

# Portable NIRS

#### Need:

Evaluation of forage quality and comparison to references/chemical analysis of feedstuff on farm

Aim:

• Measuring on-farm the composition (moisture, starch, CP, NDF, ADF, Ash) of grain, conserved or fresh forages.

#### Description:

It monitors the dry matter content of feed ingredients, improving the consistency of the rations. It checks the dry matter of forages in the field, helping to determine the right time for the harvest. It assesses the quality of the feed purchased and stocked.

### How to Implement:

You need to put the feed sample in to the cup analyser and read the results of the analysis in the display, print or store them in a USB key.

The portable NIR allows for a rapid assessment of feedstuff chemical composition. It would be desirable to include it in onfarm technical assistance services.



**Country:** 

Italy

Production System (dairy or/and meat sheep/goat):

Dairy and meat sheep and goat

Category of Animal (ewe, goat, replacement, lamb, kid):

Ewes and goats

Source of Information:

https://techcareproject.eu/

#### Attachment/links:

https://www.youtube. com/watch?v=oaRde 6DV-XY



### Expected Benefits:

- There is no sample preparation
- It is portable and can be moved easily by a trolley
- · Less the one minute to read the results
- It allows to make real time decisions

## Costs and Challenges

It needs:

- 1. a power supplier;
- 2. a software to be installed in a PC;
- 3. for some feedstuff (e.g. some fresh forages) may need a calibration based on wet chemistry.
- Set up costs ~ > 15, 000 Euro
- Subscription required: No
- Ease of use? Scale 1 (Complicated) 10 (Simple)



- Value for money (for this type of benchmark farm)? Maybe
- Recommend this tool/technology for use on other types of farm? Maybe







It would take 10 years for 98% of adoption.



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