# BEST PRACTICES in SCALING UP CASE STUDY

## UGANDA

### Using a Simple Survey Method to Scale Up Evidence-Based Decision Making at the District Level: The UPHOLD Project

## INTRODUCTION

Uganda is viewed worldwide as a successful model of decentralized service delivery and HIV/AIDS prevention. This is a particularly significant achievement considering that Uganda suffered a long period of political strife that caused the collapse of its social services.

Commenced in 1994, Uganda's decentralization process significantly transferred public planning, management and decision-making responsibilities from national actors to those at district and sub-district levels. Local authorities are now more attuned and responsive to local priorities and needs. Since the inception of decentralization, however, local governments have been constrained by their capacity to generate localized information to identify under-performing locales and design appropriate interventions.

The quest for district and sub-district data led to the adoption of the Lot Quality Assurance Sampling (LQAS) Survey method in 20 districts. Approximately 200 officials were trained by the Uganda Program for Human and Holistic Development (UPHOLD) in the use of the LQAS for data collection and analysis. The project had two overarching goals:

1. to implement a low-cost and rapid means of collecting information for monitoring and evaluation purposes, and
2. to enhance district personnel's skills in the use of information for planning and evidence-based decision making.

**Why It Matters**

Prior to the use of the Lot Quality Assurance Sampling (LQAS) survey methodology, health data collection in Uganda was largely centralized and it was difficult to obtain data for decision making at the district and lower levels. LQAS offers a unique opportunity to obtain information at this level. The methodology has also been successfully used to rapidly collect information in conflict regions that are typically under-represented in research.

The speedy collection and ready availability of LQAS data means that it can be used to inform decisions at the annual work planning process. Districts now demonstrate a stronger integration of evidence in their workplans. As a result of the data, district budgets are better customized to fit the unique performance profiles and emergent priority problems identified by each district.

***The context before LQAS***

The USAID-funded UPHOLD program was launched in October 2002 to improve social services at the district level and increase the capacity of districts to plan, monitor and implement interventions in health, HIV/AIDS, and primary education. It runs through 2007, for a total of five years.

At the inception of the program, staff quickly realized that decentralization presented challenges that necessitated adjustments in the management of government business. Early needs assessments showed that evidence-based planning and decision making was a significant challenge for districts, which generally did not have the sufficient capacity to meet their new responsibilities. Furthermore, it was found that key data sources could not provide concrete and reliable baseline information. The centrally-managed Demographic Health Surveys (DHS), for instance, provide regional data that is not representative of the district level. We realized that additional information was needed at district and sub-district levels to enable evidence-based planning and monitoring.[1]

**Lot Quality Assurance Sampling**

Lot Quality Assurance Sampling (LQAS) is a simple technique involving a sample size (lot) of 19. It is used to assess whether objectives and targets are achieved within a specified geographical area, facility, organization or other unit of interest. It is a quick, cost-effective and simple methodology that empowers program managers to evaluate performance. It provides grassroots information to measure whether a program's catchment area has reached performance targets.

In early 2003, when UPHOLD was in start-up mode, the World Bank and the Uganda AIDS Control Project (UACP) pilot-tested the LQAS monitoring and evaluation methodology in 19 districts. UPHOLD subsequently adopted the model, effectively increasing the scale of LQAS implementation from the World Bank/UACP's 19 districts to a total of 30.* UPHOLD expanded the scope of LQAS in two important ways: in addition to HIV and AIDS, it included other technical areas in the health and education fields and it extended beyond households to include health facilities and schools.

## METHODOLOGY

The district county designation was used to define a supervision area (SA). In districts that had less than five counties, the district was divided into five SAs by aggregating homogenous sub-county entities. Household lists within each village were obtained from the Uganda Bureau of Statistics 2002 census data. A two-step sampling plan was used to randomly select 19 villages, using sampling proportional to size calculations.

