



Precision Sheep Farming: a slight start

Little less than 10 years after the introduction of electronic identification in sheep farming: how is it valued?

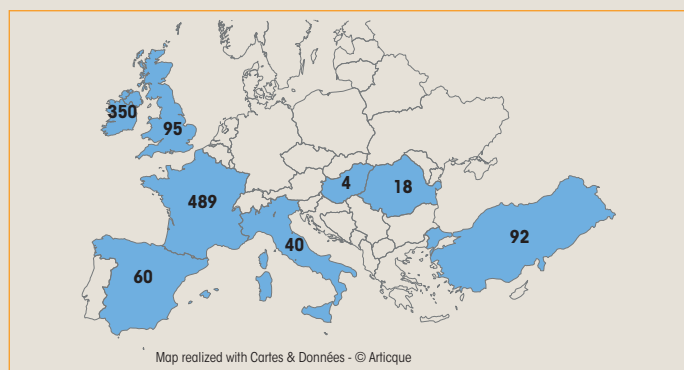


In 2018, a survey was conducted in the countries of the European project SheepNet (France, United Kingdom, Ireland, Spain, Italy, Romania, Turkey, Hungary) to evaluate how sheep farmers view the electronic identification (EID).

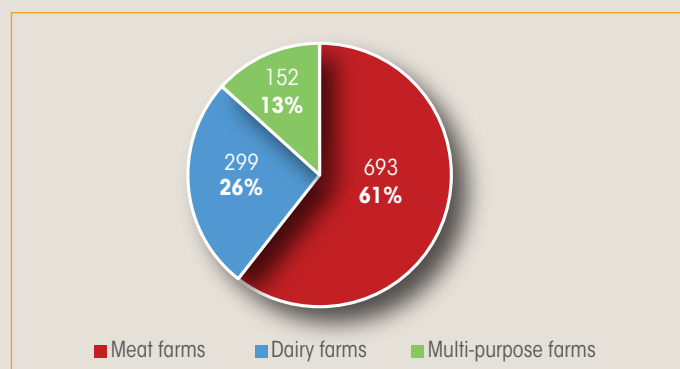
1148 surveys were collected, of which almost 75% were from France or Ireland.

Among the respondents, meat farms are dominant.

DISTRIBUTION OF 1 148 ANSWERS BETWEEN THE EIGHT COUNTRIES



DISTRIBUTION OF FARMS BY TYPE OF PRODUCTION



A FAVOURABLE CONTEXT FOR PRECISION SHEEP FARMING

Within the European Union, since the first of July 2010, all small ruminants (sheep and goats) must be identified with an RFID (Radio Frequency Identification) electronic tag.

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A huge expansion of new technologies, such as smartphones, shows new solutions for an industry in mutation (growth of the flock size, farm labour issues...)

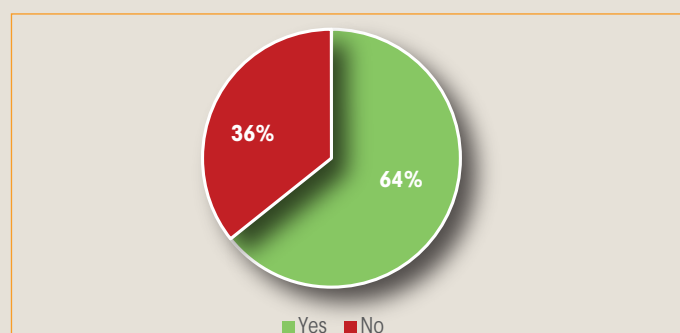
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Today, it is possible to simplify the work and/or make traceability of the data more reliable and/or to follow more precisely the animal in the flock (by batch and/or individually).



The majority of farmers (64%) perceive electronic identification as an opportunity for sheep farming.

DOES ELECTRONIC IDENTIFICATION REPRESENT AN OPPORTUNITY FOR SHEEP FARMING?



AND YET, A LEVEL OF EQUIPMENT IS STILL LOW...

