

# The KTBL/GODAN B18 project: ethical and legal aspects of open data in agriculture and nutrition

„Open Data“ sind der Allgemeinheit frei zugänglich gemachte Datenbestände. Sie können von jedermann genutzt, weiterverarbeitet und weiterverwendet werden – zu jedem Zweck. Sie sind damit ein wichtiger Baustein der digitalen Gesellschaft. Das KTBL setzt sich in der internationalen und von der Bundesregierung unterstützten Initiative „Global Open Data for Agriculture and Nutrition“ (GODAN) dafür ein, dass alle Akteure gleichberechtigt von den Datenbeständen profitieren. Das gilt auch und vor allem für die landwirtschaftlichen Erzeugerinnen und Erzeuger. Foteini Zampati vom KTBL befasst sich in GODAN mit ethischen und rechtlichen Fragen zu frei zugänglichen Datenbeständen in der Landwirtschaft wie Datenschutz, Datensicherheit und Dateneigentum. In diesem Beitrag stellt sie ihre Arbeit vor.

## Open data – opportunities and risks

Open data offers great innovation potential and a wide range of possibilities for practical use from which the agricultural sector can reap significant benefits. However, the use of open data is intertwined with certain technical, ethical and legal challenges.

The technical challenges are linked with the need to create and develop new standards, platforms and infrastructures to allow access and better use of the data according to the FAIR principles.

In the last couple of years, the use of open data has also raised some ethical and legal issues as more and more stakeholders have entered the agricultural sector devel-



oping new technologies that focus mainly on collection, analysis and management of agricultural data.

This has brought about the need to protect the rights of those from whom data originates, who collect, access and use this data as well to address ethical concerns about fairer and more responsible data governance. It is true that the need to address the challenges of Data Ownership, control, privacy, security and protection is becoming more intense due to the incremental and extensive data collection using various means such as agricultural machinery, use of sensors, remote sensing, etc.

There seem to be evermore benefits which have unfortunately not been equally distributed among different stakeholders. On the one hand, unclear data governance and risks of data misuse often hinder data sharing. On the other hand, some stakeholders, e.g. smallholder farmers find it challenging to gain access to necessary data provided by others. Both types of challenges are linked to the inequitable flow of data.

The lack of awareness about these rights or the use of data (mostly for farmers) lead to unfair distribution of wealth in the agricultural sector. This perception of inequitable distribution of advantages and disadvantages in the world of production, collection, distribution and use of data is neither specific to agriculture nor does it constitute a problem for open data only.

## Regard data as legal property

It is already well known that ownership as a legal concept is rather complex, and farming data is not traditionally recognised as a type of property that is subject to ownership. The currently available ownership-like rights of data are limited to intellectual property rights (copyright, patents, database rights, trade secrets, plant breeders' rights and trade secrets). However, none of these provide adequate protection of Data Ownership. Data asymmetries and imbalances as well as monopolies are quite present/dominant in the agricultural sector. Therefore, there is a need to address the question of the balance between the cost of introducing the technology versus the expected benefits for the farmers.

## The Global Open Data for Agriculture and Nutrition (GODAN) initiative

The Global Open Data for Agriculture and Nutrition (GODAN) initiative (<https://www.godan.info/>) is an international alliance with voluntary membership that aims to promote the global availability of open data in agriculture in order to stimulate innovation and increase productivity in this important sector. Today, its global network includes over 1,100 organizations (governments, international organizations, private sector and academia) from 118 countries across the world.

More specifically, GODAN supports global efforts to make agricultural and nutritionally relevant data available, accessible, and usable for unrestricted use worldwide.

The initiative focuses on building high-level policy, public and private promotion of open data. It supports cooperation between agricultural open-data activities bringing various stakeholders together to solve long-standing global problems. Its focus is to increase awareness of ongoing activities, innovations and good practices. Another focus is to guide and assist both private and public sector bodies in their use of open data and open access policy, by promoting capacity development and diversity of open data users. In order to do so, GODAN works closely with the aforementioned actors to define responsibilities with regard to the protection of rights of all those affected by the release and use of open data, by balancing the obvious benefits of open data with legitimate concerns in relation to privacy, security, community rights and commercial interests.

## The KTBL commitment – the GODAN B18 project

KTBL has been one of GODAN's partners from the start and has been supporting the guidelines and principles around open data and open access that GODAN advocates ever since.

GODAN and KTBL have a common vision of addressing farmers' concerns about data sharing, privacy and data protection, the absence of trust and accountability due to the lack of fairer data governance frameworks. We work together to address these ethical and legal issues such as the need to define whether agricultural data should be considered personal data or not, or what the existing regulation is as well as policies around agricultural data.

The aim of this three-year project, funded by the German Ministry of Agriculture, is to develop solutions through policies and legal frameworks that ensure fair distribution of the benefits of (open) data and increase the motivation for the use of open data for all actors in the field of agriculture and nutrition.

Through GODAN's expertise and via its enormous network of different stakeholders the project will enhance dialogue between key organisations in order to achieve a common understanding and reach consensus on the ethical and legal issues around agricultural data.

