How To

Desk Review

Digital Agriculture Landscape Assessment Toolkit

JengaLab TechChange DEVELOPMENT GATEWAY An IREX Venture

DESK REVIEW:
DIGITAL AGRICULTURE LANDSCAPE ASSESSMENT TOOLKIT

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TABLE OF CONTENTS

Table of Contents	3
Part 1 : Desk Review	4
Goals for Desk Review	4
Introduction	5
The UNICEF Example	6
How to Conduct a Desk Review	7
Step 1 - Identify Documents	7
Step 2 - Decide What Information Your Looking For	9
Step 3 - Read	11
Step 4 - Write Your Review	11
Tips and Tricks	12
Before Desk Review	12
During Desk Review	12
After Desk Review	12

PART 1: DESK REVIEW

The desk review (also called "document review" or "literature review") is a key step in landscape assessments and a precursor to project implementation and planning. However, reading extensive documentation can be time consuming – especially when you have to hunt for relevant information – and may seem redundant if you don't take good enough notes to reference back to later.

This guide will walk you through some tips and tricks for conducting an efficient desk review *so that:*

1. The team can be sufficiently prepared (and curious!) when it comes time to kickoff interviews.
2. You and your assessment team don't have to spend hours reading and referencing the same lengthy documents over and over again.

Remember, the goal isn't to know everything at this stage, but to merely **start informing your understanding of the data or digital ecosystem** as well as **the decision space driving data use** (or lack thereof!). The desk review should help you understand the overall landscape, and identify aspects that you want to explore in greater detail through conversations (interviews) with key informants.

Goals for Desk Review

1. **Primary goal:** Start structuring **user personas** and **use cases** so that they can be validated through the interview process
2. **Secondary goal:** start to inform your understanding of the **decision space** – or at least the questions you want to ask or assumptions you want to test.
3. **Expected outputs at the end of this process:**
    - Understanding/overview of the context
    - Reference library/literature review
    - Key informant interview guide
4. **Other possible outputs** (that you should always validate with interviews/feedback from stakeholders!):
    - Digital ecosystem map
    - Stakeholder map
    - Digital demand, supply, and use diagrams (especially supply!)

In summary, as you are conducting the review:

- Keep an eye out for anything related to factors of **supply**, **demand**, and **use** in the data or digital ecosystem.

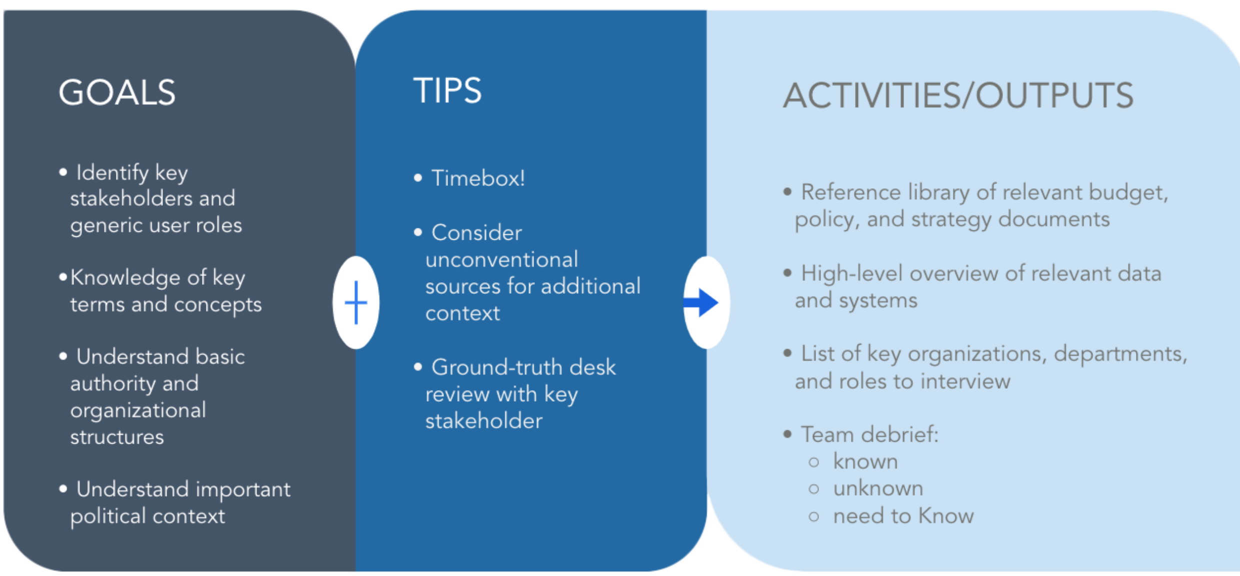
❖ Make note of any evidence to support your project's user analysis (user personas, use cases, user stories, etc.) or stakeholder/ecosystem mapping

