# Agricultural trees for resilient landscapes: a vision for European agroforestry

Contribution to the forthcoming '**Vision for Agriculture and Food'** from the European Agroforestry Federation (EURAF), Montpellier, Brussels, Toledo.



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The European Agroforestry Federation (EURAF) aims to promote the use of trees on farms throughout Europe. We welcome publication of the Strategic Dialogue for the Future of Agriculture, and the fact that agroforestry is identified as a key tool for sustainable food systems (EURAF <u>Post</u> 4.9.24). Europe needs an emergency, but sustainable, programme of tree planting and renewal on agricultural land. To achieve this we look forward to a continuing dialogue with the wider agricultural and forestry sector. Further information on the role of agroforestry in EU agriculture and forestry is available from the <u>DigitAF</u> and <u>Reforest</u> projects and <u>other</u> projects listed on the DigitAF website. The European office of "<u>World Agroforestry</u>" (CIFOR/ICRAF), provides a link between global and European agroforestry knowledge. This vision document is structured around three key pillars: knowledge, support, and impact measurement. We also outline 17 concrete policy recommendations for EU Member States and the EU Commission.



Graphic courtesy of Patrick Worms, Senior Policy Advisor, World Agroforestry

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**Desired impact:** make the most of existing tools, knowledge and scientific evidence. **Undesired impact:** reinvent the wheel.

The previous CAP Rural Development Regulation (1305/2013) defined agroforestry as "Land use systems in which trees are grown in combination with agriculture on the same land'. Article 4 of the present CAP Strategic Plan Regulation (2021/2115) defines agroforestry as part of agricultural land<sup>1</sup>. Grazing can also take place on **forest land** - where it plays a crucial role in fire mitigation and in providing shade and shelter<sup>2</sup>, and biodiversity if managed well. In forests, agroforestry is a periodic management practice rather than a land-use. Member States (MS) were asked in Article 4(3) of the CAP Strategic Plan Regulation to provide national definitions of agroforestry. These were included in all national Strategic Plans, and have been summarised in EURAF Policy Briefing #22. However, the national definitions are seldom measurable using remote sensing techniques, since they usually quote minimum and maximum thresholds of tree numbers per hectare, without information on whether a "tree" should be a mature tree or a seedling. Thus, for the purpose of the EU Carbon Removals Certification Framework (CRCF 2024/3012), EURAF has suggested a measurable definition relying on the "agricultural" status of a parcel in the CAP Land Parcel Identification System (LPIS) superimposed on the % tree-crown-density (TCD) for each parcel, derived from the Copernicus system at 10m resolution. A minimum threshold of 5% crown cover is proposed for agroforestry, since this is the value used by the FAO in its global Forest Resource Assessment to delimit "other wooded land" - a category for trees-outside-forests. The upper threshold for agroforestry is whatever the Member State has set in its national definition of "forest" in the LULUCF Regulation (2018/841) and in its national forest inventory. Clear national land-use maps showing the distinction in Member States between "forest" and "agroforest" parcels are crucial for certification of deforestation-free timber and meat products, as stipulated by the EU Deforestation Regulation (EUDR 2023/1115).

Recommendation 1. A harmonised and measurable definition of agroforestry should be used in future guidance for the EU CAP, NRR and CRCF Regulations: "An agroforest parcel is an agricultural parcel, including boundaries, with more than 5% tree-cover, or with tree-planting or management which is intended to exceed 5% cover. Shrubs may also be present" (EURAF <u>Policy Briefing #15</u>)

Member States use the Land Parcel Identification System (LPIS), Geospatial Aid Application (GSAA) and Area Monitoring System (AMS) to track eligibility for CAP Payments. Increasingly, these databases are also being used for national LULUCF inventories of greenhouse gas emissions from "cropland"; "grassland", "forestland", "wetland", "settlements" and "otherland". It is essential, therefore, that the categorisation of "forest" and "agriculture" (i.e. cropland plus grassland) should reflect the classifications used for LULUCF reporting. It is therefore unfortunate that the (FAO) definition of "forest" has been introduced in both the draft Forest Monitoring Regulation (FMR - COM/2023/728), and the EUDR. Member States have listed their national thresholds for minimum block size, crown cover and tree height in Annex II of the EU LULUCF Regulation (<u>2018/841</u>). These thresholds are also included in national forest laws. The FAO definition is needed only for 5-yearly reporting as part of the "standardised" FAO Forest Resource Assessment. The draft FMR should therefore be amended to refer to both the LULUCF (UNFCCC) and the FAO definitions.

