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Tracking farmers' innovations to benefit from health service of grassland diversity

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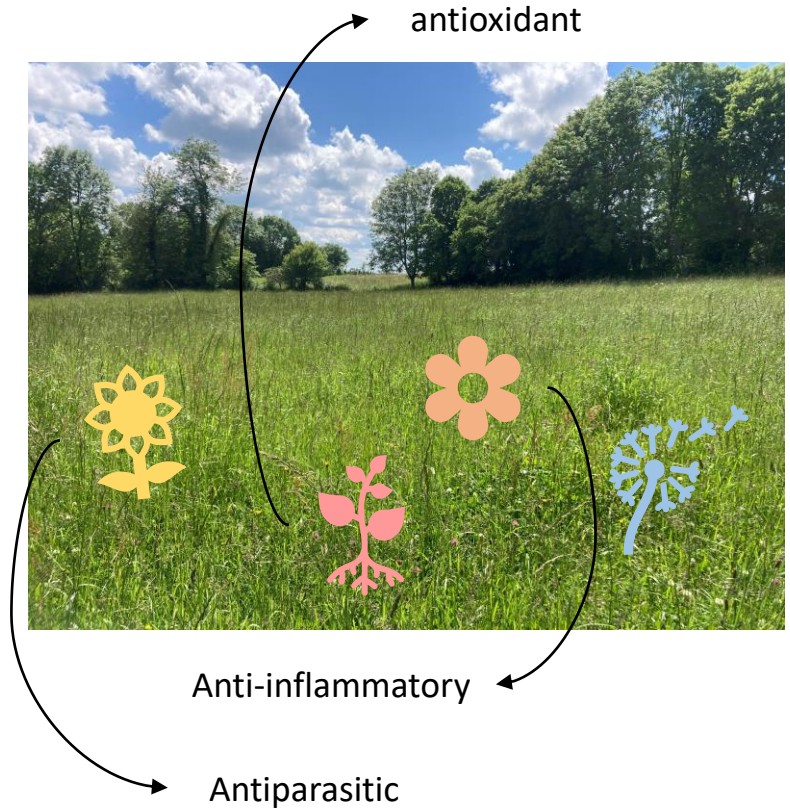
Context

- For animal production sustainability, need to develop Integrating Animal health Management practice *(Wezel et al. 2020)*
- Feeding is a factor of Integrating Animal health Management *(Lamothe et al., 2020)*
- In grasslands, some plants have medicinal properties but there is a lack of literature about *(Poutaraud et al., 2017) :*
  - *the mechanisms of action of the molecules they contain,*
  - *their interaction effects*
  - *the doses at which a benefit for animal health can be expected*
- Praidiv : French Project (CASDAR) aiming to produce references on health potential of grassland diversity

PRAIDIV
La santé est dans le pré



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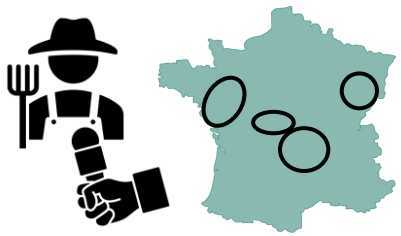


- Study of 30 farmers representation of the link between grassland diversity and animal health identified 4 profiles according to :
  - *Their knowledge*
  - *Their expectation of an health service from grassland diversity*
  - *Their practices*

(Rose et al., 2025)

