



EURAF European Agroforestry
Federation

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1. EURAF ACTIVITIES

EURAF had the honor to participate in the discussions to deliver the [Cork 2.0 declaration](#). The declaration pursues a better life in rural areas. The declaration links with social, environment and governance aspects on which agroforestry can provide solutions at local and global scale. Integration of systems, promotion of local products, improvement of quality of life of rural population, considering environment (preserving Europe's natural and cultural value of the rural environment, managing natural resources and mitigate and adapting to climate change) can be easily linked to agroforestry. The last points of the Cork 2.0 Declaration are indeed needed to foster (a) the implementation of agroforestry across Europe based on knowledge transfer through adequate tools like the recent successful thematic network H2020 agroforestry project (AFINET), (b) the simplification of the CAP not penalizing the presence of woody vegetation on agricultural lands and (c) the improvement of the credibility and accountability of the policies, including the evaluation of the impact of policies that deals with the use of woody vegetation in rural areas.

Silvopastoralism was one of the topics of the last [European Federation of Animal Science Meeting](#) held in Belfast in the grazing session, were a description of this land use, the benefits they provide, as well as the extent of these practices in Europe were presented by María Rosa Mosquera-Losada as invited speaker. Questions related to the use of silvopastoralism in dry environments were also discussed.

EURAF was also represented by María Rosa Mosquera-Losada and José Javier Santiago-Freijanes in the CDG of Arable crops, where the role of compost, obtained by using forest residues among other materials, as fertilizer, was part of the discussions. EURAF proposed to produce a guidance document on how to compost derived from forest residues as fertilizer and amendment with different mineralization rates. The Commission agreed on the proposal. Using forest-derived compost will improve the circular and bio-economy objectives that the EU has to fulfill by using the forestland and woody vegetation across Europe. A presentation highlighting the important impact of climate change on crops in Europe was also given and EURAF took the floor explaining the important role that agroforestry has to play as a form of mitigating and adapting to climate change.

EURAF was also present in the CDG of Rural Development, where the Cork 2.0 Declaration was discussed. From the floor, María Rosa Mosquera-Losada highlighted that Cork 2.0 provides an excellent framework for developing rural areas in Europe and congratulated the Commission for the excellent conference they held and the way it was conducted. Cork 2.0 Declaration was constructed based on the work of more than 250 participants working in different workshops. However, the Cork 2.0 Declaration is very broad and does not deal with specific land use management options that were mentioned during the Cork 2.0 workshops like agroforestry, agroecology, organic farming. A strong

emphasis should be given to these options when the Cork 2.0 Declaration is implemented. Mr. Rob Peeters answered that working groups will be created and public consultations will be open and land use will be considered within the Cork 2.0 framework future development.

An extraordinary presentation based on the use of the [results-based agri-environment payment schemes](#) was given and different and successful projects were highlighted. RAPCA was mentioned as one of this project and EURAF highlighted the importance of the networking carried out within the RAPCA framework including all actors needed to implement agroforestry, saving money to the administration, increasing the trust on policy-makers and activities, the recognition of adequate land management and the implication of farmers in knowledge farmer increased (a school of shepherds was created). All these positive aspects of the RAPCA were enhanced during the talk and these examples should be spread across Europe.

Collective implementation of AEC measures, a new Dutch approach talk was presented during the Rural Development CDG. Dutch policy makers carried out a multi-actor approach aiming at evaluating the effect of this collective implementation on medium and long term biodiversity goals by having farmers working in a collective form. This could be of high interest to promote agroforestry, or the inclusion of woody vegetation within the landscape at global level. Increasing the presence of woody vegetation where it is mostly needed. They elaborate plans every year which are flexible working for fulfilling the general biodiversity goals at long term. EURAF congratulates the initiative that establishes tools to handle the territory at temporal and spatial scale that can be used to enhance the ecosystem services delivered by agriculture and can be used to spread agroforestry at territorial scale to improve biodiversity at temporal scale.

Source: María Rosa Mosquera-Losada (EURAF President) and José Javier Santiago-Freijanes (University of Santiago de Compostela), September 2016.

