



Pepe Aromas

A climate-adapted crop helps regenerate a traditional farm.

EAFRD-funded projects

Location: Alentejo, Portugal

Programming period: 2014-2020

Priority: P2 - Competitiveness

Focus Area: Farm performance, restructuring & modernisation

Measures: M04 - Investments in physical assets

Funding:	Total budget	377 222 (EUR)
	EAFRD	84 267.96 (EUR)
	National/Regional	23 767.04 (EUR)
	Private/Own funds	269 187.00 (EUR)

Timeframe: 2017 to 2023

Project promoter: Pepe Aromas, Lda

Email: pepearomas@gmail.com

Summary

The project focuses on diversifying the agricultural activity of a company that the project promoters inherited from their grandfather. It is located in Vale do Pereiro, a village in the interior of southern Portugal. The project aimed to revitalise production by cultivating 20 hectares of certified organic prickly pear, a profitable crop adapted to climate change.

With low water requirements, the prickly pear can grow in very poor soils. Inspired by the principles of the circular economy, the project reuses all waste generated to develop new products and business opportunities.

The prickly pear is a highly sustainable and zero-waste crop. Its cultivation is based on good agricultural practices and respect for the environment and biodiversity, including reuse of irrigation water, use of renewable energies, reuse of consumables and waste.



© Pepe Aromas, Lda

Project results

- 100% use of the prickly pear plant cultivated on 20 ha by creating 13 products (e.g. jam, vinegar, liqueur, chocolates, juice, yogurt, soaps, shampoos) based on the reuse of waste.
- 12 ha of olive groves, 4 ha of organic lemon groves and management of 500 ha of cork oak forest.
- Important architectural heritage was renovated and repurposed.
- Generational renewal, with two young people employed from 2016 to 2023 and six young people working seasonally.
- Innovative products developed in partnership with academia.
- 70% of revenue from agricultural activity and 30% from tourist activity.
- Successful implementation of circular economy principles.
- Protection of agroforestry heritage through agricultural practices that replenish soils and use of indigenous fauna and flora to promote biodiversity.
- The certification of forest carbon sequestration is ongoing.
- Clean energy sources prioritised: solar panels, electric vehicles, etc.
- Attracting visitors, creating jobs and economic development through a sustainable tourism project leveraged on agricultural activity.



Key lessons and recommendations

- Initial lack of experience with prickly pear cultivation meant that significant research was required, as well as gaining experience on a farm already cultivating prickly pear.
- Strategic business planning helped to identify suitable crop varieties and new products and to follow consumer trends, market demand and supply.
- Planning to 3, 5 and 10-year horizons helps to organise production and decision-making.
- Automation of administrative and operational processes is important.
- Focus on training, contact with other producers, skills development and wider networks.
- Carry out agricultural, economic and environmental feasibility studies.
- Maintain an overview of the business aligned with the principles of circularity, biodiversity protection and sustainability.

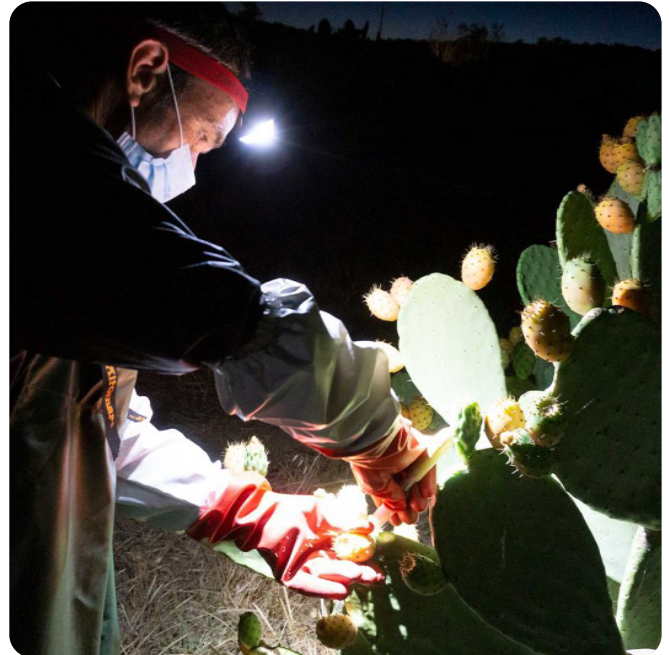
Context

The company was founded in the 1960s by its namesake, Pepe, the grandfather of the project promoters. It was dedicated mainly to cork production in an area of around 400 ha of cork oak forest. In 2015, siblings Susana and José reinvented the company, Pepe Aromas, to become a completely sustainable agricultural project in a remote region with an ageing population and severe water shortages.