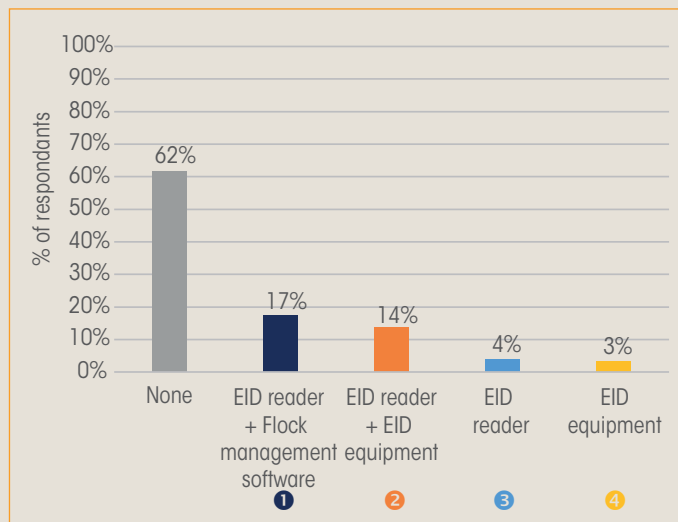
Despite a favourable context, to date, only 38% of the European farmers surveyed are equipped with tools enabling the benefits of EID.

4 equipped farming profiles were defined in the study:

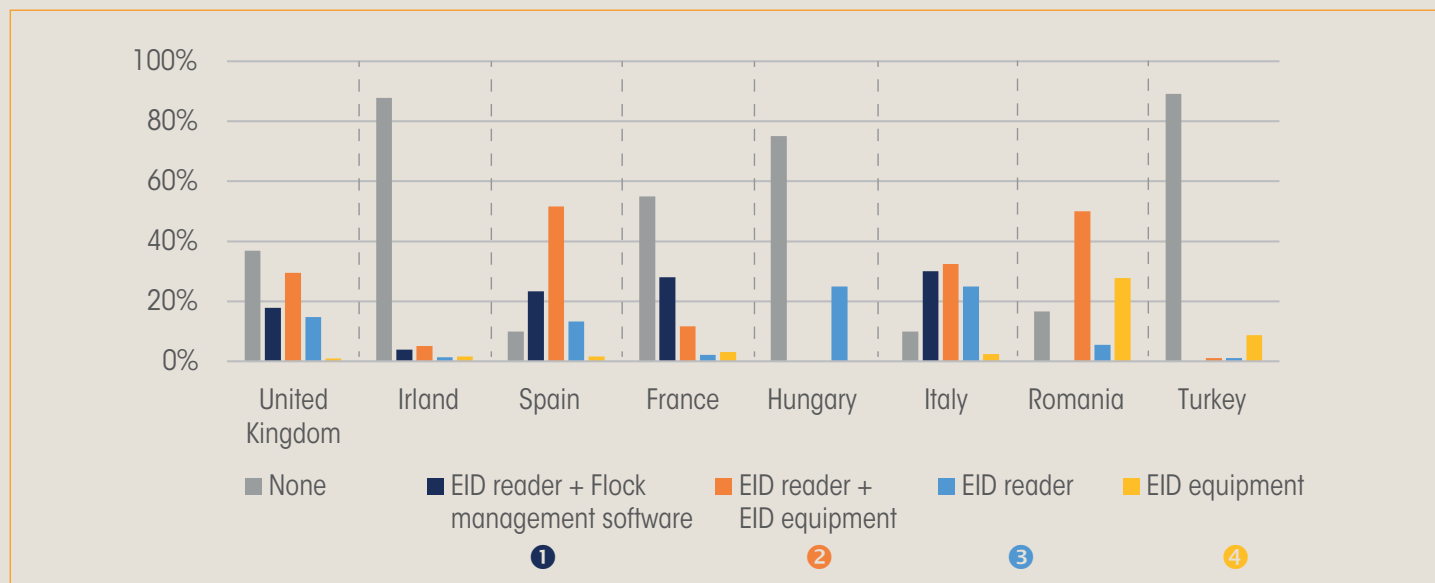
- ❶ Farmers equipped with an EID reader combined with a farm management software;
- ❷ Farmers equipped with both an EID reader and an EID equipment: EID weigh crate, EID automatic feeder...;
- ❸ Farmers with only an EID reader;
- ❹ Farmers with only an EID equipment.

This level of equipment varies widely from country to country, from 10% to 90% for the farms that participated in the survey.

