Documentation of the workshop

"Inform-Prioritize-Collaborate: Cooperation of Regions on Innovation in Forest Management, Use of Wood and Forest-related Services"

29 January 2016, Brussels

The workshop aimed at improving cooperation of European regions in innovation in the forest sector. It focussed on practical ideas of tackling forest-related challenges through innovation and cross sectorial collaboration which can be supported by AGRI Operational Groups under the 2014-2020 Rural Development Programmes or by other relevant programmes at European, national or regional level.

The event was organized by the ERIAFF Network (European Regions for Innovation in Agriculture, Food and Forestry), the European Forest Institute (EFI), EUROMONTANA (the European Association of Mountain Areas), the Confederation of European Forest Owners (CEPF), EUSTAFOR (the European State Forest Association), COPA-COGECA (European Farmers and Agri-cooperatives) and ERRIN (European Regions for Research and Innovation Network), supported by the regions of Catalunia, East and North Finland, Extremadura, Tuscany and Veneto. It was sponsored by the Bavarian State Forests Enterprise. The Representation of the Free State of Bavaria to the European Union offered the venue.

SECTION 1: OPENING REMARKS AND ADDRESSING SPEECHES

Stefan Pratsch (Bavarian State Ministry for Food, Agriculture and Forestry) reminded that forests play an essential role in the long term balance of our planet. Sustainable multifunctional forestry is the right approach to sustainability in the long run. He thanked land owners for managing their land sustainably. Policy-making should use incentives and the dialogue with landowners, but not additional laws and regulations that increase the burden to them.

Marco Remaschi (Minister for Agriculture Tuscany Region, ERIAFF coordinator) sees the forestry sector crucial for Europe. Forestry issues have to be at the heart of the EU dimension, thus encouraging a more innovative and a more cohesive and integrated forest policy towards the sector. Regions must be ready to adapt different EU policies to their own needs and approaches. The starting point should be the recognition of the multi-functionality of the forests to improve the quality of life, environmentally and economically. Wood is a strategic resource and needs active management. Tuscany is committed to focus at EU level on climate change, bio-economy and wood, ecosystem services with innovative approaches. Operational Groups are innovative instruments to guide and to orient for a strong European added value. Managing authorities have a crucial role in implementation. The local level and its needs should always be the starting point when planning any future policies.

Piotr Borkowski (Executive Director of the European State Forest Organisation EUSTAFOR) sees a changing context for forestry. Climate change and societal challenges connected to a growing society demand are becoming increasingly important. Stakeholders have to enhance their contribution to the development of an increasingly complex EU policy framework. We need to find innovative approaches on how to manage our resources also in the future. We must be ready to contribute to this from a forest owner perspective and focus on real solutions and research results that have a specific impact and contribute to economic efficiency. If we want to keep our forests vital we have to

manage them, otherwise they will disappear. EUSTAFOR engages in innovation mainly via the European Technology Platform for the Forest-based Sector (FTP).

Johan Elvnert (Managing Director of the European Technology Platform for the Forest-Based Sector FTP) sees knowledge, ideas, cooperation and investments as the key drivers for forest management and development. As European 16 million private forest owners are the ones that manage approximately 60% of Europe's forests, their involvement and representation by the Confederation of European Forest Owners (CEPF) are of utmost importance when talking about any forest-related EU policies. Furthermore, he reminds that FTP has developed a Strategic Research Agenda for the sector and identified vision targets which should be taken into consideration when building the research and innovation related policies and tools at EU level.

SECTION 2: EUROPEAN FRAMEWORK FOR INNOVATION IN FORESTRY

In her presentation on **Innovation in the EU Forest Strategy and the Forest MAP**, Maria Gafo (DG AGRI) reminded on the different expectations by stakeholders and characteristics of forests in Europe. The EU Forest Strategy is based on a common commitment on the sustainability of forests and the consensus around the concept of sustainable forest management. She presented the main elements of the Strategy. Innovation & research are the roots of it. Therefore, improving the knowledge base through research, innovation, information and monitoring can be considered as invisible roots that are of utmost importance to a good strategy that allow the policy-makers to make right decisions. The Multi-annual Implementation Plan (Forest MAP) identifies who does what and when and what are the expectations when implementing the EU Forest Strategy. The European Commission is still analyzing and evaluating the EIP measures in the 2014-2020 Rural Development. Following the request for a better inclusion of the forestry sector, it will set up Focus Groups on forest relevant topics, such as sustainable mobilisation of forest biomass and agro-ecological production systems. She explained the role of Operational Groups and presented some examples of Operational Groups in Italy and France.

