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## Forestry and rural development



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Rural Development

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# Foreword





European forests provide an essential contribution to economic growth and to raising living standards. Well-managed forests are at the heart of sound and balanced natural environments and ecosystems. Multiple policy objectives co-exist at EU level in the forest sector. On the one hand, forestry and forest-based industries provide millions of jobs and contribute to our prosperity, particularly in rural areas. On the other hand, forests are important for reaching our environmental objectives and related international commitments, particularly with regard to preserving biodiversity, mitigating climate change, preserving water resources and combating soil erosion and desertification.

To this end, 2011 has been declared International Year of Forests by the United Nations, thus recognising that sustainable forest management can contribute significantly to sustainable development.

The EU is working on balancing these multiple objectives under the Forest Action Plan (FAP), covering the period 2007 to 2011. The Plan is a step forward in terms

of ensuring better coordination of forest policy and related actions within the EU. The European Agricultural Fund for Rural Development (EAFRD) is the main financial instrument supporting the implementation of the FAP. Rural development policy has been the main instrument for implementing forestry measures in recent years. It is estimated that spending on forest-related measures<sup>1</sup> during the 2007-2013 rural development programming period, from the EAFRD alone, could amount to some EUR 8 billion.

This ninth edition of the *EU Rural Review* takes a closer look at how EU agriculture and rural development policy are contributing to promoting sustainability and competitiveness in the European forestry sector. We investigate the progress being made in this area, explore the contributions of the Member States' Rural Development Programmes (RDPS) and consider how forestry impacts on the Common Agricultural Policy (CAP).

After an introduction on forests that highlights their importance to CAP objectives at EU level, the magazine focuses

on four macro-areas, noting linkages between rural development policy and forestry, namely:

- Sustainable management of forestry practices (linked to competitiveness);
- The importance of High Nature Value forests;
- The contribution to fighting climate change;
- The social dimension of EU forestry policy.

This edition also includes several case studies examining successful projects and practical experiences from the ground. These examples illustrate how different RDP measures play beneficial roles in promoting the forestry sector using co-finance from the European Agricultural Fund for Rural Development (EAFRD). The suite of EAFRD measures available for forest-related projects is significant, and comprises measures that support the full range of services that EU forests provide.

(1) These include the eight forest-specific measures (seven under axis 2 and one under axis 1) together with other forest-related measures (mainly under axis 1 and 3) which envisage specific actions for the forestry sector.

# Forests and forest policy in the EU

2011 has been declared International Year of Forests by the UN, thus recognising that sustainable forest management can contribute significantly to sustainable development. EU forest strategy addresses the major challenges so that forests can foster economic growth and help raise living standards in rural areas across Europe.



This is the International Year of Forests<sup>1</sup>, declared by the United Nations General Assembly, to make people across the world more aware of the need to strengthen sustainable forest management and ensure the conservation and sustainable development of all types of forests for the benefit of current and future generations. Forests are an integral part of global sustainable development, with more than 1.6 billion people dependent on forests for their livelihoods. Yet, the UN's Food and Agriculture Organization estimates that every year, 130 000 km<sup>2</sup> of the world's forests are lost due to deforestation.

The EU is more fortunate than some other parts of the world as its total forest area is growing, not declining. Less timber is harvested than might be expected, only about two thirds of the annual growth of EU forests overall, but the proportion varies from 20 % in some Member States to more than 90 % in others, as shown in Fig.1.

EU forests have for centuries provided raw materials and environmental services, but active management is needed to protect the health of our forests, especially from the increasing risks associated with a changing climate, including forest fires, insect damage, disease and storms. March 21 was World Forest Day, marked by the publication of *Europe's forests - sustaining life*<sup>2</sup>, explaining what forests do for us and looking ahead to 2020.

As a land use, forestry is just as important as agriculture in the EU, but the Treaty makes clear that competence for forest policy lies primarily with the Member States. Although there can be no 'Common Forestry Policy' as there is for agriculture, in 1998 the Forestry Strategy for the European Union<sup>3</sup> was established, providing a framework for actions supporting sustainable forest management, based around the co-ordination of the

**Figure 1: Ratio of felling to net annual increment**



Source: Forest Europe, preliminary presentation of the State of Europe's Forests 2010

### Facts and figures about EU forests

- 42% of EU land – around 177 million hectares – is forest and other wooded land, of which 89 million hectares are used primarily to obtain wood and other products;
- Europe's forests are growing - from 1990 to 2010 an area the size of Hungary was afforested;
- Five million people work in forest-related sectors;
- Output of wood-based manufacturing sectors is worth over EUR 500 billion;
- 13% of EU forests are in protected areas;
- 30% of Natura 2000 sites are forest habitats, covering 23 million hectares.

Source: EU (2010) Europe's forests sustaining life (DG Agriculture and Rural Development)

forest-related policies of the Member States and the Community.

In 2005, a review of the Strategy stressed that, despite progress in the sustainable management of EU forests, the policy context was changing and new issues had emerged. This led to the adoption in 2006 of the EU Forest Action Plan 2007–2011, identifying eighteen key

actions to be implemented jointly with the Member States to:

- improve long-term competitiveness;
- improve and protect the environment;
- contribute to the quality of life; and
- foster coordination and communication.

A study in 2009<sup>4</sup> found that in its first two years the EU Forest Action Plan has contributed to promoting a more

(1) [http://ec.europa.eu/agriculture/fore/events/international-year-of-forests-2011/index\\_en.htm](http://ec.europa.eu/agriculture/fore/events/international-year-of-forests-2011/index_en.htm)

(2) [http://ec.europa.eu/agriculture/fore/publi/leaflet-2010\\_en.pdf](http://ec.europa.eu/agriculture/fore/publi/leaflet-2010_en.pdf)

(3) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:1999:056:0001:0004:EN:PDF>

(4) [http://ec.europa.eu/agriculture/eval/reports/euforest/index\\_en.htm](http://ec.europa.eu/agriculture/eval/reports/euforest/index_en.htm)

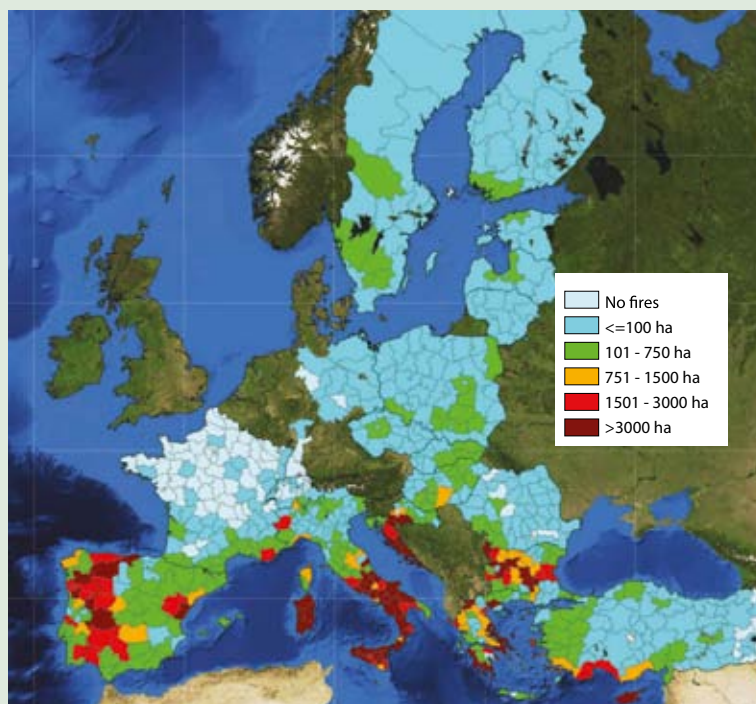
co-ordinated approach to forest-related actions in the EU. Its outputs have reached the key policy-makers and stakeholders, but if information was shared more widely the contribution of the FAP to both international forest processes and public awareness of forest issues could be strengthened. Worryingly, research suggests that there is a significant gap between the understanding of forest issues in Europe and the reality, both among the public and some policy makers. For example, the majority of Europeans perceive that the total forest area in the EU is decreasing, when in fact it has increased over the past two decades. Most EU citizens support more active management of forests, yet harvesting and management are seen as major threats to our forests.

To address this lack of understanding, the Commission has just launched an EU Forest Communication Strategy<sup>5</sup>, as part of the implementation of the Forest Action Plan, aiming to close the gap between public perception and facts about forestry, and to promote more informed decisions on matters related to forests.

As the EU Forest Action Plan comes to the end of its five-year term, a review of its achievements later this year will contribute to the preparation of the new Forest Strategy and measures to support sustainable forest management after the current RDP programmes end in 2013. Until then, the main funding mechanism to support forest management within the context of the EU Forest Strategy and Action Plan is Pillar 2 of the CAP, which is co-financed by the Member States. Under Axis 2, "Improving the environment and the countryside", Member States can choose from seven RDP measures specifically targeting forestry.

Support for the forestry sector is also provided by other measures under Axis 1, "Improving the competitiveness of the agricultural and forestry sector", and Axis 3, "Improving the quality of life in rural areas and encouraging diversification of the rural economy, as well as under the Leader Axis. Many of the beneficiaries are small

**Figure 2: Fire history map of Europe (burnt area) at NUTS3 level for 2007.**



Source: JRC (2010) European Atlas of Soil Biodiversity

forest owners, who play an important role in sustainable forest management and in improving the supply of wood from forests that were previously unharvested.

One important objective of current RDP support is to help to protect EU forests against damage from fire, pollution and natural disasters over an area of more than two million hectares. As the climate changes the threat of fire is likely to increase in periods of drought, particularly in southern Europe (see Fig.2). The European Forest Data Centre runs an information system which forecasts forest fire risks and carried out damage assessment.

### Forest management and climate change

Forests have an important role in the fight against climate change, and forestry is one of the sectors where the potential impacts and costs of climate change are being assessed in preparation for a

comprehensive, post-2013 EU climate-change adaptation strategy. A year ago, the EU launched a public consultation on forest protection and climate change<sup>6</sup>, which identified the key challenges facing Europe's forests and the environmental public goods that our forests provide, including soil protection, regulating freshwater supplies, and conserving biodiversity. It also highlighted the role of forests as regulators of local and regional weather and their contribution to climate change mitigation.

The Commission's recently published *Roadmap for moving to a competitive low carbon economy in 2050*<sup>7</sup> looks beyond the 2020 objectives to reduce carbon emissions by 20%, and sets out a plan to meet the long-term target of reducing emissions by 80 to 95% by mid-century, as agreed by European Heads of State and governments. The *Roadmap* underscores the need to consider all land uses in a holistic manner and address Land Use,

(5) [http://ec.europa.eu/agriculture/fore/publi/index\\_en.htm](http://ec.europa.eu/agriculture/fore/publi/index_en.htm)

(6) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0066:FIN:EN:PDF>

(7) [http://ec.europa.eu/clima/policies/roadmap/index\\_en.htm](http://ec.europa.eu/clima/policies/roadmap/index_en.htm)



## Management to improve the contribution of Europe's forests to mitigating climate change<sup>8</sup>

**Establishment of forest reserve areas.** Research by CarboEurope, an EU-funded initiative involving over 60 research centres in 17 European countries, indicates that the absence of management interventions can enhance carbon sequestration, even in old growth forests, an approach likely to be most relevant to designated nature conservation forests.

**Restoration of forest wetlands.** Important GHG (Green House Gases) sequestration benefits can be achieved by restoring forest wetlands, which will also enhance bio-diversity. However, other factors also need to be taken into account, such as emissions of other greenhouse gases from the wetland and the socio-economic implications.

**Continuous cover forest management,** a well-established policy in the public forest estate, can potentially increase carbon sequestration in growing stock by a factor 1.2 to 1.6 in the long term.

**Prevention of forest fires** is a priority for the Mediterranean region. Specific silvicultural management can lower the risk of fires while increasing the yield of biomass for energy substitution, raising the marketable timber output and enhancing bio-diversity. Another option is investment in fire prevention infrastructure, control equipment and improved supervision and access.

**Improved management of fast growing plantations in southern Europe** could contribute to carbon sequestration if the trade-offs between forest functions and fire risk are taken into account.

Land Use Change and Forestry (LULUCF) in EU climate policy. The Commission is preparing an initiative on this issue, due for publication later this year. LULUCF is a greenhouse gas inventory that covers man-made changes in terrestrial carbon stocks. The inventory covers living biomass above and below ground, dead wood and litter, and organic soil carbon for forest land, cropland, grassland, wetland and urban land. For forests, this could lead to the encouragement of significant changes in management.

