An on-farm experiment to assess new phenotypes:



how to involve farmers?

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Why a French lamb vigor project?

- In France current selection deals with 2 main difficulties:
 - Lack of mortality data and poor quality
 - Low heritability of mortality
- **⇒**Need to find others traits and to motivate people to collect
- **■** Vigor genetic selection starts developing in Scotland
 - Scoring system to evaluate lamb vigor exists
 - Genetic selection possible

Introduction of vigor in selection depends on feasibility and farmers' willingness to register such data

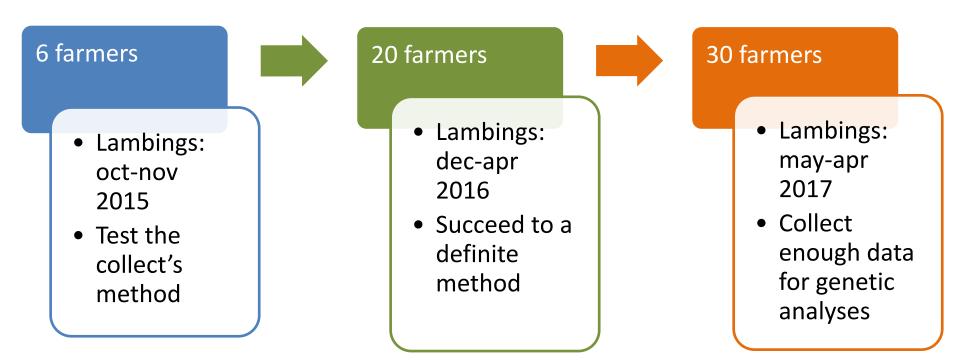


What about the project?

Based on a farmers' group

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3 successive tests to record lamb vigor on commercial farms



- The aim: to result in a data recording protocol
 - Bottom-Up approach

based on the involvement of farmers and technicians



An on-farm experiment to assess new phenotypes: how to involve farmers?

- **►** A. Different data registered
- B. Conditions that lead to success





An evolutionary protocol

- An initial method of registration recommended
- Test of data recording on farms
- After each test, changes on protocol and on scoring system motivated by farmers' experience discussed



- Meetings and surveys
- Discussion and experience sharing used to find the right way to register data
- Without to forget keeping the course: collect data for a genetic use!







The initial recording protocol

Lamb birth weight (kg)

Precision on mortality (date, reason)

Birth assistance

Lamb activity for 5 min after birth

on wet lambs

Suckling ability

Rect irth temp ture

Col mk

Stimu at birth or not









Changes on the criteria level of birth assistance

0	Lambing <u>not seen</u>	
1	Lambing <u>seen, no help</u>	
2	Minor birth assistance, position correction, few efforts	
3	Essential birth assistance, jammed lambs, major effort	
4	Major <u>consequences</u> for the ewe	



Lambing <u>not seen</u>, or <u>no help</u>



Minor help, <u>without position</u> <u>correction</u>







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- A. Data registered
- **▶**B. Conditions that lead to success

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1. A strong network

- A limited region
- Farmers and technicians familiar with data collection
- Well motivated to progress on lamb mortality
- A gradual involvement







2. Integrate recording in farmers' habits

Study
breeders
habits
by visiting farms

Adapt the record means: find the most convenient and the closest to usual farmers' practices

Use an evolutionary protocol:

to take account of constraints





3. Be receptive and to keep motivation







Keep in touch with farmers: the best person is the usual technician

Enquire to highlight the needs

Lean on breeders
testify that ever
collect the data to
convince new farmers
to join the group

Produce feedbacks







Participative approach suitable to involve farmers



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Thank you!