Doru-Leonard Irimie (DG RTD) presented **HORIZON 2020 Work Programme 2016-2017 - Multi-Actor Projects relevant for Forestry**. Forestry is specifically included in the scope of the EIP-AGRI and in the rural development programmes. Furthermore, it is well represented within the Horizon 2020 Societal Challenge 2 2016-2017 work package. According to the definition, a multi-actor approach "will ensure the necessary cross-fertilizing interactions between researchers, businesses, farmers/producers, advisors and end-users". He presents a list of Multi-actor/Thematic network topics in the Work Programme 2016/17 relevant for forestry and some lessons learnt from previous calls to be considered for future project applications.

The discussion on this presentation addressed the

- role of forestry in the coming long-term agricultural research strategy of DG AGRI. Farmers and forest owners consider the inclusion of forestry very important, forest owners' organisations would like to play a key role in the process of developing the sectors' research and innovation framework. Mr. Irimie states that forestry is included in the scope of the strategy, however not singled out from other areas (e.g. neither are crops or livestock presented separately). He encourages forest owners to harness the opportunities of the multi-actor approach and invited for further involvement of forest owners and farmers in upcoming H2020 calls.
- kind of input that is requesting from the stakeholders for the development of targets and vision for H2020 Work Programme 2018-2019. Mr. Irimie reminds that the approach will be similar to the previous one and stakeholders will be consulted accordingly e.g. on desired impacts of new projects. A public consultation will be organized on this.

- availability of information on previous projects already finished under different EU funding schemes, addressing a specific topic. Mr Irimie acknowledges the challenge for finding the relevant information which exists. PLATFORM project bringing together Bioeconomy ERA-NETs is one example on this, there might be several others. The Commission is planning the establishment of a new knowledge platform for sharing such information on bioeconomy. Mr. Elvnert from FTP informs about the FTP database on previous (FP7) and current (H2020) forest-based sector relevant research projects and partners that is available via www.forestplatform.net.

SECTION 3: SUPPORTING FOREST INNOVATION: PRACTICAL CASES AND PROJECT IDEAS FROM EUROPEAN REGIONS

Juan Botey Serra, a forest owner from Catalonia, Spain, presented **Innovative applied research: Understory biomass for Mediterranean Forest care.** This example combines different technologies and processes to get the maximum benefit from Mediterranean forest care. It includes applications from forest fire protection to energy market production with a sustainable production of understory biomass for conservation. It also includes a Forest Living Lab established at the forest estate to be used by scientists from universities and research centres.

Marco Grendele from Veneto, Italy presented a project on **Revitalising the Castanea wood value-chain**. Forests of European chestnut, and chestnut wood, are a natural heritage for the region. Loss of market, loss of value, high fragmentation of the properties, phytosanitary problems and hydrological instability caused many problems in the recent past. New business opportunities shall help to revitalize forest management of chestnut, including all the players in the value chain. Veneto has recently established an Operational Group for the creation of a new contractual model for the management of the chestnut forests with fair pay to the owners and aiming at generating a high quantity and quality of wood.

An innovative approach to **Substitution of insecticides with wax** was presented by Jarl Markus Pettersen (Norsk Wax AS, Norway). It builds up on the achievements from the EU FP7 project WeevilSTOP. Its aim was to develop a cost-effective and sustainable insecticide-free plant protection method against the pine weevil. They have tested the new method in some regions and are looking for broader cooperation with the forest practice to improve the method in different environments. Answering to questions from the audience, Pettersen stated that

- nurseries in Europe are interested in alternative plant protection methods, in particular in these kind of non-toxic technologies
- he is interested in the cooperation with Operational Groups, but his small companies has limited capacities to actively search for them.

Gianni Picchi (Italian National Research Council, CNR-IVALSA, Italy) presented a new approach for **Precision forestry in EU mountain areas**. It builds on the EU FP7 project SLOPE (Integrated proceSsing and controL systems for sustainable forest Production in mountain arEas). It integrates data analysis from remote sensors and on-field surveying systems with a database, to support the characterization of forest resources including monitoring and location of trees. Spatial information is combined with multi-sensor data and Sustainable Forest Management modeling for optimization of logistics during forest operations. As a result, forest owners are getting valuable information on the amount of wood they have and, specially, the quality of the wood.

Concerted forest management at landscape scale was presented by Christophe Chauvin (French National Research Institute of Science and Technology for Environment and Agriculture IRSTEA, France). It covers the areas of resource detection, resource activation and governance&integration. The integration of different actors plays an essential role in forest management. They want to

achieve a balance between the technical aspects of the tool and the social aspects including the commitment from different actors and stakeholders.

