

Adventures in the Data Revolution: Collecting Ugandan Data

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In the first of a three-part feature, Bill Anderson and Bernard Sabiti share the challenges of data collection in rural Uganda.

Here at [Development Initiatives](#) and [Development Research and Training](#) (DRT) we are currently piloting a 'Joined-Up Data' study in Uganda. We have been working in the rural districts of Kitgum and Katakwi, following the emergence of two issues: (1) the really bad results of students completing primary education, and (2) the unacceptably high number of women still dying in childbirth. Our challenge: can we produce information to throw light on these problems and influence the way in which they are tackled by district officials and community-based organisations?

At the outset we approached this project largely as a design and communications problem: how were we going to join up data that we could present in an easily accessible format to local stakeholders?

As our [baseline study highlighted](#), we first needed to come to terms with the physical infrastructure; not the lack of it, but its volatile nature. To give you an example, we started by looking for the latest school enrolment figures and spoke on the phone to the Katakwi District Education Officer. She had the data in front of her, but no internet connection. She offered to drive 60km to the neighbouring town of Soroti to send us an email. We persuaded her not to, and she dictated a spreadsheet of data, over the phone, for all 74 primary schools under her jurisdiction.

Uganda does not operate in the dark ages; most district towns have access to electricity, internet, computers, and information systems. These services just don't work all the time. The problem we face is one of managing functional modern systems on dysfunctional modern infrastructures. This is a central part of the landscape, not a temporary irritant.

On our first field trip to Katakwi and Kitgum we set about randomly collecting data to get an idea of what was available. In every school, clinic and office officials provided us with electronic and paper snippets of budgets, school results, clinic performance, and demographic data. We thought we had discovered hidden treasure, and back in Kampala we set about making sense of it all. This was hard work. We had data from schools, clinics, parishes, and sub-counties. Different aggregations didn't join up. Reporting periods didn't sync. It was as if we were peering into a room through a shattered piece of dirty glass and seeing a partial and distorted picture.

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It took us a while to realise that what lies inside this room is indeed an untapped goldmine: there is a lot of good quality development data in Uganda.

The Ministry of Finance, through its [budget website](#) provides large amounts of sub-district data on revenues, expenditure, administration and performance.

- Every school feeds data into the Education Management Information System (EMIS).
- Every clinic provides monthly performance data into the Health Management Information System (HMIS).
- The collection of data by the [Uganda Bureau of Statistics](#) (UBOS) in the [recent census](#) is believed to have been extremely successful, particularly in rural areas.
- UBOS is also piloting its groundbreaking [Community Information System](#) – but unfortunately not in our districts.

The problem is that much of this data is not publicly available and none of it is available in an easy-to-use electronic format. The government is not deliberately ‘untransparent’. It is keen that its data is properly used – perhaps, even, overly worried about its misuse – and shares it with anyone who can formally present a case for how they intend to use it. The challenge is to show these ministries the value of their data being used more widely.

So without these formal agreements in place we needed to jump through hoops. Here is a taster of how we built our first joined-up picture on primary school results:

2014 school results are available from the autonomous [Uganda National Examination Board](#) (UNEB), but they cost a lot of money – 200,000 Ugandan shillings (US\$70) per year per district. There are 112 districts! Through delicate persuasion of a contact of a contact in the Ministry of Education, we were able to obtain a 15,000-page pdf document containing final-year results for the entire country.

- School enrolment figures are available in the EMIS, but we had no access. The district education officers shared this data with us.
- School budgets (recurrent and development) are available in a pdf from the budget website.
- The number of teachers employed in each school is also available from budget work plans on this site.
- Parish-level demographic data from the 2014 census was shared with us ‘unofficially’ by a UBOS employee.
- And to visualise all this data at parish level we needed the latest geographic shape files – which UBOS is currently revising and for which we are waiting patiently.

What did all this teach us? That collection of data is not an a priori in this narrative. It is an essential element of the main story.

Many thanks to [Bill Anderson](#) and [Bernard Sabiti](#) for sharing their insights into data access in Uganda. The ‘Adventures in the Data Revolution’ is a three-part blog series exploring the challenges of data use in Uganda. The lessons raised here are drawn from the experience of Development Initiatives and Development Research and Training (DRT) in piloting a ‘Joined-Up Data’ study in Uganda. The study, which is taking place in Uganda’s Katakwi and Kitgum districts, is comparing links between sub-national and national data for spending on agriculture, education and health. The project is funded through the [Bill & Melinda Gates Foundation](#)’s [Grand Challenges Explorations](#) “Using Data for Impact in Uganda Communities.”