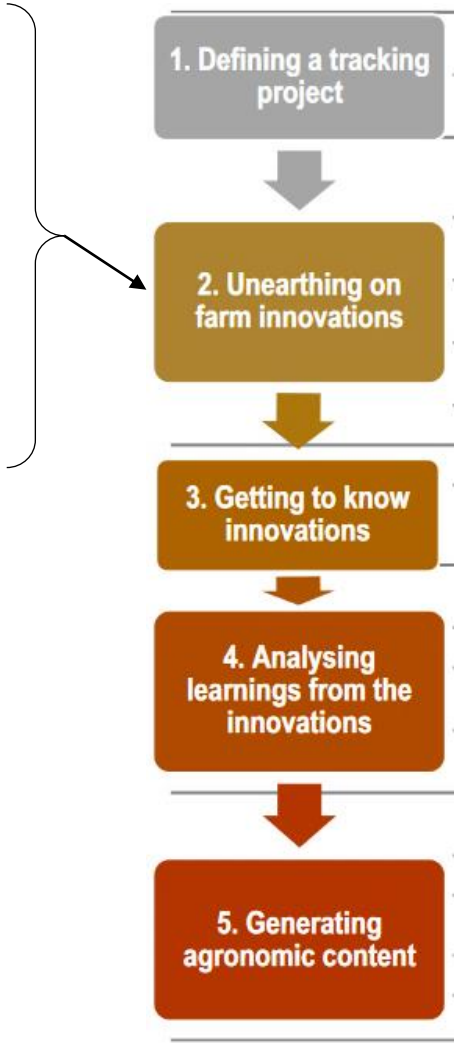
➢ Identification of 8 farmers saying they have practices allowing them to benefit from health potential of grassland diversity

On farm innovation tracking

Next step : “Getting to know innovations”

How do farmers manage grassland diversity to benefit from an health service ?

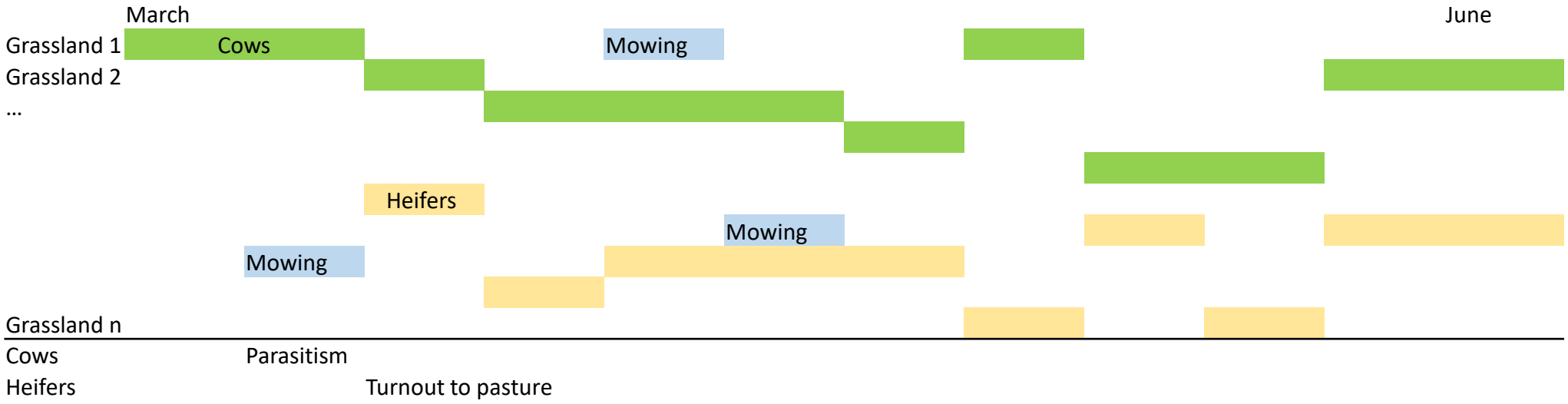
- *Qualify the place of health potential of grassland diversity in the fodder system management*
- *Describe innovative practices (physiological state of the animals and the type of grassland they are allocated to)*



(Salembier et al., 2021)

Materiel and method

- Selection of 8 farmers from the previous study
- Monitoring of grazing season from march to june using a grazing schedule
- 2 meetings



