REFOREST

Organisation: Euro-Mediterranean Economists Association (EMEA)

Discussion Policy Paper #5

Building the Investment Case for Agroforestry

Date: June 2026

Funded by the European Union

This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No. 101060635 (REFOREST). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

UK Research and Innovation

UK partners are funded by UK Research and Innovation (UKRI) under UK government's Horizon Europe funding guarantee [grant number 10039700].

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1. MOTIVATION/CHALLENGE

Europe's food systems are under pressure. They must keep supplying affordable food while also cutting emissions and helping to slow down biodiversity loss. Global temperatures have already risen by about 1.1°C above pre-industrial levels, and further warming toward 1.5°C is expected to increase the risk of ecosystem collapse (IPCC, 2023). In this context, agroforestry (AF) has attracted attention as a practical nature-based option that combines food production with carbon storage, soil restoration, biodiversity habitat and water regulation. Yet AF still occupies only around 15.4 million hectares, or 8.8% of the EU's utilised agricultural area (den Herder et al., 2017)

Finance plays a central role on this puzzle. Setting up AF systems demands high upfront spending on trees, land preparation and changes in farm management, while most tree-based revenues arrive only after several years. Conventional finance tends to work on the opposite rhythm. Credit products, risk assessments and current subsidies are usually designed around short production cycles and stable annual yields, not around multi-decade tree rotations and diversified output streams. This mismatch makes AF harder to fund and more likely to be seen as risky.

There is also a valuation gap. Many of AF's environmental benefits accrue at the landscape or societal level rather than directly on the farm balance sheet. Carbon sequestration, erosion control, flood protection or habitat provision often show up only weakly, if at all, in market prices. This reflects a classic market failure in which positive externalities remain insufficiently internalised in production decisions, reinforcing the need for policy frameworks and financing mechanisms capable of recognising and rewarding these broader societal benefits.

This policy discussion paper[17] examines how financing and incentive mechanisms can improve the economic viability of agroforestry systems**.** It draws on findings from the ReForest project and complementary external literature to identify financial and institutional constraints that limit the economic uptake of agroforestry and to clarify the conditions required for AF to function as a viable farm strategy within the evolving CAP policy context.

2. REFOREST EVIDENCE

Evidence from ReForest project highlights persistent financial barriers affecting AF adoption across Europe. Insights are derived from the development of the **ReForest Sustainable Financing Scheme** (Deliverable D5.4) and its empirical application through farm-level modelling and survey data collected across several European countries (Hajdukovic, 2025; Zibecchi, 2025a).

Survey results from the ReForest Living Labs indicate that existing financing mechanisms remain insufficient to support AF adoption. On average, only 29% of respondents reported having access to funding sufficient to cover and maintain agroforestry activities. Engagement with private-sector actors is also limited, with only 39% of surveyed farms reporting partnerships with

[17] As part of the ReForest Policy Discussion series, this paper aims to support dialogue with panellists, gather targeted input, and help refine priorities for the final Policy Briefs to be released in June.

banks, agri-food companies, or impact investors. Advisory support is somewhat more widespread but still incomplete, with 58% of respondents reporting access to some form of advisory services (Zibecchi, 2025a).

ReForest data identifies structural barriers affecting financial decision-making. Farmers report difficulties covering establishment costs, managing delayed revenue streams, and navigating subsidy frameworks that remain poorly adapted to mixed tree–crop systems. Regulatory uncertainty and administrative complexity can increase perceived investment risk, discouraging long-term commitments to AF.

Deliverable D5.4 proposes a hybrid sustainable financing scheme designed to align financial support with the biological and economic cycles of agroforestry systems (Hajdukovic, 2025). The scheme was developed through a multi-step research process combining policy analysis, farm-level surveys and interviews, Living Lab consultations, and stakeholder workshops. This work also included a mapping of public and private funding sources to identify how different financial instruments could better support agroforestry investments. The scheme can be summarised by the following pillars:

1. Ex-ante payments supporting planning and establishment costs;
2. Action-based payments provided during the transition phase as farmers implement agroforestry practices;
3. Results-based payments linked to verified environmental outcomes;
4. Advisory services supporting system design, implementation, and financial planning.

