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A new EU Forest Strategy: for forests and the forest-based sector

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1. PROCESS: CONSULTATION AND EXPERTISE

1.1. Background

The EU Forestry Strategy¹ was adopted in 1998, following a Resolution of the European Parliament calling for the Commission to put forward a proposal for such a strategy and a Communication from the Commission² which highlighted the challenges facing the EU forests, the policy and legal framework for forests and forestry in the EU as well as common objectives and guiding principles for the roles of the EU and the Member States in forest policy.

The Forestry Strategy has served as a reference document for i.e. forestry measures in Rural Development and as a basis for the EU Forest Action Plan.

The Forestry Strategy is related to several EU policies and objectives, in particular: agriculture and rural development, environment, climate change, biodiversity, plant health, research and innovation, trade, industry and energy.

In 2005 the Commission adopted a report on the implementation of the EU Forestry Strategy³, concluding that the basic principles and elements identified in the EU Forestry Strategy of 1998 were still valid. However, it also observed a need for a more coherent and pro-active approach to forest policy at EU level. Therefore the Commission presented an EU Forest Action Plan in 2006⁴.

The EU Forest Action Plan (FAP) was based on the principles and elements identified in the Forestry Strategy for the EU, and it covered four objectives:

- (1) Improve the long-term competitiveness,
- (2) Improve and protect the environment,
- (3) Contribute to the quality of life, and
- (4) Foster coordination and communication between Community actions as well as between Community actions and the forest policies of the Member States.

The Action Plan provided a framework for the implementation of forest-related actions at Community and Member State level, and it served as an instrument for coordination between different Community actions as well as between Community actions and forest policies of the Member States. The aim was to support and enhance sustainable forest management (SFM) and the multifunctional role of forests. The Leading Actors responsible for implementing the plan in 2007-2011 were consequently the Commission and the Member States. As a follow up of the Forest

¹ Council Resolution 1999/C 56/01

² Communication from the Commission to the Council and to the European Parliament on a Forestry Strategy for the EU COM(1998)649

³ COM(2005)84

⁴ COM(2006)302 final

Action Plan, the Commission committed to publish a report about its implementation in 2012.

In 2010 the Commission adopted a Green Paper on Forest Protection and Information - Preparing forests for climate change⁵ which set out options for a European Union approach to the protection of forests and to information about forest resources and their condition. The purpose of the Green Paper was to encourage an EU-wide public debate and to secure views on the future of forest protection and information policy, as well as to provide elements for a possible update of the EU Forestry Strategy on climate related aspects.

The new Forest Strategy is also linked with international forest discussions and, in particular, with the Legally Binding Agreement on forests for which negotiations have been opened in July 2011.

The need to review the 1998 Strategy has been stated in a number of contexts; such as the Council Conclusion on an EU Forest Action Plan⁶ that considers necessary an update of the Forestry Strategy to ensure greater coherence of forest-related policies and to reflect the changes in the global, regional and national policy context; the White paper on adaptation to climate change⁷ that recommended updating it on climate-related aspects; and the Green Paper on forest protection and information which aimed to provide elements for a possible update of the EU Forestry Strategy on climate related aspects. The Resolution from the European Parliament about the strategy calls for strengthening it with a view to improving sustainable forest management and conservation, and the recommendations of the mid-term and the ex-post evaluation of the EU Forest Action Plan⁸ also mentions the need for updating the strategy. The review process was welcomed in the Council Conclusions on the EU Biodiversity Strategy to 2020⁹ and supported by both the Standing Forestry Committee and the Advisory Committee on Forestry and Cork.

In April 2011 the Commission launched the review process of the 1998 Forestry Strategy. The main inputs being considered are the consultation process with Member States and stakeholders including two ad-hoc Working Groups to the Standing Forestry Committee and two workshops with Member States and stakeholders, and the evaluation of the Forest Action Plan carried out by external consultants.

1.2. Evaluation of the Forest Action Plan (FAP)

A mid-term evaluation of the EU Forest Action Plan was conducted in 2009¹⁰ and an ex-post Evaluation was concluded in November 2012¹¹. These two evaluations are

⁵ COM(2010)66 FINAL

⁶ Council Conclusions on an EU Forest Action Plan, 2662nd Council meeting AGRICULTURE AND FISHERIES - Brussels, 30 and 31 May 2005

⁷ White Paper Adapting to climate change: Towards a European framework for action COM(2009) 147 final

⁸ Available at: http://ec.europa.eu/agriculture/fore/publi/index_en.htm

⁹ [Environment Council Conclusions of 19 December 2011](#)

¹⁰ Available at: <http://ec.europa.eu/agriculture/eval/reports/euforest/>

¹¹ Available at: http://ec.europa.eu/agriculture/evaluation/market-and-income-reports/forest-action-plan-2012_en.htm

important inputs for the 1998 Forestry Strategy review and have been taken into account for the new Strategy.

The mid-term evaluation concluded that the implementation of the plan was on track but that its effectiveness in influencing action in the Member States should be analysed at a later stage as the effects of the EU FAP on its specific goals (the four objectives above) cannot be expected to show up after only two years of implementation.

For the period post 2011, the evaluation raises the following aspects for consideration:

- more holistic approach to forest sector issues, making it more interrelated with parallel sectors and with environmental, economic and social policies;
- integration of the international forestry issues into the EU forestry action;
- higher profile of the EU in international forest-related processes;
- strengthening the science-policy-practice triangle by better coordination of scientific work and utilisation of financial resources (FP7, COST, national);
- preparation of post-2013 financial instruments.

The mid-term evaluation was an important input for the ex-post evaluation.

The ex-post evaluation was based on extensive document reviews, questionnaire surveys and interviews of the Member States, Commission and stakeholder representatives. The evaluation was carried out by an external evaluation team between November 2011 and March 2012. Conclusions were based on the qualitative analysis and the evaluation team's expert opinion. The work was guided by a Steering Group composed of Commission representatives from nine different services and was structured under five Evaluation Questions that were formulated for the evaluation:

1. To what extent have the activities in the framework of the EU FAP been effective and efficient?

According to the results, the implementation of the EU Forest Action Plan was effective and efficient in the manner that the Action Plan has been largely implemented as defined in its work programme 2007-2011.

Implementation made use of, for example, studies to investigate forestry related issues, and Standing Forestry Committee ad hoc Working Groups to gather technical expertise on specific topics. Member State joint statements were defined as Standing Forestry Committee opinions on e.g. forest research, forestry measures in rural development, non-wood goods and services, wood mobilisation, and climate change and forestry. Objective 1 improving the long-term competitiveness of forestry contributed to improved understanding on effects of globalisation on forestry; valuation and marketing of non-wood forest goods and services, and; wood mobilisation for energy generation. There was a positive impact on research and technological development and forestry measures in rural development. Objective 2 enhancing and protecting the environment contributed to improved information on climate change and forestry (including EU and international commitments) and information sharing on biodiversity targets. There were steps taken towards a European forest monitoring system, although the future depends on continued funding

and voluntary co-operation by Member States. Objective 3 contributing to the quality of life shared information between the Member States on environmental education and information; protective functions of forests; and the potential of urban and peri-urban forests. There is impact on integrating forest protective functions in risk management and prevention initiatives in the EU. Objective 4 fostering coordination and communication strengthened the structure and mechanisms for implementation of the Action Plan, and contributed to investigations on public procurement of wood and wood products as well as on EU forest communication strategy. Impact on international processes was weak, but the Action Plan was a positive means to build synergies with the FOREST EUROPE process.

There were no specific resources earmarked for the EU FAP, but implementation was based on existing resources e.g. Rural Development Programmes in the Member States and other EU and national funding. Some activities found their role more naturally at EU level (Objective 1 on economic aspects, Objective 2 on environmental aspects, and Objective 4 on coordination and communication), whereas other activities were mainly implemented at national or even local levels (Objective 3 on socio-cultural aspects, but also e.g. forest owner cooperation and forest sector visibility events). Although the EU FAP resulted in several concrete outputs, such as reports, studies, working groups and recommendations, the uptake at Member State and Community levels remains weak. Furthermore, activities at national (and regional) level are not reported as contribution to the EU FAP goals, and the EU added value remains often unattained.

2. To what extent have the activities in the framework of the EU Forest Action Plan contributed to the improvement of coherence and cross-sectoral co-operation in implementing the EU Forestry Strategy?

The EU Forest Action Plan has been helpful for information exchange within the Commission, between Member States and between the Commission and Member States. However, due to its character as a voluntary instrument, improvement in cooperation and coordination depends on the commitment of the Commission Services and the Member States. The EU Forest Action Plan enabled information sharing and provided an agenda for raising awareness and understanding about forest-related issues across policy areas (e.g. rural development, research and development, climate action, risk management and prevention). Although in the beginning of the EU Forest Action Plan implementation there were expectations of a more proactive and holistic approach to forestry-related issues in the EU, the Action Plan has only been able to react to ongoing developments in other policy areas, e.g. in energy and renewable energy fields. An impact can, however, be found in terms of the Seventh Framework Programme implementation for forest and forest-based sector research, and on the definition of forestry measures in the preparation of the proposed new rural development regulation. The influence of the EU Forest Action Plan on national forest programmes varies between the Member States. Most countries replied that their national forest programme considered the EU FAP to some extent, and that the Action Plan was an additional driver in other national policies, such as in the rural development programmes, in bio-energy strategies or in public procurement guidelines. The steps towards a coherent and consistent forest monitoring for the EU27 still requires political commitment and resources.

3. To what extent have the activities in the framework of the EU Forest Action Plan contributed to balancing economic, environmental and socio-cultural objectives related to forestry?

The EU Forest Action Plan addressed the three dimensions of sustainable development through Objectives 1 to 3. Objective 4 on coordination and communication was important in terms of enabling a balanced view on Sustainable Forest Management, but implementation of specific actions (e.g. on promotion of forest biomass for energy generation, or actions on biodiversity or valuation and compensation mechanisms for non-wood forest goods and services), the potential was hardly used to develop an integrated approach to sustainability. The three sustainable development dimensions remained largely separated from each other. The socio-cultural objective activities were carried out at Member State level, but they were hardly reported on or coordinated through the Action Plan at EU level. The EU Forest Action Plan was not actively utilised as a framework to define an EU level vision and priorities overarching the national and sectoral definitions of multifunctionality and Sustainable Forest Management. The Action Plan implementation furthermore did not fully utilise support measures for forestry, such as education and advice, with the potential to build capacities for the whole sector to address new challenges and new societal demands.

4. To what extent did the EU Forest Action Plan have an added value in implementing the EU Forestry Strategy?

The EU Forest Action Plan covered the principles defined in the EU Forestry Strategy and provided an added value by operationalising them in the Key Actions and activities. The Action Plan did influence several processes both at Member States and Community level. The main achievements and added value in implementing the Forestry Strategy goals refer to a better visibility of the forest sector at EU level, facilitation for improving coherence and coordination of activities between different Community actions and for improving coordination of activities between the Commission and Member States. It is nonetheless difficult to point out the causal links of the Action Plan implementation and specific effects, because several processes are ongoing in parallel and interlinked with impact on forestry in the EU. Developments in parallel sectors and policy fields (e.g. climate action, energy, industry) have generated an increased interest in forests, and the EU Forest Action Plan was a means to address these developments and keep the forestry-specific issues on the agenda. Thus, without the EU Forest Action Plan, the responses of the forestry sector would most likely have been more sporadic. The achievement of the goals will however, dependent on the commitment of the Commission and Member States to put the Action Plan results into use also after concluding the implementation in 2011.

5. Are the current objectives, key actions and activities of the EU Forest Action Plan still relevant in tackling the needs the Plan was intended to address? To what extent is the organisational set-up of the EU Forest Action Plan as a whole adequate for its purpose?

International policy developments have caused and are causing shifts in priorities which were not foreseeable to a full extent when preparing the Action Plan. The processes in, for instance, climate change action and renewable energy policy targets, as well as the aspirations expressed in the new biodiversity targets and the bioeconomy strategy, present the forest sector with possibilities but also challenges. To a certain extent, the EU Forest Action Plan responded to these changing needs, but it was not able to build capacities for a dialogue at multiple levels (EU, national, regional or local) or to develop a common response to these policy developments.

The organisational set-up based on the existing structures (Standing Forestry Committee, Advisory Group on Forestry and Cork, Interservices group on Forestry) was largely purposeful for the EU Forest Action Plan implementation – taking into account that the Action Plan was a voluntary instrument – these structures provided an opportunity for Member States to share information and experiences. A more structured coordination would have required a clearer vision, target-setting and high-level political commitment to the goals defined.

In the process of defining the follow-up after the EU Forest Action Plan, the viewpoints of the Member States, Commission and stakeholders are valuable. It is important that the debate about the follow-up reaches beyond the mere Action Plan implementation in the forestry sector, and includes beneficiaries of the intended measures at large. Bringing the achievements as well as the challenges ahead for forestry in Europe to an EU forum would help in understanding the complexity of issues at stake, but also in setting a target for the long-term sustainability of the EU forests that we want to pass on to future generations.

1.2.1. Conclusions and key recommendations

The ex-post evaluation concluded that the EU Forest Action Plan has been a useful means of operationalising the EU Forestry Strategy principles and coordinating action across the Member States and EU. There are limitations to the leverage that the Action Plan can exert on policy processes at EU level or implementation at Member State level; without a shared vision for EU forestry, the forestry response to the developments in other policy areas (e.g. climate action and energy) remains weak, and without clear commitments and targets the Member State reporting to EU level continues to lack consistency.

Based on the analysis, the following key recommendations were put forward as a contribution to the deliberations on the review of the EU Forestry Strategy and the possible follow-up to the Action Plan:

1. In order to increase commitment to an EU Action Plan, a joint effort is needed to develop and operationalise a common vision of multi-purpose and sustainable forest management. This would cover the following aspects:

- assess present and future societal demands on forests;
- balance the three dimensions of sustainable development, strengthening and defining a holistic view of Sustainable Forest Management in the EU;
- build capacities at both EU and Member State level to address new challenges and new societal demands for sustainable and innovative forest management, for example,

in forest information and monitoring, research and innovation, education, advisory services and communication.

2. In order to support effects and impacts of an EU Action Plan, strengthened instruments and structure for mutual information exchange and joint action are needed. This would cover the following aspects:

- define priorities and targets for action;
- link EU and Member State level funding strategies and plans to the EU Forestry Strategy and the EU Forest Action Plan priorities and actions;
- strengthen coherent cross-sectoral planning, funding and implementation of activities;
- besides pre-defined measures, maintain the possibility to define additional actions or refocus existing ones if the need arises during the implementation period;
- set up a clear mechanism for monitoring, evaluating and reporting;
- revise the mechanisms for involving stakeholders from economic, environmental and social interest fields;
- advance dialogue to support public awareness raising, science-policy-practice interaction, and improved preparedness for emerging challenges and opportunities.

1.3. Consultation with Member States and stakeholders

The new Communication on a Forest Strategy builds on a very close and extensive consultation process with both Member States and stakeholders during the preparatory phase.

A first discussion on the future of the EU Forestry Strategy took place at the 115th Standing Forestry Committee (SFC) meeting in July 2010 and continued at subsequent meetings in December 2010 and February 2011. In its meeting on the 18th of February 2011 the SFC decided that an ad hoc working group (WG) should be established to support and contribute to the review process.

1.3.1. Working Group under the Standing Forestry Committee contributing to the development of a new EU Forest Strategy

The ad hoc Working Group (WG) was set up in June 2011. It consisted of experts nominated by the Member States and by relevant stakeholder groups (private and public forest owners, forest-based industries, environmental NGO's, foresters and forest research), as well as experts from 10 different Directorate Generals of the

Commission¹². The terms of reference for the WG specified that the overall objective of the WG was to make recommendations for a new EU Forest Strategy.

The WG met five times (15 June, 15 September, 18 November 2011, 9 February, 8 June 2012) and adopted a report in June 2012¹³, providing ten key recommendations to the Commission. In the recommendations, it is suggested that the strategy is called forest strategy addressing also the value chain, that it affirms the EU commitment to the principles of sustainable forest management (SFM) as defined by Forest Europe, and enshrine and promote these principles in the management of all forests in the EU. Most members of the WG considered that the strategy should be a voluntary instrument, building on subsidiarity, including agreed lines of added value at the EU level with Member States (policy guidance on certain specified topics and for actions) and identifying other areas where some Member States would like to advance further, such as: regional /cross-regional cooperation; climate change adaptation and mitigation; forest health; valuation of ecosystem services; forest biodiversity, forest information and monitoring; forest fire; production and mobilisation of wood material from sustainable managed forests; promotion of wood based products and constructing with wood as part of the green economy; afforestation. Finally, the WG proposed a long term vision and a 2020 headline target and identified ten interlinked priorities (figure 1)

Figure 1. Ten interlinked priorities proposed by the WG under the Standing Forestry Committee



¹² The members list and dates of meetings can be found in annex 1 of the report, available at: http://ec.europa.eu/agriculture/fore/publi/index_en.htm

¹³ Available at: http://ec.europa.eu/agriculture/fore/publi/index_en.htm

Lastly, the WG recommended that a Forest Action Plan/Framework that sets out specific actions for implementing the strategy, monitoring and reporting mechanisms should be developed within one year after adoption of the strategy.

1.3.2. Working Group under the Standing Forestry Committee on forest information and monitoring

This ad hoc Working Group (WG) was set up in April 2011 and addressed the issue of forest information and monitoring that came out as the most important issue in the public and inter-institutional discussion following the 2010 Green Paper on Forest Protection and Information.

The WG consisted of experts nominated by the Member States and by relevant stakeholder groups (private forest owners, forest-based industries and environmental NGO's), as well as experts from 8 different Directorate Generals of the Commission. The WG included also representatives from the European National Forest Inventory Network (ENFIN) as well as from International Co-operative Programme on Forests (ICP Forests). The terms of reference for the WG specify that the overall objective of the WG was to contribute to the implementation of the EU Forest Action Plan in the field of EU-wide, cost-efficient and harmonized forest information.

The WG met four times (5 April, 28 June, 29 September and 5 December 2011) and adopted a final report in March 2012¹⁴ that was discussed in the 124th, 125th and 126th meetings of the Standing Forestry Committee. The final report highlights critical issues, priorities and resource issues regarding forest information needs that relate to EU policies. It suggests a list of core variables to be considered for future work and priority setting on forest information.

The SFC agreed with the Commission's proposal to address forest information and monitoring at EU level by using a special budget from the European Parliament for a preparatory action with the JRC for harmonizing forest information collected by Member States.

1.3.3. Opinion of the Standing Forestry Committee contributing to the development of a new EU Forest Strategy

The report of the WG contributing to the development of a new EU Forest Strategy was discussed in the 124th and 125th meetings of the Standing Forestry Committee and an opinion was adopted in this last meeting, that took place in September 2012¹⁵. In the opinion, the SFC welcomes the Working Group report and endorses its 10 recommendations. They urge the Commission to prepare a forest package by early 2013, the proposal for a new EU Forest Strategy acting as an umbrella, and including

¹⁴ Link to the full report: http://ec.europa.eu/agriculture/fore/publi/sfc-wg6-2012_en.pdf

¹⁵ The opinion is available at: http://ec.europa.eu/agriculture/fore/opinion-docs/sfc-opinion-new-eu-forest-strategy_en.pdf

initiatives on forest information, on wood processing industry and related value chains as well as providing data on the State of EU Forests.

The SFC suggests to the Commission to prepare a strategy as a fundamentally voluntary forest policy instrument at EU level, building on subsidiarity and respecting national competence. It should further develop lines of added value at the EU level agreed with Member States, provide policy guidance on certain specified topics, provide recommendations for actions and identify other areas where some Member States might wish to advance further than others.

1.3.4. Workshops with Member States and Stakeholders

A Workshop organised in April 2011 included representatives from Member States, stakeholders, several Commission services and the Cabinet of the Commissioner for Agriculture and Rural Development. This workshop¹⁶ was the launching event for the work towards the new strategy and the outcome was used to get input and orientation for the Working Group under the SFC that was established later on. In the concluding remarks, it was considered that the review of the EU Forestry Strategy is an opportunity for the Member States, supported by the stakeholders, to put in place a common process to act on prioritised forestry issues that will be agreed upon in the strategy work. The need for coordination was considered important, but it is not going to make the different and to some extent even contradictory interests and objectives regarding forests to go away. Thus, it is necessary to face those different interests and find the best solution to balancing between them. In this framework, it would be important to prioritise and find those areas where we can add value with common actions at EU level.

A second workshop with Member States and stakeholders to present the report of the ad-hoc Working Group of the SFC took place in July 2012. During the debate several voices referred to the weak resources allocated to the sector that should fulfil many (and increasing) demands. Other issues underlined were the fact that research and innovation is among the EU priorities, the problem of forest fires, the need to strengthen the link between agriculture and forestry, the fact that forest products are underrepresented in the report, the lack of indicators to measure progress, the need to improve information about the strategy outside of the forest sector and to the society, the lack of references to certification, the necessary diagnosis of the sector before trying to improve the coordination and the increasing problem of fragmentation of forest policy (i.e. policies from other sectors where forests are important elements). In the workshop there was a general view supporting the review process. According to the discussion, the new strategy should contribute to Europe 2020 and other 2020 targets and include a "holistic view". Flexible instruments based on the agreement of the different parties involved were considered the right tools to apply, where each party should have its role, reflecting also respective competences and ensuring the three aspects of sustainability (economic, social and environmental). Last, it was underlined the need to ensure coherence between the strategy and the international instruments and, in particular, the future legally binding agreement.

¹⁶ The reports of the workshops are available at: http://ec.europa.eu/agriculture/fore/publi/index_en.htm

1.3.5. Forest Directors General Meetings

A presentation of state of play of the work was done in the informal Forest Directors General meetings under the Polish, Danish, Cypriot and Irish Presidencies (September 2011, June 2012, November 2012 and March 2013). In the meeting under the Cypriot Presidency the Forest Directors General provided guidance to the further steps of the forest strategy, as reflected in the final chair report. In particular, they expressed their concern about the level of implementation and visibility of the EU Forest Action Plan and uptake of SFC opinions for policy formulation in other areas. They stressed the need for improved coordination at EU level during the implementation, better monitoring and communication / outreach and they also underlined that the new EU Forest Strategy should:

- Include a clear vision/ objective/ target(s);
- Be a framework for policy developments related to forests, taking into account the future LBA. The strategy can make a difference only if it is meaningful for other policies outside the forest sector;
- Take a holistic view on the forest sector
- Address the whole value chain;
- Address the issue of balancing the delivery of multiple goods and services.

1.3.6. EC Advisory Groups

The new Forest Strategy has also been discussed in several meetings of the Advisory Group on Forestry and Cork¹⁷ (October 2011, June 2012, December 2012 and June 2013). In the discussions, it was underlined the need for a strong position on forestry for EU through the strategy to avoid the contradicting targets on forests in EU policies and to raise the competitiveness and forest sector's contribution to green economy and employment. The need to involve stakeholders in the process was specifically underlined. The Strategy was also presented in the Advisory Committee on Forest-based Industries¹⁸ (plenary meetings of October 2011 and April 2012 and ad hoc Working Group meeting of November 2012).

1.3.7. Other fora

Several stakeholder groups have also organised special sessions on the Forest Strategy where DG Agriculture and Rural Development has collected the different views on

¹⁷ Further information available at: http://ec.europa.eu/agriculture/consultations/advisory-groups/forestry-cork/index_en.htm

¹⁸ Further information available at: http://ec.europa.eu/enterprise/sectors/wood-paper-printing/advisory-committee/index_en.htm

the issues that the strategy should address. Thus, CEPF (private forest owners), EUSTAFOR (public forest owners), FERN and a group of environmental NGO's and UEF (foresters) have provided input to the process. CEPF, EUSTAFOR, CEPI (pulp and paper industry) and CEI-Bois (woodworking industry) and Finnish Forest Owners and Finnish Forest Industries have spontaneously made joint position papers on the strategy and Birdlife has provided some reports to be considered in the work.

From the research side, the University of Leuven has produced a position paper from the Leuven Metaforum on Forests that aims to support the review process¹⁹.

Last, Think Forest, a high level discussion and information forum on forests coordinated by the European Forest Institute (EFI) has organised a special session on the strategy at the European Parliament on 18th of September 2012²⁰.

1.4. Consultation within the Commission

The Commission Inter-Service Group on Forestry discussed the preparation of the new Forest Strategy in five meetings (25 October 2011, 13 February 2012, 4 May 2012, 2 October 2012, 22 February 2013), and representatives of several Commission services actively participated in the two workshops and in the discussions of the two Working Groups of the Standing Forestry Committee, one dealing with the review of the 1998 EU Forestry Strategy and a second one specifically dealing with forest information and monitoring.

¹⁹ Available at the following link: http://www.kuleuven.be/metaforum/docs/pdf/wg_15_e.pdf

²⁰ Further information available at: <http://www.thinkforest.efi.int/portal/news/?bid=699>

2. ANALYSIS

European forests serve different aims such as social (contribution to rural development), economical (raw materials like sawn wood for construction purposes or furniture, pulpwood for cellulose, insulation, packaging, paper and source of renewable energy), environmental (e.g. protection against soil erosion, avalanche control, regulation of streams and rivers, CO₂ capture) and societal (e.g. recreation, employment in rural areas).

2.1. State of the EU's forests

The EU currently contains 5 % of the world's forests and EU forests have continuously expanded for over 60 years, although recently at a lower rate. EU Forests and other wooded land now cover 155 million ha and 21 million ha respectively. This together means more than 42 % of EU land area is covered with forest and other wooded land. The Forest cover varies largely across Europe. The Member States with the largest proportions of wooded area are Finland and Sweden, where approximately three quarters of the land area is covered with forests or other wooded land. These same two Member States records the highest areas of wooded land per inhabitant, approximately ten times the EU average. Relatively high areas of wooded land per capita are also recorded in Estonia and Latvia. The least densely wooded EU Member States are Malta, the Netherlands, Ireland and the United Kingdom.