The European Climate Change Programme (ECCP) produced a report in 2003 outlining the most promising measures that could increase the contribution of EU forests to the mitigation of climate change (see box). The contribution of trees to carbon targets does not end at the edge of the forest. There are many opportunities to store carbon for longer by prioritising long-lived uses of wood and increasing the recycling of wood products.

### Future outlook

The debate on forest public goods and climate change will inform discussions in the coming months on the future shape of the CAP, at the same time as the EU is preparing the new EU Forest Strategy.

Work on the new Strategy was launched at a Workshop in April 2011, with close to 100 participants from Member States, stakeholder groups and the Commission services<sup>9</sup>. The new EU Forest Strategy is an opportunity for Member States, supported by stakeholders, to put in place a common process to act on priority forestry issues that emerge from the Strategy work. It is also an opportunity to give a stronger voice to the forestry sector and to further strengthen existing knowledge and understanding of sustainability within the sector. In this context, it will be important to recognise the different interests in forestry and find the best way to achieve a balance between them. The key will be to prioritise objectives and to find areas where value can be added with common actions at EU level.

Alongside this EU work, forest ministers from the 27 Member States and another 15 European countries took part in an international policy discussion at a Forest Europe conference held in Oslo, in June 2011. Recognising that "the protection and sustainable management of Europe's forests requires a stable and efficient platform for coherent policy development and implementation", the participants agreed to set up an Intergovernmental Negotiating

Committee, with a mandate to develop a holistic, legally binding framework agreement on forests in Europe<sup>10</sup>. They also adopted a new vision, goals and targets for European forests in 2020.

(8) [http://ec.europa.eu/clima/policies/forests/docs/forest\\_sinks\\_final\\_report.pdf](http://ec.europa.eu/clima/policies/forests/docs/forest_sinks_final_report.pdf)

(9) Further information is available at [http://ec.europa.eu/agriculture/fore/events/15-04-2011/index\\_en.htm](http://ec.europa.eu/agriculture/fore/events/15-04-2011/index_en.htm)

(10) [http://www.foresteuropa.org/eng/Press/News/News\\_2011/Ministers+launch+negotiations+for+a+Legally+Binding+Agreement+on+Forests+in+Europe.9UFRHQWM.ips](http://www.foresteuropa.org/eng/Press/News/News_2011/Ministers+launch+negotiations+for+a+Legally+Binding+Agreement+on+Forests+in+Europe.9UFRHQWM.ips)

# RDP support for sustainable forestry practices



**Sustainable forestry is a prominent topic in the debate about the future of the Common Agricultural Policy, and long-term support for EU forests is expected to focus increasingly on securing sustainable production methods that balance economic, social and environmental interests.**

The European Commission believes that effective, sustainable forestry approaches offer the potential to generate more environmental, economic

and social benefits than any other land use<sup>1</sup>. A considerable amount of the EAFRD is available for sustainable forest management and the majority of this

support is co-financed by Axis 2 measures. See table 1 for an overview of the main measures and funds available for EU co-financing.

**Table 1: Planned EU expenditure on sustainable land management for forestry for the 2007-13 programming period (EAFRD contributions EU27)**

EAFRD Measure	EAFRD Funding (Millions of Euros)		
	EU15	EU12	EU27
First Afforestation of Agricultural Land	908	1 012	2 390
Other Forestry Measures	2 099	414	2 758
Natura 2000 Payments	22	73	102
Forest-Environment Payments	160	108	268
<b>TOTALS</b>	<b>3 189</b>	<b>1 607</b>	<b>5 518</b>

Source: EU (2010) *Rural Development in the European Union: Statistical and Economic Information Report 2010*.

(1) [http://ec.europa.eu/agriculture/fore/publi/communication-strategy\\_en.pdf](http://ec.europa.eu/agriculture/fore/publi/communication-strategy_en.pdf)

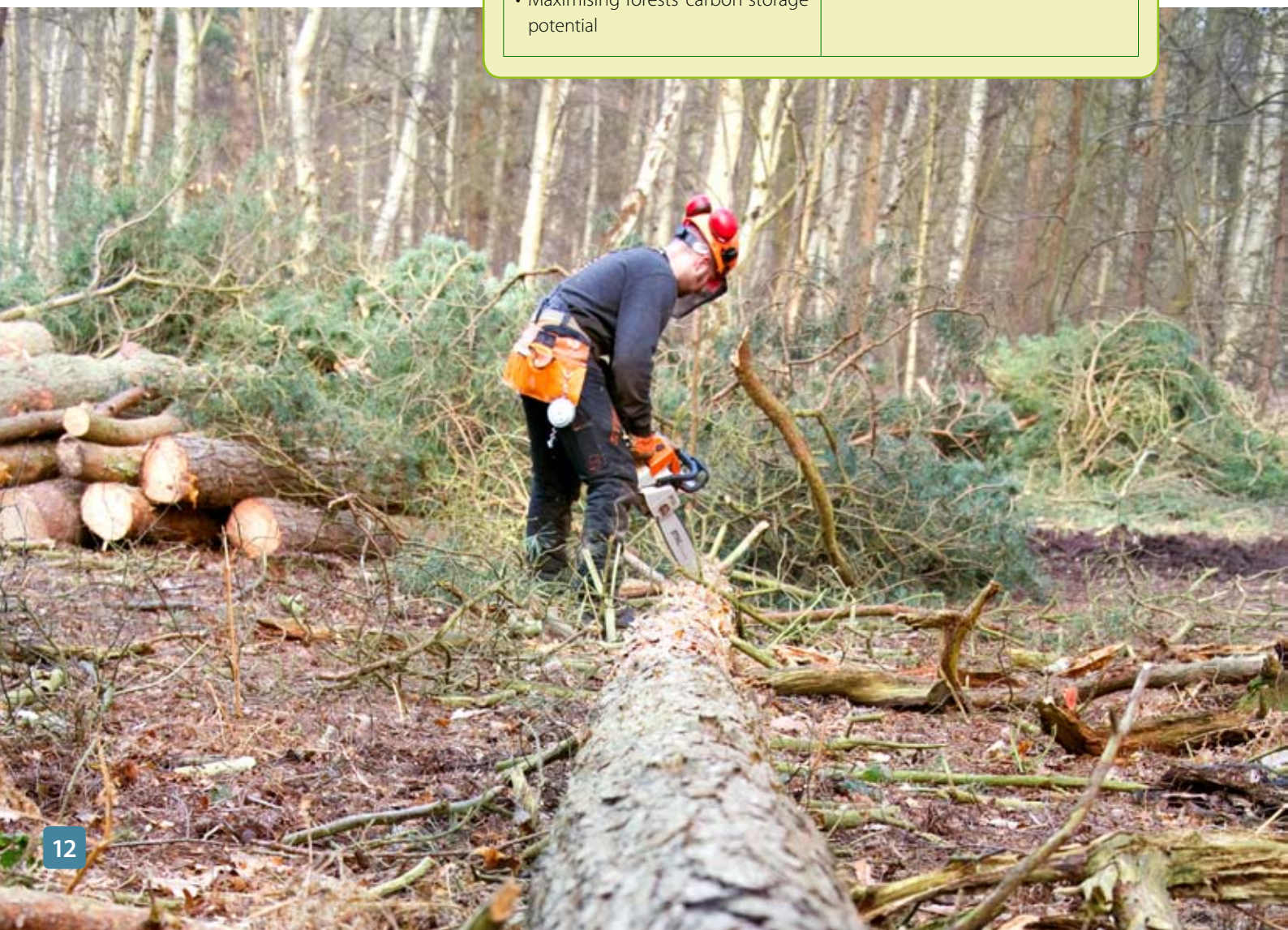
RDPs can also co-finance different types of sustainable forestry activities through other parts of the EAFRD toolkit. Axis 1, for example, can provide co-financing to increase the competitiveness of sustainable forests and improve cooperation between different stakeholders in business supply chains. Training and advisory services in sustainable forestry can also be supported under this Axis.

Axis 3 measures can be used by beneficiaries interested in making the most of the socio-economic potential of EU forests, through measures associated with, for example, economic diversification into forest tourism or wood fuel energy supplies. Cultural and community attributes of forests can also be developed using Axis 3 measures, and sustainable forestry priorities in Leader Local Development Strategies may lead to Axis 4 funds being used to facilitate cooperation between rural areas, or other local development work in this field.

**Table 2: Typical sustainable forestry topics that could be covered by RDP-funded advisory or training services:**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Preventing the planting of alien or invasive species</li> <li>• Appropriate use and control of chemicals</li> <li>• Integrated pest management</li> <li>• Waste management and minimisation</li> <li>• Comprehensive and holistic management planning approaches, based on adequate inventory and growth and yield data</li> <li>• Results oriented monitoring systems tracking performance and compliance</li> <li>• Sustainable harvest planning to maintain long-term production capacities</li> <li>• Inclusive forest management, avoiding predominance of 'single interest' approaches</li> <li>• Fire, pest and disease management</li> <li>• Sustainable cultivation of biomass for energy</li> <li>• Maximising forests' carbon storage potential</li> </ul> | <ul style="list-style-type: none"> <li>• Conservation and restoration of natural ecosystems and habitats</li> <li>• Improving landscape functions and features</li> <li>• Conserving cultural assets</li> <li>• Understanding, upholding and respecting forest access rights for local communities</li> <li>• Application of dispute resolution mechanisms concerning use of forests, access to forests, and employment conditions/rights for forest workers</li> <li>• Avoidance of discrimination in employment practices</li> <li>• Health and safety of forest workers</li> <li>• Mitigation measures against unauthorised activities such as illegal logging or mining</li> </ul> |
|--|--|

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**Table 3: Monitoring output indicators 2007-2009, and targets 2007-2013 (before Health Check as at end 2009)**

Measure	Output	Unit	Value (2007-2009)	Targets 2007-2013
Improvement of the economic value of forests	Number of forest holdings that received investment support	N.	6 020	66 921
First afforestation of agricultural land	Number of beneficiaries receiving support	N.	14 100	130 089
	Number of ha of afforested land	Ha	72 500	600 000
First afforestation of non-agricultural land	Number of beneficiaries receiving support	N.	2 250	48 806
	Number of ha of afforested land	Ha	19 500	222 776
Forest-environment payments	Number of forest holdings receiving support	N.	5 130	75 610
	Physical forest area under forest environment support	Ha	187 256	919 762
	Number of contracts	N.	8 750	76 939
Restoring forestry potential and introducing prevention actions	Number of prevention/restoration actions	N.	19 370	132 717
Non-productive investments	Number of supported forest holders	N.	39 411	136 876
Natura 2000 payments	Number of forest holdings receiving aid in Natura 2000 area	N.	4 075	52 000
	Supported forest land (ha) in Natura 2000 area	Ha	71 926	382 491

## Future emphasis

The growing relevance of sustainable forestry may lead to a strengthening of EAFRD contributions to sustainable forestry outcomes, following conclusions from the RDPs' mid-term evaluations. This could lead to more, better quality and longer lasting benefits from Europe's forest resource, helping to ensure that future generations of EU citizens continue to enjoy the wide range of functions available from EU forests.



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## Strengthening the supply chain in Italy

The timber trade in the Italian province of Veneto is facing stiff competition from cheaper imported wood. As a direct consequence, the proportion of products manufactured from local wood is relatively low and high logging costs restrict the intensity of forest harvesting. Further problems include a lack of qualified workers and the fragmented nature of forest estate, which gives rise to additional costs and a greater need for the coordinated planning of measures in the field of wood management.

A sustainable forestry project (*'Measures to valorise the productive diversification of the minor timber chain, including energetic uses'*) was launched to help address these challenges. The project is helping to upgrade forest management

machinery and woodcarving tools to improve opportunities to add value to Veneto's timber stocks. Efforts to improve cooperation between forest owners, wood processing companies and retailers are also underway, in order to improve the functionality of supply chain elements between primary production, processing and trading. This is being tested for new markets such as biomass energy fuel, and the project is also piloting a new certification / labelling scheme to help consumers make well-informed choices about the quality and sustainability of regional wood products.



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## Forest fire detection in Cyprus

In Cyprus, climate change has increased the threats posed by forest fires to the socio-economic and environmental benefits that are provided by the island's forests. In response, a project was initiated by the national authorities to help detect fires in an area covering 7 140 hectares. EU rural development funds were used to construct and equip two forest fire detection observatories and one associated surveillance station.

Automatic fire detection systems are now in place, powered by solar energy in order to minimise their own environmental impact. The surveillance and detection technology is capable

of identifying signs of fire at distances of up to 10 km away, and smoke clouds as small as 10 m<sup>2</sup>. Links to digital mapping devices pinpoint the location of smoke or fire and a warning is sounded within six minutes of a fire starting in the area covered by the high-tech surveillance cameras.



