

Oilseed and protein crop sector France's strategy for the development of protein-rich plants

Field crops and potatoes : 2023 harvest

46% of agricultural area is dedicated to field crops (cereals, oilseeds, proteins, industrial plants and potatoes)

72 % of fieldcrops are cereals

And about 20% are oilseed and protein crops

The total production of field crops is about 73 million tonnes, of which 35 million tonnes are wheat.

Not including non-food crops	Land area	Yield	Production
	<i>thousand hectares</i>	<i>100kg/ha</i>	<i>million tonnes</i>
Total cereals	8,819	74	64.9
<i>of which: soft wheat</i>	4,762	74	35.1
<i>durum wheat</i>	236	55	1.3
<i>barley, six-row barley</i>	1,816	68	12.3
<i>maize</i>	1,315	99	12.9
Total oilseeds	2,372	29	6.8
<i>of which: rapeseed</i>	1,343	32	4.3
<i>sunflower</i>	822	25	2.1
<i>soybean</i>	158	25	0.4
Total protein crops	354	28	1.0
<i>of which: field peas</i>	152	32	0.5
All oilseed and protein crops	11,557	///	72.8
Industrial plants	632	///	///
<i>of which: industrial beet</i>	381	804	30.6
<i>sugarcane</i>	35	626	2.2
Potatoes	204	422	8.6
<i>of which: certified seed potatoes</i>	21	307	0.6
<i>starch production</i>	17	434	0.7
<i>food potatoes</i>	167	429	7.1

Scope: France.

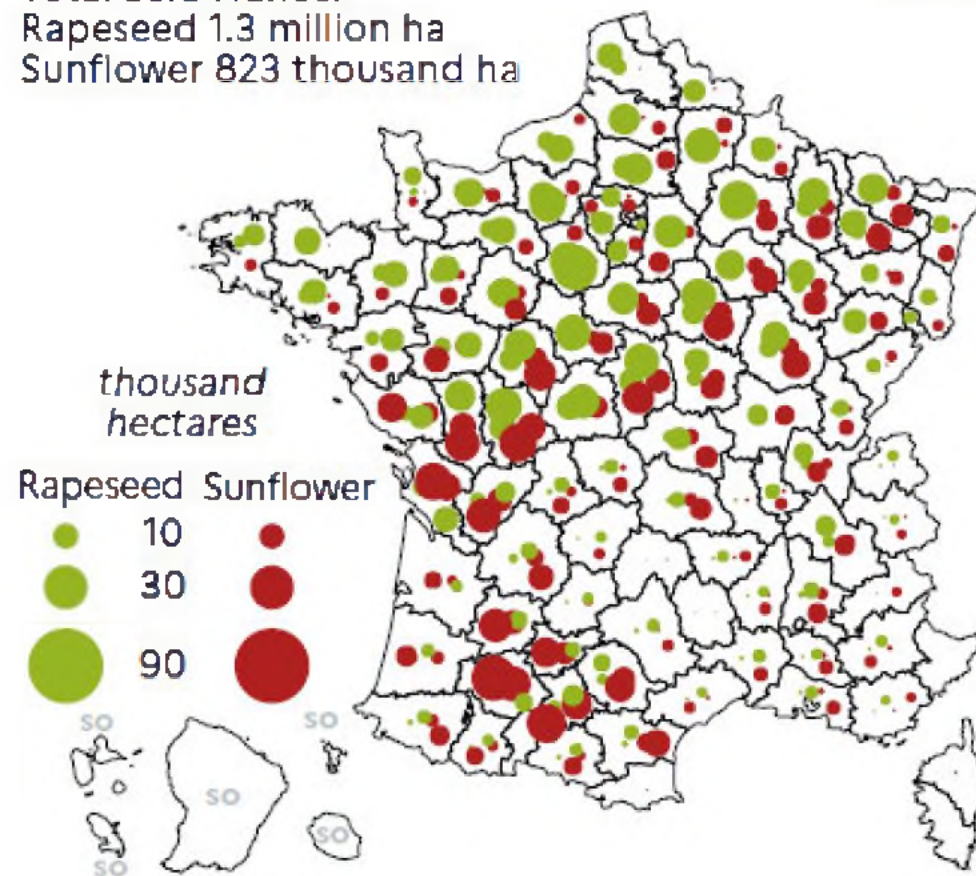
Source: Agreste - Annual Agricultural Statistics

