

# THE DATA GOVERNANCE JOURNEY MAP

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This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID). This guide was produced under DAI's Digital Frontiers Project (Cooperative Agreement AID-OAA-A-17-00033) at the request of USAID. The contents are the responsibility of Development Gateway and do not necessarily reflect the views of USAID or the United States Government.

## THE DATA GOVERNANCE JOURNEY MAP

Steps	Ask yourself	If the answer is	Take the following action	Resources
<b>Step 0</b>	Does your program include data collection, data sharing, data analysis, data processing or data storage of information from or about farmers or farms or farm-related data, or do you work with service providers or partners that focus on any of these elements.	No	No further action is required	
		Yes	Please move to Step 1	
<b>Step 1 A</b> User-Centric Data Governance	<p><b>Understanding data governance</b></p> <p>The following questions will help think through what kind of data governance activities and approaches will be relevant for your program, and how data ownership is managed. It is expected that answering these questions will help develop a more thoughtful approach to data governance within your program. Answering these questions should also help you consider whether user-centric data governance is relevant for your program.</p> <p><b>Data collection</b></p> <ul style="list-style-type: none"> <li>• <b>From whom will data be acquired? Who is the data subject?</b></li> </ul> <p>A data subject is the person/object about whom/which data is being collected. This could be individuals (if data is collected about the farmer), communities (if data is collected about farming communities and practices), organizations (if data is collected about farmer organizations, their business practices, market prices, etc), governments (if data is collected about government pricing, government supplied inputs, training programs, etc.), businesses, through machines/sensors (in this case, the data may be collected through drones, from farm machines, etc.).</p> <p>The type of data subject might have an impact on the relevant data governance approach. Data governance approaches that deal with communities, rather than individuals, will need different structures and processes. To learn more about the data governance approaches, consider:</p> <ul style="list-style-type: none"> <li>• <b>How will informed consent be requested?</b></li> </ul> <p>This could be written, verbal, or requested through digital means.</p> <ul style="list-style-type: none"> <li>• <b>What type of data will be collected?</b></li> </ul> <p>This could include data that is personal, non-personal (e.g., related to the farm), de-identified personal, or sensitive.</p> <p>The type of data collected will have an impact on how data needs to be governed; e.g., personal data is tightly regulated in most jurisdictions, as compared to non-personal data.</p> <p><b>Data storage</b></p> <ul style="list-style-type: none"> <li>• <b>Who will store the data? Where will it be stored?</b></li> </ul> <p>This could be the individual farmer themselves, a data collector or enumerator, donor organization, the data steward, or another party. It could be stored, for example, on local servers, in the cloud, or on government servers.</p> <p>Data storage policies for a program may also be influenced by national data sovereignty or data localization laws. If you are unaware whether these exist in the country where you are working, it is best to do some research.</p>			<p><a href="#">USAID guidance on mapping your stakeholders</a></p> <p><a href="#">Considerations for using data responsibly at USAID</a></p> <p><a href="#">Who owns farmer data?</a></p> <p><a href="#">Does data mean power for smallholder farmers?</a></p>

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<b>Step 1 A</b> User-Centric Data Governance	<p><b>Data ownership</b></p> <ul style="list-style-type: none"> <li>• <b>Who owns this data?</b></li> </ul> <p>This could be the data subject (the person whose data is being collected), the data collecting agency, the implementing agency, the program, or the government. In some cases, different parties may have different interpretations of ownership, so it is best to clarify with all involved parties upfront. For example, a digital service provider may consider any data submitted to its service by users to be its data, rather than that of the user.</p> <p><b>Data sharing</b></p> <ul style="list-style-type: none"> <li>• <b>Who will the data be shared with?</b></li> </ul> <p>This could include individuals, tech providers, donor organizations, researchers, governments, civil society, businesses, or multiple different organizations.</p> <ul style="list-style-type: none"> <li>• <b>What type of data will be shared?</b></li> </ul> <p>This could include data that is personal, non-personal (e.g., farm data), de-identified personal, or sensitive.</p> <p><b>Relevant regulations</b></p> <ul style="list-style-type: none"> <li>• <b>Are there any data regulations that would be relevant to the data collection, data storage, and data sharing process?</b></li> </ul> <p>This could include data privacy laws, data localization norms, data protection regulations, etc. It is recommended that a preliminary analysis of the relevant national data laws be carried out at the beginning of the program.</p>			
<b>Step 1 B</b> Farmer-Centric Data Governance	<p><b>Farmer-centric approaches to data governance</b> place farmers at the center of data initiatives, as beneficiaries, granting farmers and their communities greater agency over their outputs and meaningful participation shaped by their immediate need. These models hold the potential to strengthen the position of farmers and transition control over data to the data generators, rather than data collectors. These approaches safeguard against privacy invasion, data misuse, opacity, and other harms. They can also generate better data-sharing opportunities, counter data fragmentation, increase data quality, and identify avenues for innovation.</p> <p><b>Based on the answers in Step 1A, is user-centric data governance relevant to your program?</b></p> <p>In answering this question, please consider the following sub-questions:</p> <ul style="list-style-type: none"> <li>• <i>Is it important for your program to create more agency for farmers individually or as a collective?</i></li> <li>• <i>Does your program intend to collect more credible, accurate data directly from farmers?</i></li> <li>• <i>Is it important for your program to incorporate meaningful participation from farmers in the data collection, sharing, and processing?</i></li> </ul>	No	No further action is required  However, please consider articulating why this is not important to your program.	
		Yes	Please move to Step 2	
		Maybe or unsure	Please move to Step 2	