The company's agricultural activity, in organic production mode, revolves around four major axes: olive groves and cork oak forests converted to organic production in 2018, increased cultivation between 2013 and 2017 of 20 ha of prickly pears and, in 2023, a lemon orchard also in organic production. The agricultural project is founded on organic production and is guided by the principles of circularity and environmental sustainability.

To make production more profitable, advance innovation and reintroduce waste into the value chain by engaging with cutting edge agricultural research, the project formed partnerships with national and international companies and universities to develop a range of high-quality food and cosmetic by-products.

The project also offers eco-tourism experiences, contributing towards the promotion of the project's operating principles.



© Pepe Aromas, Lda

Objectives

The project aimed to preserve 500 ha of traditional cork oak forests, to convert 12 ha of olive groves to organic production and to cultivate 20 ha with a new prickly pear plantation in organic production, a crop adapted to the region. In terms of job creation, the goal was to create 10 new jobs by 2025.

A further aim was to promote the conservation of existing ecosystems in the region. To this end, the project promotes a zero-waste approach, environmental sustainability and applies circular economy principles by using all of the fruits and plants along with recycled packaging; it also creates new high-quality cosmetic and gourmet products. Ultimately, the project aimed to promote economic development with a positive social impact on the community based on the green and circular economy, and by preserving soils and the environment.



Activities

The project began with the planting of over 14 ha of certified organic prickly pear orchards, which involved some deforestation and ensuring access along with the installation of the drip irrigation system in the new orchard. The following year, the project holders converted a formerly abandoned train station (with architecture of national heritage value) to a fruit factory, warehouse, shop and offices. Three boreholes were made.

This was followed by the purchase of a fruit-sizing equipment line to consolidate the fruit export process for the European market. Organic certification of the olive grove (12 ha) was awarded in 2019.



© Pepe Aromas, Lda

Between 2018 and 2023, the project established partnerships with companies and universities in order to find ways to fully use every part of the prickly pear plant, through the development of new processed products from fruit, flower, seed (food range and cosmetic range), exploring the potential use of the palm (leaf) for fodder (animal feed) and developing new cosmetic products.

Tourist activity, consisting of visits to the orchard and participation in agricultural activities, began in 2020. Further onsite construction took place in 2022 as well as the purchase of a palm crusher.

The following year, 4.5 ha of lemon orchard with organic certification was planted, an irrigation system was installed, and the organic certification process of the cork oaks began.

The project established partnerships with nationally renowned chefs to develop recipes with prickly pear and palm and a cook-book launch is planned. A tractor was purchased.

Main results

The project succeeded in achieving 100% use of the prickly pear plant cultivated on 20 ha by creating additional products based on the reuse of waste. It also ensured production on 12 hectares of olive groves, 4 ha of organic lemon groves and management of 500 ha of cork oak forest.

The important architectural heritage of the former local train station was preserved; the building was renovated and repurposed to host warehouses, an office and a shop. The project fostered generational renewal, with two young people employed from 2016 to 2023 and six young people working seasonally. The project is on track to create ten new jobs by 2025 in agriculture and tourism. Innovative products were created, such as edible films and 100% biodegradable and compostable bags, thanks to partnerships with academia. Around 70% of revenue comes from agricultural activity and 30% from tourist activity.

The project implemented circular economy principles by repurposing resources such as the excess raw material from the organic cultivation of prickly pear trees.

A key output was the protection of agroforestry heritage through agricultural practices that replenish soils and the use of indigenous crops, fauna and flora to promote biodiversity.

The intention is to certify the carbon sequestration of the entire forest area in line with the national regulatory framework.

The project prioritises clean energy sources, such as solar panels and electric vehicles, and the reuse of consumables, particularly packaging.

The project has attracted visitors and created jobs by promoting sustainable tourism leveraged on agricultural activity.

Key lessons and recommendations

This project was challenging, in part due to the initial lack of experience with prickly pear cultivation. Significant initial research was required.

An action strategy and a business plan helped to identify the most suitable crop varieties and new products and to follow consumer

trends, market demand and supply. Planning to 3, 5 and 10- year horizons helped to organise production and decision-making. Key performance indicators help to ensure proper management.

Many processes were automated. It was necessary to focus on training, visits to specialty fairs and contact with other producers, skills development and wider networks.

Success factors included carrying out agricultural, economic and environmental feasibility studies, talking with other producers and gaining experience working on a farm that was already dedicated to prickly pear cultivation. The project aligned business with the principles of circularity, preservation of biodiversity and sustainability of ecosystems.

Additional information:

Pepe Aromas Website:

<https://www.pepearomas.com/>

Pepe Aromas Website:

<https://www.pepearomas.com/a-nossa-historia/premios/>

Youtube:

<https://www.youtube.com/watch?v=nYtdZISFAIw>

