



Task 4.2 Innovation case study report

Individual data collected from EID for several purposes

(Use of EID and prospects)

iSAGE Training Course and Workshop

Zaragoza, Spain, from 10 to 13 December 2019

Gilles Lagriffoul, Adrien Debroux – Institut de l'Élevage
Chloé Mathe, Nicolas Voisin-Ansquer - trainees Idele



Pauline RIVALLANT (Trainee INRA-Idele funded by GIS Agriculture-Elevage)
Dominique FRANÇOIS (INRA) - Jean-Marc GAUTIER (Institut de l'Élevage)

EID offers **many possibilities** to facilitate the management of goat and sheep flocks

New tools are being developed

But, it seems that the implementation of these technologies among sheep and goat farmers was **relatively limited**

Main objectives of the case study :

1. Make a picture of the use in France
2. Linked to the H2020 SheepNet project, broaden the picture to Europe
3. Show the interests or the limits

France :

Questionnaire with 29 items

631 answers (295 meat sheep, 182 dairy sheep, 107 dairy goat)

Questionnaire : 29 items general information about the farm and farmer, use of electronic identification (EID reader type, reader trademark, EID connected tool, flock management software, valorization), opinion on EID

Precision Sheep Farming: a slight start

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

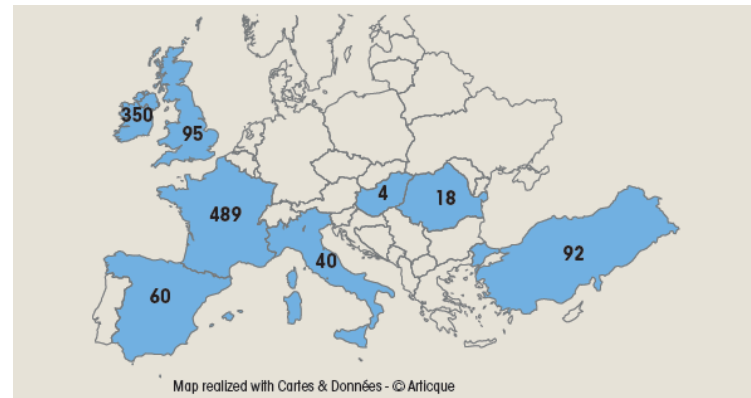


SheepNet network :

<http://sheepnet.network/>

the **same survey** extended to the various partners of SheepNet (Ireland, United-Kingdom, Turkey, Spain, Italy, Romania and Hungary)
+ results of a survey conducted by the SRUC in 2015 and 2016

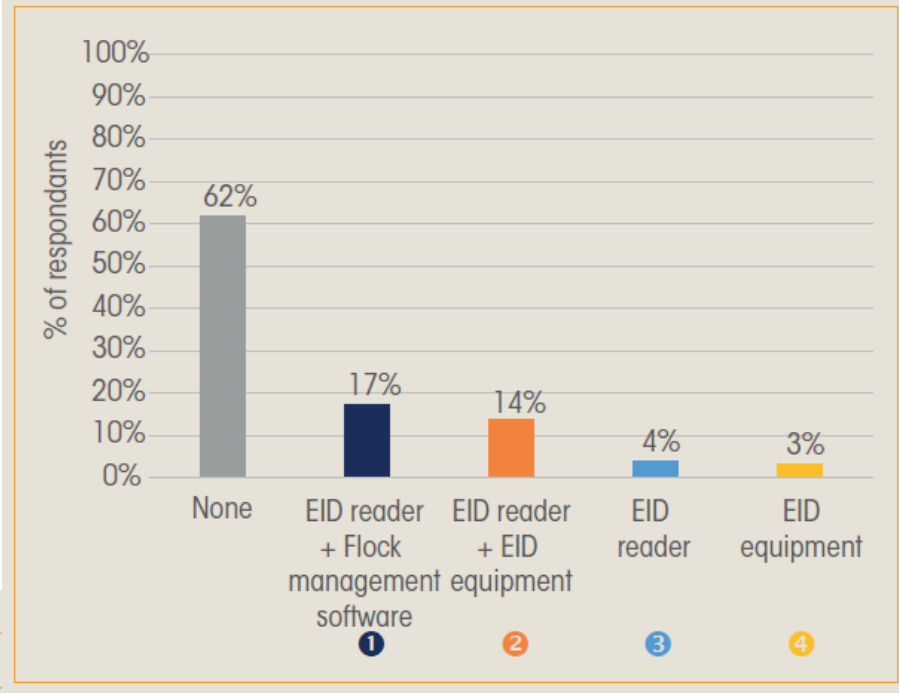
**Total of 1148 responses
across 8 countries**



