



1.4 Identify the data blockers

Identifying challenges that block data from being made FAIR

Why should I do this?

To effectively anticipate, and prepare for, challenges that block data from being made FAIR in your investment. Identifying data blockers will help your team plan to overcome them.

In this activity you will:

Identify data blockers that could limit the effectiveness of FAIR practices within your project.

Consider the common barriers to data sharing and usage, such as access restrictions, lack of resources, or cultural norms that inhibit collaboration.

Document these blockers to be better equipped to create strategies for overcoming them, ensuring that your data initiatives have the support needed to succeed. This foresight allows for proactive planning, mitigating risks before they become obstacles.

While some blockages can be easier to foresee – such as data access protocols, resource procurement, etc. – others may only reveal themselves once an investment is in motion, making any mitigation strategies significantly costlier and more cumbersome.

- 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) Review the examples of data blockers below across four different factors (data, capacity, ecosystem, culture), to help you complete your workbook.
- 3) Review the further examples given in the investment types further down the page.
- 4) 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.

Examples of data blockers:

Access blockages to certain data types (such as those requiring special permissions, agreements, authentications, etc.).

Poor data quality.

Examples of data blockers:

Lack of necessary equipment for data processing, or the skills required to do so.

Research and innovation not tailored to the expressed needs of end users.

Barriers to access the tools created (e.g., lack of digital infrastructure or literacy).

Examples of data blockers:

Issues with scalability, sustainability, and the need for capacity building among users.

A lack of collaboration and coordination among stakeholders (e.g., government agencies, NGOs, private entities).

Mismatched agendas, incentives, constraints and priorities among stakeholders.

Research and innovation carried out by 'outsiders', with little or no collaboration with end users.

Utilization of traditional 'top-down' research-for-development nodes, rather than novel 'bottom-up' innovation pathways.

Examples of data blockers:

Data privacy, security, and ownership concerns.

Regulation challenges leading to inefficiencies and duplication of efforts.

Cultural norms preventing data sharing.

Capacity development for agricultural research and innovation systems not 'owned' by local actors.

Pre-existing inequalities between, and within, countries (including those related to access, digital literacy and infrastructure).

Mistrust between stakeholders regarding the protection of sensitive data.

Remember that not all blockers are immediately visible. Some may arise as the project evolves, so plan for ongoing assessment and adaptation.

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's data blockers

An initial mapping of the country's agricultural data reveals that much of it is outdated and incomplete. A wide variety of sources are needed to obtain data that covers all facets of the platform's functionality (credit, ag. inputs, education, and market insights).

The needs of multiple internal parties to access the platform create conflicts between accessibility and data security.

There is hesitation from private sector agriculture companies to share relevant data on market share and production gaps.

A mapping of previous initiatives has indicated a mismatch between the information provided and the needs of smallholders.

Concerns have arisen regarding platform accessibility for smallholders (end users) in rural areas and amongst marginalized communities.

There is inadequate data on bottlenecks in credit access and approval for smallholders.

There is a desire to conform to the FAIR Principles by making the platform as open and accessible as possible, while still maintaining financial sustainability.

AgroThrive: a policy and advocacy investment



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AgroThrive's data blockers

Lack of gender disaggregated data and other data gaps.

Access blockages to certain data types (those requiring special permissions, agreements, authentications, etc.).

Poor data quality.

Human and technical resources constraints.

Knowledge gaps.

Logistical challenges.

Mismatched agendas, incentives, constraints and priorities among stakeholders.

Global market influences.

Bureaucratic hurdles.

Lack of clear roles and responsibilities.

Capacity development for agricultural research and innovation systems not 'owned' by local actors.

Regulation challenges leading to inefficiencies and duplication of efforts.

Data privacy, security and ownership concerns.

Pre-existing inequalities between and within countries (e.g., related to access, digital literacy and infrastructure mentioned above).

Mistrust between stakeholders when it comes to sharing data.

Power dynamics with competing interests.

Linguistic and cultural barriers.

NGBT: a field research investment



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NGBT's data blockers

Mistrust amongst stakeholders with regards to data sharing.

Lack of available data on improved crop varieties.

Limited access to advanced field research tools.

Lack of compatibility among various tools and software used for data collection and analysis, creating inefficiencies in the research process.

Research endeavors not owned or led by beneficiaries (end users).

Insufficient cooperation and coordination among farmers and farmers' organizations, researchers, and research institutions.

Adherence to traditional farming practices and preference for native crop species over modern methods.

Linguistic and cultural differences affecting the transfer of knowledge and skills from researchers to farmers.



Challenges in the data space

Data sharing might not be easy, but it's the right thing to do.

Chipó Cosford, Senior Project Manager, CABI

[Learn more](#)

Acknowledgements

FAQs

Glossary

Accessibility

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T&Cs

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. Except where otherwise noted, the content on this website is licensed under a Creative Commons Attribution 4.0 International License.