LEVEL OF EQUIPMENT OF THE FARMS SURVEYED

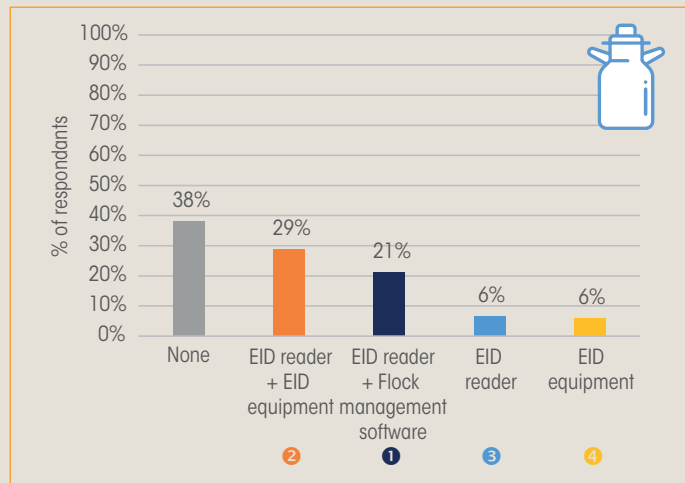


DIFFERENCE IN EQUIPMENT LEVEL OF FARMS SURVEYED BETWEEN COUNTRIES

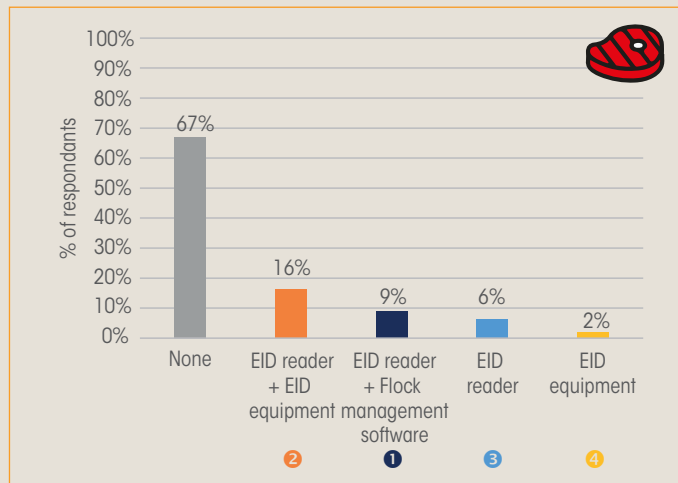


Overall, dairy farms are better equipped than meat farms.

LEVEL OF EQUIPMENT OF THE DAIRY FARMS SURVEYED (n = 299)



LEVEL OF EQUIPMENT OF THE MEAT FARMS SURVEYED (n=693)

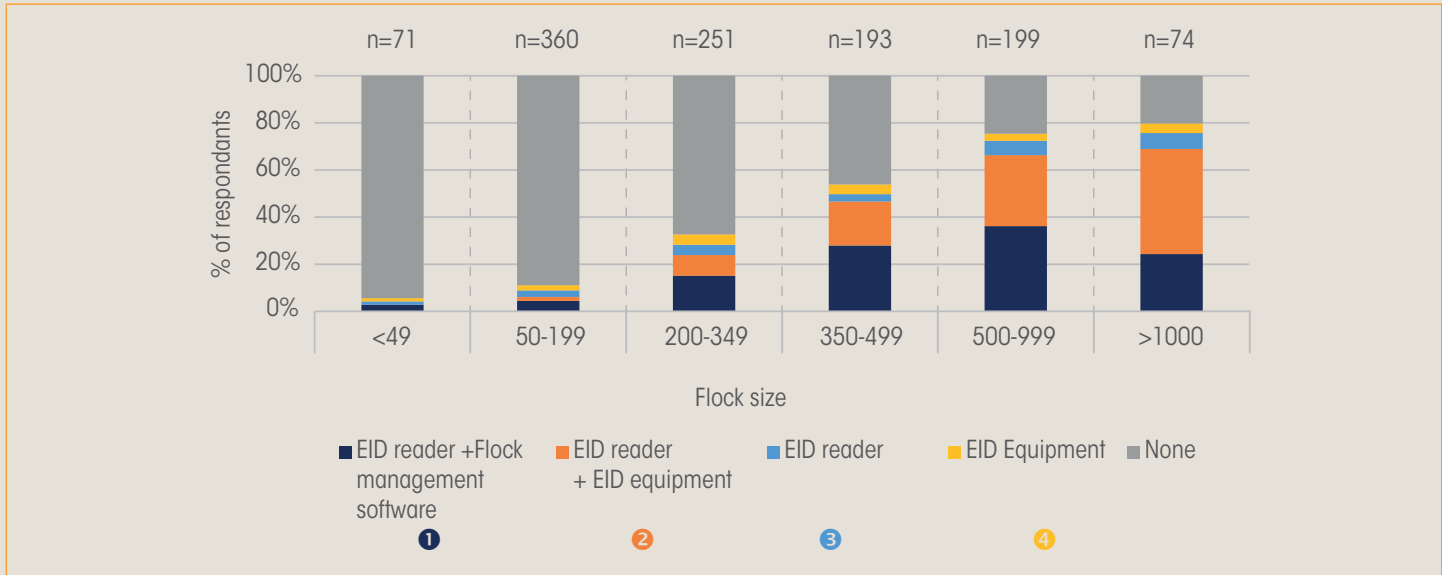


A STRONGER BREAKTHROUGH FOR PRECISION SHEEP FARMING IN LARGE FLOCKS

An almost linear relationship exists between equipment level and flock size. The greater the number of ewes on the farm, the more the farmer will choose to equip himself with precision farming tools.

