



1.3 Specify the data intervention type

Identifying data-related activities integral to your investment

Why should I do this?

To help you get started on planning for FAIR. By identifying data-related activities, you can anticipate budget and resourcing requirements.

In this activity you will:

Identify the data intervention types most relevant to your project.

Pinpoint the different types of data-related activities that your investment will require, such as data collection, sharing and integration.

Allocate resources effectively and identify areas where FAIR principles can be applied.

Understand these interventions, to help set priorities and ensure a structured approach to data management.

1) If you are a Program Officer (PO), you may want to share this page directly with your grantee, so they can act on it.

2) You can use the workbook (and supporting factsheet) for Step 1 here. We recommend using the same document throughout this step, so you have a single document that captures all your workings. The workbook contains guiding questions to help you formulate your data problem statement.

3) Use the guide below to explore typical data interventions that an investment can have:

Collecting new data or information:

New data sets being created for a specified purpose.

Stakeholder collaboration:

Collaboration between actors often relies on the ability to share data and information.

Developing digital services:

Creating services or applications from data derived from one or multiple sources.

Providing farm level insights:

Improving decision-making using high-quality data and evidence that can be trusted and reused.

Sharing or publishing data:

Focusing on improving the sharing of data or research.

Data integration and harmonization:

Essential for projects using diverse data sets (e.g., climate data, soil quality, and market prices) and enables more comprehensive analysis.

Predictive modeling and simulation:

To forecast future conditions, such as crop yields, pest outbreaks, or weather patterns.

Data preservation and archiving:

Particularly important for longitudinal studies and legacy data sets that may hold value beyond the immediate project.

Data visualization and communication:

Transforming raw data into formats that are easily understandable and actionable, such as dashboards, infographics, or interactive maps.

A project focusing on digital farmer services may involve data interventions, such as data collection from sensors on soil conditions, sharing data with government agencies to improve public agriculture resources, and integrating weather data into a mobile app for farmers.

4) Refer to the investment type examples to help you complete your worksheet.

Theme	Does the investment propose the following activity?	Case Study		Your Investment	
		Yes	No	Yes	No
Collecting Data	<p>Collecting or creating new data.</p> <p>The grantee proposes to collect or create new data for a specified purpose. It is likely that certain actors or groups will need to access, use and share the data during or after the lifetime of the grant.</p>	X			
	<p>Bringing together data and information from multiple sources.</p> <p>The grantee gathers data and information on a particular topic or location to address a particular challenge. For example, by bringing together data from governments, private companies and research institutions.</p>	X			
	<p>Multiple actors accessing and using content.</p> <p>The grantee works in an ecosystem of actors requiring access to the same content – for example, this could be to carry out research, define public or private sector interventions, or drive innovation.</p>	X			
Stakeholder Collaboration	<p>Private and public sector collaboration.</p> <p>The success of the investment is dependent on bringing together actors from the private and public sector. The grantee needs to gather data and information on a particular topic or location to address a particular challenge and make this available to stakeholders in both the public and private sector. Actors must be aligned and committed to a shared vision to incorporate FAIR processes throughout the project.</p>	X			
	<p>Development of insights, services, applications or products from data.</p> <p>The grantee proposes to create services or applications from data derived from one or multiple sources and transformed in some way. The right license is required for proper use of data in this way.</p>	X			
	<p>Developing or using a digital platform or new technology.</p> <p>The grantee proposes to create a digital platform. This could have multiple purposes, for example to host or signpost data as part of an evidence base or for analytics. Often digital platforms will have data from multiple sources, with multiple users needing to access and use the data or insights hosted on the platform.</p>	X			
Digital Services	<p>Development of predictive models.</p>		X		