Oilseed and protein crops

Oilseeds

Total area France:
Rapeseed 1.3 million ha
Sunflower 823 thousand ha

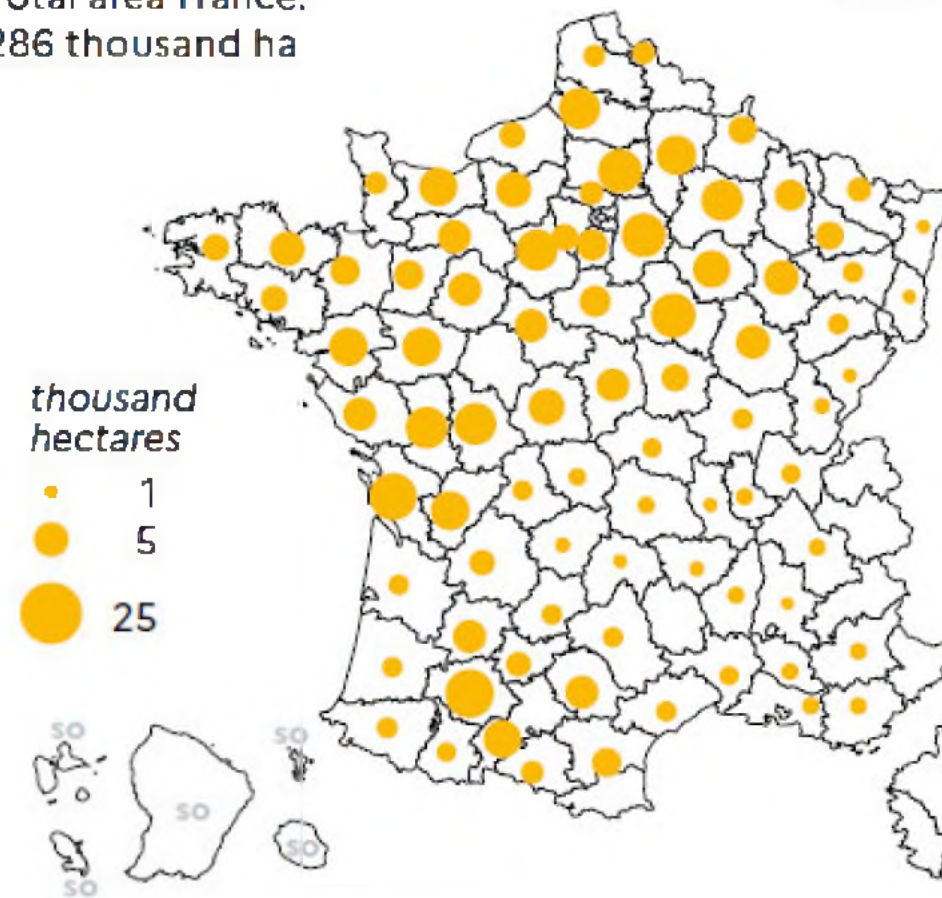
2023^P



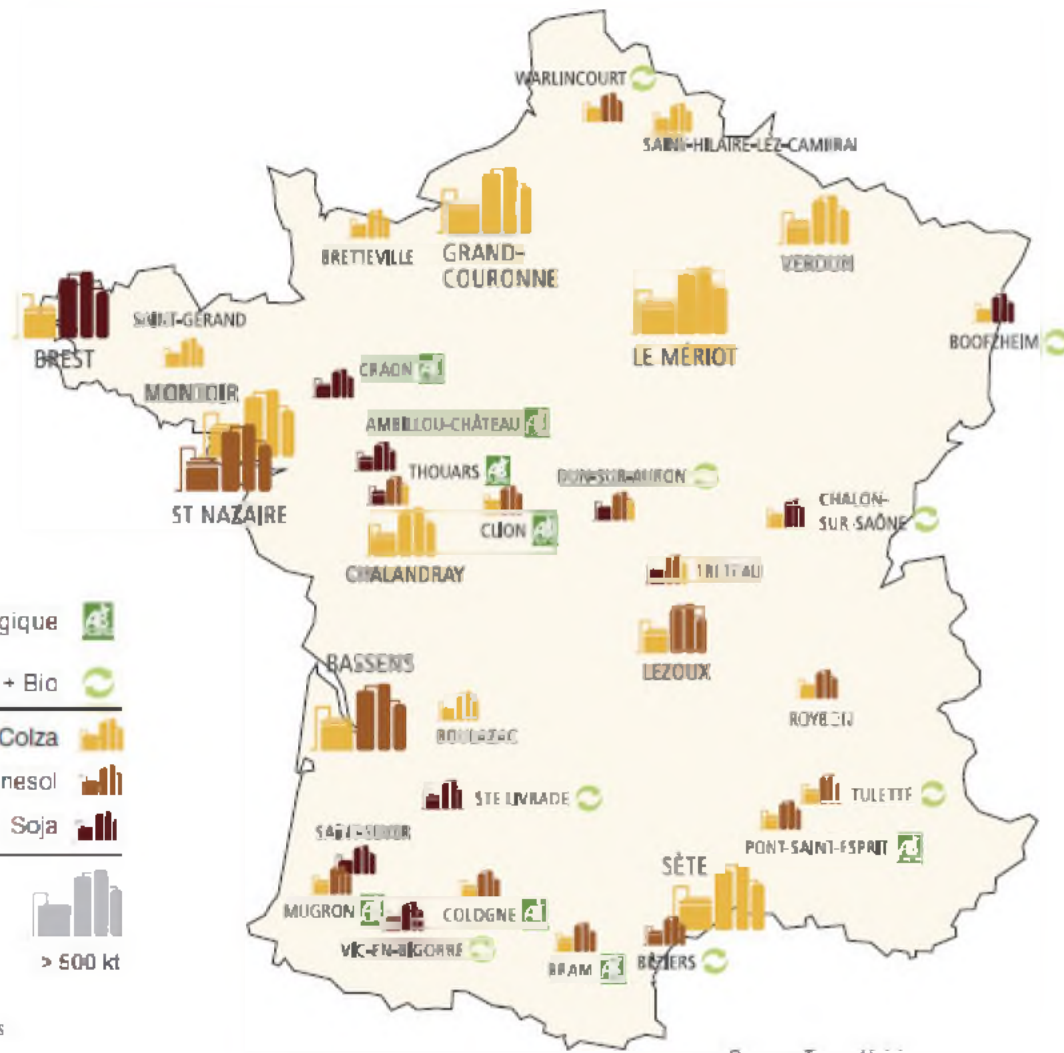
Protein crops

Total area France:
286 thousand ha

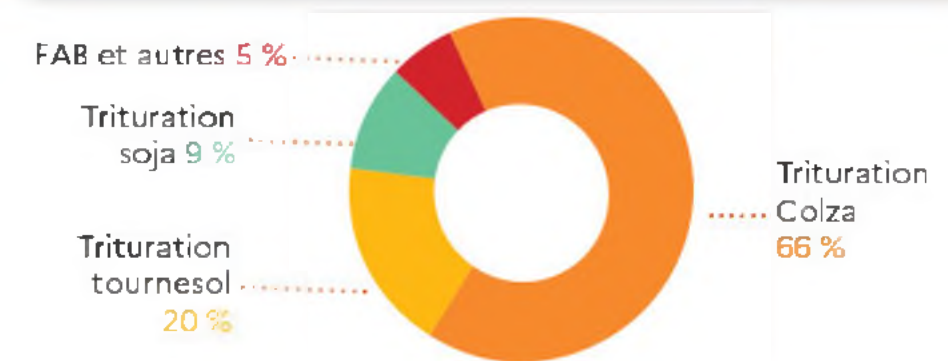
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Oilseed crushing industry