Recommendation 2. The Forest Monitoring Regulation should refer to the FAO definition of "forest" for the purpose of the 5-yearly FAO Forest Resource Assessment, but for other purposes the forest thresholds given in Annex II of the LULUCF Regulation should be used. (EURAF <u>Policy Briefing #17</u>)

<sup>&</sup>lt;sup>1</sup>Agroforestry was in the mandate for the "<u>Strategic Dialogue on the Future of EU Agriculture</u>" and was mentioned 5 times in the text, however only 9 Member States included agroforestry measures in their CAP Strategic Plans (2023-2028) - <u>often</u> with small-scale and regional budgets.

<sup>&</sup>lt;sup>2</sup> Forest grazing is prohibited in many countries by national Forest Laws - particularly in central and eastern Europe.

Agroforestry is an ancient land use system in Europe. It is <u>estimated</u> to cover around 15.4 million ha, which is equivalent to 3.6% of the EU territorial area and 8.8% of the utilised agricultural area. EURAF has developed a multi-lingual agroforestry typology based on the existing EU classification of land parcels into agricultural land and forest land, and whether trees on these parcels have been given the legally protected status of "landscape features" as part of the CAP Conditionality Pillar I rules. This classification can be used by Member States in CAP Integrated Administration and Control (IACS) and Land Parcel Identification Systems (LPIS).

Tree location	Agroforestry System	Agroforestry Practice		
		Agricultural Land	Forest Land	
Trees inside parcels	Silvopastoral agroforestry	1 Wood pasture	2 Forest grazing	
	Silvoarable agroforestry	3 Alley cropping 4 Alley coppice 5 Food forests	5 Food forests	
	Permanent crop agroforestry	6 Orchard cropping, 7 Orchard grazing.		
	Agro-silvo-pasture	8 Agro-silvo-pasture		
Trees between parcels	Tree Landscape Features (protected by CAP Conditionality Rules)	9 Woody-landscape-features		
Trees in settlements	Urban agroforestry	10. Settlement agroforestry		

Recommendation 3. Member States should use the multi-lingual EURAF Agroforestry Typology to record agroforestry land use practices in their CAP IACS and LPIS systems and for the recording of "woody landscape features" for CAP and NRR purposes (EURAF <u>Policy Briefing #1</u>).

Agroforestation is not just tree planting in agricultural parcels. It involves intercrop management, ploughing, pruning, pollarding, thinning, mulching and other management practices and proper design to increase yields and reduce above- and below-ground competition. It is a form of ecological intensification inspired from agroecological practices, which provides a safety-net for nitrates, an aerial-filter for ammonia. pesticides and particulates, and a carbon-pump<sup>3</sup> to increase soil organic matter at depth - essential in conventional farming systems. It brings environmental and climate benefits, and protects animals and crops from temperature extremes. Clear long-term targets are therefore needed for expansion. EURAF has recommended (<u>Press Release 6.2.24</u>) an increased planting programme, and our mission statement is "*belping private and public sectors in Europe to establish 10% tree cover on agricultural land by 2040*". Agroforestry provides many environmental and economic services, without requiring that the land is converted to forestry. The advantages are explained in the May 2024 <u>Brno Declaration</u>.

Recommendation 4. In view of the economic, environmental, biodiversity and climatic benefits of agroforestry, Member States should set CAP, LULUCF, NECP and NRR targets for existing farmland to have 10% tree-crown cover in the form of agroforestry by 2040 (EURAF <u>Policy Briefing #26</u>).

<sup>3</sup> Explained by a) organic exudates from fine tree roots, b) high-turnover rates of fine tree roots - with a half-life often measured in weeks, c) death of surface tree roots when ploughed, but, as long as ploughing is regular it forces structural roots to be formed deeper in the profile, d) fine root, and sometimes structural root, turnover when the lower branches of trees are pruned (as they must be in agroforestry) --- again "pumping" carbon to greater depths.

## 2. Agroforestry - how can support be better channelled?

**Desired impact:** maximise the contribution of agroforestry systems to EU agro-environmental targets. **Undesired** *impact:* continue to work in 'silos' and continue to miss climate/planting targets

Current CAP Plans include only modest commitments to tree planting. The total area planned for "afforestation, reforestation and agroforestation" (<u>CAP Result Indicator 17</u>) is 570 kha, but without the large programmes in PT and EL it is only 197 kha. Most Member States have lower targets in this CAP than initially set in the CAP 2007-2014, and a large proportion of targets in the previous CAP were not achieved (DG AGRI). This apparent disinterest in tree-planting must be seen alongside the projected under-achievement by 40-50 Mt CO2e of the EU's LULUCF target of -310 MtCO2e net carbon capture by 2030, and flat-lining of agricultural emissions at around +380 MtCO2e. Trees planted now take a long time to sequester carbon and planting *cannot be delayed*. The shortfall in land sector emissions is so grave that Member States should not wait for the new CAP to start in 2028 or 2029, but should seek to implement some of the climate-orientated changes suggested in the <u>report</u> circulated to MS by DG CLIMA in May 2023.