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## Feasibility study on wood-fuel in France

Bio-energy features prominently in many policy approaches for sustainable forestry but biomass production needs to be carefully considered to ensure that it produces net benefits. RDP funding for projects that increase the uptake of wood-fuel as a sustainable alternative to fossil-fuels take account of this issue. An interesting example can be seen in the French overseas department of Reunion, in the Indian Ocean. Here, the island's 2007-13 RDP is supporting a project to promote both the supply of, and the demand for, wood-based biofuel in the western Highlands.

Starting in July 2010 and due to complete its work in December 2012, this RDP project has a budget of EUR 1.8 million, of which the EAFRD is contributing 14%. Diversification of agricultural holdings is the driving force

behind the project, which focuses on new opportunities for farm-scale wood-fuel businesses.

The project is assessing the feasibility of different approaches and investing in capital equipment for planting, harvesting and processing of wood-fuel at pilot sites. These test centres will demonstrate the potential socio-economic benefits of new afforestation schemes for local farmers. They will also assess the amount of sustainable energy that can be generated from wood-fuel in Réunion. More information about this RDP project is available from the beneficiary, Agence Régionale de l'Énergie Réunion ([www.arer.org/index.php](http://www.arer.org/index.php)) or from the French National Rural Network ([www.reseaurural.fr](http://www.reseaurural.fr)).





# High Nature Value forests

**The European Union designates exceptionally valuable forest habitats as High Nature Value (HNV) forests. Member States have been quick to realise the potential of the new RDP forestry measures to help restore and develop European HNV forests.**

**T**he people of Europe were hunters and gatherers long before they were farmers, and much of our modern farmland began as clearings in the native forests thousands of years ago. Forest species make up the greatest assemblage of biodiversity in any terrestrial ecosystem, and have been important in our lives for such a long time that trees and forests are a treasured part of our cultural and historical heritage, and still shape our landscapes. Because of their structural complexity, forests provide ideal habitats

for a particularly rich array of plants and animals and a natural refuge for many large carnivores, such as bears and wolves, which were once a characteristic feature of many of Europe's wooded landscapes, and are still found in some forests, especially in Eastern Europe.

Not much 'old growth' forest is left now - only around 1% to 3% of all forests in the EU - but many of the other forests that have been modified by man over thousands of years are still of huge

importance to biodiversity. These 'high nature value forests' are singled out as a priority in the Community Strategic Guidelines for rural development. The link between EU policy and RDP funding 'on the ground' in Member States is also clear - one of the priorities of Axis 2, for which Member States must spend at least 25% of their EAFRD budget, is '*preserving and developing High Nature Value (HNV) farming and forestry systems*'. The Council Regulation adopted in 2005, on support for rural development by the EAFRD, was



a big step forward in terms of providing targeted support for the management of some of Europe's finest forests, rich in biodiversity and with a long cultural history. New RDP measures were introduced which make it possible to offer annual payments for environmental management of forests (the equivalent of agri-environment payments for farmland), backed up by one-off environmental investments where forest management needs to be reinforced – for example, in order to eradicate invasive alien species. Forest habitats make up 30% of all the terrestrial Natura 2000 sites and sometimes the national laws underpinning the all-important nature conservation management of this land restrict the way that owners can harvest timber and other forest products. Member States can choose to compensate the people who own and manage these valuable nature areas, by using the Axis 2 measure designed for this purpose.

### What are HNV forests?

There are 70 different types of forest habitat that are so special they are designated as being of European or sometimes international importance. Around half of the rarest forest habitats are found in just one or two countries – for example, the flower-rich Fennoscandian wooded pastures of Finland and Sweden, or the fir forests covering the Nebrodi Mountains in Sicily. However, not all HNV forests are rare, and different kinds of oak woods and beech forests are a familiar sight across much of the EU, where the two countries with the largest share of HNV forest are Romania and Bulgaria.

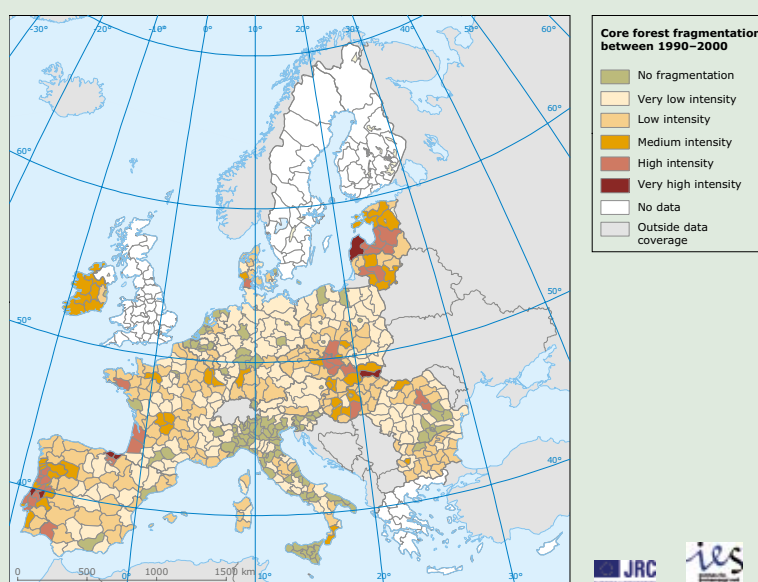
Wherever they are found, HNV forests are likely to share some of the following characteristics:

- native tree, shrub and ground cover species in forests with a high degree of naturalness;
- forests of tall trees, including old and dead trees, with deadwood on the forest floor;
- forests covering a sizeable area that have been managed sustainably for quite a long time.

Managing these forests requires silvicultural systems that can accommodate this diversity, and recognise the importance of letting nature take its course. For example, many specialised woodland plants and animals depend on a supply of dead wood as food and living space, breaking it down to be returned to the soil. The amount of deadwood in forests is rather low in the intensively managed production forests of northern Europe, and in dry Mediterranean areas, where foresters clear it away because of the fire risk.

The natural genetic diversity of native forests may not produce uniform timber for the sawmill but they could be a very important resource when we need to find disease and drought resistant strains of timber producing trees to combat the effects of a changing climate.

**Figure 3: Core forest fragmentation between 1990-2000**



Source: JRC EFDAC Map viewer at <http://efdac.jrc.ec.europa.eu/><sup>2</sup>



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(2) Progress towards the European 2010 biodiversity target, EEA Report No. 4/2009, European Environment Agency, Copenhagen. Available at: <http://www.eea.europa.eu/publications/progress-towards-the-european-2010-biodiversity-target>

Semi-natural forests have also declined, as traditional harvesting techniques like selective cutting and coppicing, hauling timber with horses, and woodland grazing became increasingly uneconomical in the face of modern, mechanised forestry. This left only small isolated patches of natural or semi-natural forests in the countryside, often in remote and less accessible areas. This remoteness may have provided some protection from human interference but the patchiness also made it much more difficult for woodland species to move through the landscape along 'wildlife corridors'. One of the ways the RDP funding can help is to support planting of new native woodlands where these will help to link up remnants of HNV woodland.

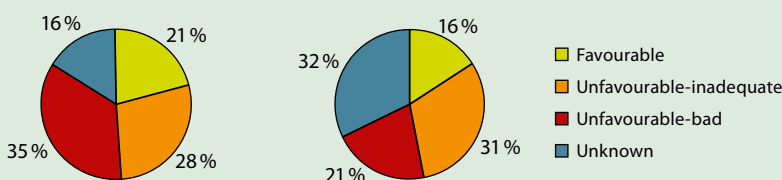
### The role of public policy in High Nature Value forests

We must be clear about what we want our forests to do for society. As the European Environment Agency has pointed out, increased harvesting of forest biomass to meet Europe's bio-energy targets is not compatible with the goals of storing carbon and enriching biodiversity by accumulating organic material in forests. The

answer for our HNV forests is very clear – if we fail to take care of the biodiversity we will lose an irreplaceable resource.

Already an alarming proportion of the most valuable forest habitats and species are in a less than favourable condition, with some Member States already taking corrective action in this respect.

**Figure 4: Conservation status of EU-25 Natura 2000 forest habitats (left) and species (right)**



Source: EEA (2010) 10 messages for 2010: forest ecosystems

### Targeted interventions in Portugal



Portugal has pioneered the use of a combined intervention of agri-environmental and forest environment payments, as well as associated non-productive investments in nine Natura 2000 areas, including important HNV forests. Target areas are defined, and targets set for each type of payment, adjusted to the threat level and the importance of the environmental values to be protected. Each of these nine packages of support, called Integrated Territorial Interventions (ITI), is specially designed with its own particular combination of the following Axis 2 and 3 measures, in order to address the specific circumstances of the Natura 2000 area:

- Agri-environment payments (measure 214), with the aim of:
  - conserving HNV cultivated areas, as well as typical landscape features;
  - preserving habitats and identified threatened flora and fauna species;
  - conserving biodiversity levels.
- Forest environment payments (measure 225), with the aim of:
  - conserving or extending forest areas with native forest species, and specific diversity of valuable flora and fauna;
  - conserving threatened priority habitats, giving preference to the different phases of ecological succession and decreasing their artificialisation by maintaining and developing these habitats;
  - favouring natural cycles.
- Non-productive investments, necessary to fulfil agri-environment and forest environment objectives (measures 216 and 227);
- Building local capacities for stimulating and monitoring these systems (measure 323);
- Creating the planning instruments necessary for a more adequate management of the Natura 2000 network (measure 323).



## Environmentally-friendly forest management in Hungary

In Hungary forest-environment payments of between EUR 36 and 200 /ha/year are aimed at encouraging nature and environmentally friendly forest management. Payments can be for between 5 and 10 years, depending on the work to be done. There are nine different schemes on offer, covering :

1. controlling the spread of non-indigenous tree and shrub species;
2. selective forest management, with felling no more than four times in ten years, and only in small, separate patches followed by natural regeneration;
3. carrying out forest maintenance work by hand, rather than by machine;
4. reducing the practices of clear-felling followed by artificial regeneration;
5. using environmentally friendly methods of materials handling;
6. taking care of special forest habitats and providing conditions for natural forest regeneration (for example, by the creation and maintenance of micro-habitats, leaving groups of trees after final felling, and cutting bushes to ensure the success of forest regeneration);
7. postponing the time of final felling in order to protect soil and habitats;
8. maintaining forests for the public benefits they provide;
9. creating and maintaining forest clearings.

These measures opened in 2009, with applications for support made each year, during October. In the first two application periods the most popular schemes were those for 'selective forest management' and for 'using environmentally friendly methods of materials handling'.



## Forest-environment scheme in Slovakia

Slovakia has recently launched a scheme under measure 225 – Forest: environmental payments - with an overall budget amount foreseen for the period 2010-2013 of EUR 25 033 216.

Forest-environment payments shall be provided for a specific method of forest management, based on environmental needs and priorities. This support will be directed mainly to NATURA 2000 sites, in order to protect the natural environment and landscape, biodiversity and especially areas with High Natural Value.

The objective of the measure is to compensate for income foregone and additional costs resulting from the forest environmental commitments made by beneficiaries, which go beyond the mandatory requirements and aim to:

- conserve and increase biodiversity;
- conserve forest ecosystems of remarkable natural value;
- mitigate adverse effects of climate change;
- preserve and improve soil structure and water quality.

The estimated number of beneficiaries is from 101 to 500.

The scheme comprises two sub-measures:

- Maintenance of good status of forest habitats, with the payment fixed in a range of EUR 54.47/ha to 57.92/ha;
- Protection of habitats of selected bird species, with the payment fixed at EUR 65.39/ha.

Aid is provided as an annual flat rate per hectare of forest land covered by the forest environmental commitment.

Eligible beneficiaries under the scheme include: private forest owners, associations, natural and legal persons who manage forests of private owners or their associations, bodies established under the Commercial Code, municipalities, church bodies and cooperatives.



# Forestry and climate action

**Forestry has a crucial role to play in climate action. Appropriate forest management is necessary to maintain and improve carbon storage in standing trees and harvested wood products, mitigating the effect of emissions from fossil fuels, restoring and protecting forests from natural risks and contributing to the substitution of fossil fuels.**

Climate change and forestry are intrinsically linked. On the one hand, changes in the global climate are already stressing forests through higher mean annual temperatures, altered precipitation patterns and more frequent and extreme weather events. At the same time, forests have multiple protective functions. They provide protection against soil erosion and desertification, help regulate the

hydrological cycle, and their ecosystems are an important source of biodiversity. Forests and the wood they produce also trap and store carbon dioxide, playing a major role in mitigating climate change.