	The investment intends to use models to analyze, control, visualize and predict complex processes. Models have a range of applications in agriculture, including predicting crop volumes based on fertilizer and pesticide use, predicting profit and loss, and analyzing yields. Often models will bring data from multiple sources together to generate outputs				
Farm Level Insights	Access to farmer and farm information. To improve farm-level decisions through digitally-enabled services, the investment proposes either to provide insights at farm-level, and/or require a log in, all of which are likely to include access to personal or sensitive data.	X			
	Using GPS or adding geographical coordinates or locations. The grantee proposes to use maps or add information to maps, such as population, administrative boundaries, farm locations or the location of pests. Note that not all basemaps or mapping apps permit use in this way.		X		
	Accessing, using or sharing surveillance data. The investment proposes to collect or access data from surveillance activities, for example, identifying the presence of human disease like malaria, or providing insight into what's happening in farmers' fields through crop types, pest or pathogen presence or the weather.		X		
Data sharing/ Publication	Publishing or sharing data or research. The investment plans to share data either with a specific group via a platform, or published openly via an open access repository. For example sharing crop variety, environmental surveillance or soil data through a soil information system or via the Gates Open Access portal.	X			

When planning your data-related activities, it is crucial to consider the potential impacts—both positive and negative—of your interventions. The following tools can help you to assess these impacts and incorporate ethical considerations into your project:

Consequence Scanning

This tool allows you to anticipate the effects of your planned activities by exploring both intended and unintended consequences. By conducting a Consequence Scanning session, you can:

Identify positive outcomes you want to emphasize, ensuring your activities support the overall goals of your project.

Mitigate potential risks by recognizing negative consequences that may arise, such as impacts on privacy or human rights, and planning strategies to minimize these.

Using this tool will help you think through the following:

What are the intended and unintended consequences?

What are the positive consequences we want to focus on?

What are the consequences we want to mitigate (e.g., foreseeable negative impacts that may violate fundamental human rights)?

Review examples of how this could be done in a workshop (see pages 2-5).

Consider hosting a Consequence Scanning workshop to collaboratively explore the impacts of your interventions. This proactive approach helps ensure that your data activities align with ethical and responsible data practices.

Data Ethics Canvas

If you would like to conduct an in-depth analysis of your planned interventions and explore data ethics, use the ODI's Data Ethics Canvas. This will help you conduct a detailed assessment of the various activities and sub-activities that you have identified in your investment.

Using this tool, you can:

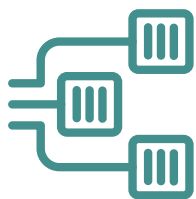
Examine ethical implications across all stages of your project, identifying and managing issues at the outset and as your project evolves.

Ask critical questions, such as: What is your primary purpose for using data in this project? Who could be negatively affected by this work?

Review examples of how this could be done in a workshop (see page 5 onwards).

Interactive Data Canvas | Data Canvas Print version

Investment types



Overview



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Every investment project is unique

The application of the six steps will vary accordingly. To provide examples that align with your project, common characteristics of AgDev investments were researched and three 'investment types' were developed.

AgriConnect: a digital solutions investment



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AgriConnect

AgriConnect interventions specifies several data intervention types, including data collection (gathering climate and soil data), digital services (developing a platform to host data), and data sharing (making data accessible to farmers and other stakeholders). They note that each intervention type will require careful planning, from collecting high-quality data to ensuring compatibility with various digital formats to support accessibility.

AgroThrive: a policy and advocacy investment



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AgroThrive

AgroThrive's interventions are centered around stakeholder collaboration (coordinating data from government and private sources) and data sharing (publishing policy-related findings). This includes building data sharing agreements with government agencies and private entities, ensuring that data is securely managed while enhancing accessibility for policymakers. They also emphasize the importance of data preservation, ensuring long-term access for future policy assessments.

NGBT: a field research investment



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NourishGen BioTech (NGBT)

NGBT interventions focuses on data collection (generating new data on climate-resilient barley), farm-level insights (using data to provide recommendations for smallholders), and data sharing (publishing research data for reuse). They plan to establish open-access repositories to ensure that collected data can be widely accessed and used for subsequent research.



Researchers in agri-food systems often go to great lengths to collect data. They also know, better than anyone, the value of accessing data from third parties, and yet very little of the data collected becomes accessible to others. How can that be?

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