



Farmers' perceptions of levers and barriers to crop-livestock integration beyond farm level. A case-study in france.

Clémentine Meunier, Myriam Grillot, Salomé Carle, Julie Ryschawy

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(A. Perrin)



Fostering win-win scenarios for crop-livestock integration beyond farm level

An in-depth analysis of French farmers' perceptions

Clémentine Meunier

Myriam Grillot, Salomé Carle & Julie Ryschawy

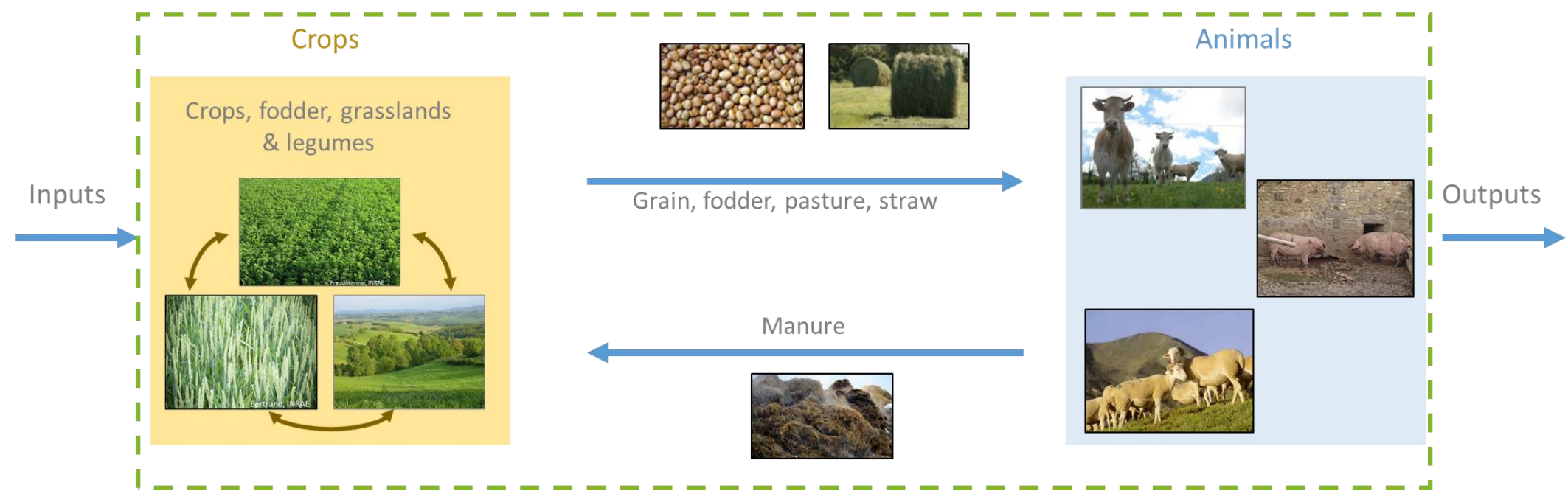
13/04/2022

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Integrated crop-livestock systems: agroecological systems in decline

ICLS : Production systems that feature temporal and spatial integration of crop and livestock enterprises



