Data Sharing Toolkit



Module 3

Considering data rights and permissions in investments

Guide

Considering data rights and permissions in investments

Purpose of this guide

This guide is intended to support program officers to facilitate data being as findable, accessible, interoperable and reusable (FAIR) as possible by identifying where data may be created or used within a grant, where other actors may need to access, use or share data, and thinking about potential issues relating to rights and permissions.

This document is intended as a guide to help navigate potential issues related to licensing and rights. This document is **not legal advice** and if you are uncertain you should seek guidance from a legal professional.

When to use this guide

Start concept | request proposal | refine proposal | create agreement | request approval | obtain signatures | active

You can use this guide in a number of ways. Depending on your and your grantee's relationship and level of knowledge you can:

- Use it when reviewing a proposal to identify areas for clarification or revision
- Use it as a prompt to support a conversation with a grantee
- Share it with the grantee and review together to identify issues with data rights or permissions

 Share with the grantee and ask them to identify potential data rights and licensing considerations

Bill & Melinda Gates Foundation strategic context

To achieve the Digital Farming Services (DFS) portfolio goal of having 'at least 50% of smallholder farmers (SHFs) in target geographies use digitally-enabled services to reduce risk and improve farm-level decisions' by 2030, Agricultural Development and DFS grantees, regional implementing partners, and local institutions must be able to collect high quality data, feel comfortable sharing that data, and be able to trust and reuse others' data.

To reduce risk and improve farm-level decisions, digitally-enabled services rely on sustainable access to relevant data, provided in a way that enables integration, analysis and use. When data is not shared or managed well, the Foundation does not receive the highest returns on investment, and investments and other projects that do not currently enable data-driven decision making are not able to benefit people to the fullest extent.

Increasing access to data will help increase return on investment, but to ensure that the data is shared as widely as possible, while minimising harmful impacts, this needs to be balanced with observing permissions in data licenses, clarifying rights to data, navigating data protection issues and understanding relevant legal and international contexts.

Understand data rights and permissions

Grantees must consider whether or not they have the rights to use or share all the data available or used within a grant funded project. When not creating or gathering new data each time, a grantee might want to access, use, share or publish resources that are licensed from someone else; include an extract of content or data licensed from someone else; be derived from the content or data licensed from someone else; or need to be transferred to another party (for example to the government) following the completion of a grant.

If a grantee is collecting new data they will need to think about who will need to access or use it. This could be to help meet the specific aims of the grant, to comply with in-country or Foundation policies, to make data FAIR, or ensure return on an investment made by the Foundation.

It is important to ensure that rights to access, use and share data are clear by having explicit licenses and agreements in place to use thirdparty content, and understanding relevant legal restrictions or permissions.

Data exists on a spectrum from closed, to shared, to open (Figure 1). Open data is data that is available for anyone to access, use and share. It is published under an open licence that allows it to be used for any purpose.

Licenses and agreements to access, use and share data set out how FAIR and open it is. Data should be FAIR and as open as possible in order to maximise potential value.

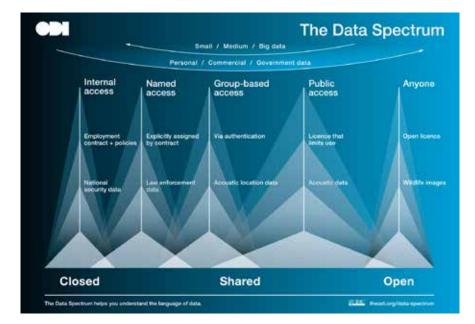


Figure 1: Agriculture data spectrum

Data that is FAIR and open can provide benefits to:

- Farmers, who can harness decision making tools
- Researchers, who can access information more readily
- Policy makers, who can make evidence-based investments
- Other private sector and civil society stakeholders, who can develop services to improve the efficiency of the value chain.¹

Grant-making institutions like the Foundation aim to create the widest possible benefits from the research they fund. Open access and open data policies usually require organisations that receive funding to license their data, code and reports for wider reuse.