Deliverable D5.5 stress tests the application of this scheme through surveys and qualitative interviews with farmers across ReForest Living Labs (Zibecchi, 2025a). Their feedback confirms the previously identified structural barriers, including high establishment costs, delayed revenues from tree components, and policy frameworks that remain poorly aligned with mixed tree–crop systems. Farmers also emphasised that administrative complexity and regulatory uncertainty make long-term investment decisions difficult, reinforcing the need for financing models that better reflect the phased development of AF systems.

Farmers generally welcomed the proposed scheme and considered its combination of financial instruments and advisory support relevant to their needs. However, respondents pointed that effective implementation will also require simpler funding procedures, accessible advisory services, and practical MRV systems.

Deliverable D5.3 support this analysis by identifying complementary financing mechanisms capable of supporting agroforestry investment (Zibecchi, 2025b). The report highlights a range of financial and market-based instruments that could help address investment risks and improve access to capital for agroforestry systems.

These include:

- blended finance structures combining public funding with private capital
- concessional credit lines
- guarantees and insurance instruments

- ecosystem service markets such as carbon and biodiversity credits
- supply-chain partnerships with agri-food companies
- impact investment funds and crowdfunding platforms
- digital tools supporting project planning and monitoring

ReForest evidence should be interpreted with caution. The survey data are based on responses from 38 farms across five countries, providing useful qualitative initial insights but are very far from representing the full diversity of AF systems and financing conditions across Europe. The responses also reflect farmers' self-reported experiences regarding financing constraints and institutional barriers.

Further analytical work is currently being conducted through a collaboration between EMEA and the Institute for Food and Resource Economics (INRES) at the University of Bonn. Using a Decision Analysis modelling framework, this research evaluates the financial performance of AF systems under different policy and financing scenarios, including projections of cumulative cash flows, break-even points, and net present value trajectories. Preliminary modelling compares business-as-usual farming systems with systems supported by the ReForest financing scheme, allowing a more systematic assessment of its potential economic impacts.

3. Literature Review / External Sources

The Millennium Ecosystem Assessment shows that agriculture depends on regulating, supporting and cultural ecosystem services that are not captured in market prices. Production systems that degrade these services can appear more profitable in the short term than diversified systems that maintain them, even if the latter are more productive and resilient over time (MEA, 2005).

This bias is reflected in the wider literature on sustainable land management. Nature-based solutions contribute simultaneously to climate mitigation, adaptation, biodiversity conservation and ecosystem restoration, but current investment flows remain far below what would be required to realise this potential. Estimates suggest that annual spending on nature-based solutions must at least triple by 2030 to meet climate, biodiversity and land-degradation targets (Climate Policy Initiative, 2021).

One explanation lies in the investment profile of these systems. Projects that restore ecosystems or enhance carbon stocks typically involve long time horizons, uncertain and delayed revenue streams, and complex risk profiles, which sit poorly with standard banking products and risk models. Financial institutions often lack the technical capacity and data needed to assess projects that combine ecological and productive functions, which restricts access to credit for regenerative farming (European Investment Bank, 2023).

Recent work treats blended finance as a way to unlock private and "patient" capital for climate and nature projects that are socially desirable but commercially marginal. Public or philanthropic contributions take on specific risks or costs that markets struggle to bear, for example, through guarantees that cover part of the credit risk, concessional loans that lower financing costs, or technical

assistance that reduces project preparation barriers (European Investment Bank, 2023; Climate Policy Initiative, 2021; Brandon et al., 2025). These structures extend repayment horizons, lower the cost of capital and relax collateral constraints, so that projects with slower or more uncertain cash flows can fit within standard risk–return metrics.

Agroforestry can also be viewed as an investment opportunity rather than solely as an environmental intervention. Diversified production systems combine multiple revenue streams, including agricultural products, timber, biomass, ecosystem-service payments and emerging carbon and biodiversity markets. They may also reduce exposure to climate risks, input-price volatility and production shocks, improving long-term resilience and creating value beyond annual farm income.

