REFOREST POLICY SESSION

Agroforestry sector in the EU: Towards novel policies and financing frameworks



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28th June 2023, Recinte Modernista Sant Pau, Barcelona Hosted and organised by the Euro-Mediterranean Economists Association

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Report compiled by: Kirsty Fairhurst, Assistant Project Officer, EMEA, and Riccardo de Angeli, Junior Researcher, EMEA



INTRODUCTION:

The policy session titled "Agroforestry sector in the EU: Towards novel policies and financing frameworks" was held on June 28th, 2023, at EMEA Headquarters in Barcelona. Organised as part of the REFOREST project, funded by Horizon Europe, the session aimed to explore innovative financial instruments and policy recommendations for promoting agroforestry systems in Europe. REFOREST aims to promote innovation, and knowledge exchange, and empower farmers in achieving multiple objectives like food production, carbon capture, and biodiversity enhancement through agroforestry.

The European Green Deal's ambition to tackle climate change and environmental degradation necessitates policy initiatives and sustainable practices for a resource-efficient and competitive EU economy. Agroforestry, a multifunctional system, holds significant potential to contribute to this transition by offering environmental, economic, and social benefits.

The policy session aimed to connect experts in the field and foster knowledge exchange on finance and policies related to the agroforestry sector in the EU. It focused on the current regulatory framework, financial mechanisms, carbon markets, and recommendations for novel policies and financing frameworks in the EU agroforestry sector. Renowned research organisations specialising in agroforestry across Europe participated in the session. The event was held in a hybrid format, allowing for both physical and virtual attendance.

The session covered several key topics, including the latest developments and knowledge on finance and policies applicable to the agroforestry sector, the role of agroforestry in EU policies, gaps in financing mechanisms and policies, strategies for effective and sustainable financing, agroforestry's contribution to climate change mitigation, and anticipated changes and recommendations for novel policies and financing frameworks in the EU agroforestry sector.





SUMMARY OF THE DISCUSSION

Ivan Hajdukovic, Researcher at the Euro-Mediterranean Economists Association (EMEA) opened the session and welcomed all participants. Setting the scene, he explained that the aim of the policy session was to connect experts in the field and facilitate the exchange of the latest developments and knowledge on agroforestry in Europe. He then introduced **Consuelo Varela Ortega**, Professor at the University Polytechnic of Madrid and a member of the Executive Board of EMEA, to moderate the session.



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In her introduction, **Consuelo Varela-Ortega** acknowledged the contributions of prestigious research centres and panellists from Catalonia, Spain, and Europe and highlighted the centrality of the REFOREST project in the European Union's main policies, including the Green Deal, food production, agricultural policy, farm-to-fork strategy, biodiversity strategy, and forest strategy.

The first speaker, Enrique Doblas Researcher and Transfer officer at the Ecological Research and Applied Forestry Centre based in Catalonia, started the discussion by highlighting the numerous benefits of agroforestry and emphasised the significance of considering both the positive and negative feedback associated with this practice. Agroforestry is portrayed as a multifunctional system that provides social, economic, and environmental advantages. These benefits include carbon farming, carbon sequestration, and increased resilience to climate change and its consequences, such as wildfires and invasive species, due to enhanced biodiversity and diverse crops and tree varieties. Agroforestry also contributes to greater biodiversity, water conservation, and reduced erosion compared to conventional crop systems. However, the outcomes of agroforestry practices may vary depending on the local environment and species, hence requiring careful consideration.



He provided examples of successful agroforestry projects, particularly highlighting the work conducted at CREAF. These examples showcase implementations at different scales, ranging from landscape-level projects to incorporating crops within forests. The significance of agroforestry in reducing CO2 levels in the atmosphere by absorbing carbon and storing it in the soil is emphasised, underscoring the importance of preserving existing carbon stores.

Furthermore, Doblas highlighted that agroforestry should be developed with care, attention, and thorough studies to ensure managed heterogeneity and maximise its potential benefits. He also highlighted the need for the European Union to actively promote agroforestry through financial support, incentives, and payment for ecosystem services.