Mountain forests in particular play a crucial role in protecting against natural hazards and in maintaining the climate balance (CO<sub>2</sub>). They are also an important source of renewable resources and act

as a biodiversity pool. However, forest ecosystems are sensitive to atmospheric pollutants and changing soil conditions resulting from decades of economic growth. In addition, when destroyed or over-harvested and burned, forests can become source of the greenhouse gas, carbon dioxide.

The EU has committed, unilaterally, to reduce its overall greenhouse gas

emissions by 20 % below 1990 levels by 2020, and by up to 30 % if conditions allow it. Forestry has a key role to play in achieving these targets. Forests cover an area of around 156 million ha, while a further 21 million ha is covered by other wooded land<sup>3</sup>. This is around 42 % of the EU land area, which is roughly the same as covered by utilized agricultural area. The largest forest areas are found in Sweden, Spain, Finland and France. As a result of afforestation programmes and natural regeneration on marginal land, forest cover in the EU has increased over the past few decades, and in most EU forests the annual growth increment has exceeded the volume removed, (i.e. naturally and through harvesting).

Due to their important protective functions and their significance in terms of land use cover, forests can be better used in combating climate change. This can be achieved not just by preventing forests from being cut down, but through afforestation (new plantings) and reforestation (replanting of deforested areas) of non-forested lands, preventive actions against natural hazards and other management and diversification actions.

## The role of RDP support in forestry climate action

RDPs for 2007-2013 provide responses to climate change related challenges through active forest management. Forestry specific measures account for a total amount of EUR 12 billion and, together with other forestry related measures, the total amount available is up to EUR 16 billion, or 7-8 % of the total budget devoted to rural development. The revision of RDPs following the CAP Health Check in 2009 put a higher emphasis on climate change, through *“appropriate agricultural and forestry practices that can contribute to the reduction in greenhouse gas emissions and preservation of the carbon sink effect and organic matter in soil composition, and can also help in adapting to the impacts of climate change”*<sup>4</sup>.

RDP support promotes the role of forests in positive climate action in relation to carbon sequestration. Forestry specific measures such as afforestation of agricultural land and afforestation of non-agricultural and abandoned land contribute directly to carbon sequestration. Specific actions include afforestation with natural productive species, spatial planning of pastures, the restoration of green cover and re-plantation. In addition, preventive actions against forest fires and climate related natural disasters also have positive effects on carbon sequestration in forests and avoidance of carbon dioxide (CO<sub>2</sub>) emissions. Similarly, the development of environmentally friendly machinery in forestry contributes to mitigation, with less disturbance of the forest soil, which may decrease CO<sub>2</sub> emissions.

The conversion of agricultural land into forest/agro-forestry systems and species selection and implementation techniques in afforestation actions have positive effects on water management, through the protection and improvement of water quality.

Forestry also contributes to positive climate action in relation to fighting soil erosion and desertification. This is a particularly acute problem in areas characterised by extreme weather changes (for instance, alternation of heavy rainfall and dry periods, very hot and dry summers followed by cold, wet winters) and natural disasters, such as forest fires. The restoration of forests affected by natural disasters, the installation, restoration and maintenance of fire protection barriers, the construction of structures such as ditches, fences and bays, the conservation and improvement of forest lanes, mineralised belts and belts of deciduous trees, fire prevention plans, forecasting and monitoring equipment and systems, fire prevention dissemination installations and equipment, and the creation of water collection points and artificial water reservoirs are all actions taken to

restore and protect forests from erosion and desertification.

Furthermore, maintenance actions such as well-planned and implemented thinning or pruning, increase the resilience of forest stands against extreme events. The establishment of such protective infrastructure is extensively used in connection with adaptation to the effects of climate change.

Forests constitute vital habitats for biodiversity and the negative effects of climate change affect not only forests as carbon sequestration sources but also as ‘homes’ for valuable animal and plant species. Forestry actions help maintain and restore natural ecosystems threatened by climate change, for example, by creating or assisting the recovery of open spaces in forests (clearings), converting to more resistant forest stand types, eliminating undesirable and intrusive plant species, and by providing information on the use of forests, with a view to restoring and conserving habitats and species, especially in high Nature Value Areas.

RDP support stresses the importance of forests in the substitution of fossil fuels, through the processing of forest biomass (wood, wood waste and woody material) for renewable energy production, and the provision of information and dissemination of knowledge related to renewable energies. In many instances, energy is produced locally from forest biomass, and used for wood fired heating systems and on-farm or local heat supply systems. Forestry related measures also encourage the creation of local networks and local supply chains for wood energy supply.

(3) There is no common definition agreed among EU Members States of what constitutes a forest, but the definitions used by FAO and FOREST EUROPE are: ‘Forest’: Land with tree crown cover (or equivalent stocking level) of more than 10 % and area of more than 0.5 ha. The trees should be able to reach a minimum height of 5 m at maturity in situ. ‘Other wooded land’ (OWL): Land either with a tree crown cover (or equivalent stocking level) of 5-10 % of trees able to reach a height of 5 m at maturity in situ; or a crown cover (or equivalent stocking level) of more than 10 % of trees not able to reach a height of 5 m at maturity in situ and shrub or bush cover.

(4) Council Decision of 20<sup>th</sup> February 2006 on “Community Strategic Guidelines for Rural Development (programming period 2007 to 2013)”



## Biomass heating plants in Austria achieve savings in greenhouse emissions

Conversion to a CO<sub>2</sub>-neutral heating supply to achieve the 2020 climate change objectives has been at the heart of the model developed by the Styrian biomass logistic and trade centres (BL&TC) in Austria. The promotion of biomass heating plants using wood from local forests ensures that the fuel is provided all year round, in adequate amounts and at the right quality. The BL&TC is a regional “service station” for top-quality wood fuels, run by a group of farmers and/or forest entrepreneurs. Every operating group in Styria has to be a farmers’ association, with at least ten forest owners and the minimum storage capacity in any biomass centre must be 500 solid cubic metres of wood or the energy equivalent of one million kilowatt hours of primary energy.

RDP funding (with a EAFRD contribution of 30%), through the measure for the improvement of the economic value of forests, provided EUR 0.6 million towards the establishment of a biomass centre, based on the BL&TC model, on the Pölstal farm, in Möderbrugg, Styria. The group operating the biomass centre consists of 13 local farmers/forest owners,

which guarantees that the entire added value remains within the region. This is not the case with multinational oil and gas supplies. The central idea is to ensure a secure supply of biomass and to establish a collective rural marketing channel for biomass fuels and energy services (e.g. wood energy contracting). The range of products at the Pölstal farm includes 14 000 bulk m<sup>3</sup> of wood chips and 800 stacked m<sup>3</sup> of fire wood, which enable the replacement of 1.2 million litres of heating oil. The wood comes from the 3 000 hectares of forest area belonging to the farm. As a result, GHG savings amount to an estimated equivalent of 3 200 tonnes CO<sub>2</sub>.

The biomass centre guarantees an uninterrupted supply of environmentally friendly fuel throughout the area. In terms of raw material procurement (supply of wood) and provision (customer delivery), the catchment area of the biomass centre covers around 30 kilometres, ensuring a quick and efficient supply of quality fuel and local heating. In the future, the biomass centre will act as a central partner in forest and agricultural biomass issues for the rural population in Styria.

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## RDP support in Estonia contributes to protection against forest fires

Rising temperatures and dryer summers are no longer just limited to the south of Europe. Forests situated in Scandinavia and other Northern European countries have also experienced their share of forest fires in recent years as a result of climate change. In Estonia, forest owners whose forests are situated in counties with a high or average risk of fire had the opportunity to benefit from funding for the prevention of forest fires and the mitigation of the negative effects on soil erosion. Five forest owners and members of the Vändra's forestry union from the Vändra and Paikuse municipalities in Pärnu county seized this opportunity to make their forests safer against fires and carried out investments that came to a total of EUR 42 295.

Recreation areas, established in each of the five private forests, are situated near much visited mushroom and berry picking forests. As a result of the investments, signposts and posters with information on fire hazards, ashtrays, bins and special barbecue bases were placed in these areas. A shed with

benches and tables was also installed, in order to restrict the barbecue area. Facilities were set up to help people cope with fire hazards. For example, a box of sand that could be used to quickly put out a dangerous fire and information posts specifying the location and explaining how to call for help.

The investment in recreation areas was complemented with new access paths and fire resistance strips, which were delineated and cleaned for the purpose of fire protection. The maintenance of fire resistance strips reduces the chances of expansion in the event of forest fires and facilitates fire fighting access. Water collection and storage points were also established to assist fire fighting efforts.



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## Sustainable management of woodland to allow natural regeneration in the UK

The Brick Kiln Plantation is a 1.7 hectare private woodland of mixed deciduous trees, predominantly ash (*Fraxinus excelsior*) and sycamore (*Acer pseudoplatanus*), with some Scots pine (*Pinus sylvestris*). There is also good understory structure, including hawthorn (*Crataegus* spp.) and hazel (*Corylus avellana*). The woodland is split into two sections. The west section has been in the same family since 1920, whilst the east section was acquired in the 1970's.



© HEARTWOODS WEST MIDLANDS WOODFUEL PROJECT

The owner of this private forest had the vision to bring the eastern section of the woodland into sustainable management and allow natural regeneration to restock. The aim was to sustainably manage the woodland for self-supply of fire wood, to improve the woodland condition and biodiversity potential, to ascertain the standing volume of the woodland, so that a sustainable thinning regime could be implemented, and to sell some ash timber for both sawmill and wood fuel uses.

These aims were achieved through selective thinning of the eastern section of the woodland, formative pruning to increase the future timber potential of the ash, management of the trees along the roadside edge to act as a screen, allowing and protecting natural regeneration as a means of restocking, and continuing ride management on an annual basis. As a result, it is estimated that there are currently 200 – 250 tonnes of timber available for thinning.



# Welfare and societal dimensions of EU forestry

**Forests across the European Union provide a diverse range of social benefits, in addition to their more traditional role as a source of commercial timber. Member States' Rural Development Programmes (RDPs) are providing support to help rural actors take advantage of these opportunities, with resulting economic benefits.**

'Celebrating Forests for People' is the strap line of the United Nation's International Year of Forests 2011, which clearly underlines the strong link between society and our forests and woodlands.

But what do we mean by societal dimensions of forestry? During the 20<sup>th</sup> Century, much of the focus on our forests was on commercial timber production, but the pendulum is swinging back to recognise that our forests are truly multi-functional

**“ We depend on forests as much as they depend on us. Forests play an essential role in our livelihoods and subsistence and they provide the roots of our traditions and cultures ”**

H.E. Mr Joseph Deiss, President of the 65<sup>th</sup> Session of the United Nations General Assembly, at the Launch of the International Year of Forests 2011.



resources, providing a range of benefits (public goods and services) to society. These societal benefits are described in the EFORWOOD report: Tools for Sustainability Impact Assessment of the Forestry-wood Chain project.

#### Table 4: Main societal benefits associated with forestry

1. Livelihoods (employment, but also including aspects of quality of life);
2. Wood products;
3. Non-wood products;
4. Environmental benefits, including watershed functions and soil protection/nutrient cycling;
5. Recreation and tourism;
6. Landscape and aesthetics;
7. Physical and mental health and well-being;
8. Culture and heritage;
9. Education;
10. Social cohesion, social capital, social inclusion and social interaction.

Source: [http://www.forestry.gov.uk/pdf/eforwood\\_d2\\_3\\_1.pdf/\\$FILE/eforwood\\_d2\\_3\\_1.pdf](http://www.forestry.gov.uk/pdf/eforwood_d2_3_1.pdf/$FILE/eforwood_d2_3_1.pdf)

## Developments in public goods

The European forest sector already displays many characteristics of a 'green economy', which the United Nations states is one that, "results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities". To support this, forestry policy and management across Europe can demonstrate the following progress:

- The economic value of non-wood products and services supplied by forests is increasing, and in some regions they generate more revenue than timber sales;
- More than 90% of Europe's forests are open to the public and the area available for recreation is increasing;
- Forest stocks are growing across Europe with growth exceeding felling;
- Forest products consumed are largely from renewable sources;
- Use of wood based energy is increasing, reducing the impact of fossil fuel consumption;
- Greater emphasis is being put on carbon sequestration and new financial models are being developed to support this;
- Five million people work in the EU forest sector;
- A large proportion of all forests are used, in part, for recreation;
- Forest sites with cultural and/or spiritual value are being increasingly recognised, as can be seen in the latest "State of Europe's Forests 2011" report;

- Ecosystem services provided by forests, such as protection against flooding or avalanches is also increasingly recognised and valued, particularly in mountainous areas. More than one fifth of European forests are managed primarily to protect water, soil and infrastructure;
- There is a move away from using straight regulatory or economic instruments to effect positive management, with greater use of persuasive instruments such as the development of management plans using stakeholder engagement, thus achieving more balanced objectives.

