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% to 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?
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 »
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
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: GPS
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!
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...

Conclusion

Thank you for your attention!