Identifying where data rights and permissions need consideration

This section uses personas to illustrate typical use cases within investments, where rights to data and permissions to use it need consideration.

¹·For examples, see http://www.godan.info/sites/ default/files/old/2015/04/ODI-GODANpaper-27-05-20152.pdf

Key issues

Below, personas are used to demonstrate different scenarios when rights and permissions to access, use or share data might appear, as well as what to do to prevent or deal with them. Scenarios included in this guide are:

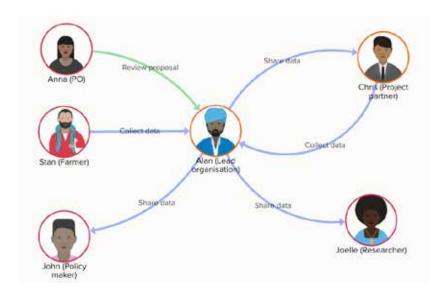
- Collecting new data clarifying how the data will be collected and shared, any government requirements related to data collection and rights over data.
- Stakeholder collaboration when bringing data together from multiple sources or when multiple actors are using the same data – identifying permissions to share data, restrictions in combining the data and any risks related to it.
- Developing digital services such as applications, digital platforms and predictive models – clarifying requirements and permissions related to the use of data by different stakeholders involved in the development.
- Farm-level insights identifying data protection requirements.
- Sharing or publishing data confirming rights to share the data, as well as identifying requirements related to it.

The personas

These personas have been developed in this document to illustrate the various data needs that exist within an investment's ecosystem.

- Sara Innovator: Sara works in an organisation that offers a tailored information service built on open data that helps farmers make better decisions.
- Alan Lead organisation: Alan works for an agriculture organisation that manages a consortium of actors to produce a platform combining data from multiple sources, which innovators and researchers can access to develop data-enabled services and products.
- Joelle Researcher: Joelle works for a university research centre which collects raw data, processes it, and combines it with available sources of open data to produce insights, which may be published via an open access repository.
- Chris Project partner: Chris works in an organisation that develops software tools to make it easier to analyse and visualise insights on data about farming practices.
- Ida Third party publisher: Ida works for a central government agency in charge of managing a number of key datasets, including the national repository of soil data, which is made available to researchers and innovators via an open data portal.
- Anna Program officer: Anna works for a grant-making organisation responsible for managing multiple investments in dataintensive agriculture programs. She needs to ensure that formal M&E requirements for reporting are being met and that activities are being implemented to a high quality.

- John Policy maker: John works for a central government agency and is collecting insights and data to build better policies for data about agriculture and soil.
- Miranda Standards body: Miranda works for an international not for profit organization committed to making quality open standards for the agricultural community to improve interoperability of data.
- Stan Farmer: Stan is a farmer that will benefit from the services and products developed by Sara and Joelle.



The scenarios

Collecting new data

As a program officer, **Anna** is assessing a proposal from **Alan's** organisation that includes collecting new data from **Stan** to help predict crop yield in a region. **Alan** plans to collect the data and share it with his project partner, **Chris**, and later on may decide to share it with policy makers and researchers, like **John** and **Joelle**.

Anna will need to confirm with **Alan** how he will collect the data from **Stan** in a way that is suitable for use and sharing during his grant, and how it will remain available after the grant is complete, if appropriate.

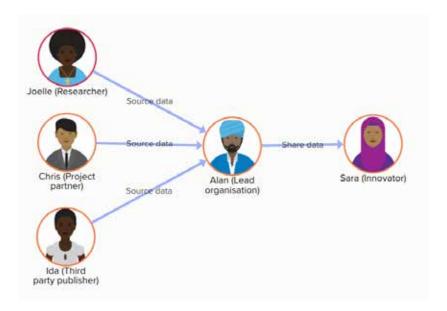
Anna should advise Alan he needs to:

• Decide during the project planning stage how widely the data should be shared and for how long, for example is it only needed while the grant is active, or does it need to be accessible after the grant is complete? This should include consulting with Stan, as the source of the data, as well as the end users, Chris, John and Joelle, to ensure it is shared in a way that meets their needs. Will this have any impact on how Alan plans to share Stans the data?