A theoretical agroecological ideal

Systems in large decline in Europe

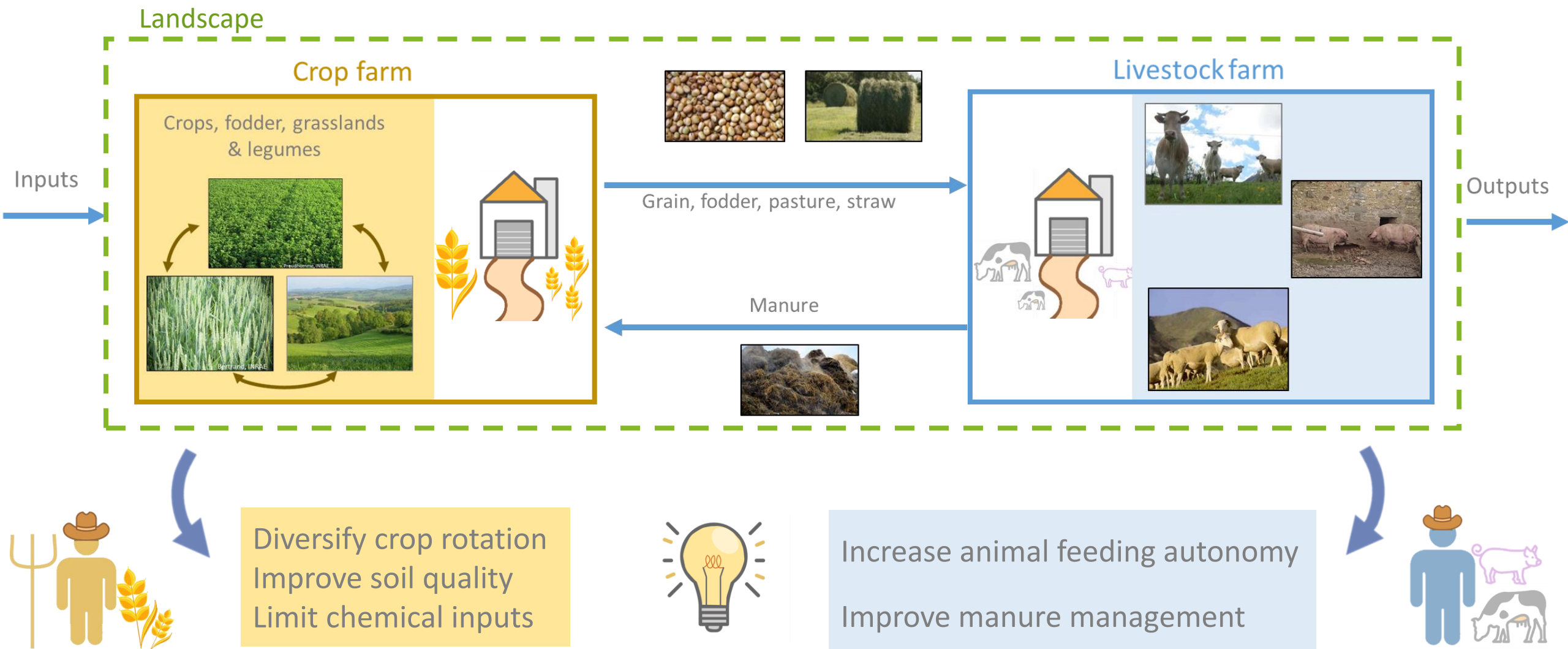
Network Resilience
Autonomy Input reduction
Biodiversity Nutrient cycling
Weed control Soil fertility



- Work organization
- Globalized markets
- CAP
- Multi-skilled workforce
- Economy of scale