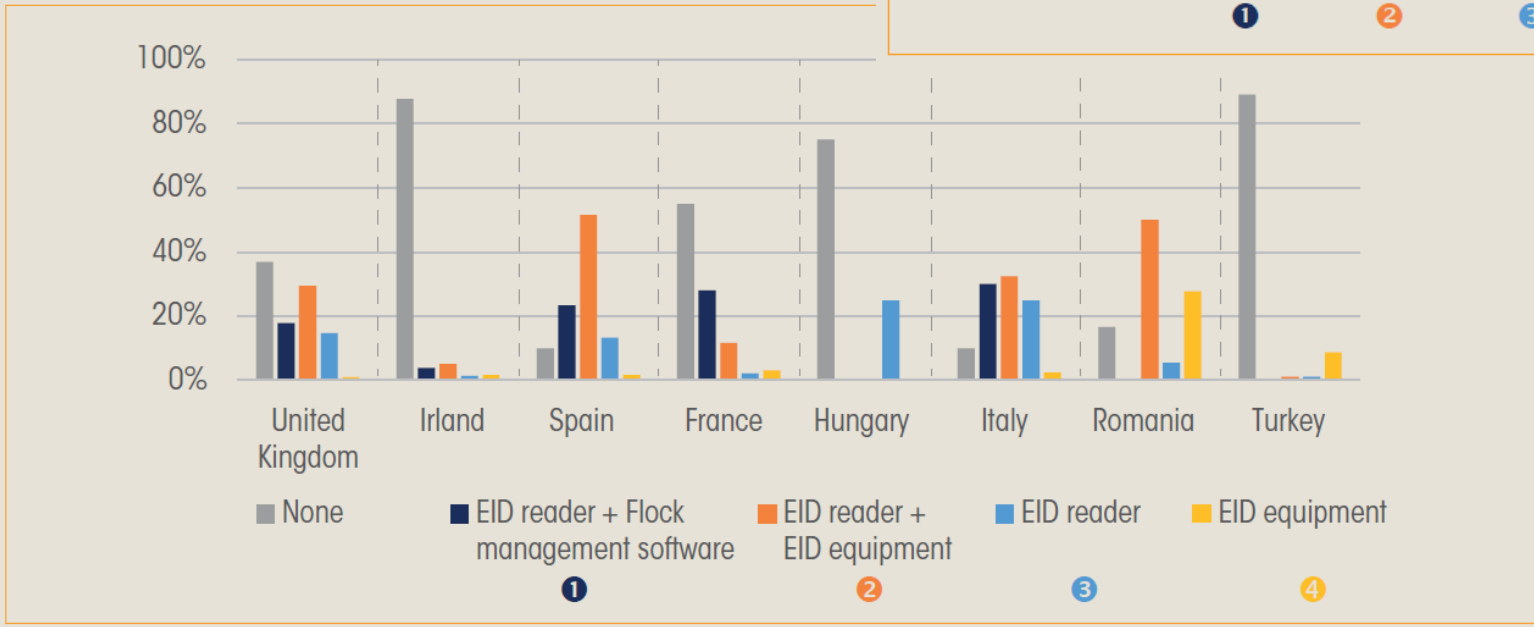
38% of the European sheep farmers equipped with EID tools