A similar procedure was used in the school and health facility surveys. Health units ranging from health centers to referral and district hospitals were surveyed, though none of the defined SAs had the necessary sample size of 19. For the school facility survey, 19 schools were randomly selected using sampling proportional to size from among all primary schools within a SA.

Displaced populations in northern Uganda necessitated a special procedure for LQAS implementation. Every effort was made to preserve the principle of a county as a SA. When residents of a village were found to be displaced, the camps where these residents went were identified. A single camp was randomly selected for interviews based on sampling proportionate to the size of the displaced population.

Survey results were used to identify high and low

[1] UACP and UPHOLD overlapped in 11 districts. Hence, in 2004 UPHOLD expanded LQAS to 9 additional districts.

performing districts and sub-districts, in respect to several indicators. The results, in turn, were used to set yearly targets. Since LQAS is used to assess whether each SA has reached a certain benchmark, we first had to use LQAS to create a baseline. Relying on the assumption that SAs were originally homogeneous, data from all SAs for a particular district was added together to calculate an average. This mean represented the district's baseline coverage and was used as a benchmark.

## RESULTS

UPHOLD has supported the LQAS survey process within the geographical area it supports for three consecutive years. Five questionnaires targeting health, HIV/AIDS and primary education were successfully administered by district officials.

Between June and August 2004, UPHOLD supported the first LQAS Household and Health Facility Survey in 20 districts, covering a population of almost 10.4 million people representing 42% of the total population of Uganda.[2] The breakdown of the 423 visited health facilities was six regional referral hospitals, 28 district hospitals, 87 health center level IVs (HCIVs) and 302 HCIIIs. We surveyed a sample of 1,449 primary schools, constituting 25% of the total primary schools in the UPHOLD supported districts. Finally, we visited 9,975 households.

The second round of LQAS was jointly implemented in August 2005 by UPHOLD and UNICEF. The original 20 UPHOLD districts were surveyed, 13 of which were also being supported by UNICEF. The survey involved a sample of 12,380 individual households.

By the second round of LQAS districts had noticeably increased their performance. This was evidenced by scheduling the LQAS survey into their workplans, provision of logistics including motorcycles for transportation and committing their staff to participate in the exercise. More than 90 percent of the 200 district workers who participated in the first round took part in the second one, which was a clear factor in districts' strengthened capacity. LQAS has moved closer to becoming a routine activity in the district planning process. The third LQAS survey is currently underway and it will cover 37 districts in the country[2]. Over 17,575 households are going to be covered in the 2006 LQAS survey in additional to all health facilities at HCIII and above as well as all primary schools in the target districts. LQAS has changed the mindsets of program and district


Participants commit to random sampling during LQAS training for Uganda's North East districts, Soroti District, 2006. Photo by Mike Ojok

partners, including partner organizations such as UNICEF, HealthPartners, and The Northern Uganda Malaria AIDS and Tuberculosis program (NUMAT). Such organizations have requested support from UPHOLD to help them better meet their local information needs. LQAS has been used to set targets for local governments and civil society organizations and is now used to inform programming for UPHOLD. For the newly created districts, data obtained through LQAS will be invaluable in helping them establish baselines for their areas of jurisdiction.

[2] The districts have increased due to re-districting in the geographical area supported by UPHOLD and due to partnership with a new program that works in additional districts in the Northern part of Uganda.

## SCALE-UP PROCESS

UPHOLD's LQAS scale up was influenced by both internal and external factors. Leadership, team work, and the mindset of the UPHOLD staff were important in shaping the scale up. Externally, donor expectations and issues of partnership with government ministries, local governments, and other development agencies were influential. All of these factors affected the timing, nature and path of scale-up. The scale-up process had six key milestones:

**STEP 1:** ***Adapting the World Bank/UACP Approach and Learning from Their Experience***

Using LQAS, UACP demonstrated the power of the 'learning by doing' approach. This method can empower parties involved in data collection to learn more, while simultaneously guaranteeing local ownership of information.[3]

**STEP 2:** ***USAID Buy-In***

Following UACP's experience, UPHOLD staff held a series of discussions with USAID about the LQAS approach. USAID agreed that LQAS increased the sense of district ownership and was more cost-effective and easier to replicate than the standard household based Demographic Health Survey. The survey's focused nature and the speed of data availability were additionally attractive.

