

APPENDICES:

Avoiding Data Graveyards:

Insights from Data Producers & Users
in Three Countries

Editors

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Appendix A: Assessing the Enabling Environment for Data Use

[Taken from the technical guidance note for country research teams]

What are the critical factors that shape the availability of data, the use of data in decision-making processes and the ultimate influence of that data in making discrete decisions as to how to allocate resources, monitor results and evaluate impact for development? Who are the current and prospective users of open data broadly, and geocoded aid data specifically, for decision-making?

The assessment of the enabling environment and the testing of the theory of change should go hand in hand. Each link in the theory of change is vulnerable to a variety of factors that may bolster (enablers) or weaken (constraints) the assumptions that must be true if data is to indeed translate into more effective decision-making. See Table 1 for illustrative categories and examples of enablers and constraints.

Table 1: CATEGORIES OF ENABLERS AND CONSTRAINTS (adapted from MEASURE Evaluation and from AidData's Data Uptake Task Force)		
Category	Description	Illustrative Examples
Environmental	Broader political, economic or socio-cultural forces, beyond any one sector, organization or individual, that enhance or constrain the use of data in decision-making	<ul style="list-style-type: none"> ● International and domestic priorities and funding ● Legal or policy frameworks ● Levels of internet penetration ● Freedom and accessibility of data and information ● Open data initiatives ● Presence of data infomediaries
Sectoral	Challenges or opportunities that are unique to a particular sector that may impact the use of data in decision-making	<ul style="list-style-type: none"> ● History of data analytics in the sector that predisposes experts to rely more or less heavily on data for decision-making
Organizational	Formal processes or informal norms that may or may not support the use of data and evidence in decision-making within an organization	<ul style="list-style-type: none"> ● Data sharing norms and practices ● Official sanctioning or approvals ● Skepticism ● Supervisor/Decision-maker preferences ● Organization priorities

Technical	Existence of the necessary hardware, software, human capital and/or common data standards to access, use and apply data to inform decision-making	<ul style="list-style-type: none"> ● Data reporting standards ● Hardware/software ● Staffing ● Quality concerns ● Data/need mismatch ● Frequency of the data ● Presentation/formatting
Individual	The extent to which a decision-maker or decision influencer has the necessary will and capacity to use data within the decision-making processes of which they are a part	<ul style="list-style-type: none"> ● Awareness ● Confidence ● Time ● Incentives ● Education/Capacity

As country teams conduct their desk reviews, they should make a rough initial appraisal of the enablers and constraints for the uptake of open data broadly and geocoded aid data specifically that can be later verified and contextualized through additional field research. Country teams should explore whether and how this picture changes across focus sectors.

Appendix B: Interview Guide

Interview Guide: Phase One USAID Enabling Environment Country Studies
Version 4, 1/6/16

Interview Details:

Interviewee [Name, Title, Org]:

Date/Time/Location:

Research team [Lead, Note-taker]:

Research Questions:

Governments, development partners and civil society leaders make a multitude of decisions every day about how to allocate, monitor and evaluate development assistance.

- **Decisions:** How are choices about the location, resourcing and evaluation of aid activities typically made?
- **Influence:** Who are the key actors and organizations involved in (or shaping) decision-making at each stage?
- **Use:** Which sources of data and evidence are actually used by decision-makers? How do they find this information and how useful is it to the decisions they must make?

- **Environment:** What are the most common barriers and incentives to using data? Which types of interventions are likely to be most helpful in overcoming these barriers?

Logistical Guidance:

- As you proceed through the interview guide, please take note of the following:
 - Notes to the interviewer are highlighted in **blue** – these are tips, queues and reminders to jog your memory as you are proceeding through the interview;
 - **Bolded** questions are required topics – please make sure you cover the substance of these questions;
 - **Alternative wording for required questions** are in bold and highlighted – use your best judgment to use these modifications as appropriate to your interview subject, or clarify with different wording or an example if the subject is still unclear;
 - **Optional drill-down questions** are highlighted, not bolded - these are supplemental questions that you may elect to use to draw out your interviewee in order to capture additional information, examples, clarification on their answers;
- Use your judgment to skip or modify a question if it has been fully covered in a preceding answer and/or is irrelevant to your interviewee. Feel free to reorder the questions and/or anchor a question in a response the subject gave to a previous question, as it makes sense in the flow of conversation.