Area covered by forests in Europe has increased at a rate of approximately 0.4% per year since 1990, as a result of afforestation programmes, natural succession of vegetation and abandonment of farming. This is in contrast to the current global situation where the forest area continues to decline, with a global rate of deforestation still alarmingly high, impacting negatively on global climate and biodiversity. Only four of the EU Member States recorded a fall in their areas of wooded land in 2010, with Denmark recording the largest reduction (-5.0 %) ahead of Portugal, Slovenia and Finland. In relative terms, the largest expansions in wooded area were recorded in Ireland (21.4 %), while Bulgaria and Latvia both recorded increases in excess of 10 %. In absolute terms, four Member States recorded an expansion in excess of 400 000 hectares, namely France, Bulgaria, Italy and Spain, with the latter recording the highest increase (594 000 hectares).

The area of forests available for wood supply (FAWS) amounted to 133 million ha in the EU-27 in 2010, 102 million ha of which (77% of the total) is located in the EU-15 and 30.6 million ha (23%) in the EU-N12. In the EU-27, FAWS corresponded to 84.8% of the total forest area and this share was quite similar in the EU-15 (84.4%) and in the EU-N12 (86.1%). Cyprus (23.9%) and Portugal (52.7%) had the lowest share of FAWS in the total forest area, whereas in Belgium, Denmark, Germany and Luxembourg this share accounted for more than 95% of the total forest area.

Other wooded land (OWL) represents only a small part (6%) of the EU-27 land area, except in some areas of southern Europe (Greece, Spain and Cyprus) where it reaches around 20% of the land area. Indeed, in South Europe the climatic and edaphic conditions favour scattered vegetation²¹:

In the EU, forest nursery activities are linked to reforestation and afforestation, which could concern forested area, agricultural land (agricultural abandonment of marginal area), creation/renovation of hedges or agro-forestry.

²¹ Source: Eurostat, Forestry in the EU and the world 2011

Table 1. Forest area in the EU, EFTA and candidate countries

	Forest		Other Wooded Land		FOWL		FAWS	
	2000	2010	2000	2010	2000	2010	2000	2010
	(1000 ha)							
EU-28	154 702	159 113	21 559	20364	176 261	179 477	131 982	134 807
Belgium	667	678	27	28	694	706	663	672
Bulgaria	3 375	3 927	105	0	3 480	3 927	2 258	2 864
Croatia	1 885	1 920	415	554	2 300	2 474	1 749	1 741
Czech Republic	2 637	2 657	0	0	2 637	2 657	2 561	2 330
Denmark	486	587	136	48	622	635	481	581
Germany	11 076	11 076	0	0	11 076	11 076	10 568	10 568
Estonia	2 243	2 203	94	134	2 337	2 337	2 103	2 013
Ireland	635	737	49	50	684	788	472	460
Greece	3 601	3 903	2 924	2 636	6 525	6 539	3 317	3 595
Spain	16 988	18 173	10 367	9 574	27 355	27 748	13 942	14 915
France	15 353	15 954	1 812	1 618	17 165	17 572	14 645	15 147
Italy	8 369	9 149	1 650	1 767	10 019	10 916	7 396	8 086
Cyprus	172	173	214	214	386	387	43	41
Latvia	3 241	3 354	123	113	3 364	3 467	3 024	3 138
Lithuania	2 020	2 165	83	84	2 103	2 249	1 756	1 875
Luxembourg	87	87	1	1	88	88	87	86
Hungary	1 907	2 039	0	0	1 907	2 039	1 622	1 726
Malta	n.s.	n.s.	0	0	0	0	-	-
Netherlands	360	365	0	0	360	365	290	295
Austria	3 838	3 857	117	134	3 955	3 991	3 341	3 343
Poland	9 059	9 319	0	0	9 059	9 319	8 342	8 532
Portugal	3 420	3 456	101	155	3 521	3 611	1 782	1 822
Romania	6 366	6 573	234	160	6 600	6 733	5 029	5 193
Slovenia	1 233	1 253	38	21	1 271	1 274	1 157	1 175
Slovakia	1 921	1 938	0	0	1 921	1 938	1 767	1 775
Finland	22 459	22 084	824	1 032	23 283	23 116	20 317	19 869
Sweden	28 512	28 605	2 225	2 020	30 737	30 625	20 947	20 554
United Kingdom	2 793	2 881	20	20	2 813	2 901	2 323	2 411
Iceland	18	30	83	86	101	116	18	29
Liechtenstein	7	7	1	1	7	7	4	4
Norway	9 301	10 250	2 699	2 134	12 000	12 384	6 519	6 419
Switzerland	1 194	1 240	63	71	1 257	1 311	1 156	1 200
Montenegro	467	467	277	277	744	744	386	386
FYR of Macedonia	958	998	143	143	1 101	1 141	804	804
Turkey	10 146	11 334	10 702	10 368	20 848	21 702	8 648	7 313

Figures in bold italics are estimates. FOWL = Forests and other wooded land

FAWS = Forests available for wood supply

Source: SoEF 2011, with estimates by Eurostat (Forestry in the EU and the world 2011)

2.1.1. *Forest Productivity*

Forest productivity varies significantly among Member States, from a net annual increment of 0.9 m³ per ha in Cyprus and 1.3 m³ per ha in Greece, to a net annual increment of 11.1 m³ per ha in Germany and 13.4 m³ per ha in Denmark (source: Eurostat, 2010).

On average, 60-70% of the annual increment is cut, so the growing stock of wood keeps rising significantly. This is measured by the balance between net annual increment and annual felling's. This relation is decisive for the current and future availability of wood and for shaping a stable growing stock²². However, it should be mentioned that the net annual increment alone does not give any indication of the sustainability of forests and forest productivity²³. Factors such as slow growth of the trees, the historical development of age class distribution and accessibility also need to be considered for any projection of future wood availability. According to MS projections under LULUCF, harvest rates are expected to increase by 2020 by around 30% compared to 2010²⁴.

The reporting of data on timber stocks follows in principle the international definitions of the FAO. In practice, however, only BE, CZ, DK, DE, FR, HU, IT, NL, PT and SE applied these definitions when delivering data to the FAO and Forest Europe (country reports for the Global Forest Resources Assessment 2010). The Decision of the European Parliament and of the Council on accounting rules and action plans on greenhouse gas emissions and removals resulting from activities related to land use, land use change and forestry²⁵ (LULUCF) contains an annex showing that only BE, DK, FI, FR, HU, IT, LU, NL and SE will apply the FAO'S definition of forests or a stricter variant (greater canopy cover). The other countries will apply a different minimum of forest area and/or a lower tree height. This Decision is foreseen to be based on the national definitions of forests.

Eurostat uses the physical data provided by the FAO and Forest Europe and provides estimates in the case of non-reported data.

²² Source: SoEF 2011

²³ Source: Eurostat, Forestry in the EU and the world 2011

²⁴ Based on EU submission of projected forest management reference levels, to UNFCCC CMP.6.

²⁵ Decision No 529/2013/EU

Table 2. Growing stock, increment and fellings

	Growing stock (million m3 ob)				Increment		Fellings (million m3 ob)	
	FOWL		FAWS		FAWS			
	2000	2010	2000	2010	2000	2010	2000	2010
EU-27	22 374,4	24 685,8	19 533,5	21 849,5	759,9	774,6	467,7	489,3
Belgium	157,6	168,1	156,6	164,3	5,3	5,3	3,5	3,9
Bulgaria	526,8	656,0	321,0	435,0	13,6	14,7	3,8	7,8
Croatia	364,4	415,6	332,5	371,4	10,0	9,9	4,3	5,2
Czech Republic	698,8	769,3	678,3	737,7	21,5	23,1	15,9	17,9
Denmark	78,0	114,4	70,8	111,9	4,8	5,8	2,1	2,4
Germany	3 381,0	3 492,0	3 356,0	3 466,2	122,0	107,0	59,8	59,6
Estonia	463,0	447,2	427,5	398,3	11,8	11,2	12,4	5,7
Ireland	70,0	74,7	69,6	74,3	0,0	0,0	2,8	2,8
Greece	192,0	205,8	156,6	170,4	4,2	4,5	2,2	1,5
Spain	871,2	915,1	746,2	783,9	43,8	45,8	16,9	16,6
France	2 267,6	2 596,7	2 119,4	2 453,2	97,6	94,4	67,4	64,3
Italy	1 215,0	1 448,3	1 072,6	1 285,3	30,2	32,5	14,3	12,8
Cyprus	9,5	10,5	3,1	3,3	0,0	0,0	0,0	0,0
Latvia	548,1	634,9	507,0	584,0	17,7	18,3	15,5	12,4
Lithuania	452,0	481,9	391,6	408,0	9,0	10,8	6,3	8,6
Luxembourg	26,0	26,0	12,8	13,9	0,7	0,7	0,3	0,2
Hungary	325,2	355,7	303,0	259,2	9,3	11,1	7,0	6,9
Malta	0,0	0,0	-	-	0,0	0,0	0,0	0,0
Netherlands	61,0	70,0	49,0	56,0	2,2	2,3	1,3	1,6
Austria	1 089,5	1 141,0	1 059,8	1 106,7	28,9	25,1	17,5	23,5
Poland	1 736,0	2 304,0	1 584,0	2 092,0	67,0	68,5	31,4	40,7
Portugal	197,8	187,8	163,0	154,0	19,1	19,1	12,6	13,0
Romania	1 348,2	1 391,5	740,9	838,0	34,6	34,0	14,1	17,2
Slovenia	335,2	417,0	312,3	389,9	7,3	9,2	2,5	3,4
Slovakia	463,2	514,1	436,9	477,6	11,7	13,2	6,7	10,4
Finland	2 090,3	2 216,0	1 927,0	2 024,0	80,3	91,0	66,3	59,4
Sweden	3 097,2	3 252,2	2 268,0	2 651,1	86,7	96,5	71,2	80,9
United Kingdom	310,0	380,0	268,0	340,0	20,7	20,7	9,7	10,5
Iceland	3,3	5,2	2,6	4,8	0,0	0,0	0,0	0,0
Liechtenstein	1,8	1,8	1,4	1,4	0,0	0,0	0,0	0,0
Norway	852,0	1022,0	685,0	797,0	22,7	21,9	11,1	11,0
Switzerland	416,5	429,6	403,0	415,0	7,7	6,2	7,2	6,2
Montenegro	74,1	74,1	67,7	67,7	2,2	2,2	0,6	0,5
FYR of Macedonia	80,0	77,5	66,0	66,0	4,6	4,6	2,8	2,9
Turkey	1 461,3	1 616,7	1 198,4	1 084,7	49,5	0,0	30,4	26,1

Figures in bold italics are estimates.

FOWL = Forests and other wooded land
FAWS = Forests available for wood supply
Ob: over bark
Source: SoEF 2011, with estimates by Eurostat (Forestry in the EU and the world 2011)

2.1.2. *Forest ownership*

Around 40 % of the forest area in the EU is publicly owned. Public ownership dominates in most of the eastern and south-eastern EU Member States. The average size of public forest holdings is more than 1000 ha, with considerable variations among countries²⁶. Based on data for 24 EU Member States (incomplete data for Greece, Portugal and Sweden), the publicly owned forest area decreased by a total of 2.9 % between 2000 and 2010, whereas privately owned forest area increased by 8.6 %. The number of forest owners rose by nearly 3 million as a result of the enlargement²⁷.

The publicly owned share of forest area decreased between 2000 and 2010 in ten Member States, most notably in Romania, Slovenia and Lithuania and to a lesser extent in Austria, Finland, Latvia, Estonia and the United Kingdom. Some of the decreases in the new Member States that joined the EU as of 2004 may be due to the restitution of land to former owners, while other countries sold their public forest assets²⁸.

Around 60% of the EU's forests are in private hands, with about 16 million private forest owners. Private forest holdings have an average size of 13 ha, but the majority of privately owned forests are smaller than 5 ha²⁹. The average size of the forest under private ownership varies considerably among Member States, from 0.7 ha per holding in Bulgaria to 130 ha per holding in Slovakia³⁰. Nevertheless, the sector is changing. Alongside alterations in the structure of forest ownership in the EU, changes are also taking place in the occupations and lifestyles of private forest owners. Forest owners are becoming less dependent on forestry as a main source of income. Increasingly, the EU's forests are owned by urban dwellers, who may have different management objectives, compared with traditional rural forest holders³¹.

²⁶ Source: The EU Forest Action Plan 2007-2011. EU Publications Office

²⁷ Source: The EU Forest Action Plan 2007-2011. EU Publications Office

²⁸ Source: Eurostat, Forestry in the EU and the world 2011

²⁹ Source: The EU Forest Action Plan 2007-2011. EU Publications Office

³⁰ Source: <http://www.unece.org/forests/fr/outputs/soef2011.html> State of Europe's Forests 2011

³¹ Source: The EU Forest Action Plan 2007-2011. EU Publications Office

Table 3. Forest ownership

	Public		Private		Other	
	2000	2010	2000	2010	2000	2010
	(1000 ha)					
EU-27	65 340	64 101	88 384	94 233	977	780
Belgium	290	301	377	377	0	0
Bulgaria	3 041	3 408	272	423	62	96
Croatia	1 398	1 396	487	524	0	0
Czech Republic	2 023	2 041	614	616	0	0
Denmark	138	139	348	424	0	23
Germany	5 846	5 708	4 824	5 283	406	85
Estonia	899	858	953	976	391	369
Ireland	399	400	236	337	0	0
Greece	2 790	3 025	811	878	0	0
Spain	4 988	5 336	11 998	12 836	2	2
France	3 984	4 113	11 369	11 841	0	0
Italy	2 811	3 073	5 558	6 076	0	0
Cyprus	118	119	54	54	0	0
Latvia	1 748	1 656	1 464	1 636	29	61
Lithuania	1 562	1 376	458	789	0	0
Luxembourg	41	41	46	46	0	0
Hungary	1 155	1 178	750	848	2	13
Malta	0	0	0	0	0	0
Netherlands	184	184	176	181	0	0
Austria	1 093	991	2 745	2 866	0	0
Poland	7 535	7 661	1 524	1 658	0	0
Portugal	54	55	3 366	3 401	0	0
Romania	6 010	4 451	356	2 122	0	0
Slovenia	365	291	868	962	0	0
Slovakia	1 006	980	830	827	85	131
Finland	7 213	6 698	15 245	15 386	0	0
Sweden	7 639	7 664	20 873	20 941	0	0
United Kingdom	1 011	959	1 782	1 922	0	0
Iceland	7	8	12	22	0	0
Liechtenstein	6	6	1	1	0	0
Norway	1 299	1 450	8 002	8 800	0	0
Switzerland	856	889	313	325	26	27
Montenegro	337	337	130	130	0	0
FYR of Macedonia	864	898	94	100	0	0
Turkey	10 131	11 317	15	17	0	0

Figures in bold italics are estimates.

2.1.3. *Conservation status*

EU forests are mainly made up of predominantly coniferous stands (50%) and predominantly broadleaved stands (27%). The remaining part is mixed stands, including coniferous and broadleaved trees.

The EU 25 Member States (i.e. excluding Romania and Bulgaria) reported in 2008 on the conservation status of all the species and habitats listed in the Annexes of the Habitats Directive. The Commission then produced a consolidated report in 2008 on the conservation status and species protected under the Habitats Directive³². Habitat types associated with forest have in general a better conservation status than non-forest habitats. The conservation status of species and habitats of European interest differs strongly between bio-geographical regions.

According to a EEA report³³ in the EU, only 17 per cent of habitats and species and 11 per cent of key ecosystems protected under EU legislation are in a favourable status. Altogether more than 50% of species and nearly two thirds of habitats in forest ecosystems have an unfavourable conservation status, see figures 2 and 3 below. At the same time the State of Europe's Forests 2011³⁴ indicates positive development in EU's forests. According to this report, both EU's forest area and the area of protected forests are expanding and forest management practices increasingly promote conservation and sustainable use of biodiversity.

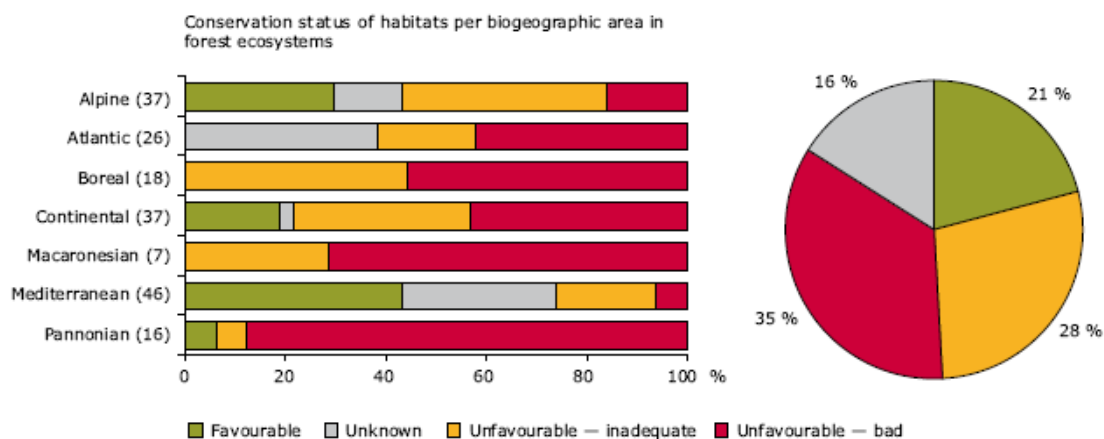
Figure 2:

**Conservation status of habitat types of European interest in forest ecosystems
(statistics by region on the left, overall statistics on the right)**

³² Source: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0358:FIN:EN:PDF>

³³ EEA Technical report n° 12/2010; EU 2010 biodiversity baseline

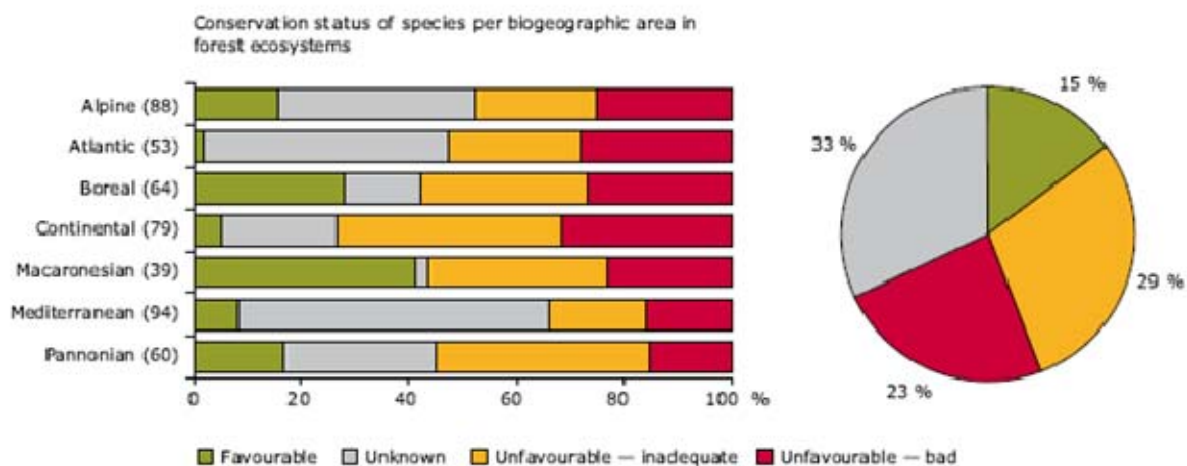
³⁴ Source: UNECE/FAO/Forest Europe report State of Europe's Forests 2011- Status and trends in Sustainable Forest Management in Europe



Source: European Environment Agency technical report 12/2010

Figure 3:

Conservation status of species of European interest in forest ecosystems (statistics by region on the left, overall statistics on the right)



Source: ETC/BD, 2008.

Forests are subject to multiple pressures and can suffer a series of damages from biotic and abiotic sources. Furthermore, the effect of climate change, which will have a clear latitudinal effect through the increase of temperatures and drought in southern Europe, is already noticeable in the altitudinal gradient. Species at the lower altitudes of mountains in Europe are already suffering from decreased precipitation and increased temperature³⁵. Therefore, the immediate effect that climate change signals is the shift in the range of suitability for forest tree species across Europe. These

³⁵ Source: MOTIVE and Trees4Future FP7 projects

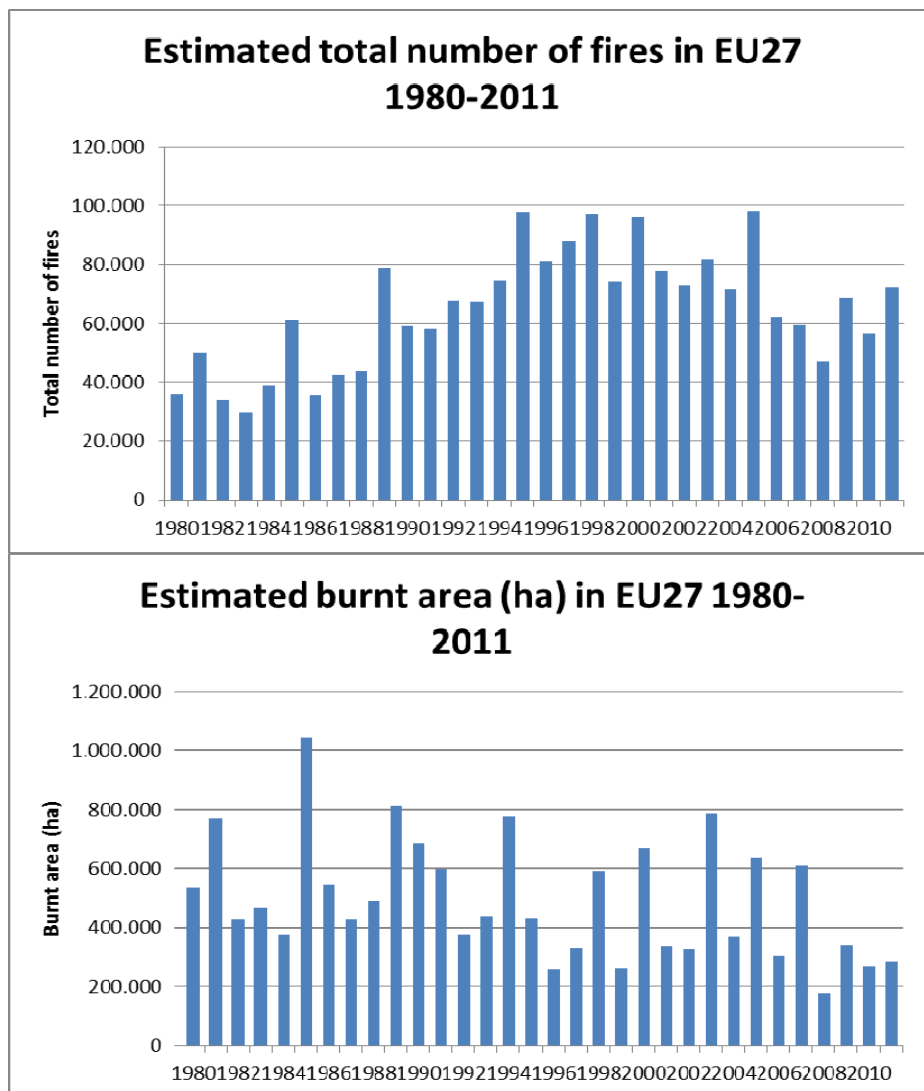
changes will certainly lead to an increase of biotic damages, as species become highly susceptible to the attack of pests. Forests will also become more susceptible to abiotic damages produced by more frequent windstorms, droughts and forest fires.

2.1.4. Forest Fires

Currently, yearly damages due to forest fires are estimated to about half a million ha of forested areas, which is approximately 0.25% of the forests area in Europe and over half of the yearly increase of forest areas, as reported above. The yearly economic damage caused by forest fires is estimated to approximately €2 billion³⁶. 150 000 ha of Natura 2000 areas were damaged by fires in 2012.

³⁶ source: EFFIS

Figure 4. Number of fires and burnt area in EU27 (1980-2011)



Source: EFFIS and estimates

2.1.5. Soil quality

Sulphur deposition has decreased over the last decade. Mean annual sulphur inputs decreased by 30% between 1998 and 2007, with significant reductions measured on half of the observed plots. For nitrogen compounds there is no clear trend in measured deposition³⁷.

In many parts of Europe, there is a tendency to acidification and eutrophication of soils. The development of pH and base saturation of soils did not show a uniform

³⁷ Source: SoEF, 2011

pattern within Europe. However, increased pH and base saturation were found in acidic forest soils³⁸.

2.1.6. *Forests and ecosystem services*

Forests provide a wealth of benefits and services to the European citizens; these are often referred to as forest ecosystem services (FES). FES include wood and non-wood products as well as services such as recreation, water and soil conservation, protection against natural hazards, etc.

In the last years there has been an increased competition for forest products and services. For instance, European forests are the largest reservoir of biodiversity compared to other terrestrial ecosystems, while providing over 50% of the renewable energy in Europe. Growing demands represents an opportunity for this sector, but, at the same time, poses a significant challenge for maintaining forest ecosystems, increasing the potential for conflicts. It is important that SFM principles are applied to ensure in the long term the provision of multiple goods and services.

2.1.7. *Forests and Natura 2000*

Overall, it is estimated that forest ecosystems cover around half of the surface of the Natura 2000 Network. This in turn represents around 1/4 of the total forest resource within the EU27. Furthermore, many other forests are home to animal or vegetal species protected under the EU Nature legislation.