2. REGIONAL AGROFORESTRY NEWS

2.1 About the Gap between the Conceptual Opportunities and the Actual Implementation of Agroforestry in Flanders, Belgium

In June this year, a first scientific paper written in the framework of the project “Agroforestry in Flanders”, was accepted for publication in the international journal “[Agroecology and Sustainable Food Systems](#)”. This paper, written by PhD student Lieve Borremans and her colleagues, deals with the observed gap between the conceptual opportunities and the actual implementation of agroforestry in Flanders. As such, currently, the implementation of modern alley cropping systems in Flanders remains limited to about 30 farmers. This seems to be in contrast to the increasing interest of policy makers,

social movements and researchers in agroforestry as a promising farming system that could address current social, ecological and biodiversity problems in agriculture.

The data are based mainly on interviews and a survey carried out in 2011 with 86 farmers. Analysis of the results showed that the intention of farmers to start with agroforestry is very low, mainly resulting from the fact that, at that time, about 55% of the farmers were not familiar with the concept of agroforestry. These results were further complemented with data resulting from a GIS analysis, and short interviews with the known agroforestry pioneers in Flanders. As such, the article gives a nice overview of, on the one hand, the characteristics of the modern alley cropping parcels, and, on the other hand, the area of the more traditional agroforestry systems (including standard orchards, agricultural plots bordering hedgerows, tree rows, etc.) in Flanders.

The conclusion of the complete study is that the average Flemish farmer today still has little interest in agroforestry, mainly because of questions with respect to the profitability and the compatibility of such a farming system and the current legal uncertainties with respect to trees on agricultural land. Therefore, future research, and policy and extension efforts should target these aspects to enhance further dissemination. This message will without doubt be taken into account within the ongoing research project in Flanders, and to date we can state that quite some efforts have already been made to tackle the observed bottlenecks.

The paper with the full title “A socio-psychological analysis of agroforestry adoption in Flanders: understanding the discrepancy between conceptual opportunities and actual implementation” can be accessed through this [link](#).

More info about the project at www.agroforestryvlaanderen.be

Source: Bert Reubens (EURAF National Delegate for Belgium), September 2016.

2.2 Ukrainian Agroforestry Association (UAA)

Ukrainian Agroforestry Association (UAA) was founded on 6th July 2016. There were two great events prior the foundation of the Association. For the first time the necessity for the formation of the organization was examined during the All-Ukrainian Roundtable "Windbreaks. Who is the real owner?" (11st March 2016). During the work of the International Conference “Actual problems of forestry and park gardening” which was held on 14th–15th April 2016 at the [National University of Life and Environmental Sciences of Ukraine](#) the participants also approved the necessity of the UAA.

The main goal of the Association is to spread the practice of creating, growing and farming in protective forest plantations (windbreaks, shelterbelts, pasture plantings, plantations of line and curtain types, etc.) on agricultural lands.

To provide the development of agroforestry the UAA has to fulfill the following tasks: (i) to conduct informational campaign on the introduction of agroforestry practices on agricultural lands in the farms of different ownership; (ii) to organize and conduct lectures, round tables, seminars, conferences, exhibitions etc.; (iii) to provide advisory services involving the public, state and local authorities, experts in forestry, agricultural, environmental industries, including international organizations; (iv) to develop the drafting of decisions and conduct public examination of draft decisions; (v) to conduct outreach and educational activities; (vi) to disseminate information, promote its goals and ideas; (vii) to publish scientific and methodical performance of the organization; (viii) to enter into unions and other associations, created on a voluntary basis and contribute to the statutory tasks, including with foreign partners; (ix) to share information, experiences and experts from organizations of foreign countries; (x) to take part in accordance with the law in the service of consulting, advisory and other subsidiary bodies formed by state authorities, local self-government for consultation with associations and making recommendations on issues concerning agroforestry, (xi) to develop and implement various projects for implementation and development Agroforestry in Ukraine.

For more detail information about UAA please contact with yukhnov@ukr.net or lobchenko@nubip.edu.ua.

Source: Vasyl Y. Yukhnovskiy (EURAF National Delegate for Ukraine), September 2016.

