

Vision and Strategic Plan for a Collective Action on Empowering Farmers through Equitable Data Sharing

Vision

We convened to lay the ground for a collective action that would empower farmers to harness the benefits of data-driven agriculture and data sharing by addressing ethical, legal and policy challenges. We identified that the key requirement for such an empowerment is enabling equitable governance of data flows. Our action therefore has the objective of empowering farmers through equitable data sharing and exchange.

While the focus is on empowering farmers, we recognize that addressing such governance issues requires looking at the whole agri-food system. In this perspective, we believe that a crucial issue is the balance between legal assertions of data ownership and the enabling of “fair and equitable” data sharing and exchange that benefits farmers and, at the same time, supports the efficiency of agri-food systems.

The core of our vision for the collective action is that farmers can be empowered to harness data-driven agriculture through inclusive data ecosystems* that nurture equitable sharing, exchange and use of data and information by all and for all participants in agri-food value chains, with special consideration of smallholder farmers, the most vulnerable to inequitable data flows.

** Data ecosystems are a combination of governance (from societal norms and community ethics to policies, codes of conduct, laws, treaties...), institutions, capacities and infrastructures dedicated to the management and flows of agri-food data as well as the actors providing and using the data.*

We believe that the ultimate goals of such equitable data flows in agri-food systems are societal goals, which we can consider formalized and globally agreed upon in the Sustainable Development Goals (SDGs). We believe that there is a need for all actors to access data and information that is pertinent for their value-chain segment, in order for the full agri-food system to be efficient and contribute to the SDGs.

We observe that farmers, especially smallholder farmers, are currently not or not fully benefiting from data sharing in the agri-food value chain. On the one hand, their data sharing is hindered by unclear data governance and risks of data misuse; on the other hand they face the challenge of gaining access to necessary data provided by others. Both types of challenge are linked to inequitable data flows.

We therefore believe that our action should address both issues: fair governance of farmers' data and farmers' equitable access to external data.

Fair governance of farmers' data

We believe that while farmers may be at a disadvantage now in sharing their data, there is a high potential for this data sharing to benefit them, if data flows are transparent and equitable, for instance in receiving better aggregated data and more tailored services from service providers.

We believe that while a large proportion of farmer/farm data belongs to categories of data covered by existing laws and policies (personal data, business data like that of any other company, property data, public records), farmer/farm data deserves special governance because of the conflicting balance between privacy, business sensitiveness and social responsibility of the data shared. Farmers have a key role and responsibility towards society in providing essential tracking data for food safety, sustainability of production, land use, but at the same time their market participation and competitiveness should not be harmed and their data should not be misused when shared.

So on the one hand we recognize that farm data should be considered as any other business's data and the same legal data protection should apply, on the other hand we think our action should help overcome the potentially negative effects of ownership and rights-based approaches in ecosystems that depend upon trust in sharing and cooperation, where assertions of data ownership may restrict or severely clog and curtail the flow of data.

To this end, we think it's more productive to think in terms of systems of farm data governance that support a fairer and more equitable distribution of benefits, where transactions are based on mutual interest. Such systems can be implemented through law and policies as well as codes of conduct and self-regulation, depending on the situation and needs of communities.

Farmers' equitable access to external data

We believe that ensuring farmers' access to necessary data managed by other actors (governments, private service providers) is also an essential aspect of an equitable data ecosystem. Ensuring that quality information is provided to the farmer is also a key means of addressing the SDGs.

We suggest that the possibility of receiving tailored information is also an incentive for farmers to share data that allow for the better targeting of services. This process can be seen as a cycle e.g. from farmer to government and back from government to farmer. Farmers will be more willing to share if they know that fair aggregation of data shared by all actors will result in better services also for them.

Therefore, we treat the issue of obtaining data from farmers as inseparable from farmers' ability to access data-driven information and advice.

We also acknowledge that other initiatives (GODAN, Open Government Partnership) are already working on advocacy with governments and the private sector for opening up their data also for the benefit of

farmers and we will not duplicate that type of effort; we will focus on the equitability aspects of farmers' access to data shared by other actors.

Approach

We believe that in shaping fair governance of the exchange of data between different actors, social and socio-economic approaches to data ethics are of primary importance because they consider the interests of actors as well as social goods and therefore foster trust. Socio-economic approaches must also consider access to technologies, infrastructures, capacities and traditional knowledge.

Food and agriculture are deeply rooted in ethics, traditions, customs and societal norms. Governance models will need to consider these carefully and either attune to societal needs or advocate and promote ethical changes in participants of concerned agri-food systems. This also means that general principles, policies, codes of conduct and agreements may need to be adapted to different local situations.

We believe that farmers' aggregations – farmers' and producers' organizations, cooperatives, consortia – have an essential role in shepherding farmers' data, negotiating access to other actors' data and ensuring equitable data flows.

We agree on the following approaches - in terms of governance models and governance structures - to realize the vision:

Governance models

- We favour governance models based on negotiation, transparency, innovative business models and “equitable transactions” models. Such governance models can be implemented through self-regulation (voluntary guidelines, protocols, codes of conduct) and through the elaboration of new laws, regulations and policies, depending on the level of governance needed by the community / value chain segment / country

- Self-regulation, societal agreements and cooperative business models can work in many communities and even at the international level, taking as examples existing social certification schemes (e.g. fair trade, sustainability), or the current international traffic of books or the international banking system.