Table 4. Total Natura 2000 forest area and total forest within Natura 2000

Member State	Total Natura 2000 (km²)	Total Natura 2000 Forest* Area (km²)	% Natura 2000 which is Forest*	Total Forest* within Natura 2000 (%)
Austria	12 317	4 790	38,40%	12,64%
Belgium	3 858	2 130	55,00%	33,79%
Bulgaria	37 648	22 220	58,84%	52,53%
Cyprus	1 626	88	79,17%	36,63%
Czech Republic	11 073	7 510	68,00%	27,11%
Germany	55 113	26 684	48,42%	25,09%
Denmark	3 858	7600	19,89%	16,33%

³⁸ Source: SoEF, 2011

Estonia	8 035	4 683	58,28%	18,73%
Spain	137 224	79 503	57,94%	41,83%
Finland	48 731	28 823	59,15%	11,81%
France	68 770	30 380	44,18%	18,86%
Greece	35 793	20 155	56,31%	33,95%
Hungary	19 937	8 330	41,78%	41,06%
Ireland	9 155	1 211	13,22%	17,22%
Italy	57 705	29 912	51,84%	30,11%
Lithuania	7 864	5 067	64,43%	24,14%
Luxemburg	474	294	62,01%	31,22%
Latvia	7 303	4 033	55,22%	12,39%
Malta	40	10	24,38%	25,19%
Netherlands	5 724	1 199	20,94%	37,91%
Poland	60 796	34 049	56,00%	35,09%
Portugal	19 204	7 775	40,48%	21,39%
Romania	42 639	22 472	52,70%	29,63%
Sweden	57 425	22 808	39,72%	7,69%
Slovenia	7 201	4 998	69,41%	42,28%
Slovakia	14 132	9 701	68,64%	44,55%
United Kingdom	17 711	1 334	7,53%	6,14%
EU27 Total	751 368	382 009	50,84%	23,10%

Note: Calculations performed with data from End 2010 Natura 2000 database and Corine Land Cover 2006 and Corine Land Cover 2000 for UK and GR

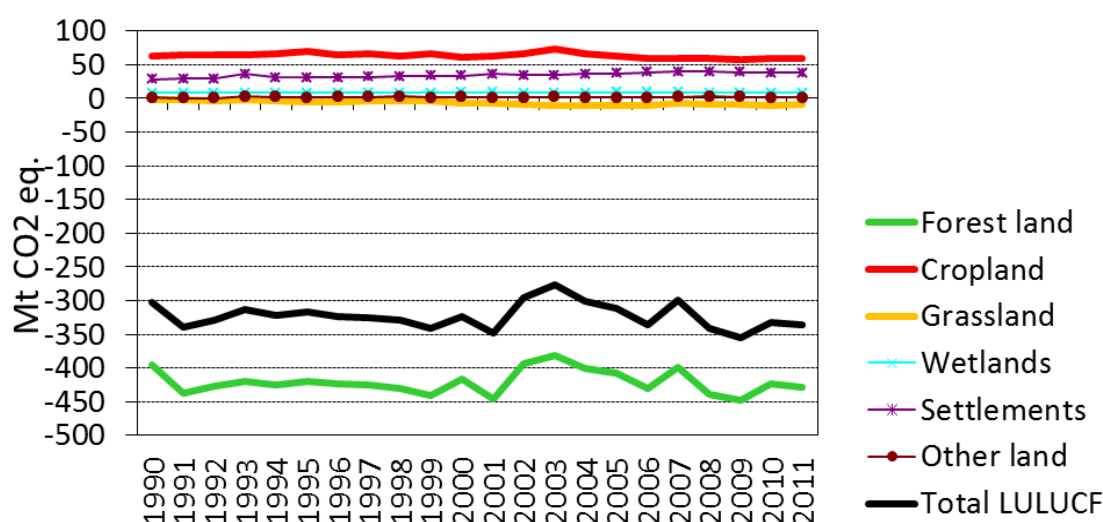
*CLC classes grouped as forests: 311 Broad-leaf forests; 312 Coniferous forests; 313 Mixed forests; 323 Sclerophyllous vegetation; 324 Transitional woodland-shrub

2.1.8. *Forests and Climate Change*

The role of forests in climate change mitigation is particularly important as forests remove around 11% of greenhouse gases emitted in other parts of the economy (9% for the whole LULUCF) and provide bio-materials that can act as temporary carbon

stores (harvested wood products) or as “carbon substitutes”, replacing carbon intensive materials and fuels.

Figure 5. Trend in emissions and removals by land uses in the EU



Source: 2013 National Inventory Submissions to UNFCCC

2.1.9. Sustainable Forest Management

Sustainable Forest Management is the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems³⁹.

There are several initiatives across the EU to support, implement and assess sustainable forest management. Criteria and indicators have been developed by Forest Europe for the pan-European region to report on the implementation of sustainable forest management by countries.

The six pan-European criteria for reporting SFM are:

- Maintenance and appropriate enhancement of forest resources and their contribution to global carbon cycles;
- Maintenance of forest ecosystems' health and vitality;
- Maintenance and encouragement of productive functions of forests (wood and non-wood);
- Maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems;
- Maintenance, conservation and appropriate enhancement of protective functions in forest management (notably soil and water); and

³⁹ Source: Second Ministerial Conference on the Protection of Forests in Europe, 16-17 June 1993, Helsinki/Finland, "Resolution H1 - General Guidelines for the Sustainable Management of Forests in Europe"

- Maintenance of other socio-economic functions and conditions.

Associated indicators were initially adopted by the Ministers in Lisbon (1998). They were later simplified and further improved to be endorsed at the Vienna MCPPEE (2003) as “Improved Pan-European Indicators for Sustainable Forest Management”. They are used to assess progress towards sustainable forest management in the pan-European region both at regional and national level. This progress and up-to-date information on European forests is regularly being presented in the “State of Europe’s Forest” reports.

Forest management plans (FMP) are an important tool for the implementation of SFM at the operational level, and can be a proxy to sustainability. FMP are information (in the form of text, maps, tables and graphs) collected during periodic forest inventories at operational forest unit level (stands, compartments) and operations planned for individual stands or compartments to reach the management goals. Equivalent instruments is information collected on forest area, at forest management or aggregated forest management unit level (forest blocks, farms, enterprises, watersheds, municipalities or wider units) and strategies/management activities planned to reach the management or development goals⁴⁰.

Forest certification has been one of the tools to document the sustainability of forest management. Looking at the number of ha certified and products carrying a logo of certification, it is clear that certification has gained importance, year after year. In the EU around 50% of forests and other wooded land are certified by FSC⁴¹ or PEFC⁴², although there are large differences between countries (figure 6). At global level, area certified by the two main voluntary forest management certification systems (PEFC and FSC) cover 412 million ha of forest (165 million ha under FSC⁴³ and 247 million ha under PEFC⁴⁴), which represents around 10% of the forest world area.

⁴⁰ Source: Forest Europe

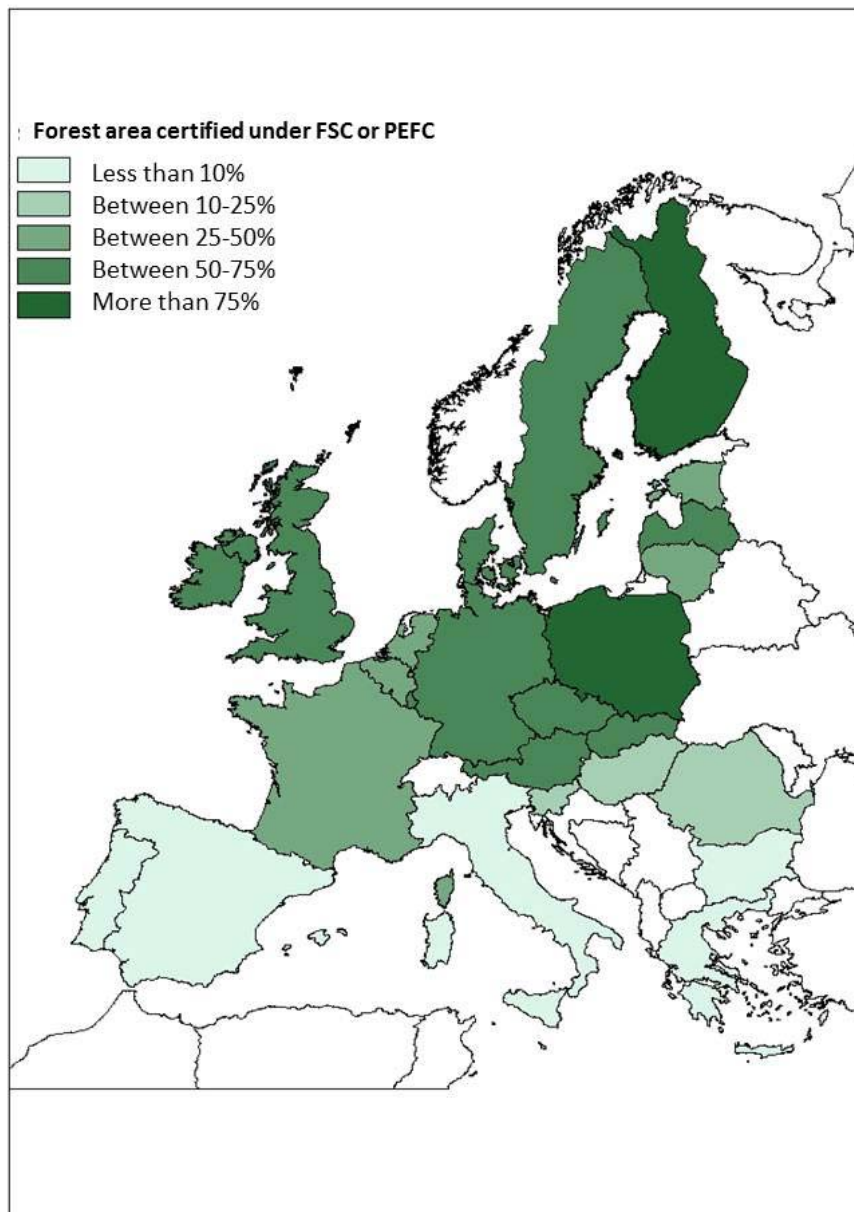
⁴¹ Forest Stewardship Council

⁴² Programme for the Endorsement of Forest Certification

⁴³ Based on 2012 FSC data available at <https://ic.fsc.org/facts-figures.19.htm>

⁴⁴ Based on 2012 PEFC data available at <http://pefcregs.info/statistics.asp>

Figure 6. Certified area in the EU



Source: Calculated from FSC and PEFC, 2012.

Model Forests is an initiative for landscape-scale platforms and broad stakeholder engagement, which carry out global change studies, develop and test local-scale innovation and adaptation strategies, and monitor such efforts over the long term. Thus, it can contribute to support sustainable forest management by implementing resource management policies at the local level, establishing networks and ensuring the participation of local communities. There are a few initiatives being developed in the EU, some of which are supported by EU programs such as Interreg (e.g. Baltic and Mediterranean model forest networks).

2.1.10. Agroforestry

Agroforestry systems, which are at the interface between agriculture and forestry, are also important to mention. Agroforestry is the integration of trees, crops and/or livestock on the same area of land. Trees can stand inside parcels or on the boundaries (hedges). Agroforestry can be applied to all agricultural systems, in all parts of Europe. Agroforestry systems are obtained by planting trees on agricultural land or by introducing agriculture in existing woodland (e.g. silvopasture). This land use can optimise the benefits from the biological interactions created when trees and/or shrubs are deliberately combined with crops and/or livestock and can help to cope with growing challenges, including climate change adaptation.

Europe has a unique heritage of traditional agroforestry systems with a high environmental and cultural value, and a high potential for innovative modern agroforestry systems as developed by research centres across Europe during the last two decades. However, since no statistics on such practices exist, its contribution to agriculture or rural economy is undervalued.

2.2. State of the EU's forest sector

The importance of forests goes far beyond the environmental role, although their social and economic importance tends to be underestimated. Forests contribute to rural development through the provision of secure employment with competitive incomes.

Some 56% of the population in the EU live in rural areas, which cover 91% of the overall territory. Farming and forestry remain crucial for land use and the management of natural resources in the EU's rural areas as well as being a basis for economic diversification in rural communities.

Wood is still the main source of income for most forest owners, delivering the raw material to the forest-based industries and to the bioenergy sector. Forest-based industries are an important industrial branch representing 7% of added value of total manufacturing in the EU and providing around 3 million jobs. These industries, in particular woodworking, were especially hit by changes affecting economies, with important impacts also being felt upstream. Woody biomass is also the most important source of renewable energy, representing 50% of the EU gross final energy consumption from renewable biomass sources.

In addition, forests produce a large range of other products, such as cork, for which the EU accounts for 80% of worldwide production, resins, medicinal plants, mushrooms, truffles, game, nuts and berries. Resin is increasingly used by the chemical industry, which is contributing to a re-flourishing of resin extraction in the EU. EU rural development policy supports SFM and multifunctionality, contributing to further developing these non-wood products.

Table 5. Production of roundwood, fuel wood and other basic wood products in the EU, EFTA and candidate countries 2011 (1000 m³)

2011	Roundwood					Wood chips and particles	Wood residues and pellets	
	Total	Industrial roundwood			Fuel-wood		Total	Pellets
		Total	Coniferous	Non-Coniferous				
EU-28	426752	334403	262099	72304	92349	64067	46978	11472
Belgium	5128	4235	3231	1004	893	473	538	0
Bulgaria	6205	3364	2005	1359	2841	38	78	21
Croatia	5258	3836	678	3158	1422	175	248	:
Czech Republic	15381	13467	12291	1176	1914	1157	1173	102
Denmark	2583	1468	1118	350	1115	168	0	0
Germany	56142	45358	36443	8915	10783	10031	3101	2679
Estonia	7470	5454	3699	1755	2016	2800	1793	554
Ireland	2627	2432	2431	1	195	509	165	0
Greece	1196	339	241	98	857	2.5s	1.2	0
Spain	16648	11528	4616	6912	5120	2080	2456	343
France	55041	28387	19585	8802	26653	5041	8633	360
Italy	6306	1662	1253	409	4643	2000	1200	743
Cyprus	8	5	5	0	4	2	4	0
Latvia	12833	11649	8445	3204	1184	3653	1358	973
Lithuania	7004	5346	3332	2014	1658	900	720	286
Luxembourg	261	244	107	137	18	422	98	8
Hungary	6073	2922	649	2273	3152	138	141	0
Malta	0	0	0	0	0	0	0	0
Netherlands	978	688	471	217	290	139	725	171
Austria	18696	13631	12784	847	5065	4253	2965	1085
Poland	37180	32200	24969	7231	4980	2187	5500	643
Portugal	9140	8540	3258	5282	600	96	1782	692
Romania	14359	10344	5108	5237	4014	577	2655	350
Slovenia	3388	2052	1582	469	1336	82	314	92
Slovakia	9213	8570	5124	3446	643	1250	1515	121
Finland	50767	45526	38355	7171	5241	7760	5294	268
Sweden	72103	66203	62333	3870	5900	16000	4000	1982
United Kingdom	10021	8788	8665	123	1234	2309	770	0
Iceland	:	:	:	:	:	:	:	:
Liechtenstein	26	8	7	1	18	19	0	0
Norway	10291	8506	8468	39	1785	0s	303	44689
Switzerland	4861	3322	2840	482	1539	0	846	0
Montenegro	364	208	177	31	156	0	0	:
FYR of Macedonia	631	101	40	61	530	0	0	:
Turkey	21039	16423	10147	6276	4616	850	850	:

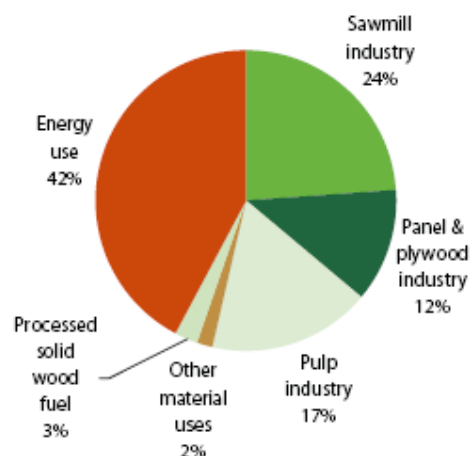
Figures in bold italics are estimates: Not available

Source: Eurostat 2013

2.2.1. Wood resources

Figure 7 provides an overview of the current use of wood from all sources (not just forests) in the EU. Some of the wood resources used for energy come directly from forests (and other primary sources) and the remainder are production residues from industrial wood processing, including black liquor from paper production, and recycled wood waste.

Figure 7. Wood resources in EU27 in 2010

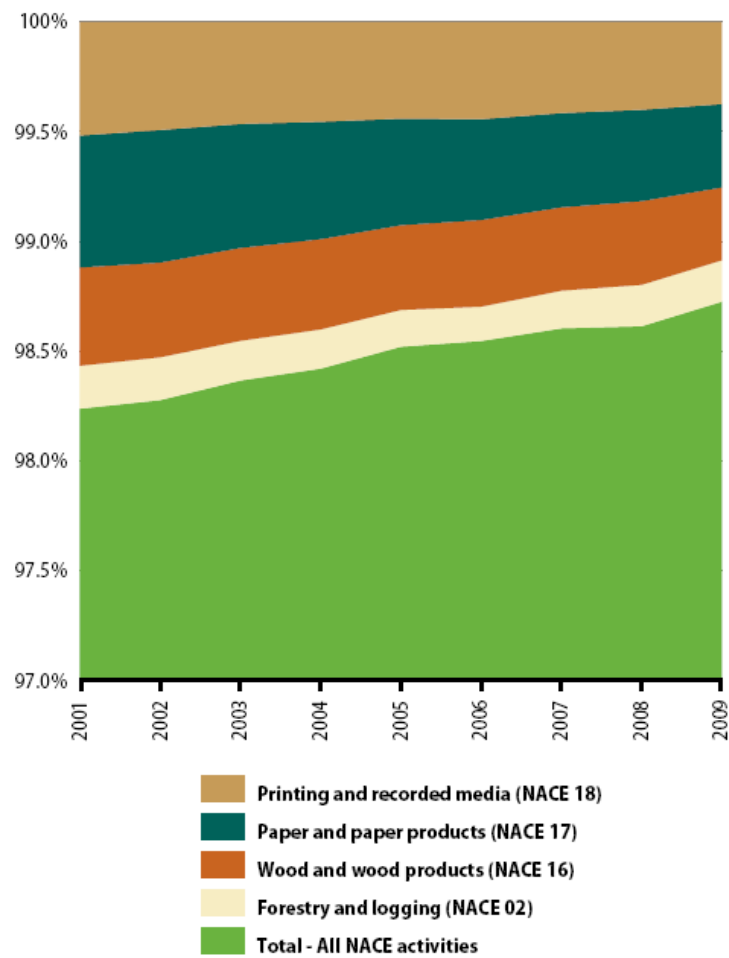


Source: EUwood, 2010

Figure 8 shows the forest sector's share of GDP. As can be seen in the figure, the wood-based sectors' share of GDP fell from 1.79 % in 2001 to 1.29 % in 2009. Forestry and logging appears to be the only wood based sector that did not decline, as measured against the development of GDP for all economic activities. These basic data were estimated by national accounts.

When indexed on 2005, the gross value added of forestry and logging increased faster than the gross value added of all economic activities up until the recent financial and economic crisis of 2008. In 2009, forestry and logging was level with the index of all activities, while wood products, paper and printing dropped below the trend for all activities. For forest-based industries, further details will be included in a separate document.

Figure 8. Forest sector's share of GDP (2001-2009)

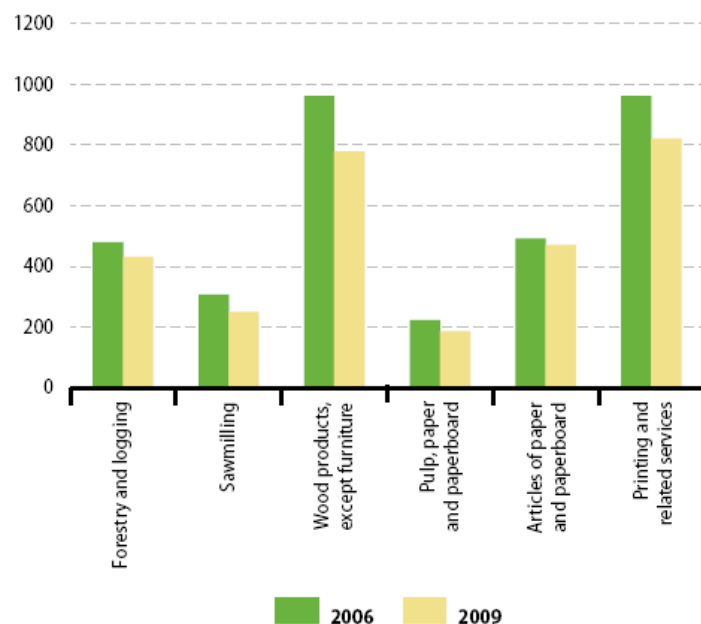


Source: Eurostat

2.2.2. *Employment and Economy*

The number of persons employed dropped between 2006 and 2009 in all the wood-based sectors, according to national accounts data, see figure 9:

Figure 9. Persons employed in the forest sector in EU27 (1000)



Source: Eurostat

In 2010 the average labour productivity in the forestry sector (calculated as value added per employee) varied substantially among Member States. The highest labour productivity is found in Finland (€101,240 per employee), whereas Bulgaria reached only €7,770 per employee. The relative increments of labour productivity in forestry between 2006 and 2010 also differ significantly across the EU. The highest average annual growth rate of the labour productivity was observed in Hungary (+12.2% between 2006 and 2009) and Slovenia (+11.5%), whereas the labour productivity of forestry decreased in France (-9.7%), in the United Kingdom (-7.3), in Greece (-2.1% between 2006 and 2009) and in Finland (-3.7%). The decrease in labour productivity was particularly high between 2009 and 2010 in several countries where it reduced by 15% or more: Germany (-16%), France (-20%), Finland (-34%) and the United Kingdom (-20%)⁴⁵.

Gross fixed capital formation (GFCF), which measures how much of the new value added is invested rather than consumed, is a key element for assessing future competitiveness. €1.4 billion were invested in the forestry sector in 2009, accounting for 13.5% of its total Gross Value Added (GVA), of which EUR 1.17 billion (84% of the total) were invested in Sweden and Finland. The gross fixed capital formation in forestry decreased by more than 40% between 2008 and 2009. The highest relative share of GFCF in GVA of the forestry sector is found in Cyprus (67%), followed by Greece and the United Kingdom (26%).⁴⁶

Regarding forest-based industries, further details will be provided in a separate Staff Working Paper.

⁴⁵ Source: Eurostat - Economic Accounts for Forestry & Labour Force Survey, update 27/09/2012

⁴⁶ Source: Eurostat - Economic Accounts for Forestry, update 27/09/2012

The EU has signed voluntary partnership agreements with 6 countries that in 2011 exported around 31 million tonnes of wood and articles of wood to the EU (table 6).

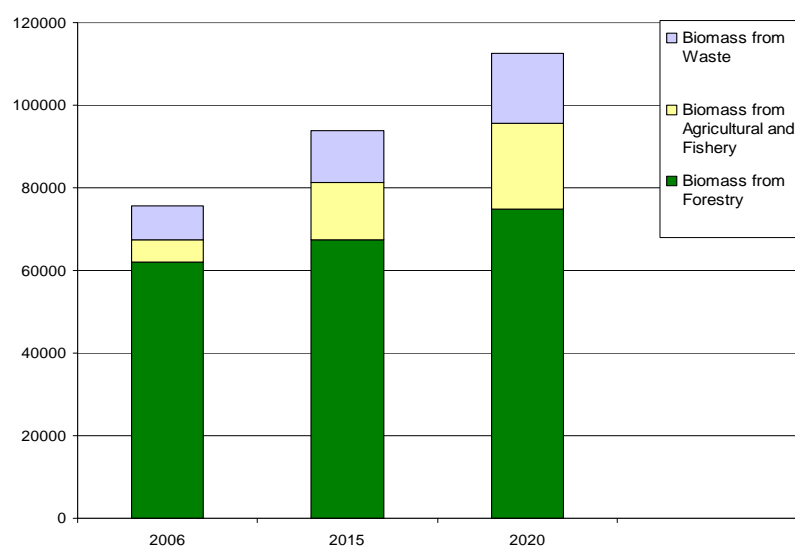
Table 6. Total imports of wood and articles of wood, Chapter 44 of the Harmonised System

	2005		2007		2009		2011	
	Quantity (tonnes)	Value (1000 €)	Quantity (tonnes)	Value (1000 €)	Quantity (tonnes)	Value (1000 €)	Quantity (tonnes)	Value (1000 €)
VPAs signed or agreed								
Cameroon	639.361	426.681	606.235	445.968	329.933	229.397	405.024	296.873
Centr. African Rep.	48.154	24.667	45.176	24.544	22.334	11.393	21.274	10.686
Ghana	124.280	121.120	97.474	100.122	46.440	47.454	46.353	49.053
Indonesia	699.465	702.183	479.553	653.728	331.682	427.024	332.283	468.149
Liberia	-	-	35	31	49.624	3.632	230.727	16.424
Rep. of Congo (Brazzavill e	216.650	101.096	174.969	91.679	231.242	53.034	128.011	60.292
VPAs under negotiation								
Dem. Rep. of Congo	134.275	69.443	318.215	123.995	228.183	58.551	106.569	56.113
Gabon	560.166	269.888	492.739	289.949	299.082	180.513	178.143	159.928
Malaysia	475.026	438.848	517.110	587.070	405.866	391.324	354.102	406.933
Vietnam	16.901	33.467	27.564	50.424	28.263	55.690	34.732	58.276
Imports from FLEGT countries	2.914.278	2.187.393	2.759.070	2.367.510	1.972.649	1.458.012	1.837.218	1.582.727
Total imports	41 087 965	10 636 018	40 090 964	13 392 913	25 310 312	8 097 771	31 801 815	10 040 614

2.2.3. Renewable energy

Member States plan to mobilise significant additional domestic biomass resources for heating and electricity generation, which will increase from 76 Mtoe in 2006 to 113 Mtoe in 2020. According to estimates based on NREAPs, forestry will continue to be the predominant source of biomass supply, with an overall share of over 66% of total biomass as a renewable energy source by 2020 (rising from 62 Mtoe in 2006 to 75 Mtoe in 2020). Agriculture will be the second source (18%), more than tripling from 6 Mtoe in 2006 to 21 Mtoe in 2020) and the contribution of waste is projected to double (up to 15% share), increasing from 8.5 Mtoe in 2006 to 17 Mtoe in 2020.

