



How acceptable are climate change adaptation measures to consumers?

Results of two focus groups conducted in May 2024 within the ADAOPT project

ADAoPT

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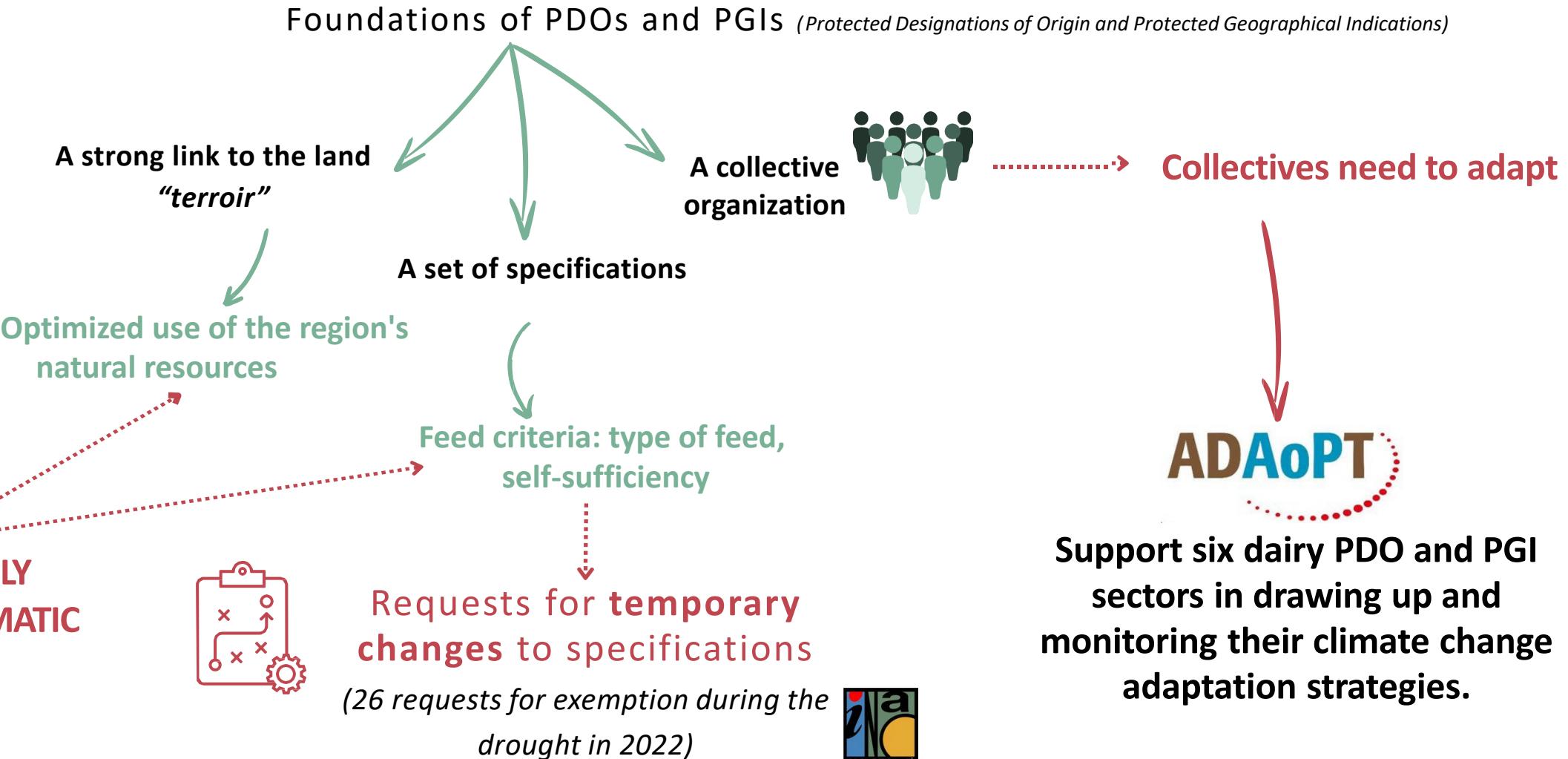
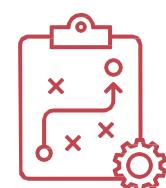




Cheese Geographical Indication (GI) sectors face growing challenges, including climate change



INCREASINGLY
FREQUENT CLIMATIC
HAZARDS





Focus group objectives and recruitment

Why consult consumers?

- Understand their knowledge of the impact of climate change on PDOs and PGIs
- Test their acceptance of certain adaptation practices that we had identified in the project

One « urban » focus group



City of Lyon



7



A weekday evening



Idele Lab database

One « suburban » focus group



City of Savy, on the outskirts of Lyon



A weekday evening



Gymnastics associations and the mayor

Compensation $\text{€} 20$ per person



Methodology: a two-hour qualitative group survey to gather consumer opinions

Awareness and discussions about their perceptions of livestock farming, livestock farmers and the consequences of climate change on livestock farming.



Cheese: representations, locations and purchasing criteria. Knowledge of PDOs.



