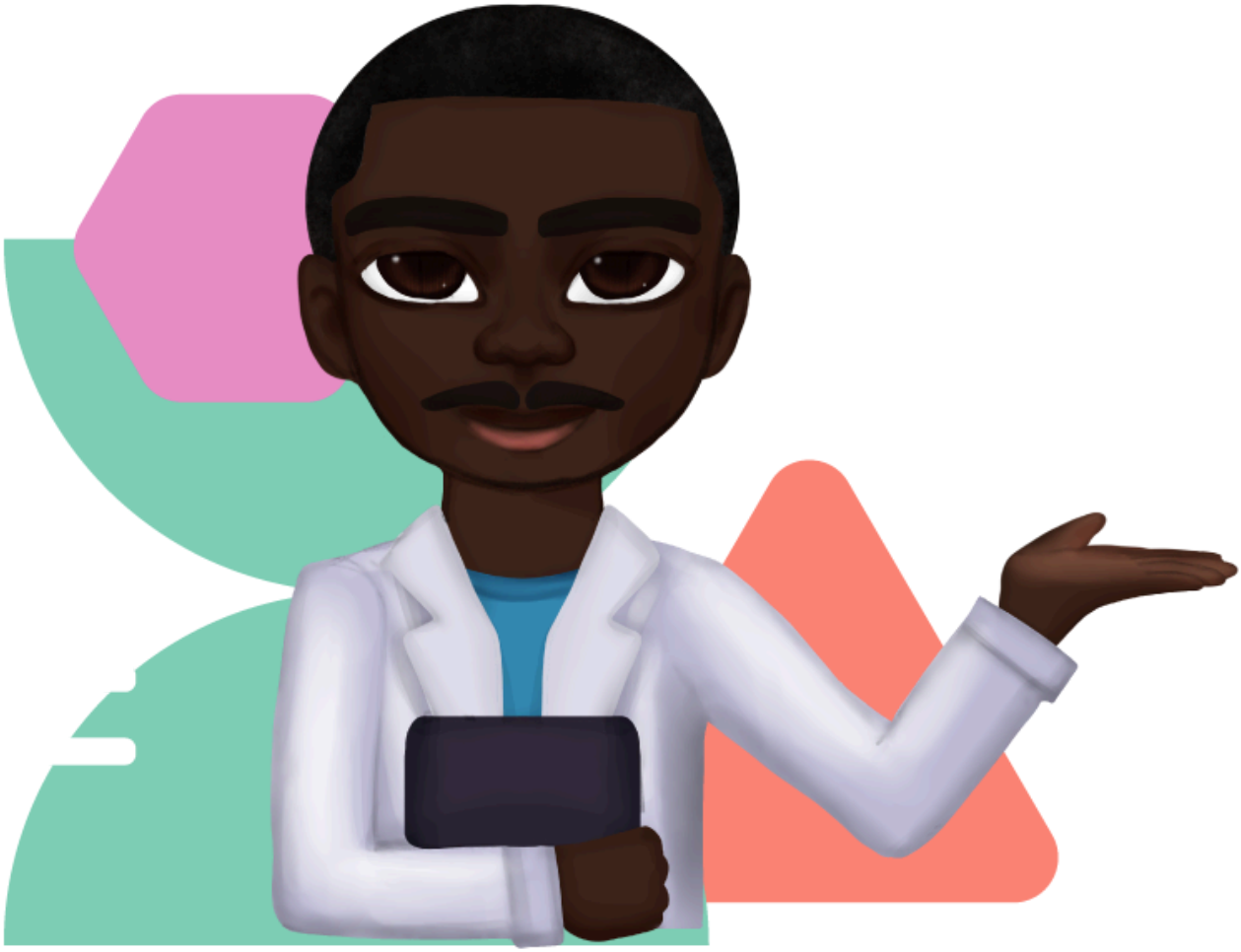

2.1 Identify personas and their value exchanges

Identifying the different individuals encountered throughout the AgDev ecosystem, each with their own learning needs, barriers, motivations and goals, and understanding what is exchanged amongst them

Why should I do this?