Figure 10. EU domestic biomass supply for heating/cooling and electricity, 2008-2020 (ktoe)⁴⁷



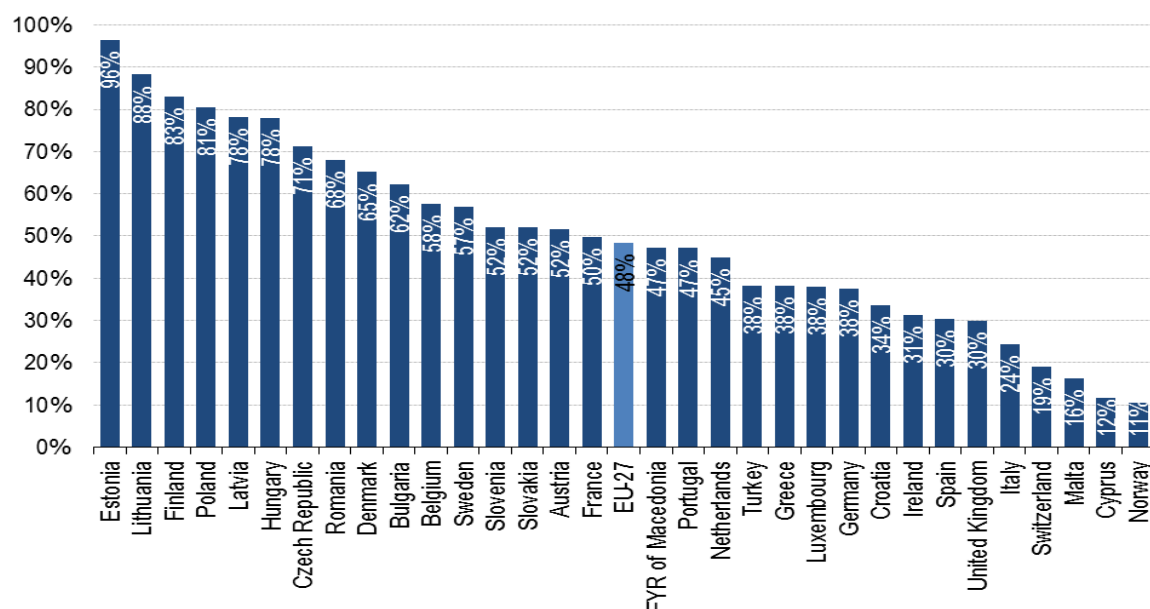
Source: European Commission's estimates based on 26 NREAPs data

Wood currently plays a prominent role in total renewable energy supply, providing around half of total renewable energy (figure 11). Households accounted for the largest share (61.3%) of the EU's final energy consumption of wood and wood wastes in 2008 followed by paper manufacturing and printing (19.8%)⁴⁸.

⁴⁷ 2006 data include both domestic and imported biomass

⁴⁸ source: Eurostat

Figure 11. Share of wood and wood waste in total renewable energy in the EU, EFTA and candidate countries in 2010 (% of gross inland consumption of renewable energy)



Source: Eurostat

2.3. State of the policy environment

Despite the absence of a common forest policy, EU policies such as rural development, employment, climate change, energy, water and biodiversity influence Member States decisions on forests. There is a long history of the EU contributing to the implementation of sustainable forest management (SFM) through these other policies, see chapter 2.1.9.

Based on the principle of subsidiarity and the concept of shared responsibility, the 1998 EU Forestry Strategy⁴⁹ established a framework for forest-related actions in support of SFM, based on cooperative and beneficial linkages between the forest policies of the Member States and Community policies and initiatives relevant to forests. The Forest Action Plan⁵⁰ covering the period 2007-2011 was the main instrument for its implementation addressing four objectives referring to competitiveness, environment, quality of life and coordination and communication, see also chapter 1.1. Forestry Measures under the Rural Development Regulation have been the main financial driver for the implementation of the EU Forestry

⁴⁹ Council Resolution of 15 December 1998 on a forestry strategy for the European Union

⁵⁰ COM(2006)302

Strategy at the EU level. Other relevant measures include the Timber Regulation and FLEGT⁵¹ and the Renewable Energy Directive.

The EU has also undertaken relevant international commitments. The Non-Legally Binding Instrument on All types of Forests under UNFF⁵² aims to strengthen political support and action to SFM but there are also several conventions in related areas relevant for forests. These include CBD⁵³ and its Nagoya Protocol, FAO Commission of genetic resources for food and agriculture (CGRFA) including forest genetic resources, UNFCCC⁵⁴, UNCCD⁵⁵ or CITES⁵⁶, OECD scheme for the certification of forest reproductive material. Special attention is being given to the on-going negotiations for establishing a Legally Binding Agreement for forests in the pan-European area, in which the EU is participating.

The review of the Forestry Strategy took into account the overall context of EU policies, including:

- Europe 2020 strategy for smart, sustainable and inclusive growth - according to which the EU wants to become *a smart, sustainable and inclusive economy*, where the EU and the Member States can deliver high levels of employment, productivity and social cohesion. The Union has set five ambitious objectives - on employment, innovation, education, social inclusion and climate/energy - to be reached by 2020;
- Review of the Common Agricultural Policy, including a new regulation on Rural Development for the period post-2013;
- The EU Biodiversity Strategy and 2020 Target, including the outcome of the CBD COP in Nagoya;
- Existing legislation (Birds and Habitats Directives, etc.)
- The Commission proposal for a decision on LULUCF accounting and the further development of forest-related issues under UNFCCC towards a new international climate agreement;
- The EU targets on renewable energy share currently implemented at Member State level through National Renewable Energy Action Plans (NREAP);
- EU FLEGT Action Plan and EU Timber Regulation;
- Communication on "Innovative and Sustainable Forest-based Industries" COM(2008)113 and the analysis of its implementation;
- The 7th Environmental Action Plan

⁵¹ Regulation 2173/2005 on the establishment of a forest law enforcement, governance and trade (FLEGT) licensing scheme for imports of timber into the European Community

⁵² United Nations Framework Convention on Forests

⁵³ Convention on Biological Diversity

⁵⁴ United Nations Framework Convention on Climate Change

⁵⁵ United Nations Convention to Combat Desertification

⁵⁶ Convention on International Trade in Endangered Species of Wild Fauna and Flora

and of the initiatives on-going outside the EU:

- The development of a Legally Binding Agreement on forests within the Forest Europe process;
- Other International forest related processes (Rio+20, UNFF, FLEG, REDD+).

The relevant EU2020 targets and the contribution from forests are included below:

Table 7. Relevant EU targets and contribution from forests and the forest sector

EU targets	Contribution from forests and the forest sector
<p>Growth and jobs: 75% employment rate by 2020</p> <p>Reverse the declining role of industry in Europe from its current level of 15.2% of GDP to as much as 20% by 2020</p> <p>Poverty and social exclusion: 20 million fewer people in or at risk of poverty and social exclusion</p>	<p>European Structural and Investment Funds contribute to poverty eradication and social cohesion.</p> <p>3 million jobs in the EU are provided by the forest sector, particularly important in rural areas.</p> <p>Forest-based industries represent 7% of the total added value and 8% of total employment of manufacturing.</p>
<p>Climate change: in 2020 reduction by 20% of CO₂ emissions compared to 1990</p>	<p>In 2009, LULUCF removed an amount of carbon from the atmosphere equal to about 9% of the EU's total greenhouse gas emissions (GHG) in other sectors⁵⁷.</p> <p>MS are obliged to provide information on LULUCF action and have international obligations until 2020 to enhance sinks and reduce emissions from LULUCF under the 2nd Commitment Period of the Kyoto Protocol.</p>
<p>Energy: 20% share of energy from renewable sources by 2020</p>	<p>In 2012 wood energy represented 50% of the total EU renewable energy consumption.</p>
<p>Biodiversity: to halt the loss of biodiversity and ecosystem services degradation in the EU by 2020, restoring them in so far as feasible</p>	<p>50% of terrestrial Natura 2000 network is on forests or other wooded land.</p>
<p>Deforestation: to halt global forest cover loss by 2030 and to reduce gross tropical deforestation by at least 50% by 2020 compared to current levels</p>	<p>Worldwide forests cover 30% of land. While EU forest area is increasing, deforestation is an important problem worldwide, accounting for 20% of global CO₂ emissions – more than total EU GHG emissions.</p>

⁵⁷ Impact Assessment on LULUCF (2011).

At EU level, forests and the forest sector currently receive important funds from the EU. Forestry measures under RD Regulation constitute the resource backbone for the implementation of the strategy adding up to around 90% of total EU funds spent on forestry. LIFE+ provides support for nature protection and forest information needs, and cohesion and structural funds support regional development projects. Horizon 2020⁵⁸ and the European Innovation Partnerships (EIP) are important tools for the development of research and innovation actions. One EIP on agriculture sustainability and productivity has recently been launched⁵⁹ and another EIP on raw materials⁶⁰.

There is also some possibilities for state aid in the forest sector under certain conditions, see further information regarding this in chapter 2.3.8.

At international level, development, neighbourhood and climate change policies also provide relevant financing for third countries, with a relevant contribution through REDD+ and FLEGT.

Innovative financing mechanisms will also be needed to mobilise funding from both public and private sources, in particular for payment of ecosystem services.

Chapter 1 provides a background explaining the developments that followed the adoption of the EU Forestry Strategy in 1998, including in particular the Forest Action Plan and the Green Paper on Forest Protection and information. Below follows a detailed description of the EU actions already carried out or on-going under the different policies relevant for forests and the forest sector as well as financial possibilities under the different policies.

2.3.1. Rural development and cohesion policy

2.3.1.1. Rural development

If we want forests to maintain and maximise their functions, including protection, it is important to ensure that forests contribute to generate wealth and employment in rural areas.

Part A: 2007-2013

With forests covering over 40 % of EU land it seems clear that a policy aiming at developing rural areas has to cover also forests and forestry. This is already the case in the current Rural Development Regulation for the period 2007-2013⁶¹. The regulation is the main financial instrument for the implementation of the EU Forestry Strategy and the EU Forest Action Plan (2007-2011), which Member States have to take into account when defining their national rural development strategies and rural development programmes. Compared to earlier Rural Development Regulations, the European Agricultural Fund for Rural Development (EAFRD) offers a more coherent

⁵⁸ COM(2011) 808 final

⁵⁹ COM(2012) 79 final

⁶⁰ COM(2012) 82 final

⁶¹ Council Regulation (EC) No 1698/2005, OJ L 277, 21 October 2005

and structured set of measures that support forestry, with a strong emphasis on Sustainable Forest Management (SFM). The regulation offers a comprehensive toolkit for Member States with more than 40 measures through 3 Axis and the Leader approach to choose for their programmes. This toolkit includes 8 measures specifically targeting forests and 7 others that can be used among others for forest related activities. All of these (apart from one) are within Axis 2 ("Improving the environment and the countryside"), and should therefore contribute to the EU-level priority objectives of biodiversity, water and climate change. Member States are free to choose measures and allocate budgets according to their specific needs in the current 88 Rural Development Programmes (RDP) including national and regional programmes.

The total financial resources allocated by Member States to the 8 forestry-specific measures were initially €12 billion including public and private funds and also including €6 billion from the rural development fund. This constitutes about 7 % of overall intended EAFRD spending. Since the adoption of the programmes in 2007-2008 they are under continuous modifications (including the "Health-check" related ones⁶²) in order to be adapted to new challenges and to changing needs and adaptation capacity. Since the economic crisis started in 2008, forestry measures are also subject of financial adjustments. The Commission prepared a report in 2009 on the implementation of forestry measures which summarised the planned measures and planned allocation of resources for forestry and forestry related measures according to the original programmes (before any modifications)⁶³

In addition to the forestry-specific measures substantial amounts of funding is directed to forestry through those axis 1 ("Improving the competitiveness of the agricultural and forestry sector") measures which can cover both agricultural and forestry activities. The measures "adding value to agricultural and forestry products" and "support to infrastructure related to the development and adaptation of agriculture and forestry" have the largest budgets among these forestry-related measures.

Adding together the funding intended for forestry-specific (€6 billion) and forestry-related measures (€1-2 billion) it was expected that around €8 billion would be made available from the Community budget (EAFRD) and up to €16 billion in total. These amounts correspond respectively to 9 % of the EAFRD funding and 7-8 % of the total amount of financial resources devoted to rural development programmes during the programming period 2007-2013.

⁶² The Health Check of the Common Agricultural Policy from 2008, includes a provision to strengthen Rural Development Policy. In particular as regards the new challenges that European agricultural and rural areas are facing. Forestry measures were relevant for all the new challenges, which include climate change, renewable energy, water management and biodiversity.

⁶³ http://ec.europa.eu/agriculture/fore/publi/forestry_rurdev_2007_2013_en.pdf

Implementation of forestry measures during 2007-2013

The implementation of forestry measures started slowly and the data shows that by the end of 2011 there appears to have been some under-spending for forestry measures compared to the original target and even compared to the updated targets which take into account the on-going modifications. In terms of the realised payments two environmentally focused measures performed very much under the average; payments for the forest-environment and Natura 2000 measures were less than 14% of the updated and reduced budget. The implementation of afforestation of agricultural land performed the best 40%. However, in this case there is a significant determination for payments (delay in actual payments), because of the long commitment period from the previous programming periods for payments for lost income, which is still under execution for afforestation during 2000-2006. Even if the measure targeting restoring forestry potential and prevention against fires and natural disasters has a long history since the 80's, the implementation is just almost the same as for afforestation, around 40%. In average the financial implementation of eight forestry specific measures was 34% by the end of 2011. Considering that 2013 is the last year for implementation of the measures and for using the available financial resources, it is understandable that member states made several financial reallocations to avoid losing EAFRD funds. As a result of these reallocations the new updated plan for the above 8 forestry specific measures has been modified to €5.4 billion which is 88% of the planned €6.1 billion in 2007.

The financial implementation of the measures, i.e. the requested EAFRD payments, increased in 2012. This can be explained by the fact that many forestry measures cover multiannual activities and payments for the work done come progressively (e.g. establishment of new or replanting damaged forests). Table 8 shows the updated plan and the payments requested in the year 2012. According to these figures 48% of the planned expenses had been requested by the end of 2012. However, when comparing with the originally planned expenses the implementation level differs among measures, but altogether it is close to 42% of the planned level in 2007.

Spending for prevention and restoration has the best result; slightly over 55% of the originally planned. Measures providing support for non-productive investments and afforestation of agricultural land performed well; 55.5% and 45.7% respectively. Spending for afforestation of non-agricultural land (where there is no long commitment period and determination for payments for lost income). The only forestry specific Axis 1 measure supporting improvement of the economic value of forest through sustainable investments, reached already around 28% of their expected level. Payments for establishment of agroforestry systems, forest environment payments and for Natura 2000 are still lagging behind the expectations. However, both measures show some improvements during the last years. In the case of Natura 2000 payments the preparation of management plans or equivalent instruments was the first step of the implementation and the preparation of these plans could have received supports from an Axis 3 measure.

Table 8. Implementation of forestry measures under Rural Development regulation

Axis 2 measures with relevance to forestry	Expenditures planned in 2007				Implementation of EAFRD expenses										
	Public	EAFRD	Private	Total	2007-2009		2007-2010		2007-2011			2007-2012			
	(€ million)	(€ million)	(€ million)	(€ million)	by 2009(€ million)	% of planned (09/07)	by 2010 (€ million)	% of planned (10/07)	Updated plan in 2011 (€ million)	Realised by 2011 (€ million)	% of planned (11/11)	updated plan 2012 (€ million)	Realised by 2012 (€ million)	% of updated planned (12/12)	% of originally planned (12/07)
221 First afforestation of agricultural land	3659,4	2410,7	576,0	4235,3	487,9	20,2%	682,1	28,3%	2192,6	884,2	40,3%	2068,4	1102,1	53,3%	45,7%
222 First establishment of agroforestry systems	32,4	22,7	14,4	46,8	0,0	0,0%	0,0	0,1%	18,7	0,2	1,0%	11,0	0,4	3,6%	1,8%
223 First afforestation of non-agricultural land	596,2	360,8	181,8	778,0	21,6	6,0%	48,7	13,5%	327,1	73,6	22,5%	265,8	101,1	38,0%	28,0%
224 Natura 2000 payments	158,6	110,6	0,0	158,6	3,7	3,3%	7,2	6,5%	92,5	12,9	13,9%	64,8	18,4	28,4%	16,6%
225 Forest-environment payments	438,8	265,3	6,4	445,2	10,9	4,1%	17,5	6,6%	218,2	25,4	11,6%	193,6	34,4	17,8%	13,0%
226 Restoring forestry potential and prevention	2474,2	1553,0	307,0	2781,2	217,6	14,0%	389,6	25,1%	1700,5	663,0	39,0%	1578,2	862,2	54,6%	55,5%
227 Non-productive investments	1379,8	808,9	216,9	1596,7	71,2	8,8%	131,4	16,3%	746,9	212,5	28,5%	748,2	315,4	42,2%	39,0%
Axis 2 forestry measures	8739,4	5532,1	1302,4	10041,8	812,9	14,7%	1276,5	23,1%	5296,5	1871,8	35,3%	4930,0	2434,0	49,4%	44,0%
Axis 1 forestry measure															
122 Improvement of the economic value of forests	1000,6	652,1	1010,0	2010,7	50,8	7,8%	91,4	14,0%	591,7	136,8	23,1%	507,5	178	35,1%	27,3%
Total for eight forestry-specific measures	9740,0	6184,2	2312,4	12052,4	863,7	14,0%	1367,9	22,1%	5888,2	2008,6	34,1%	5437,5	2612,0	48,0%	42,2%

Source: European Commission, 2013

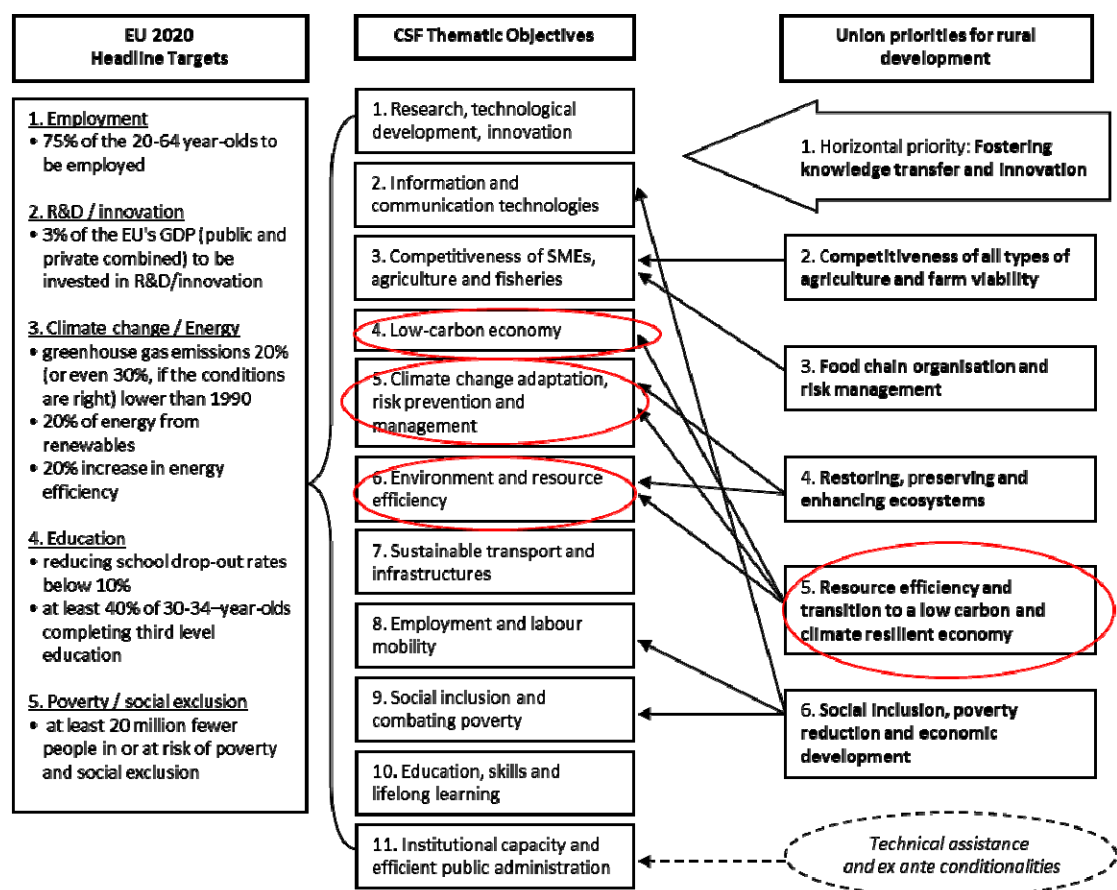
Concerning the physical implementation of the above mentioned measures the available preliminary intermediate data by the end of 2011 still show a moderate development in the implementation. It means that in the case of afforestation where the payment level was 40% by the end of 2011, the real planting of trees on agricultural land was lagging behind and only 122 000 ha compare with the planned 566 000 ha. This is close to 22% of the already modified plantation target. The original target for afforestation of agricultural land was 650 000 ha at the end of the adoption of the programmes in 2008.

Member States and stakeholders indicated that they had problem in interpretations of some requirements and considered that the high administrative burden and the low fund contributions were the main causes for the low level of performance.

Part B: 2014-2020

The Commission presented a proposal for a regulation for the EAFRD 2014-2020⁶⁴ in October 2011, as part of its proposal to reform the Common Agricultural Policy (CAP). The EAFRD will no longer be divided into three areas or axis but into six priorities linked to the EU's 2020 strategy.

Figure 12. Link between Europe 2020 and the EAFRD



Source: European Commission, 2011

The proposed regulation acknowledges that forestry is an integral part of rural development. Support for sustainable and climate friendly land use should encompass

⁶⁴ COM(2011) 627 final/2

forest area development and sustainable management of forests. In the interest of simplification but also to allow beneficiaries to design and realise integrated projects with increased added value, there was an aim that a single measure should cover all types of support for forestry investments and management. This measure is intended to cover the extension and improvement of forest resources through afforestation of land and creation of agroforestry systems combining agriculture with forestry systems, restoration of forests damaged by fire or other natural disasters and relevant prevention measures, investments in forestry technologies and in the processing and marketing of forest products aimed at improving the economic and environmental performance of forest holders and non-remunerative investments which improve ecosystem and climate resilience and environmental value of forest ecosystems.

Based on the experiences gained through implementation of the current and previous measures, there was a need for simplification and for improving effectiveness by merging and regrouping existing measures and by allowing more flexibility to the Member States to take into account their national or regional specificities and the characteristics of forestry processes, which are different from and have a different time span than agricultural ones.

Forestry measures should be proposed in the light of undertakings by the Union and the Member States at international level, and be based on Member States' national or sub-national forest plans or equivalent instruments which should take into account the commitments made in the Ministerial Conferences on the Protection of Forests in Europe. Building on the work done through this Forest Europe process, there is now a requirement that for holdings above a certain size, to be determined by the Member States in the programme, support shall be conditional on the presentation of the relevant information from a forest management plan or equivalent instrument in line with SFM. (see chapter 2.1.9) This requirement, based on the subsidiarity principles, gives free hands to Member States to set an appropriate threshold which reflects their socio-bio-geographic specificities, however, at the same time acknowledges the importance of proper planning and results achieved in this field.

It is particularly important to acknowledge the multifunctional role that forests and forestry have for the rural economies and environments. Forestry measures should be constructed so that they simultaneously contribute to economic, environmental and social objectives. Measures aiming at improving the public amenity value of forests or environmental objectives (such as improving forest health, biodiversity, climate change resilience, protection of water and soil) should not exclude sustainable economic use of the supported forest areas.

These are the main forestry related measures in the draft regulation:⁶⁵

Article 22: Investments in forest area development and improvement of the viability of forests;

- afforestation and creation of woodland (art. 23)
- establishment of agroforestry systems (art. 24)

⁶⁵ http://ec.europa.eu/agriculture/cap-post-2013/legal-proposals/com627/627_en.pdf

- prevention and restoration of damage to forests from forest fires and natural disasters, including pest and disease outbreaks, catastrophic events and climate related threats (art. 25)
- investments improving the resilience and environmental value as well as the mitigation potential of forest ecosystems (art. 26)
- investments in forestry technologies and in processing and marketing of forest products (art. 27)

Article 31: Natura 2000 and Water Framework Directive payments, and

Article 35: forest environmental and climate services and forest conservation

At the time of the preparation of the Forest Strategy and this Staff working document, the proposal for rural development was under discussion and preparation in the Council and in the Parliament, together with the related documents, e.g. Delegated Act, Guidelines. Member States are expected to prepare their rural development programmes by 2014, therefore, the past experiences and future expectations should be incorporated into the new programmes. For this reason the new EU Forest Strategy is timely and could provide impetus for the planning work.