Andrea Casadesús Cabral, Post-doctoral Research at BETA Technological Centre took the stage, focusing on agroforestry systems and sustainable development. Cabral is associated with societal issues, research, innovation, and financing mechanisms. She introduced the Transition project, which aims to foster innovative, resilient farming systems in Mediterranean environments. The project involves ten partners from six different Mediterranean countries and seeks to facilitate a transition toward resilient agriculture in the region. The project's key goals include maximising positive environmental impact, increasing the resilience of agricultural systems and rural societies, and providing returns to farmers.

Through 121 interviews conducted with farmers, technicians, advisors, researchers, and politicians, the project identified several gaps and challenges in the agroforestry sector. The most common gap mentioned by all groups was the excessive administrative procedures that hinder access to financing mechanisms. Other gaps identified included the need for economic incentives to promote cooperation among land managers, the inclusion of small farms in financing mechanisms, and the development of locally focused policies.

Based on the identified gaps, stakeholders provided proposals and recommendations for improvement. Farmers emphasised the importance of reducing administrative procedures, promoting cooperation through information and technique-sharing platforms, training regional administrations in agroforestry practices, and focusing on marketing and promoting local products. Policymakers recommended the creation of certification for sustainable agriculture, implementation of zone accounting for agroforestry system sustainability, and the design of policies to retain people in rural areas and transfer knowledge about agroforestry systems. Technicians and stakeholders suggested the establishment of local initiatives and networks to support farmers, particularly young farmers, in transitioning to agroforestry systems.

Furthermore, technicians and stakeholders highlighted the need for more flexibility in the legal framework to ensure compliance with animal welfare, agricultural, and forestry laws. They also emphasised the importance of long-term assessments for agroforestry systems in research programs and the availability of policies and financial devices for technical support to farmers.

The Transition project aims to complete the interviews with a bibliographic search and compile a white paper. She concluded by saying that the white paper will evaluate current policies, raise awareness about the perception of agroforestry systems, and integrate other tools and results from the project.



Consuelo Varela-Ortega, then introduced **Gerry Lawson, Policy Analyst at the European Agroforestry Federation** who focused his intervention on specific questions related to financing policies, multi-functionality, and climate change. He began by discussing two closely related projects, DigitAF and REFOREST, which share a joint multi-stakeholder management board. He explained that DigitAF focuses on digital tools to support agroforestry in meeting climate, biodiversity, and sustainability goals. The project encompasses various components, including tools for policymakers, development of computing tools, predictive tools, and analysing the value chain process.



Emphasising the importance of policies in agroforestry, Gerry highlighted the challenges of quantifying trees outside the forest, especially on agricultural land. He discussed the significance of the Land Parcel Information System (LPIS) in Spain, which provides open access to public members and enables farmers to access their farm data. Additionally, he acknowledged the complexity of defining agroforestry and noted the variation in forest definitions across different countries. Gerry stressed the need for coordination between forestry and agricultural laws to ensure consistency.

Gerry mentioned an upcoming review of the implementation of agroforestry and carbon farming policies in 14 countries. The review aims to assess eco-schemes, pillar two measures, and indicators, and propose necessary changes. He also discussed the importance of coordinating forest monitoring rules among Member States, advocating for detailed indicators and impact assessments at regional, provincial, and municipal levels to effectively evaluate the Common Agricultural Policy (CAP).

Throughout his presentation, various environmental benefits of agroforestry were underlines, including adaptation to climate change, reduction of emissions in the livestock sector, improved air and water quality, flood management using tree rows, and integrated pest management. It was emphasised that Europe is not on track to meet its 2025 net emission targets and argued for the need to increase agroforestry to achieve these targets. He disagreed with the commission's evaluation comparing afforestation and agroforestry, asserting that agroforestry has a higher potential for long-term sequestration and challenged the notion that afforestation alone can solve carbon sequestration goals. He



concluded his talk with a call to plant more trees and regenerate existing trees outside forests, underscoring the need for extensive tree-planting efforts.

Consuelo Varela-Ortega commended Gerry Lawson for his insightful points and emphasised the importance of coordination across Member States and regions, aligning well with the ongoing project being discussed. She also acknowledged the relevance of the financial aspect of the policies and the role of eco schemes within the common agricultural policy, suggesting leaving a detailed discussion on this topic for the end of the session.