However, many of the goods and services provided by EU forests (particularly intangibles, such as landscape quality, a sense of place, a repository of cultural heritage or ecosystems services related to water and soil management) are non-market public goods and delivered without explicit compensation or support. The challenge in managing our multifunctional forests, therefore, is to ensure that these intrinsic socio-environmental aspects of forests are adequately recognised and properly valued in relation to the direct economic value of the timber. The United Nations Economic Commission for Europe Timber Committee and the Food and Agriculture Organisation's European Forestry Commission are currently developing an action plan for the forest sector in the green economy, which should address how such non-market services can be supported.

In the meantime, there is a need to ensure that, wherever possible, an increase in direct economic and social benefits can be delivered from the EU forest resource, while preserving their unique place in our cultural heritage. This is particularly important in remote rural regions where there are few opportunities for economic diversification. Endogenous development of wider benefits from the forest resource is, therefore, being supported through the RDPs, in order to ensure more sustainable long-term outcomes and better resource management.

**“ In the “State of Europe's Forests 2011” report we see that in several countries increased efforts are being made to better promote and market non-wood goods and various forest ecosystem services ”**

Kit Prins, Forest Europe<sup>5</sup>.

(5) FOREST EUROPE (The Ministerial Conference on the Protection of Forests in Europe) is the pan-European policy process for the sustainable management of the continent's forests. More info can be found at [www.foresteurope.org](http://www.foresteurope.org)



## Belgian RDP-funded forest projects produce societal and economic benefits

The loss of indigenous trees and bushes in the Limburg Province of Belgium was causing an overall decline in biodiversity, with some species close to extinction, and the loss of a distinctive landscape. To address this, an indigenous trees project, led by Regional Landscape Haspengouw and Voeren, was delivered between 2008 and 2011. This project (which involved nine different partners, including the Nature and Forest Agency, the Institute for Nature and Forest Research and the Limburg Social Economy Workshops, was awarded a grant of EUR 565 800, with 19.5% financing by the European Agricultural Fund for Rural Development (EAFRD) and co-financing provided by the Flemish Government.

The project has enabled sites where indigenous trees grow to be protected and the seeds to be collected, not only for planting by the partner organisations but also for selling to the wider market. Benefits of the RDP project have included not just environmental improvements through an increase in the supply of indigenous trees and bushes, but also the creation of “green” jobs, in both the collection and growing of seeds. A new plant label, ‘Plant van Hier’, has also been created, to enable effective marketing, and the number of harvesting sites has increased from the original 40 to 700.

For more information visit [www.rlh.be](http://www.rlh.be)

The Little Owl (*Athene noctua*), the smallest owl in Flanders, has until recently been thriving due to the region’s mix of native woodland, orchards and grazing pastures. However, this locally iconic bird has come under threat for several reasons,

one of which is the lack of nesting sites due to the incremental removal of suitable trees. To tackle this, a Leader funded project has been implemented (2009-2011), which has provided 400 nesting boxes, manufactured by BUSO Zottegem-Veltzeke, a secondary school for special education, and Breek De Stilte, an organisation which works with autistic people.

The wider community has also been encouraged to plant willows and fruit trees and everyone who volunteers to hang a nesting box is provided with a special ‘Little Owl’ clay house number plaque. To further raise awareness, a mobile exhibition and educational materials have been produced and, finally, a local brewery, Brewery De Ryck, has brewed a traditional beer (Steenuilke) in honour of the Little Owl. Paul Haustraete, the RDP’s Little Owls project manager with Regional Landscape Flemish Ardennes, said, “we had never dreamed that so many inhabitants of the Flemish Ardennes (and beyond) would be so closely involved with the Little Owl project. Our company has found an ambassador for the Flemish Ardennes and that is something totally unexpected!”

For more information visit [www.rlva.be](http://www.rlva.be)



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## RDP support for expanding forestry actions for society

Of the 88 RDPs delivering project support across the four main EAFRD axes, almost all included some forestry related measures, which combined amount to a total commitment of around EUR 8 billion (EAFRD contribution). Most of these funds will have some kind of positive

socio-economic and environment impact, and around EUR 2.2 billion of the RDP forestry measures have been allocated directly to actions that can deliver additional societal benefits.

Other non-forestry instruments in the RDPs, such as Axis 3 measure 313 (encouragement of tourism activities) and the Local Development Strategies of Leader Local Action Groups (LAGs), have also

been able to play a useful role in capturing broader social benefits from EU forest resources. Leader in particular has been able to bring together public and private stakeholders to work on the promotion of local resources in a planned and strategic way in order to maximise benefits. This is happening not just within a single LAG area but often across borders, as can be seen in the Czech case study.

Leader support for forest diversification builds on both upstream and downstream activities and develops wider linkages with the rural economy. Axis 4 of the RDPs has also been key to delivering wider benefits. The ability of LAGs to take an innovative approach and play

a role in truly sustainable management, supporting projects that deliver local environmental, cultural and economic benefits is one of their advantages. The work of the European Network for Rural Development's (ENRD) Forestry Thematic Initiative on the 'Multifunctional Role

of Forests (public goods and services provided by forests)' theme will show other good examples of how this is being achieved in practice (<http://enrd.ec.europa.eu/index.cfm?1B2F41CE-B877-0D3B-6203-6CBB21FD42A9>).

### **"Royal forest" promotes natural and cultural heritage-based tourism in the Czech Republic**

The "Royal Forest" ("Královský hvozď"), which stretches along the Czech-Bavarian border, incorporating five districts in Bavaria and six district municipalities in the Czech Republic, has provided many opportunities for cooperation and development based on shared cultural linkages with the forest environment. The LAG MAS Ekoregion Uhlava has been working with a range of partners, including the Bavarian LAG Landkreis Cham, to support diverse projects to improve the appearance of the area and develop tourism products. The partners involved have agreed a joint development plan for the area and examples of projects supported include: cultural monuments in the forest setting; joint cross-border materials to interpret the area's cultural heritage; the restoration of buildings that are part of the area's cultural heritage; cross-border trails, both for hiking and cycling; a forest education centre; a wooden observation tower; a Czech-Bavarian week; and investment in tourism businesses.



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For more information visit:  
[www.ekoregion-uhlava.cz](http://www.ekoregion-uhlava.cz), [www.kuenisches-gebirge.de](http://www.kuenisches-gebirge.de)  
 and <http://lag-cham-opf.le-on.org/>

### **Leader's area-based approach supports cooperation between timber businesses in Austria**

In Zirbenland, the economy is dominated by forestry, agriculture, energy production and tourism. Here, in the heart of the Seetaler Alps, the densely wooded slopes provide good scope for timber production, but the real benefits come from adding value.

In 2007, Leader funds were made available by the Innovationsregion Zirbenland LAG to encourage more networking and collaboration between local stakeholders involved in the forestry sector. The result was a new 'Wood Engineering Centre'. This centre has many facilities, including a prototyping workshop with industrial robots and a range of equipment for cabinet makers, enabling the development of products of many different types and scales. Support is provided by the centre for all aspects of research and development, from design to prototyping to product testing, market research, costing and feasibility assessment, and, finally, marketing of end products. In this way, the centre is helping to sustain and

develop the socio-economic fabric of local communities in the LAG territory.

For more information visit  
[www.hiz.at](http://www.hiz.at) and [www.zirbenland.at](http://www.zirbenland.at)



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Better implementation  
through sharing  
experience



## A joint initiative by National Rural Networks (NRNs) is helping to facilitate the exchange of information and experience to guide improvements in the implementation of forest-related measures in the Rural Development Programmes (RDPs).

In December 2009, the European Network for Rural Development (ENRD) launched the NRN Joint Thematic Initiative for Forestry, with the aim of establishing a working platform for the exchange of experience and practice relevant to the implementation of the 2007-2013 forest-related RDP measures. The initiative responds to a proposal from the Italian NRN, and the core group now also includes networks from Austria, Belgium (Wallonia), Estonia, Finland, Germany, Latvia, Spain, and Sweden, the UK.

In seeking to best respond to the needs of the NRNs, the initiative has adopted an experimental approach, creating a framework for joint action but also providing the space for participants to identify priority areas of interest and to define the types of activities to be undertaken. The emphasis in the early stages has been on trying to ensure concrete and tangible outcomes, while also allowing sufficient flexibility for the emergence of new proposals and 'spin-off' activities.

Tangible outcomes expected during the lifetime of the initiative include:

- forestry cooperation projects, initiated within and between networks;
- the collection, collation, analysis and dissemination between networks of case studies and relevant examples of the implementation of forest-related RDP measures;
- the identification and dissemination of relevant and transferable management practices at RDP measure level;
- information and knowledge exchange on national forestry policy instruments and the identification of relevant examples; and
- knowledge enhancement and training initiatives in support of stakeholders.

To help kick-start the work of the platform, a background paper was prepared, with contributions by the NRNs, which reviews the implementation of forest-related measures in the RDPs of selected Member States. This paper is now helping to establish a basis for further exchange and cooperation.

### Work plan

A work plan for 2010-2011 draws on this background paper and presents a range of activities to be undertaken by the participants. Taking account of the situation in the different countries, the plan includes proposals for joint actions in three areas, which were identified as priorities by the networks:

1. The use of biomass from forests for local or short chain energy projects;
2. The multifunctional role of forests; and
3. Support for private forestry management.

For each of these three topics, joint activities are organised and managed by a single, lead NRN, with the support of the ENRD.

## Biomass from forests

Within the first topic, on biomass from forests, NRNs aim to exchange experience on ways to develop and improve integrated renewable energy supply at local level, while also ensuring compatibility with traditional timber activities. Specifically, they are looking at initiatives in areas such as the sustainable production of bio-energy from public/private forests for heating (heating networks), the effective use of forest biomasses (e.g. branches and tree tops after cutting, chip preparation, pellets) and unproductive forest, and cooperation in the short production chain.

This topic is currently being developed under the leadership of the Finnish NRN and a number of joint activities are now being carried out, including workshops, a seminar on the use of forest bio-mass for heat generation, as well as specific training initiatives and study visits to look at relevant RDP projects.

## The multifunctional role of forests

The second topic, jointly led by the Spanish and the Belgian (Walloon) NRNs, has been exploring the contribution of forests to the provision of public goods and services, looking at issues such as improving delivery mechanisms, possibilities for economic diversification, and the implementation of agro-forestry systems.

In October 2010, this sub-group participated in a study visit to southern Spain, to learn about some of the economic diversification opportunities being pursued in the *dehesa* oak forests (see box). The outcomes of the visit subsequently informed an international seminar on "The Management of Environmental Public Goods", which was organised by the Walloon NRN, and took place in Namur (Belgium) in November 2010. During the seminar, further examples of the multifunctional role of forests in the wider EU context were presented.

## Support for private forestry management

For the third topic, a range of possible sub-themes have been identified and are currently being considered. These include: structural weaknesses of small forest holdings; the development of support instruments for management practices; involving local forest associations; and propriety-right systems.

Potential areas of exchange identified by the NRNs include: electronic information systems for forest owners (i.e. for electronic submission of applications for support, etc.); the collection, processing and dissemination of information on socio-economic performance; innovative forms of forest ownership; and advisory /planning tools. Actions envisaged for 2011 include an initiative led by the Italian NRN on the exchange of experiences in setting-up accountancy data systems for forest holdings.

## A cooperative working environment

The experience to date suggests that the NRN Joint Thematic Initiative for Forestry has the potential to become a true working environment for those engaged in the delivery of RDP forestry measures across the EU. In addition to developing awareness of the diversity of forest-related initiatives being undertaken in the different countries and regions, specific actions, such as the study visit to the *dehesa* forests, are also helping to deepen knowledge in specific areas and ensure that the lessons and experiences are shared across the networks.

This study visit was the first example of a spin-off activity generated by this thematic initiative on forestry and it clearly highlights the potential added value of bringing NRNs together for joint activities around common topics of interest.

A key factor in the success of the initiative is the fact that the activities are being led by the NRNs themselves, with the support

and assistance of the ENRD. This helps to ensure that these activities respond to the real needs of the participants, who also take responsibility for ensuring their successful implementation.

This experience is now also helping to inform the work of other thematic initiatives, focusing on topics such as rural entrepreneurship, thereby helping to broaden the scope of cooperation to other aspects of the RDPs.

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## Learning from the *dehesa* experience in Spain

In October 2010, the Spanish NRN, which co-leads a group of NRNs interested in the topic, "The Multifunctional Role of Forests", hosted a study visit to the *dehesa* oak forests in southern Spain (Andalusia).

