2009

Demographic Data for Development: Uganda

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Recommended Citation

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UGANDA

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I. INTRODUCTION

A recent increase in decentralization and democratization in developing countries has expanded the role that data plays in informing policies and measuring program results. Increasingly, programs and policies are being assessed by their ability to reach goals that have evidence-based indicators. This growing focus on evidence places greater and greater demand on those who generate clear, timely, reliable, and relevant data. In an effort to strengthen data, initiatives around the globe, such as PARIS21 and Health Metrics Network, have been designed to increase access to and use of data by harmonizing measures, providing technical support in data collection, and increasing the dialogue between data producers and users.

This report presents the Uganda findings of a qualitative study simultaneously conducted in Ethiopia, Ghana, and Senegal. The case studies aimed to develop a picture of the demand for data, access to data, quality of available data, and the perceived supply and demand for demographic data in the four countries. These countries were chosen based on their upcoming census, identified statistical capacity within country, active engagement in the production of important data, and participation in many international data initiatives. The emphasis of the studies was on four types of datasets: Population Censuses, National Household Surveys, Service (Education and Health) Use Statistics, and Budget Data.

This case study sought the views of a broad range of from individuals, policymakers, data producers, and data consumers, many of whom occupy multiple roles in government and non-profit agencies. Some of the entities interviewed are in a position to make use of data (media or civil society organizations), but may not necessarily produce data themselves, or even make use of primary data. In addition to government efforts, international partners are also involved in data efforts in-country that reflect their programmatic interests; these data may therefore be used by those with an interest in either the partner's agenda, or the topics addressed by the data. The discussion that follows seeks to represent the multifaceted views of those interviewed, and assess the lessons that can be learned from the opinions and anecdotes that they shared.

Country Context

Uganda has a population of 28.3 million (2007)[1] spread over 236,040 square kilometers. The population is composed of more than 40 distinct ethnicities, which are classified according to their linguistic similarities[2]. It is estimated that 85-87%[3] of the population lives in rural areas; of the urban population, 1.5 million[4] people live in the capital city Kampala, eight times more than the population of the second largest city, Jinja. Uganda's economy has grown at an average rate

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[1] UNFPA – Uganda. 2007. State of Uganda Population Report 2007.
[2] http://countrystudies.us/uganda/21.htm
[3] http://www.ruralpovertyportal.org/english/regions/africa/eth/index.htm;
http://www.unicef.org/infobycountry/uganda_statistics.html; http://devdata.worldbank.org/AAG/uga_aag.pdf
[4] http://www.citypopulation.de/Uganda.html

of 7.9% over the past five years; GDP grew by 8.9% during the 2007/08[5] fiscal year. However, with more than 31%[6] of the population living below the poverty line, poverty remains a problem.

The increased emphases on programs for poverty reduction and improved development have highlighted the need for data to identify development needs, and to assess the progress of new initiatives. For example, Uganda's long-term poverty eradication strategy, the National Poverty Eradication Action Plan (PEAP), has had a considerable effect on the demand for data. PEAP was developed in 1997 in an effort to reduce the levels of poverty in Uganda, and usher the country into middle-income status by 2025, through planning and investment in physical infrastructure and human resources.

The progress of PEAP and other national and international poverty-eradication strategies is monitored through the National Statistical System (NSS). The NSS was created in 1998 to serve as an umbrella body for all government agencies that collect statistics through formal surveys or administrative actions. It is maintained by the Uganda Bureau of Statistics (UBOS), which ensures the timely collection and analysis of economic and demographic statistics by coordinating, monitoring, and harmonizing all government data production efforts. The main sources of data are the census (last conducted in 2002); the Demographic Health Survey (most recently in 2006); and the National Household Survey (NHS), which was last carried out in 2006. Despite these data activities, however, it is not always the case that data are available when needed, or used when available.

II. DEMAND FOR DATA

One of the primary objectives of this study was to gather and assess the views of data producers and consumers on the level, nature and impediments to the existing and potential demand for socio-economic data.

