

Analysis of stockbreeder hierarchies within the livestock farming domains (cattle and sheep)

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Problem:

how to provide information to livestock farmers?

- 1) Decrease of means (less money)
- 2) Level of knowledge of the farmers increases
- 3) Problems to solve are more and more complex (economy, technical, ethic, environmental and social problems)

Objective of this study

To analyse the relationships between:

- The hierarchy made by farmers with the different tasks they have to accomplish
- The mode of mobilization of information

Hypothesis: New methods should take into account these two points

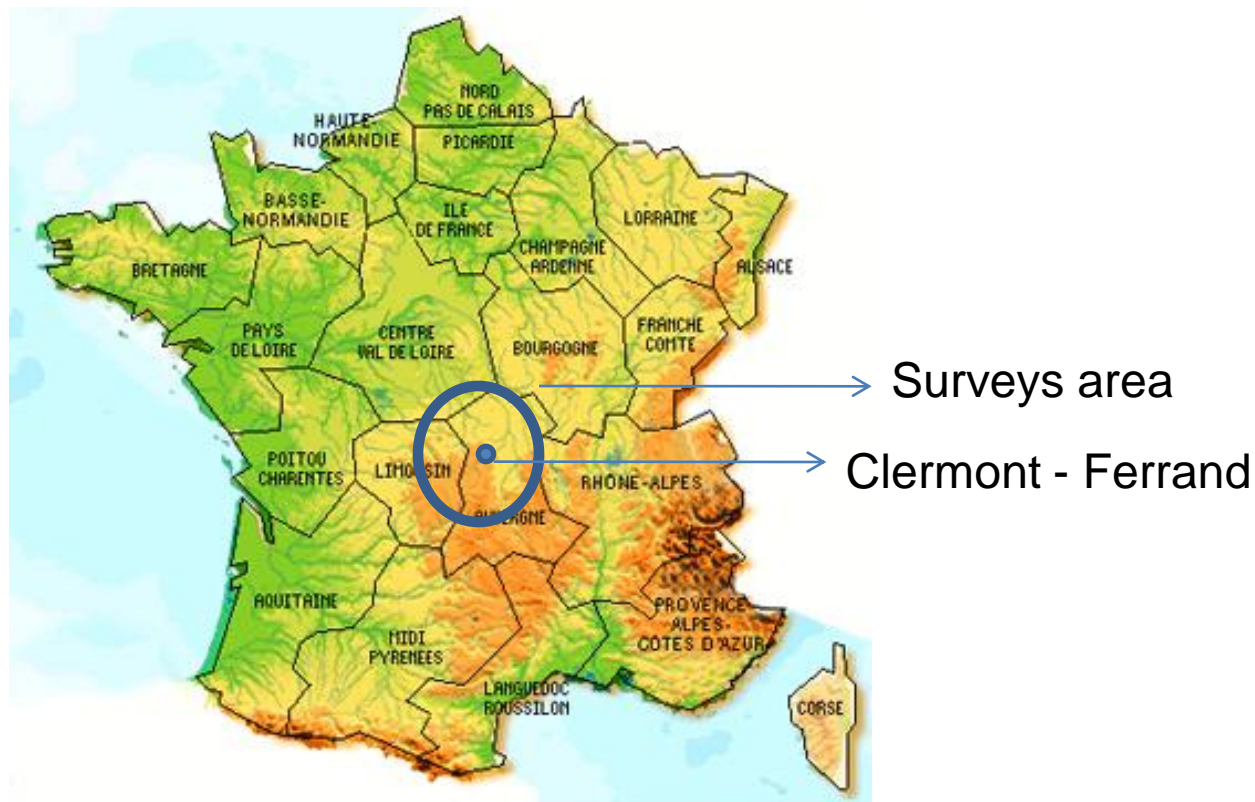
Materials & Methods

- 54 surveys

- 30 beef cattle farmers



- 24 meat sheep farmers



Materials & Methods

- 9 livestock farming domains

Composition of herd

Breeding management

Feeding management

Production of stored
forage

Health management

Grazing management

Marketing

Accounts

Production of
concentrates

Materials & Methods

- 9 livestock farming domains

- 1) Classification according to 3 criteria:

- Attractiveness

Magne *et al.*, 2007

- Importance

- Satisfaction

Materials & Methods

- 9 livestock farming domains

1) Classification according to 3 criteria:

- Attractiveness
- Importance
- Satisfaction

Example: Importance →

1 : Very important
5 : Fairly important
9 : Few important

1	Breeding management
2	Composition of herd
3	Health management
4	Marketing
5	Feeding management
6	Accounts
7	Production of stored forage
8	Grazing management
9	Production of concentrates

Materials & Methods

- 9 livestock farming domains
 - 1) Classification according to 3 criteria
 - 2) Surveys about the management of information
 - The content, the origin and the medium of information
 - The motivation of the farmers to search information

Results and discussion

1) Hierarchy made by farmers within the 9 domains

=> Result 1

2) Mobilization of information

=>Result 2

3) Relationships between these two points

=> Discussion

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elle hiérarchisation des domaines d'élevage ?

