

Data and digital solutions for identifying the
poor and eradicating poverty

UNECA, Addis Ababa

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The importance of data in identifying those in poverty



- Who and how many people are living in poverty?
- Who are those pushed back to extreme poverty or experiencing increasing inequality, marginalisation and exclusion?
- Humanitarian context: use data to respond appropriately to any crisis, address needs, and plan better for recovery.
- Development context: Make policy and resource allocation decisions. Crucial for planning, management, and monitoring the effectiveness and efficiency of public service delivery.



Meaningful data

- Relevant
- Reliable
- Preferably real (or near real time)
- Disaggregated data
- Inclusive – Involve affected communities along the data value chain right from the design of data collection instrument to the actual data collection, analysis, and use?



Is there dearth of data?

In DI's experience, we find little evidence to indicate there is a dearth of data.

But,

Scattered everywhere - sitting in different departments and agencies of government institutions. Non-state actors also have data.

One source of data may not provide different perspectives, details, nuanced perspectives (for example disability data).

An example from Kenya's disability data



An inventory of disability data sources that have been published over the last 10 years.

Table 1: Category of disability data publications (2011-2022)

Data category	Number of disability data publications
Official survey data	15
Non-official survey data	8
Official administrative data	7
Mixed official (survey, census and administrative)	7
Official qualitative data	2
Non-official qualitative data	2
Non-official administrative data	2
Official census data	1

Challenges of data relevant to those in poverty



Especially at sub-national level,

- Paper based
- Limited use of data in decision making (non-interoperability or/and inaccessibility)
- Weak administrative data systems
- Limited statistical capacity building
- Rapidly changing, costly and complex ICT infrastructure
- Over-reliance on external funding for some statistical programmes
- Limited exploitation of non-traditional data sources

Challenges in disability data – an example from Keya



- Lack of open source policies
 - E.g., The case of KNBS vs., NCPWD
 - Access to the NEMIS
- Underfunding of data collection - no budget lines for disability data related activities
- Data collection is made a costly exercise.
 - E.g., KNBS vs. an OPD