Perception of Growth in Demand for Data

There was general consensus among both the consumers and producers of data who participated in this study that Ugandan demand for data has recently increased and will continue to increase in the foreseeable future. Both groups largely attribute this growth in demand to a heightened awareness among the different categories of data consumers for evidence-based policy formulation and decision-making. Technocrats– both in government and outside government – also observed that it is now standard practice for funders (both government and development partners/donors) to demand concrete evidence to justify any planned interventions, or to show the outcomes of money spent on implemented interventions/activities.

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[5] Ministry of Finance, Planning, and Economic Development. 2008. Background to the Budget 2008/09 Fiscal Year.
[6] UBOS. 2006. Uganda national Household Survey 2005/06: Report on the Social Economic Module.

Besides increased general awareness, rising data demand was also attributed to a number of other national-level factors. Some of the study participants noted that, under PEAP, government has set a number of development targets across all sectors whose progress has to be continuously monitored. In this respect, the PEAP document spells out key sector-specific indicators for which routine data must be routinely collected either through administrative records such as the Health Management Information System (HMIS) or through periodic surveys such as the Uganda National Household Survey (UNHS). The Millennium Development Goals (MDGs) were also reported as a contributing factor to the rising demand for data. Some study participants observed that most of the MDGs are similar to the PEAP goals, enabling simultaneous data collection for both programs. A few study participants also observed that Uganda's status as a signatory to several international conventions and declarations has also increased the demand for data. However, while there was a general consensus among the respondents regarding the increased demand for data, it was not possible to quantify the increase.

Source of Demand

Demand for data was reported to emanate from many sources and at different levels. The main sources of data demand include government sectors and departments, local governments, NGOs, development partners, and local and international researchers/academicians. On the whole, however, most of the data generated by the national statistical office and other national information systems was said to be mainly consumed by government ministries. Data from the NHS is mostly demanded by the Ministry of Finance, Planning and Economic Development, primarily for monitoring poverty levels. On the other hand, data from the Health Management Information System (HMIS) and the Education Management Information System (EMIS) are mostly demanded and used by the Ministry of Health and the Ministry of Education. Beyond internal use, data from the Ministries (service use statistics) are mostly demanded by the President's Office, Parliament, and development partners. Many government technocrats noted that the President, in particular, is an ardent consumer of demographic data. A ministry of Health official observed as follows,

"We have a directive to inform the President if a mother dies during child birth or pregnancy. He must be informed. So we are now putting death review committees at hospitals to inform us of the causes of every maternal death occurring at these facilities."

Outside the Ministry of Finance, demand for budget data mostly comes from development partners; but also from advocacy groups (NGOs), a few research institutions, and Parliament, which has an office for budget research and analysis. On the other hand, demand for census and survey data is more widespread across various categories of consumers. Data produced by UBOS is consumed by everyone including government ministries and departments, NGOs, development partners, researchers and media houses.

In general, it was noted (by both the producers and consumers of data) that the majority of data consumers demand summarized data rather than micro-data. Data consumers across the board are content to have the data producers carry out all the analysis on their behalf, so demand for micro-data is mostly from researchers and academicians (both local and foreign).

Impediments to demand

Impediments to demand for data are from both the demand and supply sides. Cited demand side impediments include lack of awareness of data available for public access, limited knowledge on how to access existing data, limited capacity to manage/analyze data, and limited (although increasing) appreciation of the utility of data, particularly secondary. Some respondents also observed a national tendency to collect primary data even when there is sufficient secondary data available to address a research issue.

On the supply side, data producers other than UBOS reportedly do not make much of an effort to inform potential data consumers of the availability of the datasets and their accessibility. Some of the limited data sharing is attributed to the fact that most organizations, including Ministries, equate the dissemination of findings in the form of summary reports with the dissemination of datasets. One NGO, for example, complained that it has been trying to access detailed data on Uganda's external debt stock but has only been able to obtain gross figures. Other data producers do not share their data because they fear its misuse and misinterpretation, considering the limited data management and analysis capacities of most potential consumers. Several data producers also raised ethical concerns in regards to respondent confidentiality and unclear data ownership (between producer and funder) as additional constraints to data sharing.