2.3.1.2. EU Cohesion policy support to forestry

In addition to the EAFRD, Member States and their regions can also benefit from the support of the European Regional Development Fund (ERDF) and European Social Fund (ESF) The ERDF co-finance programmes and projects that might be directly or indirectly linked to forests and the forestry sector, in the framework of measures aimed at territorial development. Some examples that can be linked to forests and the forestry area are: investments of the ERDF in Natura 2000 and the promotion of biodiversity and ecosystem services, the use of biomass as renewable energy and the support to SME's and innovation.

The ERDF co-finance cross-border, transnational and interregional cooperation programmes that can support projects which relate to forests and forestry. Projects can include the following fields of intervention: monitoring and information systems as well as networks linked to forest fires, sustainable land management, Information sharing on climate change adaptation, carbon sequestration and risk reduction, biodiversity, policies against depopulation in mountain areas, favouring of bio-energy use, cooperation for use of renewables and energy efficiency and sustainable development of regions through SMEs.

2.3.1.3. Contribution from the EU Forest Strategy to rural development

The EU Forest Strategy should contribute to achieve the rural development objectives underlined above by:

- Improving the competitiveness of the forest sector and promoting the diversification of economic activity and quality of life, delivering specific environmental public goods⁶⁶;
- Assessing and improving the effect of forestry measures under rural development policy;
- Emphasising the social aspects of sustainable forest management
- Ensuring a sustainable workforce as one of the pillars for a successful implementation;
- Better valuing the benefits that forests give to society, and, through SFM, finding the right balance between delivering the various goods and services. Restoring, preserving and enhancing ecosystems dependent on forestry

2.3.2. *Forest Protection: Environmental policy and plant health and reproductive material policy*

From the environmental policy perspective, the major policy developments since the 1998 strategy are the following:

- The development of the EU 2020 biodiversity Strategy against the background of the EU's international commitments to halt the loss of biodiversity and the degradation of ecosystem services in the EU by 2020 and in particular the different specific targets therein which are relevant to forests and forest ecosystem services;
- The EU 25 Member States (i.e. excluding Romania and Bulgaria) reported in 2008 according to the provisions of Article 17 of the Habitat Directive, on the conservation status of all the species and habitats listed in the Annexes of the Habitats Directive which occur on their territory. On the basis of this, the Commission produced a consolidated report on the conservation status of each species and habitat type at a bio geographical and EU level. These reports provide useful contextual information.⁶⁷ A new report for the period 2007-2013 will be produced in 2015 on improved scientific basis;
- The advancing implementation of the Natura 2000 legislation⁶⁸ and the inclusion of forest areas as approximately 50% of the network. This will entail work on appropriate EU funding and on cooperation between foresters and nature conservationists;
- The implementation of water and air legislation (notably the water framework⁶⁹ and national emissions ceilings directives⁷⁰) and of the soil thematic strategy⁷¹;

⁶⁶ Objective of the second pillar of the Common Agricultural Policy, as reflected in Conclusions of the European Council of 7-8 February 2013 on the Multiannual Financial Framework

⁶⁷ The reports are available at: <http://biodiversity.eionet.europa.eu/article17>

⁶⁸ Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version) and Directive 92/43/EEC of the European Parliament and of the Council of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

⁶⁹ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

- The 6th and now 7th Environment Action Program⁷²⁻⁷³ with considerable emphasis not least on the protection of natural resources;
- The adoption of the Resource Efficiency roadmap⁷⁴ which raises issues regarding how we use resources and the choices we make regarding priorities;
- The EU-wide impacts of the expected increase of forest biomass for bio-energy potentially leading to runaway developments that may threaten more climate friendly use of wood as a material;
- The upcoming invasive alien species initiative, under the 2020 Biodiversity Strategy⁷⁵;
- The Commission adopted a proposal in May 2013 for a new EU Plant reproductive material regulation⁷⁶.
- The Commission adopted a proposal in May 2013 for a new EU plant health Regulation, offering reinforced protection of trees and forests against new non-European pests⁷⁷;
- The development of the EU database of forest reproductive material containing species and artificial hybrids listed in Annex I to Council Directive 1999/105/EC, and including hyperlinks to national registers;
- The outcomes of the FLEGT Action Plan⁷⁸ which have both internal and international aspects;
- REDD/REDD +⁷⁹ issues/outcomes;
- The amendments of the EIA directive⁸⁰ on the assessment of the effects of certain public and private projects on the environment
- The SEA directive⁸¹ on the assessment of the effects of certain plans and programmes on the environment

⁷⁰ Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants

⁷¹ COM(2006) 231

⁷² Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme

⁷³ Proposal for a DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet" COM(2012)710 final

⁷⁴ COM(2011) 571 final

⁷⁵ COM(2011) 244 final

⁷⁶ Reference COM(2013) 262 final:

http://ec.europa.eu/dgs/health_consumer/pressroom/docs/proposal_aphp_en.pdf

⁷⁷ Reference COM(2013) 267 final:

http://ec.europa.eu/dgs/health_consumer/pressroom/docs/proposal-regulation-pests-plants_en.pdf

⁷⁸ COM/2003/0251 final

⁷⁹ REDD+ refers to policy approaches and positive incentives to reduce emissions from deforestation and degradation (REDD) and to support conservation of existing forest carbon stocks, sustainable forest management and enhancement of forest carbon stocks (+) in developing countries

⁸⁰ Directive 2011/92/EU of the European Parliament and the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment

2.3.2.1. Forest Protection

European forests are threatened by biotic and abiotic agents, such as insects and other pests, diseases, grazing and invasive alien species, windstorms, forest fires, droughts, floods and avalanches. Both the nature and the effects of certain threats are trans-boundary and therefore actions at EU level increase the added value of the measures.

The disturbances caused by these agents do have significant socioeconomic and environmental impacts and climate change effects will further exacerbate them, particularly through the increased frequency of extreme events (storms, drought, floods and temperature extremes).

Relevant policy instruments already provide support for prevention and restoration, such as for example, the EU Rural Development and regional policy measures, the EU legislation on Plant Health and Plant Reproductive Material, the Solidarity Fund, other Civil Protection Mechanisms. The use in forestry of high-quality reproductive material suited to the site in question is essential if the stability, disease-resistance, adaptation, productivity, diversity and overall resilience of forests are to be increased

The EU plant health legislation has been reviewed and a proposal for a new Regulation on protective measures against pests of plants has been adopted in May 2013. The new Regulation will offer better protection of forests against new non-European pests reaching the Union with international trade, including mandatory surveys for such pests and obligations to eradicate or contain those pests. In this context, the Commission is currently assessing the impacts of the extension of the obligation to apply within the EU the International Standard for Phytosanitary Measures n° 15 on wood packaging materials.

The EU forest reproductive material has been reviewed and a new regulation on Plant Reproductive Material (PRM) was adopted in May 2013. The new PRM regulation reinforces the principles set in the Directive 1999/105/EC on FRM: approval of well identified material on the basis of its origin, traceability as well as flexibility for operators and decrease of the administrative burden.

The Forest Strategy should ensure that under changing climatic conditions forests have enough resilience to, and are adequately protected against natural and human-induced threats so that forest cover is maintained, if not increased, forests are healthy and provisioning of all forest functions is continued. Prevention has to be priorities, rather than damage mitigation and restoration.

2.3.2.2. The fight against illegal logging

Illegal logging is the harvesting of timber in contravention of the laws and regulations of the country of harvest. Illegal logging is a global problem with significant negative

⁸¹ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

economic, environmental and social impact. In economic terms illegal logging results in lost revenues and other foregone benefits. In environmental terms illegal logging is associated with deforestation, climate change and a loss of biodiversity. In social terms illegal logging can be linked to conflicts over land and resources, the disempowerment of local and indigenous communities, corruption and armed conflicts. Illegal activities also undermine the efforts of responsible operators by making available cheaper but illegal timber and timber products in the market place.

The European Union's policy to fight illegal logging and associated trade was defined back in 2003 with the Forest Law Enforcement Governance and Trade (FLEGT) Action Plan. The key regions and countries targeted in the FLEGT Action Plan, which together contain nearly 60% of the world's forest and supply a large proportion of internationally traded timber, are Central Africa, Russia, Tropical South America and Southeast Asia. The FLEGT Action Plan covers both supply and demand side measures to address illegal logging, and was endorsed by the EU Council of Ministers in November 2003.

The FLEGT Action Plan has led to two key pieces of legislation:

1. FLEGT Regulation⁸² adopted in 2005, allowing for the control of the entry of timber to the EU from countries entering into bilateral FLEGT Voluntary Partnership Agreements (VPA) with the EU;
2. EU Timber Regulation⁸³ adopted in 2010, as an overarching measure to prohibit placing of illegal timber and timber products on the internal market. This regulation came into effect on 3 March 2013.

However the EU response has not been limited to legislative measures. The EU has sought to switch demand for legal and sustainable timber and timber products by encouraging both private and public sector procurement policies that give preference to legally harvested timber and timber products.

2.3.2.3. Ecosystem services and biodiversity

Ecosystem services can be defined as the benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth⁸⁴. Thus, they are important for the environment as well as for social and economic reasons.

Looking at the environmental side, forests are an important component of European nature. They are home to the largest number of species on the continent. The distinctive nature of European forest ecosystems is characterised by the fact that numerous species of trees, other plants or animals are restricted to Europe. 23% of the

⁸² Council Regulation (EC) No 2173/2005 of 20 December 2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community

⁸³ Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market

⁸⁴ Source: Millennium Ecosystem Assessment, 2001

total forest resource within Europe is in Natura 2000 and forests and other wooded land represent around 50% of the total terrestrial Natura 2000 network. The Natura 2000 network of protected areas is the core instrument for achieving the 2020 targets of the EU biodiversity strategy, including a significant improvement of the conservation status of habitat types and species of Community interest and where possible the restoration of a favourable conservation status. Natura 2000 sites are not strict nature reserves. They are sites where human activities such as sustainable forest management are perfectly possible, but subject to the condition that they are compatible with the conservation objectives of the respective sites. This means that in most cases normal sustainable forest management is possible without any restriction. In other cases, forest management may need to be adapted in order to avoid deterioration of protected habitats or disturbance of species. This strategy should therefore aim at further promoting the active role of forestry as an example, especially in Natura 2000 sites, of how environmental objectives and in particular nature conservation objectives can be pro-actively combined in a context of sustainable forest management.

Forests play an important role in soil protection as the leaf litter and root structures enhance soil stability against erosion or landslide: This function can be particularly relevant during extreme rainfall events.

Forests also provide multiple benefits for biodiversity and people. While some ecosystem functions, goods and services have a monetary value (e.g. wood), there are other ecosystem services which have to be 'valued' in other ways (e.g. recreation, cultural heritage, water and soil quality and quantity).

By better valuing, maintaining and enhancing ecosystem goods and services, the EU will provide an effective mechanism for balancing different uses while in the same time also contributing to enhance forest biodiversity.

To improve the knowledge on ecosystems and their services in the EU, Member States, with the assistance of the Commission, will map and assess the state of ecosystems and their services in their national territory by 2014, assess the economic value of such services, and promote the integration of these values into accounting and reporting systems at EU and national level by 2020.

2.3.2.4. Water Policy

Forests have a key role in protecting drinking-water supplies. Forests shade snowpack, controlling the rate at which it melts, which water keeps flowing to streams, lakes and aquifers year-round. The trees also work to clean the water, filtering out pollutants and regulating the water's temperature to keep the aquatic ecosystem in balance. This is why appropriate forest management is crucial to two important aspects of water supply: provision of high-quality water to humans and water supply to the forest itself. This fits into the aim of the Water Framework Directive (WFD) on long-term sustainable water management based on a high level of protection of the aquatic environment. Article 4.1 defines the WFD general objective to be achieved in all surface and groundwater bodies, i.e. good status by 2015, and introduces the principle of preventing any further deterioration of status.

2.3.2.5. Financial resources

For the programming period of 2000-2006 53 different LIFE+ projects dealing exclusively or mainly with forest habitats have been co-financed. The total EU contribution for these projects was 49 M€ The Nature & Biodiversity component of Life+ continues and extends the former LIFE Nature programme. It will co-finance best practice or demonstration projects that contribute to the implementation of the Birds and Habitats Directives and the Natura 2000 network as well as the Biodiversity Strategy. Taking into account that around 50% of total Natura 2000 network is on forests and other wooded land, an important number of projects was financed. The Environment Policy & Governance component co-finances innovative or pilot projects that contribute to the implementation of European environmental policy and the development of innovative policy ideas, technologies, methods and instruments. It also helps to monitor pressures (including the long-term monitoring of forests and environmental interactions) on our environment.

For the programming period of 2006-2011 there were 83 LIFE+ projects dealing with forests with a total budget of almost 209M€ of which 103M€ EU co-financing. Overall the projects covered areas such as habitat management and restoration of forests, rehabilitation and recovery of forests and forest wetlands, protection and conservation of forests, development of an EU-level Forest Monitoring System (total budget 34M€), biodiversity conservation, biotope networks, carbon monitoring and markets, forest fire prevention, climate change effects, awareness raising campaigns, specific species protection in specific forests.

2.3.2.6. Contribution from the EU Forest Strategy to forest protection

The EU Forest Strategy should contribute to forest protection by:

- Giving guidance to policy and legislative instruments and tools at EU and national level to address risk and cope with these threats, considering the range from prevention to restoration.
- Recognising the importance of, improve, make comparable and share forest information and monitoring, assessment and reporting on all the major biotic and abiotic threats building on successful experiences, such as the EU Forest Fire Information System (EFFIS), and the links made in this and other frameworks to neighbouring countries.
- Enhancing cooperation with neighbouring countries, including for the prevention of transfer of pests and diseases, and through enhanced coordination of pest- and disease-related research and for the quality of Plant Reproductive Material.
- Increasing the area of forests under active and multifunctional SFM

- Strengthening the knowledge on the state, functions and economic value of forest and of their services;
- Proposing a set of shared concepts and framework for valuation of ecosystem services, promoting their integration in accounting systems at EU and national levels by 2020, building on the Mapping and Assessment of the state of Ecosystems and of their Services (MAES);
- Recognising and strengthening the role of forests protecting water as referred to in the Water Framework Directive;
- Achieving a significant and measurable improvement in the conservation status of forest species and habitats by fully implementing nature legislation, building on the upcoming guide on Natura 2000 and forests;
- Contributing to the full implementation of Natura 2000 network by 2020, as specified in target 1 of the EU Biodiversity Strategy for 2020;
- Implementing the Strategic Plan for Biodiversity 2011-2020 and reach its Aichi targets adopted in the context of the Convention on Biological Diversity, building on the forthcoming common Restoration Prioritisation Framework;
- Delivering a measurable improvement in the conservation status of species and habitats of Community interest that depend or are affected by forestry through a greater uptake of forest management plans or equivalent instruments, as foreseen in target 3b of the EU Biodiversity Strategy;
- Strengthening forest genetics conservation in terms of tree species diversity, and diversity within species and within populations;
- Strengthening the mechanisms of protection against pests, building on increase cooperation with neighboring countries, on enhanced research and the on-going review of the Plant Health Regime;
- Supporting Mediterranean countries to protect their soil and water resources in forest areas most threatened with desertification.

2.3.3. *Climate change*

Forests could make a significant contribution to achieving climate change mitigation objectives by absorbing carbon dioxide and storing carbon in trees and timber products. The EU land use, land use change and forestry (LULUCF) sectors remove approximately 9% of greenhouse gases emitted in other parts of the economy⁸⁵ and it provides bio-materials that can act as temporary carbon stores (harvested wood products, HWP) or as “carbon substitutes”, replacing carbon intensive materials and

⁸⁵ Communication on Accounting for land use, land use change and forestry (LULUCF) in the Union's climate change commitments COM(2012)94

fuels. The Commission has adopted a decision on accounting rules for activities related to land use, land use change and forestry (LULUCF)⁸⁶

At the same time, forests are vulnerable to climate change impacts. Droughts, fires, storms, heat waves, and biotic agents will increasingly affect their composition and their functions⁸⁷, including the provision of renewable biomass and the ability to store/sequester carbon. It is therefore of great importance to maintain and enhance the resilience and adaptive capacity of EU forests, including through fire prevention and other adaptive solutions (e.g. using reproductive material suitable to future climatic conditions). Some instruments are available under environment, rural development and research policies to promote and enhance the protection, management and use of forest resources, contributing to adaptation efforts such as:

- The EUFGIS project⁸⁸ funded by the second Community Programme on the characterisation, conservation, evaluation and utilisation of genetic resources has improved the documentation and management of dynamic conservation units of forest trees and created an online information system for forest genetic resources inventories in Europe towards sustainable forest management.
- The European Forest Fire Information System (EFFIS) supports the services in charge of the protection of forests against fires in the EU countries and provides with updated and reliable information on forest fires in Europe (see further in chapter 2.3.6).

The EU Strategy on adaptation to climate change⁸⁹, cross-sectoral by nature, also provides a short review of the expected impacts of climate change on EU forests.

Still, the exact effects of climate change on forests are complex and not yet clearly understood, calling for additional efforts both on information sharing, on knowledge generation and on dissemination to policy makers and forest users across Europe.

The use and management of forests can contribute to mitigating CO₂ emissions, by maintaining or enhancing their role in the carbon cycle, as well as ensure that forests are climate resilient and contribute to the development of a low carbon economy. Clear, reliable and comparable forest information would be required to balance the increased use of raw forest materials for the needs of a green economy, with the maintenance, or re-establishment of ecosystem services and forest resilience. This balance should take different scales, conditions and timeframes into account (short-term actions and long-term effects, cross border effects).

The EU is also a global forest player and its imports of food, biomass, fossil fuels, minerals and timber can contribute to drive deforestation and forest degradation (hence GHG emissions) in third countries. In this framework, relevant EU policies,

⁸⁶ Decision No 529/2013/EU of the European Parliament and of the Council on accounting rules and action plans on greenhouse gas emissions and removals resulting from activities related to land use, land use change and forestry

⁸⁷ Green paper On Forest Protection and Information in the EU: Preparing forests for climate change COM(2010)66

⁸⁸ <http://www.eufgis.org/>

⁸⁹ Communication on an EU Strategy on adaptation to climate change COM(2013)216

including FLEGT⁹⁰ or new REDD+⁹¹ incentives and policy approaches could positively impact both the supply and demand sides, and become important instruments to fight deforestation and forest degradation, with a potential to deliver benefits beyond mitigation, including adaptation, biodiversity, governance and poverty reduction.

2.3.3.1. Financial resources

Apart from REDD+, which is being address in chapter 2.3.9 dealing with international aspects, there are other possibilities through other instruments under climate change policy such as Emissions Trading. It is estimated that auction revenues by 2020 under the Emissions Trading Directive⁹² will be around € 21,000 million. Under this Directive Member States are required to use at least 50 % of the revenues from auctioning of allowances in 9 activities, 2 of them related to forests:

- Avoid deforestation and increase afforestation and reforestation in developing countries that have ratified the international agreement on climate change;
- Carbon sequestration by forestry in the Community

2.3.3.2. Contribution from the EU Forest Strategy in regard to climate change

The climate change objectives of the EU forest strategy should be to:

- - Optimise the contribution of forests, their soils and their products to climate change mitigation, also considering a cascading use of wood, carbon accounting under LULUCF as well as to ecosystem-based adaptation;
- - Optimise the capacity of EU forests to adapt to climate change, building on the actions proposed in the EU Strategy on Adaptation to Climate Change, such as bridging knowledge gaps, mainstreaming adaptation action in forest policies, and using LIFE+ funding opportunities. It can in particular build on the actions proposed under the EU Strategy on adaptation to climate change, on bridging knowledge gaps, mainstreaming adaptation action in forest policies, and on the use of LIFE+ funding opportunities for forest-related demonstration projects.

⁹⁰ EU Action Plan on Forest Law, Enforcement, Governance and Trade

⁹¹ Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries

⁹² Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community

The implementation of the forest strategy will address policy guidance to optimise forests contribution to mitigation and ecosystem based adaptation, while taking into account local, national, regional and global circumstances. It will consider:

- An initiative to explore and promote as appropriate the use of renewable harvested wood products as a sustainable and climate friendly material, also considering substitution effects;
- Further work on sustainability criteria for the use of forest biomass;
- Further work on adaptation to climate change for EU forests, in particular ecosystem based adaptation;
- Further work on the potential of the EU market and of EU policies on resource efficiency to reduce the human pressure on global forests that results in greenhouse gas emissions, including actions to address the drivers of deforestation.

2.3.4. Promoting competitive and sustainable supply of wood for the EU bioeconomy

The forest sector has all the attributes to take a major role in the European green economy, through exemplary sustainable management, including the development and application of ecosystem services principles, renewable energy use linked to an innovative forest industry developing intelligent bio-based products, more efficient and environmentally sound processing technologies. The natural, renewable and recyclable characteristic of wood makes its sustainable use environment and climate-friendly, positive for the society and for the low carbon economy, provided that limits to what forests can sustainably supply are respected, that the use of wood effectively contributes to climate change mitigation and that products are only sourced from sustainable forest management. Moreover non wood forest products are gaining higher interests in the markets.

Forest biomass as a source of bioenergy provides to rural communities an opportunity to create sustainable new jobs and to diversify income. The Biomass Action Plan⁹³ overviewed and set out measures to increase the development of biomass energy from wood, wastes and agricultural crops. The proportion of wood based energy currently is about 5 % of total EU energy supply. According to National Renewable Energy Action Plans it is expected that biomass will represent more than 10 % of the EU gross final energy consumption by 2020. In this context forestry biomass is set to play a significant role. Some Member States have already started an essential change of energy systems. More mobilisation of potential woody biomass resources for energy purposes will be required as demand grows, but it is extremely important that the biomass for energy purposes comes from forests that are sustainably managed. Renewable energy from forest sources is in itself an important contribution to the wider ‘green economy’.

⁹³ COM(2005) 628 final Biomass action plan

Forest biomass can be an opportunity for rural communities to create sustainable new jobs, to diversify income and to contribute to rural development.

However, production of environmentally sound and cost competitive bioenergy is the outcome of a mix of policy considerations (area of forests and crops, amount of available biomass, climate change, biodiversity, and impact on soil nutrient, water balance, greenhouse gas savings) as well as qualitative abilities (energy conversion, wood use, market issues, commitments, achievement, socio-economic environment, climate change mitigation). This contribution of EU forests is to go hand in hand with other functions to be delivered, as the result of other commitments (halt the loss of biodiversity by 2020, achieve good water status, for example). Cross-linkages with agricultural and waste biomass must be also considered. Thus, bioenergy should be assessed with broader perspective taking into account complex benefits, impacts and constraints.

Cascade use of wood

Resource efficiency for the forest sector means using forest resources in a way that minimise impacts on the environment and climate, prioritise the forest outputs that add higher added value, create more jobs and contribute to a better carbon balance. Cascade use of wood fulfils these criteria. Under the cascade principle, wood should be used in the following order of priority:

1. wood-based products
2. re-use
3. recycling
4. bio-energy
5. disposal

This principle should be applied when possible. However, in some cases, different approaches may be necessary, for example in cases of changing demand or environmental protection. For instance, it is sometimes necessary to remove biomass to prevent forest fires, which is in that case often used for bio-energy.

The projected high demand for forest products and services gives opportunities for growth in the forest sector, as well as multiplier effects for related businesses, offering green jobs, especially in rural areas. However, the impact of EU wood consumption on imports as well as EU carbon footprint should be carefully considered. It is important to establish effective mechanisms to ensure that supply is sustainable. The sustainable potential of home-grown resources should be optimised in accord with the principles of SFM.

2.3.4.1. Financial resources

The Intelligent Energy – Europe (IEE) Programme aims at supporting the development of renewable energy including forest bioenergy and ensuring its sustainability. 36 projects in bioenergy sector have received support under IEE II to develop supply chains for solid biomass, liquid biofuels and biogas, or to provide important inputs to the elaboration of European, national and regional strategies for sustainable exploitation of bio-resources, including forestry, agricultural, industrial and municipal wastes. In the forestry sector, projects seek to increase the production and use of energy from wood biomass, by mobilising untapped potentials, transferring knowledge and bringing together potential suppliers and consumers. The total contribution has been estimated at around €15 million for the period 2006-2012.

2.3.4.2. Contribution from the EU Forest Strategy to promotion of a competitive and sustainable supply of wood for the EU bioeconomy

In this framework, the objective at EU level for forests should be:

- To establish the forest sector as the lead force driving the development of Europe's green economy, to increase the potential and to maximise the contribution of forests and the forest sector, to Europe's green economy including the provision of both wood material, cork and other non-wood products and services and to be at the forefront of rural development, and the creation of sustainable employment and jobs in rural areas.
- To enhance the economic vitality and competitiveness of existing production, ensuring a well-functioning internal market with level playing field, and to stimulate and make enabling conditions for new bio-based products and services, creating synergies with the EU Bioeconomy Strategy.
- Enhance the development of wood-based energy products and environmentally sound technologies
- Ensure that use of forest biomass and derived products is guided by consistent requirements of sustainability and efficiency, and that those sustainability principles are being properly enforced globally.
- Ensure that increased EU consumption of biomass does not add to global deforestation levels by ensuring that global forest protection safeguards are robust enough to cope with the added level of demand on timber markets.
- To pursue EU policies and international cooperation to:
 - reduce and eliminate illegal logging (FLEGT VPAs and Timber Regulation);
 - improve/increase public procurement of sustainable products (building upon the Report to the SFC on public procurement of wood and wood based products);
 - recognise and support of the role of harvested wood products in the carbon stock and to substitute other less climate or less environmental friendly (high energy cost) materials.