❖ The above two points can be accomplished easily through the use of a well-structured literature review or analytical framework.

INTRODUCTION

The primary purpose of the desk review is to identify information from key documents related to the ecosystem (aka "landscape") being assessed. Why these documents? Because the goal is to start to identify:

- The key challenges and priorities for the country or area of focus.
- The institutions that shape the digital landscape (aka "ecosystem"). For example, the users or creators of a given technology.
- The systems and sources that make up that digital landscape (surveys, reports, databases, systems, etc.).



Desk Research Overview from [Updated CALM Methodology]

THE UNICEF EXAMPLE

There are many similarities between UNICEF's approach to Data 4 Children (D4C) action planning and this digital ecosystem assessment methodology. In UNICEF's DIY Landscape Assessment toolkit, UNICEF states that the assessment phase of work (desk review + interviews) should aim to answer the questions in the table below. These questions have been restated to adapt to IFAD's context where relevant:

UNICEF DIY Toolkit:	IFAD - Version:
Sources and quality of **demographic data** *for children*	Sources and quality of demographic data *for smallholder farmers*
A broad overview of **relevant national data systems and structures**, including their adaptability to guide *humanitarian action* in the event of a crisis	A broad overview of **relevant national data and digital systems and structures**, including their adaptability to guide *rapid climate-mitigation response* in the event of a crisis.
An overview of the **key partners** and *UNICEF's* role or **comparative advantage** in priority sectors	An overview of the **key partners** and *IFAD's* role or **comparative advantage**.
Key data needs/demands and gaps, currently and considering how these would change in the event of a *humanitarian crisis*	**Key technology needs/demands and gaps,** currently and considering how these would change in the event of a climate crisis.
Success stories of what is working, could be shared, or could be leveraged in other settings or sectors	
Entry points or opportunities that could be leveraged for greater impact	

From UNICEF DIY Toolkit

Recall that the desk review alone will not give you a comprehensive view of all of the information listed above. Interviews and key informant consultations will also help inform your understanding of the above.

HOW TO CONDUCT A DESK REVIEW

So how do you get the information you need and complete a successful desk review in a reasonable amount of time? **The key is to stay focused and remain aware of your limitations.** You will never cover everything. Your purpose is to identify key documents and key information from those documents related to supply, demand, and use of technology.

- ➔ **Step 1 – Identify** the documents to be included in the review. Make sure to keep an organized list.
- ➔ **Step 2 – Decide** what information you are looking for and identify how you will record this information (either in a Google doc or Google sheet organized into analytical categories). If you think about how you will use these categories to structure the report and the recommendations/ strategic actions and activities, it will make writing the report a lot easier!
- ➔ **Step 3 – Read** or really, skim, most of the documents. Pay special attention to summaries, introductions, and conclusions. Take notes related to supply, demand, and use, staying focused on what is relevant for your assessment.
- ➔ **Step 4 – Write** your review. This should be the easy part if you have organized your notes well. The structure can follow the themes identified in Step 2 with a bit of additional reflection on how the information in these themes fits together.

STEP 1 - IDENTIFY DOCUMENTS

What documents should you include in your review? How will you keep track of these documents? As you go through this first step, remember to stay focused on:

- What outputs need this information? and
- How will you present this information in deliverables?

In other words, think about the analytical outputs of your assessment (stakeholder maps, demand/supply/use diagrams, etc.) and identify resources that you can access from your desk that can start informing some of these outputs.

You may have also been asked to write a desk review document, You can also use this collected information to feed into the sections of your diagnostic report (along with the information you get from conducting interviews) and your eventual recommendations.

