ResAlliance

Type of solution: Governance Sector: Agroforestry
Good practice(s): Soil management, Management alternatives, Ecosystems services, Financing

Agroforestry in the Portuguese Agricultural and Climate Plans

The Portuguese CAP Strategic Plan (2023-2028) is unique compared to other Member states, since it claims that that agroforestry is only possible in permanent pasture.

Figure 1. Black merino sheep under scattered holm oak in Southern Portugal.
Author: João Palma | © CC-BY

Figure 2. The Competence Centre for Cork Oak has an app to help find the right spot for cork-oak, based on climate and soil (Paulo et al. 2015).
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/// Context ///

The Portuguese CAP Strategic Plan and is unique in not recognising silvoarable systems: “agroforestry systems in Portugal are based on natural regeneration processes, which prevent the alignment of trees, and promote undercover systems with meadows and permanent pastures rather than annual crops. In this sense, (…) due to the difficulty of combining a density of trees with the necessary installation and harvesting of arable crops, it is considered that arable land cannot form agroforestry systems”.

Cork oak, olive trees, stone pine and chestnut and most fruit and nut-trees which are commercially exploited for cork or fruits are considered as “permanent crops”, and only non-commercial production with these species is considered as “agroforestry”, with minimum densities set at 40-60 trees/ha, depending on species.

Permanent pastures under Quercus are 100% eligible for basic payments (BISS), but the eligibility of other species depends on crown cover, with >75% being ineligible. Unlike neighbouring Spain, permanent pastures containing edible shrubs and no grass cannot be declared as eligible for BISS. Environmentally important landscape features can be declared in the LPIS by farmers and are 100% eligible for BISS (Figure 4). Two ecoschemes may apply to agroforestry (“permanent pasture management” and “practices promoting biodiversity”) and grants exist both for the establishment of agroforestry (Article 73) and for annual maintenance (Article 70). See Policy Briefing #42.

/// Solution for a Resilient Future ///

BETTER MONITORING. Data from the Portuguese LPIS system (ISIP) is not made available in the EU Inspire Portal, but is in the DGAGRI Member States Geoportal, and is available in a public portal. Areas of forest are not included, unless they receive CAP payments. CAP Result Indicator 17 (tree planting) is given only as total (212,783 hectares) for the full CAP period, and not broken down into the sub-categories afforestation (17.1), reforestation (17.2), agroforestation (17.3) and woody landscape features (17.4). Output Indicator 16, shows annual maintenance payments made for tree-planting, but again does not split the planned figure (201,074 hectares) between afforestation and agroforestry. Impact Indicator 21 should give the area of Landscape Features, but is not yet available for Portugal.

WIDER IMPLEMENTATION. Portugal has around 1.2 Mha of agroforestry (den Herder et al. 2015), and has the lowest percentage area of “tree deserts” on cropland/grassland in the EU (Figure 3). This reflects its mosaic landscapes and high forest cover, but there are still zones with low tree cover where more agroforestry is needed. Portugal excludes silvoarable systems from its definition of agroforestry, and this is unique amongst Member States. The Portuguese CAP Strategic Plan includes potentially good investment and agri-environment support to agroforestry, but the uptake of these schemes is not yet clear, and available statistics do not separate afforestation from agroforestation targets.

SHARING KNOWLEDGE. The strengths of Portuguese agroforestry policy are summarised in EURAF Policy Briefing #42 as: a) one of the largest areas and longest-established areas of agroforestry in Europe (Reis et al. 2019; Belo et al. 2019); b) extensive literature on agroforestry in permanent crops like vines, olives and fruit trees; c) recognition of the importance of agroforestry for climate-mitigation and adaptation; d) recognised as a crucial part of Portuguese forestry expertise in universities and professional associations (e.g. IUAF); e) the subject of recent conferences (e.g.). Weaknesses can be summarised as: a) lack of data on uptake of agroforestry measures; b) lack of data on agroforestry targets; c) confusion the rules for landscape features and direct payments eligibility of parcels with trees; d) uncertainty over which Pillar II measures can support agroforestry; e) apparent exclusion of silvoarable systems from support.