To help validate assumptions regarding the needs, barriers, motivations and goals encountered by each stakeholder in your investment. Understanding these aspects enables you to effectively plan FAIR strategies to address stakeholders' needs and goals, while also devising solutions to overcome any obstacles they may face. By gaining insights into the dynamic exchanges within your data ecosystem, you and your partners can develop more effective and responsible data management and collaboration plans.

In this activity you will:

- Understand how development initiatives exist in complex networks of interconnected, overlapping and codependent entities that can simultaneously inhibit and facilitate their ultimate objectives. This constellation of different factors and entities can be thought of as a Data Ecosystem.

- Map out key personas in your data ecosystem, such as farmers, policymakers, and service providers.

- Identify each persona's role and motivations, and the potential challenges they might face.

- Outline the value exchanges between these personas, describing how data, information, or other resources are shared.

This exercise will help you understand the dynamic relationships within your ecosystem, and how they impact the success of your investment.

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) Use the workbook (and supporting factsheet) for Step 2 here. We recommend using the same document throughout this step, so you have a single document that captures all your workings.

- Refer to the investment type examples and, for a larger list, look at the 'Examples' section to help you better understand which inputs are required to identify personas and value exchanges. Looking at these examples will help you plan for the workshop.

Host a meeting or workshop with the project stakeholders and invite them to think critically about the personas involved in your project's data ecosystem and the value exchanges.

Document the personas identified in your workbook.

Use additional methods such as desk research, key informant interviews (KIIs), or surveys with project stakeholders (if required).

Personas and their value exchanges may include:

Innovator

Creates new solutions or technologies, either within companies or as entrepreneurs.

Goals:

Create novel products or services to meet specific goals.

Develop solutions based on the nature of their company (for-profit, non-profit, public, etc.).

Key data or value exchange:

Access to open data or data obtained through agreements.

Need specific capacities to analyze and leverage data.

Lead organization representative

Combines data from multiple sources for innovators and researchers to develop data-driven services and products.

Goals:

Combine data from multiple sources to develop data-driven services and products.

Develop sustainable business models and create measurable impact for funders.

Key data or value exchange:

Review derived data from raw inputs. Interact with stakeholders and build project awareness.

Rely on open source raw data, or data accessible through sharing agreements.

Private sector liaison

Provides insights into the needs and goals of the private sector, beneficial for projects related to economic development.

Goals:

Provide insights into private sector needs and goals.

Influence project outcomes to benefit both the project and the private sector.

Key data or value exchange:

Offer specialized data, advice and feedback.

May receive funding for consulting, or provide input to influence policy and outcome.

Project Officer (PO)

Ensures project goals are met, manages reporting requirements, and communicates results.

Goals:

Ensure successful completion of project goals.

Manage reporting requirements and communicate results.

Promote maximum impact and value for money.

Key data or value exchange:

Collect, analyze and aggregate data to achieve project objectives.

Ensure compliance with internal data management and open access policies.

Project partner/consultant

Provides expertise in areas lacking within an organization, such as technology or practical advice.

Goals:

Provide expertise in areas lacking within the organization.

Solve specific issues and offer practical advice.

Key data or value exchange:

Receive funding to address organizational needs.

Work with various data forms, offering analysis, advice and reports.

Researcher

Collects, processes and combines raw data with open sources to generate insights, often published in open access repositories.

Goals:

Deliver high quality research, backed by robust evidence.

Gain recognition and promote research uptake.

Contribute to research breakthroughs influencing policy or funding.

Key data or value exchange:

Rely on collected and derived data.

Publish findings in open access repositories and include openly licensed secondary research.

Third-party publisher

Makes data available to the public or specific audiences, often managing central data repositories.

Goals:

Make data available to the public or specific audiences.

Ensure data quality and manage central data repositories.

Key data or value exchange:

Publish data through sharing agreements.