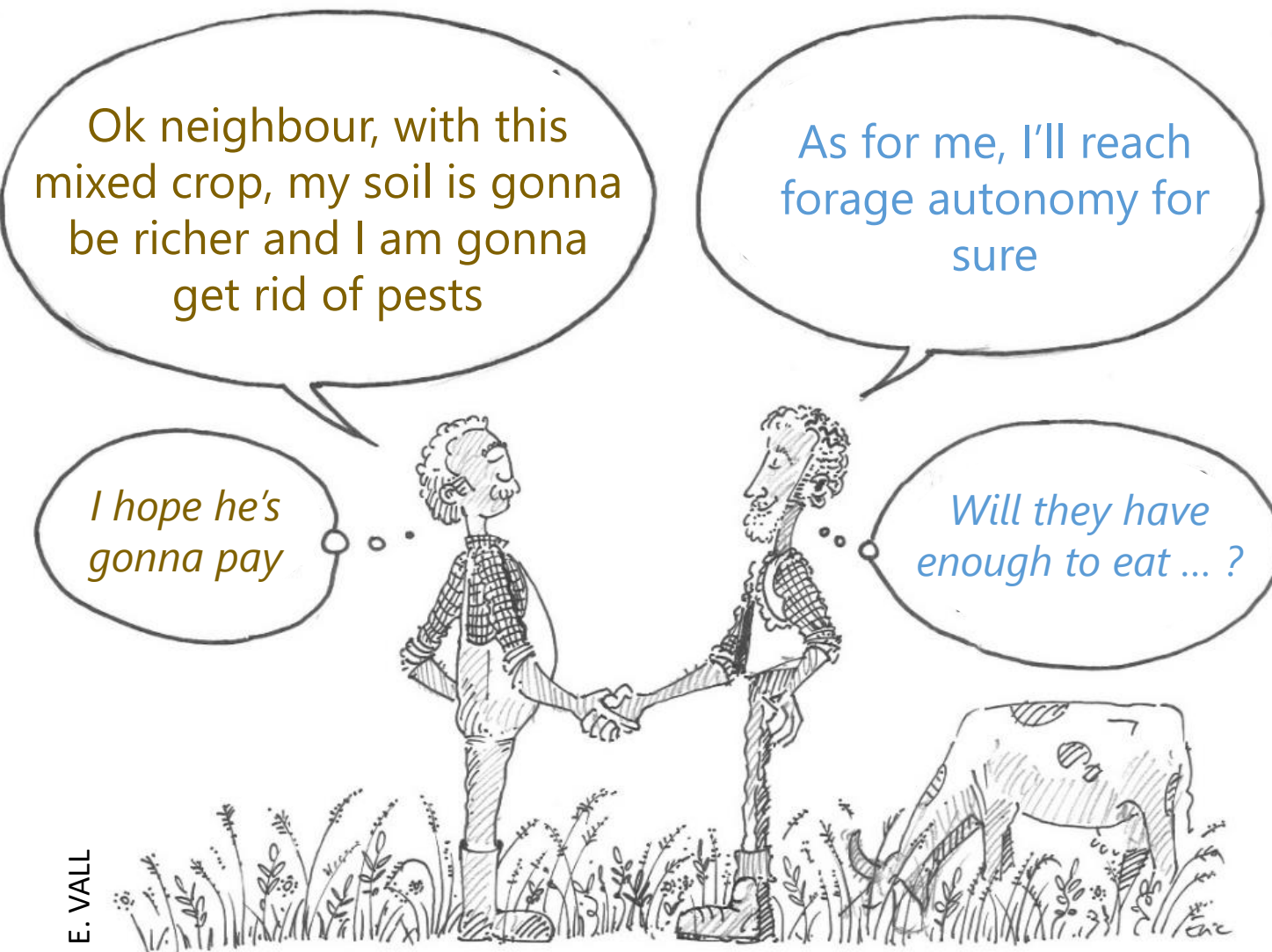
(Bonaudo et al., 2014 ; Franzluebbbers et al., 2014; Garrett et al., 2020 ; Hendrickson et al., 2008; Lemaire et al., 2014 ; Peterson et al., 2020 ; Ryschawy et al., 2013)

Crop-livestock integration beyond farm as a relevant option



Many lock-ins to beyond farm integration : the role of farmers' perceptions

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(Bouttes et al., 2019)

Many Advantages



Scarce initiatives

Costs for information gathering, collective decision making, monitoring
(Asai et al., 2018)

Implicit aversion to risk and lack of trust between crop and livestock farmers
(Garrett et al., 2020)



