



THE FUTURE OF AGRICULTURE IS WRITTEN IN GRONINGEN

Today the province of Groningen decided to join forces with the **Fascinating program** from the National Program Groningen. This program aims to realize the agricultural sector of the future: a circular system that balances sustainability, nature, healthy food and economic impact. The province of Groningen that is situated in the northern part of the Netherlands, is traditionally an agricultural region. It offers a unique combination of available agricultural land, large-scale industrial infrastructure, sustainable energy, high-ranking knowledge institutions and a highly developed chemical industry and, above all, the will and culture to work together. In the first three years, a budget of 20 million will be invested in the region. This is funded 50/50 by the participating organizations and funds from the National Program Groningen.

Groningen has the ingredients

Fascinating stands for Food Agro Sustainable Circular Nature Technology in Groningen. Why in Groningen? This region not only offers available agricultural land, but also a large-scale industrial infrastructure for biomass processing. Add this to the availability of sustainable energy, high-ranking knowledge institutions and a highly developed chemical industry, and the result is complete: Groningen has a unique combination of all the necessary ingredients to shape the future of agriculture. The various projects provide employment and knowledge.

What will the agricultural sector of the future look like?

The focus of our agricultural sector has long been on scale and efficiency. However, this was often at the expense of nature and soil quality. The focus for the future must be on added value of the products we create in terms of nutritional and economic value, in a complete circular system with a minimal footprint. A system that creates less nitrogen and CO₂ emissions. The agriculture of the future rests on 4 pillars:

- Healthy and balanced nutrition: we make the step from quantity to quality. How can we translate a healthy diet into our agricultural system? What does the consumer want?
- Sustainable production of nutritional crops: we express quality in terms of nutritional value and economic value. How do we balance food production with nature, without CO₂ or nitrogen emissions and with enhancement of biodiversity?
- Energy-efficient and sustainable processing: with the current processing processes, we lose a lot of nutrients from the crops and we use a lot of energy. By making existing technologies energy efficient and developing new technologies, we can use all nutrients in an energy-efficient way.
- Non-food use of residual flow: after processing agricultural products, you still have a large residual flow that you cannot use for human or animal consumption, such as cellulose, soil and manure. We use these residual flows in a circular manner as raw materials for the chemical industry or as an energy source.

About Fascinating

The four large agricultural cooperatives (Agrifirm, Avebe, Cosun and FrieslandCampina), LTO Noord and the Province of Groningen have joined forces in Fascinating. Together with knowledge institutions and organizations in the food industry, chemical industry and the energy sector, they are investigating how the agricultural sector of the future can be realized. The program is coordinated and organized by the Institute for Sustainable Process Technology. The Province of Groningen takes an active part in the decision-making in the program. Fascinating is an open innovation platform and organizations and social parties that want to help shape the objectives are more than welcome to participate.

This unique combination of forces creates the strongest conceivable combination. From the perspective of the individual farmer, this covers all proverbial flanks. Whether it concerns grass, potatoes, cereals, milk or new arable crops. The collaboration guarantees scale that makes implementation possible.



“For me this is a dream come true! We are finally making the step from quantity to quality and we are going to focus on nutritionally high-quality agriculture. ”

Tjeerd Jongasma, director ISPT