

AgroForAdapt - ReForest field visit

On 30 June 2023 we carried out a joint field visit to agroforestry systems in Riudarenes (Girona) between representatives of the [LIFE AgroForAdapt](#) and [Horizon Europe ReForest](#) projects.

From annual monocultures to silvoarable systems

Conventional monocultural agriculture faces a series of economic and environmental sustainability challenges that threaten its viability, especially in small and medium-sized farms. In particular, the vulnerability of the farmer to the rising price of inputs (fertilisers, diesel) and the pressure of global markets on the final price of the product, together with the growing impact of drought and irregular rainfall, make it advisable to diversify production. To this end, silvoarable systems are offered as a solution for diversification and eco-intensification (i.e. producing more on the same area), making it possible to improve the profitability of farms as well as achieving interesting benefits in terms of ecosystem services, such as soil protection, increased biodiversity and carbon sequestration. These systems are currently being addressed in different EU-funded projects, including [LIFE AgroForAdapt](#) (which works especially in Mediterranean conditions) and [Horizon Europe ReForest](#) (whose main area of work is Central European conditions).

On 30 June 2023 we organised a field meeting to exchange experiences between partners of both projects (Fundació Emys, University of Bonn, German Agroforestry Federation), visiting agroforestry experiences in Riudarenes (Girona, Spain).



Participants in the visit

Private farm with more than 14 ha of silvoarable land

During the morning we visited the farm of Mr. Antoni Trinxeria, agricultural owner and forester who is one of the pioneers of silvoarable systems in Catalonia. Antoni explains that the increasing impact of drought, the cost of agricultural inputs and the stagnating price of wood have made his farm less profitable in recent decades. As a result, he has decided to install more than 14 ha of silvoarable systems, mainly following two models:

- on land under annual crops (rotation of wheat, rapeseed and barley): incorporation of rows of fast-growing species (10 ha of poplar in a 16 x 5 m frame) or intermediate-rotation quality timber-producing species (2 ha of hybrid walnut in a 12.5 x 6 m frame).
- on 2 ha of low-slope cork oak forest with health problems: partial conversion of forest land to annual crops, maintaining the most vital and productive cork oaks and creating an open woodland (*dehesa*) landscape with very low vulnerability to fire.



Rows of poplar in a cultivated field



Intercropping an open woodland of cork oak

Can Moragues Estate (Fundació Emys): silvoarable systems in the framework of innovative agroecology

In the afternoon we visited the headquarters of [Fundació Emys](#), at the [Can Moragues](#) demonstration farm. We visited the [three AgroForAdapt demonstration systems](#) installed on this farm at the beginning of 2023 following organic farming schemes:

- rows of fruit trees installed on a plot of annual crops.
- rows of fruit trees combined with horticulture.
- division of a plot of land with a row of elderberries.

The aim of these systems is to diversify production, to achieve a more favourable microclimate for crops thanks to the presence of the trees and to promote pollination and integrated pest control.



Fruit trees in a 16x4 m frame on a plot where intercropped horticultural species will be installed



Can Moragues Estate

[Link to the note published on the German Agroforestry Federation website](#)