We will support and help develop similar approaches that a) take a social or socio-economic perspective to the ethics of farm data and b) follow a distributed model for data flows, which we privilege due to the distributed nature of agri-food data and the need for cooperation and trust. We will also consider encouraging existing certification bodies to include best practices in data management as part of their certification schemes.

- National and international policies, laws and treaties have a key role in regulating data flows and countering a potential “Wild West” of data governance, from which only the most powerful actors and monopolies will be in a position to benefit.

We will support and help develop national policies that recognize the business sensitivity of farm data and at the same time enable equitable flows of agri-food data. At the global level, the development of international guidelines, a protocol or an international treaty on agri-food

data flows.

- The main criterion for an equitable data governance model is that it enables “equitable transactions”.
Equity in transactions indicates a balance of individual interests in transactions, guided by the overarching goal of sustainability. “Sharing and exchange” indicates the transaction-based activities of participants in the agri-food network rather than actions that are governed by individual and collective rights invoked at various points of interaction and exchange.
We will support and help develop models of data governance based on equitable transactions.
- We will privilege, in general, approaches that foresee Inclusive participation throughout the whole agri-food system.

Governance structures

Governance also requires bodies that implement and monitor the governance model.

Trust by all parties in governance bodies is key to getting the cooperation of all actors.

- We will support and help develop governance structures where data flows are transparent and equitable and regulated by a trusted organization of network members.
Examples can be data platforms governed by farmers’ aggregations (farmers’ organizations, cooperatives) or consortia including other value-chain actors as also in the form of virtual aggregations (across geographic limits such as around specific crops, commodities, markets etc.) or any form of “data cooperative” owned by its membership. The bodies governing these platforms should be recognized as “Trust Organizations” that are entitled to verify, validate and authenticate data flowing as also assure fair, just, inclusive and equitable data and information flows in agri-food systems.
- We also recognize the importance of governments and intergovernmental bodies that exercise governance through policies and laws, either national data policies framed with the larger envelope of other national policies, or international, considering that agri-food systems span several countries and continents. We will support national and international bodies in the development of policies that facilitate equitable flows of agri-food data.
- We will also support or help develop public/private partnerships for both the governance and the funding of data platforms.

We recognize that it is not in the power of one project to realize such a vision, but we believe that a collective action with global and local representatives of the actors that are part of the agri-food systems will contribute to shape the ecosystem or parts of it.

We agreed on an initial set of actions that we will undertake to implement our vision, which will be started as partners commit resources and/or as necessary funds are secured.

Action plan

While collective action on the entire data ecosystem is most desirable, it is agreed that actions may be started on specific areas of the agri-food system depending on which actors join and propose/lead activities. While the vision remains ambitious and comprehensive, it is important to encourage actors to intervene where they find opportunities.

We will develop a more detailed action plan when the membership of the action and the commitments of partners are formalized.

1. Process

- Final vision and action plan made into an investable proposal
- Broadening of the network, inclusion of other actors
- Formalization of the partnership: setting up of a flexible driving team (a Board or a Steering Committee), a collaboration tool, a mailbox. Elaboration of the ToC and the M&E mechanisms.
- Joint resource mobilization
- Creation of partner-led working groups / task forces.

Possible working groups according to participants' interests: a) Survey of current state and research (inventory, mapping and research on ethics, policies, laws, business models, cost mapping...); b) Communications (collection and dissemination of all relevant material, documentation of the process, outreach); c) General guidelines / global policy / certification schemes; d) Local pilots (data cooperatives, national policies, localized guidelines, codes of conduct); e) Legal mechanisms (including best practice models); e) Resource mobilization; f) Capacity development.

2. Proposed activities and deliverables (core, general)

- Inventory of current policies, laws, codes, contractual practices and business models in different countries. Making existing materials available on line; synthesizing and translating the extant knowledge into usable information.
- Collection of stories, research and think pieces on ethics, governance, applicable law (e.g. farm data as company data), costs...
- A map of the data chain to identify the different data and the different uses and who is involved.
- A "growers' on-line equitable data toolkit" with information and tools, checklists etc.
- Voluntary guidelines and certifications leveraging existing bodies issuing codes and certifications. Feasibility study on an international agreement / Treaty
- Capacity building and awareness raising, primarily for farmers and farmers' aggregations

3. Proposed activities and deliverables (local, specific, depending on the engagement of partners)

- Local voluntary guidelines / codes of conduct on farm data sharing (Uganda pilot case)
- Local experiments on governance and business models for "data cooperatives" and for technology platforms (big data, blockchain)

- Experiments with legal mechanisms (contract templates / appendices; “legal clinics”, legal actions) as well as certification schemes or social certification mechanisms.
- Tailored local capacity building activities on farm data: data access and data sharing

We agree that the action will be initially coordinated by the Global Forum on Agricultural Research and Innovation (GFAR), the Global Open Data for Agriculture and Nutrition (GODAN) and the Technical Center for Agricultural and Rural Cooperation (CTA), but all other actors are encouraged to take the lead during the setup of the action, as well as in working groups and in individual activities.

This vision document is initially signed by the participants in the Bonn meeting on “Ethical, legal and policy aspects of data sharing affecting farmers”, convened on 10 and 11 July in Bonn by GFAR, GODAN and CTA and hosted by the German Federal Office for Agriculture and Food (BLE). Our outreach work will aim at broadening the partnership.

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