- Decide how data will be collected in a way that will meet this need, for example will any personal, sensitive or potentially harmful information be collected from Stan?
 - What does this mean in terms of how the data should be managed?
 - What does this mean in terms of the elements of the data he and Chris can share or how they could share it?
 Could this impact the project goals?
- Clarify whether there are any government expectations or requirements for data collected in the country he is working in? Some countries require that data collected in the country must be shared with the government.
 - John may be able to help, or may have colleagues that could help.
 - Is a budget needed for research into the policy, legal and regulatory context in-country?
- Clarify where the rights to use data will sit.
 For example, will this be with Alan's
 organisation, Chris's organisation or another
 actor? By default the rights to use and exploit
 data will sit with the organisation collecting it,
 so it needs to be clear who that is in this case.
 - Do these rights need to transfer to another stakeholder at the end of the project, for example to the government? Is a budget needed for legal advice to facilitate this?
- Confirm how he plans to share the data for example publishing it online under an open licence, or sharing with specific stakeholders under bespoke data sharing agreements.

Tools to help

- The checklist in Module 7 Developing a data management plan – could help **Alan** to manage the data he is collecting.
- Different countries have their own data protection legislation and social contracts, which need to be adhered to. The agricultural data country profile can help **Anna**, **Alan** and **Chris** to understand this context.
- The risk assessment for sharing agricultural data could help Alan and Chris identify potentially harmful content in the data, such as personal, sensitive or commercially confidential data.
- · Data sharing and licensing
 - Permissions to use data are set out in a data licence. The agricultural data spectrum may help **Anna** to clarify with **Alan** how openly he intends to access, use and share the data collected.
 - The publisher's guide to data licensing could help Alan to identify the right type of data licence to attach to the data.
 - The checklist in Module 5 -Designing data sharing agreements – can help Alan and Chris to identify what should go into bespoke data sharing agreements, if needed.



Stakeholder collaboration

Alan plans to work across national borders to understand the sources of pests and pathogens affecting agriculture in a particular region. To fully understand the sources he plans to gather data on populations, settlements, infrastructure, and national and subnational boundaries from publishers like Ida, private sector partners like Chris and researchers like Joelle. Alan wants to provide access to the data to innovators like Sara, to generate insights that will inform interventions.

As a program officer, **Anna** will need to confirm with **Alan** how he will ensure he has the rights and permissions to bring together and use different data sources in such a way that the resulting dataset is suitable for use and sharing with his stakeholders, both while his grant is active, and after the grant is complete, if appropriate.

Alan will need to:

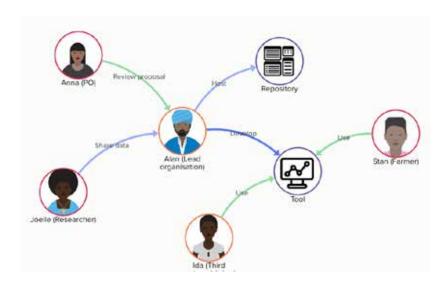
- Confirm with Ida, Chris and Joelle what permissions for use each of the datasets will be supplied with – these can be found in the licence or contract.
 - Are there limitations or requirements on how or when data can be redistributed?

- How will these permissions impact sharing the data with Sara and what she can do with it?
- Check whether there are any relevant laws in the country relating to rights over derived data, relating to data leaving the country, or any legal restrictions that might apply to merging data.
- Consider any risks from sharing the data –
 for example is information about pests and
 pathogens sensitive or potentially harmful to
 individuals or groups of society? What does
 this mean in terms of the data Alan may share
 or how he decides to share it?
- Decide whether he will share directly with Sara only, or whether to share with a wider community so other users can benefit. The agricultural data spectrum in Module 5 may help to think about this.
- Engage Sara as a potential user to ensure the form and content of the data will meet their needs – how might they want or need to access and use the data?
- Engage the actor that will be the long term custodian of the data after the grant is complete, for example transferring from Alan's organisation as the grantee, to Ida in government, Joelle's research organisation or someone else.
- Build legal advice and support in facilitating this into the budget.