An LQAS coordinator in Soroti reviews questionnaires with his survey supervisor for the North Eastern districts. Photo by Mike Ojok

**STEP 3:** ***Negotiating Acceptance of LQAS Within and Outside UPHOLD***

The LQAS method initially encountered resistance within UPHOLD. Some staff questioned the speed and timing of its implementation, and there were concerns that districts were not sufficiently mobilized to engage in the exercise. Meetings were held with internal stakeholders to agree on the content, process, and schedule of implementation.

Strong leadership was a key factor in internal and external negotiation processes. Partnership and dialogue were crucial to overcoming potentially impeding forces such as resistance to change and the difficulties associated with coordinating a broad coalition of interest groups. UPHOLD identified outside partners with similar interests so as to leverage human resources and share the costs of data collection. A series of discussions were held with the USAID-funded AIDS/HIV Integrated Model District Program (AIM), UNICEF and the MOH. In the end, the only viable partners for the first round of LQAS survey, due to organizations' priorities and capacities, were the relevant government ministries, UPHOLD-supported districts, and USAID.

**STEP 4:** ***Adapting Instruments and Instrument Development***

The UPHOLD Monitoring & Evaluation Team utilized input from the technical staff, especially regarding survey design. Among our central priorities were focus, brevity, simplicity, and the need to achieve rapid and accurate results.

Districts and other grantees were centrally involved in defining their information needs. This process was facilitated through consultative and training meetings. Initial information requests far outstripped the manage-

able capacity of the LQAS instruments; UPHOLD actively negotiated which questions would be included. We had to be mindful of resource availability, time limitations, and the need to keep LQAS simple.

Collecting LQAS data among women is a key component of the process. This survey is taking place in Mubende District. Photo by Joshua Kakaire

**STEP 5:** ***District Capacity Building***

Significant manpower was needed in the initial LQAS roll-out phase. UPHOLD contracted local private sector consultants to conduct trainings and provide supportive supervision to district staff during sampling, data collection, and data compilation. These consultants were oriented to the facility survey, concepts of methodology and approaches to data collection, especially in conflict areas. UPHOLD trained 16 core trainers, who in turn were responsible for training nearly 200 district staff. This cascade approach made it possible to conduct concurrent training in different regions and enhanced their quality because of the smaller group size.

**STEP 6:** ***Implementation and Institutionalization***

UPHOLD adopted a decentralized framework for implementing the LQAS surveys. We used two distinct sampling approaches for conflict and non-conflict areas. In the conflict areas 19 villages were randomly sampled from each SA by sampling proportionate to size. If the homesteads from a selected village were displaced, their relocation camps were identified and 19 homesteads that originated from that village were selected. Two assumptions made during this process were that there was no difference in community behaviour as a result of displacement and that people's access to services had remained the same.

Districts were sub-divided into a minimum of five SAs in the non-conflict areas. A two-step sampling plan first randomly selected 19 villages and then randomly selected 19 individuals in each SA.

LQAS has now been institutionalized at the district level and has moved from 20 districts with 9,500 households sampled in the 2004 survey to 37 districts with 17,575 households sampled in the 2006 exercise. Over 300 district staff have now been trained in the use of the methodology.

## WHAT WORKED

LQAS implementation was successful due to a combination of factors:

- Transformational leadership, which was exemplified by the Chief of Party negotiating between the partners and UPHOLD for LQAS acceptance.
- Buy-in by district officials and staff. District personnel demonstrated their commitment to both data quality and timeliness, with some even committing their own resources to the process.
- Buy-in by UPHOLD staff at central and regional offices. The staff committed considerable time to the survey and played a pivotal role in its implementation. They provided crucial technical and logistical support.
- Thorough and effective training of survey interviewers.
- Staff flexibility and continued focus on capacity building.
- Fair reimbursement and promotion of survey

'ownership' for the district level field workers.

