

*Working together on innovative and
sustainable harvesting within the
Controlled Traffic Farming concept.*

Stichting Future Food Production

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FUTURE FOOD PRODUCTION

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The Noordoostpolder e.o.

De Noordoostpolder en Urk:

- A unique area/polder
- Agriculture is the main sector
- Passioned farmers
- Many (agro)technical companies
- Knowledge institutions: NLR, Dyntespark, Wageningen University & Research



Background - cause

- The agriculture in The Netherlands and also in the Noordoostpolder is confronted with some **serious** bottlenecks.
- Farmers produce for the world market and for world market prices which stay at the same level year after year. On the contrary production costs are rising and yields remain the same.
- The answer to this has been scaling up and intensifying. But nowadays we see numerous bottlenecks popping up regarding this strategy.



Background - cause

- With the increase of mechanization, as a result of the scaling, the soil pressure also increased significantly.
- In addition, due to climate change, conditions during the harvest season are often not good enough.
- This way the condition of the soil decreases rapidly
- Working in wet conditions with heavy machines also results in extra fuel consumption.

All in all, the agricultural sector is less and less sustainable with rising social costs!



Our vision

A balanced, robust and futureproof agriculture,
that harvests healthy and nurturing food from a
healthy and vital soil.



The foundation FFP invites parties to realise:

- Regional corporation on:

The largest challenges regarding the future of the AG-sector

- Corporation (vs. The tradition of everybody owning his own (large) tractor)
- Integrating the whole chain of growing, storage, processing and logistics

Smart combinations and cross-overs

- Of knowledge (of f.e. NLR, Geomatica and Wageningen University & Research)
- Of industries (Agriculture, technique, fisherie, ICT, retail, etc.)
- Of trends (climate, energy, aging, etc.)



The challenges and tasks we face

The challenges for the individual farmer and the sector as a whole:

- Climate change
- Soil health
- (Green) Energy
- Stop the devastating influence on nature
- Social (urbanization, population growth, AG-awareness)
- Economics (internationalization, emerging markets, rising prices of land and inputs and the power of the retail)



The challenges

- Doing things better (bigger) \longrightarrow doing better things
- Putting words into action
- The industry as a whole faces challenges, but the individual farmer needs to embrace the importance .



The Project: goals

Our practical goals are:

1. Minimal use of chemicals (we bring it down to 10%)
2. Low energy use (goal: >30%)
3. No use of P and K in the chemical fertilizer form
4. Minimal use of N as chemical fertilizer (max 30kg N/ha/yr)
5. Low use of water (goal 80% less than “usual”)
6. Nature friendly



The Project: means

- Strip cropping
- Controlled Traffic Farming (based on 3,15m trackdistance)
- Very light and automatized implements
- Keep the soil green as long as possible
- Rotation with 5 crops
- Maximal use of natural characteristics of crops and their interference to each other
- Use of compost and manure
- Precision techniques



The Project: practical

- We develop a semi automatized selfpropelled lightweignt "tractor"
- We start a "farm" of 2 ha with 5 crops
- seedpotato- red beet- summerwheat/lupine- onion- winteroats
- All in strips of 3,15m; all machines will be on that track
- We develop the mechanical harvest of rootcrops (based on that track)



Founding partner

steverink techniek

Wim Steverink

