

Regenerative Agriculture at MAS Seeds®

MAS Seeds® is committed to supporting farmers in their transition and in reducing its own carbon footprint through the use of regenerative agriculture practices.

We strive to contribute to the construction of a sustainable and efficient agricultural model.

To this end, our teams of agronomists are trained in regenerative agriculture techniques, through the guidance of renowned experts.

The foundations of regenerative agriculture



Respecting earth's true cycle

Understanding long-term processes to enrich soils and enhance farms.



Respecting nature's true cycle

Integrating crop rotations and diversity to create synergies.



Increasing yield sustainably

Affirming our original role as seed company through research and varietal innovation.



Increasing farmer profitability

Ensuring the economic sustainability of farms.

Our 2030 plan

- **50% of resilient varieties** in our maize and sunflower portfolio.
- **A comprehensive offer of cover crops and forage mixtures** across Europe, tailored to maize and sunflower rotations.
- **100% of our seed producers** committed to regenerative agriculture.

VARIETAL INNOVATION TO EXPAND REGENERATIVE PRACTICES

Through its research and development department, **MAS Seeds® develops a range of high-performing, resilient, and diverse crops** to enrich rotations, improve soil health, and enhance yields.

Selection of high-performing, resilient and earlier varieties

With **250 test sites and 300,000 micro-plots** around the world, our experimentation network allows us to collect millions of data points through **advanced phenotyping techniques**.

This information is complemented by **genotypical data from our biomolecular laboratory**, enabling us to predict the performance of new varieties even before field trials.

All this data is then **analyzed using advanced applied science models** to identify **the best maize and sunflower varieties based on performance, resilience, and stability criteria**.

MAS Seeds® is also working on the development of earlier maize cycles, allowing for earlier harvests. This method reduces the risk of mycotoxins and supports the establishment of cover crops starting in September-October.

Development of cover crops and forage mixtures adapted to maize and sunflower

Our research team develops cover crops and forage mixtures specifically adapted to maize and sunflower crops to improve the sustainability and resilience of agricultural systems.

The MAS4 portfolio, composed of legums, grass, and crucifer mixtures, plays a crucial role in protecting and improving soil, weed management, and soil fertility enhancement.

To enhance this portfolio, **four criteria are analyzed in our experimental trial network** dedicated to cover crops and forage mixtures :

- The **ease of integration** into crop rotation.
- An excellent **winter biomass** production (> 3 t DM/ha).
- The adaptability to different **sowing dates** and **soil types**.
- The **ease of disposal** for optimal transition to the next crop.



Research on crop rotation and development of agroecological solutions

Our experiments aim to develop farming practices that allow for **more sustainable and profitable sunflower and maize production, minimizing their carbon footprint**.

Different practices are tested :

- Enhancing **cover crops** to benefit following crops.
- Reducing soil tillage through **no-till farming**.
- Reducing synthetic fertilizers in favor of **green manure**.
- **Undercover sowing** to limit the use of chemical weeding.
- **Irrigation** optimization.
- **Crop protection** optimization.

Crop rotations and cover crops integration are the foundation of our regenerative agriculture strategy. By adopting these practices, farmers can improve soil health and organic matter, maintain yields while reducing their carbon footprint, and contributing to a more sustainable agriculture.

TOWARDS SEED PRODUCTION IN REGENERATIVE AGRICULTURE

Launch of our **pilot farms network** and **production specification**

2024

First seeds from level 1 committed farms

2025

Transitioning the **entire French network**

2025 à 2028

100% of farms in France reach commitment level 1

2028

French network progresses toward **levels 2 and 3**
Begin transitioning in Spain and Ukraine

Convinced of the benefits of regenerative agriculture on performance, production profitability, and carbon footprint reduction, MAS Seeds® aims to transition its entire network of seed producers in France by 2028.

Experimentations conducted on a network of pilot farms

A collection of pilot farms are dedicated to experimenting with regenerative agriculture practices in seed production.

The goal is to **define the most efficient crop management practices, adapted to seed production**, in order to subsequently deploy them across the entire network of producers.

The main area of focus include **soil tillage reduction, cover crops enhancement, nitrogen fertilizer modulation, and irrigation optimization**.

The first seeds from transitioning farms available in 2025

The transition to regenerative agriculture is a gradual process that will take several years.

However, **the assessments conducted on all farms in the French production network in 2024 have identified producers already engaged** in a process of transitioning to regenerative agriculture.



Therefore, the first level 1 « **Regenerative Agriculture** » seeds are marketed in 2025.