The EU Forest Strategy should contribute by:

- Assessing the potential for the mobilisation and use of sustainably produced forest biomass for energy and ensure that it takes place according to the guiding principles of this strategy (SFM, multifunctionality and resource efficiency);
- Affirming the EU commitment to the principles of sustainable forest management (SFM) as defined by Forest Europe and its tools to proof and document it, building on existing monitoring and verification systems.
- Encouraging an increase in the area of sustainably managed forests in the EU, including incentivising the development and use of forest management plans or equivalent instruments as a tool to address the different demands on, and multifunctional role of forests.
- Developing in close cooperation with the Standing Forestry Committee (SFC), objective, ambitious and demonstrable EU SFM criteria that can be applied regardless of the end use of forest biomass.
- Ensuring that the tools used to enhance and demonstrate the sustainability of forest management and environmentally sound production processes are guaranteeing fair competition and a level playing field with other resource-based sectors.
- Promoting sustainable production and consumption of forest based products and services.
- Facilitate increasing mobilisation of sustainably produced wood for all uses to the full sustainable potential.
- Contribute to promote wood based products and constructing with wood.
- Contribute to improving the competitiveness of the forest sector.
- Assist the development of producer groups.
- Consider possible targets to be further specified to translate these objectives in reality regarding the sustainability of forest management within the EU, sustainable production and consumption and resource efficiency

2.3.5. *Research and innovation*

A coherent and ambitious European forest-based research area is a primary pillar for the implementation of the EU Forest strategy. Forest research has some specificities such as long timeframes and difficulties for transferability of results due to bio geographical diversity.

As mentioned in earlier chapters, we live in a changing environment with increasingly complex interlinked relationships between climate, biodiversity, society and the economy. These relationships are multi-scalar at global, regional and local levels. On the other hand, there are more and more multifunctional demands on and expectations of forest resources which pose a significant challenge for their sustainable management. The contribution from research and innovation is key to overcome these challenges. Thus, research and innovation are considered as one of the main pillars of the future forest strategy.

The objective under Horizon 2020 related to forestry is to ensure the long-term sustainability of the sector research in a series of areas is necessary including dealing with pests and diseases and climate change, the development of wood products and biomass, the implementation of adequate production practices and systems. Adequate socio-economic analysis and foresight exercises are also necessary to ensure that contributions of the sector to the rural economy and society at large are well understood and catered for.

While European forest research is internationally recognised in certain scientific areas (genetics, forest risks, etc.) it is also fragmented, often mono-disciplinary and unevenly distributed, and duplication may also occur. It is important that efforts from Member States, stakeholders and the EU go into the same direction. For strengthening the coordination between EU and Member States different instruments can be considered such as COST, ERA-Nets, a Joint Programming Initiative (JPI), or an Article 185 Initiative⁹⁴. The Forest-based Technology Platform is also contributing to the coordination of research efforts by owners and industries, the European Commission and Member States, and should play a significant role in strengthening the sector's innovative capacity.

To maximise research efforts both Commission and Member States should put further emphasis on dissemination of results and the exchange of best practices.

Increase in innovation in the sector can contribute to assist countries to recover from the economic crisis and boost their economies in terms of growth and jobs, in particular in rural areas. Research in business/economic development and financial aspects to achieve the optimum path towards developing a successful competitive forest sector is also essential. Through the European Innovation Partnership on Agricultural Productivity and Sustainability⁹⁵, actions could be undertaken to push the technological transfer from science to forest practice, providing more systematic feedback about practical needs from forest to science, and fostering a competitive forest sector that achieves more from less and works in harmony with the environment. The EIP on Raw materials⁹⁶ will contribute to innovative solutions with a view to increasing the availability of raw materials for Europe, including wood.

The objectives at EU level for forest-related research and innovation under Horizon 2020 are to address the priorities of the EU Forest and Bioeconomy strategies. There will be some focus on the coordination of transdisciplinary research, product innovation and production methodology through: well-coordinated national research and innovation programmes and priorities; excellent and coordinated research institutions; and new joint facilities and Pan-European networks of large-scale infrastructures with long-term funding. Increasing innovation and enterprise development in the sector will support growth and jobs, in particular in rural areas.

⁹⁴ Article 185 of the Treaty of Lisbon enables the Community to participate in new joint research programmes undertaken by several Member states, as well as to participate in the dedicated implementation structures

⁹⁵ COM(2012)79 final

⁹⁶ COM(2012) 82 final

2.3.5.1. Financial resources

The EU framework programmes for research and technological development have included actions in support of the forest sector. There has been a considerable increase in the 7th Framework Programme and Horizon 2020.

The EU framework programmes for research and technological development have included actions in support of the forest sector. There has been a considerable increase in the 7th Framework Programme (FP7) And Horizon 2020.

Until now 5,027 projects linked to forests, forestry and the forest sector have been funded by all EU Research programmes combined. Of this, 745 have been funded under FP7. Around €275 million have been spent in forest related projects under FP7. According to an assessment of the Forest-based Sector Technology Platform, EU funds represent around 20% of total funds for R&I in the sector with the remaining part coming from Member States and the private sector. Indicatively, under Horizon 2020 (2014-2020), the Commission proposed to allocate some €4,152 million to the societal challenge entitled "Food security, sustainable agriculture, marine and maritime research and the bio-economy" which includes forest research.

In addition to this, the COUNCIL REGULATION (EC) No 870/2004 of 24 April 2004 (which repealed Regulation (EC) No 1467/94) established a Community programme on the conservation, characterisation, collection and utilisation of genetic resources in agriculture. It promotes genetic diversity and the exchange of information including close co-ordination between Member States and between the Member States and the European Commission for the conservation and sustainable use of genetic resources in agriculture. It also facilitates co-ordination in the field of international undertakings on genetic resources, in particular within the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and the FAO's Global Plan of Action for the Conservation and Sustainable Utilisation of Plant Genetic Resources for Food and Agriculture. The budget allocated to this programme, which complemented the actions co-funded by the Rural Development Regulation amounted to €10 million. The programme supported 17 actions dedicated to plant and animal genetic resources. These actions were implemented by around 180 partners located in 25 Member States and 12 non-EU countries. The actions started during 2007 with durations of up to 4 years. One of the actions was the project EUFGIS, which focused on forest genetic resources⁹⁷. The total budget for EUFGIS was €1,1million with DG AGRI co-funding 50%.

2.3.5.2. Contribution from the EU Forest Strategy to research and innovation

The objectives of the EU forest strategy for research and innovation should be to:

- Stress the necessary contribution from research and innovation to achieve the interlinked priorities and provide the necessary support through the relevant instruments and, in particular, Horizon 2020;

⁹⁷ See more on: <http://www.eufgis.org>

- Strengthen the necessary contribution from research and innovation to provide support on the conservation of species diversity as well as diversity within tree and woody shrub, as well as endangered genetic resources, in order to utilise forest genetic resources in a sustainable way, to restore viable populations of endangered species as well as to contribute to the conservation of diverse forest ecosystems;
- Strengthen the necessary contribution from research and innovation to provide support on the ability of forest ecosystem to react to damaging biotic and abiotic factors (resistance towards pests or pollutants) at three level, diversity of trees species, diversity within trees species and diversity within populations;
- Push for technological and knowledge transfer from science to forest practice, in particular through the European Innovation Partnership on Agricultural Productivity and Sustainability where forestry is included and where several actions could be undertaken;
- Strengthen the coordination between EU and Member States as well as stakeholders, facilitating that research and innovation efforts go into the same direction. The Standing Committee on Agricultural Research (SCAR) can play a significant role in this respect;
- Put further emphasis on dissemination of results and the exchange of good practices using the EU forest governance structure and other relevant fora.

2.3.6. *Forest information and monitoring*

Harmonized information on forests and forest resources at EU level is still limited, notwithstanding important research efforts in this field⁹⁸. For instance, readily harmonized information on forest health and vitality and forest damage is lacking. It should be noticed that a mere increase in forest area at national or European level provides little information on the condition of the forests regarding forest biodiversity, forest condition, forest damage or fragmentation.

The lack of a comprehensive European Forest Information System prevents an accurate assessment of the state of forest resources at the European level. Global studies such as the FAO Global Forest Resources Assessment, or European assessments such as the “State of Europe’s Forests” provide a compendium of the main characteristics of European forests at national level; Although the work on harmonization of information from national forest inventories has been on-going for a number of years, the level of harmonization on this information is still limited⁹⁹.

⁹⁸ For more information, see the COST E43 project on NFI harmonisation: Web page: <http://www.metla.fi/eu/cost/e43/>

⁹⁹ For more information, see the COST E43 project on NFI harmonisation: Web page: <http://www.metla.fi/eu/cost/e43/>

The trans-boundary nature of the landscape requires the availability of trans-national forest information for the analysis of effects of e.g. climate change, biotic (pests) and abiotic damages (fires, storms). Thus cooperation between national/regional forest services and European services is essential to guarantee the sustainable provision of goods and services from European forests. The European Commission has been working closely with these services to attain a wide coverage of harmonized information for the most relevant forest parameters such as forest area, growing stock, biomass, forest damages, etc. Since the gathering of European wide forest information may be a long process, in the meantime, large-scale approaches are being implemented by the EC for an initial spatial assessment of forest area, forest spatial pattern and fragmentation, and forest biomass (JRC Forest Map, JRC Forest Spatial Pattern, JRC Forest Biomass). Additionally, the European Forest Fire Information system, which currently provides comprehensive assessment of forest fire regimes and damages in Europe, is being complemented with a dedicated module aiming at the assessment of forest damages overall, including biotic (pests) and abiotic (wind/snow storms) damages. Forest monitoring for pests should be coordinated with the new EU plant health legislation, which also targets forest pests. Lastly the Forest Reproductive Material database, which currently provides a summary on FRM listed in national registers, is being complemented with hyperlinks to national registers of FRM and maps for the localisation of seed zones.

The Green Paper on forest protection and information in the EU¹⁰⁰ described the impacts that forests have to face due to climate change and the environmental, social and economic challenges that result from them. This led to renewed interest in a more comprehensive EU forest information system based on data collected by Member States, to take the knowledge base on forests forward so that both the Member States' and the EU's forest related policies and actions can be guided by relevant up to date knowledge. This view was shared by the Council conclusions¹⁰¹ of June 2010, stakeholder inputs in the public consultation during the summer of 2010 and the report from the European Parliament of 2011¹⁰².

The Council noted the trans-boundary nature and effects of certain forest-related phenomena and threats, such as pest outbreaks, forest fires or storms, at EU level and on a wider scale. The Council recognized the need for adequate information to identify threats to forests and challenges and shortcomings of existing policies and instruments at national and EU level. It also underlined the need for the continuous assessment and monitoring of the state, dynamics and evolution of European forests, highlighting the role of National Forest Inventory Systems and pan-European initiatives.

The European Parliament stressed that measures for forest protection would have to reflect the cross-border nature of biotic and abiotic threats, according to their type, bioclimatic zone and regional conditions. It also mentioned that action to support, coordinate and supplement policy initiatives by the Member States and regions should be taken where the EU can deliver added value. The EP considered that long-term forest protection depends upon establishing or sustaining forest ecosystems with

¹⁰⁰ COM(2010)66 final of 1.3.2010, SEC(2010)163 final

¹⁰¹ http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/envir/115113.pdf

¹⁰² http://ec.europa.eu/environment/forests/pdf/opinion_eur_parl.pdf

highly diverse tree composition, age and structure. It stressed the need for collection and dissemination of relevant, harmonised and comparable data on forest cover, biodiversity, biotic and abiotic threats and land use in the context of the UNFCCC, CBD and environmental accounts. It also argued for enhancement of coordination and information efforts with regard to forest protection and called on the Commission to compile and monitor indicators relating to the protective functions of forests such as soil retention and water capacity.

As a follow-up action, the Commission chaired an ad hoc working group of Member States and stakeholder forest information experts appointed by the Standing Forestry Committee, resulting in a report¹⁰³ that reviews the actual state of forest information in the EU, sums up stakeholder interests, summarizes priorities for EU level harmonization of certain forest parameters and lays out policy options.

Recently, the Commission proposed to the Member States the development of a European Forest Information System in a modular manner, following the recommendations provided by the SFC ad-hoc working group on Forest Information.

Thanks to a €1 million budget voted by the European Parliament the Commission is carrying out a Preparatory Action on harmonized forest information in Europe. The action is based on Commission Decision C(2012)3716 of 8 June 2012 and it will be implemented by the Joint Research Centre in close collaboration with interested Institutions from Member States such as National Forest Inventories. Considering the priorities identified by the working group, it aims at:

- enhancing the collection of forest information building, on existing information systems in the countries, including on Forest reproductive material;
- further developing an European framework for comparable and harmonized forest information collected by the countries;
- defining modalities for the collection and processing of data sets and
- serving as a basis for the provision of policy relevant forest information in the EU as required under international obligations.

Priority will be given to:

1. Using national forest inventories (NFI) data to estimate biomass and carbon stocks in European forests. The aim is to propose and use a harmonized approach for the assessment of forest biomass. The information collected by the NFIs, such as tree data (dbh, basal area, tree height, species, growing stock, volume increment) and stand volume should be converted into biomass and biomass increment. The data provided should be as harmonized as possible in space and time among the countries and should describe the same metric, e.g. forest living biomass in tons or tons/ha.
2. Assessing the conservation status of forest habitats and the ecological coherence of the NATURA 2000 sites. This will include assessments of threats to the favorable conservation status of forest habitats, such as fires or

¹⁰³ <http://ec.europa.eu/environment/forests/pdf/Fin%20report%20info%20monit%20wg.pdf>

pests. Landscape elements outside NATURA 2000 will be considered, since biodiversity conservation must go beyond protected areas boundaries.

3. A scenario modeling with the European Forest Dynamics Model (EFDm) with the aim to test the performance of the model and to further develop the existing prototype. Improvements of the EFDm encompass, inter alia, a listing of all forest management activities and disturbances inclusion in the model, getting graphs, tables and statistics, modeling of uneven aged forests.

In addition, the European Forest Fire Information System (EFFIS), the only existing EU level forest information tool, will continue monitoring forest fires. It has been in operation since 2000 and allows participating Member States and neighbouring countries to convey data on fire occurrence into a central database managed by the JRC. EFFIS also produces daily fire danger forecasts and fire damage assessments based on GIS and remote sensing data.

The EFFIS model overcomes the traditional gap between reluctance to have formal commitments regarding forests at EU level and the equally recognised need to ensure EU forests are delivering on broader policy objectives. It is a very practical and flexible tool. EFFIS feeds the European Forest Data Centre (EFDAC), a more comprehensive umbrella structure also operated by JRC, to which more modules concerning other forest parameters can be added if Member States agree on providing the relevant information from their forest inventory and/or monitoring work. EFDAC is based on the collaboration with a network of experts nominated by the members of the SFC. It is planned to gradually be developed towards a EU Forest Information System.

In this way, future forest information work would help to improve the level of forest protection and the contribution of forests to environmental and economic objectives, including biodiversity conservation as well as efficient use of the EU's resources, notably through integration of such actions into the new Forest Strategy.

The Commission launched several studies on forest dieback, on the impacts of storms, on the influence of weather driven patterns in general, on biotic agents affecting forests, on socio-economics in relation on forest fires, on a new EU forest fire classification system, etc.

2.3.7. International aspects

2.3.7.1. Pan-European Dimension

Forest Europe

Forest Europe, formerly known as MCPFE (Ministerial Conference for the Protection of Forests in Europe) has 47 signatories to the Forest Europe process; 46 states plus

the European Union. States include EU Member States plus others in the pan-European area, stretching from Iceland to the Russian Federation. There are also observers from other non-European countries, stakeholders and international organisations.

The main aim of all participants working together in this process is to further develop a common understanding regarding the protection and the sustainable management of forests in Europe and it addresses common threats and opportunities related to forests and forestry.

This process is based on Ministerial Conferences (Strasbourg 1990, Helsinki 1993, Lisbon 1998, Vienna 2003, Warsaw 2007 and Oslo 2011), at which ministerial declarations, resolutions and decisions are adopted. The discussion and work between the conferences, which is called the "Forest Europe Process", has focussed on monitoring and on national level implementation.

The European Union has signed all "Forest Europe" ministerial declarations, resolutions and decisions. As a signatory, the EU is directly involved in the follow-up and implementation of the Resolutions. In 2010, the Commission submitted to the Forest Europe Liaison Unit a report concerning progress on the implementation at EU level of the Forest Europe declarations and resolutions during the period 2007–2010. The report highlights the contribution of EU policies and measures to the implementation of the Forest Europe ministerial commitments at EU level¹⁰⁴.

Towards a Legally Binding Agreement on Forests

At the most recent Forest Europe Ministerial Conference held in Oslo in June 2011, ministers responsible for forests decided on the elaboration of a legally binding agreement on forests in Europe and established an Intergovernmental Negotiating Committee with the mandate to develop such an agreement.

According to the provisions of the Oslo Mandate, the Committee has the goal of completing its tasks by 30 June 2013. The Committee will present its results to an extraordinary Forest Europe Ministerial Conference that will take place within six months of the conclusion of the negotiations for consideration, possible adoption and opening for signature.

The Committee aims to develop a holistic legally binding framework agreement for forests, to address, inter alia, sustainable forest management (SFM) in Europe and the multi-functionality of forests, ensuring the long-term provision of a broad range of goods, products and forest ecosystem services. A list of possible subjects to be addressed by the agreement is specified in the Oslo Mandate.

¹⁰⁴ Included into the Forest Europe publication "Implementation of the FOREST EUROPE Commitments - National and Pan-European Actions 2008-2011" available at: <http://www.foresteurope.org/>

The Intergovernmental Negotiating Committee (INC) is to develop a holistic legally binding framework agreement for forests, to address, inter alia, the following possible subjects:

- a. To ensure sustainable forest management in Europe and the long-term provision of a broad range of goods and forest ecosystem services;
- b. To maintain and enhance forest resources in Europe, their health, vitality and resilience, and their adaptation to climate change;
- c. To increase the resilience of forests to natural hazards and to protect forest against human-induced threats;
- d. To enhance the contributions of forests to the mitigation of climate change;
- e. To maintain and enhance the protective and productive potential of European forests;
- f. To halt the loss of forest biodiversity in Europe and combat desertification;
- g. To create and maintain enabling conditions for European forests to contribute to a green economy, employment and the development of rural and urban areas;
- h. To maintain and enhance the cultural and social functions of forests in Europe;
- i. To reduce, with the aim of eliminating, illegal logging and associated trade in timber and timber products;
- j. To improve the forest knowledge base through research, education, information sharing and communication;
- k. To enhance participation and cooperation on forests at local, national, regional and global levels;

Participation in the INC is open to the 46 European States and the European Union, signatories to Forest Europe. Over thirty international and intergovernmental organisations, NGOs as well as one country hold an observer status to the Committee. The Chair and the Bureau facilitate the work of the Committee and guide the Secretariat in providing necessary service to the negotiations.

Co-negotiators on behalf of the EU, as a party to the INC, are the Member State in charge of the Presidency in the Council and the European Commission (represented by DG Agriculture and Rural Development). The EU and its Member States participate in these negotiations based on the two decisions adopted in the Council on 7 June 2011:

- Decision of the representatives of the Governments of the Member States, meeting within the Council, authorising the Presidency of the Council to negotiate, on behalf of the Member States, the provisions of a legally binding

agreement on forests in Europe that fall within the competences of the Member States¹⁰⁵ and

- Council Decision on the participation of the European Union in negotiations on a legally binding agreement on forests in Europe¹⁰⁶.

Both decisions include negotiating directives for the Commission and the Presidency, supplemented by the Practical Arrangements for the negotiations, the latter adopted in the Council Working Party on Forests in advance of each session of the INC.

Despite on-going discussions on detail, there is a consensus that the LBA will enshrine the principles of SFM and the multi-functionality of forests.

The meeting of INC4 took place in Warsaw in June 2013.

The development of the New EU Forest Strategy has fully taken into account the current negotiations on a future Legally Binding Agreement on Forests, and implementation will be addressed within the follow up process of the Strategy that will take account of the finally agreed LBA's provisions.

2.3.7.2. Global Dimension

World forests

Forests cover roughly 30% of the world's land area and deliver a multitude of economic and social benefits. They offer major environmental benefits related to ecosystem services, biological diversity and climate change. Tropical forests are amongst the most important habitats for biodiversity and provide crucial eco-system services such as water purification and erosion prevention. The forestry sector is a main contributor to the economy of many countries; among which developing countries. The livelihoods of 1.6 billion people depend on forest resources to some extent and 60 million indigenous people depend directly on forests for their survival. Forest have a significant cultural and social value for many communities. Forests also store significant amounts of CO₂, thus preventing further increases in concentrations of greenhouse gases in the atmosphere.

Forests are under threat from deforestation and degradation. According to FAO Forest Resources Assessment, the global rate of deforestation shows sign of decreasing but is still alarmingly high estimates: around 13 million ha of forest were converted to other uses or lost through natural causes each year in the last decade compared with 16 million ha per year in the 1990s. Most of the deforestation takes place in tropical regions in developing countries. Deforestation accounts for some 20% of global carbon dioxide (CO₂) emissions (IPCC, 2007), more than total EU greenhouse gas emissions. Reducing emissions from deforestation will therefore be essential in order to achieve the objective of limiting global warming to 2 degrees Centigrade. It is also

¹⁰⁵ 2011/712/EU

¹⁰⁶ COM (2011) 177 final

a cost-effective way to combat climate change. Protecting forests will have additional benefits for biodiversity and for the livelihoods of the poor.

The EU and international forest policies

At the global level, the EU is at the frontline of efforts aimed at combating deforestation and promoting implementation of Sustainable Forest Management (SFM) as a mean to protect global biodiversity and respond to climate change, while at the same time ensuring a continued delivery of forest ecosystem goods and services that contribute to sustainable development and poverty reduction. To this end, the EU and its Member States are key players in several international fora and multilateral environmental agreements that deal directly or indirectly with matters related to forests and determine the international forest governance regime. On broad horizontal issues, the EU and its Member States are actively engaged in the on-going processes related to the Rio+20 follow-up which will lead by 2015 to a new institutional framework for sustainable development (strengthened UNEP, establishment of a High-level Political Forum on Sustainable Development, Sustainable Development Goals and new post-2015 development agenda) where the role of forests in sustainable development and green economy will have to be fully recognized. The EU and its Member States are also negotiating matters related to forests in the framework of the UN Forum on Forest (UNFF)/Non-Legally Binding Instruments on all type of Forests (NLBI), the UN Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), and the UN Convention to Combat Desertification (UNCCD). The year 2015 represents a significant milestone for a number of these processes, particularly considering the scheduled review of the International Arrangement on Forests at UNFF11, the expected conclusion of the negotiations for a post-2020 climate agreement in the context of the UNFCCC, and the convergence of SDGs and post-2015 development agenda.

The EU and its Member States are also active in the OECD scheme for the certification of forest reproductive material which aims to encourage the production and use of forest tree seeds or plants that have been collected, processed, raised, labelled and distributed in a manner that ensures their trueness to name. This 'certified' material is intended for use in a variety of forestry functions, including timber production, soil protection and environmental criteria. The scheme is open to OECD Members as well as to other States. To date 25 participating countries (15 Member States and Croatia) implement the Scheme, including tropical countries which are developing their seed exchange for reforestation purposes.

In the absence of a single multilateral legal agreement, international policy dialogue and cooperation on forests are promoted through a complex architecture of different multilateral and regional agreements, institutions, programmes and initiatives which reflect the multiple values of forests and their contribution across the three pillars of sustainable development. The United Nations Forum on Forests (UNFF)¹⁰⁷,

¹⁰⁷ In October 2000, the Economic and Social Council of the United Nations (ECOSOC), through its Resolution 2000/35, established the United Nations Forum on Forests (UNFF) as a subsidiary body with the main objective to promote “the management, conservation and sustainable development of all types of forests and to strengthen long-term political commitment to this end”. In April 2001, following

established in 2000 as a subsidiary body of the UN Economic and Social Council (ECOSOC) as part of a new international arrangement on forests, plays a vital role in addressing forest-related issues in a holistic and integrated manner, and promoting international policy coordination and cooperation to achieve sustainable forest management¹⁰⁸. The EU and its Member States are actively engaged in the UNFF and have subscribed to the Non-Legally Binding Instruments on all type of Forests (NLBI), adopted by the Forum in 2007, with the objective of: (a) strengthening political commitment and action at all levels to implement effectively sustainable management of all types of forests and to achieve the shared global objectives on forests¹⁰⁹; (b) enhancing the contribution of forests to the achievement of the internationally agreed development goals; and (c) providing a framework for national action and international cooperation.

Forests are also an integral part of discussions and deliberations under other international fora, including multilateral environmental agreements such as the UN Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), and the UN Convention to Combat Desertification (UNCCD) where important decisions are being taken on forest-related matters such as REDD+¹¹⁰, biodiversity and protected areas management and financing, sustainable land management. The EU is also an active member of the International Tropical Timber Organization (ITTO)¹¹¹, an intergovernmental organization promoting the conservation and sustainable management, use and trade of tropical forest resources. The ITTO members represent about 80% of the world's tropical forests and 90% of the global tropical timber trade.

the recommendation of ECOSOC, the Collaborative Partnership on Forests (CPF), partnership of 14 major forest-related international organizations, institutions and convention secretariats, was created to support the work of the UNFF and its member countries and to foster increased cooperation and coordination on forests.

