

# Findings

## Africa Region



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### **Uganda's Integrated Information Management System: A new approach in statistical capacity-building**

Uganda is embarking on a major program to upgrade its statistical systems. As with many African countries, the quality of national statistics and the timeliness with which they are produced have been issues of considerable concern for a number of years. The main agency for the collection and dissemination of statistics has been the Statistics Department in the Ministry of Finance and Economic Planning. It has suffered from problems common to many national statistical offices, including: high staff turnover, inadequate funding, lack of timeliness in delivering outputs, unevenness in quality of data produced and inability to respond quickly to new data needs. The starting point for reform has been to persuade government and donors to commit more resources to essential statistical activities. To this end, the Directorate of Statistics undertook a Statistical Needs Assessment in 1996. This led to the establishment in 1999 of a new semi-autonomous Uganda Bureau of Statistics (UBOS) and to the development of a draft UBOS Corporate Action Plan. Several donors have committed themselves to support this Plan, including Danida, the UK government's Department for International Development and the World Bank. The World Bank will be channeling its support through the Second Economic and Financial Management Project (EFMP II).

#### **Key features of the program**

The main goal of the program is to support the building of national capacity to collect, process, store and disseminate statistical information for the purpose of monitoring and evaluating outcomes and outputs of development policies and programs at both national and district levels. Several interesting and novel features have been proposed

#### *Strengthening ubos capacity to deliver a core statistical program*

The national statistical infrastructure is being extensively overhauled. Evidence of this can be seen

in: the creation of a new Statistics Act, the establishment of a Statistics Board, a commitment by government to a substantially increased budgetary allocation to statistics, and the creation of the new statutory body called UBOS. The staffing structure in UBOS will be progressively upgraded and increased in number over the next three years and the new structure will include 5 directorates (Population and Social Statistics, Macroeconomic Statistics, Production Statistics, Administration, and Information Service) and two units (Coordination and Standards, and Audit) reporting directly to the Executive Director. Donors will be supporting this structure through the funding of additional technical assistance and training. With this structure, UBOS will focus on delivering a *core statistical program* capable of monitoring national and international development goals (including the Target 2015 goals set by the world's governments to halve the proportion of people who live in absolute poverty by the year 2015) on a regular and timely basis. The core program will include the production of timely macroeconomic and sectoral indicators for monitoring growth, and the ability to generate and disseminate primary data for monitoring poverty and tracking the outcomes of various development initiatives.

### *Integrated Information Management System*

The credibility of UBOS, as it takes on the challenges of the 21<sup>st</sup> century, rests on being able to service the information needs of users more rapidly and more easily. Possibly the single most important element of the new system will be the establishment of a new information technology infrastructure for an *Integrated Information Management System*. The model for the system (see Figure 1) has been elaborated by UBOS and is based on models used, among others, by Statistics Denmark, Statistics Sweden and the Australian Bureau of Statistics. It is designed to ensure that all data collected directly by UBOS or received by UBOS as secondary data from other sources are stored in a Central Depository of Data. With respect to survey and censuses, the main output will be the (statistical) object register which holds all the data in a cleaned format ready for all further analysis and use. The benefit of this approach is that all tables or other analytical results are based on the same data source. The collection of observation

registers will be stored in the Central Depository of Data, "CDD-Observations (CDD-O). Given the need to disseminate statistical information in a variety of hard copy and electronic formats, the system incorporates the concept of a centralized store of macro data or output tables. The macro database is then used as the input source for reports, newsletters or electronic dissemination. This ensures coherent reporting, because any statistical measure is calculated only once. Not all data come from surveys. Some are collected from other agencies and the results are simply delivered in the form of output tables. In such cases, the output tables are entered directly into the macro database. The collection of output tables are stored in the Central Depository of Data "CDD-Aggregated (CDD-A)". Part of the CDD-A is replicated into the National Statistical Databank (NSD) in order to give users access through the Internet.