Practical steps for a better data ecosystem

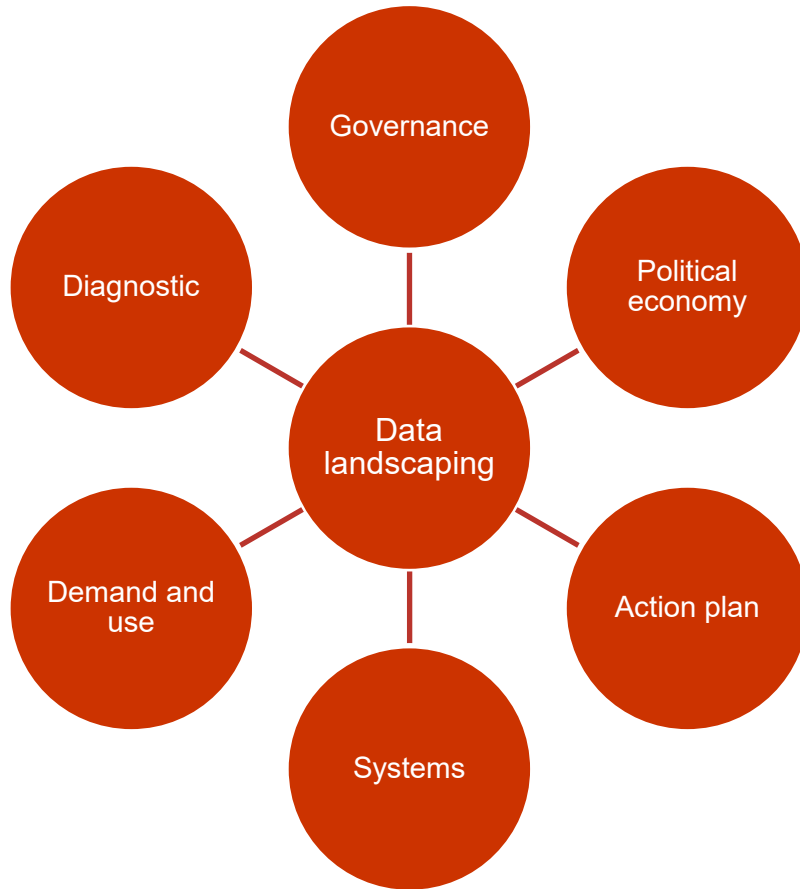


- Data landscaping
- Joining-up datasets
- Supporting data systems



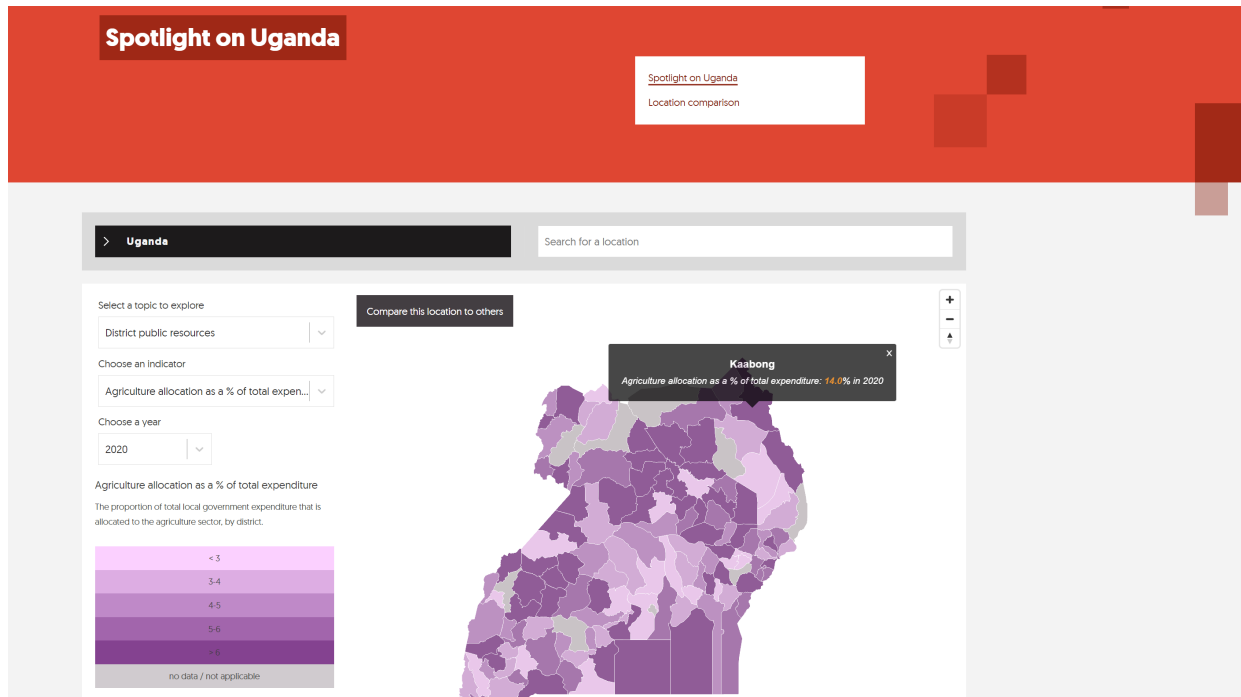
I. Data landscaping

Data diagnostics



	A	B	C	D	E	F	G	H
	Name		Lowest level of disaggregation	Other types of disaggregation	Year of most recent publication	Collecting organisation/s	Supporting organisation/s	Methodology
1	Description							
2	National Office of Statistics (NSO)							
3								
4								
5	Non-NSO surveys							
6								
7								
8	Administrative data systems							
9								
10								
11	Registries							
12								
13								

II. Joined-up datasets



Spotlight on Uganda

Release date: 22 September 2020

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- Health_Uganda.xlsx - XLSX 181.4kB
- Poverty and vulnerability_Uganda.xlsx - XLSX 115.3kB
- Education_Uganda.xlsx - XLSX 442.2kB
- District public resources_Uganda.xlsx - XLSX 299.3kB
- Water and sanitation_Uganda.xlsx - XLSX 142.5kB
- Public finance_Uganda.xlsx - XLSX 8.8MB

XLS files contain the dataset, metadata and charts / images
CSV files contain the raw dataset



III. Data systems

- Need for improved data governance, including promoting supportive policies, processes, and government structures to enable data use.
- E.g., To strengthen sub-national data value chains in Uganda:
 - co-create micro-examples of good data systems suited to different sub-national governance structures that address gaps across the whole data value-chain.
 - identify good practices and appropriate entry-points that provide the greatest impact in data uptake and use.
 - determine the most cost-effective way of building sustainable data systems to support sub-national level.

Welcome to the Kayunga Open Data Hub

The Home of Kayunga District Open Data

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Digital solutions in identifying those in poverty and eradicating poverty



What do we mean by digital solutions?

- Digital solutions = digital transformation
- Transformation of existing analogue processes (primarily within public administration) to digital processes
- Digital data capture at the point of service delivery (in particular health facilities, schools and civil registry offices)
- Digitisation of foundational systems
- Building national and sub-national e-government infrastructure

Digital data collection



- Africa's overriding priority for digital transformation is digital data collection and with digital data collection MUST come use of that data at point of entry and in local governments.
- The data should come from health facilities, schools, registry offices, local planning departments, water utilities, and district agriculture extension officers, among others.
- Increase data collection at source as rapidly as possible.
- Currently,
 - incomplete
 - collected at source on paper (being digitised further up the data chain)
 - collected on a need-by-need basis.

Digitisation of foundational systems

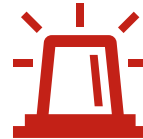


- Another digital solution is digital civil registration and vital statistics (CRVS) - critical for the vulnerability and poverty data ecosystem.
- Data systems which interlink with the provision of and access to social protection services.
- Help to identify people in need, and to understand what their needs are. Example from Uganda: vital statistics are not produced using data from civil registration systems rather the national statistics office collects, compiles and disseminates vital statistics from decennial population censuses and household surveys.
- Use of national identification numbers (NIN).

Is Artificial Intelligence (AI) a priority in Africa?



AI could have a transformative impact for good but,



AI relies on large sets of data: Data captured in a child's birth registration, a patient's health record and a pupil's progress through school are the kinds of inputs needed for machine learning to develop useful algorithms.

- Lack of foundation: timely, sufficient quantity and quality, inclusive and joined-up data
 - Lack of clarity on data collection
 - Implicit data biases along gender lines
 - Potential private sector use of model outputs: Without access to public data and minimal government input, these projects often start with 'what problems can be solved', rather than 'what problems need to be solved'.
- In short, hasty adoption of cutting-edge technology will likely exacerbate inequalities

Deprioritise radical AI in Africa



These days, new data science challenge is launched every other day by donors who appear not to grasp the fact that the data needed for AI to work comes from the very systems that artificial intelligence wants to replace.

In general, the idea that technological innovation that exploits big data as the solution to low-income countries' data problems is a dangerous concept.

Identify public data gaps, barriers to data use and models for improving data that does exist. This is not a quick fix, but it will deliver sustainable solutions for more effective AI-ready data systems in future.



Thank you!
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