Tools to help

- Anna could work with Alan, using this guide, to help Ida, Chris, and Joelle understand and visualise where data is sourced, who needs access to it, and where each of them exchanges value by sharing data.
- This guide on deciding how to share data can help **Anna** and **Alan** to consider options for

- approaches to share data on a 1:1, group or open basis.
- This risk assessment for sharing agricultural data could help **Alan** and **Chris** identify potentially harmful content in the data, such as personal, sensitive or commercially confidential data.
- Different countries have their own data protection legislation and social contracts, which need to be adhered to. The agricultural data country profile can help **Anna**, **Alan** and **Chris** to understand this context.



Developing digital services

Anna is assessing funding to Alan's organisation in order to establish an innovation platform for soil data. This involves hosting a data repository, composed of raw data and secondary analysis produced by researchers like Joelle. At the same time, Chris has an idea for a software-based data analysis tool that would make it easier for farmers, such as Stan, and policymakers from Ida's agency to make decisions. He wants to publish the software under an open licence for others to access and use.

Alan will need to:

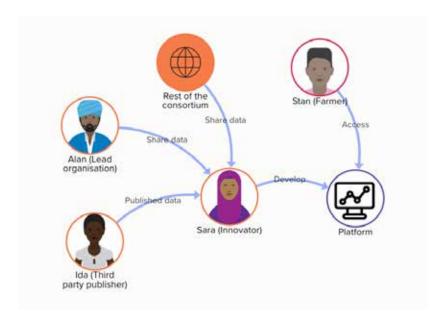
- Make sure that in the terms of the subcontracting agreement with Joelle's research institution, he has the necessary rights to use the raw data and create derived datasets from it to develop the tool, and that it complies with the funding policy of Anna's organisation.
 - Are there limitations or requirements on how or when data can be used or redistributed?
 - Will the permissions make a difference to the way data is used further downstream, for example in services or applications developed from the data?
- Engage potential users, like Stan and Ida, to understand how they want or need to access and use the data, and whether this has any implications for licensing data on the platform.
- Consider whether there be any personal, sensitive or potential harmful content in the data on the platform. What does this mean in terms of how to provide access? Do parts of the data need to be more secure?
- Publish the software and data with a clear licence outlining permissions and restrictions for use.

Alan needs to make sure the right permissions are in place for him to create his tool and publish the software under an open licence.

Tools to help

- Anna could work with Alan, using this guide, to help Chris, Joelle and Ida understand and visualise where data is sourced, who needs access to it, and where each of them exchanges value by sharing data.
- This risk assessment for sharing agricultural data could help **Alan** identify potentially

- harmful content in the data, such as personal, sensitive or commercially confidential data.
- This reuser's guide to data licensing may help Alan to better understand whether he has the right permissions to create his tool and publish the software under an open licence.
- This publisher's guide to data licensing may help Alan to publish the software under an open licence for others to access and use.



Farm level insights

Alan plans to bring together a consortium of actors from the wheat and dairy sector to provide tailored content to farmers. Sara is partnered with Alan and wants to combine data from organisations in the consortium with data published by the government agency Ida works for. They intend to develop an SMS-based farm extension information service. Individual farmers such as Stan will sign in to the platform and create a profile, which will contain personal information. Stan can be geolocated (using GPS) by their mobile number, which will help the platform to target information to their location, but which could cause concerns related to privacy.

Part of **Sara's** role is to ensure the data about **Stan** is shared in a secure and trustworthy way, while protecting individuals from harmful impacts.

Alan will need to:

 Check for data protection laws in the country he is working in to ensure he is clear on his obligations. This could include:

- Ensuring the consortium is clear on the personal data they need and why, to minimise the amount of personal data about farmers collected – this is good practice and also minimises risk.
- Engaging farmers signing up to the service, such as **Stan**, to ensure they are clear why they are providing personal data, what it will be used for and the relevant obligations and rights they have.
- Check the permissions each of the data sources will be supplied with – these can be found in the licence or contract. Are there limitations or requirements on how or when data can be redistributed or combined with other data?
 - How will these permissions impact the intended use of the data?
 - Will it make a difference to the way data is used in the service?
- Check whether there are any relevant laws in the country he is working in relating to rights over derived data, or legal restrictions that might apply to merging data about individuals.
- Engage the consortium to understand how they might want or need to access and use the data. What does this mean for licensing data?