Expression on images (created by AI) representing ways of adapting to climate change in small and large groups



Game involving the purchase of different cheeses through auctions – willingness to pay



Methodology: a variety of solutions to adapt to CC tested with consumers



- Purchase of fodder outside the PDO territory
- Introduction of new fodder into animal feed
- Return of cheese to shelves after summer stock shortages
- Water retention facilities
- Installation of solar panels to provide shade for animals
- No grazing in summer, grazing in winter

→ *Expression on images generated by Artificial Intelligence*

→ *Levers selected based on stakeholder discussions, with an attention to facilitate consumer expression.
These solutions have not been validated by the Cheese Protection Consortia.*

Photos and practices discussed: “*exotic*” forages



Caption: This image shows sorghum. It is a plant that is more resistant to drought than most plants historically cultivated in France. It can be used for animal feed.

Positive reviews for both groups :
Comprehensive, curious, rewarding the efforts

City

‘It could enable farmers to work more calmly in the face of climate change.’

‘Regardless of the impact of sorghum on cheese quality, cows need to be able to eat.’

‘I would be curious to taste it and see if it has an impact.’

Outskirts

‘Agriculture has to adapt.’

‘We see people taking action, experimenting. It’s encouraging.’

‘You have to put yourself in the shoes of a farmer who has to feed his animals.’

Photos and practices discussed: *out-of-area fodder*



Caption: In this image, a truck is bringing in fodder from another region because there is no longer enough grass to feed the animals in the region (due to drought).

Mixed opinions on both groups:
OK in the short term but not a solution in the long term

City

'Driven by the reality of climate change, yes, we have to do something! But I think it's a shame...'

'On the one hand, we have a truck bringing in hay and polluting the environment, it becomes a vicious circle.'

'It's a very short-term solution; we have to find a way to do without it.'

Outskirts

'It would be better if they could feed their animals locally.'

'It seems logical if the animals don't have to eat.'

'It's not a remedy that can change things.'

'The carbon footprint must not be good.'

Photos and practices discussed: *reversed seasons*



Caption: In these images, we see:

- Animals inside a building in the middle of summer, because it is too hot to leave them outside. There is no more grass to eat in the meadows.
- Animals outside in the middle of winter, under the snow. The animals have enough to eat.

Mixed opinions on both groups: *suggesting alternative propositions*

City: comprehensive but not in favor

*'They choose **the shed to have some shade**, because it's a heatwave.'*

They suggest giving the animals a choice with **access to the barn as needed**.

They suggest **adding trees** to the fields to provide '*shade that may be cooler than the barn*'.

'The CC is more in favor of letting them out in winter and bringing them in during summer.'

Outskirts: why not in winter, but mixed for summer

*'Acceptable if periods in the building are **alternated with periods in more spacious areas**'*

'Even if the period when the animals are let out is longer, it is still winter. But with less cold winters it will be less of a problem.'

They suggested to '**Plant trees** so that the grass does not dry out and to have green grass in summer, rather than hay.'

Photos and practices discussed: *seasonal break*



City

'It's sad.'

'I'll come back to the product later.'

This **seasonality** seems '*logical*' to them.

'You get used to everything.'

*'It can be a pleasure, a **seasonal product**!'*

Outskirts

'It is up to the consumer to adapt'

'I'll come back to that.'

In terms of animal welfare: *'The animals are **treated better**; it's more in tune with their rhythm.'*

'Better that than cheese made on the other side of the world.'



Willingness to pay (WTP) varies depending on adaptation levers

Starting price 2€10	City	Outskirts	
 <p>Purchase of fodder outside the PDO territory in case of drought</p>	<p>3 purchase refusal WTP --- <i>'It's no longer PDO, we're downgrading the product.'</i></p>	<p>2 purchase refusal WTP --</p>	<p>Consumers feel that they are losing out on quality compared to what an PDO promises.</p>
 <p>Keep the animals indoors in summer (with hay) and let them outside in winter.</p>	<p>2 purchase refusal WTP -- <i>'It must be stressful for them.'</i></p>	<p>5 purchase refusal WTP -----</p>	<p>A proposal that does not satisfy half of consumers, who do not want to buy the product.</p>
 <p>Providing more exotic fodder that has not historically been cultivated in the region</p>	<p>WTP +++</p>	<p>1 purchase refusal WTP +</p>	<p>Proposal that may justify an increase in the price of cheese</p>
 <p>Cheeses are produced seasonally, so they are not available on the shelves at certain times of the year.</p>	<p>WTP +++</p>	<p>WTP ++++ <i>'the most reasonable and rational'</i></p>	<p>This proposal would best justify an increase in the price of cheese for consumers in both cities. They are even willing to pay more to see their cheese back on the shelves.</p>



Conclusion:

Adaptation measures are more or less accepted, depending on the people and locations involved.

- The practices that are most acceptable to consumers are not necessarily the easiest to implement.
- Biases to keep in mind:
 - Small groups, which illustrate a diversity of opinions but are not statistically representative.
 - The use of AI to generate photos has made some levers unrealistic from a visual point of view.
 - A limited number of practices, the economic and technical consequences of which are difficult to assess.



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