

Delivering on a Data Revolution in Sub-Saharan Africa

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Why Data, Why Now?

Governments, international institutions, and donors need good data on basic development metrics to plan, budget, and evaluate their activities. To be valuable, such data must be accurate, timely, disaggregated, and widely available. Statistical systems that work to improve policy and enhance accountability allow all stakeholders to freely exchange high-quality data to ensure that funding and development efforts are working.

Nowhere is the need for better data more urgent than in sub-Saharan Africa.

There have been gains in the frequency and quality of censuses and household surveys,¹ but the building blocks of national

statistical systems in sub-Saharan Africa remain weak. These building blocks, fundamental to the calculation of almost any major economic or social welfare indicator, include data on births and deaths, growth and poverty, taxes and trade, land and the environment, and sickness, schooling, and safety. The World Bank's former chief economist for Africa describes the challenge:

Estimates of poverty represent robust statistics for only 39 countries for which we have internationally comparable estimates [in 2005]. And they are not even comparable over the same year. Only 11 African countries have comparable data for the same year. For the others, we need to extrapolate to 2005, sometimes (as in the case of Botswana) from as far back as 1993.²

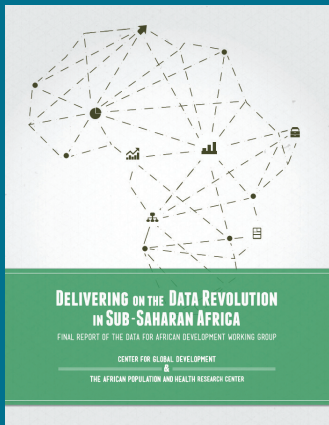
1. More than 80 percent of countries in Africa conducted a census between 2005 and 2014, according to the UN Stats (<http://bit.ly/UGezKV>). For an evaluation of the International Household Survey Network and Accelerated Data Program, see Anne Thomson, Graham Eele, and Felix Schmieding, *Independent Evaluation of the International Household Survey Network*

(*IHSN*) and *Accelerated Data Program (ADP)*, (Oxford: Oxford Policy Management, 2013), <http://bit.ly/1nzzpDT>.

2. Shanta Devarajan, "Africa's Statistical Tragedy," *Africa Can End Poverty Blog*, October 6, 2011, <http://bit.ly/1pxSR5g>.

Summary

Despite improvements in censuses and household surveys, the building blocks of national statistical systems in sub-Saharan Africa remain weak. Measurement of fundamentals such as births and deaths, growth and poverty, taxes and trade, land and the environment, and sickness, schooling, and safety is shaky at best. The challenges are fourfold: (1) national statistics offices have limited independence and unstable budgets, (2) misaligned incentives encourage the production of inaccurate data, (3) donor priorities dominate national priorities, and (4) access to and usability of data are limited. The Data for African Development Working Group's recommendations for reaping the benefits of a data revolution in Africa fall into three categories: (1) fund more and fund differently, (2) build institutions that can produce accurate, unbiased data, and (3) prioritize the core attributes of data building blocks.



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The nascent post-2015 UN development agenda is generating momentum for a worldwide data revolution and is highlighting the need for better development data in Africa and elsewhere. But the early efforts focused on collecting more data, not necessarily better data, may divert attention from the underlying problems surrounding the production, analysis, and use of basic data that have inhibited progress so far.

Often these problems are not merely technical but the result of implicit and explicit incentives and systemic challenges. Both donors and countries need to take truly revolutionary steps to address the core problems underlying bad data in the region.

The Challenges of Data Collection and Use in Africa

The working group identified four main obstacles to greater progress on data in Africa:

1. National statistics offices have limited independence and unstable budgets.
2. Misaligned incentives encourage the production of inaccurate data.
3. Donor priorities dominate national priorities.
4. Access to and usability of data are limited.

All challenges must be addressed to make progress.