The *dehesa* is a very specific Mediterranean system of extensively grazed, wooded pasture that covers the south-west regions of Spain and southern Portugal. In agricultural terms, this is a marginal system, with productivity severely limited by the poor quality of the soil. Despite this, these areas harbour significant potential for diversification. In particular, their intrinsic characteristics and management practices ensure the provision of a wide range of environmental (biodiversity, soil conservation, landscape, air quality, carbon storage) and social (retention of human capital and skills linked to diverse economic activities) public goods and services.

The visit provided participants with an opportunity to witness some of these different activities and to explore the opportunities they provide for economic diversification. On the first day of the visit, a field trip was organised to the Natural Park of Alcornocales (Cádiz), where participants met representatives of the Grupo de Desarrollo LAG, "Los Alcornocales". Participants heard about how the LAG is promoting the exploitation of the park's endogenous resources by bringing together public and private stakeholders to develop alternative forms of sustainable tourism. The LAG has also contributed to the implementation

of the European Charter for Sustainable Tourism in the park, and a new sustainable development plan is being prepared, with the participation of local stakeholders, including private land owners, tourism entrepreneurs, municipalities and the regional government.

On the second and third days, participants visited the Natural Park of Sierra de Aracena y Pico de Arroche, where they observed two very different examples of diversification in the *dehesa*. They first visited local farmers of Iberian pig species, and heard about their efforts to overcome the recent economic downturn by developing rural tourism accommodation ("casa rural"), and by establishing an own brand for the commercialisation of their organic pork. The NRN delegation then visited an area of the *dehesa* that comprises mainly olive trees, where a co-operative of local producers have diversified into production and marketing of organic extra-virgin olive oil.

As a follow-up to the study visit, the Belgian Walloon NRN organised a seminar on the "Management of Environmental Public Goods" in November 2010, where further examples of the multifunctional role of forests were presented. The Spanish and Walloon networks co-ordinated these two actions in order to ensure that the interesting insights and examples of economic diversification from the *dehesa* visit would feed into and stimulate debate on innovative management practices at the Belgian seminar.



## The role of forest resources in the socio-economic development of rural areas: the RomaForest 2011 Congress

At the end of June 2011, more than two hundred people involved in forestry from across Europe, including experts from Belgium, Estonia, Serbia, the UK and many regions of Italy took part in the RomaForest 2011 Congress. Organised by the Italian NRN and INEA (National Institute of Agricultural Economy), this was an opportunity for policy-makers, foresters and researchers to spend two days sharing best practices, exploring how RDPs can support sustainable forestry, and discussing the problems and threats facing rural areas where forests provide a source of income and an ever expanding range of ecosystem services.

The Congress began with scene setting papers, to give participants an overview of forest governance and future scenarios in the context of forestry and rural development policies in different parts of Europe. This was followed by a discussion on opportunities for sustainable and multi-functional forest management, and then four parallel thematic sessions covering key topics in more detail, informed by an impressive 42 different presentations and posters.

A session on the competitiveness of the forest sector discussed the real contribution of wood and other forest products to the European economy and employment, with

examples from France, Romania and Wales (UK). It concluded that it takes innovation in forest management, partnership, and persistence to bring a forest to economic and ecological sustainability and that capacity building is a key element of success. Participants went on to consider the need for efficient supply chains and forest-based local governance strategies, with presentations of case studies from three different forest areas in Italy. This session clearly underlined the fact that if rural enterprises harvesting timber in a responsible way are going to be able to contribute to the socio-economic development of rural areas then, pricing policies must adapt to the reality of local market conditions.

Meanwhile, another group discussed the challenges of climate change for forest policies, forest research and information, and how best to deal with the contradictory objectives of managing forests as carbon sinks, for timber production and as a source of bio-energy. The group looked at examples of GHG inventories, the effects of climate change on Mediterranean species, and the benefits of green infrastructure. It then discussed how forest-based climate mitigation measures could be mainstreamed in the next RDP programming period. Key

challenges identified include, working out how much funding is needed, raising awareness of the role of forestry, engaging grass roots organisations, making good use of technical models, choosing policy options that capitalise on the climate change potential of forests and, last but not least, bringing forests closer to where people live in urban areas.

The parallel session on forests, bioenergy and agroforestry considered the possibility that demand for wood products to generate bioenergy could overtake supply in little more than 10 years' time. Three case studies from Italy looked at opportunities to supply wood energy from regenerative logging of conifer plantations, alternative ways of thinning walnut plantations, and farmers' and foresters' perspectives on creating new agroforestry systems using RDP measure 222 – first establishment of agroforestry systems on agricultural land. The discussion then moved on to sustainability assessments and the eco-efficiency of wood energy supply chains. This group concluded that in Italy, the supply of wood energy could be increased using RDP measures to support economic planning, agroforestry and mechanisation. Key issues will be forging closer links between institutions, researchers and farmers, making more



efficient use of wood and harvesting techniques, and developing the biomass-bioenergy-environment supply chain.

The session on forest biodiversity, landscape and other public benefits considered how Europe's forests could supply these many differing demands, what the priorities should be for 2014 – 2020 and how to deal with the trade-offs, for example, between biodiversity and biomass for energy production. There were examples of monetary valuation of forest services from southern Italy and Sicily, and of the recreational and well-being benefits of forest landscapes in Belgium and Italy. Simple 'radar' diagrams were used to illustrate how an indicator of forest biodiversity might be used across Europe, and delegates were shown how existing forest inventory data can be used to define the baseline indicator for High Nature Value forests in Italy. These presentations illustrated the importance of having a sound evidence base to justify and underpin the implementation of RDP forestry measures, now and in the future, and the need for well-established channels of communication between researchers, policy-makers and forest managers.

The second day of the congress provided an opportunity for representatives from three different directorates general of the European Commission (DG AGRI, DG ENV and DG CLIMA) to outline future policies, neatly illustrating the breadth of forest policy. Some hints were provided about the forestry measures we can expect to see in the next programming period and data on the implementation of current forestry measures was presented, highlighting the disappointingly low level of uptake, against planned expenditure, for some measures, including the forest-environment measure. Member States were invited to provide more examples of the use of this measure, and warned that re-allocation of unused RDP forestry funding is likely to happen if spending remained low. In relation to forest-related policies at EU level, the EC outlined the review of the EU Forest Strategy, which has just started, and discussed some of the complex and conflicting issues raised in the debate about last year's Green Paper on forests<sup>1</sup>. A last intervention illustrated the potential contribution of land use, land use change and forestry (LULUCF) to climate policy. A Communication from the Commission on LULUCF is expected in the autumn, followed by a legislative proposal.

RomaForest 2011 succeeded in covering a wide range of topics in a way that provided useful insights for people actively involved in managing forests. It provided an up-to-date review of relevant EU policies and RDP implementation, and an opportunity for stakeholders to be directly involved in this timely debate, just a week before the EU budget announcement for the 2014-20 RDP programming period. While media coverage of the EU budget has focused mainly on future EU support for agriculture, RomaForest 2011 reminded us all how important it is to communicate the role of forestry in delivering key EU policies, especially in the context of climate change. Many forests, and particularly those beyond the globally competitive forest industries of Northern Europe, will depend on support from RDPs to deliver their contribution to the economic and social future of rural communities across the EU.

The RomaForest 2011 proceedings, presentations and papers are available to download from the conference website

<http://www.reterurale.it/romaforest2011>

(1) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0066:FIN:EN:PDF>



# Supporting the multi-functional potential of Bulgaria's Biologically Important Forests

**Vanya Ratarova has worked for the past four years as a Forest Conservation Research and Advocacy Officer with the Bulgarian Society for the Protection of Birds (BSPB). She is co-author of a recently-completed study for Birdlife International on mapping Biologically Important Forests in Bulgaria and Romania.**

An ecologist specialising in sustainable forest management, Vanya Ratarova joined the BSPB biodiversity conservation team in 2007. Working mainly at the non-governmental organisation's head office in Sofia, she is responsible for the implementation of BSPB (and partner BirdLife International) policies and initiatives relating to forest conservation.

A key aspect of her work has involved the mapping of the country's Biologically Important Forests (BIFs)<sup>1</sup> – defined as those retaining features of natural forests, or having started to develop such features – for the Bulgarian-Romanian Forest Mapping project (BRFM, 2007-2009). This is part of Birdlife's European Forest Task Force Initiative, mapping BIFs across Europe.

The overall objective is to provide a basis for the effective protection and management of European forest ecosystems. Specific goals of the BRFM project, coordinated by Diyana Kostovska (also based at the BSPB headquarters) were to locate BIFs in Bulgaria and Romania, review their current protection status and propose concrete measures for the management of the most important and valuable forests.

### Forests in Bulgaria and Romania

Forests cover 34% and 27% of Bulgaria and Romania respectively. These are among Europe's richest and most diverse ecosystems: the physiographic characteristics of the countries, a derivative of their climatic conditions, topography and hydrology has produced a great variety of forest habitat types. Additionally, the

habitats are very rich in endemic plant and animal species. For example, vast, unregimented primeval (old-growth) forests remain in Bulgaria's Rila and Pirin mountains. These provide shelter for many rare and threatened species, including some of Europe's large carnivore populations such as brown bears and wolves. They also harbour many forest-dependent species such as the globally-threatened semi-collared flycatcher and white-backed woodpecker.

Importantly, the BRFM project adds a new ecological aspect to the forest inventory databases of both countries, which, until now, have only focused on the economic aspects of forests. "Depicting their BIF distribution should help decision-makers better understand the need for rational planning and management of forests that also takes into account biodiversity needs," says Ms Ratarova.

(1) Biologically Important Forests (BIFs) – defined as "retaining features of natural forests, or having started to develop such features".

## Forest policy

The mapping work has also enabled the BSPB to get more involved in forest policy processes at national level, and also in the development and implementation of the rural development programme in Bulgaria.

One of the first tasks, ahead of the actual mapping of the forests, which are mainly located in mountainous areas, to the south-west and south-east of Bulgaria, was to adapt the general BIF criteria to local conditions. This was not easy, notes Diyana Kostovska, explaining that it involved discussions with all stakeholders, particularly foresters and forest experts, in order to adapt the general, international criteria to local conditions.

For example, for just one of the (nine) general criteria – “forests with no or limited human activities”, six further indicators

were required in order to adapt this very broad term to the Bulgarian situation. These forest areas, along with “endangered forest ecosystems and habitats”, are the most common BIF in Bulgaria, accounting for 72% of the BIFs. The most common forest types in Bulgaria are *Thermophilous*<sup>2</sup> deciduous forests and Montane beech forest.

Another important task was to locate appropriate sources of information. The main source was the forestry inventory database of the Bulgarian State Forest Administration. This was supplemented by other information e.g. on the Natura 2000 network in Bulgaria. In addition, field checks were carried out in order to verify the reliability of the information gathered from various sources. For this task, the BSPB was able to make use of its extensive network of volunteers in order to cover some of the more remote and inaccessible forest areas.

## Other challenges

Among its conclusions, the BRFM report highlighted that most of the Bulgarian BIFs are not protected – only 15% are strictly protected, while approximately 75% of the forests “lack any kind of protection measures at all”. Although most of the BIFs are covered by the Bulgarian Natura 2000 network, without operating management plans they are subject to unconstrained forest management and exploitation.

Forestry in both Bulgaria and Romania is still focused on ensuring optimal economic gains from silviculture. Some of the key challenges to the sustainable use of Bulgarian forest resources are linked to illegal activities. “Illegal logging is still a very big problem,” says Ms Ratarova [estimated by WWF Bulgaria (2005) to account for 45% of the total annual harvest]. Other factors include

(2) *Plants thriving under warm conditions.*



**“ When they are working in the forests they [foresters] say they don’t pay any attention to the biodiversity there... ”**

Vanya Ratarova

increased human activities in forests and inefficient forest biodiversity policy implementation.

Another problem encountered by Ms Ratarova in her work for the BSPB is that local people, including foresters, in rural communities often “lack any information about EU policies”. Moreover, she says that the perception among foresters is that the Natura 2000 network is a “limitation” to their work: “When they are working in the forests they say they don’t pay any attention to the biodiversity there, as they’re only interested in the timber.”

A key lesson she has learnt from the 2007-2009 mapping work is that: “It is really very important to work not only on a national level, but to get in touch with local people, including the foresters, and to exchange experiences and knowledge.” She continues: “There are other ways to gain profits from the forests – not just by logging – but by making use of the natural resources in more sustainable ways.”



