

NETHERLANDS

Farm's performance, restructuring & modernisation

Location

Zuidwolde, Drenthe

Programming period

2014 – 2020

Priority

P2 – Competitiveness

Measure

M4 – Investments in physical
assets

Funding (EUR)

Total budget 150 000
RDP support 18 000
Private 132 000

Project duration

2016 – 2017

Project promoter

Farm Katerberg

Contact

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Website

n/a

A young farmer invested in precision farming through the acquisition of a new sprayer; combining cost savings and environmental protection.

Summary

Wim Katerberg, who is 26 years old, together with his parents, farms a 300-hectare arable farm in the Zuidwolde area of the Dutch province of Drenthe. Their main crop is starch potatoes and they also grow sugar beet, summer barley, grass seed and silage maize. At the end of 2016, Wim applied for RDP support to acquire a new sprayer machine that would allow him to do precision farming. Thus, he bought a Horsch sprayer capable of site-specific precision spraying.



The new field sprayer applies fertilizers or pesticides closer to the roots and adjusts the fertilizer quantity to the needs of the crop. Before the foliage is sprayed, biomass cards are made using satellite images. These cards 'tell' the sprayer where the leaves have already died and where they haven't, so that there is no need to spray everywhere. The sprayer also enables farmers to adjust the amount of soil herbicides based on the organic matter content of the soil. Also, the syringe causes less drift since the spray height is lower compared to conventional syringes.

Results

Thanks to the new machine there are cost savings and a reduced impact on the environment. For example, in potato cultivation 2 litres of pesticides per hectare are required with conventional agriculture, but with the new site specific sprayer, only 1.3 litres of product are needed per hectare.

Lessons & Recommendations

- ❑ It is helpful that this particular technique exists, but the innovation might be against current regulations.
- ❑ There are considerable challenges to accessing RDP support and the mandatory regulation of the support rules is not ideal for entrepreneurs, who require greater flexibility (for example, it is mandatory to take out financing for at least 5 years. However, this is not helpful when beneficiaries have their own available resources and where they would prefer a shorter period of commitment).

Context

Wim Katerberg, who is 26 years old, together with his parents, farms a 300-hectare arable farm in the Zuidwolde area of the Dutch province of Drenthe. Their main crop is starch potatoes and they also grow sugar beet, summer barley, grass seed and silage maize. At the end of 2016, Wim applied for RDP support to acquire a new sprayer machine that would allow him to do precision farming. Thus, he bought a Horsch sprayer capable of site-specific precision spraying.

Objectives

This investment in precision farming equipment has provided:

- economic benefits, by reducing the fertiliser/pesticide dosages used, and
- environmental benefits, by reducing nitrate and pesticide losses through the ground and surface water.

Activities

The new field sprayer applies fertilizers or pesticides closer to the roots and adjusts the fertilizer quantity to the needs of the crop. Before the foliage is sprayed, biomass cards are made using satellite images. These cards 'tell' the sprayer where the leaves have already died and where

they haven't, so that there is no need to spray everywhere. The sprayer also enables farmers to adjust the amount of soil herbicides based on the organic matter content of the soil. Also, the syringe causes less drift since the spray height is lower compared to conventional syringes.

Main results

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Key lessons

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Additional sources of information

n/a