Challenge 1: National Statistics Offices Have Limited Independence and Unstable Budgets

National statistics offices (NSOs) are the backbone of data production and management in most African countries; they produce official statistics and support data activities at other national agencies to create accurate and timely data for decision making. NSOs must be able to produce reliable, accurate, and unbiased statistics that are protected from outside influence. Most NSOs in Africa, however, are constrained by budget instability and a lack of autonomy that leave them vulnerable to political and interest-group pressures. Indeed, budget limitations and constraints on capacity are two of the most frequently cited reasons for lack of progress on statistical capacity in sub-Saharan African countries.

Of the 54 member countries of the African Union, only 12 are considered to have an autonomous NSO according to Regional Strategic Framework for Statistical Capacity Building in Africa (2010).³ In the remaining 41 countries, statistics fall under the jurisdiction of another government ministry. NSOs that lack autonomy often do not manage their own budgets and receive little government funding. They must therefore rely on donors to fulfill even their most basic functions. In many countries, nearly all core data collection activities are funded primarily by external sources.⁴ Without functional autonomy and predictable national funding of NSOs, other efforts to address data systems challenges in Africa are not likely to succeed.

Challenge 2: Misaligned Incentives Encourage the Production of Inaccurate Data

Discrepancies between administrative data and household survey-based estimates in education, agriculture, health, and poverty mean that many internationally published numbers are inaccurate. In many low-income countries, for example, local units have an incentive to exaggerate school enrollment when central government and outside funders connect data to financing. It is hard to insulate data from politics. The development of intrinsic and extrinsic checks can systematically avoid the resulting data inaccuracies.

These and other challenges related to incentives and funding are often rooted in conflicting objectives between donors and countries. International donors use data to inform allocation decisions across countries while governments use data to make budgetary decisions at more micro levels. Similar tensions also exist within countries, between the national and local levels of government. This difference affects the demand for and use of data. In some African countries, it contributes to inaccuracies in the data published by national and international agencies.

3. The 12 countries are Angola, Burkina Faso, Cape Verde, Chad, Egypt, Ethiopia, Liberia, Mauritius, Mozambique, Rwanda, Tanzania, and Uganda.

4. Morten Jerven, *Poor Numbers: How We Are Misled by African Development Statistics and What to Do about It* (Ithaca, NY: Cornell University Press, 2013).

Challenge 3: Donor Priorities Dominate National Priorities

Donors routinely spend millions for micro-oriented survey fieldwork and one-off impact evaluations. These ad hoc donor-funded projects generate significant revenue for statistics offices and individual NSO staff. Increasing take-home pay by chasing donor-funded per diems via workshop attendance, training, and survey fieldwork is the order of the day. As a result, statistical systems lack incentives to improve national statistics capacity or prioritize national data building blocks, leaving core statistical products such as vital statistics and land registries uncollected for years.

Challenge 4: Access to and Usability of Data Are Limited

Even the best, most accurate data is useless if it is not accessible to governments, policymakers, civil society, and others in a usable format. Many NSOs and other government departments are hesitant to publish their data, lack the capacity to publish and manage data according to international best practices, or do not understand what data users want and how to get that information to them.⁵ These problems are critical because more open data is required to improve or inform policies and to hold governments and donors accountable.

The Way Forward: Actions for Governments, Donors, and Civil Society

Action around a data revolution in Africa should begin by addressing the underlying problems surrounding the building blocks of national statistical systems, including their production, analysis, and use. These changes must be initiated and led inside governments, but donors and local civil society groups also have a major role to play. The data revolution must help modify the relationship between donors, governments, and the producers of statistics and work in harmony with national statistical priorities.

The following recommendations for action directly address one or more of the problems outlined here. Taken together, they can help build a solid foundation for a true data revolution that can be led and sustained in the region.

