

Precision sheep – precision farming and ewe milk quality

Riferimenti

Tipo di progetto

Gruppo Operativo

Acronimo

Precision sheep

Tematica

Agricoltura di precisione

Information

Time frame

2019 - 2021

Durata

32 months

Partners (no.)

8

Regione

Toscana

Comparto

Zootecnia - ovi-caprini

Localizzazione

ITI19 - Siena

ITI1A - Grosseto

Costo totale

€363.923,25

Programma di sviluppo rurale

2014IT06RDRP010: Italy - Rural Development

Programme (Regional) - Toscana

Parole chiave

Animal husbandry and welfare

Farming practice

Agricultural production system

Sito web

<https://precisionsheep.it/>

Project status

completed



Objectives

Improve the efficiency of the ewe's milk farm. Thus, management practices based on the principles of precision agriculture and precision feeding will be introduced in the farms with the support of innovative tools. The innovative practices will be transferred at farm level with an approach able to take in consideration the specific characteristics of each farm. The innovation transfer will be conducted using a participatory and multi-actor approach. The latter will include on-line communication systems among researchers, advisors and farmers and the development of a decision support system (DSS) to encourage the network of information among the actors.

Activities

Creation of a support service to the decisions (app for smartphones, web-app) to improve the efficiency of the production processes of the companies involved and transfer of innovations that will be made by creating a network of support to the sheep's milk production chain between pilot companies, technical figures, research bodies and breeders and structured on three levels:

- demonstration of agronomic and zootechnical innovations in pilot companies;
- support of "extensionists" to transfer innovative practices in network companies that will also use the new app;
- involvement of local zootechnical companies.

Context

In recent years, a series of unfavorable circumstances (adverse climatic events, intensification of the problem of predators, fluctuations in production costs) have led to a general decline in the production of sheep's milk in Tuscany, also associated with a decline in the quality of the same has led to a progressive loss of competitiveness of companies. Thanks to

the survey conducted on a sample of companies, in the setting up phase, problems and opportunities were identified for the development of participatory and innovative approaches to precision farming. Among the main problems identified, there is a lack of appropriate structural modernization interventions with a lack of stocking and distribution systems. This condition implies a high use of labor for the food management of the flock and limits the possibilities of introducing innovations in the diet. Another problem is the lack of innovation in breeding systems, for example regarding the reproductive management of the herd, which is for the most part traditional, with non-seasonally-adjusted milk production. Furthermore, a lack of support figures for the transfer of agronomic and zootechnical innovation to the company has been identified. The results of this first survey showed the opportunity to improve the technical and technological level of dairy sheep farms in central-southern Tuscany (the area where more than 80% of the regional sheep population is concentrated) through the introduction of precision farming and precision feeding methods and decision support services.

Partenariato

Role	Azienda	Address	Telephone	E-mail
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Pratiche abstract
Link utili

Titolo/Descrizione	Url	Tipologia
Sito web del progetto	https://precisionsheep.it/	Sito web
Relazione Finale Precision Sheep	https://precisionsheep.it/wp-content/uploads/2022/04/Relazione_Finale_Precision...	Materiali utili
Presentazioni di Precision Farming	https://precisionsheep.it/wp-content/uploads/2022/04/Precision-Farming.pdf	Materiali utili
Presentazioni di Benessere e Qualità del latte	https://precisionsheep.it/wp-content/uploads/2022/04/Benessere-e-Qualita-del-la...	Materiali utili

Titolo/Descrizione	Url	Tipologia
Presentazioni di Precision Feeding	https://precisionsheep.it/wp-content/uploads/2022/04/Precision-Feeding.pdf	Materiali utili