2.3 French-Hungarian Field Tour

From September 13th to 16th, the French embassy in Budapest and the National agricultural research and innovation centre of Hungary (NARIC) invited a French delegation to a 4-day field tour aimed at sharing views and experiences on agroforestry development across Europe. The delegation consisted of Alain Canet (chairman of the French agroforestry association - AFAF), Pierre Pujos (pioneer organic agroforestry farmer in France) and Fabien Balaguer (AFAF board member and EURAF treasurer). They were hosted and guided around the country by Zsolt Keserű and Veronika Honfy, from NARIC. The diversity of profiles and backgrounds within the team led to a fruitful cross-fertilisation between the two countries. A diversity of stakeholders were visited, from farmers to researchers and agricultural extension workers. France and Hungary have a lot to share on the agroforestry subject, and this visit allowed for many new ideas of partnerships to come up. On the last day, a meeting with the EAFRD referent in the government office paved the way for a stronger Europe-wide cooperation on pushing agroforestry forward - from the field to administration. A working session was also specifically dedicated to the development strategy and strengthening of the new Hungarian agroforestry association, which was created earlier this year.



Figure 1: Some pictures taken during the French-Hungarian field tour.

Source: Fabien Balaguer (EURAF Treasurer) and Andrea Vityi (EURAF National Delegate for Hungary), September 2016.

3. FEATURED FARM: Mixed Crop-Dairy Cattle Farm in South-Western France

After 18 years of ploughing, Christian Abadie and his brother (farmers in South-Western France) witnessed a 50% decline in the organic matter content of their soils and increasing problems of erosion. In 2000, they decided that ploughing had to stop and that their agricultural system could be modelled as closely as possible to the natural ecosystems, with constant inputs of organic matter to enhance soil biota. Thus they started looking at no-till systems.

The initial years of no-till were complicated since they had to find the right techniques and varieties, whilst unlearning years of traditional practice. They set about maximising the return of carbon to the soil using permanent cover crop systems. By returning some of the organic matter to the soil each year, and protecting the soil structure, they now produce more with greatly reduced off-farm inputs. Their techniques, refined over the last 15 years, have transformed the land. Their soil retains large amounts of CO₂, which is essential for a sustainable agriculture in the face of climate change. Water retention is far higher, limiting the need for irrigation, a crucial point in a region renowned for its production of maize. The small amount of run-off that takes place is free of silt and erosion has stopped.

Last winter and spring they started planting trees on their grasslands. This should further improve the overall productivity of the farm, whilst making it more sustainable and resilient, both ecologically and

economically. These trees (a mixture of species including poplar, ash, mulberry, maple...) will later be pollarded to produce chipped branch-wood for livestock bedding. This way, they will be able to gradually reduce their need for straw from outside the farm, and gain self-reliance.

Christian and his brother are now in a position to share their hard-won knowledge, and are active members of several farmer-associations whose members are searching for a more sustainable form of agriculture. Their land is evidence to the fact that no-till agroforestry systems are a practical response to the environmental, economic and production problems of modern farming.



Figure 2: Some pictures of the farm.

Source: Fabien Balaguer (EURAF Treasurer), September 2016.

4. WHAT DIFFERENCE DOES GROWTH RATE MAKE TO TIMBER QUALITY IN TEMPERATE HARDWOODS?

It is generally understood that growth rate, in timber trees at least, has a definite influence on their usability and ultimately therefore on their commercial value. And that “understanding” seems to be that slow growth is good for quality, whereas fast growth is detrimental to good quality. That is certainly the case with softwoods (conifers) where fast growth leads to a preponderance of earlywood cells and proportionately fewer latewood cells. Thus the wood is generally of lower density, possibly somewhat lower strength, and most probably poorer overall quality, since it consists mainly of “lightweight” earlywood tissue, which machines less well and gives wood with poorer texture and lesser surface hardness. That much is true: but only for softwoods!

With temperate hardwoods, the situation is more complex and – in the case of one particular type of hardwoods – just the opposite. First of all, it needs to be understood that hardwoods can have one or other of two fundamentally different types of cell structure: ring-porous and diffuse-porous. In the former, the “pores” (those large, tube-like cells that conduct the sap around the tree) are mostly concentrated in the earlywood; and thus they form a very distinct band of growth in the tree’s ring

structure – hence the term “ring-porous”. In the latter tree type, these wood cells are diffused (i.e. scattered) all across the growth ring, with no obvious accumulation of pores in any one part of the ring – hence the name “diffuse-porous”. (In this type of hardwood tree, the growth rings are less distinct and are demarcated by a line of other tissue: it matters not what, in this short discussion.)