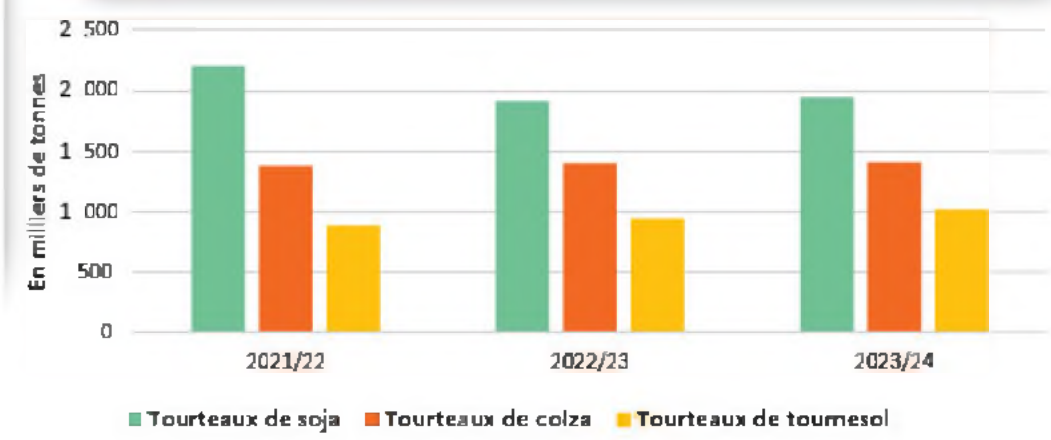


Répartition des volumes de graines oléagineuses (hors lin oléagineux) transformées (en moyenne quinquennale 2019/20 – 2023/24)



Source : FranceAgriMer

Consommation des tourteaux français par les Fabricants d'Aliment du Bétail (FAB)



Source : FranceAgriMer

The need to increase protein rich plants self-sufficiency

French self-sufficiency is about...

- 77% regarding all sources of protein for animals (including grass and fodder) (76% at the UE level in 2023)
- 50 to 60% regarding protein-rich materials only (oilseeds and pulses) (31% at the UE level in 2023)

The main dependance concerns soybeans (seeds and meals) with imports reaching about 90% of consumption. Meanwhile, self-sufficiency is higher for pea (>100%), fodder (100%), rapeseed (96%) and sunflower (67%).

Different constraints for legume production

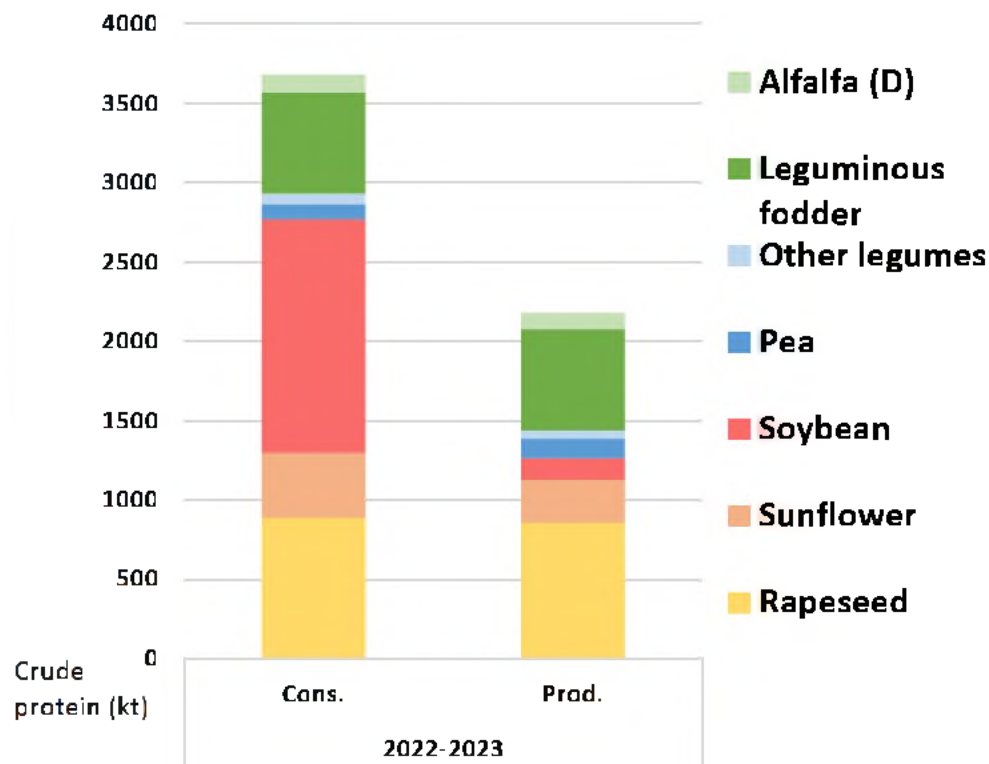
- **Agronomic:** Managing climatic hazards and increasing sanitary incidents; genetic selection; specific equipment required for the cultivation of certain legumes, etc.
- **Economic:** Low competitiveness of legume crops compared to cereals and industrial crops; lack of market opportunities and mismatch between supply and demand, etc.
- **Logistic:** Challenges related to collection with small volumes, sorting, storage due to high segmentation, and lack of optimization in the shipment flow of harvested crops, etc