Nom de domaines	
1	HERD
2	BREEDING
3	PRODUCTION DE FOURRAGES <small>(conservés, à base d'herbe ou de maïs)</small>
4	ALIMENTATION
5	CONDUITE / GESTION DU PATURAGE
6	COMMERCIALISATION
7	GESTION & COMPTABILITE
8	HEALTH
9	CONCENTRATE

SATISFACTION

elle hiérarchisation des domaines d'élevage ?

Nom de domaines	
1	BREEDING
2	HERD
3	SANITAIRE
4	COMMERCIALISATION
5	ALIMENTATION
6	GESTION & COMPTABILITE
7	PRODUCTION DE FOURRAGES <small>(conservés, à base d'herbe ou de maïs)</small>
8	CONDUITE / GESTION DU PATURAGE
9	PRODUCTION DE CONCENTRES

IMPORTANCE

le hiérarchisation des domaines d'élevage ?

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9	PRODUCTION DE CONCENTRES

ATTRACTIVENESS

elle hiérarchisation des domaines d'élevage ?

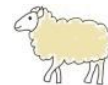
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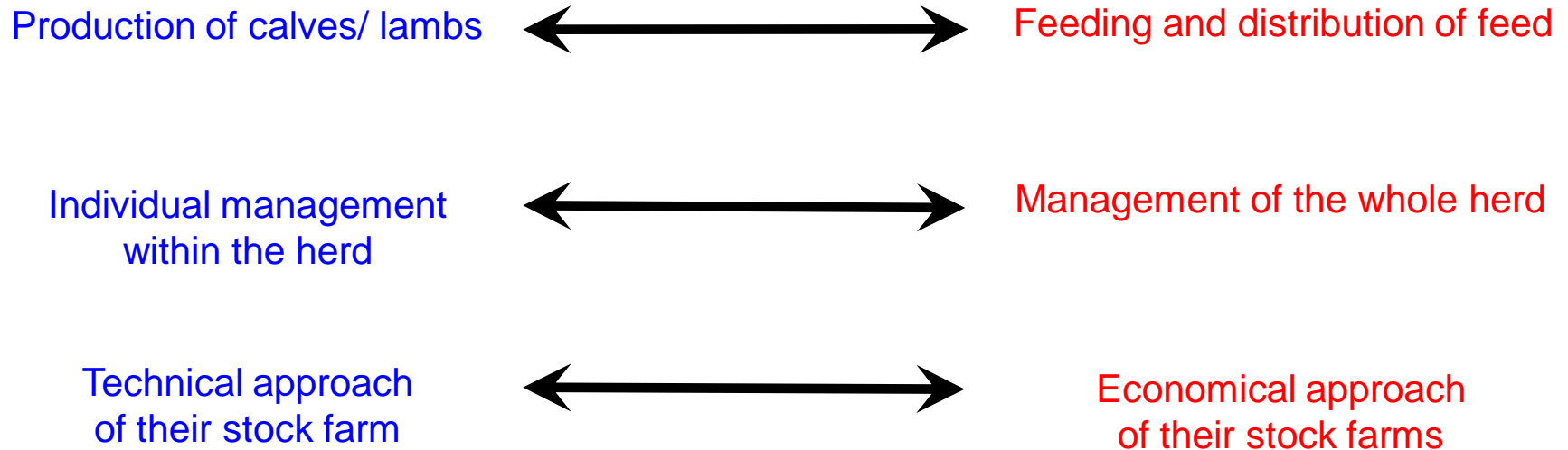
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Result 1: Classification of 9 domains

Characterization of the hierarchy made by farmers:

Thanks to a factorial analysis

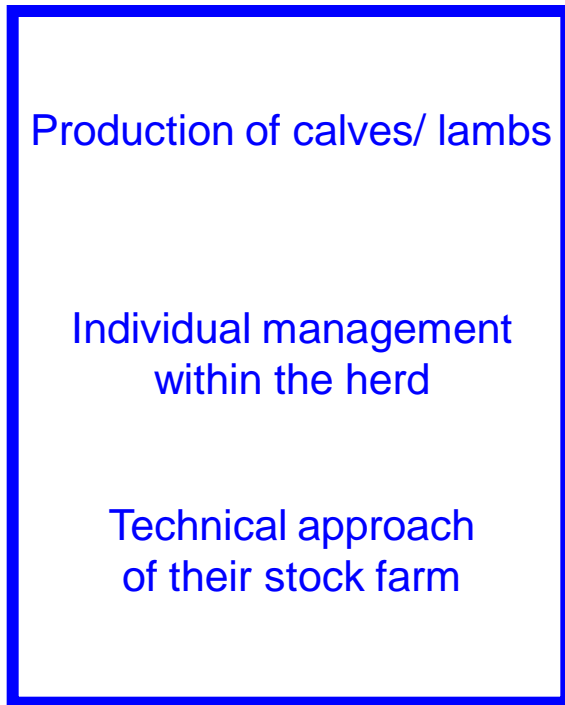


Result 1: Classification of 9 domains

Characterization of the hierarchy made by farmers:

Thanks to a factorial analysis

Group 1



















Domains close to animal

Group 2



Domains connected with efficiency & global management

Result 1: Classification of domains

	Group 1 close to animal	Group 2 Efficiency & global management
Species	 20  17	 4  13
Age of farmers	20 to 50 years	50 to 60 years
% Crops/Area used for agriculture ¹	10 %  10 %  10 %	20%  20%  30 %
Meat production / livestock unit ¹ (kg/unit)	204  307  114	320  314  106
Farm income/worker ¹	23 700 €  29 600 €  19 500 €	30 600 €  31 900 €  26 500 €
First domains	Reproduction and health	Marketing / Accounts / concentrates

¹ Data: average 2007 and 2008

Results and discussion

1) Hierarchy made by farmers within the 9 domains

=> Result 1

2) Mobilization of information

=>Result 2

3) Relationships between these two points

=> Discussion

Result 2: Management of information

Characterization of the management of information by farmers:



Thanks to a factorial Analysis

	Group 1	Group 2	Group 3	Group 4	Group 5
Axis 1	All domains		Few domains		Few domains
Axis 2	Autonomy		Autonomy	Assistance	
Axis 3		Technical advisers	Other farmers	Other farmers	Technical advisers
Axis 4		Cost			Skills





 20



 2
 1



 3
 7



 3
 9



 2
 6

Results and discussion

1) Hierarchy made by farmers within the 9 domains

=> Result 1

2) Mobilization of information

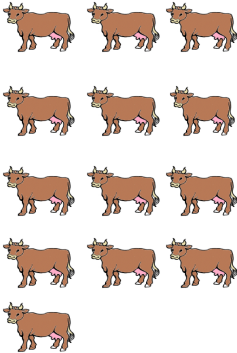

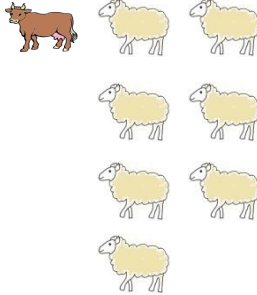
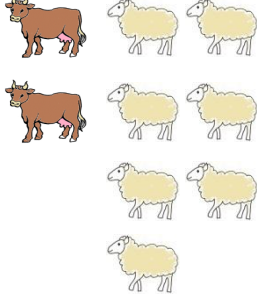
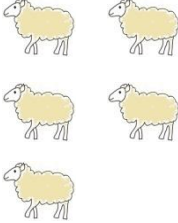
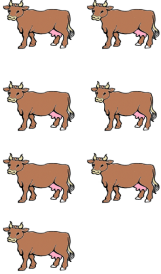


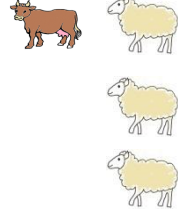
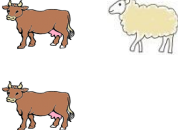
=>Result 2

3) Relationships between these two points

=> Discussion

Discussion: Cross between classification and management of information

Distribution of sheep and cattle farmers:

Mobilization		Group 1	Group 2	Group 3	Group 4	Group 5
Classification	Group 1 close to animal					
	Group 2 Efficiency & global management					

Conclusion

- Validation of the three criteria
- Diversity of classification of breeding activities
- Different strategies of mobilization of information
- Original method to know the classification of 9 domains

Conclusion

- ⇒ New methods of advice
- ⇒ Adapt of advices according to the interest of farmers
- ⇒ Maintain different sources of information to respond to different strategies of mobilization of information

“Post-Doc” about “advice” (The job is vacant !)
Contact : Stephane Ingrand (ingrand@clermont.inra.fr)

Acknowledgment

Thanks a lot for your attention !



Sheep and cattle Farmers
Delphine Guichette Debord (Chambre d'Agriculture de la Creuse)