Explore in-depth farmers' perceptions

Material & Methods



A case-study in South Western France, a historical ICLS region



200 m

Valley

400 m

Premountains

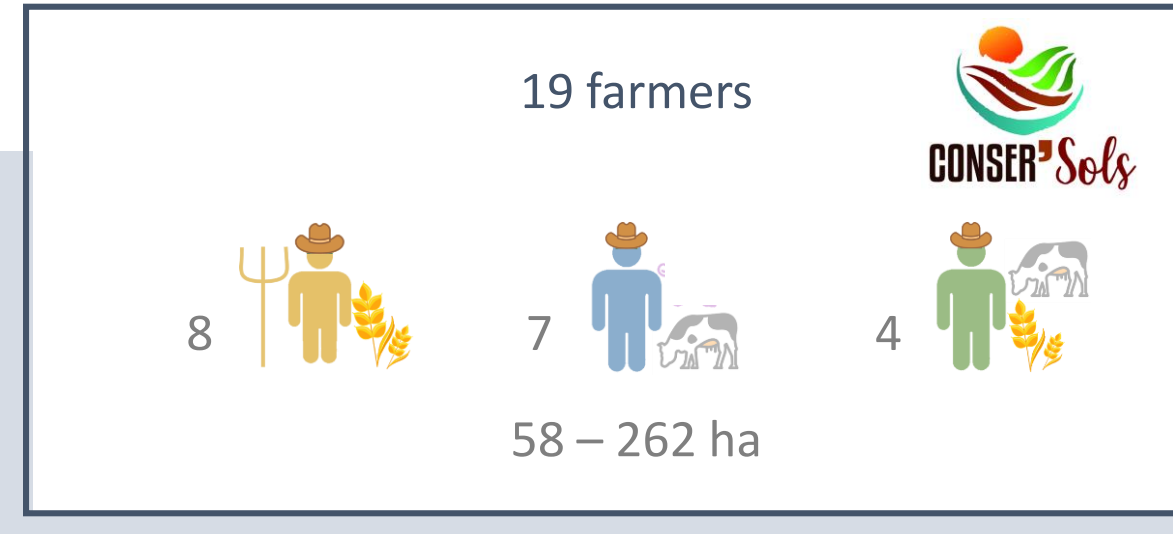
700 m

Mountains

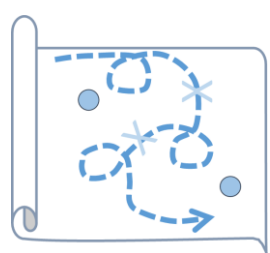


Applying a qualitative methodology

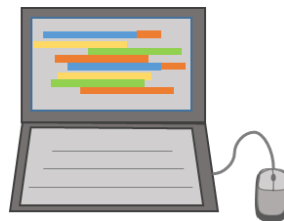
- ☐ History & attributes of the farm
- ☐ Vision of ICLS beyond farm level
- ☐ Past experience of ICLS beyond farm level
- ☐ Products to supply / demand
- ☐ Levers / barriers for ICLS beyond farm level



Not statistical representativeness,
interested farmers



Semi-structured interviews

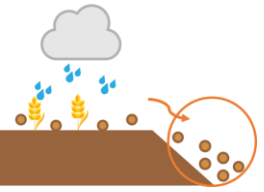


Inductive content analysis with Nvivo (S. Carle)

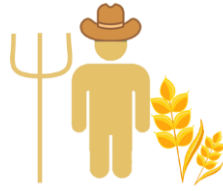
Results



Major technical interests for crop farmers...

