



Task 4.2 Innovation case study report

Feed self-sufficiency, a challenge for the sustainability of sheep and goat farms

iSAGE Workshop

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AUTOSYSEL

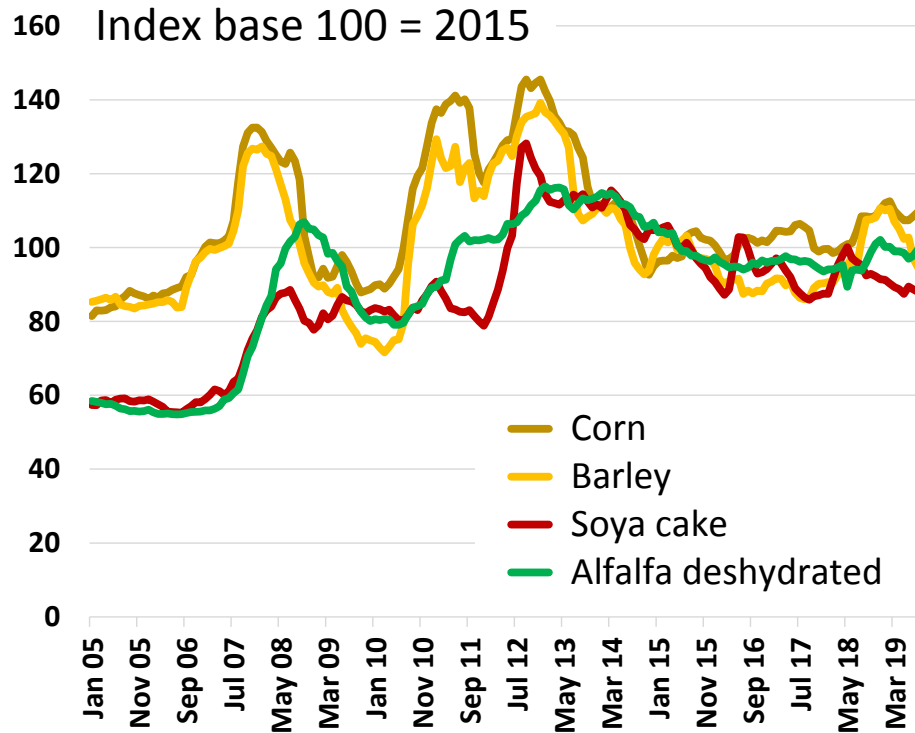
casdar
autelo
Promouvoir l'autonomie alimentaire
des élevages ovins laitiers

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In sheep and goat sector, feed purchases \approx 50 to 60% of operational costs