The objective is to draw up a clear position on Data Ownership and responsibilities and to shed light on complex legal issues related to open data in the area of law, data protection, IP rights, licensing contracts, traditional knowledge and personal privacy in digital agriculture and to recommend an effective, efficient and ethical data governance framework for the agricultural sector.

This action includes content contributions to applications, methods and innovations, participation in relevant projects, webinars, conferences, publications, as well as cooperation with project participants and external partners.

The project has a holistic approach. It examines open data in agriculture and its relation to data rights, privacy, data protection, as well as ethics, policies, soft laws, legislation, international treaties, on national, regional and international level both in developed and developing countries and includes all actors involved in agriculture (e.g. farmers, consumers, researchers, private sector, governments).



## Data Rights and Responsible Data a Working Group – Sub-Group on codes of conduct

During this project, in February 2019, the Data Rights and Responsible Data Working Group was established (<https://www.godan.info/working-groups/data-rights-and-responsible-data-working-group-0>).

Its main objective is to develop a clearer position on Data Ownership (access and control of data use) data rights, data management and data governance, policies and responsibilities. The foundation of this group is one of the deliverables of the project as it actually serves as an international exchange platform mostly via organised webinars (<https://www.godan.info/pages/farmers-rights-data-and-ownership-issues-httpsww-wyoutubecomwatchv0gw81svqajy>) in terms of how open data can be used to solve challenges in the agri-food sector where different actors with different background can share their opinions. The working group provides information about the technological trends and developments that have an impact on ethical and legal aspects of data governance.

Furthermore, a sub-group on Codes of Conduct, Voluntary Guidelines and Principles Relevant for Farm Data Sharing (or sub-group on Data Codes of Conduct for short) was established in collaboration with the CTA (<https://www.godan.info/working-groups/sub-group-data-codes-conduct>) at the same time.

It was founded as part of the collective action plan of the expert Bonn consultation in July 2018, on "Ethical, legal and policy aspects of data sharing affecting farmers" organised by the Global Open Data for Agriculture and Nutrition (GODAN), the Technical Centre for Agricultural and Rural Cooperation (CTA) and the Global Forum on Agricultural Research (GFAR), supported by the Kuratorium für Technik und Bauwesen in der Landwirtschaft (KTBL).

The main objective of this sub-group is to promote the development of codes of conduct in agriculture, to fill the legislative void, setting common standards for data sharing contracts and providing guidelines. The goal of the sub-group is to communicate that these codes of conduct (even though they are not legally binding) could raise awareness around the importance of transparency in agricultural data flows, changing the way agribusiness views data and making data producers (primarily farmers) more aware of their rights.

## Online tool codes of conduct

In May 2020, the GODAN/KTBL project launched an online toolkit on codes of conduct (<https://www.godan.info/codes/about>).

GODAN, CTA and GFAR created this tool by initially reviewing existing codes of conduct, voluntary guidelines and principles relevant for farm data sharing. It was drafted as part of the consultative process taking place in the GODAN/CTA sub-group on Data Codes of Conduct.

The initial draft was made available for input and feedback during the first KTBL workshop on codes of conduct, and continuous consultation with different stakeholders took place and was incorporated into this edition.

The aim and purpose of this tool is to provide a guide to best data management practice to farmers and agribusinesses and associations who collect, manage and share their data.

It has an additional practical purpose: to provide the conceptual basis for general scalable guidelines for everyone dealing with the production, ownership, sharing and use of data in agriculture.

The tool features 17 clauses from which the users should be able to select a clause relevant to their situation and proceed to a checkout where the selected clauses can be used as a document.

The online tool, which is still evolving, seems to have gathered a lot of attention and since its launch 1,486 people have visited GODAN's webpage pertaining to the codes of conduct.

In order to promote the online toolkit to a broader audience in the agricultural sector, KTBL, in collaboration with GODAN, organised a virtual workshop on 11 December 2020. The participants familiarized themselves with the tool and created their own customisable code of conduct.

Overall, the KTBL/GODAN B18 project is considered unique and pioneering work. Having realized the importance of the socio-ethical and legal considerations regarding smart farming, and trying to balance the costs of the introduction of the technology versus the expected benefits for farmers, KTBL in collaboration with GODAN is working on addressing the issues around Data Ownership, data rights, privacy, data protection, policies and regulation. The project entails raising awareness about the challenges and benefits of data sharing, enhancing the trust and transparency within data value chain and promoting dialogue among all actors involved in agriculture for a fairer data governance framework.

#### About the expert

Foteini Zampati is the head of this three-year project. Ms Zampati is a legal professional with more than 18 years of experience. She holds an LLB in law and a master's degree in European Union and Business Law. Since joining the Kuratorium für Technik und Bauwesen in der Landwirtschaft (KTBL) she has been working as a data rights research specialist to support the GODAN initiative on Ethical and Legal Aspects of Open Data. The focus of her research is the international environment, specifically current applications of open data in the agricultural sector, and she is also responsible for the research and analysis of national and international legislation on open data and intellectual property, ownership issues and data rights, compliance and best practices across all aspects of national and European privacy and security as well as data protection law and GDPR in the agricultural sector.