Release data in exchange for funding, credit, or public good.

What are some other specific value exchanges to consider?

Advice: Experts provide recommendations based on data analysis, experiences or specialized knowledge to help others make informed decisions.

Capacity building or development: Enhancing skills, knowledge and resources to meet specific challenges, through training or on-the-job experience.

Collected data: Information gathered systematically from various sources, that is vital for analysis and decision-making.

Data: Raw facts, figures or information used as the basis for reasoning, knowledge and information.

Derived data: Information generated from existing data through transformation, computation or analysis.

Feedback: Information about the results of processes or performance used to make improvements or informed decisions.

Funding: Financial resources to support projects, activities or initiatives in exchange for services.

Insights: Deep understanding or perception extracted from analyzing or synthesizing data.

Open source code: Freely available computer program source code that can be viewed, used, modified and distributed by anyone.

Raw data: Unprocessed information collected directly from a source, not yet analyzed or organized.

Reports: Structured documents presenting information, findings, analysis or recommendations in a clear and organized manner.

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

AgriConnect: Mapping stakeholders and data interactions

After taking the steps above, AgriConnect has determined the most important personas:

Rashima – Lead/assigned grantee:
works on the digital platform that will serve as a useful data repository for smallholder farmers in Dataland to access information on cheaper agricultural inputs, financing options, educational materials related to crop cultivation and precision farming, and market access insights.

Chima – Smallholder farmer:
a representative of the 'end user' of the platform, and also head of his village's farming cooperative, he is highly familiar with the issues faced by smallholders in his region. His input will be vital both in the development of the platform, as a point of contact for uptake initiatives, and for monitoring and evaluation of the platform's utility after it is launched.

Faisel – Researcher:
works for a university research center collecting, processing and combining raw agricultural data, which he processes with available sources of open data to produce insights that may be published via an open access repository. Much of his data is highly relevant to the project's objectives, making him an important contributor to the final output.

Chris – Third-party publisher:
works for a central government agency in charge of managing the national repository of agricultural indicators, including economic, social and trend forecasts, which is made available to researchers and innovators via an open data portal. This data is a vital component of the final output.

Efe – Private sector liaison:
CEO of Dataland's largest agricultural input supplier. Highly familiar with the needs of farmers in the country from the perspective of the private sector.

Ayan – Project partner:
head of a national NGO that helps connect smallholder farmers with financing opportunities, including microfinancing institutions, government programs, commercial banks and agricultural cooperatives. This information will be an integral part of the platform that AgriConnect is creating.

Marie – UX consultant:
works in an organization that develops software tools to make it easier to analyze and visualize insights on data about farming practices. Her skills will be utilized to make AgriConnect's platform interface user-friendly and accessible to smallholder farmers.

Noora – Technical consultant:
PhD graduate in precision agriculture, who has consulted with many organizations, universities and government agencies. She is considered to be Dataland's foremost expert on precision agriculture, and has worked on projects to install sensors to measure climate variations and soil data around the country.

Nemy – Cyber security consultant:
Works for a private sector agency. Her knowledge of cyber security will be a valuable asset in planning for, and carrying out, the project's plan to securely store data.

Value exchanges:

> Rashima will allocate funding to her project partners (Faisel, Efe, Ayan, Marie, Noora and Nemy) in exchange for the provision of derived data, reports, advice and insights that will allow her to develop AgriConnect's data platform.
>
> Chima will provide raw data from his farm (and from this community) to Rashima in exchange for the capacity development that will result from the development of the platform. He will also provide her with feedback on the utility of the project's output.
>
> Chima will provide data to Faisel (collected data) in exchange for monetary compensation for his efforts (and for ensuring that the data he helps collect is high quality and standardized according to the instructions he receives).
>
> Faisel and Noora have both provided Chris's agency with derived data in the past, which they did to help enhance the government's central AgDev data repository. Their current work, funded by Rashima's organization (AgriConnect), will also be shared with Chris as part of the project's commitment to the FAIR Principles.
>
> Chris will provide Rashima with access to the government's data repository in exchange for the promotion of the social good that will result from AgriConnect's final output. As a member of the government's AgDev ecosystem, he has been charged with assisting organizations and other stakeholders working to improve the AgDev environment in the country free of charge.