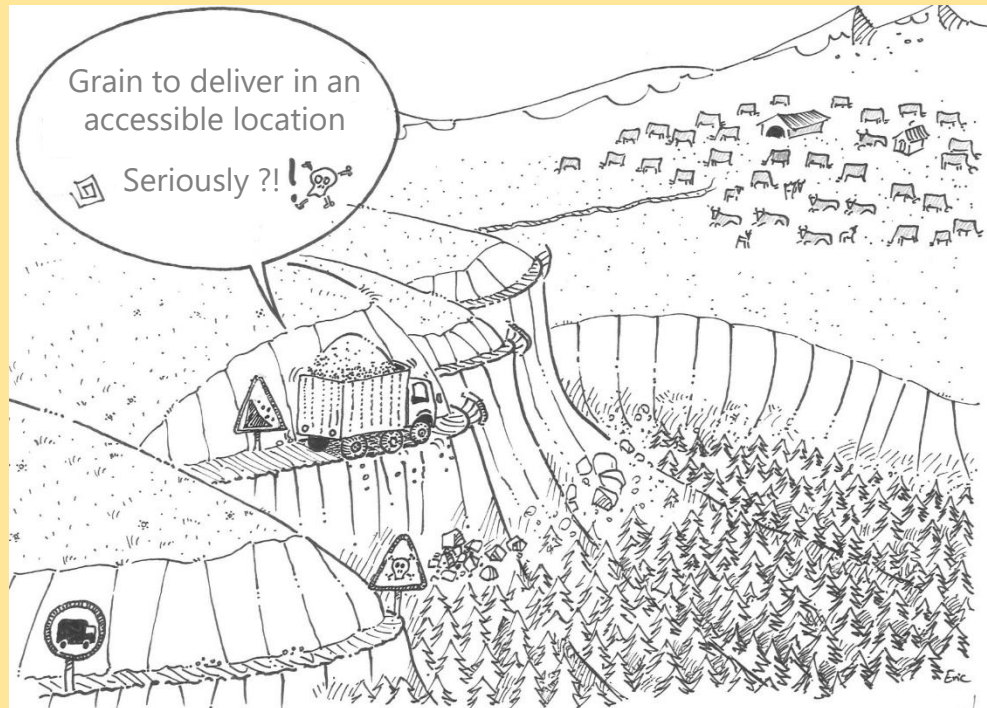


Especially soil quality



“When you are a crop farmer, it is true that you lack organic matter”

“Seeding alfalfa for several years, it allows anyway to limit erosion. And maybe it could do regarding weeds”



... Balanced by organizational barriers

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Time management & logistic risk

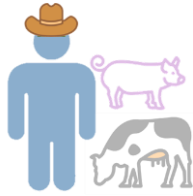
“We sell the grain to the cooperative. It’s easier than coordinating ourselves with livestock farmers.”

“The guy must be available quickly to take out the straw and be there, otherwise it will not be okay.”

Low cost of outputs as regards to the time needed to implement such local cooperation

“When we see the price of alfalfa seed, if we seed it to make only two cuts and pull it out, it will have to be well paid.”

Regaining autonomy is key for livestock farmers...

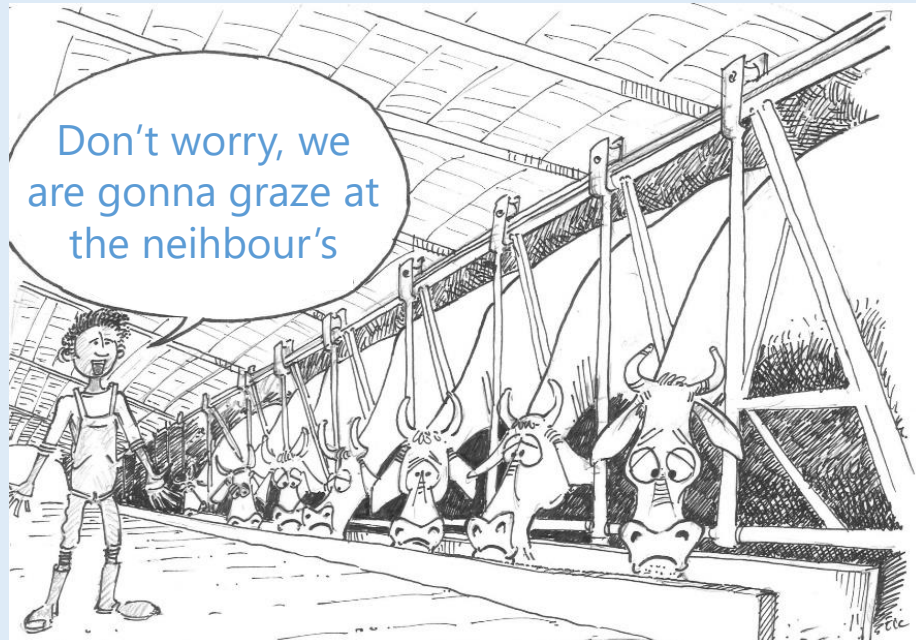


Technically and at the local level

“buying directly from crop farmers, it also allows us to pay less for the product” since “when we limit intermediaries there is always less cost.”