Sources:

Ceresco, 2021. Freins et leviers logistiques au développement de systèmes de culture diversifiés et riches en légumineuses

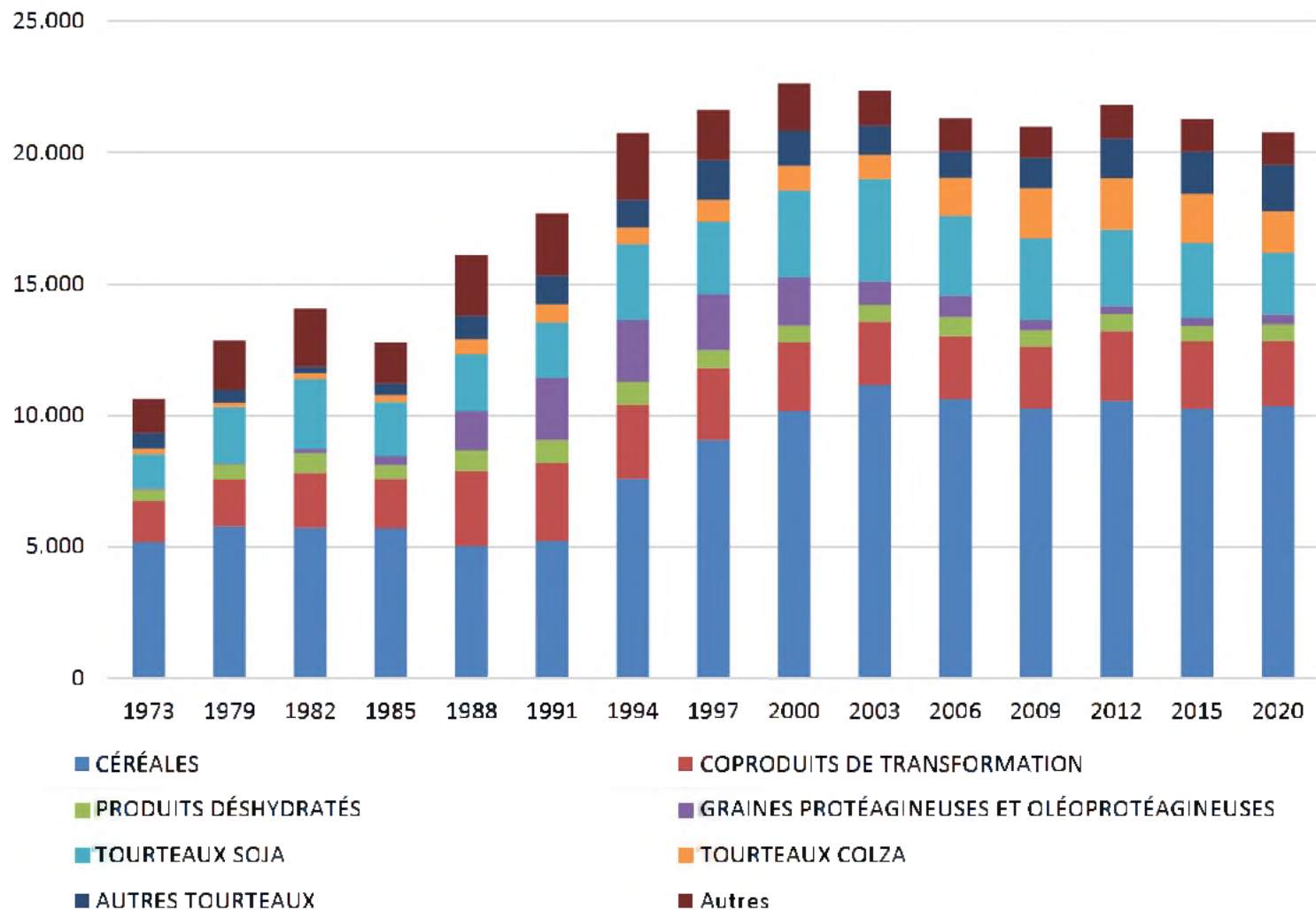
Meynard, 2013. Freins et leviers à la diversification des cultures. Etude au niveau des exploitations agricoles et des filières