From 500 ewes, 75% of the farms have an equipment that utilizes EID!

EQUIPMENT LEVEL ACCORDING TO FLOCK SIZE

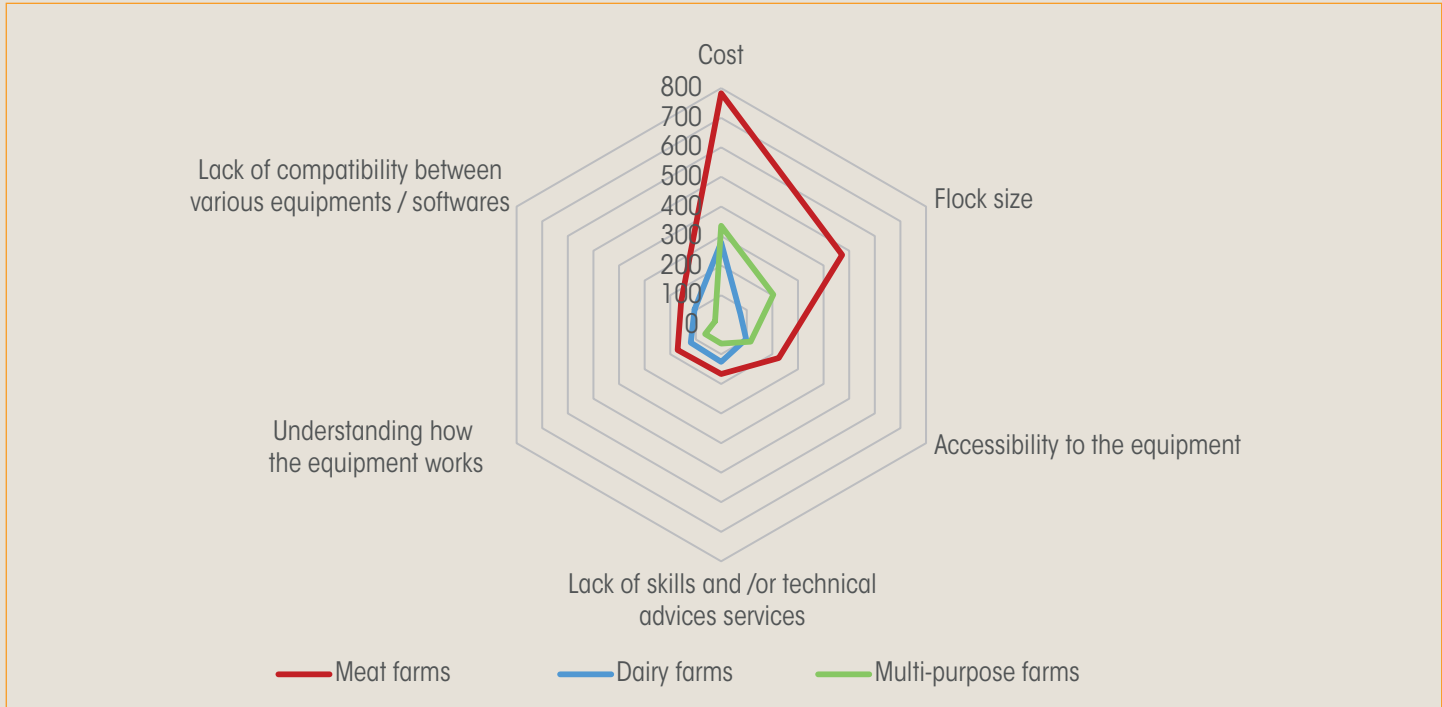


COST: THE FIRST DRAWBACK ON EQUIPMENT

During the survey, the farmers ranked in order of importance (1 to 3) the drawbacks or barriers of having the equipment. A score was given to each answer, assigning 3 points for the first barrier, 2 points for the second and 1 point for the third.

The main obstacle to the equipment of farms remains the high cost of the different EID readers/ equipments. Flock size ranks second and can be related to the cost/benefit of the investment. The accessibility of the material as well as the lack of support and communication is only mentioned after.