In decision as regards to large cooperatives

“they are private, they are no longer cooperatives, they are no longer working in the interest of the members”



... But their fears and lack of knowledge slow them down

10

Loss of knowledge to prepare the rations

Lack of appropriate machinery

“We cannot do precise and serious work with mixed crops harvested [if not sorted]”

Lack of trust in crop farmers who may follow the market rather than help their neighbours

A strong implicit divergence between the mindsets of crop farmers and livestock farmers

Trade-offs in term of timing, strategy and vision

Logistics, time and organization

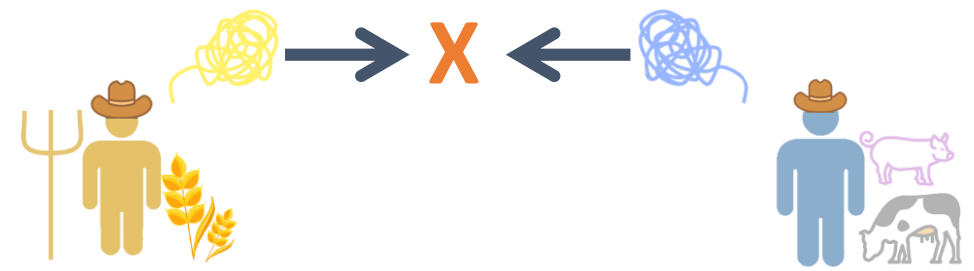
Calendar, constraints and priorities of each of them

Fair prices

Trust establishment

Few knowledge exchanges and connections between crop farmers and livestock farmers

Mitigated by crop farmers values and backgrounds regarding livestock



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"Livestock farmers think in the longer term; we cannot say, 'Well, this year I won't feed my heifers, but I will do it for sure next year'. Crop farmers, they think on a yearly basis; they think short-term."

"It must be win-win and not win-lose"

"For me with my friends, there is no problem, a word is worth more than a writing. But if there are people I don't know, I'll be suspicious "

"For me, it was more to provide solutions to livestock farmers, who are disappearing."

Conclusion & Take-home messages



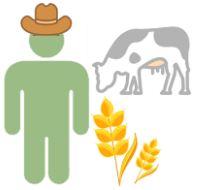
Unlocking ICLS beyond farm level

Understanding farmers' perceptions



Identifying progressive farmers as leaders

Key role of ICLS farmers



Bridging the divide

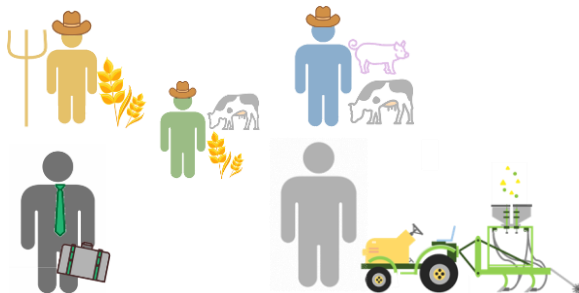
Involving a diversity of actors

Local cooperatives or machinery groups

Supply chain

Niche markets

Policy makers



Facilitating communication

Empathy as a first step
for codesign

Ease trust establishment
and create bonding ties



Dynamix





(A. Perrin)



Thank you for your attention !