III. SUPPLY

Availability and Accessibility of Data

UBOS conducts population and housing censuses every ten years, and a National Household (standards of living) Survey[7] every two years, in addition to a number of other equally important data collection activities such as the Demographic Health Survey (DHS). Ministries, and other Government departments and agencies also routinely collect data and maintain their own information systems such as HMIS and EMIS. HMIS data is collected administratively at health facilities at communal levels, and then forwarded to district health offices. The districts then forward the amalgamated data (in hard copies) to the Ministry of Health Resource Centre for

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[7] Uganda National Household Surveys are primarily used to collect socio-economic data required for measurement of human development and monitoring social goals with special reference to the measurement of poverty under the Poverty Eradication Action Plan (PEAP) and Millennium Development Goals (MDGs).

entry into the central system, validation and analysis, so that the results can be shared with the districts and also disseminated to interested stakeholders. The EMIS data is collected through an annual Education Census conducted at the beginning of every year whereby head teachers complete (in triplicate) self-administered questionnaires aimed at mining data on the schools. One copy of the questionnaire is supposed to be retained by the school for internal use, one is retained by the district, and one is forwarded to the Ministry of Education. Budget data, on the other hand, is generated from Budget Framework Papers developed by the districts – through a consultative bottom-up data gathering process – and data from the various line ministries and government agencies such as the Bank of Uganda.

Data producers who were interviewed for this study claimed that their data is readily available and accessible to consumers free of charge; potential consumers just had to express their need in writing. They also pointed to websites as well as public libraries/resource centers as places where summarized data can easily be accessed in form of reports. Census data, in particular, can be analyzed online through the Integrated Management Information System (IMIS). However, data consumer interviewees were divided on the issue of accessibility of existing data. All government officials, parliamentarians and institutions that have partnerships or established links with data producers (say in terms of funding or provision of technical support) reported that these datasets are readily accessible to them. Closer scrutiny, however, revealed that even with access to the datasets, these entities just access the summarized data, and rarely undertook the analysis themselves. On the other hand, organizations that did not have any type of collaboration with the data producers held the opinion that the national datasets are not readily accessible, as a director of a renowned research institution asserted:,

"They (data producers) have a lukewarm attitude towards releasing data; yet publicly they give a different perception. ...But also, it may be due to cultural attitudes; we seem to fear criticism, we fear to be scrutinized because it may work against us".

This apparent contradiction between various data producers and consumers regarding data accessibility is most likely a result of some of the demand- and supply-side impediments that have already been highlighted.

Quality of Data

Both data producers and consumers were asked whether they had any concerns regarding the quality of available data. Most of the key respondents perceived census data and national household survey data as of good quality, aside from concerns with timeliness, especially in regards to the release of census data. Furthermore, a few respondents, who admittedly have never accessed and analyzed these datasets themselves, doubted their reliability, arguing that some of the published statistics on factors such as poverty levels are in sharp contrast with the reality on the ground. For similar reasons, most consumers of the service-use (health and education) statistics cast doubt on the reliability of data that is administratively collected (through HMIS

and EMIS); they revealed that they mostly rely on data from the DHS and the NHS. Respondents cited several examples of glaring problems encountered in using administrative service use data, such as reported primary completion rates and enrollment rates of over 100% in parts of the country with high school dropout and non-attendance rates. Poor quality of administrative data was largely attributed to poorly trained, unmotivated and poorly supervised personnel tasked with collecting and processing the data. Administrative data is also sometimes deliberately falsified in order to attract more financial resources from government:

*"We do get data sometimes that we feel is laughing in our face; like vaccination coverage of 200 and something percent. People, of course, have to come up with explanations as to why that are so, but you know that such a figure is far out of the way and it should not be… It shows that people who are collecting the data are not using it; they are just like data clerks. In my opinion, the computer is being used like a waste paper basket – they just throw in, they don't look at it again and therefore they never get to know that they have garbage in there." (**Development Partner**)*