Of the 80 kha "business as usual" agroforestry trees planned by Member States in the last CAP (2015-23), only 5 kha were planted by the end of the period (DGAGRI pers comm). Many factors explain this: an absence of trained advisory services, uncertainty on the part of farmers regarding eligibility for area payments, incompatibility of tree-planting with short-term tenancies, poor grant terms and conditions, worries about the attitude of inspectors, insufficient recognition from nature conservation authorities that trees and shrubs are valuable components of agricultural systems, and resistance from Managing Authority staff to complications introduced by agroforestation in the Geospatial Aid Application (GSAA). It is easy to publish targets, but clear mechanisms should be in place to correct any under-achievement. This appears not to have been the case. Both financial and non-financial incentives and disincentives are important. Engagement is also needed with municipalities, provinces and wider stakeholders in developing climate adaptation plans. Member States should exchange experience on legal and operational 'good practices' in the area of tree-planting by tenant farmers.

The <u>three billion "additional" tree target</u> of the Commission is an important initiative, but after 4 years it still has to achieve 1% of its goal. The commitment was launched in the Forest Strategy (<u>COM/2021/572</u>), and was repeated in Article 13 of the Nature Restoration Regulation (<u>2024/1991</u>). Yet it is proving difficult to un-entangle "additional" trees from "business as usual" trees, such as those established by the private sector with the assistance of grants from Member States. Recording of trees in the EU-EEA MapMyTree <u>portal</u> therefore needs to be better integrated with mapping of afforested parcels in national LPIS systems, and with the carbon certification land parcel registry system which is due to be developed by DG CLIMA before 2028.<sup>4</sup>

Recommendation 5. Agroforestation involves small areas of trees but is usually subject to the same environmental constraints and rules which govern large-scale afforestation. Member States should ease the level of bureaucracy on agroforestry schemes, recognizing the environmental benefits of small-scale tree-planting and regeneration. Exchange of best practice regarding tenants rights and responsibilities is also needed (see <u>Brno Declaration</u>).

The EU Carbon Removals Certification Framework (<u>CRCF</u>) includes "agricultural mineral soils and agroforestry" as the first of the three certification methodologies. Concern existed over the "additionality" requirement of the CRCF, and whether CAP support for tree-planting would be judged as "double-funding". However, the draft DG

<sup>&</sup>lt;sup>+</sup> On 24/11/24 DGAGRI <u>published a study</u> on the "potential" contribution of Measures included in the CAP Plans of 19 Member States. This is an important step forward, but the potential contribution mentioned (29Mt CO2/year) needs to be carefully evaluated.

CLIMA proposal indicates that new agroforestry carbon farming schemes will have a "zero baseline" as long as the trees are less than five years old. This allows farmers to use CAP Article 30 (ecoschemes) for the planning of tree-planting and initial soil carbon sampling, followed by CAP Article 73 (investments) support in year1 for the planting itself and CAP article 70 (agri-environment-climate measures AECM) payments for annual maintenance payments during the first 5 years. From year 6 onwards carbon certification will take over and provide a modest annual voluntary-carbon payment of 20-30  $\in$  per tonne of projected annual CO2 removal. Payment per tonne will be around 70-100  $\in$ /tonne in the statutory ETS market, so it is hoped that the land-parcel based registry of voluntary certificates introduced by DG CLIMA in 2028 will facilitate introduction of a statutory "<u>Agri-ETS</u>" scheme in the medium-term. Carbon farming payments can also contribute to the restoration of the extensive but degraded/abandoned silvopastoral systems found in many parts of Europe - for example, the Dehesa and Montado systems of the Iberian Peninsula.

Recommendation 6. All Member States should implement CAP measures for agroforestry tree planting and restoration of degraded agroforestry areas from year 1-5, with support from EU voluntary carbon farming certification thereafter (EURAF <u>Policy Briefing #20</u>).