Clémentine Meunier

Salomé Carle, Myriam Grillot & Julie Ryschawy

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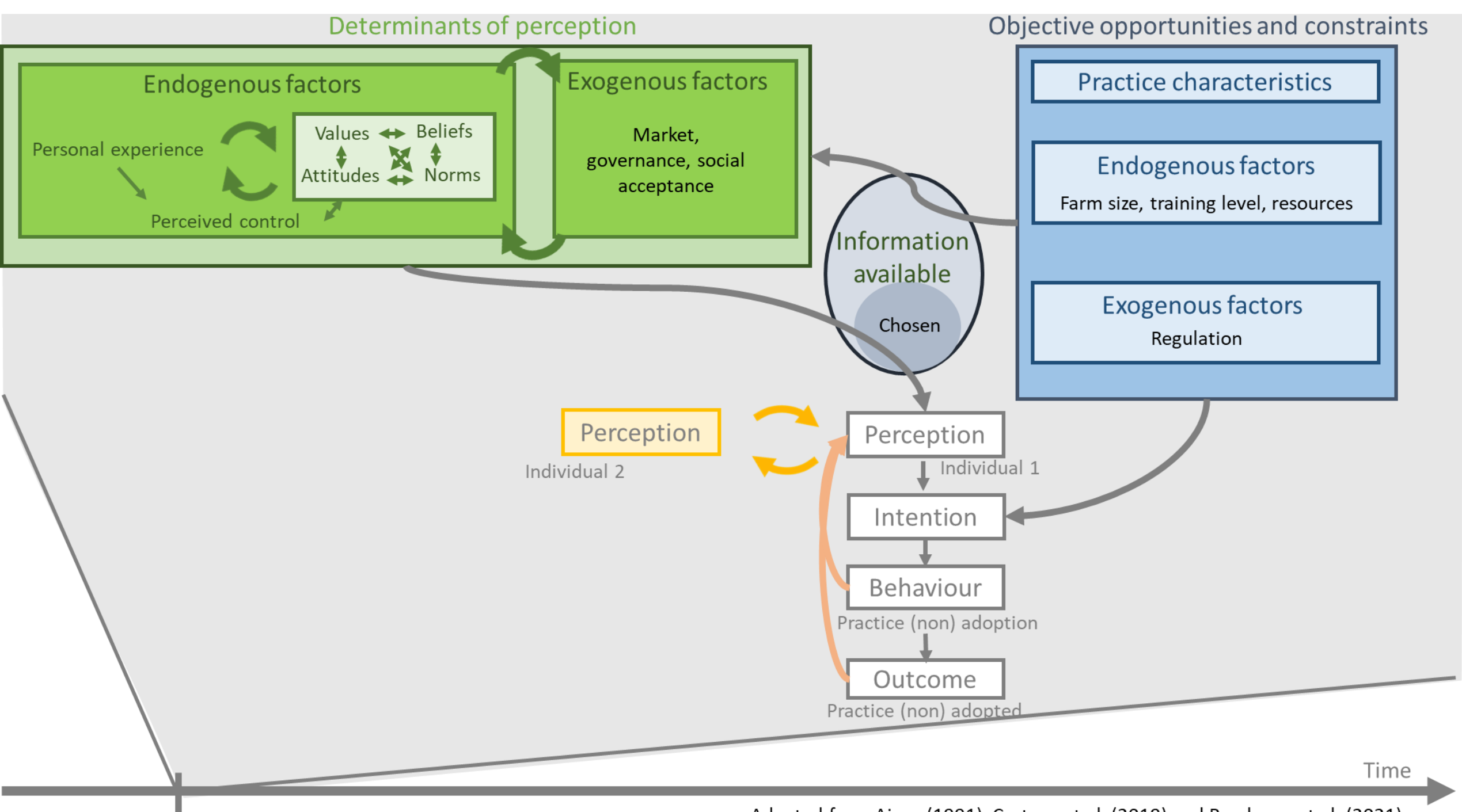


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See their world



**Understand their
feelings**



Empathy



**Appreciate them as
human beings**



**Communicate your
understanding**

