



First evaluation of interventions to reduce antimicrobial usage in the French rabbit industry

Claire CHAUVIN, Juliette CHOUDJAYE, Sophie LEBOUQUIN

The French rabbit industry...

4th producing country



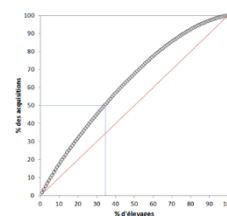
0.7% of French PCU

>4% of AM-VMP sales, 2008

Amongst 1st species (regarding ALEA)

2009 – CLIPP + ANMV requested an on-farm survey
Performed by Anses on a random sample of 113 farms

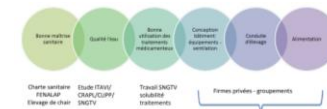
Results ...



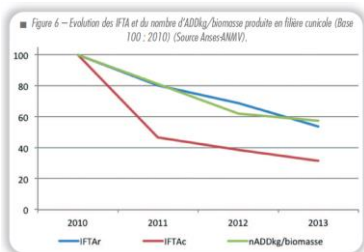
2011 - Interprofessional Plan launched



- Sectoral charter
- Trainings
- Monitoring (IFTA)
- Actions



2014 – AMU decreased,



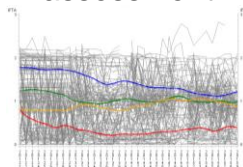
but...

- Difficulties reported
- Progress limited

2015 - Mid step analysis



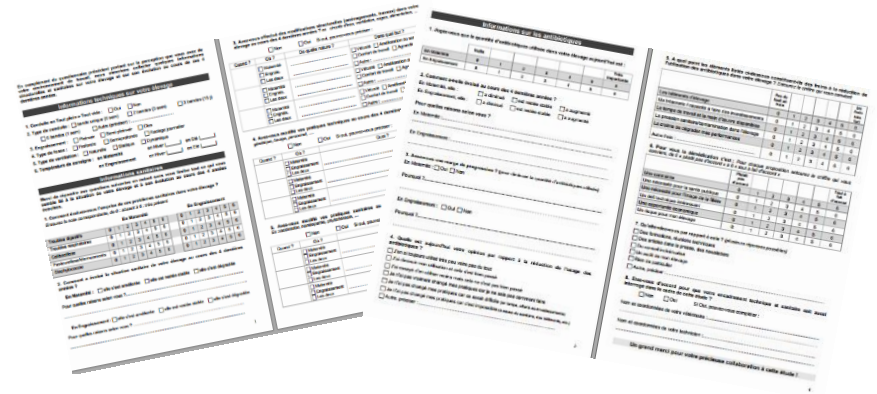
① Trajectories heterogeneity assessment



② Brakes and incentives identification

Study

Objective: To gain further knowledge on farmers' perception regarding AMU reduction, actions implemented, brakes and levers of reduction, and their relationships.