The setting up of this system will involve the establishment of standards for receiving data and for storing them in databases and databanks in a common format. The main benefit of the system will be to greatly facilitate open access to the data by users, whether in hard copy or electronic form (on-line, Internet, CD-ROM etc.). A further feature of this component will be the construction of a GIS database. This will be linked with the cartographic preparations for the 2002 Population Census. This should help to improve monitoring and targeting of national and regional development programs. A similar approach to statistical capacity building is being used in Mozambique, where the recently-created National Statistical Institute is installing a national database system modeled on the World Bank's Africa Live Database system.

#### *National household survey capability*

Another area of special focus will be the upgrading of UBOS's household survey capability. Given the continuous and growing demand for high-quality household survey data, special emphasis is to be given to the creation of a permanent household survey capability. This is required so that UBOS can regain credibility as a 'center of survey excellence'. Whilst Uganda has already demonstrated a capacity to collect survey data, there is still a need to significantly improve capacity to process such data and to make the data and timely results more readily available to users. To ensure the effectiveness of this component, a 3-year *Integrated Household Survey Strategy* and program is under preparation by UBOS with the close participation of users. An area of particular concern is the production of timely annual agricultural statistics. UBOS intends to maintain a permanent capacity to: draw and document samples, collect sample survey data, rapidly enter, validate and process survey data, and to write reports. UBOS is establishing a core field force of several mobile teams that will be used both to undertake survey directly for UBOS as well as to serve as a pool of technical support for districts planning their own surveys. It is currently planning to conduct a pilot study on a simple indicators monitoring surveys which could be carried out by district authorities as a vehicle for meeting district information needs. This will most probably include the collection of annual agricultural statistics and production data required for GDP calculations and national accounts.

#### *National Service Delivery Survey (NSDS)*

The enhanced statistical program will also support government in its goal to improve the quality and performance of public services and in particular the targeting of such services to the poorest and most vulnerable communities. This is to be done through the repeated administration of an

annual National Service Delivery Survey (NSDS). When the results are coupled with public expenditure reviews, they provide a powerful instrument for evaluating the effectiveness of public expenditure programs ( see Findings No.138 : Uganda – using surveys for public sector reform, July 1999 ). The first round of the survey has been contracted out to consultants, but will be progressively mainstreamed and taken over by UBOS. It will use a large sample (approximately 20,000 households) so as to be able to generate disaggregated results that are useful to district-level users, and a relatively short questionnaire. The World Bank has recently been working on a new light survey, the Core Welfare Indicators Questionnaire (CWIQ) which was first successfully carried out in Ghana ( see Findings No 39 : Ghana – poverty monitoring with the Core Welfare Indicators Questionnaire ). The CWIQ incorporates a number of time-saving features including: short questionnaire, use of optical mark recognition (scanning for rapid data entry; and, pre-written data processing and tabulation programs. This survey has a strong service delivery orientation and monitors indicators of "access, use and satisfaction" with different services by different population groups. The NSDS is expected to benefit from this work and to incorporate a number of the features of the CWIQ, notably the use of Optical Mark Recognition (OMR) to speed up the data entry process. Once the experiences of the first round of the NSDS have been evaluated, the responsibility for monitoring of delivery of public services and the measurement of their outcomes on different population groups may be progressively transferred to UBOS. Future rounds of the NSDS will also be supplemented with focus group interviews. The complete M&E system should also involve the tracking of public expenditures down to district and sub-district levels, and the matching of these expenditures to their outcomes on the various population groups. The outputs of this system will also be particularly useful for monitoring the outcomes of the new Comprehensive Development Framework (CDF) approach to development aid which the World Bank is promoting and for which Uganda is one of the pilot countries.

## **Conclusion**

The aim of the program is to upgrade Uganda's statistical system from a government statistical office, to a new role of a National Statistical Service. While the change in name may seem subtle, the implications are profound in that it aims to ensure that UBOS generates a range of outputs and services that are truly demand-driven and that will meet the real information needs of a much wider range of 'users' both within and outside the country.

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