

## Bioeconomy Case Study



#### COUNTRY

Spain

#### PROJECT PROMOTER

Asociación ADROCHES

#### **FUNDING**

RDP funds, EUR 221 665

### **RDP MEASURE**

M16 - Cooperation (EIP-AGRI)

#### DURATION

Started in 2019

#### **CONTRIBUTION TO**

- generating environmental benefits
- · mitigating climate change
- creating value through improved production methods or processing technology

## KEYWORDS

Added value, cooperation, biowaste, residues, livestock, pilot project, soil and water management

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# SUBPGAN – Improving the management, valorisation and marketing of livestock by-products through innovation

## The initiative

In order to avoid the leaching of effluents and the contamination of rivers and the aquifer, the SUBPGAN operational group was set up to examine the most profitable and innovative solutions for managing the manure produced in the dairy cattle farms of Comarca of Los Pedroches. The project will not only look at innovative manure management processes, but will also examine new or current techniques for processing manure by-products and creating new products to support the intensive greenhouse crops in Almería.

- ✓ The project will support mitigation and adaptation to climate change through the innovative management of livestock by-products.
- ✓ Improved soil and water management through the reduction of contaminants leaching into the soil and water bodies.
- ✓ Promotes the production and use of renewable energy sources, byproducts, waste and residues.
- ✓ Reduces N2O and CH4 emissions from agriculture
- ✓ The project organised a demonstration day to publicise innovation and training workshops for farmers in the region.
- It produced a manual for farmers and a mobile application for waste management.
- 2 individuals directly employed in/by the initiative and 9 indirectly through spin-offs of the initiative suppliers transport etc.







## SUBPGAN – Improving the management, valorisation and marketing of livestock by-products through innovation

## Context

This project was set up in order to identify the most profitable and innovative solutions to managing the waste produced in the dairy farms of the Comarca de Los Pedroches, in Cordoba, Andalucía.

## Objective

The objective of this project is to quantify the costs of establishing one or more plants to process livestock waste in the region. The products produced at these plants would be made available to the market, thus creating jobs, stimulating economic development and providing environmental benefits.

## **Activities**

The activities of the project aimed to:

- 1. Decrease dairy farm livestock waste contaminants in the soil and rivers.
- 2. Find economically viable solutions for farmers through the cooperation of different agents and the application of different techniques.
- 3. Analyse waste treatment methods and alternative uses of livestock waste by-products which are already applied in the region.
- 4. Study new treatment techniques to increase the value of these by-products on the market;
- 5. Analyse the markets to assess the demand for byproducts from livestock waste.
- 6. Study the economic, strategic and logistical findings of the project and their applicability within the local farming context.
- 7. Disseminate the results.

The project consortium includes the Cooperative Society Andalusian Agropecuaria San Isidro (Dos Torres, Córdoba), ADROCHES – the Association for the Rural development of the region of Los Pedroches (Dos Torres, Córdoba), Olivarera Los Pedroches - an Andalusian Cooperative Society (Pozoblanco, Córdoba), the Técnicas de Compostaje, S.L. (Almería), the Campus of International Excellence Agri-food (Universities of Cordoba, Almeria, Cadiz, Huelva and Jaen), the Seneca Green Catalist, S.L. (Córdoba) and the Institute of Fisheries and Agricultural Training and Research Center of La Mojonera (Almería).

## **Environmental sustainability**

The project focuses on the management of livestock waste, in particular during its liquid phase, and the creation of marketable by-products. The farms use storage equipment to contain the liquids and avoid them mixing with rainwater and leaching into streams, rivers, or the groundwater.

It carries out an analysis of the options of building one or more biogas plants to process manure from cattle, using anaerobic digestion and producing biomethane.

Different innovative solutions are made available to farmers to solve the problem of cattle waste, including advanced composting by forced aeration, vermicomposting, anaerobic digestion and production of biomethane.

## Lessons learnt

The preparation of the RDP budget was very complex, due to the need to introduce three proforma invoices to justify each of the expenses covered by the programme.

The project is currently running on the partners' own funds, but once the expenditures are approved it will receive support from the RDP.