Carbon markets & nature-based solutions: some design issues

- Negative emissions & carbon dioxide removal
 - Need a strict definition of CDR \rightarrow removal from atmosphere
 - CDR = not avoidance, not emissions reductions
- Baselines & additionality
- · Liability & reversibility: who is responsible?
- Revenues
- Discounting
- · Premiums for co-benefits?



The next speaker introduced was **Milan Elkerbout**, **Research Fellow**, and **Head of Climate Policy at the Centre for European Policy Studies**, (CEPS). Milan's focus was on climate policy in general, with a specific emphasis on emissions trading in the European Union. He began by discussing the role of emissions trading, particularly in the context of carbon markets, highlighting its potential significance for land use, forestry, and agricultural sectors. He emphasised that agricultural greenhouse gas emissions account for 10% of the total emissions on average, with no significant decline observed. Land use has been identified as a critical topic of governance, not only due to its emissions but also as emissions reductions are pursued across the economy.

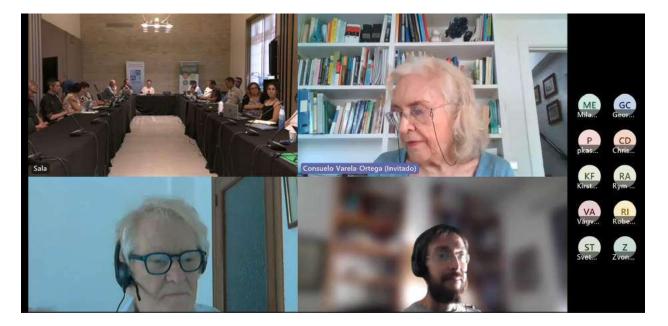
The dominant role of biomass in the EU energy policy mix and its contribution to renewable energy consumption was highlighted. However, sustainability concerns remain controversial. He acknowledged recent updates to sustainability criteria and the Renewable Energy Directive, expecting continued evaluation and strengthening of these measures.

Concerns were raised about the declining land carbon sink in the EU, which has shown significant decreases within a relatively short period of 5-6 years. Milan emphasised the importance of restoring and growing the land carbon sink as a crucial aspect of achieving net-zero emissions. He discussed carbon dioxide removal (CDR) as a necessary approach to compensate for remaining emissions in sectors such as agriculture, aviation, and certain industrial processes. Soil carbon sequestration and biochar were highlighted as potential methods of carbon removal in the agricultural sector.



Milan emphasised the need for carbon removal to involve taking carbon out of the atmosphere, rather than relying solely on avoidance or emission reduction strategies. He mentioned the effort-sharing framework in carbon accounting, indicating that as emission cuts deepen, burden-sharing for carbon removal may become necessary. However, currently nature-based solutions are not included in this framework due to concerns about accounting integrity. This is an area of key importance. To ensure integrity, there needs to be a homogenised framework with a fixed taxonomy. He finished his intervention by mentioning the international dimension of carbon markets and the potential for international cooperation and emissions trading under Article 6 of the Paris Agreement. To build on this, he suggested, creative mechanisms could be implemented for discounting and considering premiums for co-benefits.

Consuelo then gave the floor to Jaime Coello, Researcher at the Forest Science and Technology Center of Catalonia, affiliated with the Government of Catalunya. Jaime Coello introduced his work with the project LIFE AgroForAdapt, a five-year initiative funded by the European Union. The primary objective of this project is to enhance the role of agroforestry systems in climate change adaptation specifically within the Mediterranean region. The project focuses on two main types of agroforestry systems: silvoarable systems, which involve combining trees with various agricultural practices, and silvopastoral systems, which integrate trees with livestock management. Different versions of silvopastoral systems are being studied, including the addition of trees to grasslands and the introduction of animals to forests. The ultimate goal is to explore the optimal combination of trees with agriculture, grasslands, or livestock management to maximise the benefits.



Encompassing a significant geographical area, the project spans three working areas: Castilla, Leon, Catalonia, and Southern France. It incorporates 76 demonstrative systems, covering over 850 hectares of land. The project promotes agroforestry and assesses the ecosystem services provided by these systems, including socioeconomic impacts, microclimate regulation, biodiversity, and prevention of forest fires. They bridge the gap between scientific research and practical implementation. The project is also developing innovative technical and commercial tools to facilitate the promotion and adoption of agroforestry practices.