The future Multiannual Financial Framework (MFF) is an opportunity to evaluate the EU's spending on the Common Agricultural Policy, but also to reinforce other financial mechanisms (e.g. Cohesion Fund, European Regional Development Fund, etc). EURAF believes that existing CAP incentives are insufficient to accelerate the much-needed expansion of agroforestry. Currently, the annual budget earmarked for the EU Solidarity Fund (<u>EUSF</u>) from 2024-27 is around  $\in 1.1$  billion, with funds going towards post-disaster recovery. In the context of buffering climate shocks, an *Agroforestry Climate Resilience Fund* could contribute greatly to climate adaptation and to eventual savings in fighting disasters. Agroforestry systems and woody landscape features cannot stop flash floods or wildfires, but they can greatly reduce their impact when planned on a landscape-scale in conjunction with municipalities as part of regional climate-adaptation planning. In the long run, such investments in agroforestry systems will lead to savings in the area of post-disaster recovery.

Recommendation 7. Because of the advantages of agroforestry for climate adaptation, a budget in the range of about 1% of the EU Solidarity Fund budget should be allocated to an Agroforestry Climate Resilience Fund (<u>Policy Briefing #27</u>).

Agroforestry practices are an integral part of the restoration and management of natural habitats at a national level. Member States are asked in the Nature Restoration Regulation (NRR - 2024/1991) to set targets for the restoration of landscape features (including lines of trees, isolated trees, hedges and small copses), and the Strategic Dialogue on the future of EU Agriculture calls for a "well-resourced nature restoration fund (outside the CAP)". Regions, counties and municipalities should be involved in the creation and management of these funds, and their integration into regional climate adaptation strategies. The involvement of municipalities in research and demonstration was pioneered in the EU <u>Climate Mission</u>, and is also vital for the "Nature Restoration Fund". When expanding the role of trees in landscape restoration plans it is important to map the distribution of tenanted land (with greater constraints on tree planting) and also areas of common land in both the <u>EU Farm Structure Survey</u> and the <u>LPIS</u>. New areas of common land are an option for agroforestry, particularly near settlements. The Dutch <u>Herenboerderijen</u> are an example, as are the "forest gardens" being developed in <u>Sweden</u> and <u>Poland</u>. Areas of extensive silvopastoralism (e.g. in ES and PT) are often best managed as common land, and this should be encouraged. Greater involvement of citizen science and voluntary groups is also needed. Collaborative agroforestry tree planting measures in the CAP should be incentivised, involving groups of farmers, foresters and community groups. The layout of trees should be optimised at landscape scale.

Recommendation 8. Agroforestry should be a key component of the "well-resourced Nature Restoration Fund" recommended in the Strategic Dialogue, which should be planned at municipality scale involving a wide range of local stakeholders (<u>Policy Briefing #18</u>).

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An <u>Agri-Food Just Transition Fund</u> could also offer financial instruments for farmers and land managers to transform their practices and develop agroforestry systems. This should include support dedicated to upskilling, reskilling, and vocational training of workers, social security and social protection for those whose income will be affected by the transformation to more sustainable<sup>5</sup> farming including agroforestry. This fund can assist advisory services active on the ground to assist farmers in their transition towards climate neutrality by 2050. Funds should also favour employers that demonstrate a strong commitment to respecting workers' rights, as indicated in the 'Long-Term Vision for Rural Areas'. Examples of economic activities that may serve as amplifiers/multipliers are ecotourism or 'slow tourism'. Businesses in these areas contribute to strengthening synergies between economic development (e.g. complementary sources of income in rural and isolated communities), environmental sustainability (e.g. tourists are better informed about food produced locally such as those with 'geographic indications'; efforts in the area of nature protection, etc.), and social progress (e.g. areas where ecotourism or agrotourism are developed usually have better infrastructure, access to e-services, etc.).

Recommendation 9. The future EU Agri-Food Just Transition Fund should play a key role in accelerating transition to net-zero EU agriculture and forestry, together with better understanding of the climate impact of agricultural and forestry measures (<u>Policy Briefing #11</u>).

While agroforestry is considered one of the most potent nature-based solutions in the area of climate mitigation and adaptation, R&I funding remains low in contrast to other promising solutions (e.g. renewable energy, decarbonising transport, etc). <u>The EU Innovation Fund</u> could be a source of inspiration when it comes to the average budget allocated to one project (about 65 million eur), as opposed to the considerably lower budget allocated to e.g. Cluster 6 Horizon Europe projects.

Recommendation 10. Implementation of the Strategic Dialogue recommendation that a higher percentage of Horizon Europe funds should be devoted to projects which develop and test new technologies and innovations for sustainable agriculture (<u>Policy Briefing #23</u>).

Farmers, foresters, municipalities, provinces and regions should be involved in collaborative agroforestry schemes. These can include fire mitigation planning (with grazing animals in fire-breaks and understories); flood management (with tree-infiltration-zones in the uplands and flood-breaks to redirect floodwater in the lowlands); animal welfare (with shelter in living barns with trees at conventional densities and shade from trees at wider agroforestry densities). More investment is needed through <u>mechanisms</u> such as the European Regional Development Fund or the Cohesion Fund.

