



Geographical scope:
France, including the
Cévennes and Basque provi



Organisation name: AGROOF,
in collaboration with the Baron
des Cévennes chain, INRAE



**Number of participating
farmer:** farmers from the Baron des
Cévennes chain and other networks like
Porc Noir de Bigorre, Kintoa Pig, Limousin
Black Ass Pig, and Nustral Pig systems



Total budget: 17,875 € from MIXED
+ 5,000 € from Fondation de France
Funding: Horizon 2020

A bit more about the Case Study

The French case study, managed by AGROOF, integrates agroforestry into pig farming by utilizing oak and chestnut wooded areas for natural feeding. This approach emphasizes animal welfare, environmental sustainability, and high-quality pork production, with pigs raised in outdoor systems under traditional practice

The project tackles challenges such as securing acorn and nut supplies, mitigating soil damage, and adapting to climate change. Solutions include planting shade trees, improving pasture management, and exploring diverse fodder trees to enhance sustainability and resilience in pig farming



Highlights



Integrates traditional oak and chestnut systems with modern agroforestry practices for pig farming



Agroforestry solutions reduce feed dependency and mitigate climate stress impacts on livestock



Produces high-quality, locally marketed pork under rigorous environmental standards

Website and project information

<https://projects.au.dk/mixed/networks-national-teams/france>

<https://projects.au.dk/mixed/>



Key outcomes and insights

Environmental and socio-economic benefits

The project improves soil health, biodiversity, and pig welfare while producing high-quality pork. It strengthens farmer networks and showcases a resilient, sustainable model for pig farming

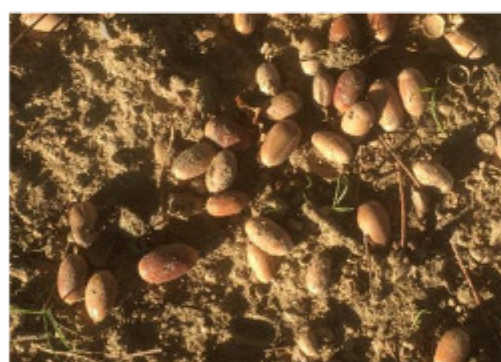


Photo. The acorns have been collected during the autumn period in 2022

Innovative features

The French case study blends traditional pig farming with agroforestry innovations, such as shade trees, diverse fodder sources, and tree protection measures. It promotes sustainable land use through paddock management and collaborative feed sourcing



Photo. The electrical wires could also be fixed directly on the branches in presence of mature trees or on "electric pole"

Good practices & Lessons learned

Problem 1. Insufficient supply of acorns and nuts for pig feed

The traditional system relies on acorns and nuts for pig feed, but the supply is inconsistent and insufficient for scaling production



Problem 2. Climate stress on pigs

Pigs suffer from heat stress due to insufficient shade in outdoor systems, which affects their welfare and productivity



Problem 3. Soil degradation due to high pig density

Intense pig activity damages soil, causing erosion, bare patches, and reduced vegetation cover



Problem 4. Damage to trees by pigs

Pigs frequently damage trees by debarking or rubbing, leading to significant losses and lower productivity in agroforestry systems



Solution 1. Plant more productive oak and chestnut trees, analyze their yields, and explore additional fodder trees. Collaborate with local producers to establish collective sourcing and ensure a stable, high-quality feed supply

Solution 2. Plant fast-growing shade trees, such as Paulownia and Mulberry, near essential areas like water points and create vegetated pergolas for additional cooling. This approach improves microclimates and provides supplemental fodder from tree leaves and fruits

Solution 3. Enlarge pasture areas through agreements with neighboring landowners, introduce crop rotations, and divide plots into paddocks to allow for fallow periods. Implement fodder crop overseeding to restore vegetation and improve soil quality

Solution 4. Use protective measures like Ursus Cactus netting, electric fencing, and concrete barriers to safeguard trees. Test various protection methods to identify cost-effective and efficient solutions tailored to different tree species and plot conditions