Deploying data as digital soil

Data has been described as 'the new oil' for the 21st century due to its potential to drive modern economies. This remains increasingly valid in rural Europe where data can be called the 'new soil' because of its significance for supporting existing prosperity and stimulating new growth.

Strategic development topics often spotlighted by senior European Commission staff when they talk with ENRD audiences include the importance of food security, climate action, leaving no-one behind in rural areas, and the need for better data. Data's value is acknowledged for its role in making informed decisions concerning food system transitions, tackling environmental challenges, or supporting rural communities. All these prominent EU policy topics rely on adequate quantities of quality data.

Searching the website libraries of the ENRD, including evaluation, and EIP-AGRI, highlights the scale of data-driven and data-development initiatives involving the Common Agricultural Policy (CAP).

These projects, policy and programming work both reflect and contribute to the EU's European Strategy for data, which promotes data's role as an essential resource for economic growth, competitiveness, innovation, job creation and societal progress. Sharing data is recognised by the Strategy as fundamental to optimising data's growth potential.

The EU-funded Support Centre for Data Sharing collects existing experiences in several sectors, including Copa-Cogeca's EU code of conduct on agricultural data sharing by contractual agreement.

This industry-led code is designed to help farmers compete and agriculture was the first sector responding to the European Commission's call for sectorial self-regulatory approaches on data sharing.

The code is useful because large amounts of data are generated by modern agri-food equipment measuring productivity factors such as quality, resource use and animal welfare, among many other variables. Sharing such data allows farmers to identify sectorial or territorial trends that might not be visible on individual farms. Pros and cons can emerge from sharing agricultural data and Copa-Cogeca's code of conduct includes guidelines on dealing with issues concerning data ownership, portability and transparency.

Data-driven rural innovations

Transparency is referenced in the EU's Data Governance Act proposals and confidence in data-driven innovations inevitably influences their success. One high-profile data tool popular for its innovative ability to provide transparency is blockchain. This technology stores data in ways that are difficult to change or corrupt while allowing the data to be available transparently.

Blockchain offers many opportunities to use data as 'digital soil' for developing rural Europe. Experience from Europe's blue economy shows how this ever-expanding technology is being applied to enhance the transparency of food data from the fisheries sector. FLAGCHAIN is a project using blockchain to provide transparent traceability to help inspire consumer awareness and local consumption.

Such projects hold useful demonstration value for CAP stakeholders due to their use of secure data to create peer-to-peer networks that operate independently without intermediaries. The data model could cover the supply chain of many products. Possible applications could include plans for a direct sales module promoting local food products and linking with rural tourism sites, local recipes, and nutritional values. More information about Blockchain applications in the agri-food sector is available in an event report from a workshop in 2020 organised by the EU Blockchain Observatory & Forum with DG AGRI and CNECT.