Main tool : EID reader

LEVEL OF EQUIPMENT OF THE FARMS SURVEYED



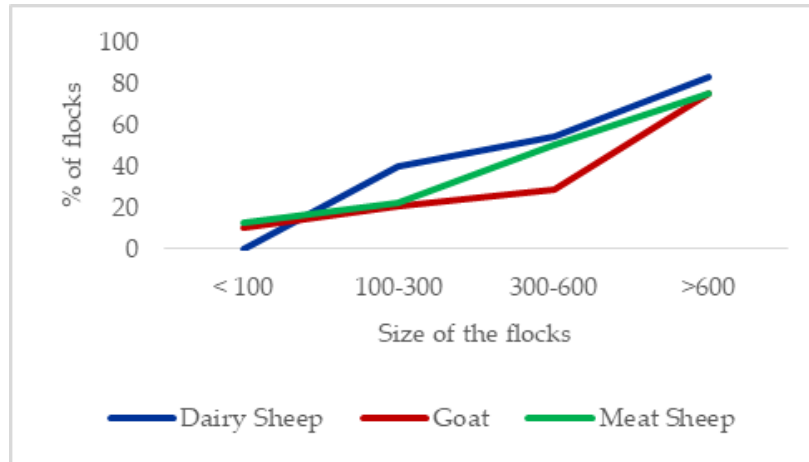
DIFFERENCE IN EQUIPMENT LEVEL OF FARMS SURVEYED BETWEEN COUNTRIES



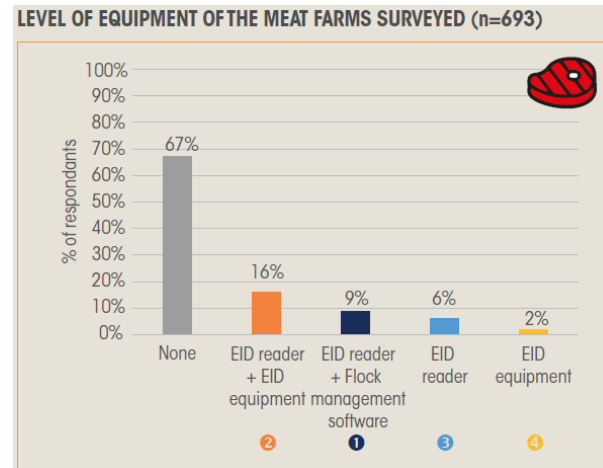
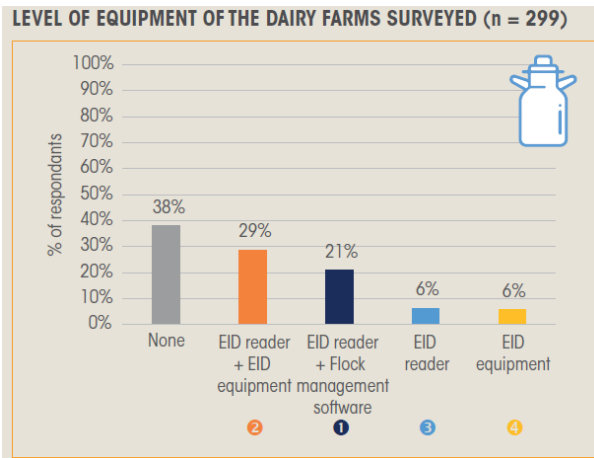
Main drivers :

1. Flock size

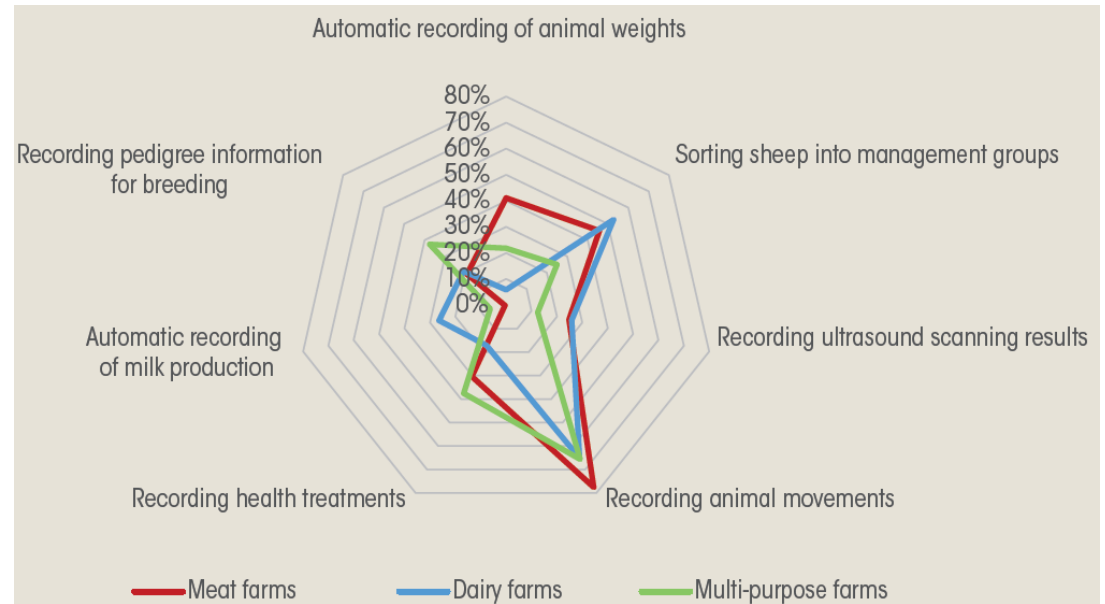
An almost linear relationship between % equipment and flock size



2. Production dairy > meat

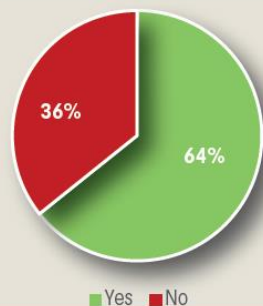


EID mainly used for recording animal movements

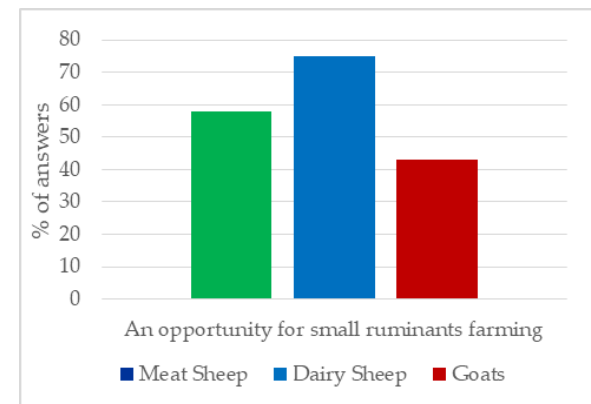


An opportunity for 2/3 of the European sheep breeders

DOES ELECTRONIC IDENTIFICATION REPRESENT AN OPPORTUNITY FOR SHEEP FARMING?