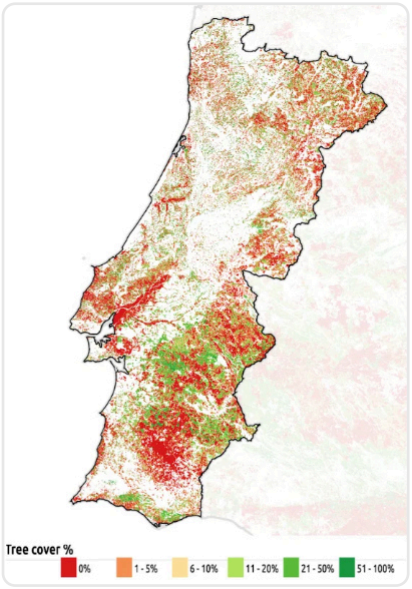

Figure 3. Tree cover density in Portugal on grassland/cropland, using data from Copernicus and Corine from 2018 (100m pixels). Intense red colours indicate that the area has no tree cover.
Author: DigitAF Project | © CC-BY

PORTUGAL	LF - Weight	LF - Areas	LF - Protected
1 Buffer Strips		y	
2 Cairns			
3 Cultural Features			y
4 Ditches	2	y	y
5 Field margins and patches			
6 Woody-landscape-features			
6.1 Hedgerows			
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 or forest margins	2	y	
7 Land lying Fallow	0.3	y	
7.1 Fallow land with melliferous plants	1.5		
8 Others			
9 Small Ponds	1,5	y	y
10 Small Wetlands			
11 Stonewalls	1	y	y
12 Streams			
13 Terraces			

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

EMISSION TARGETS. The EU LULUCF Regulation (2023/839) gives Portugal a net emission target of -1.358 MtCO2e/yr for 2030, compared with -390 MtCO2 in 2016-18. The Portuguese draft National Integrated Energy and Climate Plan (NECP 2021-2030) thinks this is achievable, with -9.567 MtCO2e/yr estimated in 2030. This is partially due to agroforestry, since the Forestry Accounting Plan (FAP) (2021-25) includes as much as 2.3 Mha of forest land in agricultural use. The FAP suggests an afforestation target 8,000 ha/yr by 2030, but the CAP Strategic Plan goes higher, with 212,287 hectares planned for 2023-29, as the sum of afforestation, restoration and agroforestry.

CARBON CERTIFICATION AND AGROFORESTRY. The 2010 National Forest Inventory (NFI), estimates that agroforests cover 716,000 and 413,000 hectares respectively for cork oak and holm oak respectively. This can account for 30% of the total carbon (C) present in Portuguese forests: with cork oak storing 64 million and holm oak storing 20 million Mg CO2eq (IUAF). Agroforestry-carbon-farming certification will become very important in Portugal, helped by the Delegated Act being developed by the Commission for "Monitoring, Reporting and Verification". The ResAlliance project will contribute to the section of these rules on "agricultural soils and agroforestry".

Further information

- Belo CC, Coelho I, Rolo J, Reis P. 2019. Sistemas agroflorestais em Portugal continental. Parte II: montados, condições de uso do solo e evolução. Rev Ciênc Agr. 2019;37: 122–130. doi:10.19084/RCA.16806
- EURAF. 2024. Agroforestry in the Portuguese CAP Strategic Plan. EURAF Policy Briefing #42. Available on euraf.net from 30.10.24
- Ministério da Agricultura e Alimentação. 2023. Common Agricultural Policy Strategic Plan for Portugal.
- Ministerio del Ambiente y de la Transición Energética. National Energy and Climate Plan (2023-2030). 2024. https://commission.europa.eu/publications/portugal-draft-updated-necp-2021-2030_en
- den Herder, M, Moreno, G, Mosquera-Losada, MR, Palma, JHN, Sidiropoulou, A, Santiago Freijanes, J, Crous-Duran, J, Paulo, J, Tomé, M, Pantera, A, Papanastasis, V, Mantzanas, K, Pachana, P, Burgess, PJ. (2015). Current extent and trends of agroforestry in the EU27. Deliverable Report 1.2 for EU FP7 Research Project: AGFORWARD 613520. 99 pp.
- iSIP 2024. Online Parcel Identification System (iSIP) Public portal. https://publico-isip.ifap.pt/ (Accessed 19 September 2024)
- Paulo, JA, Palma, JHN, Gomes, AA, Faias, SPF, Tomé, J, Tomé, M. 2015. Predicting site index from climate and soil variables for cork oak (Quercus suber L.) stands in Portugal. New Forests 46, 293–307. https://doi.org/10.1007/s11056-014-9462-4
- Reis P, Rolo J, Coelho I, Belo CC. 2019 Sistemas agroflorestais em Portugal continental. Parte I: economia e distribuição geográfica. Rev Ciênc Agr. 2019;37: 113–121. doi:10.19084/RCA.16805

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Authors: Gerry Lawson | **Partners:** EURAF – European Federation of Agroforestry

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