The most important thing to realise about ring-porous hardwoods is that when they grow slowly, the rings are close together (just as with softwoods); but unlike the conifers, the latewood part of the growth ring does not dominate the timber: it is the earlywood which does. That is because the large earlywood pores still need to be accommodated within the narrow width of the ring; and this then leaves little or no room for the latewood – which is largely made up of the fibres which give wood its density and strength. Conversely, in ring-porous hardwoods that grow very fast, the much wider ring allows plenty of room for both the earlywood pores and the latewood fibres: so a denser, stronger timber is the result: quite the opposite to what happens in softwoods!

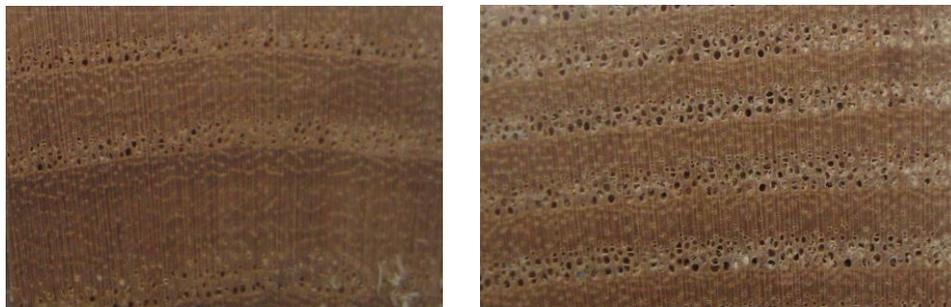


Figure 3: Examples of a ring porous species (ash) grown quickly (left) and slowly (right).

With diffuse-porous timbers, the rate of growth has a negligible effect on density and strength, since the rings are formed quite differently and the pores are still scattered about in the wood, regardless of how and when they were formed.



Figure 4: Example of a diffuse-porus species (maple) grown quickly.

Therefore, whilst fast growth may be considered “bad” in softwoods, it is certainly not a problem in hardwoods generally; and it is to be positively encouraged in ring-porous hardwoods, such as ash, oak and chestnut.

Much more detail is available in “Sustainable Use of Wood in Construction”, Jim Coulson, ISBN: 978-1-118-53966-8, 216 pages, August 2014, Wiley-Blackwell.

Source: Jim Coulson (TFT Woodexperts Limited, UK), July 2016.

5. THE CORK 2.0 DECLARATION

Cork 1.0 led to the creation of the Pillar II of the CAP and provided the general guidelines to increase sustainability of European agriculture. Cork 2.0 Declaration was developed in early September 2016 to enhance even more the sustainability of the European systems. The Cork 2.0 Declaration is based on ten main points where agroforestry can play a role as it is a form of integrating forestry and agriculture increasing the goods delivered by both sectors and therefore improving rural viability and vitality. Benefits of agroforestry linked to the environment (points fourth, fifth and sixth) are directly connected with agroforestry, which includes important traditional systems, being able to reduce contamination in agricultural areas and promoting the management of the natural resources. The role of agroforestry as a form to mitigate and adapt to climate change has been recently recognized in the Global Alliance Climate-Smart Agriculture (GACSA). The first point recognizes the need of integrated strategies and multi-sectorial approaches to promote rural prosperity recognizing the importance of social aspects. The second point is based on the connection of the productive sector through the adequate strengthening rural value chain including tools development. The third point was related with the increase of the value of the goods that are provided by rural areas to the society, recognizing the need of investing in the rural viability and vitality. Points fourth, fifth and sixth of the declaration are related to environment, protecting rural environment and recognizing the value of already traditional systems (i.e. dehesa, montado, grazed orchards), point fifth is linked to the adequate use of resources based on the use of biodiversity, while point sixth is connected with climate change mitigation and adaptation that agroforestry can fulfill.

The integration of all actors to boost knowledge and innovation is recognized in point seven of the Cork 2.0 Declaration that connects with point eight dealing with the enhancement of rural governance through the use of bottom-up approaches should be enhanced such as Leader and EIP-AGRI initiatives. The new H2020 project agroforestry thematic network AFINET fulfills this aspect. The ninth point of the Cork 2.0 Declaration is dealing with the simplification of policies and flexibility when adopting policies that can use the ideas proposed in the recent policy report of AGFORWARD. Finally, the tenth point deals with improving performance and accountability as credibility on policy by stakeholders and society should be pursued.