CUMULATIVE POINTS FOR EACH IDENTIFIED DRAWBACK



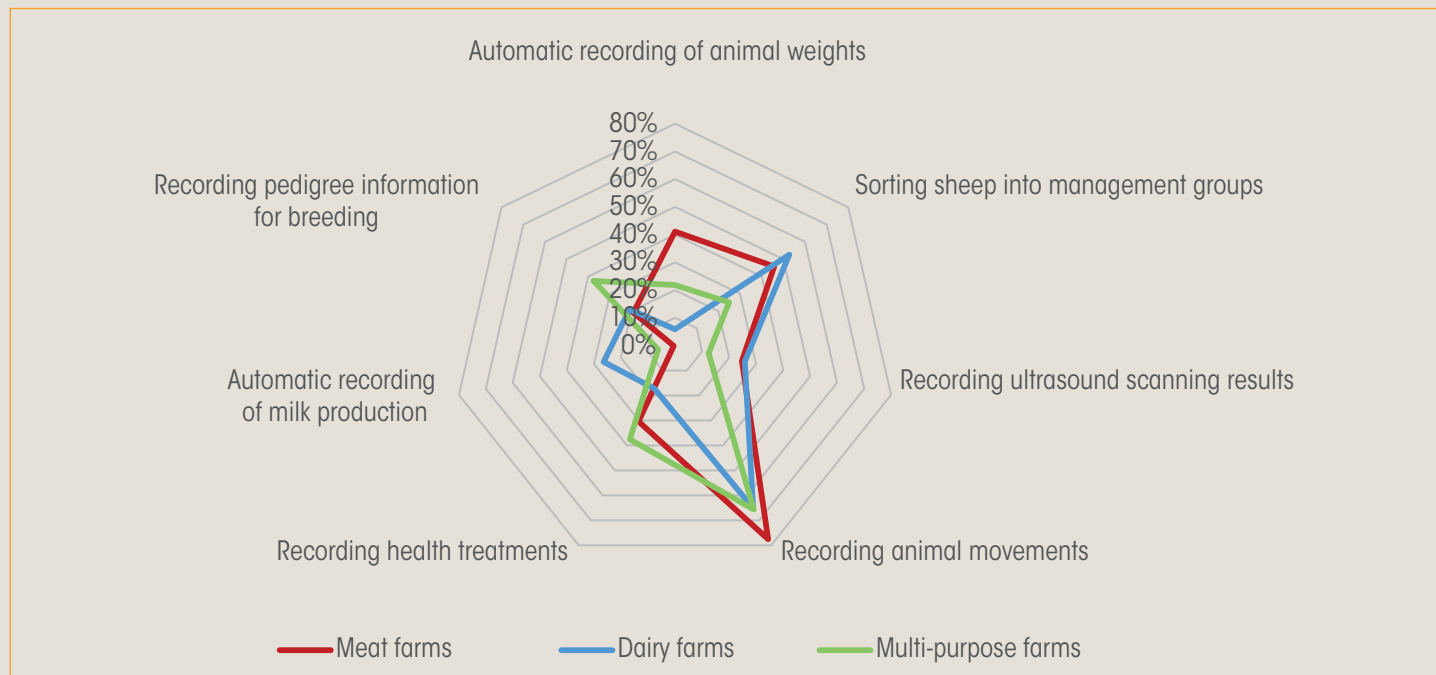
ELECTRONIC IDENTIFICATION MAINLY VALUED FOR RECORDING ANIMAL MOVEMENTS

The uses of electronic identification by equipped farmers are still very limited and depend heavily on the type of equipment on the farm.

To date, electronic identification remains mainly used for the recording of animal movements as well as sorting sheep into management groups. Conversely, the recording of ultrasound results, health data or the monitoring of mating, are still undervalued.

Finally, the valuation of electronic identification through other equipment such as the EID weigh crate and milk counters is currently very marginal and depend of the level of equipment.

WHY DO SHEEP FARMERS USE EID ON THEIR FARMS?



CONCLUSION

Today the ovine production is in a favourable context to develop precision sheep farming (widespread use of EID and expansion of new technologies). Yet, only 38% of farms are equipped with tools that maximize the benefits of EID. Overall, dairy farms better equipped than meat farms.

The level of equipment of the farms depends on flock size, with nearly 75% of the farms with more than 500 ewes equipped. The cost of materials is the first barrier to the equipment of sheep farms. These two points show a lack of favourable perception of the cost/ benefit ratio during the investment.

To date, the benefits of electronic identification remain limited to the management of animal movements. To promote a better use of the latter, a cost/benefit of investments approach should be carried out as well as a better communication on the possible benefits.

THANKS:

The breeders and the partners Sheepnet and ISAGE.

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Réf.: 00 18 704 001 - December, 2018

THE TECHNICAL PARTNERS OF THE PROJECT:



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 727895 and 679302.

