

The Netherlands Invests in Satellite Data for Precision Farming



The Dutch government is freeing up EUR1.4 million for the purchase of satellite data to improve the sustainability and efficiency of farming. Among other things, the data contains detailed information about the soil, the atmosphere and crop development. Specialised companies can analyse the data to provide farmers with targeted advice on irrigation, fertilisation and crop-spraying activities. The satellite data will be made available online as open data, allowing everyone to have free access to it.

The Dutch agricultural and horticultural sector enjoys a very strong international reputation, and the government is keen to support this leading position by investing in innovation. Satellite data enables farmers to monitor crop progress very closely and to take corrective action precisely where it is needed, thus resulting in greater efficiency and

sustainability. This will help to secure the Netherlands' position at the forefront of the agriculture and horticulture industry and enable the country to continue to do its bit to solve the global food crisis in the future.

Specialised remote sensing equipment

The data is collected by Earth observation satellites that are orbiting at between 500 and 900 kilometres above the Earth. Using highly specialised remote measuring and sensing devices, the satellites gather unique information about soil quality, humidity, temperature and atmospheric conditions. It is also possible to analyse the development of biomass and the nitrogen and starch content in the crops, plus the satellites collect information on numerous other aspects such as changes in water quality, forestation and the environment. The satellite data will be available for the upcoming production season via satellietdataportaal.nl.

Open access to satellite data

It is far from easy to decipher the raw satellite data. Generally speaking, the data will primarily be analysed by scientific institutes and specialist companies. They will then convert it into information that farmers can utilise in their existing operations – such as up-to-date information about vegetation (www.groenmonitor.nl) or targeted advice on fertilisation and irrigation (www.akkerweb.nl). Smart crop production methods can generate substantial savings for farmers in terms of fuel, seeds, artificial fertiliser, crop protection agents and water.

National Testing Ground for Precision Farming

The purchase of satellite data is a good fit with the Dutch National Testing Ground for Precision Farming (NPPL) project, which recently received EUR2 million worth of government subsidy. The project is aimed at accelerating the adoption of precision farming in the Netherlands by connecting and strengthening existing initiatives and also by creating additional scope for experimentation where necessary.