Producers of administrative data admitted that their data has some problems but contended that the problems are not significant enough to render the data unusable. They revealed that administrative data is usually incomplete because it does not adequately capture service-use statistics from the private sector. For example, many private schools do not respond to the self-administered questionnaires in the Annual Education Census through which EMIS data is collected. Similarly, there is no proper information flow mechanisms between private health facilities and the Ministry of Health, thus HMIS does not capture service-use data from private providers. It was further pointed out that discrepancies between administrative and survey data arise as a result of differences in operational definitions when collecting the data. At the same time, the line ministries and districts are unable to provide adequate financial support and supervision to local data collectors.

*"When we travel to more rural districts like in Teso and Karamoja they say: look, we do not have transport to go and check out the health centre III and IIs; we just have to take what they give us. We cannot even go to see if they are doing things right. In Teso, I think that was in Amuria, they told me some Health centre IIs have computers but nobody knows how to use them, they have no money to go and give them some support to learn how to enter data on the computer. The man told me, I think that was in Kaberamaido, they had a budget of only 150,000/= (about US$90) for everything including stationery and so on for HMIS for a whole year. I could not believe it because it is not enough even for the town alone let alone going down to the lower level. So every time you are there they are asking for paper, they are asking for motorcycles. They are not well facilitated really." (**UN Agency**)*

Opinion among respondents was divided on the issue of whether data is well analyzed by producers. Some felt that data analysis was adequately carried out, while others, particularly UN Agencies, development partners and a few government technocrats/policymakers, felt that the

analysis is not deep enough to guide decision-making. Yet most data users, including government technocrats/policymakers, feel that it is not their role to analyze the data:

"It is not a function of policymakers to analyze data, so if the producers of the data do not do any serious analysis, then policymakers are handicapped. " (**Government Official**)

Respondents also observed that data producers often lack the capacity to undertake sophisticated analysis and therefore have to rely on consultants, who are equally lacking. Thus, some government ministries have at times had to hire expatriates to support the local consultants in carrying out sophisticated data analysis.

IV. DATA NEEDS OF LOCAL GOVERNMENTS

For the past decade, the Government of Uganda has been actively pursuing a policy of decentralization as part of its development strategy and its action plan to eradicate poverty by the year 2017. Under decentralization, district authorities are increasingly being empowered to implement their own poverty eradication strategies. The central government avails funds for implementing decentralization strategies on a competitive basis. District authorities have to submit comprehensive annual District Development Plans, accompanied by a detailed district budget framework outlining the targets and outcomes for strategic interventions on poverty within the district. The development plans and budget frameworks are reviewed and vetted at the central level, and have to be approved by parliament before any funds are made available to district authorities. Both documents are therefore crucial in enabling districts to effectively lobbyists for approval of their budgets. Equally important is the quality and timeliness of data and information that goes into the development of the two documents.

According to the district officials interviewed, District Planning Units are essential to district planning. They handle all types of data for all the key service delivery areas such as health, education, works, water, environment, etc. They also manage all other data used for planning, such as socio-demographic data on the population, and district revenues. In general, the data needs and priorities of district local governments were said to be similar to those of the central government, since the local government is a microcosm of the central government. Furthermore, local government priorities were said to be largely determined by the center since they operate with a set national development framework – the PEAP. Thus, the overriding national development priorities of achieving the MDGs—eradicating poverty, achieving education for all, promoting gender equality, reducing infant mortality, improving maternal health, combating diseases like malaria and HIV, and ensuring environmental sustainability, for which monitoring data needs to be collected—are also development priorities for the districts.

In addition to planning for the districts, Planning Units are also responsible for compiling data on agreed upon variables/indicators on all the sectors, so as to forward the data to the line ministries.

To this end, districts are responsible for maintaining a number of (parallel) information systems that feed into the various national information systems, which in addition to the previously discussed HMIS and EMIS also include the Local Government Information Communication System (LOGICS), Roads Annual Maintenance Planning Inventory Systems (RAMPS), and Water Maintenance Information System (WMIS).