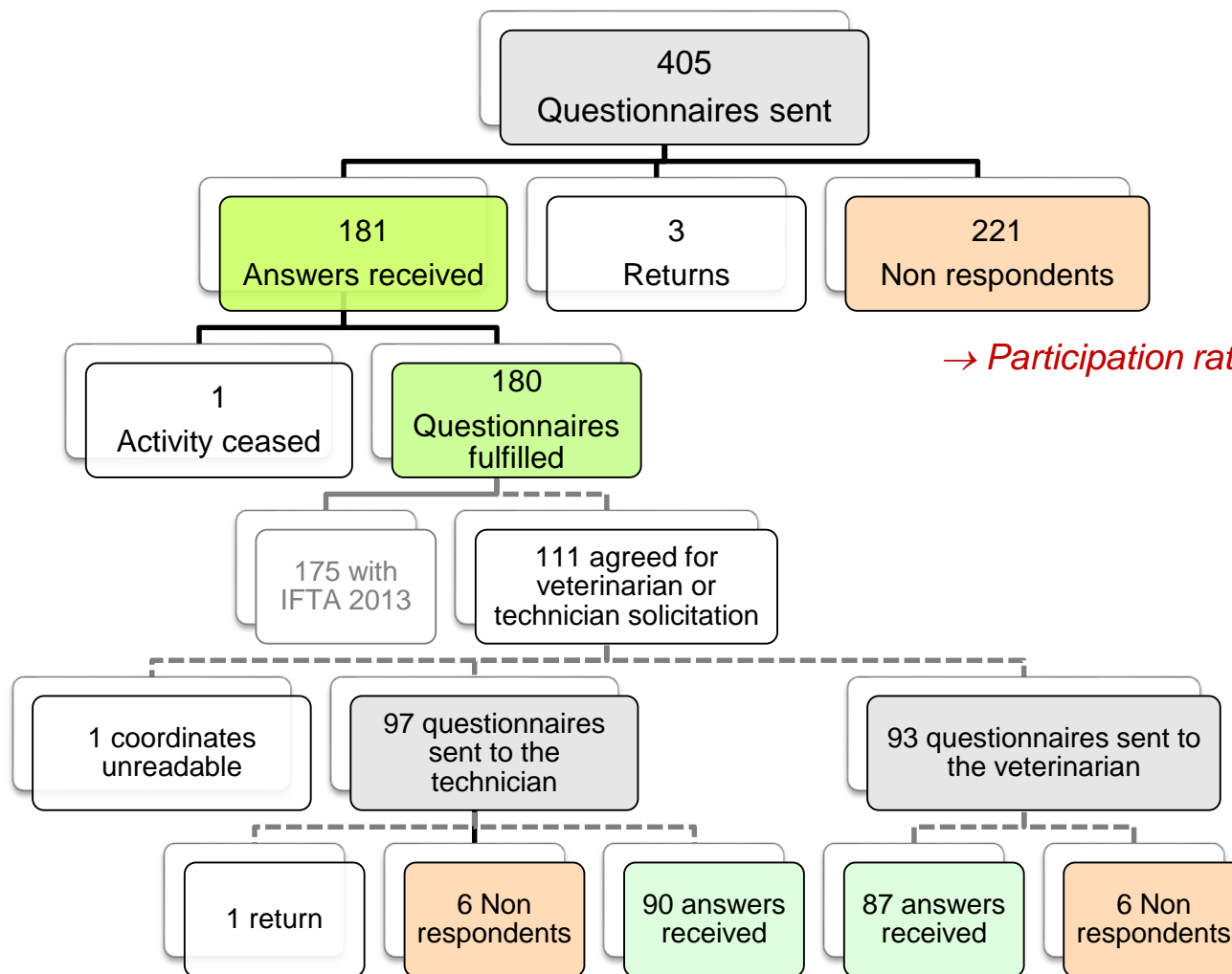
Method: A postal survey

- A four-page questionnaire,
- send in March 2015,
- to 405 farmers (regularly transmitting IFTA values to the national database)
- To collect data on:
 - ✓ their perception of the reduction plan engaged and their own experience
 - ✓ actions/modifications implemented during the 4 last years
 - ✓ sanitary situation of the farm

Two last topics cross checked with technicians and veterinarians answers, if farmers agreed.

Data on AMU (IFTA values, batch level) obtained from the professional database.

Analysis: Relationships between items explored through PLS-PM.