Bilan d'approvisionnement agroalimentaire 22-23 <https://agreste.agriculture.gouv.fr/agreste-web/disaron/Chc2417/detail/>
<https://data.europa.eu/data/datasets/eu-feed-protein-balance-sheet?locale=en>



Rapeseed and sunflower meals as substitutes of imported soybeans

Raw materials used in compound feed manufacturing (kt) in France



- The decrease in imported soybeans was made possible by increased production of other oilseed meals in France, in particular for ruminants
- Increases in protein-rich fodders, legumes, and oilseed meals are complementary solutions to enhance European protein self-sufficiency and ensure price competitiveness of protein sources
- The French national strategy for the development of protein-rich crops thus includes both oilseeds and legumes.

A strategy to gain protein autonomy with a food systems approach

3 strategic priorities

To reduce dependence on imports of protein-rich materials, particularly soybeans imported from third countries.

To improve food autonomy for French farms at the farm, territorial, and sectoral levels

To increase the production and consumption of protein-rich plants in human food.

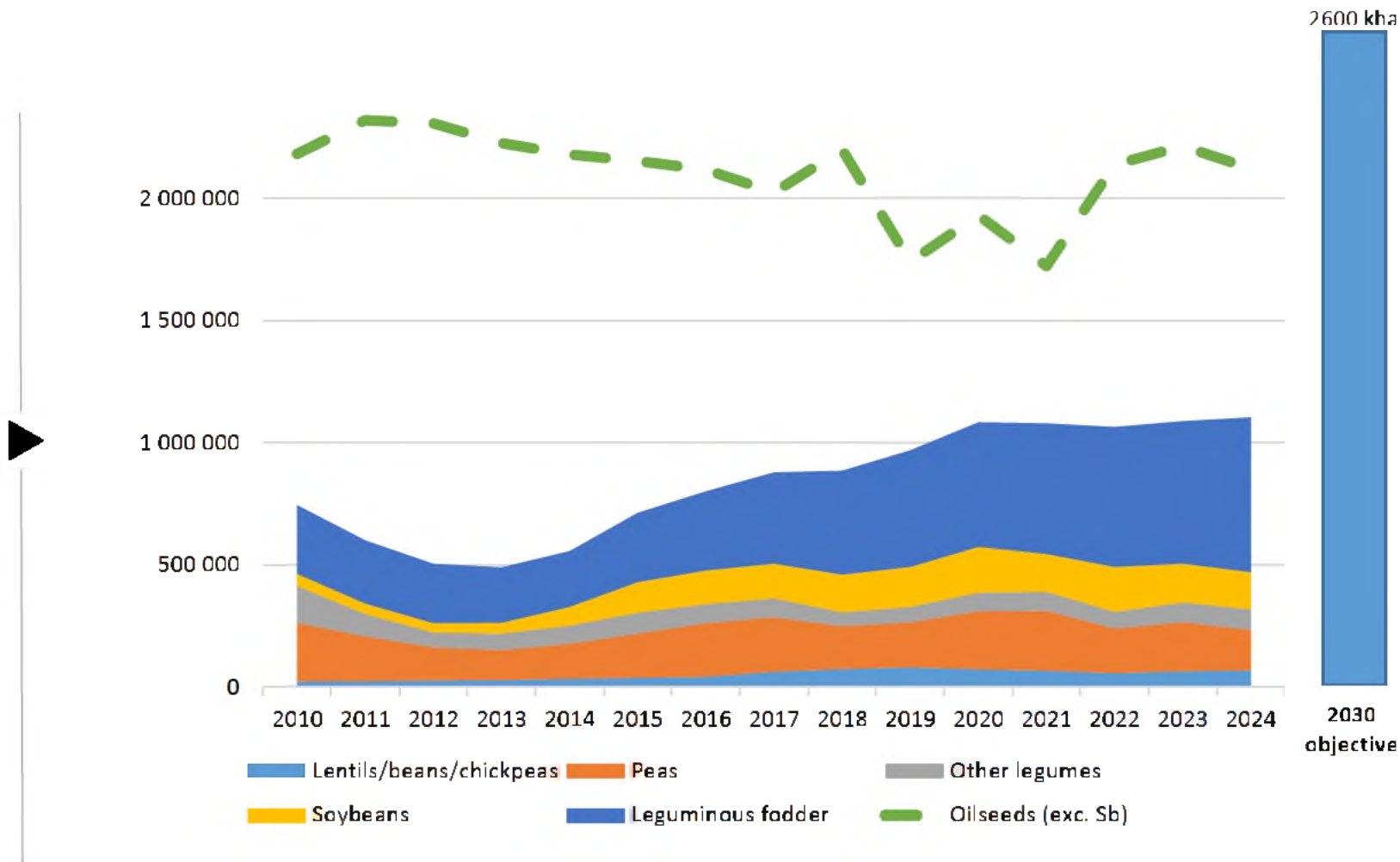
7 axes for a 10 year strategy

- To lead the transition towards diversified cropping systems rich in legumes.
- To strengthen the food autonomy of farms and the use of fodder proteins.
- To support crop-livestock synergies at the sectoral and territorial levels.
- To position France as a leader in protein-rich plants for human consumption.
- To mobilize resources for research, innovation, and training.
- To promote a strategy at the European level and develop international partnerships.
- To monitor and evaluate the strategy

Ambitious goals for legumes and oilseeds crops

The objective is to reach 2,6 Mha of legumes by 2030 while maintaining approximately 2 mha of oilseeds

- This would bring legumes areas to 10% of the total Utilized Agricultural Area (UAA). All legumes are intended to contribute to this growth.
- One of the key transformations for arable crops in order to reach GHG emissions reduction targets (decrease of fertilizer use)



Source: Agreste

Developing efficient and equitable value chains

Increasing supply : coupled support and operational programs for oilseeds and legumes

Industrial capacity : Investments in the downstream stages of oilseeds and legumes value chains

Demand :
R&D on food and feed
National food program
Collective catering
Territorial food projects...

- Those policy instruments aim to overcome several economic, logistical, and organizational barriers by supporting the structuring of **legume and oilseed value chains**
- Enabling agricultural value chains to engage in a **transformation process, both economically and socially** (food sovereignty, competitiveness), as well as in **environmental and health areas** (ecological transition, adaptation of practices to climate change, development of alternatives to pesticide use, reduction of greenhouse gas emissions and water usage, animal welfare, and biodiversity preservation...)