Fund More and Fund Differently

Current funding for statistical systems and NSOs is not only insufficient but structured in ways that do not help produce and disclose accurate, timely, and relevant data, particularly on the building blocks. The working group identified three strategies for donors and governments to fund more and differently that will better support national statistical systems:

- **Reduce donor dependency and fund NSO more from national budgets.** African governments should allocate more domestic funding to their NSO and statistical systems to smooth spending, maintain teams, and enhance independence. Ideally, governments would allocate a significant share of the required funding, barring unusual fiscal or other demands in a particular year. Where more creative mechanisms are needed, governments might consider routine allocation of a share of sectoral spending to be tied to national strategies for the development of statistics (NSDS) activities—1 percent for data, for example, or a “data surcharge” added to any donor project to fund the public good of data building blocks.
- **Mobilize more donor funding through government-donor compacts and experiment with pay-for-performance agreements.** Governments should press for more donor funding of national statistical systems, using a funding modality, or data compact, that creates incentives for greater progress and investment in good data. A pay-for-performance agreement could link funding directly to progress on improving the coverage, accuracy, and openness of core statistical products.

5. Lynn Woolfrey, “Leveraging Data in African Countries: Curating Government Microdata for Research,” DataFirst Technical Paper 22, University of Cape Town, 2013, <http://bit.ly/1iBMMVx>.

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- **Demonstrate the value of building block statistics** by generating high-level agreement by national governments and donors to prioritize national statistical systems and the principles for their support. Efforts may also include greater support to civil society to elevate the importance of national statistics and hold policymakers accountable for progress.

Build Institutions That Can Produce Accurate, Unbiased Data

Many of the political economy problems are related to political and interest-group influence or rigid procedures in civil service and government administration that limit the ability to attract and retain qualified staff. However, governments cannot be afforded greater autonomy without greater accountability for more and better data. With these issues in mind, the working group recommends the following actions:

- **Enhance functional autonomy** such that NSOs function independently of government sectoral ministries and are given greater independence from political influence. These efforts, as well as those to operationalize legislation already in existence, should be increasingly supported through existing programs and initiatives to support statistical capacity.
- **Experiment with new institutional models**, such as public-private partnerships or crowdsourcing to collect hard-to-obtain data or outsourcing data collection activities. Such models would support increased functional and financial autonomy while retaining, if not increasing, NSO accountability to stakeholders. Public-private partnerships in high-income countries have been shown to generate demand and increase access to open data.⁶

Prioritize the Core Attributes of Data Building Blocks: Accuracy, Timeliness, Relevance, and Availability

Although 80 percent of African countries conducted a census in the past decade, Africa still invests too little in the building blocks of data, and in some cases political economy challenges distort the data. Future efforts should prioritize funding and technical assistance to strengthen the core attributes of data building blocks.

- Build quality control mechanisms into data collection to improve accuracy. Many of the challenges relating to misaligned incentives can be mitigated by having NSOs provide support, oversight, and quality control over data collection and analysis from other government agencies. The sectoral assessment framework of Stats South Africa, for example, provides improvement plans for government agencies and departments that produce data and evaluates data quality on a number of indicators.⁷ Better use of technology may also help address this issue.
- Encourage open data. National governments and donors should release all non-confidential, publishable data, including meta-data, in a machine-readable, analysis-ready format. The African Development Bank and World Bank should expand their lending to support statistical capacity building and leverage open data policies.
- Monitor progress and generate accountability. Civil society organizations, including think tanks, and nongovernmental organizations should monitor the progress of both donors and governments in improving data quality and evaluating for discrepancies—and hold both accountable for results.

6. Joel Gurin, "Report from London's Open Data Institute," *Open-Data Now* (blog), July 26, 2013, <http://bit.ly/1yJdCvWF>.

7. Pali Lehohla, *South African Statistical Quality Assessment Framework (SASQAF) Operational Standards and Guidelines* (Pretoria, South Africa: Statistics South Africa, 2010). <http://bit.ly/1rubPLc>.