Alai family farm - conservation agriculture on the Po Plain

A family-run arable farm converted to sod seeding in order to reduce their production costs and improve the organic matter content of their land.

EAFRD-funded projects

Location: Guastalla, Italy Programming period: 2014-2020 Priority: P4 - Ecosystems management Focus Area: Soil erosion & soil management Measures: M10 - Agri-environment-climate Funding: Total budget 51 000.00 (EUR) EAFRD 21 991.00 (EUR) National/Regional 29 009.00 (EUR) Timeframe: 2017 to 2023 Project promoter: Lisa Alai Email: Ghippo56@gmail.com Website: n/a

Summary

The Alai family farm, on the plains of the Po Valley in Emilia Romagna, mainly cultivates alfalfa, wheat and corn, but they had been struggling to keep up with rising costs. They decided to see if a new production method would help them improve their financial situation.

Project results

Management costs per hectare were reduced by approximately 15%-20%. Fuel costs decreased by nearly 50%.

The yields for most crops have remained stable and of good quality.

Their soil organic matter content, which is monitored every two years, has increased by 0.15%-0.20%.

Lessons & Recommendations

The use of a simple conservation agriculture technique, sod seeding, has provided positive economic and soil fertility outcomes. However, it requires the use of special machinery and seeds that are suitable for this technique (which are not always easily available). The farmer had some difficulties finding contractors who were able to provide the specific machinery for implementing this technique.

Context

The Alai family runs a mid-sized farm on the plains of the Po Valley in Emilia Romagna, close to the border with Lombardy (northern Italy). The Po Plain area is known for the production of the Parmigiano-Reggiano PDO cheese. The Alai family farms approx. 45 hectares of arable land, on which they mainly cultivate alfalfa, wheat and corn. Until recently, their business was really struggling, especially to meet the costs of hiring external contractors, so they decided to experiment with a new production method.

Objectives

Adoption of the sod seeding technique aimed to reduce the farm's yearly production costs, improve the organic matter content of the farm's soils and reduce its overall carbon emissions. All of this they aimed to accomplish without negatively affecting production yields.



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Activities

The Alai family implemented the sod seeding technique and crop rotation across all of their 45 hectares, even though they only received annual support from the agri-environment-climate measure of the Rural Development Programme of Emilia Romagna for 33 ha.

In order to correctly implement the technique and be eligible to receive support, the farmer must comply with a set of mandatory provisions:

- > maintain a distance of at least 40 cm between crop lines;
- > use minimum tillage, even if ad hoc machinery is used;
- > maintain cover crops after the main crop is harvested and leave the residues on the land; and
- > when intervening to prevent soil compaction (e.g. every five years), the chosen operation must avoid the inversion of soil layers.



Main results

Management costs per hectare were reduced by approximately 15%-20%. Fuel costs decreased by nearly 50%.

The yields for most crops have remained stable and of good quality.

The soil organic matter content, which is monitored every two years, has increased by 0.15%-0.20%.

Key lessons

The use of a simple conservation agriculture technique, sod seeding, has provided positive economic and soil fertility outcomes. However, it requires the use of special machinery and seeds that are suitable for this technique (which are not always easily available). The farmer had some difficulties finding contractors who were able to provide the proper machinery for implementing this technique.

Finally, the family received advice from a recently established association for conservation agriculture (AIPAC) that has been set up in Ferrara by one of the main farmers' associations (Confagricoltura).

> "I was surprised to note that overall economic results for our farm are quite positive: there is no need to use the plow anymore."

> > Alai family member

Additional information:

www.confagricoltura.org/ferrara/agricoltura-conservativa-provein-campo-delle-attrezzature