I. Introduction [suggested time: 5min]

Interviewer script:

[Insert formal name(s) of interviewee], thank you for making time to meet with us today. My name is [insert your name]. My colleagues, [insert names of interview team], will be assisting me in taking notes from the interview today. Before we begin, I wanted to provide some additional background about our study and how we will be using the information you share with us in today's interview. Would that be okay?

As mentioned in our prior correspondence, we work with the AidData Center for Development Policy – a consortium of universities and organizations in the US that studies development programs, particularly who is funding what, where and to what effect? Our research study seeks to document how data and evidence are used in making these decisions and ways in which these sources of information can be made more useful to policymakers.

At the completion of the study towards May 2016, we will be producing a final report that synthesizes lessons learned from this research, which we would be pleased to share with you. The final report will also be published on AidData's website and shared publicly.

As part of this study, we are conducting approximately interviews with government, civil society and development partner representatives, including yourself. The notes taken in this interview will be confidential and only seen by members of the research team. We will use the notes from

your interview primarily as background to inform the findings of our study, but you will never be directly quoted or cited at any point in the study without your specific consent.

We have prepared several questions to guide our conversation today, but please feel free to share additional insights, as you feel appropriate.

One final piece of business before we begin: to ensure the highest integrity of our research, we want to make sure that you fully understand your rights as a participant in this study. Therefore, we have prepared a brief informed consent statement for you to review and sign.

[Provide two copies of the informed consent statement to the interviewee to sign. One for them to keep and one for you to keep for your records]

The interview itself should take approximately 60 minutes. Does this time frame still work for you?

Thank you very much. Do you have any questions about the interview process for me before we proceed?

II. Decision Making Process [suggested time 15min]

Interviewer: We would like to ask you some questions about the key decisions that you and your [insert organization/department/agency] makes regarding the financing, targeting or evaluation of development projects.

1. Please state your title and how long you have been working with [insert organization/department/agency].
2. **What are some of the most frequent decisions your [organization/department/agency] makes or influences regarding the financing, targeting or evaluation of development projects?** [Alt: What are the most frequent types of activities your organization undertakes with regard to the financing, targeting or evaluation of development projects?]

[Optional drill-down questions as needed]:

- Are there specific policy objectives that your organization is trying to influence?

3. **Could you walk us through how these decisions are typically made in your organization?** [Alt: Can you walk us through the process of how your organization completes [activity mentioned in question #2]?]

[Optional drill-down questions as needed]:

- What is your own role in this process?
- Which individuals/ organizations outside of your organization are involved in this process and what is their contribution?

- What reports, briefing notes, or decision memos are created by your [team, office, agency, etc.] that inform strategy or individual decisions?”

4. Are there some decisions for which data and evidence are used most often? If so, which decisions? [Alt: Are there some activities for which data and evidence are used most often? If so, which activities?]

[Optional drill-down questions as needed]:

- At what stage of the process do you find that this data is most used?

III. Data Use - General: [suggested time: 15min]

Interviewer: Keeping in mind the types of decisions you just described, we would like to ask you several questions about how different types of data and evidence are used within your organization decision-making process.

1. Which types of [data/analysis] do you typically use in your work?

[Optional drill-down questions as needed]:

- Which data sources do you typically draw upon to get this information?

2. How do you determine which source of [data/analysis] to use? Why do you use these particular sources?

[Optional drill-down questions as needed]:

- Does your [boss/client] request that you use data in your decisional tasks?
- Do they request that you use specific data sets?

3. What types of [data/analysis] does your boss request from you? [Alt: What types of data/analysis do you typically request of your staff?]

4. To what extent is the data and evidence your organization currently uses meeting your needs? Why or why not?

[Optional drill-down questions as needed]:

- Do you think your organization uses the same data sources as other peer organizations? Why or why not?
- Do you think your organization uses data/evidence more, less, or equal to other organizations? Why do you think this is?
- How are sources of data/evidence shared within and across teams? Are there particular standards, norms or best practices that influence this information sharing?
- What would enable you to more easily use these data sources in your work?

IV. Data Use – Aid Data [suggested time: 15min]

Interviewer: Now that we've asked about how your organization makes decisions and uses data in a general sense, we'd like to ask some more specific questions about how you use and access data on aid projects specifically.

- 1. What questions related to aid programs are you typically trying to answer in the context of your work?**

[Optional drill-down questions as needed]:

- Do you have a particular sector or thematic focus?

- 2. Which types of data related to these aid projects is most useful to you in your work? Why?**

- 3. How do you typically access the information you need on aid programs?**

[Optional drill-down questions as needed]:

- Do you have access to the information you need for your work on where aid programs operate and what they are doing? Why or why not?