Figure 5: María Rosa Mosquera-Losada (EURAF President) and Jose Javier Santiago-Freijanes (University of Santiago de Compostela, Spain) during the Cork 2.0 Declaration.

Source: María Rosa Mosquera Losada (EURAF President), September 2016.

6. WORLD CONGRESS ON SILVOPASTORAL SYSTEMS

The World Congress on Silvopastoral Systems took place last 27th-30th September 2016 in Évora, Portugal. The event consisted of several plenary sessions with top keynotes: Adriana Chacón-Cascante, Shibu José, Kevin O'Hara, Guy Beaufoy and Ika Darnhofer. Besides, there have been 37 parallel sessions with around 150 presentations ranging from landscape assessments, animal productivity, animal-grass and tree-grass interactions, modelling, regeneration, pests and diseases, wild fires, environmental services, water and carbon relations and climate change, non-wood products, biodiversity, remote sensing, to farmer perceptions, economics and policy. Several field trips were organized, where participants learnt on biodiversity, public goods, grazing, water regulation or cork stoppers in the forests of the region.

Some of the concluding remarks are that we are many and diverse, aware and interested in a dialogue across regions and disciplines. There is a need for bridging gaps between biophysics-and socioeconomics: silviculturalists need to understand grazing and pastoralists to understand trees, while it is crucial to increased visibility. Furthermore, silvopastoral systems represent perfectly the circular economy that the European Union seeking.

Close to 300 attendees gathered in this edition, and given the success of the event, there are already proposals for future editions.

Wrap-up of conclusions and future actions will be circulated in the near future.



Figure 6: Field trip on biodiversity and ecological functioning: Pinus pinaster stands, rice fields, Quercus suber montado.

For more details, please visit the webpage <http://www.silvopastoral2016.uevora.pt/>

Source: Mercedes Rois-Díaz (European Forest Institute, Finland), September 2016.

7. MISCELLANEOUS

Life in Syntropy: the story of a transformation

“Life in Syntropy” is a [short film](#) that was screened at the Paris climate talks. It tells the story of Brazilian farmer Ernst Gotsch, who bought completely deforested land and transformed it into a remarkably biodiverse farm that reverses climate change by sequestering carbon.

Agroforestry in Action Webinar Series

The Agroforestry in Action Webinar Series is a production of the [Center for Agroforestry at the University of Missouri](#). Presentations in this webinar series explore topics in agroforestry from North America and around the globe, showcasing examples of excellence in practice and research. Live webinars are presented on a monthly basis and are free and open to all. Please see the [live webinar schedule](#) and register well in advance to participate.

2nd "From Field to Forest" Congress

The 2nd "From Field to Forest" Congress will take place in Theaterkerk, Bemmelen, Netherlands on 9th December 2016. The program consists of five lectures and a panel on the future of natural farming, in which the government has a place. More info [here](#).

19th European Grassland Federation (EGF) Symposium

The 19th European Grassland Federation (EGF) Symposium will take place in Sardinia, Italy during 7th – 10th May 2017. The title of the Symposium is “Grassland resources for extensive farming systems in marginal lands: major drivers and future scenarios”. More info [here](#).

15th North American Agroforestry Conference

The 15th North American Agroforestry Conference will take place in Virginia, USA during 27th – 29th June 2017. The title of the Conference is “Agroforestry for a Vibrant Future: Connecting People, Creating Livelihoods, Sustaining Places”. The Conference is for agroforestry producers, researchers, educators and those involved with related work in the fields of permaculture and agroecology. More info [here](#).

IUFRO Anniversary Congress 2017

The International Union of Forest Research Organizations (IUFRO) is organizing its 125th Anniversary Congress “Interconnecting Forests, Science and People”. The congress will take place in Freiburg, Germany, from 19th-22nd September 2017. The Congress will include an agroforestry session “Agroforestry - the future of land use management?”. More info [here](#).

This is your newsletter! If there's anything you think should be included, please send suggestions to euraf@agroforestry.eu for the next issue.

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