- Development of a strong foundation of committed stakeholders, through engaging in relationship-building and partnerships
- UACP's experiences helped UPHOLD and its partners avoid pitfalls. Open relationships with UACP staff facilitated information sharing.

## WHAT WE LEARNED ALONG THE WAY

- **Scaling-up is demanding and requires massive preparation and implementation efforts, in the form of human and financial resources.** It is clear that in the long run, costs can be reduced through partnerships and district ownership of the processes. The subsequent rounds of LQAS were much smoother, as the districts knew what to do and were more committed to the process. The costs incurred by each partner also reduced as new partners such as UNICEF and NUMAT came on board.
- **It is not always initially possible to bring all potential partners on-board.** Buy-in takes time and often only happens after the value of investment is definitively proven. Some later partners did not participate in the first round of LQAS because they did not know whether it would be beneficial.
- **Flexibility in responding to local contexts and situations is important**, including during this scale up of a standardized survey. This lesson was especially pertinent regarding sampling procedures in conflict areas.
- **Despite its relatively low cost, LQAS results are comparable to those of more expensive surveys** such as the Demographic Health Surveys. On average, data collection per district cost $2,700 USD.
- **It is essential that users and technical specialists are confident in LQAS survey results.** Some stakeholders, including statisticians accustomed to traditional large sample household surveys, remained skeptical of LQAS until its completion.
- **With many competing priorities within the UPHOLD project**, **some staff, especially at the regional level, found it difficult to find time to work on LQAS.** The UPHOLD Monitoring & Evaluation Team eased tensions by phasing-in the various surveys, beginning with the less complex facility survey. In turn, the experience we gained from the facility survey led to a better-managed implementation of the household survey.

In order to reach everyone, a data collector arrives by boat to a village in Mayuge District sampled for LQAS. Photo by Apollo Nkwake

## CHALLENGES

The most contentious challenges identified with the institutionalization and scale up of LQAS in our experience were as follows:

- Initial costs for training and capacity building can be quite high. This was especially the case when going into new districts with no prior experience with conducting the survey. However, these costs are significantly reduced with subsequent surveys once district teams have been put in place.
- LQAS is a relatively new methodology that had not yet been used on a large scale was often met with skepticism and resistance with concerns about the validity and reliability of data collected. These fears are being allayed, however, as detractors learn more

about the method.

- For institutionalization, LQAS requires committed and significant district participation. This may often be difficult due to the many competing priorities and often limited number of personnel available at the districts.
- LQAS cannot answer the 'why,' it only indicates a problem in utilization or coverage in service delivery and follow-up explanatory studies have to be conducted.

## CONCLUSIONS

The Lot Quality Assurance Sampling offers a unique opportunity to obtain district and sub-district level data that is critical for planning. The speed of collection and ready availability of data provides districts with quick data access. Following LQAS implementation, districts immediately began incorporating the data into their strategic planning, decision making and workplans. This enabled them to plan with enhanced accuracy and efficiency.

In resource-limited settings, such as where the Uganda Program for Human and Holistic Development works, district budgets are now better customized to fit their unique performance profiles and emergent priority problems. Furthermore, the LQAS data is now being used to track the performance of district health services which are ranked each year and publicized in the national newspaper. A recent WHO report cites this district-level performance measure as contributing to a reduction in newborn mortality.

Collecting data from all groups, including men 15-54 years old was critical. Here LQAS data is being collected in Mubende District.

Photo by Joshua Kakaire

The Ugandan government is currently considering expanding use of the LQAS into every district. It is JSI's hope that this expansion will lead to improvements in the monitoring and evaluation of development outcomes by local governments throughout the entire country.

## ENDNOTES

[1] UPHOLD HMIS & EMIS Situation 2003.

[2] UBOS, 2002.

[3] Mukaire, et al. 2004.

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