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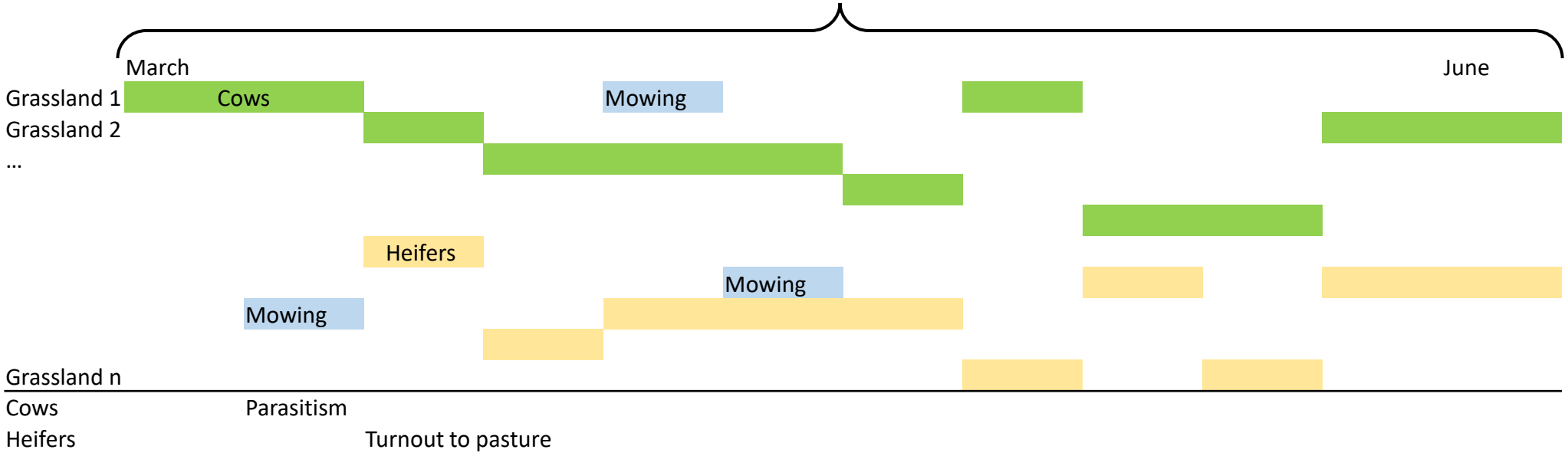
Meeting 1 :

- Setting up a grazing schedule
- Describe grasslands and animal groups
- Planning the grazing season



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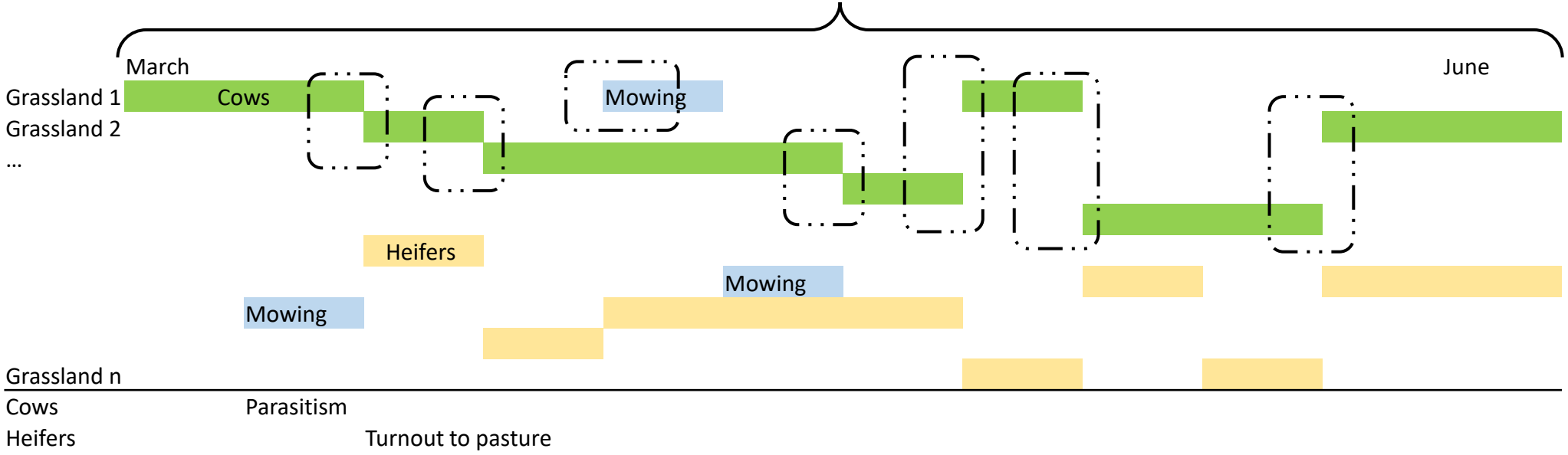


