



New technologies by french small ruminants farmers: a revolution underway?

State of play and needs

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Context: EID in France

▶ An obligation for all animals

- ▶ born since January 2010
- ▶ Leaving the farm



▶ estimation January 2015

- ▶ **Full EID:** 25 000 farms (30% with SR nb > 25; 66% of national flock)
- ▶ **Others:** 80 à 90 % of EID animals





Aims

- ▶ **Which new devices and equipment are used or can be used?**
 - ▶ Based on EID
 - ▶ Other new technologies (GPS, sensors, imaging...)
- ▶ **Estimate their importance?**
- ▶ **Perspectives?**





Methode

▶ Survey in 2015 based on:

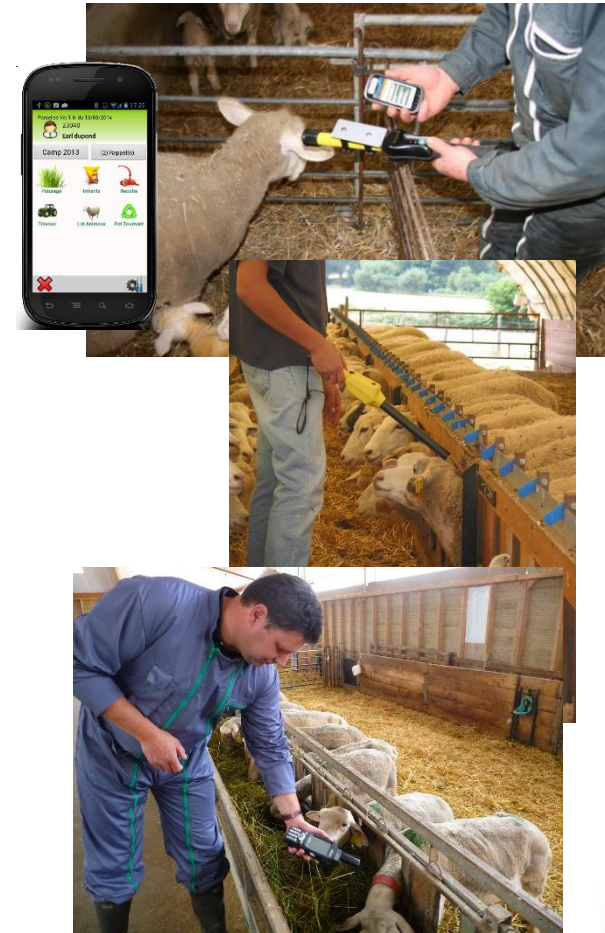
- ▶ 22 technicians
- ▶ 6 manufacturers or distributors of equipment for sheep and goat
- ▶ 4 small ruminants software publishers

▶ Expertise of French Livestock Institute



EID + handheld readers

- ▶ Use by about 2000 SR farmers
 - ▶ 7% farmers with > 25 sheep or goats
 - ▶ 28% farmers with > 300 sheep or goats
 - ▶ = 50% farmers using livestock software
- ▶ For livestock management
- ▶ with :
 - ▶ Stick + Pocket PC or smartphone
 - ▶ All-in-one « Psion »



from the weight acquired simultaneously
from a list of preset information
mixed flocks with several owners

EID + « fixed » readers

► For automatic drafting

- In few dairy farms at the exit of milking parlour

► Automatic counting

- very little use today

► Main restraints :

- Unreadable tags
- Slowness



Farmer demands for improvements
and more possibilities



EID + readers + equipment

▶ Automatic weighing

▶ A large range of solution

- Used by few farmers for livestock management
- mainly used by technicians for Individual performance testing of lambs in farm

▶ Main restraints :

- Cost: 10 000 - 15 000 €



Relevant tool for sheep livestock management?





EID + « fixed » readers + equipment

▶ Automatic individual feeder

- ▶ 100 dairy sheep farms
- ▶ 20 -30 in dairy goat farms



A demand for more R&D:

- Analysis of cost / benefit
- Determine/Validate the rules of feeding management



Other technologies: GPS

- ▶ **Interest = tracking in real time :**
 - ▶ To locate animals on large grazing areas
 - ▶ As warning system in case of animals get out of a defined area
- ▶ **Use by 20 -30 dairy goat farmers**
- ▶ **Main restraints**
 - ▶ Battery autonomy
 - ▶ network coverage
 - ▶ Availability of specialized software according to the need
 - ▶ The « fear » of been used by the administration for controls

A demand for more R&D





Other technologies: sensors

- ▶ **Not used today on farm!**
- ▶ **Main restraints :**
 - ▶ No (or few) demand from farmers because
 - No knowledge of potential and of the existence
 - ▶ No (or few) application available in farm

A demand for research!



Conclusion

- ▶ **EID = booster for new technologies**
- ▶ **« simple » reading = the main use of EID**
- ▶ **More application and use in dairy farms**
- ▶ **Main restraints:**
 - ▶ Cost / benefit
 - ▶ Lack of knowledge of potential of new technologies
 - ▶ Impact on the work organization + ergonomic approach
 - ▶ Regulation perception
- ▶ **A big need for R&D and for new applications on health, reproduction, genetics, feeding management, predators management, work assistance...**

**Thank you for
your attention!**