GODAN Blog: Codes of Conduct for Better Ag. Data Management

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The adoption of digital technologies in agriculture has marked the start of a major transformation: Better services and products, innovations, enhanced decision making and increased profitability and productivity. But do all stakeholders in the agricultural sector have the same access and control to these insights? Do farmers really benefit equally, or even at all, from the benefits of data sharing? What concerns do farmers have on such issues as data ownership, privacy and security?

In a bid to better understand the importance of the socio-ethical considerations surrounding smart farming, and the challenges involved in balancing the cost of new technologies against expected benefits to farmers, GODAN, in collaboration with the Technical Centre for Agricultural and Rural Cooperation (CTA) established a Sub-Group on Data Codes of Conduct in February 2019.

This sub-group came about as part of a collective action plan from an expert consultation convened in Bonn, Germany in July 2018 by GODAN, the CTA and the Global Forum on Agricultural Research (GFAR). It was set up to feed into the GODAN Data Rights and Responsible Data Working Group, gathering information from practical activities and research to inform and advise the parent group. The main focus of the sub-group is to develop better data management practices through the adoption and implementation of agricultural data codes of practice, focusing on the farmers' perspective. The Working Group came out of an expert consultation convened in Bonn, Germany in July 2018, where GODAN, the CTA and the Global Forum on Agricultural Research (GFAR) decided to focus on developing better data management practices through the adoption and implementation of agricultural data codes of practice. The goal of the group is to empower farmers (and the agricultural industry more broadly) by raising awareness about farmers' rights within the data value chain, promoting dialogue between all the actors involved in agricultural data sharing, and enhancing the role of farmers' associations in setting codes of conduct.

The Sub-Group on Data Codes of Conduct's first workshop was an attempt to better understand the legal and policy-based open data challenges facing modern farmers. Entitled "Legal and Policy aspects of Open Data in Agriculture affecting farmers," the two-day event was organised by GODAN, CTA and KTBL on 25-26 July, 2109 in Darmstadt, Germany.

There was a large participation of many and varied actors: From farmer group representatives, lawyers and policy makers; to researchers and data specialists from across the globe.

During the workshop, participants analysed two reports from a legal and policy perspective. The reports, conducted in Europe and Africa respectively, looked at the current state of open data in agriculture and nutrition from the perspective of both developed and developing countries.

The discussions and presentations mainly focused on the issue of the present imbalance of distribution of benefits between farmers and agribusinesses, where in some cases farmers are not even aware of the value of their own data. Some interesting ethical questions were raised about data ownership, access, control, consent, privacy, and the lack of transparency caused by the often complex and unfair terms and conditions in data licenses when farmers are entering contracts with agribusinesses. Recommendations were suggested, such as the development of codes of conduct, as a way to bridge this digital divide.

Participants were asked to create an ideal code of conduct, attempting to balance the interests of all participants involved, while ensuring the farmers' perspective was considered and needs were met.

Three groups, representing different groups of stakeholders: researchers, farmers and governments; were tasked with creating a framework for the development of codes of conduct. The teams were instructed to prioritise the most important considerations when setting codes (ex.: definitions, data rights, access, consent, certification schemes), taking into account the key elements to come out of the Working Groups' recent review of existing agricultural codes of conduct.

It was interesting to observe each groups' individual approach, and how they prioritised their concerns:

A Researchers' Perspective

The manner in which information is collected and disseminated is an important consideration in the question of data ownership and sharing. If handled badly, it can make farmers less inclined to provide researchers with the necessary data. During the workshop, a nine-step approach was discussed and elaborated, based on priorities set by the research participants group:

1. Data clarification: Metadata and source description.
2. Verification of legal and contractual obligations between the provider and processor of the data.
3. Type and sensitivity of the data.

4. Data system risk assessment: How secure is it and what is the potential for misuse?
5. Importance of a clearly defined purpose for the collection of data: How is data to be used, and to what effect?
6. Consent of research subjects to data reuse.
7. Establishing a point of contact for both farmer and research communities.
8. Control of data flow, access to data and efficient data exchange can be constrained by the use of technology.
9. Data management – storage and access rights/security.

A Farmers' Perspective

The key concern of the farmers' group was the current lack of transparency present in data exchange systems. This concern extended to questions such as data ownership, access rights and control, privacy and security, and contributed to a lack of awareness of the value and benefits of data sharing.

Farmers need to be made aware of the value of the data they share with others. A better understanding of the process and more involvement in the development of data sharing principles would serve to build trust between farmers and agribusinesses. Seeing benefits in return for sharing data would incentivise cooperation. Farmers' associations could play a key role in representing farmers and their interests.

From the perspective of the farmers' group, the main focus of the code of conduct should be on:

1. Data ownership.
2. Terms and definitions.
3. Farmer's rights.
4. Farmers'notification in advance of data collection through a clear briefing.
5. Farmer's informed consent of data collection and use, and access control.
6. Clear and understandable contract.
7. Contract termination.
8. Disclosure,use and sale limitation.
9. Liability and protection of IP rights.
10. Enforcement-certification schemes and their effective implementation by independent and participatory administrating entity.

The Government's Perspective

The analysis of framework priorities shifted considerably when considering the government perspective. The group representing national Governments considered their responsibility to ensure the participation of all stakeholders in developing a national or commodity-based data code of conduct. They exhibited a greater level of concern in guaranteeing the safeguarding of public interest, as well as the traceability and transparency of data within the system. They felt that there should be a provision for the involvement of farmer organisations in developing data contract agreements. They also proposed to consider data licensing (for example, CC-BY-SA) for farmers agreeing to share their data.

The government group's priorities were outlined as follows:

1. Develop simple and understandable contracts, along with clear definitions.
2. Ownership – covering the principle and application.
3. Collection, access and control of - and consent to - data use.
4. The rights of the data originator (for example, the right to portability).
5. Contract termination – with a possibility to opt out clearly stated in advance.
6. Unlawful and anti-competitive activities should be prohibited.
7. Data protection safeguards should be put in place.
8. Participatory certification schemes should be designed and enforced.

It is worthwhile mentioning that despite agricultural codes of conduct being voluntary and not legally binding, they can nevertheless contribute to major cultural shifts, as they provide a solid framework for best practice in data management through the engagement of stakeholders at every level (including and especially farmers) in open dialogue to find solutions that address their differing needs and concerns. This approach can also serve to strengthen trust throughout the data value chain.

A full report on the outcomes of the Workshop will be published before the end of 2019.

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