Recommendation 11. Increase the use of agroforestry in EU Adaptation Planning (e.g. CAP Strategic Plans, Climate Adaptation Plans and NECPs) (<u>Policy Briefing #27</u>).

<sup>&</sup>lt;sup>5</sup> The EU Sustainable Finance Initiative (aka the Taxonomy Regulation) has developed criteria and indicators for "no significant harm" and a "positive contribution" to 6 measures of "sustainability": climate mitigation, climate adaptation, pollution reduction, water resources, biodiversity and the circular economy.

Agroforestry systems can be used on land managed conventionally, and it may also help conversion to organic farming. However, one of the bottlenecks in this potential conversion is the implementation by some Member States of "double funding" constraints<sup>6</sup>: limiting farmers to subsidies for organic farming or agroforestry, but not both.. This leads to confusion on the part of farmers, and gives the impression that organic and agroforestry systems compete: whereas they are entirely complementary. It makes sense for Member States to offer sequential "packages" of support measures to assist agro-ecological conversion, such ecoschemes for farm planning and soil sampling, investment measures for tree planting and agri-environment-climate measures to provide annual support for the initial years of establishment. "Stacking" of these measures on the same parcel should not be an issue if this level of support is necessary to bring about the change in practices required.

Recommendation 12. Member States should encourage "stacking" of agroforestry payments alongside organic farming and other environmental payments on the same parcel.

#### 3. Agroforestry - measuring impacts and moving forward?

**Desired impact:** collect data once and use it multiple times. **Undesired impact:** increase the bureaucratic burden on farmers, foresters and land managers

Statistics on public tree planting and maintenance at an EU level are not consistently provided to the Commission, and, while the 3-billion tree initiative is welcome, the data provided to the <u>MapMyTree</u> initiative is purely voluntary and hence incomplete. Carbon farming certification will help but a national registry of tree planting is needed to understand successes and failures at national, regional and local level. Current data is too imprecise to enable robust carbon farming or to pay for predicted environmental results - including the past efforts of early adopters. Nor is data collected on efforts to naturally regenerate tree cover in areas of degraded or abandoned agriculture.

Recommendation 13. Data on public-sector and private tree planting in the EU should be available in a single portal, with geolocation to parcel level, particularly since much private-sector planting is assisted by public funds (<u>Policy Briefing #69</u>).

Similarly, data on the environmental and climate impact of CAP agricultural measures is very imprecise, despite repeated European Court of Auditors (ECA) <u>reports</u>. The recent <u>publication</u> - "Rough estimate of the climate change mitigation potential of the CAP Strategic Plans of 19 Member States over the 2023-2027 period" is a very welcome first step to a more rigorous evaluation and the effect of the CAP on national GHG emission reporting. Overall, however, there is little evidence that CAP Delivery Model has yet **moved** from monitoring "compliance" to rewarding "performance", particularly performance in terms of climate mitigation or adaptation (<u>ECA report</u>).

Recommendation 14. A EU Rural Data Governance Framework should be agreed with forestry and farming stakeholders, which integrates geospatial information on land use in agriculture and forestry and meet the needs of carbon farming certification and national greenhouse gas emissions reporting (Policy Briefing #69).

The Farm Sustainability Data Network (<u>FSDN</u>) is a welcome development, although data won't be available until 2028. It has questions on the area of woody landscape features and has recently included questions on "forest land including standing timber" and on specific farming practices. It is important that this data is fully integrated with

<sup>&</sup>lt;sup>6</sup> For example, in PL the same parcel cannot get both organic and agroforestry payments, in CZ only the non-wooded strip receives organic payments, while in DK and IE both payments are given in full.

the Farm Structure Survey and LPIS/GSAA reporting. Landscape-feature metrics in the Nature Restoration Plans (developed under the NRR) should be harmonised with CAP metrics (Member States should finalise monitoring methods by August 2025). There are concerns that the <u>Implementing Regulation</u> of the FSDN is collecting a lot of information from farmers which should be harvestable automatically from IACS or LPIS data already held by MS.

Recommendation 15. A harmonised index of "landscape features" should be used in the CAP and the NRR, with MS encouraged to record these accurately in IACS/LPIS systems to facilitate "payment by results" and to provide information automatically to the Farm Sustainability Data Network (<u>Policy</u> <u>Briefing #69</u>).