AgroThrive: a policy and advocacy investment

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AgroThrive: Mapping stakeholders and data interactions

After taking the steps above, AgriThrive has determined the most important personas:

Kaira – Lead/assigned grantee:
develops evidence-based policy recommendations for the government of Datapur to improve the enabling conditions for agriculture development and success. Her focus is on policies related to credit and financing, infrastructure development, fostering technological advancements, educational opportunities, climate resilience, and land tenure.

Haben – Smallholder farmer:
as head of his village's farming cooperative, he is highly familiar with the 'on-the-ground' issues faced by him and other smallholders in Datapur, and how he feels the government can support farmers.

Adnan – Government liaison:
works in Datapur's AgDev policy division, and will be the government point of contact for the project. He will be responsible for reviewing and giving feedback on AgroThrive's work, as well as its dissemination to others in his office and the wider government. He will also assist in setting up 'learning sessions' to discuss the policy recommendations with relevant high-level stakeholders.

Imamu – Third-party publisher:
works for a central government agency in charge of managing the national repository of agricultural indicators, including economic, social and trend forecasts, which is made available to researchers and innovators via an open data portal. This data is a vital component of the final output.

Zora – Private sector liaison:
as CEO of Datapur's largest agricultural organization, which is involved in all aspects of the country's agriculture, including buying, shipping, processing and distribution, she is highly familiar with the bottlenecks and obstacles that are preventing the sector from achieving higher levels of success and productivity and ultimately harming smallholders.

Aziz – Project partner:
head of a national NGO that helps connect smallholder farmers with financing opportunities, including microfinancing institutions, government programs, commercial banks and agricultural cooperatives. This information will be an integral part of AgroThrive's recommendations to the government.

Anna – Project Partner:
works in an organization that develops AgDev training modules for smallholders throughout Datapur. These have included providing information on the latest agriculture developments, climate resilience, and new seed varieties. Her input will give insights into what is currently being taught, to help AgroThrive shape its educational policy recommendations.

Saanvi – Technical consultant:
a PhD graduate in climate-smart agriculture who has consulted with many organizations, universities and government agencies. She is considered to be Datapur's foremost expert on climate resilience related to agriculture, and has installed sensors to measure climate variations and soil data around the country.

Lata – Gender consultant:
a gender expert who regularly consults with the government, NGOs and the private sector on gender issues. As the recommendations put forth by AgroThrive are intended to be gender-inclusive and intersectional, her input will be integral to their development.

Value exchanges:

> Kaira will allocate funding to her project partners (Zora, Aziz, Anna, Saanvi, Lata) in exchange for the provision of collected data, reports, advice and insights that will allow her to develop evidence-based AgDev policy recommendations for the Datapur government.
>
> Haben will provide data from his experience (and that of his community) to Kaira in exchange for the compensation for his time, as well as the eventual economic and community development that is the intended result of AgroThrive's work. He will also provide her with feedback on the feasibility of some of the recommendations.
>
> Haben will provide raw data to Saanvi (collected data) in exchange for monetary compensation for his efforts (and for ensuring that the data he helps collect is high-quality and standardized according to the instructions he receives).

Anna and Saanvi have both provided Imamu's agency with derived data in the past, to help enhance the government's central AgDev data repository. Their current work, funded by Kaira's organization (AgroThrive), will also be shared with Imamu as part of the project's commitment to the FAIR Principles.

Imamu will provide Kaira with access to the government's data repository in exchange for the promotion of the social good that will result from AgriThives's final output. As a member of the government's AgDev ecosystem, he has been charged with assisting organizations and other stakeholders working to improve the AgDev environment in the country free of charge.