Meeting 2 :
understanding the reasons for each allocation of a group of animals to a grassland

Materiel and method

Analisys

1 to 2 reasons for each allocation → Different number of allocation by farmers Due to a diverse numbers of animal groups, grassland plots and frequency of plots changes between farmers)

- Qualify the place of health potential of grassland diversity in the fodder system management
- Categorise reasons on the basis of the farmers' explanations
- Calculate the ratio between the number of reasons per category to the total number of reasons given by the farmer

- Characterise innovative practices

Description of practices in terms of the physiological state of the animals and the type of grassland (composition, expected service, etc.)

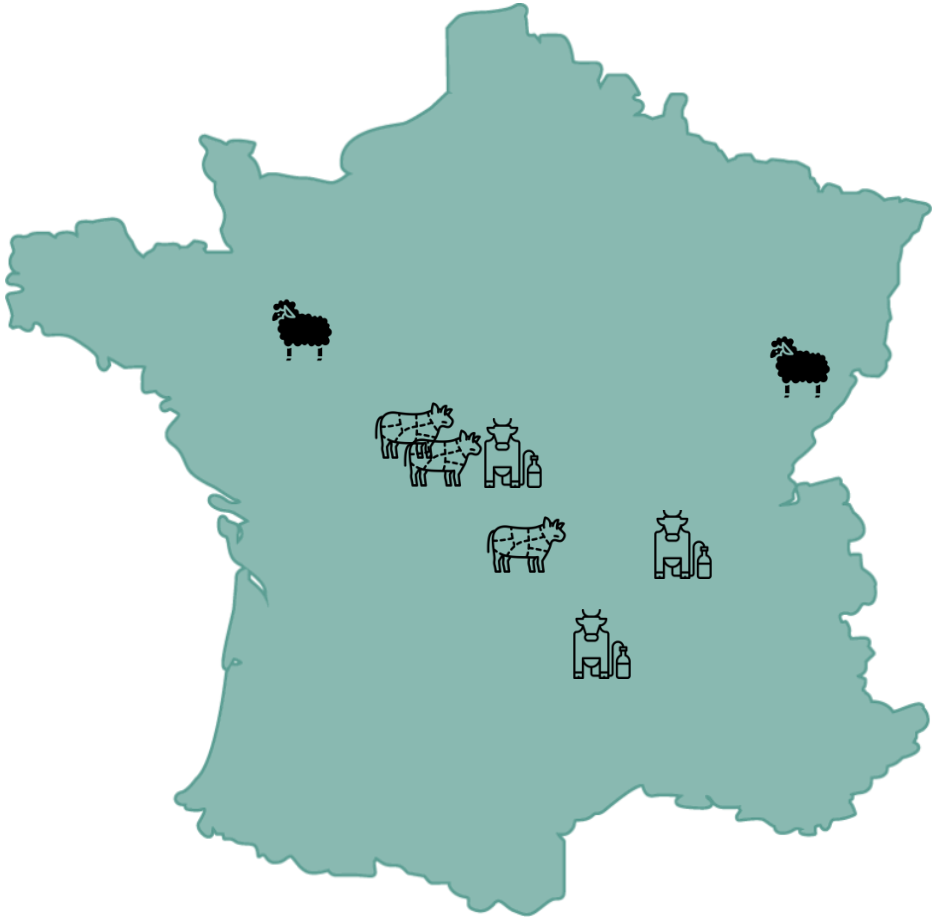
Results

Sample description

8 farmers (7 in organic farming)

3 Suckler cattle
3 Dairy cattle
2 Suckler sheep

Distributed in France



Main forage surface : 21 ha to 156 ha

Grassland part : 91% to 100 %

Permanent grassland part (in total grassland): 10% to 100%

Rotational grazing (from 3 days to 1 month per paddock)