Of course, risk-management instruments also play a complementary role. Climate variability, extreme events and price swings make income from regenerative practices volatile and can deter both farmers and lenders. Parametric insurance products and revenue-stabilisation schemes help buffer these shocks, preserve farmers' repayment capacity and signal creditworthiness (World Resources Institute, 2022; Climate Policy Initiative, 2024).

Ecosystem service markets are a further, rapidly evolving element of the financing landscape. Carbon and biodiversity credit schemes aim to turn improvements in carbon stocks and habitat quality into tradable units, offering a potential revenue stream for land-use systems that restore ecosystems.

Agroforestry is well suited to this logic because it can deliver saleable farm products while also yielding measurable gains in soil and biomass carbon and biodiversity indicators. Governance remains a central concern. Evidence from voluntary markets points to inconsistent baselines and accounting rules, high monitoring and verification costs, and weak safeguards in some schemes, which together undermine trust and limit farmer participation (IPBES, 2026).

EU policy has begun to respond. Regulation (EU) 2024/3012 establishes a Carbon Removal Certification Framework (CRCF) as a voluntary system for certifying high-quality carbon removals, including carbon farming in agriculture and forestry. It lays down common criteria for quantification, additionality, long-term storage and sustainability, together with harmonised monitoring, reporting and verification and an EU registry. By improving transparency and credibility, the CRCF may help strengthen confidence in environmental markets and support greater participation by farmers, investors and corporate actors.

Beyond carbon markets, emerging nature-credit approaches are seeking to reward measurable improvements in biodiversity, ecosystem condition and ecosystem restoration outcomes. While these markets remain at an early stage of development, they are attracting growing interest from companies seeking to address nature-related risks, disclosure requirements and sustainability commitments. Agroforestry may be particularly well positioned to participate in such schemes due to its ability to generate multiple environmental benefits simultaneously. However, important questions regarding measurement methodologies, market governance, additionality, permanence and benefit-sharing remain unresolved.

4. CAP POST-2027 IMPLICATIONS

The reform of the Common Agricultural Policy for 2028–2034 opens a window to rethink how agroforestry is treated in EU farm policy. The Commission's proposal combines a simplified, degressive area-based income support with a stronger focus on incentive payments for environmental and climate action and on "transition" support for farm restructuring.

For agroforestry, the key question is how CAP instruments can move beyond compensating additional costs or income foregone and start recognising tree-based systems as long-term investments. Establishment requires substantial upfront spending, while ecological and economic returns accrue over decades. Existing measures provide limited, time-bound establishment support and do not resolve this temporal mismatch, and ReForest evidence shows that financing constraints in the early years remain one of the most frequently cited barriers to adoption.

Interactions with private-sector frameworks are likely to become more important over the next programming period. Corporate sustainability reporting, carbon farming initiatives and the new Carbon Removal Certification Framework can increase demand for verifiable environmental performance in supply chains. Well-designed CAP interventions could help farmers access these emerging markets, for instance, by funding monitoring, data collection and advisory services for agroforestry projects.

Blended finance and risk-sharing tools add another layer. Guarantees, concessional loans, transition payments , and insurance schemes could be combined with grants to address high establishment costs, delayed revenues, and collateral constraints that currently limit agroforestry investment. If poorly designed, however, short contract durations, complex procedures and fragmented instruments risk favouring short-term, easily measurable actions over long-term landscape transformations and may deter smaller farms.

A wider financing architecture may also be required. Public CAP funding can play an important role in reducing early-stage risks, but long-term scaling is likely to depend on cooperation among public institutions, development banks, commercial lenders, impact investors, and private-sector actors. Instruments such as guarantees, concessional lending, green bonds and blended-finance facilities can help bridge the gap between public objectives and private investment requirements by improving risk-return profiles and extending investment horizons.

Recognising agroforestry explicitly as a long-term agricultural investment model, rather than only as an environmental measure, would help align income support, investment aid and carbon farming initiatives. This would allow the CAP to address establishment risk, reward durable ecosystem services and support coherent multi-annual financing pathways for tree-based farming systems.