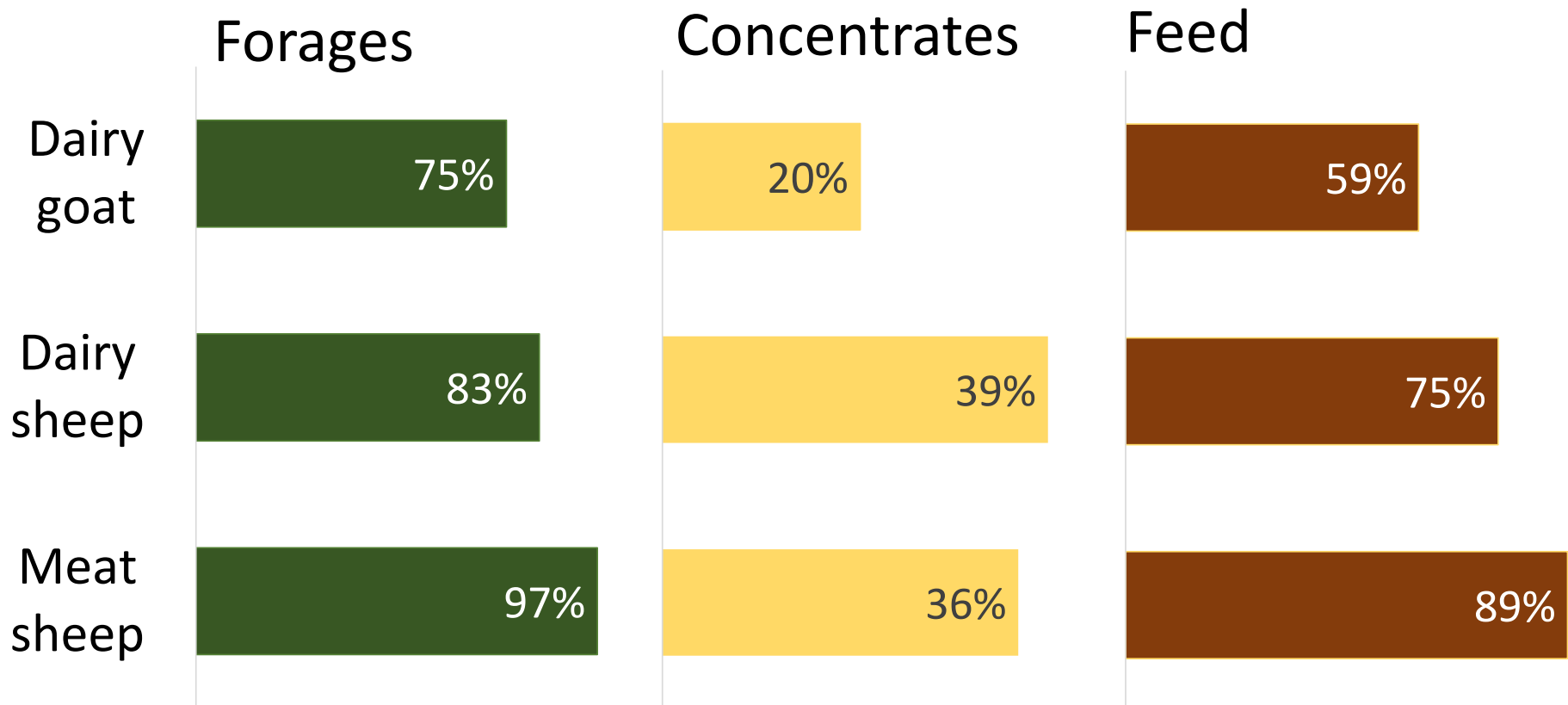
Evolution of feed prices



Economic results of farms are highly dependant on the evolution of feed prices...

French Livestock Institute from INSEE and AGRESTE

Feed self-sufficiency for French sheep and goat farms



French Livestock Institute from INOSYS Réseaux d'élevage

The farmers use different technical levers to improve feed self-sufficiency of their farms.

- ▶ **Modify the cropping plan** to produce cereals or protein crops, or to improve the quality of harvested forages by developing, for example, legumes crops (alfalfa, clover...)
- ▶ **Adapt stocking rate of the main fodder area** by increasing farm area or reducing the number of ewes or goats
- ▶ **Develop grazing** to reduce the amount of forage distributed
- ▶ **Improve the quality of harvested forages**, using silage, haylage or barn-dried hay
- ▶ **Use pastoral lands** by installing fences or employing a shepherd
- ▶ **Adapt concentrate distributions to the animals needs** by doing feed batches or using an automatic feeder

Most of these levers have **positive effects** on farms sustainability.. but some of them can have **negative effects** on a sustainability part.

- +** **↘ operational costs and ↗ gross margin** especially when feed prices are high
- **Can ↗ fixed costs:** machinery costs for cereal crops, automatic feeder...
- +** **↘ carbon footprint:** transportation of soya from Brazil
↘ nitrogen fertilizer and **↗ agricultural systems diversity** : alfalfa, lupin in crop rotation
↘ farm equipment and fuel consumption: grazing
- +** **Respect of quality label rules (PDO) ; ↗ local feed**
- **↗ workload** : to guard the flock when grazing

To conclude...

- ▶ Most often, **farmers combine several levers** in the same time to improve feed self-sufficiency of farms.
- ▶ So it is important **to adapt the possible solutions** to farming systems and **to advise farmers in their implementation**.
- ▶ In France, this work is done by the **technical organisations** that advise the sheep and goat farmers.