Many Member States have failed to fully implement the INSPIRE Directive for open access to publicly supported geospatial data. The <u>GreenData4All</u> initiative is particularly important in the land sector. Forestry and agroforestry data from both the private and public sectors should be incorporated in a single database, as part of a harmonised open-source parcel-based information system linking agricultural (LPIS), forestry (NFI) and (eventually) cadastral information. The challenges, and <u>potential errors</u>, of EUDR reporting make this more urgent than ever.

The Farm Sustainability Tool (<u>FaST</u>) potentially provides land owners the opportunity to enter their soil details at parcel scale, to gain access to a range of models and integrate with a future registry of carbon farming commitments. Parcel-scale data is crucial to evaluate the implementation of current legislation (e.g. Nitrates Directive, Water Framework Directive), policies in draft (e.g. <u>Soil Monitoring Directive</u> and the Forest Monitoring Regulation (<u>COM/2023/728</u>) and future initiatives (e.g. <u>Water Resilience Initiative</u> and <u>Nutrient Management Action Plan</u>). There is little evidence however that the FaST tool is being delivered by MS as originally envisaged..

Recommendation 16. New EU rural data gathering initiatives such as the FSDN, FaST and GreenData4All depend on open data from the EU Land Parcel Identification System: all MS should make anonymised LPIS information available on public portals during 2025 - allowing them to finally meet the requirements of the INSPIRE Directive (2007/2/EC). (<u>Policy Briefing #69</u>)

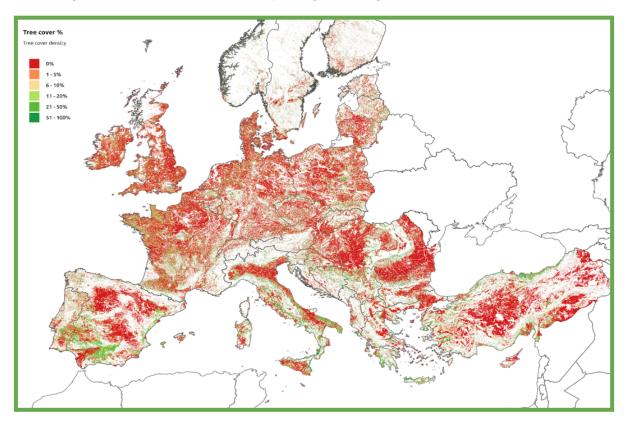
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Strict rules on GHG emissions and carbon-sequestration will penalise EU farmers if similar obligations are not placed on imports of food and timber products from outside the EU. This is the so-called "international leakage" of emissions. However, following WTO rules, this modification to the CBAM is unlikely to be possible until an Agri-ETS is implemented in the EU. This measure is needed to reward the efforts of farmers to implement agroforestry and other nature based solutions to climate change.

Recommendation 17. Following publication of the Delegated Acts for the EU Carbon Removals and Carbon Farming (CRCF) Regulation in August 2025, priority should be given to drafting rules for the inclusion of agriculture and forestry in the EU Emission Trading System (<u>Policy Briefing #8</u>).

#### 4. EURAF's Mission

**EURAF's mission** is to "help ensure that all agricultural land (grassland and cropland) has a tree-crown-cover above 10% by 2040, or has tree planting in place to achieve this". The map shows current agricultural areas with less (red) or more (green) than this threshold. There is a long way to go to achieve the 10% target, and turn the map green. The key message is that agroforestry can provide a major contribution to climate, environmental and economic targets, without the need to formally change the designation of the land to "forest".



Data in the map is Copernicus tree-cover density from 2018 superimposed on Corine agricultural land (minus permanent crops) for the same year. Each pixel covers 1 ha (100 m x 100 m). The map was produced for the EU DigitAF project by Planet Inc and the European Forest Institute.

### 5. EURAF's Participation in Research Projects

This document was produced with support from the six research projects listed below. The views and opinions expressed are those of EURAF and its affiliated organisations only.

- 1. **DigitAF :** *Digital Tools to help Agroforestry meet climate, biodiversity and farming sustainability goals: linking field and cloud.* 1.7.2022 30.6.2026. <u>Horizon Europe. Project website</u>
- 2. **ResAlliance:** *ResAlliance landscape resilience knowledge alliance for agriculture and forestry in the Mediterranean basin.* 1.12.2022 20.11.2025. <u>Horizon Europe. Project website</u>
- 3. **Distender:** *Developing Strategies by integrating mitigation, adaptation and participation to climate change risks.* 1.6.2022 20.11.2025. <u>Horizon Europe. Project website</u>
- 4. **CREDIBLE:** Building momentum and trust to achieve credible soil carbon farming in the EU. 1.6.23 31.5.26. <u>Horizon Europe</u>. <u>Project Website</u>
- 5. **Deep Horizon:** *Deploying ecosystemic solutions to improve soil health and uncovering subsoil functions in the critical zone.* 1.10.24 30.6.28. <u>Horizon Europe. Project website</u>
- 6. Carbon Farming Med. Helping Mediterranean countries meet the EU's 2035 climate goals in agriculture. 1.2.24 20.9.26 Interreg Euro-Med. Project Website.