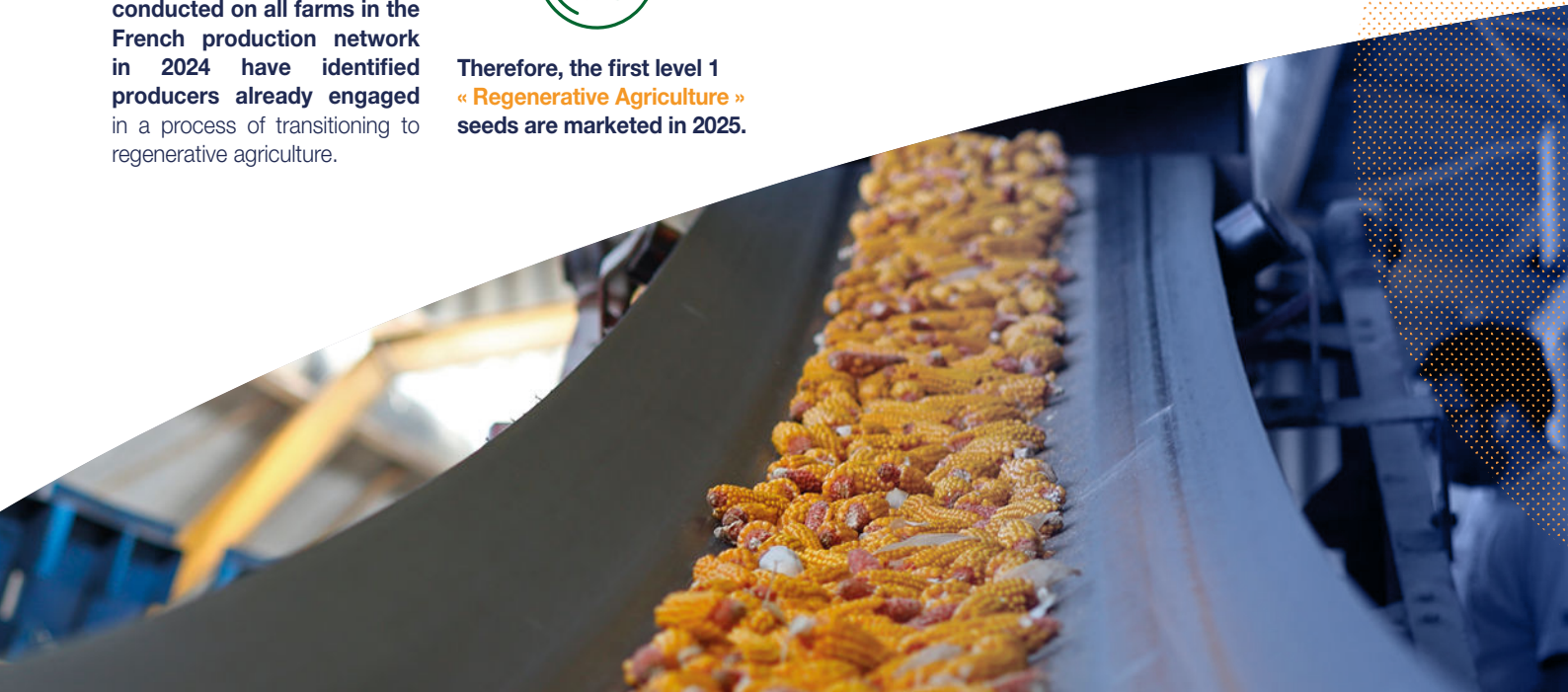
Our 2028 plan: 100% of producers committed to regenerative agriculture

A **specification document, defined in 2024**, outlines regenerative agriculture practices adapted to seed production.

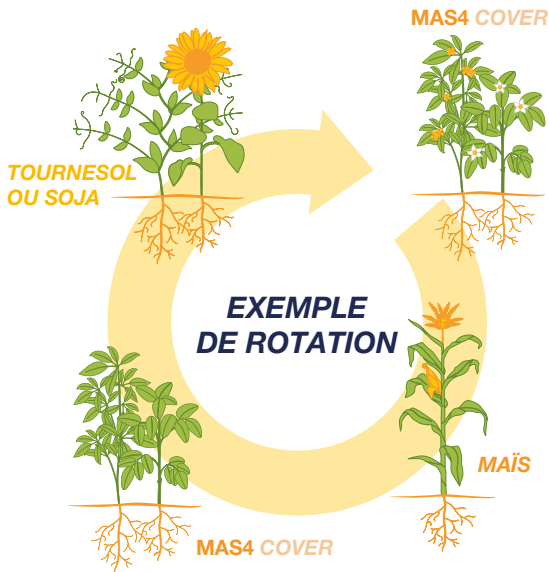
It establishes **three levels of commitments, defined by milestones to be achieved in adopting new practices**, and helps structure and action plan evolving the production network. Experiments on pilot farms allow for an easier process on transitioning farms.

The goal is for 100% of farms to reach commitment level 1 by 2028, and further increase their commitment to levels 2 and 3 within the following years.

The experience acquired on the French network will facilitate the transition of the Spanish and Ukrainian networks thereafter.



SUPPORTING FARMERS IN THEIR TRANSITION



Proposing seeds tailored to the need of regenerative agriculture

Our offer is suited to maize and sunflower-based rotations, with cover crops specially designed to meet the specific needs of each region.

Our maize, sunflower, and oilseed rape varieties are selected for their performance as well as their resilience, ensuring yield security in all conditions.

We also offer other species to extend and enhance rotations, such as soybean, alfalfa, and sorghum, to maximize biodiversity and soil health.

The needs of regenerative agriculture



ADAPTABILITY
TO CHANGING
CLIMATE



INCREASE
SOIL VALUE



SUCCESSFULLY
IMPLEMENT
COVER CROPS



The solutions MAS Seeds® offers

High performing, resilient, and stable varieties identified under various labels:

MAIZE

WATERLOCK



GREEN+



SUNFLOWER

HelioSMART



NORUST



OILSEED RAPE

SAFETY+



The range of MAS4 cover crops and forage mixtures, designed for maize and sunflower-based rotations.

MAS4 COVER
NUTRI
EXPERT
ENERGY

Technical support in managing cover crops, from establishment to disposal, including nitrogen release estimation.