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**“ It is really very important to work not only on a national level, but to get in touch with local people, including the foresters, and to exchange experiences and knowledge ... ”**

Vanya Ratarova



### Useful links

Birdlife International “Bulgarian-Romanian Forest Mapping (BRFM) report”:  
[http://www.hcvnetwork.org/resources/assessments/BRFM%20report\\_English\\_low%20resolution.pdf](http://www.hcvnetwork.org/resources/assessments/BRFM%20report_English_low%20resolution.pdf)

Interactive map of Biologically Important Forests with country reports:  
[www.forestmapping.net](http://www.forestmapping.net)

The Bulgarian Society for the Protection of Birds:  
<http://bspb.org/index.php>



# How to safeguard a sustainable future for Portugal's forest resources?

**Nuno Coimbra runs a mixed agro-forestry business on the family farm in the centre of Portugal. He is a firm believer in sustainable forestry approaches, which he practices on a daily basis in order to maintain his own income, and also to conserve the potential of his land holdings for future generations of agro-foresters.**

Portugal's climate and soil conditions are often not suited to supporting a rich agricultural base, and historically, the State tended to discourage private ventures into the development of rural land for commercial purposes. As such, Portugal is the most afforested country in southern Europe.

Nuno Coimbra's agroforestry farm, named "Rosmanihal", is located in the

centre of Portugal. Here he manages around 1000 hectares of land that has been worked by his family since his great grandfather's days, in the late 1800s. Mr Coimbra is a Forest Management Engineer by trade and he specialises in implementing local Montado techniques for cork production. Half of his land is managed using these cork cultivation methods. He also uses other silviculture systems, covering forest crops

such as pines and eucalyptus. There is also some agriculture amongst his forests, namely maize and some rice in the valley areas, where water is drained from the surrounding upper forests.

The Coimbra's farm is not far from the "Paúl do Boquilobo Natural Reserve" (belonging to the Word Network of UNESCO Biosphere Reserves), and the balanced management of the resources

in Rosmaninhal is consistent with the conservation needs of a wildlife reserve.

Agro-forestry actions applied by Mr Coimbra reflect what is possible naturally from the area's soil and climate conditions. This leads to multiple uses, which require multiple skills but also allow diversification of income. Biodiversity also benefits from the farm's mixed land use systems.

Naturally, each component of the agro-forestry farm, alone, does not provide the needed income. Only the complementary effect among the different sources of income enables the economic sustainability of the farm. At the same time, it also lessens the vulnerability to different risks (market, fires or diseases) that affect other parts of the country, such as areas depending on unmixed pine tree or eucalyptus forestry for the cellulose industry. According to Nuno Coimbra, the well-adjusted production of these two forest species in Rosmaninhal helps him to supply pine nuts and timber for several industrial purposes.

## Montado farming

The *Montado* is an agrosystem of both southern European and northern African regions, corresponding to a peculiar landscape of transition between forest and open field landscapes. Montado farms grow cork-oaks or holm-oaks, often with cereal crops or cattle grazing amongst the trees, in an extensive system (in natural pastures or benefiting from the fallow land).

Montado management focuses on sustainability because the crop production cycle involves a long-term approach. Mr Coimbra explains that management of the cork crop involves regular cutting of brushwood growing among the trees, but avoiding aggressive techniques that might harm the shoots. He emphasises that if no fire risk existed he wouldn't cut the brushwood at all, as it helps to provide shade, which is useful for the growth and development of the new-born cork-oaks, as well as helping to enrich the entire Montado ecosystem.

Although other Montado farmers graze cattle, Mr Coimbra avoids that option as he prefers natural fauna preservation methods, and aims to prevent excessive soil damage that can sometimes occur when livestock congregate. He is worried that the increase in intensive methods (that introduce more cattle, remove trees to open up larger field areas and apply artificial inputs) is creating an imbalance, resulting in the spread of 'cork-oak disease', which has become more prevalent in recent decades and weakens cork trees' resistance to cope with stress.

By keeping his cork regeneration conditions as similar as possible to the natural situation, and by controlling soil erosion, Mr Coimbra manages to get more resistant new cork-oaks, from which he selects those with a bark tissue structure capable of producing the most demanded top quality cork. At the same time, these selected trees will also guarantee the best quality lineage.

## Social benefits from integrated perspectives

In addition to the environmental and economic aspects of his agro-forestry enterprise, Mr Coimbra is also keen to mention the social benefits generated at Rosmaninhal. Employment is a key outcome and the farm's low impact cork production methods help to support three permanent employees, as well as seasonal contractors involved in brushwood cutting (between December and March), agricultural work related to maize and rice (from May to October), and the extraction of cork (about 20 workers in June).

Such relatively small employment impacts can help make a big difference to the viability of rural communities in Portugal, which (as elsewhere in Europe) suffer from strong depopulation pressures caused by the lack of, or limited, job opportunities. Mr Coimbra believes that support, through rural development policies, for similar types of sustainable agro-forestry actions will have long-term legacies in terms of helping to support a living countryside.

### The prodigious richness of the cork-oak

Portugal is the world's biggest producer of cork, accounting for more than 50% of global production. The country's cork industry represents about a third of Portuguese export trade, involving more than 800 enterprises and around 12 000 jobs. There is a remarkable diversity of products and applications that use cork. Different kinds of 'bottle stoppers' are the most obvious (accounting for 25% of production and 70% of turnovers), and these help to assure the quality of other Portuguese rural products, such as the country's wines (like Port) and spirits.

Cork from Portugal's forests is also used in flooring and wall coverings, to make decorative objects for the home and office, in furniture, foot-wear, clothes, suitcases, wallets and even in umbrellas. Manufacturers of cars, military equipment and aviation components also use large amounts of cork, as do chemical, pharmaceutical and electrical power industries. Additionally, cork trees also provide good environmental benefits, as parts of biodiverse habitats.



COMFOR: transferring knowledge about ergonomics in the forestry sector





## Occupational health conditions for small and medium sized EU forest businesses have been boosted by results from the COMFOR rural research project, which received funding from the EU's 6<sup>th</sup> Framework Programme for Research and Technological Development.

Poor occupational health and economic performance is a Europe-wide issue for small and medium-sized enterprises (SMEs) operating in the forestry sector. Coordinated by the European Network for Forest Entrepreneurs (ENFE), the COMFOR (Collective work science approach to solving the common problems of occupational health and performance in European forest operations SMEs) project, which ran from June 2006 to May 2009, sought to develop an innovative knowledge transfer concept that would encourage and enable forestry SMEs to adopt ergonomically sound working practices.

In order to improve occupational health in the target industry, the COMFOR team had to find ways to overcome significant practical and financial barriers that prevented forestry SMEs from adopting better working practices. "The biggest challenge was to transfer knowledge to small and micro enterprises in an environment where the business focus is mainly on economic survival in a field with low profit margins," explains project coordinator, Mr Edgar Kastenholtz of ENFE. "Busy schedules mean that ordinary work

tasks must be prioritised," says Mr Folke Bohlin, from the Swedish University of Agricultural Sciences (SLU), who led the research component of COMFOR. "It was a challenge to motivate SMEs to realise that their contribution was important, if not crucial to the success of the project," he adds.

COMFOR's task was to take existing knowledge of best practices in ergonomic and work organisation methods and convert these into procedures that meet the demands, perceptions and learning cultures of EU forestry SMEs. In order to achieve its goals, the project gathered a consortium of 21 partners (across 21 countries), directed by 10 forestry SMEs, who specified what areas the research should focus on and, with the assistance of national associations of forestry contractors, tested and piloted the solutions developed.

### Research comes first

This bottom-up approach necessarily meant that the first year of the project was dedicated to research, conducted by three universities with a proven track

record in economics and ergonomics – SLU, Warsaw Agricultural University and the Albert-Ludwigs University, Freiburg (Germany). Working closely with the 10 partner SMEs, and with input from six applied research, training and development organisations, the universities developed case studies to establish the current stage of development and frame conditions for the forestry workforce in 10 countries across three regions of Europe: north, west-central and east-central.

The research findings were used to produce reports on: "ergonomic and economic efficiency in mechanised forestry"; "the impact of structural change on health and performance"; and "optimum educative techniques". They also fed into a series of customised training packages, reflecting national conditions. The end result of three years of development, including a year of testing, evaluation and continuous amendment, was an interconnected system of seven training packages for improving health and performance, known collectively as 'The Tools' (see box).

## The COMFOR system of educational packages for mechanised forest operations

Tool 1: Health & Performance

Tool 2: Cost/Benefit

Tool 3: WORX (Work organization and working climate) for SMEs

Tool 4: Skills (contractor)

Tool 5: Skills (operator)

Tool 6: Ergo-check

Tool 7: Skills-check

COMFOR recommends that all the tools are used as part of a development process within an enterprise, although each can also be applied individually.

The tools are available online at [www.enfe.net/comfor.htm](http://www.enfe.net/comfor.htm) in the languages of the 10 participating countries for use by ENFE's national contractor associations and their members.

The next step was to set up a training programme to transfer the knowledge contained in the tools to the target audience. As Ms Maryse Bigot from the Institut Technologique FCBA (Forêt Cellulose Bois-construction Ameublement) in Paris, who led this stage of the project, notes, "it's always very difficult to get people from micro-enterprises to take part in training sessions; when they are not at their job they are losing money." Hence, COMFOR targeted organisations in each country that were already active in training or consulting processes with contractors to act as multipliers.

Training sessions were customised according to the needs and requirements of the enterprises in each country, taking into account factors such as the availability of forestry workers, national health and safety legislation and the degree of mechanisation of forest operations within the country. The process of designing the training programmes also led to the creation of a handbook, "Training activities – recommendations for the trainers", which is available as a free download from the COMFOR website.

## Wide acceptance

COMFOR's decision to involve forestry SMEs as partners from the beginning of the project has helped it to produce a genuinely useful set of tools. "We observe a rather keen interest from the industry," says Mr Kastenholz. "Some of the tools are now used quite widely in training and consultancy." According to Ms Bigot, "the cost/benefit analysis tool has been very popular." This particular tool provides an 'early warning' for work-related illness and enables companies to calculate the financial cost not only of absenteeism, but also of 'presenteeism' (i.e. limited illness at work). Mr Bohlin from SLU, who helped develop the tool, says "our Finnish partners (Metsäurakointi Piirainen) found that not only did they have substantial 'presenteeism', but that this meant an average loss of EUR 1 000/month."

To achieve the widest possible dissemination of the tools, they are now available, royalty-free, for download from the COMFOR website by forestry SMEs. Project coordinator, ENFE, is also promoting COMFOR to all of its member organisations. In addition, the COMFOR tools are being considered for inclusion in contractor training and certification schemes in some of the participating countries: in the UK, for example, the tools will be wholly or partly incorporated into the current machine operator certification scheme; in the Netherlands, they will be added to the existing contractor certification scheme.

Like any investment in health and safety, the value of COMFOR will only become apparent in the medium to long-term. However, the project is clearly an important first step in making forestry SMEs aware of health problems in their enterprises and of how investment in ergonomics and work organisation can benefit the bottom line. With the support of the experts and partners that have helped develop and been trained to use the project's tools, it is hoped that the know-how generated by COMFOR will, over time, reach a wide range of forestry contractors in Europe, improving their health, performance and economic viability.

For further information visit [www.enfe.net/comforopen/comfor.htm](http://www.enfe.net/comforopen/comfor.htm)





# FOPER: enhancing forest policy and economics in the Western Balkans

**FOPER – Forest Policy and Economics Education and Research – is an international project to enhance human capacity in forest policy and economics in higher education and research in the South-East European (SEE) partner countries. The project is consolidating the gains of increased capacities of forest policy and economics experts in the SEE region, while helping to improve the forest sector’s ability to contribute to sustainable development in all its different aspects (economic, environmental and social).**

**F**OPER is funded by the Ministry for Foreign Affairs of Finland as part of its EU enlargement programme and managed by the European Forest Institute. The project has been working to strengthen the capacities of higher forestry education and research institutes in the fields of forest policy and forest economics since 2004. While traditional forestry sciences are very strong in SEE countries, there is a lack of modern economics and policy science in forestry. Since forests are an important resource in these countries, it is a high priority to build higher education and research capacity in economics and policy. "From 2004 to 2009, 10 university lecturers, 20 researchers, and about 300 professionals received training in forest policy and economics from experts outside of the region," according to Tomi Tuomasjukka, FOPER I coordinator.