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To address the improvement of the policy framework, the initiative has identified nine thematic working groups. Each working group will define its methodology and concentrate on specific aspects of agroforestry, aligned with the topics discussed during the seminar. By the end of the year, each working group is expected to produce a draft report tailored to the objectives of their respective projects. These reports will serve as deliverables for the individual projects, streamlining the participants' efforts.

With the interventions from panellists now concluded, **Consuelo Varela-Ortega** moved the session to open discussion. She began by highlighting the importance of combining the effects of major policies such as the Green Deal and the CAP. She mentioned the positive contributions of these policies to agroforestry and the production of ecosystem services. She also emphasised the significance of capacity building and connecting with farmers. **Marcos Jiménez Martínez**, from the University of Bonn, primarily researching savanna ecosystems and agricultural productivity, sought more details about the project discussed by **Andrea Casadesús Cabral**.





Andrea Casadesús Cabral explained that the entire project is focused on agroforestry systems. They are searching for innovative crops and techniques to enhance the resilience of these systems. The project follows a participatory approach, involving various stakeholders and scientific support. Understanding the objectives and policies of partners from different regions, including outside Europe, poses a challenge.

Jaime Coello responded to Marcos' question about collaboration opportunities within the project. He mentioned that some working groups are more crowded than others, with common agricultural policy, carbon farming, and silvo pastoralism generating the most interest. However, all groups have room for collaboration, and participation in multiple groups is possible. The greenhouse gas emissions group is still determining if it has enough members to start working. The next step for the project is planning the first online meetings during the summer.

Ivan Hajdukovic made a comment highlighting the structure of the new CAP, which retains the two pillars of support for European farmers while emphasising a new political approach that prioritises results and performance over-rules and compliance. The new CAP also grants European countries more flexibility to adapt measures to their local conditions. Ivan then requested Gerry Lawson's perspective on the feasibility of the interventions outlined in the countries' CAP strategic plans to promote agroforestry.

Gerry Lawson responded by expressing the complexity of the new system and how each country now designs its own coding and system for the Pillar 2 schemes. He discussed the Agri-environment schemes, which provide income support for establishing climate-friendly practices, and the agroenvironment climate measure, which some countries implement to support agroforestry. Lawson pointed out that the payment in these schemes is based on the income forgone or the cost incurred. He also mentioned that Europe's claim of flexibility is sometimes contradicted by the restrictions in place, such as not allowing payments per ton of carbon sequestered. He highlighted the missed opportunity to challenge World Trade Organization rules and enable more effective agroforestry support. Lawson further mentioned the confusion between Pillar 1 (eco schemes) and Pillar 2 (agro-environment climate scheme) and the insufficient allocation of funds for agroforestry schemes, with some countries not implementing any at all.

Consuelo Varela-Ortega interjected, expressing her interest in discussing food production within the context of agroforestry but acknowledged the limited time available. She also emphasized the importance of expanding the analysis and lessons from the project to other regions in the world where agroforestry plays a crucial role in combining food production and forest conservation. Her experience in the Amazonian area of Brazil and Bolivia highlighted the significance of maintaining forests while producing food. Varela-Ortega praised the presenters and the panelists for their valuable insights and analyses on carbon sequestration, carbon markets, and the need for coordination within the EU policy framework.

Rico Hübner directed a question to **Jaime Coello** regarding the long-term maintenance of the network of farms.

Coello mentioned the involvement of the European Agroforestry Federation (EURAF) and their support for the project. The aim is to bring agroforestry farmers into the EURAF community and create a



virtual platform to connect farmers and promote networking. He mentioned plans for field trips, seminars, and other activities to strengthen the virtual community and eventually transition into more physical interactions.

Gerry Lawson followed up with a question for **Milan Elkerbout** regarding the debate on carbon avoidance, certification of greenhouse gas reductions, and carbon removals. **Elkerbout** noted that the debate involves powerful interest groups and mentioned the need for rigorous carbon accounting. He expressed scepticism about treating anything that is not scientifically proven as carbon dioxide removal.