French survey :



The main constraint : cost

The others :

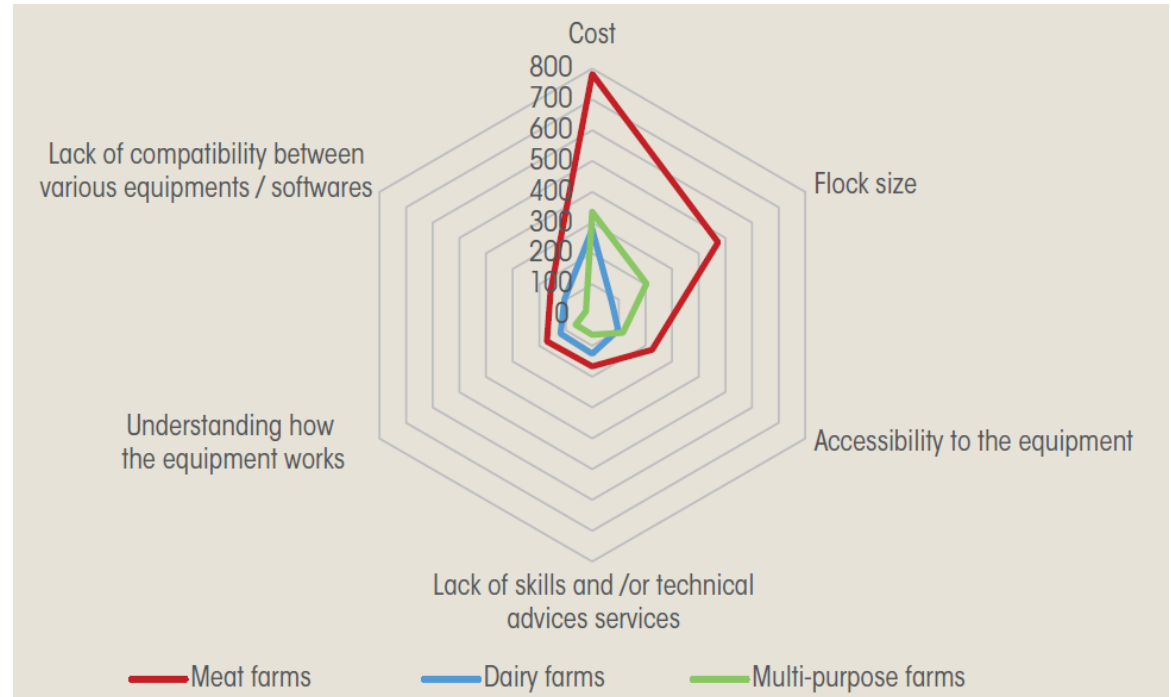
Flock size (cost/benefit)

Type of equipment

Compatibility between equipments

Lack of skills,

Lack of advice services



A reluctance to use the EID technology for less than 10 % of the answers
Few sanitary problems, losses... reported

Some illustrations of EID use

Automatic **milk recording**



Automatic **feeder** in milking parlour



Health : EID weigh crate with autoshedder for targeted selective treatment

EID worming gun (with weigh crate/panel)

Management of **Reproduction** : electronic Alpha-Detector (detection of mounting activity)
Alpha®



...

EID reader
+ **flock management** software
Ex. ESKARDILLO tool

Automatic **weighing**



Walk Over **Weigh** (WOW)



For the future...

The potential of the EID technology is now well established.

Need to develop efforts in terms of communication, information :

- . About the different technologies,
- . To choose the better equipment regarding the objectives of the breeder,
- . To demonstrate through concrete examples, to show cost / benefit,
- . To work with the breeders to develop specifications to define tools that meet their expectations and with a "price " compatible with sheep and goat farming.

EU approach regarding funding for innovative technologies research and transfer, to motivate companies to invest in the small ruminant sector (/ cost)

Promote R&D programs to develop PLF in small ruminants

Explore technologies : latest knowledge, UHF technology, ...

Partners : IDELE, CNBL, CAPGENES, INRA

Thank you for your attention

Thank to the breeders who accept to answer to the questionnaire

iSAGE project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 679302.