To build up long-term capacity, FOPER facilitated the development of an international Master of Science (MSc) programme in *'Forest Policy and Economics'*, which is the joint responsibility of the faculties of forestry in Belgrade, Sarajevo, Banja Luka, Skopje, and Tirana. By May 2009, 19 FOPER

I students had successfully defended their masters' theses. Twenty-one FOPER II students currently enrolled will defend their theses by June 2012. The courses for this four semester international MSc programme are offered at the Faculty of Forestry in Sarajevo and the Faculty of Forestry in Belgrade, and are taught by international as well as regional faculties. The FOPER project provides scholarships for students from the five partner countries so that they can focus full-time on this intense course of study.

In 2009, the steering committee approved a new component – the FOPER Doctoral College and Support Programme, which provides funding for doctoral students from the partner countries, who are enrolled at regional or international universities in forest policy and economics, to spend at least six months out of the region, attend international conferences to present their research work, and participate in international doctoral education 'summer schools'.

Several of the SEE countries are in the pre-accession stages of EU membership, and the research results from the FOPER

project are directly relevant to informing legislation, policy and the conduct of the forestry sector. For example, the Collaborative Regional Research Team (CRRT) coordinated by the Faculty of Forestry in Sarajevo is carrying out the research project, *'The adaptation of national forest policy systems in South-East European countries (Albania, Bosnia-Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, and Serbia) to new modes of international forest governance'*. The project is examining the degree to which forest policy actors in SEE countries understand the emerging international forest governance processes and how these are adapted by national forest sectors as policy systems. The results of this project will help SEE countries to adapt their institutions and legislation to European standards.

## Internships and employment

An important aspect of FOPER is its internship programme, which allows students to gain experience in a ministry, faculty, forest enterprise or NGO for periods of between a week and a year.



Professor Margaret Shannon, project co-ordinator, says: "This programme allows hosts to learn what someone with expertise in forest policy and economics can contribute to their work. Our goal is to create additional places and employment opportunities, and so far we've been successful."

For example, the Ministry for Agriculture and Forestry in the FYR Macedonia hosted two FOPER I students, Ms Marina Miovska and Mr Vladimir Stojanovski, during the summer of 2010. "As graduate master students within the area of forest policy, we had a preference for being employed in this newly established unit, and to become part of the forest policy chain in the SEE region. Through the connection with the regional and the international experts in the field of forest policy, the unit can also be of great benefit for the department of forestry and hunting," says Ms Miovska. Mr Stojanovski has now begun his doctoral studies in Vienna and brings his internship experience to his research interests in forestry innovation.

The Serbian government has also taken on students for short placements,

to help with policy, and the Brussels Confederation of European Forest Owners (CEFP) plans to offer a FOPER PhD student an internship this autumn. Prof Mersudin Avdibegovic, MSc coordinator, says that the high employment rate of former FOPER students highlights their "strong competitiveness" in the national and regional labour market. About a third of the FOPER I students (2007-2009) are currently employed with international/national consultancy companies and environmental NGOs. About 20% are hired by the public forest administration, while roughly 30% are employed by universities and forestry research institutes. Moreover, there is no brain-drain as all graduates are still active in the region.

### Connected research

Such tangible outcomes are an important sign of the value of the project, according to Prof Shannon. "When I became the FOPER coordinator, I wanted to see real output: publications, students trained, dissertations, theses, productive workshops and conferences that attracted stakeholders," she says.

Next year FOPER will host the first conference of the new Division 9 Forest Policy and Economics of the International Union for Forest Research Organisations (IUFRO) in Sarajevo. A special conference on 'Assessing Governance of Forests' will be held, as well as the regular meeting of the deans and directors of forestry research organisations from around the world.

The Sarajevo Faculty of Forestry has just created a new research institute that will also provide new opportunities for FOPER graduates. This development highlights the importance of the internship programme, says Prof Shannon. Employers see why they might want someone on a longer term basis. Very often in the past they asked, 'Why do I need an adviser in forestry economics?'"

For further information visit <http://www.foper.org>



# Views on how EU rural development policy can best support EU forests



## To support sustainable forestry, EU rural development policy must target resources carefully, gather more information, build capacities and provide guidance, while streamlining the policy framework where possible.

Europe's forests, in common with the continent's other rural landscapes, cannot be separated from the influence of human activity. Over centuries, forests have been cut back and replanted, new species have been introduced and old species have died out. According to the European Environment Agency's *State and Outlook 2010* report<sup>1</sup>, only around 5% of the European forest area is considered to be undisturbed by humans.

People continue to manage forests. But the pace of change is increasing and management challenges are becoming more complex. Development pressure is growing, sometimes causing conflicts over, for example, road construction. Environmental threats, including climate change, must be planned for and adapted to. Forests must also become more productive. Mr Denis Boglio, Secretary General of the Federation of Mediterranean Forest Owners, says that "one of the biggest mid-term challenges is to increase competitiveness and wood mobilisation to meet future industry and energy sector demand, which all projections suggest will rise significantly".

EU rural development policy seeks to help forest managers meet these challenges. The EU rural development regulation for 2007-13 includes eight forest measures, with afforestation given the highest priority. About EUR 8 billion in EU funds (EAFRD contribution) will be spent on forestry through these measures. Meanwhile, work is moving forward on a rural development strategy for the post-2013 period. Considering the different environmental and economic challenges, the focus on forests is likely to become more intense.

### Targeted support

Lessons for future EU forest policy can be drawn from the experience of past rural development programmes (RDPs). One of the main issues is the targeting of resources. Mr Boglio believes that the amount of public money spent on forests must be balanced against the public goods and collective benefits that forests secure, such as clean air and water, and the sequestration of carbon dioxide.

"Well-managed forests can be a very powerful tool for Europe to mitigate climate change," Mr Boglio says. "But at the moment, the forestry measures in the

RDP are based on another policy context. The new Common Agricultural Policy should allow for this updating of priorities, and foresters will expect increased support to help them to help Europe in this major [climate] task".

Ms Veerle Dossche, forest policy and biodiversity specialist with campaign group Fern<sup>2</sup>, says that experience has shown that finance is important, but it must be deployed carefully. "In the context of climate change and declining biodiversity, this support should remain in place, provided that the funds contribute to improved forest management practices and increased forest conservation," she says.

But she adds that, "there are not enough incentives or safeguards in place to ensure that the rural development policy effectively contributes to enhanced forest protection. This has, both in the previous and in the current programming periods, led to a situation where business as usual was supported, at the cost of biodiversity conservation."

Ms Dossche cites the use of EU money to plant "alien and sometimes invasive" species, or the deployment of funds to promote bio-energy production without

(1) <http://www.eea.europa.eu/soer>

(2) FERN is a non-governmental organisation (NGO) and a Dutch Stichting created in 1995 to keep track of the European Union's involvement in forests and coordinate NGO activities at the European level.

first establishing sustainable biomass production criteria, as examples of financial support that could have been more carefully targeted.

However, Mr Erik Sollander, forest policy strategist with the Swedish Forest Agency, says that EU financial support should be seen in context. He notes that in Sweden, one of Europe's main forestry nations, relatively little public money is spent on forests: 730 million Swedish kroner (equivalent to around EUR 82 million) between 2007 and 2013, half of which is EU money. Sweden found in the 1980s that high subsidies "delivered mainly what was expected, but also gave rise to negative side effects and destroyed the forest sector's incentive to improve," he says.

Subsequently, Sweden reduced these subsidies. "Since then the forest sector has, on its own, developed solutions to several policy-relevant problems. For

example, an FSC [Forest Stewardship Council] national standard was first developed here," Mr Sollander says.

The Swedish experience highlights two factors about the forest sector. Firstly, it can be profitable without subsidies, which in turn provides an incentive for good forest management. Sweden's forest industry is worth 250 billion kroner (equivalent to around EUR 28 billion), with good profit margins, says Mr Sollander.

Secondly, there is scope for more growth in the sector. Europe's total wood harvest is below the annual re-growth, and the total forest area is increasing. Sweden is one of the countries with the highest utilisation of its wood supply (more than 80%), compared to less than 20% in countries such as Ireland, Portugal and Spain, according to the European Environment Agency's *State and Outlook 2010* report.

## Optimising management

When considered in this light, according to the experts, while financial support is important, EU rural development policy can work to help forests in a number of other ways. With the right planning and consideration of environmental risks, forests can be managed sustainably and can be economically productive.

Mr Boglio says that policy can be used to encourage "changes in management practices, extension of protected perimeters, more adaptive silviculture." EU measures can be "implemented at regional or sub-regional level, and will generate more management without necessarily a productive/economic focus," he says, noting that many European forests are under-managed because of low profitability, though there is scope for this to change because of factors such as a growing demand for biomass for energy.





Other ways in which rural development policy can help include capacity building, supporting innovation and technology transfer to increase the added value of wood and forest-based products, and promoting regional-level schemes to provide payment for environmental services, he says. In addition, the EU should be ready to step in and provide flexible assistance when disasters occur, which is particularly important in southern Europe, where forest fires are common.

On capacity building, Mr Boglio says that “in most of Europe, forest property is extremely fragmented and this is an incredible limitation when managing, investing or selling. Grouping forest owners and facilitating joint management (associations, cooperatives, and advisory services) has been proven to be an effective way to overcome this problem”.

Mr Sollander also has a wish list of non-financial measures that could be put in

place. He says there should be increased dialogue with the forest sector to pinpoint problems, and more in the way of advisory services to help forest owners become more efficient and effective. In addition, the counter-productive consequences of some measures need to be dealt with. He says that EU agricultural subsidies for grazing land go too far in specifying the extent to which grazing land can have woodland cover. In Sweden, this has led to the unnecessary cutting down of trees in order to obtain the subsidies.

Sustainability criteria are another stumbling block. “The current effort to use sustainability indicators for biofuels may, when applied here [in Sweden]; mean that forest resources are not used for energy – simply because the system becomes too cumbersome. I understand this was never the intention, but it is still a risk that we do not quite know how to handle,” Mr Sollander says.

For Ms Dossche of Fern, the main non-financial consideration for rural development policy as it affects forests is that there should be coherence with environmental aims. Financial support “should explicitly be linked to contributing to the EU’s environmental commitments,” she insists.

She also believes that EU Member States should be obliged to take this seriously through a requirement that they show in their rural development strategies how they “will ensure coherence with other national programmes or action plans, such as those for biodiversity and renewable energy”. At the same time, Brussels can provide common guidelines, and “a standard for good forestry practices should be established and form the baseline for support for all forest measures”.



## Keep it simple

The call for guidelines is echoed by the forest owners. Better still, rural development policy as it affects forests could be streamlined. There is a “lack of a single, coherent policy framework to support ‘sustainable forest management’ and forestry as a whole,” says Mr Boglio. There is an “extremely complex and opaque” set of directives covering issues such as agriculture, energy and water, he says. These can overlap and sometimes “have incompatible or mutually exclusive goals.”

Ms Dossche agrees there is a “confusing policy web,” partly brought about because there is no provision for forest policies in the EU Treaties. When national policies are included in the mix, the potential “lack of coherence” is even greater, she says.

Mr Sollander says that EU policymakers should resist the temptation to introduce greater complexity when reviewing rural development and forestry policy. The Swedish government wants to “simplify the existing legal framework – without losing edge,” he says. The benefits for forests and for society at large could be “huge”. The ideal, he adds, would be “simple, well thought-through legal frameworks that can be understood by almost anyone. But to create that and still have something meaningful is difficult”.



### Useful links

Confederation of European Forest Owners – CEPF: [www.cepf-eu.org](http://www.cepf-eu.org)

Fern: [www.fern.org](http://www.fern.org)

Swedish Forest Agency: [www.skogsstyrelsen.se/en](http://www.skogsstyrelsen.se/en)

European Environment Agency – EEA: [www.eea.europa.eu](http://www.eea.europa.eu)

The previous issues of your EU Rural Review are still available on EU Bookshop: <http://bookshop.europa.eu>



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The screenshot shows the homepage of the European Network for Rural Development (ENRD). The header includes the European Commission logo and the text 'European Network for Rural Development'. Below the header, there is a navigation menu with options like 'HOME', 'RURAL DEVELOPMENT POLICY', 'NATIONAL RURAL NETWORKS', 'ERDF THEMATIC INITIATIVES', 'ERDF LIBRARY', 'EVENTS AND MEETINGS', and 'RDP PROJECTS DATABASE'. The main content area is titled 'European Network for Rural Development' and contains a section for 'ERDF NEWS and UPDATE' with a 'MAIN STORIES' section featuring a 'PROJECT OF THE MONTH' and a list of 'OTHER NEWS' with dates and brief descriptions. The sidebar on the right includes sections for 'EVENTS AND MEETINGS', 'MEDIA GALLERY', 'BY COUNTRY', 'RDP PROJECTS DATABASE', 'LEADER GALLERY', 'RDP MONITORING INDICATORS', and 'NBN SELF-ASSESSMENT TOOLKIT'.

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