- 4. What challenges do you face when trying to access or use aid information in your work?**

V. Data Use – Subnational Data: [suggested time: 15min]

Interviewer: Now that we've asked about how you use and access information on aid projects at a national level, we'd like to ask several follow-up questions related to subnational data, specifically.

- 1. To what extent do you need to access disaggregated information about aid projects at a province, district or more local level in your work?**

[Optional drill-down questions as needed]:

- What types of subnational information about aid programs [is / would be] most useful?
- At what subnational unit of analysis [examples relevant to country] would it be most useful to have subnational information on aid programs?
- What types of analysis do you/ would you like to complete using subnational information about aid programs?

- 2. When accessing information on aid programs at a subnational level, do you typically use the same process as you do for other types of information? Why or why not?**

- 3. Have you ever felt the need to use subnational data in your work but have not been able to do so? What was the reason?**

[Optional drill-down questions as needed]:

- To what extent do you feel confident in the quality – accuracy, coverage or comprehensiveness – of the data source(s) you use for subnational aid information?

4. **What would be most helpful in overcoming these challenges and make it easier for you to use subnational aid information in your work?**

VI. Examples: Data/Evidence in Specific Decisions: [suggested time: 5min]

Interviewer: Thank you for all of the insights you've shared about how you and your organization are using data and evidence in decision-making. As we come to the end of our interview, we wanted to take the opportunity to ask you to walk us through a particular example of a recent major decision that you made and the role of data and evidence in that process.

1. **Tell me a story about the most recent major decision you or your organization made related to the financing, targeting or evaluation of development projects?**

[Optional drill-down questions as needed]:

- What role did you have in the decision-making process?
- At which stage were you involved?
- How was this decision ultimately made?
- Was data/analysis an important factor in the final decision?
- Who were the other stakeholders involved in making this decision?
- Were you encouraged (by colleagues/superiors/subordinates) to use data in the context of making/contributing to this decision?

2. **What types of data/evidence did you use in the process of making/contributing to this decision? Did you have all the information resources you wanted or needed?**

[Optional drill-down questions as needed]:

- Were you encouraged to use a specific data set or source of evidence?
- What kinds of information inputs did other stakeholders provide? (e.g., anecdotal evidence from the field, reports from previous projects, data, etc.)
- Of the data/evidence sources you used in making/contributing to the decision, which were most and least useful? Why?
- What was the end result of the decision-making process?
- To what extent do you think that specific sources of data/evidence were influential in making/shaping the final decision? Why?

3. **What types of data/evidence would you want to use in making these decisions in the future (if any)? Why?**

VIII. Conclusion [suggested time: 5min]

We've come to the end of the questions we prepared for you.

Thank you for taking the time to speak with us today. We appreciate your insights which will add great value to our study. Over the next [weeks/days] we will be interviewing other government, development partner, and civil society representatives to discuss data use in [insert country]. Are there any other individuals that we should speak with?

Please don't hesitate to be in touch if you have any questions. We will be analyzing the input from our interviews and producing the report over the next couple of months. We will be in touch with you as soon as we have a final product to share.

Appendix C: Taxonomies of Decision and Data Types

[Taken from the technical guidance note for country research teams]

Taxonomy of Decision Types and Decision Routines

With this phase one research, AidData intends to shed light on how leaders from government, civil society and development partners are using development data to make discrete **decisions** about how to allocate, monitor and evaluate development assistance -- or not.

For the purpose of the three country studies, **we define a relevant decision as an active or passive choice made with consequences that affect one or more of the following:**

- allocation or prioritization of resources;
- approval or disapproval of project design or plans;
- adjustments to, or continuation of, strategies, operational plans and/or procedures
- determination of the success or failure of a project;

Decision routines are formal or informal processes within which consequential decisions are made at the national, subnational and organization/agency levels, including:

- Identification of priorities and resources;
- Strategic and operational planning and budgeting;
- Project or activity design, approval and implementation;
- Monitoring and evaluation

A **decision type** refers to categories of grouped decisions at different stages of the policy/program/project cycle. We have developed an initial **taxonomy of decision types** of interest. See Table 1 below.