Clotilde Giry (French National Center for Forest Ownership) presented EIP sustainable and productive Agriculture (and Forest!) - the French context at a glance. The challenge is to mobilize key stakeholders and raise awareness on EIP AGRI possibilities. France established a national platform (EIP consultative committee) to support the development and promotion of EIP AGRI and forestry at national and regional levels. First calls for Operational Groups were conducted in several regions, but there is still a lack of visibility of the EIP AGRI and of coordination in the Forest sector.

A general discussion with the audience on the implementation of the Operational Groups on forest topics followed, guided by two questions: (1) What is the state of play in your region or member state regarding Operational Groups on forest topics in the Rural Development Programme? (2) Are there other regional/national instruments and programmes to support innovation in forestry?

In **Austria** there are no Operational Groups at the moment, however there are some interesting new forest tools that could be adapted to the Operational Group methodology. One is about a technology using drones to identify bark beetle attacks two months before the damage becomes destructing. Other ideas focus on improving the fitness of forests for climate change.

In **Belgium**, the Wallonia region is active in the BBI-JU to support innovation in forestry and stakeholders committed to green chemistry.

In **Croatia**, the new government has just started, therefore all concrete actions are still pending. The Vukovar region has adopted the Rural Development Programme (RDP), although more focused on traditional technologies.

Finland had a call for proposals for Operational Groups. Some proposals were delivered for forest topics, but the participation from the forest sector could have been more active. Many of the proposals were too much research focused.

In **France** there is a national effort to coordinate relevant stakeholders for forest innovation at national and regional level. Several regions had calls on Operational Groups, some regions have already established such groups on forest topics.

In **Germany** the situation differs between the regions. In North Rhine-Westphalia the regulation is not yet in place. Although it would be useful to improve forest technology in the region, forestry will not be included in the next call.

In **Italy**, several regions have ideas on Operational Groups. In the Veneto region close contacts with the managing authority were established, but it is not sure if the first groups will start already in 2016. The European Commission and EIP AGRI will hold the first information event on Operational Groups (including forest topics) in Veneto. In Tuscany, a strong political engagement exists, a call will be published soon, with outcomes possibly later in 2016 or in the first half of 2017. It will host a meeting in September including different stakeholders on the operational groups, which definitely will have a specific focus on forest, concentrating on priority areas.

In **Norway**, there is a national strategy on forestry and some regional projects focusing on mapping of wood and optimizing forest management. In one region the establishment of an online market place for wood is planned in which participation of public and private forest owners would be of high relevance.

In **Spain** the situation is different for the regions. In Catalonia a second call for Operational Groups is ongoing. Information about successful groups/projects should be available this year. The regions of Castile and Leon and Catalonia are considering the cooperation of two operational groups. In another region a project and Operational Group for growing and collecting white mushrooms is planned in close cooperation with Italy. This Spanish-Italian cooperation considers the establishment of two Operational Groups to further tackle the issues like property rights and sales of permits.

In **UK**, an EIP AGRI call for proposals for Operational Groups was opened in September 2015. It received 130 ideas/proposals of which 13 were about forestry, including topics like soil protection and timber supply chain. Two groups have started already.

The audience could not provide any information on Operational Groups or other instruments supporting innovation in forestry for Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Greece, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Sweden and Switzerland.

In general, the discussion raised concerns on the slow developments of Operational Groups in some countries and the missing of forest topics in others.

SECTION 4: BROKERAGE SESSION

Organized at 4 tables with 2 discussion rounds each, this session offered a matchmaking opportunity for experts and regional actors willing to learn and/or cooperate through EIP AGRI Operational Groups or other support measures for forest innovation. The discussions at the brokerage tables aimed at

- raising awareness on how Rural Development Programmes could help in spreading and realizing a project idea, in particular with EIP AGRI Operational Groups or Focus Groups;
- indicating intentions/opportunities for cross-border cooperation (which regions; intended partners to implement/further improve the innovation issue);
- identifying opportunities to spread the idea or establish cross-border cooperation through other relevant EU programmes/instruments;
- proposing concrete new cases related to the topic/innovation challenge.

For details on the outcomes please see the individual table reports.

SECTION 5: Wrap up and outlook

The table chairs reported the main results of the table discussions in Section 3: "Brokerage session".

Table 1 (Managing Impacts related to Climate Change) saw a huge interest on mitigation and adaptation to climate change that also has positive aspects such as the adoption of innovative measures for a more competitive forestry. Evaluation of new planting techniques and development of carbon markets were discussed as relevant measures. Obstacles to cross-border cooperation were identified, mainly connected to the lack of information for forest owners on the implementation of the EU programmes and on the context for funding at cross-border scale. Information on the different initiatives from the operational programmes should be promoted among European stakeholders. Access to contacts and European networks could help to find greater synergies.

