GODAN-DO: Ethical and legal aspects of open data – support of the Global Open Data for Agriculture and Nutrition (GODAN) initiative

country/countries	global
funding agency	Federal Ministry of Food and Agriculture - BMEL
project management	Federal Office for Agriculture and Food – BLE
project coordinator	Kuratorium für Technik und Bauwesen in der Landwirtschaft e.V. (KTBL)
project partner(s)	Global Initiative on Open Data in Agriculture and Nutrition (GODAN)
project budget	**305.623,62 €**
project duration	01.01.2018 to 14.05.2021
key words	Open data, data rights, FAIR data sharing
background	Open data offers a potential for innovation from which the agricultural sector can benefit through a variety of reuse options. On the other hand, the use of Open Data is associated with challenges. From a technical perspective, standards, platforms and infrastructures need to be created to enable access to the data. Furthermore, the Open Data concept raises ethical and legal

	questions, which were the focus of this project. Considering that in recent years actors have entered the agricultural sector whose focus is on data collection, analysis and management, it is crucial to ensure that the rights of farmers, through whose activities data is generated and made available, are respected when publishing and using Open Data. With the increasing collection of data by agricultural machinery, the use of sensors, remote sensing, etc., as well as increased networking and data exchange via the internet, the question of data rights is becoming more pressing. Before the start of the project, legal regulations, both nationally and internationally, existed only to a limited extent.
objective	The objective of this project was to develop solutions that ensure a fair distribution of the benefits of (open) data and increase the motivation to use open data. The first step was to examine the ethical and legal framework for open data in agriculture and to address what ethical and legal challenges digitisation and automation in agriculture have brought with them in recent years, but also what benefits and value the sharing of data has, especially for smallholder farmers. The project documented the current state of Open Data at national and international level from an ethical and legal perspective (laws, regulations, guidelines and principles, codes of conduct and policies). The aim was to shed light on complex legal issues related to open data in the areas of law, data protection, data rights, intellectual property rights (copyright, patents, data banking rights, breeders' rights, etc.), licensing agreements, traditional knowledge and privacy protection. By reflecting on the current state of affairs and identifying issues, a constructive and productive discussion was to be initiated and initial concrete results and solutions to be developed.
results	Challenges and benefits of data sharing have been identified and discussions on data ethics and policy development have been promoted. Uncertainties around farmers' data rights and data protection issues (especially from the farmers' perspective) can now be assessed and understood. The challenges and risks, but also the benefits of data sharing from an ethical and legal perspective have been outlined, discussed and identified in collaboration with various partners at national and international level. This information is available in the form of an inventory of current policies, laws, codes of conduct, contractual practices and business models. Legal expertises have been compiled on open data rights issues, farmers' concerns about the protection of their personal data (e.g. consent) and the impact of digital technologies in agriculture. The project has sought dialogue and initiated cooperation with various international actors. Activities included the organisation of workshops, webinars, participation in major conferences, support and advice on the development and implementation of data policies at national and international levels, and knowledge transfer for farmers and farmers' organisations as well as policy makers. In addition, an agricultural code of conduct framework was created to fill legislative gaps, set common standards for data sharing contracts and provide guidance. This included a generic, scalable and further customisable template for a code of conduct that meets farmers' needs.

recommendations	Based on the project results, the following measures are recommended: - strengthening transparency of data processing - establish a legal framework with a clearer position on consent, intellectual property and data rights - anchoring the concepts of "privacy/security by design" and "privacy/security by default" - mandating safeguards to ensure accountability, protect privacy and protect the interests of data providers - a socio-ethical impact assessment on how agricultural technologies will affect access to social, economic and institutional structures and the equitable distribution of benefits - further addressing issues of data ethics - promote and support the development of open data policies at national and international levels (in both developed and developing countries) - further mapping of the data chain to identify types of data, purposes of use and actors involved. - promote the use of independent platforms (e.g. data cooperatives). - bodies managing these platforms should be recognised as "trusted organisations" authorised to verify, validate and authenticate data flows and to ensure fair, equitable, inclusive and balanced data and information flows in the agri-food sector - guidelines should be coordinated at international level to create standards or international agreements.

photos

Participants of the workshops on „legal and policy aspects of open data in agriculture affecting farmers" on 25th of July, 2019 in Darmstadt