Table 1: TAXONOMY OF DECISION TYPES

Forecast	projection of future needs, trends or consequences from current or planned actions;
Prioritize	determination of the relative importance of a particular problem, solution, issue;
Design	formulation of a new development strategy, policy, project and/or activity;
Approve	approval or disapproval of a proposed development strategy, policy, project and/or activity;
Plan	means to implement a development strategy, policy, project and/or activity;
Budget	resourcing of a development strategy, policy, project and/or activity;
Site	selection of geographic locations and/or sub-groups of the population which will be involved in, or affected by, a development strategy, policy, project and/or activity;
Monitor	ongoing assessment of how a strategy, policy, project and/or activity is performing and implementation of course corrections;
Evaluate	determination of the success, failure, consequences and lessons learned from the implementing a strategy, policy, project or activity

Country teams should utilize their desk research to shed light on **whether and how data makes its way into each of these decision routines and decision types**. We are also interested in learning more about the data preferences and experiences of two types of people behind these decisions: **decision-makers and decision-influencers**. See Table 2.

Table 2: DECISION ROLES	
Decision-makers	those individuals in a position to make consequential decisions related to development strategies, policies, programs, projects and/or activities.
Decision-influencers	those individuals in a position to inform or influence decision-makers through the provision of data and evidence, moral and political suasion, or other means.

Supply of, and Demand for, [Geocoded] Development Data

In phase one, AidData seeks to capture both a country-level view of how **data** on development investments and results is being used in specific decision-making processes, as well as deeper-dive assessments in two focus sectors per country. While the particular interest of these studies is on **geocoded aid information**, we will consider a broader set of open and proprietary data in order to facilitate the sharing of lessons learned. Table 3 outlines a taxonomy of **data types** -- categories of data at different stages of the policy/program/project cycles -- that we consider to be relevant to this phase one research.

Table 3: TAXONOMY OF DATA TYPES	
Commitments/ Disbursements	pledged versus actual dollars available to be programmed against specific development programs, projects or activities;
Budgets	projected dollars to be spent to support development programs, projects or activities;
Expenditures	actual, or real, dollars spent to support development programs, projects or activities;
R e s u l t s Monitoring	inputs and outputs associated with discrete projects, programs and/or policies (e.g., teachers hired, test scores, graduation rates);
N a t i o n a l Statistics	broad-based outcomes or indicators that are not specific to a given project (e.g., literacy rates, population demographics, GDP growth per capita);
Evaluations	assessments of the intended or unintended outcomes of discrete projects, programs and/or policies

For the purpose of the three country studies, we are also interested in the interplay of several key **attributes of data** with regard to decision-making, including: **source, granularity, accessibility and format**. See Table 4 for a breakdown of these attributes.

Table 4: TAXONOMY OF DATA ATTRIBUTES	
Data source	<p>Categories of data based upon who produces and publishes it:</p> <ul style="list-style-type: none"> • Government (e.g., national statistical agency, other national government agency, subnational government agency) • Multilateral or bilateral aid agency (e.g., World Bank, USAID) • Domestic third-party (e.g., civil society, think tank, or company operating within a single country); • International third-party (e.g., civil society, think tank or company operating within multiple countries)
Data granularity	<p>Categories of data based upon the levels of disaggregation possible:</p> <ul style="list-style-type: none"> • International: data collected and/or report at the aggregate level only for multiple countries without disaggregation; • National: data collected and/or reported at the aggregate level only for an entire country without disaggregation; • Subnational: data collected and/or reported that facilitates various levels of disaggregation within a country (e.g., province, district, town/village)

Data accessibility	<p>Categories of data based upon how easily it is accessed by those who want to use the information:</p> <ul style="list-style-type: none"> ● Proprietary: data which can only be viewed or used by a limited number of people that either pay for this service or work within an organization that produces the data; ● Partly open: data that can be used with limitations; ● Open: data that can be freely used, reused and redistributed by anyone – subject only, at most, to the requirement to attribute and sharealike;
Data format	<p>Categories of data based upon how it is packaged for the end consumer:</p> <ul style="list-style-type: none"> ● Dataset ● Spatial layer ● Interactive dashboard ● Static map or visualization ● Statistic ● Narrative report

Country teams should utilize their desk research to produce a **preliminary analysis of the supply of, and demand for, data for development broadly and within their focus sectors.** We are also interested in learning more about the roles of particular types of people involved with data, including: **data producer, data infomediary and data consumer.** See Table 5.

Table 5: DATA ROLES	
Data producer	An individual or institution that collects, collates and publishes data for their own use or for others.
Data infomediary	An individual or institution that repackages, interprets and/or disseminates data for easier consumption by others.
Data consumer	An individual or institution that uses data produced by others for the purpose of making their own decisions or informing those within their own organization