Table 2 (Supporting Wood and Biomass Mobilization) saw the high fragmentation of forest owners as the main challenge facing Europe's forestry. In addition, sometimes the real needs of the landowners are not well included in policies.

Table 3 (Supporting the Provision of Ecosystem Services) found a bottom-up approach needed. However, it is important to have common rules and protocols and achieve mutual agreements among service companies and land owners. A more flexible context including a market that is not so strict in regulation is needed. The development of infrastructures for recreational use of forests (camping sites, adventure parks, forest schools, etc.), payment for water provision and the example of the carbon market as compensation investments was mentioned.

Table 4 (Improving Sustainable Forest Management Approaches and Tools) also discussed the fragmented ownership and how to actively involve landowners. It stressed the importance of precision forestry as a strategic tool for the future, helping to manage forest areas more efficiently. In addition, stronger involvement of the whole society in forestry issues and better explanation on the reasons for forest management is crucial.

The workshop moderator **Harald Mauser** (European Forest Institute) expressed his hope on more activities in the regions and the forestry sector to come up with new initiatives within the rural development programmes or within other instruments to get more innovation and support for forestry. A next workshop on forest innovation in 2017 will discuss concrete experiences of Operational Groups on forest innovation topics.

Table 1 - Managing Impacts related to Climate Change

Chair: GIRY Clotilde (National Center of Forest Ownership, France)

Co-Chair: HÄMÄLÄINEN Tuomo (Centre for Economic Development, Transport and the Environment

for North Karelia, Finland)

Minute taker: POPARTAN Ana Claudia (Euromontana, Belgium)

The discussion revealed a huge interest on mitigation and adaptation to climate change that also has positive aspects such as the adoption of innovative measures for a more competitive forestry. Evaluation of new planting techniques, elaboration of diagnosis and decision support tools for managers and owners in the context of climate change, and development of carbon markets were discussed as relevant measures. The forest sector has to promote and demonstrate better its contributions to climate change mitigation and its level of adaptation to it. It has to explain to society the multifunctional management of forests.

Obstacles to cross-border cooperation of Operational Groups (OGs) were identified, mainly connected to the lack of information for forest owners on the implementation of the EU programmes and on the context for funding at cross-border scale. OGs working transnationally are more challenging. It's necessary for such a group to develop from a previous project, so partners are aware of the innovation potential and know each other.

The transfer of technology and knowledge from a bottom up approach is complicated. The ERASMUS programme gave the opportunity to know each other and to better understand the problems everyone faces. A similar scheme supporting the exchange of knowledge could be a new tool to apply in OGs.

For OGs dealing with carbon sequestration a LIFE Project in Murcia would be interesting. It developed a programme for compensating forest owners (focusing on carbon sequestration) by the CO_2 emitting industries.

OGs lack information at regional level, research centres that are among the beneficiaries of operational groups are not aware about them. The provision of more information is recommended, especially on what an EIP is, how it works and what the state of play in other regions is. DG AGRI has only limited resources. Regional networks are meant to disseminate information at national level, for example with workshops. A next EIP-AGRI Workshop "Operational Groups: first experiences" will take place in Veneto.

In Italy there is a national network to set up the rural development programmes. The public institutions have somebody in charge of innovation and of informing stakeholders. But forest actors have the responsibility to mobilize themselves.

Information on the different initiatives from the operational programmes dealing with the forest sector should be promoted among European stakeholders. Access to contacts and European networks could help to find greater synergies.

Table 2 - Supporting Wood and Biomass Mobilization

Chair: GRIGOLATO Stefano (University of Padova, Italy)

Co-Chair: GONZÁLEZ CORTÉS Jerónimo (Management Authority Extremadura, Spain)

Minute taker: RICARDI Francesca (Veneto Region, Italy)

The discussion was structured by Challenges, Weaknesses, Ideas for innovation, and Approaches to use EU programmes (Rural Development, LIFE, Horizon2020,...). Mobilisation was seen both a problem and an opportunity.

A broad range of challenges was mentioned, like regional differences in ownership and markets, improve involvement of small forest owners, valorisation of forest proprities and mobilising more wood from non-managed forests, having more biomass in Europe, minimize ecological damage to forests and forest soils, address a balance between supply and demand, better inclusion of all parts of the value chain and encouraging closer vertical cooperation, promotion of local wood for local use, technological innovation needs, management and regulation, understand the needs of the stakeholders and translate them into research and innovation projects,

Weaknesses were discussed, in particular the fragmented and small scale forest ownership and low attitude of forest owners to collaborate (both with regional differences), low interest of forest owners in wood mobilization, lack of modern machinery (in particular in the Mediterranean), water as a limiting factor in the Mediterranean, foresters do not consider all the value chains, overall cost of the system are too high, lack of interaction between policies and real needs, difficulties for forest owners to link with Operational Programs.