→ The time to be thinking about the overarching sections of these outputs is NOW!

Example

Identifying Documents for Desk Review

--> TIP: ***Ask a client, partner, or stakeholder to share key documents with you!*** *If you glance through these documents, they should give you ideas that you can pursue with relevant internet searches to identify additional resources.*

Government Documents:	- National agriculture strategies and development plans - National digital strategies and development plans - National economic development strategies, policies, and plans - Climate change assessments, strategies, and plans - Digital agriculture or agricultural data policies - Government-sponsored programs related to digital agriculture - National monitoring and evaluation plans
IFAD Documents:	- IFAD ICT Strategy - IFAD Country COSOP - Project implementation manuals (PIMs) - Project design reports - President reports - Supervision reports - IFAD-sponsored diagnostics and landscape reports
Other Documents:	- Programs and projects on digital agriculture from other development partners operating in the country - Country-specific academic research and evaluations on digital agriculture - Country-specific (non-academic) research and landscape assessments on digital agriculture - Continental and regional vision documents/ strategies to which the country is a party to - Business registries and networks for digital agriculture providers and agtech solutions - Digital agriculture conferences, expos, marketing events, etc.

As you gather these documents, you will also need to think of a way to keep them organized. Many people find Google sheets very helpful for this. At a minimum, you will want to record the following information:

- Document title
- Author/responsible party
- Date of publication
- Thematic area/sector
    - *Note that organizing documents into separate tabs by sector/topic is helpful for quick references*
- Location within the shared folder(s) and URLs
    - *Note: hyperlinks to locations within shared folders are helpful for quick references*
- The views, annotations, and summarizations of documents
    - If multiple people are working on the literature review, an indication of who is responsible for reading the document and who is responsible for recording relevant information

The above information needs to be recorded during desk review because it will be referred to throughout the assessment process. Organization and classification of these documents will undoubtedly help teams share and take notes, write and reference reports, develop outputs, and design workflows for different members.

STEP 2 - DECIDE *WHAT* INFORMATION YOU ARE LOOKING FOR IN THESE DOCUMENTS AND DETERMINE *HOW* TO RECORD IT

Before you start reviewing the documents, you should decide **what information you are looking for and determine how you will record this information**. For example:

- Are you interested in mapping the digital ecosystem or creating demand, supply, and use diagrams? You probably want to systematically gather information on specific **technologies** or **data sources** during desk review
- Are you interested in mapping stakeholders or tailoring specific recommendations? You probably want to systematically gather information on **user personas and stakeholder groups** during desk review

As you make these decisions, think ahead to the desk review report you will write and how this will fit into the landscape report (that will usually include information from the desk review plus information from the interviews). In addition, evaluate how it will feed into any recommendations or strategic action planning that you will do.

How can you make this work as easy as possible for future you? One tip is to create analytical categories that you will use to 1) first to record information from your documents and 2) to structure your report and recommendations.

You will probably want to create a simplified analytical framework focused on the specific information that you are gathering from these documents. There can (and should) be some overlap between this framework and the analytical framework that you will use to analyze your interviews, but this framework should be much simpler and shorter.
For more information on how to develop an analytical framework based on your desk review, see *Section XX of the Toolkit: Analytical Framework.*

You can vastly simplify the review writing process by determining why you need to create categories to record information and identifying how you will use the collected information.

Example

Writing Your (Desk) Review

You can leverage the UNICEF Lesotho Diagnostic table below to create a data source mapping table for your final report. You may also want to keep track of key stakeholders and institutions that you learn about during your review to help you identify folks to interview.