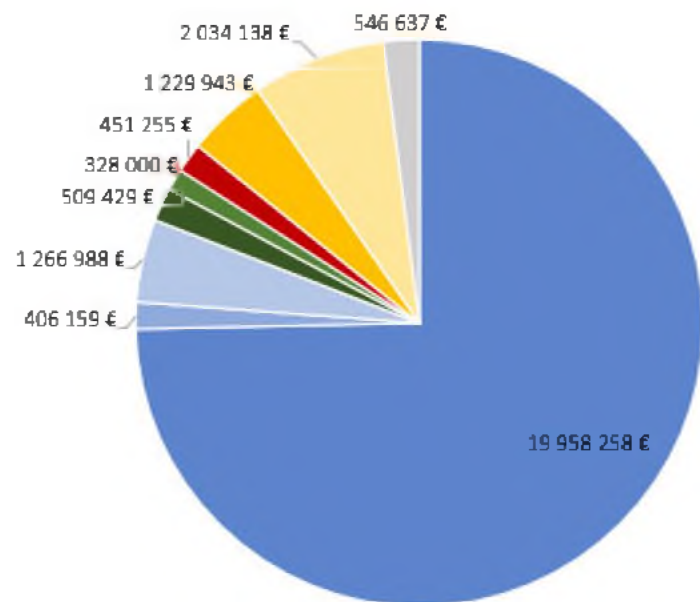
Oilseeds and legumes Operational Program

- Slow implementation at the initial stage : difficulty in meeting the recognition thresholds for farmers organizations (0.5 full time equivalent position ; 500 hectares ; 50 farmers), with sufficient marketed production, and at least 65% of the production delivered to a farmer organization.
 - Oilseeds acted as a lever in achieving these thresholds, thereby enabling the structuring of the oilseed and protein crop sectors
 - Value of marketed production : 30% of oilseeds and 70% of legumes

- 4 farmers organizations in 2026
- A forecast budget of about 2 M€ in 2026

- **Main activities** : Advisory services to optimize crop management practices ; Planning and monitoring of harvesting operations to ensure the supply of raw materials to processing plants, as well as on-farm trials and experiments with farmers ; Promotion and communication

Forecast Budget for the Dried Fodder Operational Program (2024–2026)



■ 1.1] Planification et organisation de la production, adaptation à la demande Concentration de l'offre. Récolte, stockage, préparation commerciale, conditionnement. Optimisation des coûts de production.

■ 1.2] Production durable d'énergie

■ 1.3] Investissement corporel ou incorporel destiné à rechercher ou à développer des méthodes visant à diminuer l'impact sur l'environnement, notamment du matériel spécifique à la réduction des produits phytosanitaires/zoosanitaires

■ 2.1] Acquisition de connaissances techniques en lien avec les méthodes de production et commercialisation

■ 2.2] Conseil technique et diffusion de connaissances aux producteurs notamment liées à l'évolution des systèmes de production et aux nouveaux outils, aux pratiques alternatives et aux moyens de lutte contre les nuisibles et/ou les maladies et l'adaptation

■ 2.3] Conseil technique et diffusion de connaissances en lien avec les conditions d'emploi, les obligations des employeurs, la santé et la sécurité au travail

■ 4.1] Etude de marché, prospections commerciales, tests produits

■ 4.2] Création et évolution de la marque d'OP et/ou du logo ; Création de nouveaux produits et coûts liés à la présentation de ces produits

■ 4.3] Publicité, promotion et communication

■ 6.1] Traçabilité des produits et systèmes de certifications

■ 6.2] Agréage et contrôle de la qualité des cahiers des charges en production

■ Frais de gestion

2028 – 2032 CAP : an opportunity to increase European protein self-sufficiency

- The French strategy on protein crops relies on a **food-system approach, mobilizing different policy instruments at all levels of the value chains.**
- **Operational programs** represent a promising tool for structuring oilseed and legume crop value chains, enabling a diversity of actions to reinforce production through technical support to optimize crop management strategies, risk management, experimentation, promotion and communication, and the development of long-term marketing strategies to maintain supply-demand equilibrium.
- Oilseeds (excluding soy) account for 35% of the supply of protein-rich plant materials to French livestock farms (average 2018–2023), and 22% at the European level (2023–24), with self-sufficiency rates of 72% for rapeseed meals and 53% for sunflower meals.
- These crops contribute to European supply both in protein for feed and in biofuels. Their utilization represents a particularly suitable response to European protein autonomy, given the ability of oilseeds to substitute for imported soybean meals, particularly for cattle herds. Their integration would also provide a leverage effect for structuring legume production.