The following are recommendations for inclusion in the EU DGAGRI "Vision For Agriculture". **Member States** should include agroforestry in their agricultural, environmental, forestry & climate policies, **by ...** 

**1... introducing the following measurable definition of agroforestry** in future EU CAP and CRCF guidance: "An agroforest parcel is an agricultural parcel, including boundaries, with more than 5% tree-cover, or with tree-planting or management which is intended to exceed 5% cover. Shrubs may also be present"

**3.** ... using the multi-lingual EURAF Agroforestry Typology to record agroforestry land use practices in their CAP IACS and LPIS systems.

5. ... reducing the bureaucracy and increasing budgets for the existing agroforestry measures in 9 Member States - since the current rules were mainly designed for larger scale afforestation projects.

6. ... implementing agroforestry support in the 18 Member States which currently have no

**agroforestry measures** - including: ecoschemes for design and initial carbon sampling, investment measures for planting and agri-environment- climate support from years 2 to 5. Voluntary carbon farming certification can start in year 6.

**11.** ... stressing the use of agroforestry in Adaptation Planning (e.g. CAP Strategic Plans, Climate Adaptation Plans and NECPs).

**12.** *...* **allowing "stacking" of agroforestry payments** alongside organic farming and other environmental payments on the same parcel.

**15.** ... sharing approaches on collecting data on Result Indicator 17 (Area of Landscape Features) through IACS/LPIS systems, to facilitate CAP and NRR reporting and potential "payment by results" to farmers.

The **Commission** should set the framework for planning at the boundary of forestry and agriculture **by** ...

2 ... including the UNFCCC and national definitions of "forest" in the FMR alongside the FAO definition, to allow greater consistency with the statistics used in annual reporting on GHG emissions by MS. 4. .... encouraging Member States to set CAP, NRR and NECP targets of 10% tree-crown cover on agricultural land in the form of agroforestry by 2040.

7. ... hypothecating 1% of the EU Solidarity Fund budget to the establishment of agroforestry as a catchment scale climate adaptation measure, particularly to reduce the effect of flooding and storms.

8. ... emphasising agroforestry as a key component of the "well-resourced nature restoration fund", as recommended in the Strategic Dialogue, with planning at the province/municipality scale and involving a wide range of local stakeholders.

**9.** ... including agroforestry as a component of the EU Agri-Food Just Transition Fund, aiming to accelerate the transition to net-zero EU agriculture and forestry, together with a better understanding of the climate impact of agricultural and forestry measures.

**10.** ... increasing the focus of Horizon Europe Framework Programme-10 on calls seeking to develop and test new technologies and innovations for sustainable agriculture.

**13.** ... increasing the visibility of data on public- and private-sector tree planting by providing a single EU portal, with geolocation to parcel level, linked to the future EU 2028 carbon-farming registry.

14. ... implementing an EU Rural Data Governance Framework, agreed with forestry and farming stakeholders, which provides land use data at a parcel scale and uses the "record once use multiple times" principle.

16. ... ensuring that new EU rural data gathering initiatives such as the FSDN, FaST and GreenData4All use anonymised data from the EU Land Parcel Identification System - finally meeting the requirements of the INSPIRE Directive (2007/2/EC).

17. .. planning for a statutory EU Agricultural and Forestry Emission Trading Scheme, as soon as possible after the voluntary EU Carbon Removals Certification Framework is implemented.