To implement innovation, better cooperation of private owners to manage their forests is important. Business innovation by establishing new cases like "heat entrepreneurship" (sell energy for heat and gain from megawatts) are needed. In Finland, a heat entrepreneurship knowledge cluster has been formed in South Ostrobothnia (HECSO project), collecting all energy clusters in this region. They teach new business modells (how to make contracts,...). The EU FP7 project S2BIOM provides a database with data on cost supply, biomass, residues from agriculture sector, offering an On-line tool to disseminate information. The EU FP7 project SIMWOOD deals with mobilisation of wood and alos offers a data platform. Bottom-up approaches should be strengthened with participatory groups at regional and local level. One field for innovation is improving the procedures to sell wood. Another field is technology that is very expensive. Cost for innovation have to be considered.

Table 3 - Supporting the Provision of Ecosystem Services

Chair: PETTENELLA Davide (University of Padova, Department of Land, Environment, Agriculture and Forestry, Italy)

Minute taker: KORHONEN Veli-Pekka (East North Finland Regions, Finland)

Preconditions for developing payments for ecosystems services (PES) were discussed. A bottom-up approach is needed that is different from the flat tax approach used in Croatia (forced payment). Green taxes are not a PES (free contractual agreement). Potential consumers have to realize the scarcity of products and services and have to be aware of the benefits of ecosystem services to them. Most of the European citizens don't even know where milk, cheese etc. are coming from.

Cooperation and aggregation of suppliers would help (see the example of the Model forests). It is important to have common rules and protocols, and achieve mutual agreements among service companies and land owners (like in the case of developing carbon forest investments in the voluntary markets). Active land market or contractual agreements between services companies and landowners are needed. A more flexible context including a market that is not too strict in regulation is needed to ensure room for manoeuvre and enough space for innovation.

Examples of ecosystem services for investments & cooperation were discussed, like

- tap water provision based on PES rules for paying landowners in catchments areas
- wild (semi-wild) organic forest products: adapting silviculture and regulating access, hunting and fishing
- forests and nature for recreational: demand for infrastructures and organized systems like camping sites, adventure parks, hiking paths, skiing areas...
- attractive landscapes motivate young people to return back to the countryside
- forest Schools, kindergarten using forests as tools
- carbon credit for the voluntary market: need of transparency and common rules
- "Eco points" paid as compensation for environmental losses at infrastructure developments
- funeral forests and burial trees.

Table 4 - Improving Sustainable Forest Management Approaches and Tools

Chair: SCHENKER Thomas (CEPF)

Minute taker: BOSCALERI Fabio (Tuscany Region and ERIAFF Coordinator)

This table started approaching forest management from some key points related with fragmented ownership and actively involvement of landowners. It stressed the importance of precision forestry as a strategic tool for the future, helping to manage forest areas more efficiently. There is a need to adjust forest management techniques to adapt to climate change but also to take advantage of some opportunities (e.g. better growth rates). Also new silviculture strategies are needed to better meet customer needs (tree species, diameter not over 50 cm, ...). In some regions there is a rising interest to share experiences (eg. in Tuscany about 350 ideas for Operational Groups have been proposed, part of which related with forestry). A stronger involvement of the whole society in forestry issues and better explanation on the reasons for forest management is crucial.

A general consensus emerged from the debate on the following statements:

- Fragmentation of forest ownership is a limiting factor
- Forest infrastructures (particularly tracks) are fundamental for accessing and managing resources.
- Setting regional political and/or sustainable productive targets could help the active management of forests.
- Scarce perception among forest practitioners of what the EIP AGRI Operational Groups are and which benefits they could bring in the territories.
- There is need of a clear definition of what is considered sustainable.
- A public project deserves a professional management and should not be launched just for giving it a try.
- Actions are needed for mitigating/reducing the initial costs of innovation.

For innovation actions, the following ideas and suggestions were discussed:

- Precision forestry with open data and use of satellite images or orthophots with services adapted also to small owners.
- Finding solutions for a better coordination and collaboration among forest owners.
- Make use of the Model Forest Network for identifying innovative actions.
- Adoption of educational plans to involve schools in explaining the benefit of forest management to young people (good examples are in eg. Bavaria and Austria).
- Adoption of certification schemes.