¹⁰⁸ A/RES/66/288, “The future we want, Outcome of the UNCSD 2012 (Rio+20), United Nations Conference on Sustainable Development, Resolution adopted by the UN General Assembly.

¹⁰⁹ In 2006, at its sixth session, the UN Forum on Forests agreed on four shared Global Objectives on Forests, providing clear guidance on the future work of the international arrangement on forests. The four Global Objectives, which have been integrated in 2007 in the Non Legally-Binding Instrument on all type of Forests seek to:

1. Reverse the loss of forest cover worldwide through sustainable forest management (SFM), including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation;
2. Enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest-dependent people;
3. Increase significantly the area of sustainably managed forests, including protected forests, and increase the proportion of forest products derived from sustainably managed forests; and
4. Reverse the decline in official development assistance for sustainable forest management and mobilize significantly-increased new and additional financial resources from all sources for the implementation of SFM.

¹¹⁰ REDD+: Reducing Emissions from Deforestation and Forest Degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.

¹¹¹ The latest International Tropical Timber Agreement, the ITTA, 2006 entered into force on December 7, 2011.

On broad horizontal issues which have far reaching implications for the international forest governance, the EU and its Member States are actively engaged in the on-going processes related to the Rio+20 follow-up which will lead by 2015 to a new overarching framework for sustainable development. These processes include in particular the strengthening of UNEP, the creation of a High-Level Political Forum on sustainable development that will replace the UN Conference on Sustainable Development (UNCSD), the elaboration of a set of SDGs that will be fully integrated in the post-2015 development agenda and a strategy for Sustainable Development Financing. The role of forests in sustainable development and green economy will have to be fully recognized and adequately reflected in this new framework.

In 2015 the international community will review the effectiveness of the International Arrangement on Forests and consider future options. This crucial milestone will overlap with several other international processes with far reaching implications on forests such as the Rio+20 follow up, ., the expected conclusion of the negotiations for a post-2020 climate agreement in the context of the UNFCCC, and the convergence of SDGs and post-2015 development agenda. The interconnections and synergies amongst these different processes require that the EU and its Member States ensure a coherent and integrated approach across different multilateral fora.

Official Development Aid

The EU also continues to be the driving force in mobilising international support for development: it is the largest aid donor, accounting for the half of global Official Development Assistance (ODA) to developing countries, the largest and most open market for developing countries and is at the forefront promoting the three dimensions of sustainable development¹¹². The EU is helping developing countries to devise an inclusive approach to address all elements of sustainable development including social development, economic growth and environmental protection.

The EU Development policy¹¹³ recognizes the central importance of the sustainable management of natural resources, including forests, for development and poverty reduction.

It highlights promotion of a ‘green economy’ that can generate growth, create jobs and help reduce poverty by valuing and investing in natural capital. It should also contribute to improving the resilience of developing countries to the consequences of climate change. More precisely, the EU should scale up its support for oversight processes and bodies and continue to back governance reforms that promote the sustainable and transparent management of natural resources, including raw materials and maritime resources, and ecosystem services, with particular attention to the dependence of the poor on them, especially smallholder farms.

¹¹² COM(2012)366: Improving EU support to developing countries in mobilising Financing for Development.

¹¹³ COM(2011) 637 final: Increasing the impact of EU Development Policy: an Agenda for Change

At the core of the proposed EU response is the objective supported by the EU Council to halt global forest cover loss by 2030 at the latest and to reduce gross tropical deforestation by at least 50 % by 2020 compared to current levels.¹¹⁴

The EU has been providing support to developing countries for improving forest governance, promoting sustainable forest management and the conservation of forest ecosystems and for addressing the drivers of deforestation and forest degradation. From 2000 to 2012, the EU has contributed over 1 billion euro to partner countries for forest projects and programmes from the EU budget and the European Development Fund. Recent years saw a rapid increase of Commitments and pledges for REDD+ activities by EU Member States and the EU budget, that amount to 1.5 billion euro for the period 2010-2012.

The EU Official Development Assistance also contributes to address the drivers of deforestation and forest degradation through supporting initiatives in other sectors , including promoting good governance of the environment and natural resources, strengthening the rule of law, promoting sustainable agriculture including agroforestry, and better land management, promoting access to renewable (non-biomass) energy, etc...

The EU is also providing support and tools to governments and partner institutions in developing countries for the monitoring of forest ecosystems and a better understanding of the interactions between development, environment, and security issues. Through the Joint Research Center, the EU contributes to mapping and measuring changes in forest resources in Africa and other tropical countries, improving the characterisation of land cover/use in partner countries, to documenting the quality of high biodiversity regions and to assessing the level of threats from human activities (agriculture, logging, fires).

FLEGT and REDD+

Illegal logging has a devastating impact on some of the world's most valuable remaining forests. Its environmental effects include deforestation, the loss of biodiversity and the emission of greenhouse gases. Its direct impacts on people include conflicts with indigenous and local populations, violence and human rights abuses, the fuelling of corruption and exacerbation of poverty. The World Bank has estimated that the governments of some of the poorest countries in the world lose over \$ 15 billion per year as a result of illegal logging – money that should be spent improving the lives of their people.

In light of this, the European Union adopted the Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan in 2003, setting out a range of measures available to the European Union (EU) and its Member States to tackle illegal logging in the world's forests (see 4. below). The Action Plan combines measures in timber producer countries (supply side) with measures in consumer countries (demand side). Voluntary Partnership Agreements (VPA) are at the core of FLEGT implementation. VPAs are bilateral trade agreements between the EU and tropical wood exporting

¹¹⁴ COM(2008) 645 final and Council Conclusions of December 4, 2008 on “Addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss”

countries, which aim to improve forest governance and guarantee that the wood imported into the EU is from legal sources. So far, 6 countries have concluded a FLEGT VPA with the EU: Ghana, Cameroon, Congo Brazzaville, Liberia, the Central African Republic and Indonesia. Eight other VPAs are being negotiated with Vietnam, Laos, Malaysia, Gabon, Democratic Republic of Congo, Côte d'Ivoire, Guyana and Honduras. On the demand side, the EU has adopted a new EU Timber Regulation that entered into application on March, 2013: this regulation prohibits the placing of illegal timber on the EU markets and obliges operators to reduce the risks of introducing illegal timber through the implementation of due diligence systems. The EU also promotes legal timber in public procurement policy.

REDD+ has emerged as one of the key areas for action on mitigating climate change. Emissions from deforestation and forest degradation¹¹⁵ in tropical countries are significant, representing 15% to 20% of global annual anthropogenic CO₂ emissions. In addition, the total quantity of carbon stored in forest soils and ecosystems is equivalent to 40 years of global anthropogenic CO₂ emissions, indicating the importance of conserving this carbon stock to the extent possible.

Thus, tackling forest emissions and improving forest carbon sequestration via a set of incentives and policy approaches negotiated under the UN Framework Convention on Climate Change, known as REDD+, is estimated to have the potential to reduce net global emissions by up to 3 Gt CO₂e annually by 2030¹¹⁶, provided adequate and predictable support is provided.

REDD+ activities must take into account and avoid creating conflicts with practices of indigenous peoples and local communities and must ensure preservation of biodiversity, ecosystem services and social co-benefits. Assistance to developing countries will be necessary in order to produce accurate data and build capacity to establish and implement an effective and reliable framework for including REDD+ in their low carbon growth plans; in this context, the contribution of initiatives such as the EU Action plan on Forest Law Enforcement Governance and Trade (FLEGT) should be particularly underlined.

Reducing direct and indirect drivers of deforestation, including through: a) demand and/or supply-side measures that can reduce the impact of EU consumption on forests in third countries; b) considering trade related measures to reducing deforestation (FTAs provisions, Due Diligence, voluntary initiatives by the private sector, etc.); c) appropriate market signals targeting producers, retailers and consumers (awareness raising and education campaigns, clear and effective labelling of products, etc.)

Global drivers of Forest Degradation and Deforestation

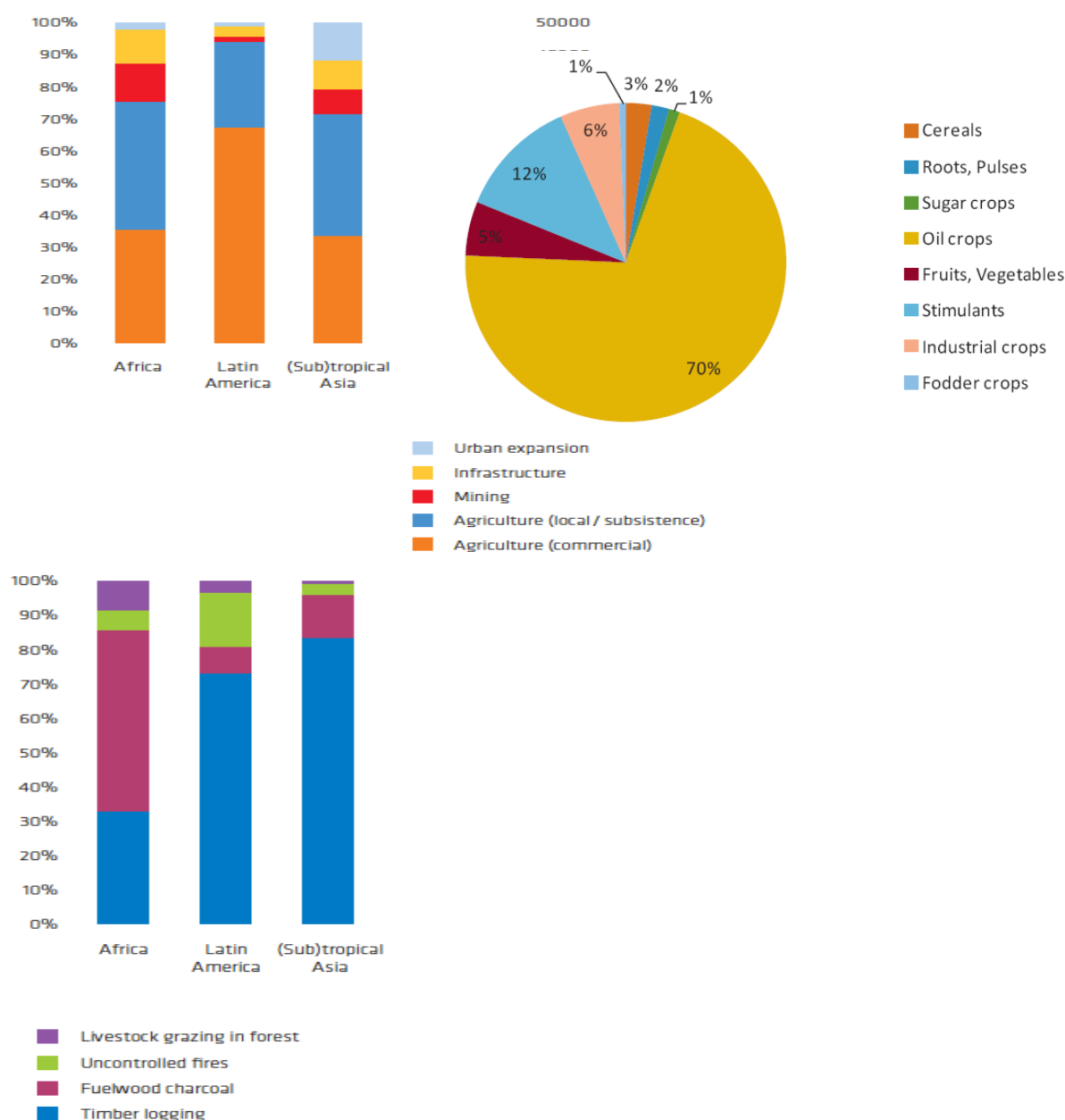
¹¹⁵ Deforestation is the removal of forest and conversion to other land use. The generic definition of forest degradation is a reduction of its capacity to provide goods and services. In a REDD+ context it is usually understood as the impact of land-use activity that reduce the carbon stock in a forest relative to its natural carbon carrying capacity.

¹¹⁶ Initial analysis on the mitigation potential in the Forestry sector, prepared for the UNFCCC Secretariat by Jürgen Blaser and Carmenza Robledo, 2007

While Sustainable Forest Management remains a central concept, there is an increased recognition of the need to also tackle more broadly the impact of demand for goods and services in driving forest degradation and deforestation through forest land conversion for alternative uses than forests, that mostly takes place in tropical regions. Action limited to the forest sector will be insufficient to address all drivers of deforestation and forest degradation which are largely outside this sector. Among the key drivers, agriculture (both subsistence agriculture and commercial agriculture), livestock, fuelwood and charcoal consumption, timber logging and mining deserve special attention. Addressing these drivers requires a broad range of actions including promoting sustainable intensification in agriculture and environmental friendly agriculture practices, changing consumption patterns, promoting access to non-biomass energy sources, combatting illegal logging, promoting a sustainable forest industry, and promoting good practices/codes of conduct for mining operations. As one of the main markets for forest and agricultural products, consumption of timber and agricultural products in the EU has an impact on forest degradation and deforestation well beyond its borders. In this respect, a recent study commissioned by the EC shows that in 2004 deforestation associated with EU27 final consumption equalled 10% of worldwide deforestation embodied in commodities and products. Consumption of oil crops (soybeans, palm oil) and derived products, as well as livestock products, had the main impact (see fig. 2.10 below). Imports of wood products from third countries, particularly for energy use, will increase significantly in the upcoming years¹¹⁷. The EU has hence a strong potential to reduce its impact on worldwide deforestation by adopting appropriate demand and supply-side measures, including trade-related measures, aimed at improving resource efficiency and sustainability of its domestic consumption.

¹¹⁷ The EU demand for wood pellets is estimated to triple by 2020 (study commissioned by DG ENV on impacts of EU consumption on Deforestation to be published shortly).

Figure13. Key drivers¹¹⁸ of deforestation (top), of degradation (in relative area, bottom left), and cumulative deforestation embodied in EU27 crop consumption by crop group, 1990-2008¹¹⁹ (bottom right)



¹¹⁸ Drivers of Deforestation and Forest Degradation: A Synthesis Report for Policymakers, 2012 by Gabrielle Kissinger et al. supported by United Kingdom Departments for Energy and Climate Change (DECC) and International Development (DFID) and The Government of Norway's International Climate and Forest Initiative

¹¹⁹ Comprehensive analysis of the impact of EU consumption of imported food and non-food commodities and manufactured goods on deforestation, 2012, by VITO for the European Commission

2.3.7.3. Contribution from the new EU Forest Strategy to international aspects

The strategy confirms EU's ambition to remain at the forefront of global efforts aimed at promoting sustainable forest management and the contribution of forests to the achievement of the internationally agreed development goals, including poverty eradication and environmental sustainability, improving forest governance, and addressing the drivers of deforestation and forest degradation. The strategy will also ensure coherence between EU and Member States domestic policies and their objectives and commitments on forest-related issues at the international level. It will assist the EU and its Member States in formulating clear and coherent objectives in relation to the international forest agenda.

At the regional level, the adoption of a legally binding treaty on forests involving all EU Member States is likely to have ramifications for EU policies which should be dealt with in the follow-up process of the new EU Forest Strategy.

Illegal logging and poor governance and law enforcement of the forest sector are one of the main drivers of forest degradation and deforestation. . Through the EU FLEGT Action Plan¹²⁰, the EU has been fighting illegal logging through a mix of supply side measures, notably with the support to forest governance reforms and Voluntary partnership agreements (VPAs), and demand side measures, with procurement policies and the EU Timber regulation. Similar objectives have been pursued by international partners such as USA and Australia with demand side measures (Lacey Act (2008) Amendment and the Illegal Logging Prohibition Bill, respectively). The emergence of new markets, particularly in Asia, which will represent an increasing share of world's demand for timber will require in the years to come an active engagement with international partners and achieve increased cooperation and coherence at international level in order to ensure increased effectiveness of EU's efforts.

2.3.7.4. Financial resources

The total EU contribution during the period 2000-2006 for forest projects in third countries was €348 million. As for the next commitment period 2007-2012, resources have been considerably increased reaching over € 650 million. The detailed distribution of funding to the different regions is included in table 9 and figure 14.

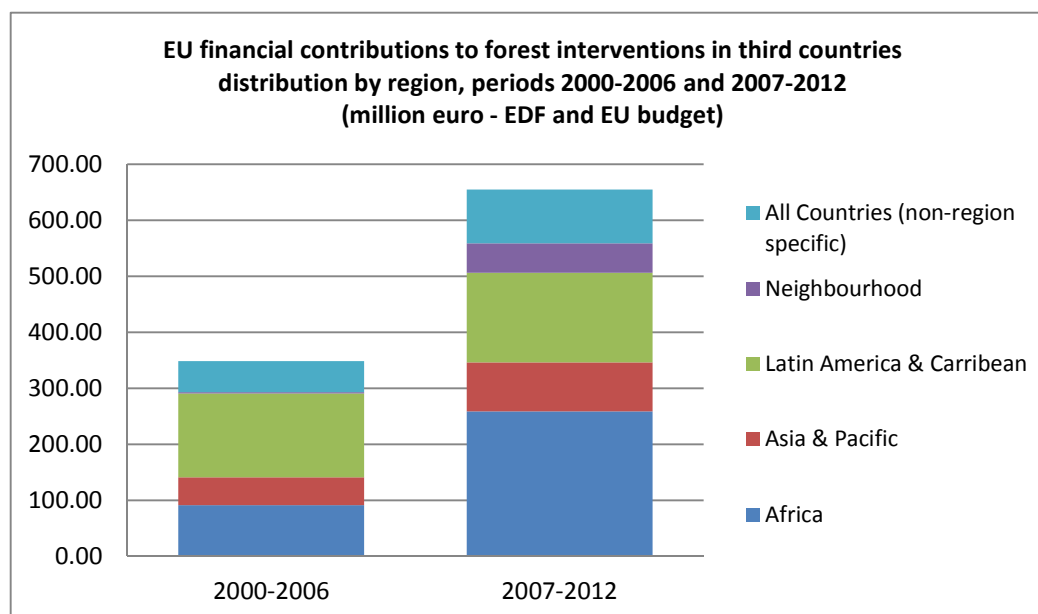
Table 9. EU development funds by region

By region:	Period 2000-2006	Period 2007- 2012	Total per region
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¹²⁰ As of March 2013, 6 Voluntary Partnership Agreements have been concluded (Cameroon, Central African Republic, Congo, Ghana, Indonesia, Liberia,,) and 8 are currently being negotiated (Côte d'Ivoire, Democratic Republic of Congo, Gabon, Guyana, Honduras, Laos, Malaysia, Vietnam).

Africa	€1,407,858.05	€258,655,906.61	€350,063,764.66
Asia & Pacific	€9,198,765.34	€7,142,066.75	€136,340,832.09
Latin America & Caribbean	€149,713,258.33	€160,489,026.43	€10,202,284.76
Neighbourhood	€2,533,201.78	€2,572,963.60	€51,061,65.38
All Countries (non-region specific)	€5,634,689.28	€5,898,839.12	€151,533,528.4
Total	€348,000,000	€654,758,802	€1,002,758,802

Figure 14. EU financial contributions to forest interventions in third countries



Under climate change international policy, there are also financing possibilities, in particular under REDD+ (table 10). In February 2012, the Council invited¹²¹ the Commission to explore further how to scale up results based financing for REDD+ over time including towards the committed goal of US\$100 billion, inter alia with

¹²¹ 3148th ECONOMIC and FINANCIAL AFFAIRS Council meeting, 21/02/2012

respect to catalysing the private sector investments in order to address the drivers of deforestation and how to further increase the effectiveness and efficiency of REDD+ financing.

Table 10. Commitments and pledges for REDD+ activities by EU MS and the EU budget

Type of support	in €million
REDD+ Fast-Start Financing 2010 – 2012, (including FLEGT, EU-REDD Facility and the Global Climate Change Alliance, excluding FIP, GEF, FCPF and UNREDD) ¹²²	455
UN-REDD Multi Donor Trust Fund 2008 – 2011 ¹²³	20
Forest Carbon Partnership Facility (FCPF) Readiness and Carbon Funds 2008 – 2012	151
Forest Investment Program (FIP) 2008 – 2011	189
Global Environment Facility, Sustainable Forest Management and REDD-Plus Program (GEF, Indicative 2007-2010)	143
REDD projects financed from EU budget, 2008 – 2011 ¹²⁴	58
Research projects Financed from EU budget, 2010 – 2012 ¹²⁵	11
Other EU commitments reported to the Voluntary REDD+ Database (REDD+ Partnership), up to 2012	515
TOTAL	1,542

2.3.7.5. Contribution of the Forest Strategy to the international pillar

The international pillar of the new EU Forest Strategy aims at:

- Raising the profile of the EU and its Member States in international forest policy, and ensuring consistency across relevant EU domestic and international policies;
- Promoting SFM in pan Europe and globally, and the role of forests in the transition to a green economy in the context of EU development cooperation and external action;

¹²² Source: European Union fast start funding for developing countries, 2011 progress report

¹²³ UN-REDD

¹²⁴ Source: European Commission services

¹²⁵ Source: European Commission services

- Ensuring continued support for global efforts to fight illegal logging through the FLEGT Action Plan;
- Supporting developing countries in their efforts to improve forest policies and regulations, strengthen forest governance, value and monitor forest ecosystems, promote SFM, and address the drivers of deforestation and forest degradation through REDD+;
- Reducing direct and indirect drivers of forest degradation and deforestation, including by promoting measures that can reduce the impact of EU consumption on forests in third countries.

2.3.8. State aid and the forest sector¹²⁶

Under Article 107 (1) of the Treaty on the Functioning of the European Union ("TFEU"), aid granted by a Member State or through state resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods is prohibited, insofar as it affects trade between Member States. Article 42 of the TFEU lays down that the rules on competition apply to the production of and trade in agricultural products only to the extent laid down by the European Parliament and the Council. State aid rules do not apply under specified conditions to certain aid measures in favor of agriculture products listed in Annex I of the TFEU. The general prohibition to grant State aid does apply to the highly competitive forest sector within the internal market. In a judgement of the Court of Justice of the EU,¹²⁷ the forest sector and forestry activities are confirmed to fall outside of Annex I and Article 42 of the TFEU. Therefore, in principle, a State aid measure to the forest sector is subject to Articles 107, 108 and 109 of the TFEU. Article 108(3) of the TFEU requires that Member States notify all planned state aid measures to the European Commission and implement them only after their approval by the European Commission.

Article 107(2) of the TFEU provides for derogations from the general prohibition¹²⁸ and the forest sector (forestry and forest-based industries) may also benefit from those under certain conditions. The conditions for applying these derogations are mentioned in the respective aid instruments of Directorate-General for Competition and Directorate –General for Agriculture and Rural Development. The Commission can approve a forest aid measure, if it complies with the applicable State aid framework

¹²⁶ Caveat: This section aims to provide general information on State aid rules in the forest sector and it should not be regarded as a formal legal position of the European Commission. For the applicable legal framework, please refer to the State aid instrument published in the Official Journal and to the consistent practice of the EC (http://ec.europa.eu/competition/state_aid/overview/index_en.html) and the jurisprudence of the ECJ (<http://curia.europa.eu/>) on forest aid measures.

¹²⁷ Judgement of the Court of 23 February 2006 in joined Cases C-346/03 and C-529/03, paragraphs 37, 42 and 43

¹²⁸ For example, aid to make good the damage caused by natural disasters or exceptional occurrences *shall be* compatible with the internal market, and aid to facilitate the development of certain economic activities or certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest *may be considered* to be compatible with the internal market.

and if it can therefore conclude that a forest measure can benefit from any of these derogations. The State aid rules in force during the period 2007-2013 make a distinction between forest activities which A) contribute directly to maintaining or restoring ecological, protective and recreation functions of forests and to the biodiversity and a healthy forest ecosystem and B) other forest based industrial activities, which are related to the commercial extraction and transportation of timber and processing wood or other forestry resources into product of energy generation.

Part 1: 2007-2013

Regarding forest activities in category A, the Community guidelines for State aid in the agriculture and forestry sector 2007 to 2013¹²⁹ ("agricultural and forestry guidelines") allow Member States to make available three types of aid. The first type of forest measures are therefore aligned with the EU rural development policies and permit aid under the same conditions and with the same aid intensities as stipulated in Articles 43-49 of Council Regulation 1698/2005. Under these provisions aid can be granted to the first afforestation of agricultural land, first establishment of agroforestry systems on agricultural land, first afforestation of non-agricultural land, Natura 2000 payments, forest- environment payments, for restoring forestry potential and introducing prevention actions and for non-productive investments. Additional costs and income foregone due to the use of environmentally friendly forestry technology going beyond the relevant mandatory requirements on the basis of voluntary commitment to use such technology meeting the conditions of the rural development forest-environment measure can also be available.¹³⁰

Under Point 175 of the agricultural and forestry guidelines, the second type of aid to the forest sector can be available with 100% aid intensity, where the measure contribute to the listed ecological, protective and recreation activities and to the biodiversity and a healthy forest ecosystem. The third type of forest aid constitute those measures, where rules are common with the agricultural sector, such as purchase of forest land, training and consultancy services and setting up forestry associations.

Various activities related to forest based industries, commercial extraction of timber and processing wood or other forestry resources into product of energy generation (category B) may be supported under the common rules of the EU State aid framework, such as Community framework for state aid for research and development and innovation,¹³¹ Community guidelines on State aid for environmental protection,¹³² the Guidelines on national regional aid for 2007-

¹²⁹ OJ C-319, 27.12.2006, p1

¹³⁰ For such environmentally friendly forestry technology measure, the aid amount may exceed the limit fixed in the rural development regulation when duly justified.

¹³¹ Official Journal C 323 , 30/12/2006, p1-26

¹³² Official Journal C 082 , 01/04/2008 , p 1-33

2013¹³³ and the Community guidelines on State aid for rescuing and restructuring firms in difficulty¹³⁴.