→ Participation rate: 45%

→ Participation rate: 94%

-> 62 farms with 3 questionnaires

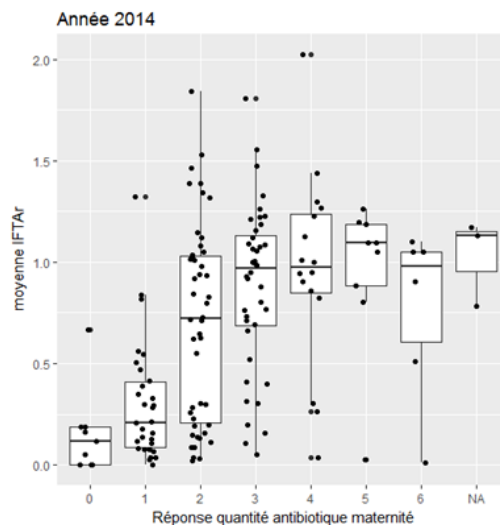
→ participation rate: 94%

Respondents / non-respondents comparison

	IFTAr	IFTAc
Respondents	0.64	0.32
Non-respondents	0.74	0.28

Wilcoxon test $p < 0,05$

AMU perceived / measured



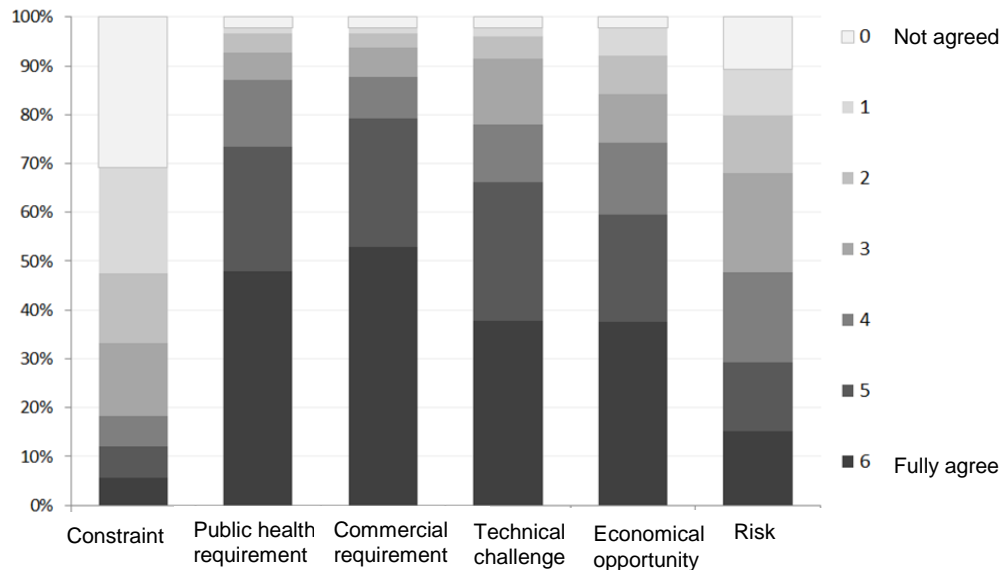
Farmer declaration / veterinarian-technician evaluation

significantly correlated ($p < 0.05$)

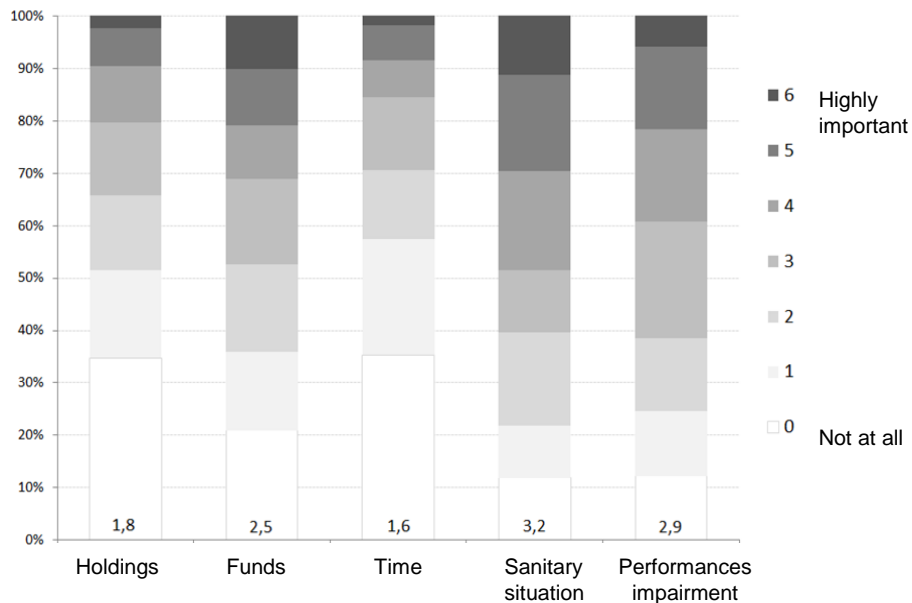
Results

Perception

Do you consider AMU reduction plan as a:



Do you consider this element as a brake:

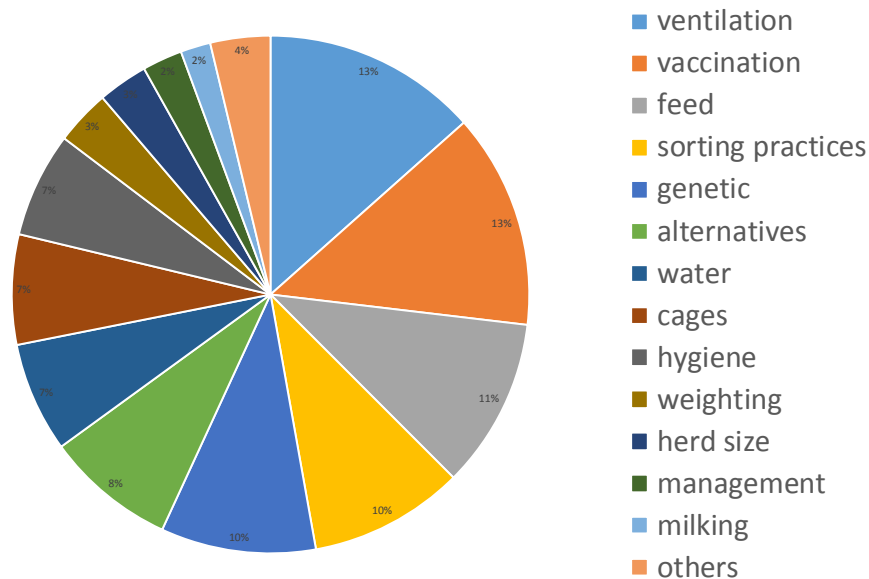


Regarding AMU decrease over the past 4 years

- 14% always had a very low AMU level
 - 56% decreased AMU – and things went well
 - 19% decreased AMU – and didn't turn out right
 - 1% did not decrease – do not know how to proceed
 - 2% did not decrease – it would be too difficult
- } 75%

Progress still possible according to 50% of farmers.