5. KEY QUESTIONS FOR THE POST-2027 CAP

The following questions aim to stimulate discussion among policymakers, financial institutions, researchers, and practitioners:

- How can “patient” public and philanthropic capital, guarantees and concessional loans be structured so that agroforestry projects meet standard bankability criteria (NPV, collateral, debt-service coverage) across different farm types?

- Which combinations of grants, transition payments, blended finance instruments and carbon or nature-credit revenues most effectively shorten the break-even period of agroforestry systems without creating dependency on temporary subsidies?

- What insurance and risk-sharing products are realistically scalable for agroforestry (for example, establishment-failure cover, index-based drought or storm insurance, income-stabilisation schemes), and how can data and modelling improve insurers’ ability to price these risks?

- How can public CAP funding be aligned with emerging private-sector frameworks such as the CRCF and Corporate Sustainability Reporting Directive (CSRD) to reward verified environmental performance from agroforestry systems?

- Which CAP financial mechanisms proposed for the 2028–2034 programming period are most effective in reducing investment risks during the establishment phase of agroforestry systems?

1. Under what conditions can agroforestry become an investable asset class for institutional and private investors?

- What role should development banks, guarantees and blended-finance facilities play in mobilising private capital for agroforestry?

- Can emerging carbon and nature-credit markets provide reliable long-term revenue streams for farmers?

- How should public and private finance be combined across different stages of agroforestry development?

6. APPENDIX 1: REFERENCES AND RELATED DOCUMENTS

ID	Reference or Related Document	Source or Link/Location
1	Climate Policy Initiative. (2021). The state of finance for nature: Tripling investments in nature-based solutions by 2030. Climate Policy Initiative.	State of finance for Nature :

2	den Herder, M., Moreno, G., Mosquera-Losada, M. R., Palma, J. H. N., Sidiropoulou, A., Santiago Freijanes, J. J., Crous-Duran, J., Paulo, J. A., Tomé, M., Pantera, A., Papanastasis, V., Mantzanas, K., Pachana, P., Papadopoulos, A., & Burgess, P. J. (2017). Current extent and stratification of agroforestry in the European Union. Agriculture, Ecosystems & Environment, 241, 121–132.	https://doi.org/10.1016/j.agee.2017.03.005
3	European Investment Bank. (2023). EIB Group sustainability report 2023. European Investment Bank.	10.2867/447447
4	Hajdukovic, I. (2025). Agroforestry Sustainable Financing Scheme (Deliverable D5.4). Horizon Europe Project REFOREST (Grant Agreement No. 101060635).	ReForest-D5.4-AF-Sustainable-financing-scheme.pdf
5	Intergovernmental Panel on Climate Change (IPCC). (2023). Climate change 2023: Synthesis report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC.	IPCC_AR6_SYR_LongerReport.pdf
6	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). (2026). Summary for policymakers of the methodological assessment report on the impact and dependence of business on biodiversity and nature's contributions to people. IPBES.	https://doi.org/10.5281/zenodo.15369060
7	Millennium Ecosystem Assessment, 2005. Ecosystems and Human Well-being: Synthesis. Island Press, Washington, DC.	Ecosystems and Human Well-being: Synthesis - Millennium Ecosystem Assessment
8	Brandon, C., Aggarwal, A., Kratzer, B., Carter, R., Laxton, V., & Ross, K. (2025). From bonds to blended finance: How a diverse range of financial instruments are financing climate adaptation and resilience. Working Paper. World Resources Institute.	https://doi.org/10.46830/wriwp.25.00061
9	Zibecchi, T. (2025a). Application of the Agroforestry Sustainable Financing Scheme (Deliverable D5.5). Horizon Europe Project REFOREST (Grant Agreement No. 101060635).	ReForest-D5.5-Report-of-AF-Financing-Model-Application.pdf
10	Zibecchi, T. (2025b). Mapping Report on Agroforestry Sector Finance and Policy III (Deliverable D5.3). Horizon Europe Project REFOREST (Grant Agreement No. 101060635).	ReForest-D5.3-Mapping-Report-on-AF-sector-finance-and-policy-3.pdf