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<b>Step 2A</b> <b>Data Stewardship</b>	<p><b>Understanding existing data governance norms</b></p> <p>The following questions will help you better understand how data governance is currently being approached in the program. This will help you identify existing processes and structures, if any, that can help moderate data governance and if there is a need for an external party to steward data governance for this program.</p> <ul style="list-style-type: none"> <li>• <b>Does your program or any of its partners have processes/structures in place to govern data?</b> This could include an internal data steering committee, data sharing protocols, or a data review committee. Any pre-existing guidance on how to govern data within the program could be included here.</li> <li>• <b>Is there an existing system that facilitates data sharing while protecting individual rights?</b> This could include pre-existing data infrastructure that moderates data sharing or an organization through which data is collected and shared.</li> </ul>			<a href="#">USAID's policy on development data</a>
<b>Step 2B</b> <b>Data Stewardship</b>	<p><b>Data stewardship</b> is the responsible use, collection, and management of data in a participatory and rights-preserving way. A steward can create valuable patterns of data sharing, holding, privacy, and control across parties. Data stewards generally have four main responsibilities: (1) building data opportunities to unlock the value of data; (2) data management to ensure representation, usability, and quality; (3) defining guidelines for quality, usability, safety, and transparency; and (4) intermediating on behalf of individuals and communities to protect their data rights. Stewards ensure the quality of data sharing between parties, providing data collectors with more consistent and reliable data.</p> <p><b>Does the program require a data steward?</b></p> <p>In answering this question, please consider the following sub-questions:</p> <ul style="list-style-type: none"> <li>• <i>Are existing data governance systems sufficient to facilitate a user-centric data governance approach?</i></li> <li>• <i>Is there a need for a third party (organization or individual) to ensure that individual data rights are protected while unlocking the value of data?</i></li> </ul> <p>This could be a party who facilitates the sharing of data. Invariably, they work on behalf of the data subjects and can often hold fiduciary responsibilities towards the users.</p>	<p>No</p> <p>Yes</p> <p>Maybe or unsure</p>	<p>No further action is required</p> <p>However, please consider articulating how you will develop a user-centric data governance model without a data steward.</p> <p>Please move to Step 2</p> <p>Please move to Step 2</p>	<a href="#">Trustworthy Data Stewardship Guidebook</a>

Steps	Ask yourself	If the answer is	Take the following action	Resources
<p><b>Step 3</b> <b>Designing a Data Stewardship</b></p>	<p>Once it is confirmed that a data steward is needed, there are different models of stewardship that might be relevant for the program. Answering these questions will help unpack the key elements of a data steward that will be relevant for this program. The answers to these questions will also help inform the commissioning of an organization to implement the data stewardship program. This stage has been further divided into four sections: objective/purpose, participation and accountability, services provided, and safeguards.</p> <p><b>Step 3.1: Objective/Purpose</b> The following questions will help define the core objective of the data stewardship and its primary beneficiaries. This is not an exhaustive list, and there may be other categories of data use that may be relevant for the program.</p> <ul style="list-style-type: none"> <li>• <b>What is the core purpose of data stewardship?</b> This is the primary function of the data steward. Responsibilities could include user-driven research, collective bargaining, individual data empowerment, creation of commercial value, etc.</li> <li>• <b>Who is expected to primarily benefit from the data steward's functions?</b> Identify the individuals, collective, or organization(s) who will directly benefit from the functions of the data steward.</li> <li>• <b>Are there additional beneficiaries?</b> Identify the other parties involved in this governance model and what they gain from this model.</li> <li>• <b>Which organization will be leading the efforts of data stewardship?</b> This could be a farmer organization, academic institute, private company, community organization, civil society organization (CSO), or government agency. In some circumstances, this could be the individual farmer or a collective community.</li> <li>• <b>What is the primary value that will be received by sharing data?</b> Economic (ability to monetize data or data-based insights), social value (data shared by the individual or collective helps contribute to a common good, such as identifying better farm practices, identifying yield patterns, etc), research, data management (data shared allows data generators to better understand their farming patterns and allows them to use it to inform their practices), privacy, or other.</li> </ul> <p><b>Step 3.2: Participation/Accountability</b></p> <ul style="list-style-type: none"> <li>• <b>What level of participation might be requested from the data subjects?</b> Participation can range from keeping data subjects informed to consulting them, directly involving them, collaborating with them, or empowering them. This can be through direct representation (voting), delegated representation (through a fiduciary or representative organization), through consultation forum, merely informative (only inform the data subjects of what is being done without seeking their active inputs), etc.</li> <li>• <b>How will decisions related to data governance be made?</b> This can be via the data steward, direct voting, or an independent entity, through a representative body, such as a cooperative, or some other mechanism.</li> </ul>			<p>To learn more about the different governance models, see the following reports:</p> <p><a href="#">Exploring legal mechanisms for data stewardship</a></p> <p><a href="#">Shifting power through data governance</a></p> <p><a href="#">The Data Economy Lab</a></p>