Stan will need to ensure he makes an informed choice to engage in the service, is clear on his rights and is confident they are protected by law.

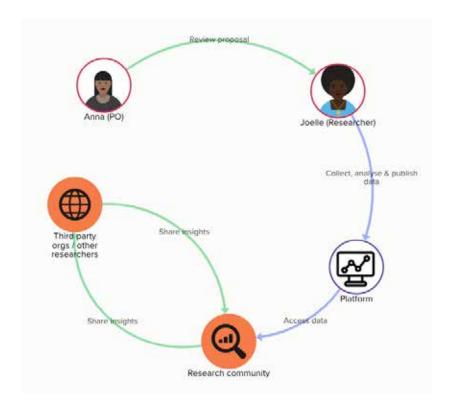
Sara needs to ensure that she has permission from all of these data publishers to reuse this data under an open licence.

Ida needs to ensure she publishes government data with a clear licence outlining permissions and restrictions for use.

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Tools to help

- The risk assessment for sharing agricultural data can help Alan to identify first steps for managing personal data and reducing risk.
- The General Data protection Regulation includes a global best practice approach which can help Alan and Sara in obtaining consent for use of personal data.
- Openness principles for organisations handling personal data can be helpful for Alan, Sara and Ida.
- Publishers guide to data licensing can be helpful for Alan, Sara and Ida.
- Different countries have their own data protection legislation and social contracts, which need to be adhered to. The agriculture data country profile can help **Alan** to understand this context.



Sharing or publishing data

Anna is reviewing a proposal from **Joelle**. **Joelle** wants to process and format soil data so it is useful for other agriculture researchers to use.

She oversees data collection in the field and produces analyses of the samples. She wants to openly publish the data and analyses available for other researchers to access, use and share.

Anna will need to confirm with **Joelle** that she has the necessary rights to share the data in this way, and that it complies with the funding policy of the donors.

Joelle will need to:

- Confirm whether there are any government expectations or requirements for data collected in the country she is working in?
 For example some countries require that data collected in the country must be shared with the government.
- Check whether there are any relevant laws relating to rights over derived data, or legal restrictions that might apply to merging data, in the country she is working in.
- Consider any risks from sharing the data.
 What does this mean in terms of the elements of the data she can share or how she can share it?
- Engage potential users of the published data to ensure the way she plans to make the data available will meet their needs.
- Understand who holds the rights to use and exploit the data. By default they will sit with the organisation collecting the data.
 - Is it clear who that is in this case?
 For example if there is a sub-contractor collecting, are agreements going to clarify usage rights?
 - Do these rights need to transfer to another stakeholder at the end of the project, for example to the government?

 Consider how she will make the data findable, accessible, interoperable and reusable FAIR.

Tools to help

- The risk assessment for sharing agricultural data can help **Anna** and **Joelle** to identify first steps for managing personal data and reducing risk.
- Publishers guide to data licensing could help Anna and Joelle to identify the right type of data licence to attach to the data.
- Different countries have their own rules related to sharing and publishing data, which need to be adhered to. The agriculture data country profile can help **Anna** and **Joelle** to understand this context.
- A guide for mapping stakeholders and value exchanges from data can help Anna and Joelle to identify and understand the data ecosystem better.

Further resources

For further help on considering data rights and permissions, please consult the following resources in the Data Sharing Toolkit:

- Case study: Harmonisation of data from different sources
- Module 5 Sharing data through data licensing
- Cheat sheet on 'data sharing to maximise utility'
- Guide: Sharing agricultural data: managing risk to minimise harmful impacts

Online resources

- Guide: Data Ecosystem mapping methodology
- Guide: Understanding personas in agricultural ecosystems

Data Sharing Toolkit



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