Farm Digital Communication Message

Summary

Growers in international chains participate in food safety and sustainability programmes in which they share data with customers and certification bodies. However, there are still no digital standards and many growers either use no business management software or a package that registers only part of the data.

Digital standards and a neutral platform would ease the administrative burden. Farm Digital was set up to develop these standards and test a prototype platform.

The problem

Administrative systems are being used more and more frequently to monitor and safeguard sustainability and food safety in the agricultural sector. A sizeable part of the administration is still paper-based, which is leading to unnecessary costs for organisations and entrepreneurs and to upscaling among farmers. In addition, there are farmers in developing countries who cannot participate in such programmes.

Broader standards are needed. Value can be created for growers who have no farm management system (FMS) by making data available for multiple programmes. This will also deliver benefits for growers who do have a FMS by affording them access to more data (only some data can be derived from a FMS).

Many Dutch farmers have a PC. Labour costs are high in the Netherlands and a lot of goods are imported from developing countries, in which there is a strong focus on sustainable chains. By providing ICT support for these chains, the Netherlands will strengthen its leadership role in international trade.

Farm management systems offer data to other parties, but they do not work in international chains, nor do they support all data. The PETA collaboration is trying to increase the market share of FMS by promoting a uniform information architecture. The number of farmers without a FMS is, however, still in the majority.

A neutral platform stands the best chance of success, as the participants would prefer not to use the platform of a competitor or a commercial platform. One attractive option is a data-sharing platform with data flows that can be used in combination in specific apps. Cheap data-sharing methods are urgently needed, but collective action is also needed to create such a 'common pool resource'.

It is easier for individual companies and certification bodies to have farmers supply data on an individual website. That does not, however, lead to reuse or optimise the value of data, and it remains to be seen whether the farmer gets to take his data with him if he changes trading companies.

Research needed

Research is needed on data-sharing via standards and a neutral platform in order to identify and solve problems and to measure effects. The funding for applied research in the Netherlands in PPP constructions in which businesses want to make immediate use of the developed knowledge makes such an experiment all the more attractive.

FARM DIGITAL

This research has been brought together within the Farm Digital programme, which 'develops components for an Open Information Architecture and tests them with a "Proof of Concept" that leads to an infrastructure which delivers more efficient data use (data-sharing) while lowering the data-collection costs. This infrastructure is tested with two prototype applications which are trialled by a large contingent of crop farmers.'

The People 4 Earth Foundation is developing 'AgriPlace,' a prototype for a platform that regulates the data traffic for sustainable agriculture.

Wageningen UR is very interested in a research experiment for a neutral platform with ideal aims. LEI Wageningen UR will also benefit from an open structure for data collection as it will no longer be wholly dependent on the datasets of multinationals.

Scaling up

After farmers and certification bodies have been introduced to the prototype, the electronic registration of data from FMS will be fleshed out in detail. Discussions will be held with other FMS with a view to participation in this phase. A link with the prototype will also be discussed.

As AgriPlace offers many fixed costs and wide network effects, People 4 Earth will continue to recruit new participants and draw on funds to speed up progress.

LEI Wageningen UR will develop projects that explore the feasibility and attractiveness of Agricultural Business Collaboration and Data Exchange Facilities. Particular attention will be paid to software-eco systems with apps.

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