NGBT: a field research investment

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NGBT: Mapping stakeholders and data interactions

After taking the steps above, NGBT has determined the most important personas:

Farah – Lead/assigned grantee:
working to develop a more nutritious and climate-resistant barley varietal, which will directly benefit the smallholder farmers of Datastan by increasing yields, improving income, and addressing food insecurity.

Davu – Smallholder farmer:
as head of his village's farming cooperative, he is highly familiar with the 'on-the-ground' effects of climate change that smallholders in Datastan are facing, as well as the types of crops they are currently growing.

Nasser – researcher:
works for a university research center collecting raw agricultural data, processes it, and combines it with available sources of open data to produce insights, which may be published via an open access repository. His insights, drawn from this data, will be useful to the project team in their analysis of climate trends and changes that have affected Datastan's agricultural sector, and to make predictions for the future of climate-related shocks. Nasser's subject matter expertise will allow him to guide the exploration and analysis of additional climate-related project data.

Joe – Third-party publisher:
works for a central government agency in charge of managing the national repository of agricultural indicators, including economic, social and trend forecasts, which is made available to researchers and innovators via an open data portal. This data will be a valuable addition to the research inputs for the project.

Kama – Private sector liaison:
the CEO of Datastan's largest barley distributor is a key resource in the private sector needs related to barley cultivation, as well as the potential for growth that can be expected through increased production.

Cali – Agricultural geneticist:
a frequent NGBT Project Consultant whose expertise lies around the seed genetics and the creation of new characteristics and variety of seeds (and plants), which will be instrumental in helping NGBT create new barley varietal.

Charlotte – Climate scientist:
her insight on the impacts of climate change on cereal crops (including barley) in Sub-Saharan Africa will be vital to the project, as climate resistance is one of the key components of the new barley varietal that NGBT hopes to formulate.

Chanda – Soil scientist:
ecologist specializing in Datastan's ecosystem. She has been studying the effects of barley cultivation on Datastan's soil, and how to offset the negative consequences of increased cultivation. Her insights will be instrumental in formulating a barley varietal that will thrive within Datastan's unique soil type.

Jaya – Gender and children specialist:
a specialist in gender issues within Datastan, including the exclusion of women smallholders and the effects of disparate malnutrition on both women and children. Her knowledge will help the project team to consider the intersectional benefits of the newly developed barley varietal on groups that have traditionally been harmed by inadequate yields, as well as ensuring their inclusion in this promising advancement.

Value exchanges:

Farah will allocate funding to her project partners (Nasser, Kama, Cali, Charlotte, Chanda and Jaya) in exchange for the provision of derived data, reports, advice and insights that will contribute to the development of NGBT's new barley varietal.

Davu will provide data from his farm (and from his community) to Farah in exchange for the monetary compensation for his efforts. He will also provide her with feedback on the implementation plans of the barley varietal on completion of the project.

Davu will provide data to Nasser (collected data) in exchange for monetary compensation for his efforts (and for ensuring that the data he helps collect is high quality and standardized according to the instructions he receives).

Nasser, Cali, Charlotte and Chanda have all provided Joe's agency with derived data in the past, to help enhance the government's central AgDev data repository. Their current work, funded by Farah's organization (NGBT), will also be shared with Joe as part of the project's commitment to the FAIR Principles.

Joe will provide Farah with access to the government's data repository in exchange for the promotion of the social good that will result from NGBT's final output. As a member of the government's AgDev ecosystem, he has been charged with assisting organizations and other stakeholders working to improve the AgDev environment in the country free of charge.

For FAIR processes to be successfully implemented, the approach must be people first, and not technology first.

Ameen Jauhar, Data Governance Lead, CABI

Learn more

FAIR Process Framework has been developed by the Enabling Data Access (EDA) project team at CABI and is funded by the Bill & Melinda Gates Foundation to support the foundation's Open Access Policy. The FAIR Process Framework is a tool to assist partners in developing data access and management plans (DMAPs) that incorporate FAIR and responsible data practices.