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BOER & BUNDER, THE NETHERLANDS

Open data for farmers and plot development

In The Netherlands a web application has been launched that aims to improve accessibility to open data, unlocking valuable information that can aid the work of farmers and those involved in agriculture and the environment. Its biggest hurdle, however, is not untangling all the available data that is of use to individual farmers, nor is it the design of a time-sensitive and useful format to present the data, but rather getting farmers to see the practical application of the service, although this uncertainty is fast evaporating.

The new web application harnessing the benefits of open data for agriculture is called “Boer and Bunder” (“The farmer and his plot”). It was launched in 2015 and currently visualizes key information on the 1.9 million hectares of agricultural land in The Netherlands.

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Boer and Bunder provides easy access to relevant information linked to farmland. “We use complex algorithms to create simple-to-understand visualizations, which can be requested through an intuitive user interface,” explains Anne Bruinsma, who heads the service that brings together tech-savvy data experts with farmers and the agriculture-business.

At the heart of the application is a smart search function combined with user-generated data. This enables farmers to share all kinds of details about their farm through Boer and Bunder. In turn, all participants can see what is working on other farms and adapt their own farming practices, or they can find information of value for their soil type and topography.



Building on the web application, new content and services are being added, responding to user feedback. This will require focus on technical optimization, adding new data sets and the development of smart filters. The web application is adding further water usage and water quality information to the service.

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Bruinsma says, “Since the launch of the application we’ve had over 160,000 visits, 350,000 page views, generated by almost 50,000 users. Currently we have about a 1,000 to 1,500 daily users.” So it is clear plenty of farmers see the value of the service, despite some concerns.

A small number of farmers, explains Bruinsma, feel open data might have the potential to check on their farming methods. Yet this is a minor issue and the Boer and Bunder team are seeing a growing interest in the positive service it brings to the agricultural sector. They are confident they can build a case that will get farmers comfortable using open data, and look to the growing number of enthusiastic users on the site. It is clear, with greater buy-in by farmers, agriculture and the environment in Holland will benefit.

The Boer and Bunder team has embarked on fostering community debate and enhancing communication about the value of open data in agriculture. Given the potential benefits of sharing high-quality information about the country's farmland, the team feel they have a good case to make and are winning over sceptics.

Bruinsma is optimistic and says most farmers want to embrace the benefits offered by open data and explains the situation in Holland, "There is so much new technology available that the average farmer needs help understanding what works best for them and meets their needs. Is it drones or sensors? Whatever the device, there are plenty of places where open data can be used to improve agriculture. "

The challenge facing Boer and Bunder is filtering all the existing information and presenting it in ways that can be used and valued by the average busy farmer.

The repositories for all the information gathered by sensors, drones and other systems are often open data portals containing many data sets. The team at Boer and Bunder recognises that it requires considerable knowledge and experience to explore effectively. This means that much of the current use of open data is restricted to a small group of academics and experts. The challenge facing Boer and Bunder is filtering all the existing information and presenting it in ways that can be used and valued by the average busy farmer.

The web application has come about through a partnership between Crop-R, a software company specialised in arable farming, Liters, a creative content agency, and Hackwerk Advies, an agency targeting open data and innovations in agriculture. Financial support has been provided by the Dutch Ministry of Economic Affairs, but Boer and Bunder is expected to become part or fully commercial, as it supplements its free services with more specialised paid-for services.

Sources: <https://boerenbunder.nl/>
<http://hackwerk-advies.nl/land/>