Exemptions from the notification obligation are possible if a measure complies with a Block Exemption Regulation, which constitutes a mean of administrative simplification. On the basis of a Commission proposal, the EU Council of Ministers can enable the Commission to exempt from the prior notification obligation specific categories of aid that have a limited potential to distort competition within the internal market. The Commission can thus adopt Block Exemption Regulations (BERs), defining the conditions which ensure that if all criteria are fulfilled the aid is compatible with European state aid rules. In such cases, the Member States ensures compliance with the applicable BER and the Commission can carry out ex-post control.

Under the Block Exemption Regulations, certain categories of aid to the forest sector may be exempted from the notification requirement. In the 2007-2013 period, forestry measures were block exempted, for example¹³⁵ under the general block exemption regulation¹³⁶ or under the block exemption regulation for regional aid.¹³⁷

In some cases, the measure at stake is not considered to fulfil the criteria of Article 107 (1) of the TFEU, and should therefore not be notified. This is the case, where the total amount of aid granted to any one forest undertaking does not exceed EUR 200 000 over any period of three fiscal years. This is the so-called 'de minimis' aid. The other applicable provisions of the de minimis regulation¹³⁸ should also be fulfilled.

In the past, the Commission has found that certain aid measures for the forest sector do not constitute aid, since not all criteria of Article 107 (1) of the TFEU are met.¹³⁹

Part 2: 2014-2020

The majority of the afore-mentioned European State aid legal instruments expires on 31 December 2013 and are thus currently being revised. The revision¹⁴⁰ is part of the

¹³³ Official Journal C 054 , 04/03/2006, p 13-44

¹³⁴ Official Journal 244 , 01/10/2004, p 2-17, as last prolonged by Commission communication concerning the prolongation of the application of the Community guidelines on State aid for rescuing and restructuring firms in difficulty of 1 October 2004, *OJ C*-296, 2.10.2012, p3

¹³⁵ Please refer to the website of DG Competition regarding specifics forest aid schemes: http://ec.europa.eu/competition/state_aid/register/

¹³⁶ , Commission Regulation (EC) No 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General Block Exemption Regulation), *OJ L* 214, 9.8.2008, p. 3–47

¹³⁷ Commission Regulation (EC) No 1628/2006 of 24 October 2006 on the application of Articles 87 and 88 of the Treaty to national regional investment aid (Block Exemption Regulation for regional aid), *OJ L* 302, 1.11.2006, p. 29–40

¹³⁸ Commission Regulation (EC) No 1998/2006 of 15 December 2006 on the application of Articles 87 and 88 of the Treaty to de minimis aid, *OJ L* 379, 28.12.2006, p. 5–10

¹³⁹ See, for example, Aide d'Etat/Italie (Calabre) SA.33142 (N/2011) "Non aide – Mesure 226 (organismes publics)" or State aid N 374/2009 – Ireland. National Development Plan 2007-2013. R&D&I aid scheme. Available at: http://ec.europa.eu/competition/elojade/isef/index.cfm?clear=1&policy_area_id=3

¹⁴⁰ Caveat: The present section relies on the information available on 01.02.2013 on the websites dedicated to State aid modernization in the agricultural and forestry sector and should not

State aid modernisation (SAM) package,¹⁴¹ which aims at fostering growth in a strengthened, dynamic and competitive market, focusing enforcement on cases with the biggest impact on the internal market and streamlining rules and faster decisions. . The current proposal on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)¹⁴², submitted by the Commission in October 2011 as part of the package of proposals for the CAP post-2013¹⁴³, leads directly to the need to revise the legal basis for State aid in the agricultural sector, which also involve forest measures as part of the rural development strategy.¹⁴⁴ This approach is followed by the indicative Roadmap¹⁴⁵ of the Community Guidelines for State aid in the agriculture and forestry sector 2014-2020 and of the Block exemption Regulation on the application of Article 107 and 108 of the Treaty to State aid to small and medium-sized enterprises active in the production, processing and marketing of agricultural products and forestry.¹⁴⁶

The forest sector is not covered by Article 42 TFEU and the general competition rules apply although specific forest aid measures are contained in the rural development programs. The Commission has indicated in its Communication on State aid Modernisation of 8 May 2012¹⁴⁷ that for cases with limited effect on trade and limited

prejudice in any way the policy considerations and the decision which will be taken by the European Commission.

¹⁴¹ The overview provided on the post-2013 policies address the main tendencies of the modernisation, due to the ongoing revision of State aid rules and the legislative process for the Common Agricultural Policy (CAP). Please refer to: http://ec.europa.eu/competition/state_aid/modernisation/index_en.html and http://ec.europa.eu/agriculture/cap-post-2013/index_en.htm On 17 January 2013, the European Parliament adopted a [Resolution on the State aid Modernisation](#) initiative of the European Commission. In November 2012, the European Economic and Social Committee and the Committee of the Regions adopted its [opinion](#), respectively on SAM

¹⁴² COM(2011) 627 final/2; Proposal for a Regulation of the European Parliament and of the Council on support for rural development by the European Agricultural Fund for Rural Development. http://ec.europa.eu/agriculture/cap-post-2013/legal-proposals/com627/627_en.pdf

¹⁴³ http://ec.europa.eu/agriculture/cap-post-2013/legal-proposals/index_en.htm

¹⁴⁴ Please refer to Consultation on the State aid instruments in the agricultural sector. http://ec.europa.eu/agriculture/stateaid/policy/consultation/index_en.htm

¹⁴⁵ Roadmap on Community Guidelines for State aid in the agriculture and forestry sector 2014-2020; Block exemption Regulation on the application of Article 107 and 108 of the Treaty to State aid to small and medium-sized enterprises active in the production, processing and marketing of agricultural products and forestry; Modification of the annexes to the implementing Regulation 794/2004 regarding the notification of State aid in the agricultural and forestry sector, 03/12/2012, Please refer to p3 ,p6 and p9. *It should be noted that the Roadmap is only indicative and the information it provides is only for information purposes and is subject to change. The roadmap does not prejudice the final decision of the Commission on whether the initiative will be pursued or its final content and structure.* Available at: http://ec.europa.eu/governance/impact/planned_ia/docs/2013_agri_001_state_aid_package_en.pdf

¹⁴⁶ Roadmap, *ibid*, p8. Please also refer to the consultation documents on the modernisation of state aid rules in the agricultural sector, available at: http://ec.europa.eu/agriculture/stateaid/policy/consultation/index_en.htm

¹⁴⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions EU State Aid Modernization (SAM), COM/2012/0209 final

potential to distort competition a simplified analysis will be proposed. The Commission's proposal of December 2012,¹⁴⁸ following its adoption, would enable the Commission to block-exempt further categories of aid from the notification requirement, including certain types of aid in favor of forestry contained in the rural development programmes, where experience acquired is sufficient to allow the Commission to define clear compatibility criteria ensuring that the effect on competition and trade between Member States is limited.

2.3.9. National forest policies & National Forest Programmes in the EU Member States

National Forest Programmes (NFP) have been established in most of the EU Member States in accordance with the pan-European forest policy process. They provide a global framework to address forestry issues in the context of sustainable forest management. NFP are tools for the planning, implementing and monitoring of forestry and forest-related activities and provide an environment for the concerted and coordinated implementation of programs and activities by all interested parties on the basis of mutually agreed objectives and strategies. NFP follow a wide range of approaches to develop, program and implement forest policies in a country or a region.

The share of countries with formal NFP processes is steadily increasing, but that there are still significant differences between the Member States in terms of the use of the NFP principles, such as stakeholder participation, cross-sectoral approach and iterative processes. More attention is increasingly paid to legal frameworks, effective implementation and monitoring.

Both the 1998 Forestry Strategy and the 2006 Forest Action Plan address particular attention to NFP, in particular as a suitable framework for implementing international forest-related commitments. The new EU Forest Strategy also considers these programs as a central element for the implementation of the new Forest Strategy. Member States are invited to set up and implement their action plans & national forest programs considering the principles and targets of the new EU Forest Strategy. NFP should ensure that they take into account the relevant EU policies such as rural development, biodiversity, renewable energy, resource efficiency or climate change.

NFP contribute to the coordination and cooperation goals and are strongly supported by the new Strategy.

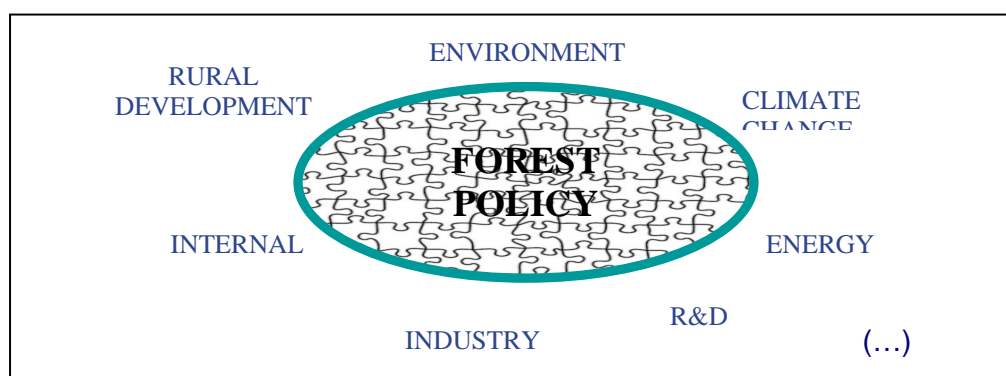
2.4. Coordination, cooperation and communication

¹⁴⁸ Proposal for a Council Regulation amending Regulation (EC) No 994/98 of 7 May 1998 on the application of Articles 92 and 93 (now 87 and 88 respectively) of the Treaty establishing the European Community to certain categories of horizontal State aid and Regulation (EC) No 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public passenger transport services by rail and by road.COM(2012)730 final, 5 December 2012

2.4.1. Coordination and cooperation

As has already been stated, there is no provision for a common EU forest policy in the Treaty but forestry is a significant and essential element of several existing and developing EU policies, for example relating to agriculture, biodiversity, climate, energy, water and soil etc. These policies in turn are major contributory factors to what is seen as the complex, fragmented and sometimes contradictory forest policy environment that exists today, see figure below. All this shows the growing need for a policy framework that coordinates and ensures coherence of forest-related policies and allow synergies with other sectors influencing forest management. The EU needs a new forest strategy as a key reference in forest-related policy development. EU forests and its forest sector need to be positioned in a way that ensures their contribution to the EU's objectives and targets¹⁴⁹.

Figure 15: The complex forest policy environment



The 1998 Forestry Strategy and subsequent Forest Action Plan established a governance structure that proved to be useful for information purposes but lacked a clear distribution of tasks, which in turn made it difficult to hold different actors to account for their responsibilities.

Stronger commitment and political support from all parties involved are needed. Otherwise the strategy will fail to impact on policy processes both at EU and at Member State level and the forest sector response to developments in other policy areas would remain weak.

2.4.2. Communication

Over the last few decades, crucial changes have taken place in the views and demands on forests by society at large. To know more how the general public is thinking about forest and forestry the Commission conducted a ground-breaking study when a

¹⁴⁹ See the annex to the Communication on the new forest strategy

representative survey was carried out across the EU-27 surveying a total of 11,106 randomly selected citizens.

The survey found that the public perceives protection / prevention of deforestation as a key concern regarding forests and that the general condition of European forests is worse than it actually is. However, in reality, total forested area in Europe has been increasing slightly over the past two decades (approx. 0.8% per year) and the loss of biodiversity has at least slowed down due to recent policy measures. Moreover, contrary to expert expectations, neither ecosystem services nor recreational purposes seem to be high on people's lists when thinking of forests. Relationship between and importance of key threats and damages to forests (storms, diseases, pests and invasive species) not well known by the public. Contrary to the high media attention given to forest fires, other very important threats to forest health are much less exposed to the public.

European public places higher value on forest conservation and forests' protective functions than on forest utilisation aspects: In line with previous studies and expert expectations, the preservation of biodiversity is perceived as one of the most important functions of forests. Furthermore, the expectation of experts in terms of an increasing importance placed on the value of forests for protecting against climate change and natural disasters was confirmed by the public survey: an overwhelming majority values this benefit over most other forest uses.

Public perception on preferred management style for various forest uses/benefits varies widely: Based on previous studies and the survey among experts, the overall perception of Europeans on the quality of forest management is rather positive. The clear majority of EU citizens stated they would favour more active management (multifunctional and sustainable management) to better address all three pillars of SFM, whilst experts were divided about the likely EU citizens' opinion about management for protecting biodiversity, for protecting against climate change and for providing recreational opportunities. For the other two forest functions – providing wood as a renewable material and providing wood for bioenergy – experts had predicted that the majority of EU citizens would favour more active management, while in reality, the public opinion survey showed that the European public is more or less evenly divided on what the best forest management style should be (more or less active management) for these two forest uses. Regional differences are quite significant regarding citizens' opinion on the preferred management style for providing wood as a renewable material: citizens in the South West region place a stronger emphasis on less or much less active management than people in the South East region; North West and central Europe are in line with the EU-27 mean.

European public is also interested in the links between forests and climate change and the majority believes forests can help in one way or another to tackle climate change. A clear finding of this study is that people are more and more concerned with and interested to learn more about the interplay between forests and climate change, however, the European public is currently divided as to what types of forest management measures (wood as renewable material, wood for bioenergy, afforestation) could best help address climate change.

As various parts of the public survey have demonstrated, the European public has clearly shifted its expectations as regards forests and forestry from a traditional commodity and recreational perspective to a demand for greater protection and management for ecosystem services (i.e. emphasis on forest services and benefits centred on protection).

2.4.2.1. Implications for future forest communication

The study formulates recommendations on how national and EU-wide communication on the role of forests and forestry in addressing new challenges (e.g. climate change, the increasing demand for bio-energy, and balancing forest use with nature protection and biodiversity conservation) in European society may be improved. The outcomes of the public survey confirmed expert predictions on the two most requested topics for further information: sustainable forest management and the interplay between forests and climate change. Overall, forest communication faces the challenge to reach out to the public on topics that are currently not high up on the communication agenda. This leads to the definition of three key areas for improving future forest communication across Europe:

- The need for a clear and sufficiently detailed message presented in a neutral manner that allows the public to make appropriate distinctions depending on the relevant specific issues and challenges, including forest area, biodiversity and damages, for various geographic contexts (i.e. local forests, European forests, forests worldwide),
- The need for stressing the important role of forests and wood in tackling climate change and,
- The need for addressing specific audience; with emphasis on communicating with the more disinterested public, i.e. the young people.

Responding to the challenges raised by the study, and following Key action 18 of the EU Forest Action Plan "Improve information exchange and communication" an ad hoc Standing Forestry Committee (SFC) working group (WG) was established to develop an EU communication strategy on forests and forestry¹⁵⁰. The WG was formed with participation of members of the UNECE Forest Communicators Network. In result of a series meetings held in 2010 a draft Communication strategy on forests and forestry in the EU was developed and adopted by the SFC in 2011.

2.4.2.2. Contribution of the new Forest Strategy to Coordination, cooperation and Communication

The new Forest strategy aims to:

¹⁵⁰ More info on the DG AGRI – Forest webpage:
http://ec.europa.eu/agriculture/fore/statistics_en.htm#book1

- Explore various options for better coordination on SFM and forest information and strengthened cooperation between and with Member States;
- Further improve coordination and coherence of policies affecting forests and the forest sector, in particular with the support of the SFC;
- Enhance stakeholder involvement in discussions on forest-related issues. The Advisory Group on Forestry and Cork and the Advisory Committee on Forest-based Industries also have key roles here;
- Encourage Member States to support Forest Advisory Systems as a tool of awareness, training and communication between local forest holders and Authorities;
- Improve public information about forests and wood raw material, building on the EU Forest Communication Strategy by the SFC and working together to promote the main messages of the EU Forest Strategy;
- Further assessing public perception of forests (e.g. via Eurobarometer).

3. WAY FORWARD

3.1. Governance

Based on the governance structure created in the framework of the 1998 Forestry Strategy, an improved coordination scheme with a clear distribution of responsibility for actions among different actors and levels of governance can improve the interactions between the different committees and the usefulness of their contributions, giving to these groups a clear role in EU's forest-related policy formulation and development. The specific role of the Standing Forestry Committee, composed of representatives of the forest administrations of the Member States advising the Commission in forest related matters, has to be underlined. It will be the cornerstone of an improved coordination of future work in this field, although it should revise its working methods, to reinforce the links with related policies and, when necessary, working together with other relevant committees and fora.

3.1.1. Standing Forestry Committee (SFC)

The SFC will be closely involved in the implementation of the strategy. Through the SFC, Member States should report on how they are managing their forests according to their national forest policy and legislation and, in this framework, what is their baseline for SFM.

The consultative role of SFC on Community measures affecting forests before the adoption by the Commission will be strengthened, taking into account the opinions of the SFC for policy formulation on issues relevant for forests and forestry. The appropriate exchanges between the SFC and other committees relevant for forests

should also be ensured, such as the Standing Committee on Agricultural Research (SCAR) or the FLEGT Committee. More emphasis will be given to the use of the SFC as a means of considering the balance of competing demands on forests and keeping forests multi-functional..

The SFC whose working methods will be renovated and adapted to the challenges, reinforcing links with related policies and, when necessary, working together with other relevant committees. It should revise how it takes stock of, responds to and builds upon inputs from other policies. The SFC will further contribute to improve the coordination through the following measures:

- Elaboration of an annual working plan for the SFC that addresses
 1. The monitoring, evaluation and reporting of the strategy;
 2. The work towards the target;
 3. The mechanisms to involve stakeholders.
- Organisation joint workshops between the SFC and the AGFC to improve the participation and dialogue with stakeholders.
- Working together with other committees on certain issues. The joint preparation of the guide on Natura 2000 and forests by the SFC, the Advisory Group on Forestry and Cork, the Habitat Committee¹⁵¹ and the Expert Group on Natura 2000 management could be considered as best practice in this regard. The working arrangement for future challenges is to be decided on a case by case basis and could be addressed in the annual work program of the SFC.
- Further involving the experts from other disciplines in the SFC meetings and vice versa, improve the participation of forest experts in the relevant committees.

3.1.2. Advisory Groups and consultative bodies

The Advisory Group on Forestry and Cork (AGFC) provides the views of socio-economic sectors and consumers on matters arising in connection with forests and rural development.

The Advisory Committee on Forestry and Forest-based Industries advises the Commission on industrial aspects of Community policies affecting forest-based industries and forestry as well as on matters concerning the market and other economic considerations affecting forest products in the Community.

The Economic and Social Committee as well as the Committee of Regions, consultative bodies of the EU, should also be more closely associated.

¹⁵¹ Article 20 of COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

3.1.3. Commission Inter-services Group on Forestry

The inter-services group on forestry will be the follow up platform to ensure global view and coherence of forest related initiatives in the Commission, which will be subsequently submitted to the SFC.

3.1.4. Forest Directors General Meetings

These meetings have as main purpose the exchange of views in an informal environment on policy issues concerning forests. They should give guidance to the further implementation work of the forest strategy. Their orientations should be submitted to the SFC.

3.1.5. Council Working Parties

The relevant Council Working Parties (WP) and in particular the Forestry WP would work to implement the EU Forest Strategy in the fields for which they are responsible such as international negotiations on forest and forest-related policies. This WP as co-legislator has a key role discussing the proposals from the Commission on forest related initiatives after being adopted.

This governance structure aims to provide better coordination/synergies between EU and Member State levels with stronger commitment of the leading actors, improving the coherence between domestic and international forest-related policies, strengthening the ownership of this strategy and bringing it closer to citizens.

3.1.6. European Parliament

The European Parliament should also play an important role in the strategy, not only in its capacity as co-legislator but also as a driving force for mobilising citizens and their national parliaments on relevant forest-related issues.

3.2. Follow up

The strategy will be subject to a review by 2018 to assess progress in implementing the strategy. In particular, it will assess if goals and forest headline target are being met, also addressing the contribution from forests and the forest sector to the relevant EU targets.

With the current legal setup and in the absence of a common EU Forest Policy, the strategy proposed in the Communication has gone as far as it could addressing in a holistic and balanced way the three pillars economic, social and environmental that define sustainable forest management. Other possibilities, however, exist in the different pillars and policies separately, but this will not allow addressing through a holistic approach forests and the forest sector.

ANNEX I: DEFINITIONS

For the purpose of the Communication on an EU Forest Strategy, the following definitions are used:

Forest(s): Land spanning more than 0.5 ha with trees higher than 5 meters and a canopy cover of more than 10%, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use. Other wooded land is a land not classified as forest (*source: FAO - Global Forest Resources Assessment 2010 Terms and Definitions Working Paper 144/E Rome 2010*).

Other wooded land (OWL): Land of more than 0.5 ha not classified as a forest. It has a canopy cover of 5 % to 10 %, comprising trees able to reach a height of 5 metres at maturity in situ; or with a combined cover of shrubs, bushes and trees. It does not include land that is predominantly under agricultural or urban use (*source: FAO - Global Forest Resources Assessment 2010 Terms and Definitions Working Paper 144/E Rome 2010*).

Forests available for wood supply (FAWS): Forests where no legal, economic, or environmental restrictions have a bearing on the supply of wood (*source: Eurostat*).

Sustainable forest management (SFM): The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems (*source: Ministerial Conference for Protection of Forests in Europe. Helsinki, 1993*).

Forestry: The term forestry is considered to encompass the production of standing timber as well as extraction and gathering of wild growing forest materials. It also includes products which undergo little processing, such as wood for fuel or industrial use (*source: Eurostat; SEC(2006)748 Staff Working Paper on an EU Forest Action Plan*).

Forest-based sector: Term covering forest resources and the production, trade and consumption of forest products and services. Throughout the text the term "forest sector" is used instead (*source: European Forest Sector Outlook Study 1960-2000-2020, UNECE-FAO; SEC(2006)748 Staff Working Paper on an EU Forest Action Plan*).

Forest-based industries: Industries downstream from forests, principally wood-processing but also others based on e.g. non-wood forest products (cork, resin, et al.). It includes woodworking, pulp & paper manufacture and converting, and printing

industries (source: COM (2008)113 *Communication on innovative and sustainable forest-based industries in the EU*).

Ecosystem services: Benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth (source: *Millennium Ecosystem Assessment, 2001*).

Bioeconomy: It includes agriculture, forestry, fisheries, food production, as well as parts of chemical, biotechnological and energy industries. It encompasses the sustainable production of renewable biological resources and their conversion, as well as that of waste streams into bio-based products, biofuels and bioenergy (source: COM(2012)60 *"Innovating for Sustainable Growth: A Bioeconomy for Europe"*).

Green Economy: An economy that generates growth, creates jobs and eradicates poverty by investing in and preserving the natural capital offers upon which the long-term survival of our planet depends (source: COM(2011)363 *"Rio+20: towards the green economy and better governance"*).

ANNEX II: MAIN REFERENCES

Commission Staff Working Document annex to the Communication from the Commission on the implementation of the EU Forestry Strategy SEC(2005)333

Commission Staff Working Document annex to the Communication from the Commission on an EU Forest Action Plan SEC(2006) 748

Communication from the Commission on an EU Forestry Strategy COM(1998)649 final.

Communication from the Commission on the implementation of the EU Forestry Strategy COM(2005)84 final and the analysis of its implementation

Communication from the Commission on an EU Forest Action Plan COM(2006)302 final.

Communication from the Commission on innovative and sustainable forest-based industries in the EU COM(2008)113

Communication from the Commission Europe 2020: A strategy for smart, sustainable and inclusive growth COM(2010)2020 final

Council Resolution of 15 December 1998 on a forestry strategy for the European Union.

Ex-post evaluation of the Forest Action Plan (October, 2012)

Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change COM(2010)66 final

Mid-term evaluation of the Forest Action Plan (November, 2009).

Report of the Standing Forestry Committee ad hoc Working Group VI on forest information and monitoring (March, 2012)

Report of the Standing Forestry Committee ad hoc Working Group VII contributing to the development of a new EU Forest Strategy (June, 2012)

White Paper Adapting to climate change: Towards a European framework for action COM(2009) 147 final

ANNEX III: ACRONYMS

AC-FBI	Advisory Committee on Community Policy regarding Forestry and Forest-based Industries coordination
AGFC	Advisory Group on Forestry and Cork
CAP	Common Agriculture Policy
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COST	European Cooperation in Science and Technology
EAFRD	European Agricultural Fund for Rural Development
EFDAC	European Forest Data Centre
EFDM	European Forest Dynamics Model
EFFIS	European Forest Fire Information System
EIP	European Innovation Partnerships
Era-Net	Networking the European Research Area
ERDF	European Regional Development Fund
ESF	European Social Fund
EUFGIS project	Establishment of a European information system on forest genetic resources (supported under Council Regulation (EC) N° 870/2004 on genetic resources in agriculture)
FAP	Forest Action Plan
FLEGT	Forest Law Enforcement, Governance and Trade
FP7	7 TH Framework Programme for research
GFCF	Gross fixed capital formation
GVA	Gross Value Added
INC	Intergovernmental Negotiating Committee
JRC	Joint Research Center
JTI	Joint Technology Initiative
LBA	Legally Binding Agreement
LULUCF	Land use, land use change and forestry
MOTIVE	MOdels for AdapTIVE forest Management project under FP7)
NREAPs	National Renewable Energy Action Plans
REDD+	Reducing emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks

RD	Rural Development
SFC	Standing Forestry Committee
SoEF 2011	State of Europe Forests 2011
SFM	Sustainable Forest Management
TFEU	Treaty for the functioning of the European Union
Trees4Future	Research infrastructures for forestry research (project under FP7)
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Framework on Forests