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<p><b>Step 3</b> Designing a Data Stewardship</p>	<ul style="list-style-type: none"> <li>• <b>What accountability or feedback mechanisms will be put in place?</b> This could include review processes, grievance redressal forums, ethics committees, or other mechanisms.</li> </ul> <p><b>Step 3.3: Services Provided</b></p> <ul style="list-style-type: none"> <li>• <b>What are the technical services that the data steward will provide?</b> This could include: <ul style="list-style-type: none"> <li>• Technical infrastructure: steward hosts the data on a platform</li> <li>• Data access management: steward manages data access and use in a way that the data generator has greater control over data sharing</li> <li>• Insights and visualization: steward analyzes the data shared and provides insights that can be used to inform policy/group/individual decisions</li> <li>• Data protection: steward ensures data security</li> </ul> </li> <li>• <b>Are there non-technical services that the data steward will provide?</b> This could include: <ul style="list-style-type: none"> <li>• Data literacy and participation: provides training to the data generators on data rights and the value of the data</li> <li>• Collaboration between stakeholders: steward facilitates conversations between common entities to encourage data conversations and data sharing</li> <li>• Advocacy: steward provides a forum for data generators to discuss and voice their concerns/questions</li> <li>• Develop community structures for governance: steward facilitates community structures that can be used to collectively share data and bargain for better rights for the data generators</li> </ul> </li> </ul> <p><b>Step 3.4: Safeguards</b></p> <ul style="list-style-type: none"> <li>• <b>What kind of data privacy measures will the data steward have to consider?</b> This can depend on the type of data shared, the regulations in the country, agreements with the data generators and the objective of the data sharing.</li> <li>• <b>How will the data steward address questions of data misuse/data breach?</b> This involves the legal obligations of the data steward in cases of misuse. Again, this can depend on the type of data being shared, the regulations in the country, the agreement with the data generators.</li> </ul>			
<p><b>Step 4</b> Monitoring and Evaluation (M&amp;E)</p>	<p>The following section outlines the key considerations to keep in mind while designing a scope of work/terms of reference for the data steward and the consequent M&amp;E plan. The goal here is to ensure that the M&amp;E plan tracks the processes followed by the data steward and ensures they are in alignment with the project plan and implementation strategy. It should also capture the key impact areas of the data steward.</p> <p>This is not a guide to a comprehensive M&amp;E plan. However, the list below will help clarify the expectations from the data steward and help the implementing organization think of key M&amp;E metrics for a data steward.</p>			

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<b>Step 4</b> <b>Monitoring and Evaluation (M&amp;E)</b>	<b>Key Considerations for a data steward M&amp;E plan</b> <ul style="list-style-type: none"> <li>• Measuring representation and participation in the operations of the data steward</li> <li>• Adherence to the project plan and implementation strategy</li> <li>• Adherence to the data handling strategy and data security protocol</li> <li>• Presence of effective accountability mechanisms for proper handling and storage of data</li> <li>• Risk management</li> <li>• Evaluation of the data steward's relevance, impact, and sustainability</li> <li>• Documentation of lessons that can inform future data stewardship designs</li> <li>• Responses and feedback from the community of interest</li> </ul>			
<b>Step 5</b> <b>Implementation</b>	<p>You may now use the information gathered above to guide your data governance approach. You may also use this to guide the design of any scope of work, terms of reference, or solicitation to invite an external party to help you implement user-centric data governance approaches, as well as to guide your program strategy and your M&amp;E plan.</p>			