Consuelo Varela-Ortega concluded the session with two remarks. She highlighted the importance of considering food production in agroforestry discussions and expressed her desire to expand the project's analysis and lessons beyond the EU to other key regions like the Amazon. She thanked the panellists and expressed her hope for future collaboration and physical attendance at future conferences.

Ivan Hajdukovic, as a member of EMEA, expressed gratitude to the panellists and participants for their valuable contributions. He emphasised the meaningful discussion and the insights gained from the presentations. He also thanked Consuelo for moderating the policy session and concluded by looking forward to future policy sessions.



SPEAKER BIOGRAPHIES



Ivan Hajdukovic, Researcher, EMEA

Ivan Hajdukovic is an economist with a strong background in quantitative methods and data analysis. His main areas of interest are macroeconomic policies, international economics, environmental economics, humanitarian and sustainable development. He obtained his PhD in Economics (Summa Cum Laude) at the University of Barcelona in July 2021. He holds a Master's degree in Economics from the University of Lausanne and a Bachelor's degree in Economics from the University of Geneva.



Consuelo Varela Ortega, Board Member, EMEA

Professor of Agricultural and Natural Resource Economics. She is also a member of the recently created Research Centre for the Management of Agricultural and Environmental Risk (CEIGRAM). She has been involved, during the past 25 years in research in Spanish, European Union and International networks in the fields of agricultural policy and the environment, water resources management and institutions. Professor Varela-Ortega is the country representative for Spain in the International Association of Agricultural Economists (IAAE) and has taken part in the scientific committee and advisory panels of several international institutions, such as the Global and National Food and Water System for the CGIAR Challenge Program on Water and Food and the CIRAD (International center for agricultural development research) in France.



Enrique Doblas, Researcher and Transfer officer, CREAF

Enrique has a PhD in Biology and is involved in research collaboration and project development, coordination and evaluation. He is also interested in international development and founded an NGO that forges partnerships to overcome complex environmental challenges. He has been part of several EC projects on ecosystem resilience and management under global change while he also perseveres with research on soil ecology, leading to many talks and publications.



Andrea Casadesús Cabral, Researcher, BETA Tech Centre

Dr. Andrea Casadesús is a biologist specialised in plant ecophysiology, PhD in Ecology, Environmental Science and Plant physiology (University of Barcelona). Her main expertise is in the field of plant stress responses (phytohormones and antioxidants, etc.) and in the study of the mechanism of action of biostimulants (mainly those from animal origin). At the BETA Technological Center, she is currently a researcher on soil and nutrient management, mainly working on circular economy and resilient agriculture.





Jaime Coello, Researcher, Forest Sciences Centre of Catalonia (Spain)

Jaime has a PhD in Forest Engineering and an MSc in European Forestry. He has worked as an engineer-researcher on forest restoration, silviculture and agroforestry systems since 2006.



Gerry Lawson, Policy Analyst, European Agroforestry Federation

Gerry worked for 10 years working at the Natural Environmental Research Council HQ in Swindon on International and Data Policies, with two years working in the Research Councils UK - the coordinating body for all seven UK Research Councils. Upon retirement, Gerry continues to assist as a volunteer for the European Agroforestry Federation, an NGO based in Montpellier and Bruss els.



Milan Elkerbout, Research Fellow and Head of the climate policy programme at CEPS

Milan Elkerbout is a Research Fellow and Head of the climate policy programme at CEPS. He has been working in the climate and energy unit of CEPS since late 2014. In 2019 and 2020, Milan was a Mistra visiting fellow at the IVL Swedish Environmental Research Institute in Stockholm, as part of the ongoing Mistra Carbon Exit research programme.

Milan's research focuses on EU climate policy, in particular the EU emissions trading system (ETS) and industrial decarbonisation policies. He has written extensively for CEPS and externally on the policy mix to reduce greenhouse gas emissions in the steel sector and other energy-intensive industries. He also focuses on the role of negative emissions and carbon capture and storage (CCS) in EU climate policy. Other topics of interest include state aid control, industrial policy, and trade-climate policy interactions.







Thinking and acting for the future of the Mediterranean