Results

Reasons categories \ Farmers	
	Number of reasons given by farmers
Grass ressource	
Grassland preservation	
Work organization	
Animal performance	
Animal behaviour	
Animal welfare	
Animal health	

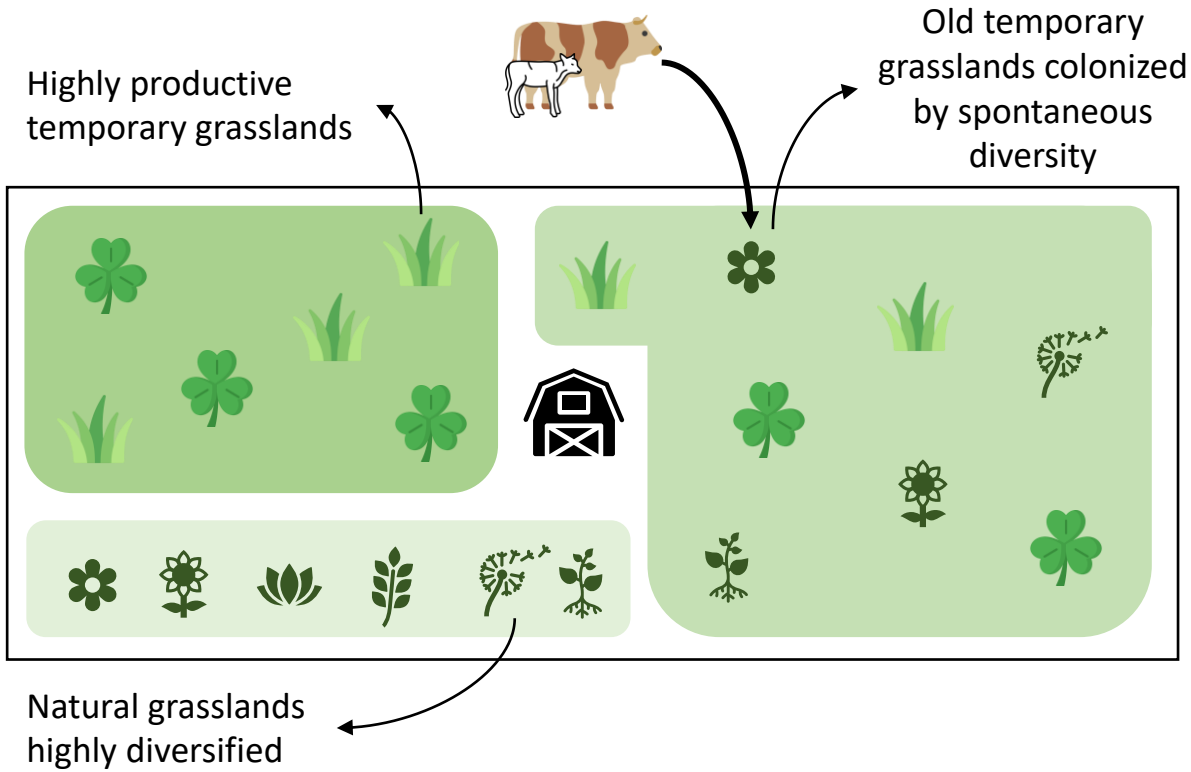
Results

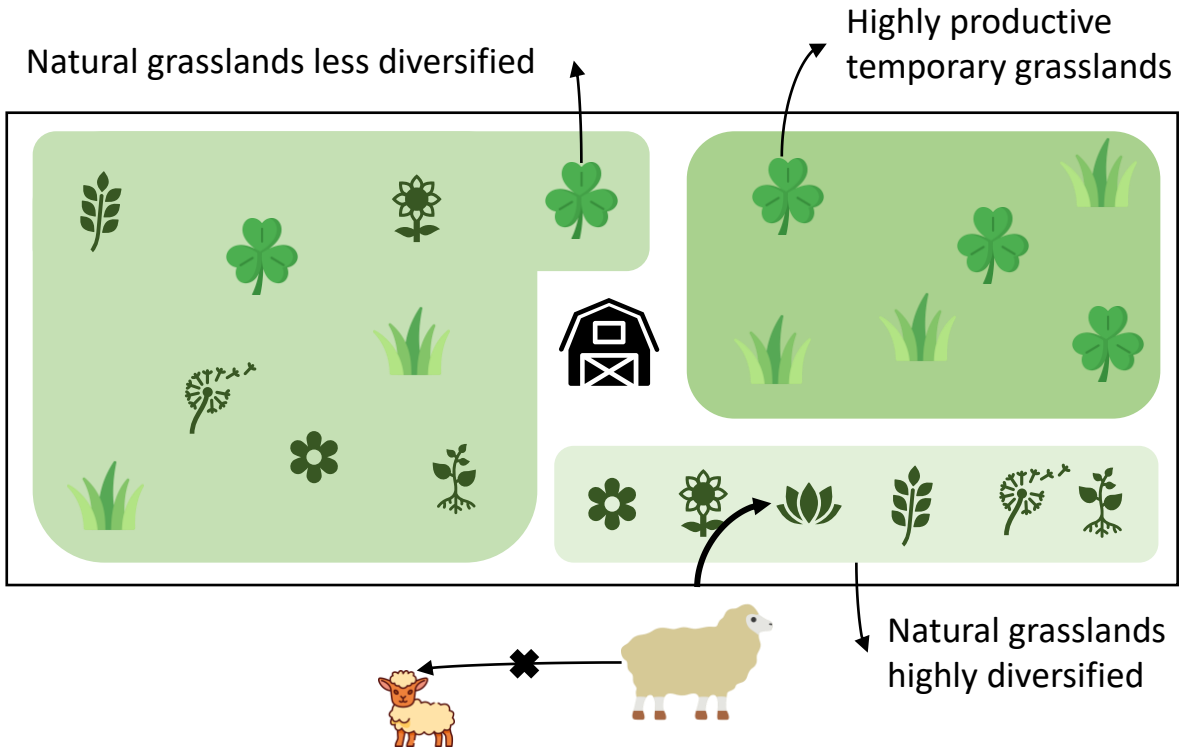
Reasons categories \ Farmers	E1	E8	E9	E13	E17	E26	E28	E30	Mean
Number of reasons given by farmers	*45*	*74*	*90*	*79*	*24*	*30*	*48*	*52*	*442*
Grass ressource	60%	72%	70%	58%	46%	50%	85%	44%	61%
Grassland preservation	16%	18%	24%	0%	0%	33%	10%	23%	16%
Work organization	16%	7%	6%	19%	21%	7%	0%	17%	11%
Animal performance	0%	0%	0%	16%	25%	0%	4%	2%	6%
Animal behaviour	0%	1%	0%	5%	0%	0%	0%	10%	2%
Animal welfare	4%	1%	0%	1%	0%	7%	0%	0%	2%
Animal health	4%	1%	0%	0%	8%	3%	0%	4%	3%

Results

Examples of pratices

F1 : “Suckler cows graze on temporary diversified grasslands because flora allows growth and calves health.”





F17 : “after weaning the lambs, ewes graze on diversified natural grasslands, rich in aromatic plants, because it allow them to fill up on vitamins.”

Discussion and perspectives

Animal health and welfare occupies little space in the fodder system management

- Farmers seem to think their grazing management by grouping similar grasslands. Once an animal group is an the good grassland group, farmers manage grazing according to grass growth, climate, …

Hypothesis : Health service appears when farmers plan their grazing season, after they adjust according to grass growth, climate, …

(Coléno et Duru, 1998)

Innovative practices ?

- Practices examples could be considered non-innovative because they are often implemented to cover fiber and energy requirements *(Michaud et al., 2020)*
- They can be considered innovative in our study because they are implemented to improve animal health through minerals, vitamins, etc., provided by grassland diversity.

Track completion

✓

✓

✓

Real effect of these practices on animal health must be assess before making any recommendations

Farmers testified about their practices in short videos.

Any questions ?

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Farmers testimonies in videos