In addition to routine demand for data from the sector ministries, Planning Units reported that they also receive a lot of demand for data from NGOs that want to extend their services to the districts. Such NGOs are usually interested in small area statistics for sub-counties or parishes they want their services to cover.

District officials interviewed reported that data consumers often cannot access the data they need because of poor infrastructure, which include frequent power outages; poor storage and filing systems that make it difficult to retrieve information; and poor data security. Districts also sometimes lose their data due to computer viruses caused by outdated anti-virus software. Officials also reported delays in receiving data from service providers such as schools and health units; the situation is, however, said to be improving due to recent interventions from line ministries.

V.   INTERVENTIONS

This section highlights a number of interventions being implemented, as the well suggestions made by the study participants on how to improve the availability, access, quality and use of census data, household survey datasets, health and education statistics, and budget data.

Availability of Relevant Data

UBOS has developed working partnerships with several stakeholders to ensure that it collects data that is relevant and addresses the national development goals and priorities. Hence, before any major data collection activity, brainstorming workshops are conducted with a wide range of data consumers in and outside government in order to agree on the most relevant variables for which data should be collected. Government uses the data collected by UBOS in order to schedule reviews of some national plans. For example, the review of the Health Sector Strategic Plan and the PEAP takes place every five years right after the results of the UDHS and the UNHS are released. UBOS has also recently started organizing stakeholder workshops to enable them to agree on the analysis that it needs to carry out on available data. However, because of capacity gaps, UBOS hires consultants to undertake such analysis. To address the gaps in capacity for handling complex data analysis, three potential solutions were suggested by various study participants:

- Provision of specialized skills training in data analysis;

- Creation of synergies between data producers and academic institutions to undertake data analysis; and

- Creation of a dedicated business data analysis center at UBOS.

Access to Data

UBOS has recently instituted some new measures to improve access to micro-data. These include putting a representative sample (10%) of the census datasets on the UBOS website, so that interested users can use UBOS's Integrated Management Information System[8] to carry out basic analyses of the available datasets. The IMIS software is also available on CD-ROM for use by data consumers without ready access to reliable and affordable internet services. The software enables data consumers with minimal analysis skills to carry out basic analyses of large and complex national datasets on their own and produce summary outputs such as tables, graphs and maps. UBOS is also developing an online National Data Archive[9], which catalogues all survey datasets in order to make them accessible to potential users across the national statistical system. The Archive gives interested users an overview of the survey results and how to access the associated datasets. Furthermore, UBOS ensures that survey/census reports are widely disseminated both online and in hard copies to a wide range of key stakeholders.

Despite these on-going interventions, most data consumers interviewed were of the opinion that national datasets should be made readily available online, through a central location (i.e. centralized data warehouse), and through decentralized public locations (e.g. in University Libraries and District Planning Units). Respondents also recommended that datasets be distributed on CD during dissemination of the survey/census results.

Most study participants also emphasized the need for data producers to make potential users more aware of the available data and how to access to it. They suggested that awareness campaigns should continuously be conducted through various media. Respondents additionally called for data producers to change their negative attitude towards sharing their datasets.

Use of Data

Despite data being readily available, data usage was reported to be still fairly low, even in the presence of initiatives aimed at promoting data use. At national level, policymakers such as parliamentarians have been provided with various information resources such as internet and library services to help them quickly access the information they need. Parliamentarians have also been provided with research assistants, in addition official units that provide support in analyzing and interpreting data. Utilization of these resources, however, remains low. Thus, data producers usually have to organize workshops for the parliamentarians in order for them to

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[8] http://www.ubos.org/redatam/redatam/index.html
[9] http://www.ubos.org/nada/

appreciate (and hopefully use) the available data and information. In order to promote and further strengthen use of data, some respondents proposed that data needs to be presented to policymakers in user friendly forms such as maps. This is especially critical at the local government level given the low levels of education among policymakers at that level.