

Agroforestry in the Italian Agricultural and Climate Plans

The Italian CAP Strategic Plan provides a national definition of agroforestry and support for planting, but it is hardly mentioned in the Italian National Energy and Climate Plan. Will carbon-farming certification bring a resurgence of agroforestry?



Figure 1. Hens ranging in olive trees in Umbria.
Author: Adolfo Rosati (CRE) and Piero Paris (IBAD-CNR) | © CC-BY



Figure 2. Cover Photo from "Agroforestry in Italy: an opportunity for agricultural holdings" (AIAF). Published in Italian in September 2023, under the auspices of the Rete Rurale Nazionale 2014-2020.
Author: AIAF Italy | © CC-BY

/// Context ///

The Italian CAP Strategic Plan (Section 4b-2) defines agroforestry as "A land use system in which there are, in the same area, associations of tree vegetation with extensive agricultural and livestock crops and production in which wood and secondary forest products can also be obtained". A limit of 250 plants per hectare is given, but the area of the tree-crowns does not reduce the parcel-area eligible for basic payments (BISS), provided that agricultural production remains "sustainable".

There are several payments which farmers may receive for agroforestry, including ecoschemes in Pillar I and rural development payments in Pillar II. In summary:

- All types of woody-landscape-feature "Good Agriculture and Environmental Conditions (GAEC-8)" are implemented,

i.e. hedgerows; trees in line, groves/copses, individual trees, and farmers are expected to map these these area in their annual CAP returns. These areas are fully eligible for basic payments (see Figure 4 and EURAF [Policy Briefing #21](#)).

- Five eco-schemes give annual payments to farmers in all regions. Two are focused on permanent crops like fruit-trees and olives, but do not specifically mention agroforestry.
- Twenty-nine "Agri-environment-Climate Measures" (Article 70) and 38 "Investment Measures" (Article 74/75) are implemented, and several could be of benefit to agroforestry but only SRD05 one specifically mentions "agroforestation" and this is implemented only in six regions.

/// Solution for a Resilient Future ///

BETTER MONITORING. The Italian Land Parcel Information System (SIPA) data is not made available in the EU [Inspire Portal](#) or in the Member States [Geoportal](#). This makes it difficult to identify the areas of trees on agricultural land. CAP Result Indicator 17, which is intended to indicate the areas of trees planted for afforestation (17.1), reforestation (17.2), agroforestation (17.3) and woody landscape features (17.4) gives only single figure (50,159 hectares), with no breakdown. Output Indicator 16, shows annual payments made for tree-planting, but does not split the planned figure (73,568 hectares) between afforestation (imboschimento) and agroforestation (agroforestazione). Impact Indicator 21 should give the area of Landscape Features, but is not yet available for Italy.

WIDER IMPLEMENTATION. Although Italy has around 1.4 Mha of agroforestry (den Herder et al 2015, Paris et al 2019), it also has extensive "tree deserts" (Figure 3). These areas of cropland and grassland have extremely low tree-crown-cover, and tend to be in areas with mineral-soils and high environmental pressures. The CAP Strategic Plan contains explicit and potential support for agroforestry in ecoschemes, investment measures and agri-environment

climate measures. However, not all autonomous regions implement this support, those with most "tree deserts" should give agroforestry priority.

KNOWLEDGE SHARING. The strengths of agroforestry policy are summarised in EURAF Policy Briefing #39 and Riviello et al. (2024) as: a) one of the largest areas and longest-established areas of agroforestry in Europe; b) extensive literature on agroforestry in permanent crops like vines, olives and fruit trees, c) increasing recognition of the importance of agroforestry for climate-mitigation and adaptation, d) holding in 2023 of the first Italian National Agroforestry Conference and publication of multi-author guide to agroforestry. The same authors summarised the weaknesses as: a) implementation of agroforestry policy options by only 6 regions; b) lack of advertising or even opening of the funding measures; c) confusion amongst officials and farmers over the rules and conditions; d) incomplete recording of agroforestry and landscape features in the Italian LPIS system (SIPA); e) no mention of agroforestry in additional Pillar II measures which could support it.

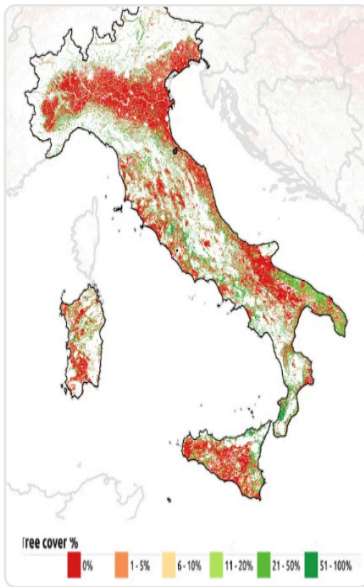


Figure 3. Tree cover density in Italy on grassland/cropland, using data from Copernicus and Corine from 2018 (100m pixels). Intense red colours indicate that the area has no tree cover.
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ITALY	LF - Weight	LF - Area	LF - Protected
1 Buffer Strips	1,5	y	y
2 Cairns			
3 Cultural Features			
4 Ditches	2	y	y
5 Field margins and patches			
5.1 field margins (m)	1,5	y	y
6 Hedgerows/individual or group of trees/ trees in rows			
6.1 Hedgerows	2	y	y
6.2 Trees in Line	2	y	y
6.3 Groves/copses	1,5	y	y
6.4 Individual trees	1,5	y	y
6.5 Scrub			
7 Land lying Fallow	1	y	
8 Others		y	y
8.1 Monumental trees	1,5	y	
9 Small Ponds (a surface area of 3,000 m2 or less)	1,5	y	y
10 Small Wetlands			
11 Stonewalls	1	y	y
12 Streams			
13 Terraces	1	y	

Figure 4: Landscape features in the Italian CAP Strategic Plan: showing weighting for contribution to the GAEC-8 targets, features selected and whether protected.
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/// Always Moving Forward ///

EMISSION TARGETS. The EU Land Use, Land Use Change and Forestry Regulation, (2023/839) allocates Italy a carbon-capture target in the land-sector of 35.758 MtCO₂e/yr for 2030, but the Italian National Integrated Energy and Climate Plan (NECP 2021-2030) projects that LULUCF net sequestration in 2030 will be only 28.4 MtCO₂e, having risen from 21.2 MtCO₂e in 2022. Surprisingly, tree planting areas or afforestation/agroforestation sequestration targets are not mentioned in the NECP. Specific Action 9 in the Strategia Forestale Nazionale (2022) aims by 2025 to increase the area of “agroforestry, agroforestry systems and cork-farming” by 15% compared to 2025.

CARBON CERTIFICATION AND AGROFORESTRY.

Agroforestry trials at Casaria farm in Padua province have demonstrated that 50-100 poplar trees per hectare can store 1-4 tonnes of carbon per hectare per year in the wood alone (Mezzalira et al., 2021). This and other studies reviewed in EURAF Policy Briefing #26 show that agroforestry provides a viable solution for carbon farming. The EU Carbon Removals Expert Group is expected to draft three “Delegated Acts” in 2026 giving Monitoring, Reporting and Verification Rules for a) Agricultural Soils and Agroforestry, b) Sustainable Forest Management and c) Wetland Rewetting.

Further information

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