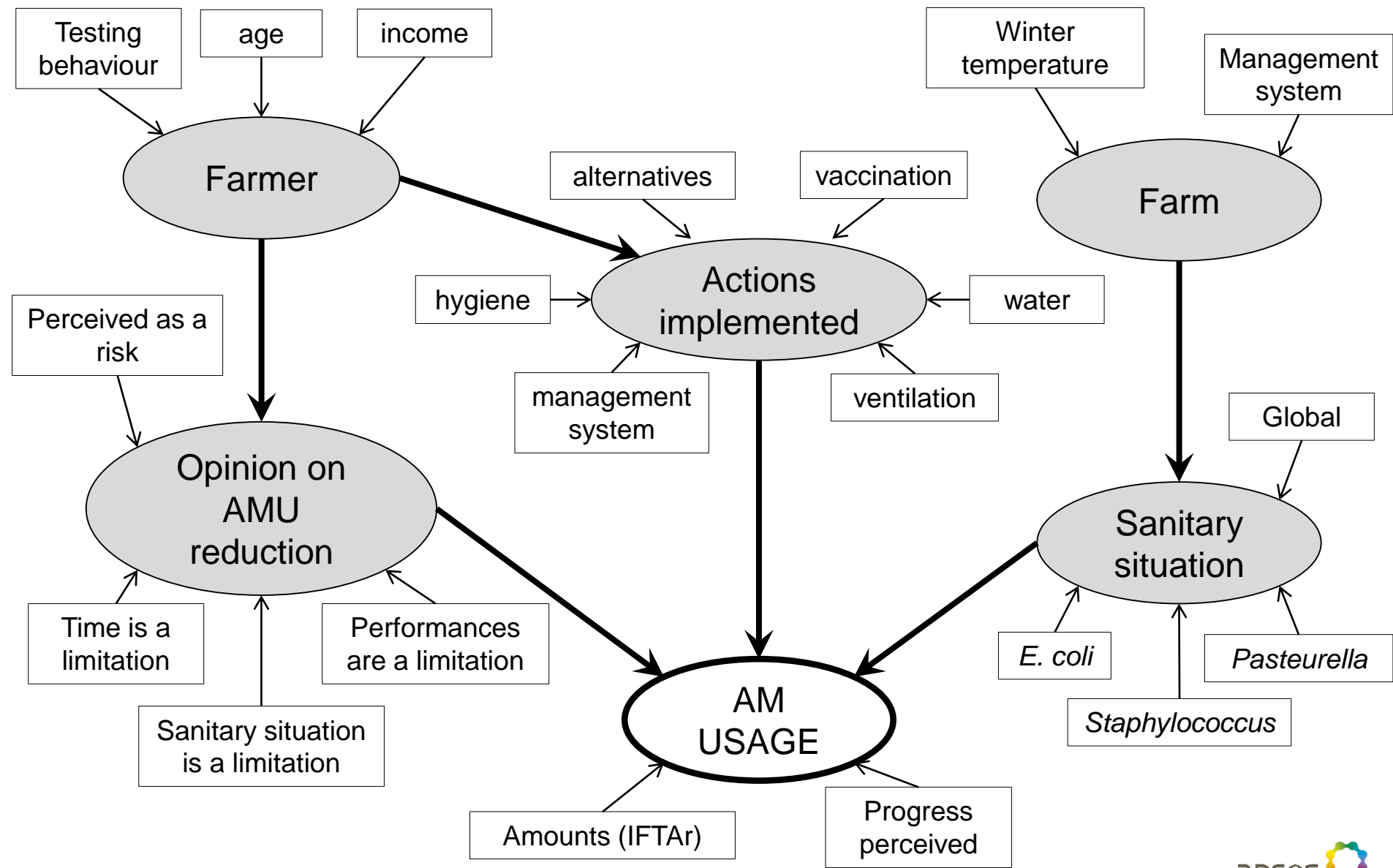
Actions/modifications were engaged/implemented by 78% of farmers (140/180)



2 action/farm on average
(1 to 4)

Results

Model



$R^2=0.34$

Conclusion

- The voluntary collective engagement of the French rabbit industry was confirmed.
- Responding farmers were aware of efforts to be engaged to decrease AMU, widely supported and well perceived.
- Heterogeneity of experience and perception underlined.

- The economic situation of the farm conditioned both the implementation of mitigation actions and the perception of farmers.
- Actions implemented appeared to be efficient levers of reduction.
- But sanitary situation still impair progress to be made in many farms.

Despite economic difficulties encountered, the French rabbit industry decided to maintain objectives and efforts towards a reduction of AMU, reinforcing measures already adopted.

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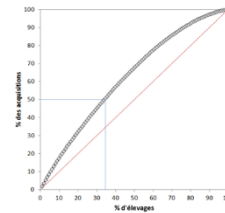
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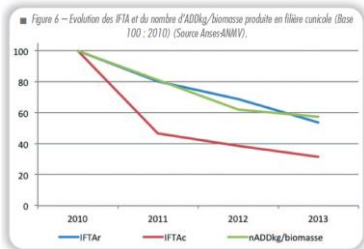
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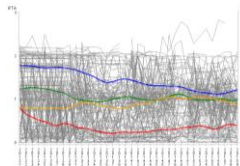
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2018 - New results
ALEA -52% (2010-2017)
IFTAr -54% IFTAc-61%

New actions
Training/coaching, technical improvements
New objective
-50% (2016-2022)



Thank you for your attention!