- Agri-ETS A possible extension to the EU Emission Trading System to include agricultural and forestry operators.
- AMS <u>Area Monitoring Services</u> a bespoke Copernicus Sentinel-1 and Sentinel-2 data offered to MS Payment Agencies and used to check the crops and cultivation of all agricultural parcels.
- **CAP** -the Common Agricultural Policy where rules are determined by the CAP Strategic Plan Regulation (2021/2115), and secondary legislation. National interpretations and definitions are provided in national CAP <u>Strategic Plans</u>
- CBAM the EU <u>Carbon Border Adjustment Mechanism</u>, which Parliament's Agriculture committee and others have suggested should be extended to agriculture and forestry imports. This can only happen if an Agri-ETS is introduced.
- **Copernicus** The <u>Copernicus programme</u> collects and transforms data from multiple sources (i.e. satellites and in-situ (non-space) measurements) into operational services to provide information about the earth's land, oceans and atmosphere, and to monitor climate change, support European emergency management, and safeguard civil security.
- **Corine** The 'Coordination of information on the environment' is an inventory of European land cover split into 44 different land cover classes. Corine also shows the changes between classes over four periods since 1990.
- **CRCF** Parliament adopted a provisional agreement for the EU Carbon Removals and Carbon Farming Certification Regulation on 19/4/2024. Discussions are taking place on a number of Delegated and Implementing Acts to define the rules under which the Regulation will operate from 2026 onwards.
- **EUDR** the EU Deforestation Regulation passed into law on 29.6.23, and requires operators to provide certificates of due diligence that certain agricultural products are not produced from deforested land. To operate well it needs national databases separating forest land from agroforestry.
- ECA the European Court of Auditors has produced a range of important reports on EU environmental and agricultural issues including on the <u>LPIS</u>, <u>environmental targets</u> and climate action
- **ESF** the <u>European Solidarity Fund</u> enables the EU to provide financial support to a Member State, a country involved in accession negotiations or a region in the event of a major natural disaster
- **EU-ETS** the EU Emission Trading System was launched in 2005 and is the world's first carbon market. It is based on a "cap and trade" principle, where the cap refers to the limit on GHG emissions by operators operating in the system. The EU is investigating options for introduction of an agricultural/forestry ETS scheme (Agri-ETS see above).
- **FaST** the <u>Farm Sustainability Tool</u> for nutrients is a joint initiative of the EU DG-AGRI, DG-DEFIS and DG -DIGIT) which aims to provide a parcel-based range of digital tools and data available to EU farmers, Member State Paying Agencies, farm advisors and developers of digital solutions. MS should provide this by December 2024
- FMR <u>Forest Monitoring Regulation</u> a draft regulation to plug existing gaps in the information on European forests and create a

comprehensive forest knowledge base. EURAF <u>regrets</u> that the draft uses the FAO rather than UNFCCC definition of "Forest"

- **FSDN** the <u>Farm Sustainability Data Network</u> is set to replace the Farm Accountancy Data Network by 2028. It expand the scope of the FADN to cover not only farms' income and business activities but also information on their environmental and social sustainability performance
- FSS <u>Farm Structure Survey</u> is conducted consistently throughout the EU with a common methodology on a regular basis and provides therefore comparable and representative statistics across countries and time, at regional levels
- GHG <u>Greenhouse gases</u> .. usually expressed as CO2e the global warming potential (GWP) equivalent of CO2, with the GWP of methane being 21 and nitrous oxide being 310.
- GreenData4All An <u>initiative</u> which will help deliver on Europe's green and digital transformation by updating EU rules on environmental geospatial data and on public access to environmental information.
- **GSAA** <u>Geospatial Aid Application</u> a GIS system operated by all Member States to record field and farm boundaries
- **IACS** <u>Integrated Administration and Control System</u>. an automated system to collect farm data on area and animal based interventions and to provide this data to other CAP applications such as the LPIS and AMS.
- JTF <u>Just Transition Fund</u> a fund supporting diversification and reconversion of disadvantaged areas. The European Economic and Social Committee (EESC) has recommended <u>specific targets</u> for the just transition of EU agro-food systems
- LPIS . Land Parcel Information System reference database for agricultural (and some forestry) parcels in relation to eligibility for CAP funding - it is accompanied by very high resolution orthoimagery (<50cm pixel resolution).</li>
- LULUCF Land Use Land Use Change and Forestry net balance of carbon on agricultural land and all greenhouse gases in forestry. The EEA published an excellent <u>handbook</u> on current and potential reporting methods in the EU.
- **NECP** <u>National Energy and Climate Plan</u>- 10 year projections for each MS, covering decarbonisation, energy efficiency, energy security, internal markets etc. MS should include details on how they will achieve their 2030 energy targets, including LULUCF.
- NRR the <u>Nature Restoration Regulation</u> (2024/1991) sets a range of environmental targets and obligations on Member States, including restoring at least 20% of the EU's land and sea areas by 2030. It generally allows MS to set targets for themselves, including for "high diversity landscape features"
- SMD <u>Directive on Soil Monitoring and Resilience</u> a draft directive which sets common standards for soil monitoring data and methods and asks MS to set targets and timescales for improvement.
- WTO World Trade Organization .. It is <u>relevant</u> to agricultural and forest policy since WTO "green box" rules limit Payments for Environmental Services to "income forgone" and "additional costs" rather than measured/modelled environmental (or climate?) impacts.