Government Survey or Report	Custodial Agency	Collection Frequency	Use Cases	UNICEF Support	Data Quality / Trust
Census	BoS	Every ten years	Program baselines, prioritization, and targeting Source for disability data	No	Good; timeliness of publication a challenge
Continuous Multipurpose Household Survey – Household Budget Survey module	BoS	Quarterly	Key deprivations for social assistance targeting	Yes	Good; small survey sample makes it challenging to use for hyper-local targeting
Lesotho Multiple Indicator Cluster Survey (MICS)	BoS	One-time (not regular)[42]	Help address gaps in between LDHS Includes specific questions aimed at filling child data gaps	Yes	To be determined; optimism
Various Population Studies	BoS	Varies	Relevant demographic data	Varies	N/A
National budget and analysis reports	MoF	Annual	Public financial management information	No	Not enough level of detail/ disaggregation about child relevant program spending
Public Expenditure Reviews (PERs)	MoF	Every five years	Public financial management information	Yes	Not enough level of detail/ disaggregation about child relevant program spending
Education Sector Report[43]	MoET	Annual	School enrollment, access, and retention data	No	Timeliness of publication, disaggregation, facility-level quality assurance mechanisms a challenge
National Assessment Survey	MoET[44]	Every four years	Learning outcomes and performance by geographical location	No	Coverage limited to primary schooling

Source: UNICEF Lesotho Diagnostic

You might want to start off by making a list of the main categories of things that you are looking for, refine this list and use it to create headings on a Google sheet. This table can be iterative and change as needed, but it should be created *before* moving on to Step 3. You may also want to include space to record overall priorities and challenges that might shape the digital landscape, etc.

STEP 3 - READ

While you may prefer to spend all day reading the interesting documents you have gathered, you may not have adequate time to do so. Remember to time-box and mostly skim through documents. Pay special attention to summaries, introductions, and conclusions where the 'meat' is found. Focus on words like 'data' and 'digital' or whatever is most relevant to the topic you are investigating.

Take notes related to supply, demand, and use, staying focused on what is relevant for your particular scope and the analytical framework/table that you created. Record relevant use cases, user personas, user journeys wherever possible. This is why it's important to identify the type of information you are looking for before moving onto this step!

As you 'read' your documents, you will record relevant information in the table that you created in Step 2. You may want to keep a separate document open as you read so that you can jot down references to other documents that are mentioned in the documents you review. Then you can specifically search for these documents to add them to your repository.

→ Remember to stay focused and balanced. For example, if you are examining the landscape related to multiple sectors or value chains, you want to make sure you have a bit of information about each of those sectors, and not just a ton of information on one.

STEP 4 - WRITE YOUR REVIEW

This step should be simple if you organized your notes document/analytical framework/Google sheet well. The structure can follow the themes identified in Step 2 with a bit of additional reflection on how the information in those themes fits together.

Example

Writing Your (Desk) Review

This UNICEF Lesotho Report provides a great example of how the desk review fed into the overall report. The country context, institutional priorities, and key data sources were all identified during the desk review and then 'fleshed out' with information gathered from interviews, client comments, and other sources.

TIPS & TRICKS

BEFORE DESK REVIEW:

- Before diving into the readings make sure that you know:
  - 1) *Why* you are reviewing the documents
  - 2) *What* information you are looking for
  - 2) *How* this information will be used in your deliverables
- The depth of the desk research will depend on the project timeline. Remember, you are not supposed to know everything from the desk review and you should **prioiritize leaving ample time and budget for non-desk review activities** such as interviews, analysis, validation, report drafting, and finalization.

DURING DESK REVIEW:

- **Keep thinking about the use case of your assessment – what will the primary audience of this assessment find useful?**
- Limit your time and move quickly:
  - Be sure to timebox appropriately and avoid rabbit holes, both when searching online and when “reading.”
  - Stay focused on key information and feel free to skip anything thats not immediately relevant to the scope of your assessment.
  - Use the search function, tables of contents, indices, appendices, and references to go through long documents and hone in on words or topics of interest.
- Only record information that is relevant to the literature review/analytical framework or the learning questions that you and your team agreed on (unless you have a case for including an additional question or column – then of course share your idea with the team!)

AFTER DESK REVIEW:

- Huddle with your assessment team to determine what is known/unknown and use this understanding to shape your kickoff conversations and interview guides.
  - For more on how to tailor your interview guides, see *Section XX: Interview Guides*
- **Ground-truth your desk research findings with a key stakeholder or partner before conducting interviews, to ensure that you have not misinterpreted or misunderstood the context.** Test your assumptions and be honest about what you still do not know - use this as an opportunity to shape additional data collection such as interviews or validation exercises.

RESOURCES FOR LEARNING MORE

[Assessment Action]
[WHO Desk Review of Data Quality]

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