

ITALY

Biodiversity restoration, preservation and enhancement

Location
Casalino

Programming period
2014 – 2020

Priority
P4 – Ecosystems
management

Measure
M10 – Agri-environment-
climate

Funding (EUR)
Total budget 486 000
EAFRD 209 563
National/Regional 276 437

Project duration
2015 – 2020

Project promoter
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A farmer received support for applying sustainable soil management practices while using the digestate from his biogas plant as fertiliser.

Summary

The project aimed to support a farmer in the use of the dry remains from biogas production (digestate). It enabled him to adopt more sustainable soil management practices, including minimum tillage combined with strip tillage and sowing.



Results

The farmer appears very satisfied with the outcome of the new practices: the crops are in good shape, and he managed to cut fuel costs by 60%.

The minimum tillage method leaves straw that improves the physical structure of the lime soils of the farm.

The phytosanitary state of the crops is also very satisfactory.

Lessons & Recommendations

- This project confirms that the combined adoption of innovative practices for soil management provides positive results.
- The entrepreneur needed to carefully study examples of this techniques from other farmers, before being able to implement them on his farm.

Context

Daniele is a 23 year old entrepreneur, who after studying biology entered his family's farm business. Located in the border area between Piedmont and Lombardy (Novara province), the farm was until a few years ago almost entirely devoted to rice cultivation. When the profitability of this crop greatly decreased, the family considered setting up a biogas plant in order to diversify its activities. This change, which was possible thanks to RDP support, necessitated a move to a different way of managing soil fertility,.

Setting up the biogas plant meant also changing the overall crop pattern of the 150 hectares farm. Rice cultivation was strongly reduced, and crops suitable to be used for the plant were introduced, such as maize. As a result of the plant, digestate started to be available. The entrepreneur needed to adapt to this new context and to learn new practices to properly manage this resource.

Objectives

The project aimed to use the dry remains of the biogas production (digestate), adopting a more sustainable pattern of soil operations. This involved a minimum tillage technique combined with strip tillage and sowing.



Activities

The project focused on adopting two linked practices: a minimum tillage applied for the first 12/14 cm of soil, and on strips only 20 cm wide, for planting maize rows. In practice this meant using 30% of the available soil, leaving the rest untouched.

Then on these crop rows the digestate from the biogas plant production is distributed, just below soil level.

Main results

The farmer appears very satisfied with the outcome of the new practices: the crops are in good shape, and he managed to cut fuel costs by 60%.

The minimum tillage method leaves straw that improves the physical structure of the lime soils of the farm. In addition, the phytosanitary state of the crops is also very satisfactory.

Key lessons

This project confirms that the combined adoption of innovative practices for soil management provides positive results. The entrepreneur needed to carefully study examples of this technique in use in other farmers, before successfully implementing them in his farm.



Additional sources of information

n/a