# 31st WEDC International Conference, Kampala, Uganda, 2005

# MAXIMIZING THE BENEFITS FROM WATER AND ENVIRONMENTAL SANITATION

# Sector performance reporting in Uganda – from measurement to monitoring and management

M Thomson, P A. Okuni and K Sansom, Uganda and UK

Effective performance reporting is essential if countries, sectors and institutions are to know whether they are on track to achieve their objectives, and to provide information that can be acted upon to maximise performance levels. This paper charts the evolution of water and sanitation sector performance reporting in Uganda. This began with performance measurement of the status of the sector, became a more comprehensive mechanism for monitoring changes in performance and is moving towards an overall performance management system that will result in better sharing of good operational practices, strengthened policy making and improved resource allocation decisions. Key messages for other countries seeking to improve performance reporting include the need to measure a broad range of prioritized performance 'themes', to strengthen systems for collecting and triangulating this data, to build up performance trends and performance 'league' tables, to develop capacity of the conduct of 'in-depth' and 'value for money' performance studies and to create mechanisms for the continual sharing of good operational practices.

# The importance of sector performance reporting

Reporting on performance is a key component of the management of any institution or sector. Good information is required to assess how an institution or sector is faring, whether it is on-track to meet its objectives and what decisions need to be made to improve performance in the future. Good performance reporting is an integral part of the assessment of progress towards sector goals, national objectives and Millennium Development Goals (MDGs).

# Overview of the water and sanitation sector in Uganda

Several institutions/ departments have responsibilities for managing and/or delivering programmes in the Uganda water and sanitation sector. These include the Planning and Quality Assurance Department (PQAD) in the Ministry of Water, Lands and Environment (MoWLE), the Directorate of Water Development (DWD), the National Water and Sewerage Corporation (NWSC), the Environmental Health Division (EHD) of the Ministry of Health (MoH), the Ministry of Education and Sports (MoES), the Ministry of Local Government (MoLG), local governments, non-government organisations (NGOs), community-based organisations (CBOs), development partners and the private sector. The Ministry of Finance, Planning and Economic Development MoFPED are also involved to the extent that they want to achieve value for money from government investments.

Prior to 2003, the only way to assess overall sector perform-

ance was to sift through documentation of all the various institutions separately. There was a lot of good information available, but this tended to focus on certain aspects of performance such as the number of infrastructure projects completed and the overall amounts of money spent. Since 2003, sector performance reporting has been significantly strengthened. This paper summarises how this was done, what the successes and challenges have been and what lessons can be shared with other countries.

# Performance reporting concepts

The literature on sector 'performance' refers to a multitude of concepts including 'monitoring', 'evaluation', 'review', and 'audit'. Many different interpretations and definitions of these terms exist and this can cause confusion in the collection, analysis and use of sector performance data. This paper breaks down sector performance reporting into three broad conceptual areas:

- Performance measurement this refers to the identification, prioritisation and collection of performance data
- Performance monitoring this relates to the analysis of performance data to make meaningful conclusions
- Performance management this involves the improvement in sector practices, policies and resource allocations based on the interpretation of performance data

These three concepts are sequential and are developed further in Figure 1.



# Why measure and monitor performance?

Improving accountability and transparency are key elements of the New Public Management (NPM) approach which can be defined as 'a set of management approaches and techniques, borrowed mainly from the private sector and applied to the public sector' (Batley and Larbi, 2004). NPM is being introduced in both developed and developing countries to improve performance of basic services including water and sanitation.

Sustainable improvements in services require improvements in both accountability and transparency amongst the key stakeholders. Both factors are critical to gain and maintain the trust of users and investors. They are founded on: (i) clear roles and responsibilities; (ii) independent audit and monitoring; and (iii) open disclosure of information.

Accountability is defined as a set of relationships among service delivery actors with five key features (World Development Report, 2004, cited in Sansom et al, 2004):

- Delegating: Explicit or implicit understanding that a service will be supplied
- Financing: Providing the resources to enable the service to be provided
- Performing: Supplying the actual service
- Having information about performance: Obtaining relevant information and evaluating performance against expectations
- Enforcing: Being able to impose sanctions for inappropriate performance or provide rewards when performance is good

Paying careful attention to these five aspects can enable improvements in service performance. Effective performance monitoring is critical to achieving this objective.

Improved performance measurement and monitoring can enable the achievement of the following benefits.

- More focused and better integrated performance data
- Easier identification of good and poor performance
- Strengthening of mechanisms for identifying the causes of good or poor performance
- More focused institutional roles for assessing and acting on sector performance and a framework against which sub-sector capacity building strategies and targets can potentially be developed
- Integration of all the 'tools' of performance measurement, e.g. operational monitoring, value for money review, technical audits, financial tracking studies, evaluation etc
- Improved information for assessing the effectiveness of water and sanitation policy and for enabling better policy making
- A more credible system for arguing for more resources for the water and sanitation sector and allocating resources within the sector.

Source: Delta Partnership (2004)

# The challenge of measuring overall sector performance

The measurement of sector performance presents particular challenges in the context of water and sanitation. Commonly, a major issue is that there is an overwhelming amount of data and not all of this presents a consistent view of performance. Example data sources for Uganda are shown in Box 1. Many of the data sources used are independent national household surveys, which are important to ensure the credibility of the performance measurement. Effective performance monitoring should use a variety of data sources such as:

- User perspectives from independent surveys
- The service provider's data collection, collated by government departments
- Participatory assessments using focus groups to develop an understanding of coping strategies
- In-depth studies commissioned for specific purposes.

The information from these various sources can then be triangulated to develop a more comprehensive understanding.

An example of inconsistent data is presented in Figure 2. This shows that the level of use of improved sanitation, which for 2003 varied from around 55% to 85% depending on the source of data used. This discrepancy highlighted the fact that many respondents in most of the national household surveys did not like to admit that they did not use latrines, or the surveys did not consider the usability of the latrines. However the health workers in the HIASS survey were able to identify households with unusable latrines, which accounted for the lower latrines usage figures. When such inconsistencies are identified, further in-depth studies can be commissioned to provide a clearer understanding of service levels and coping strategies.

Table 1 shows the type of water source used for both poor and non-poor consumers. Note the high percentage of poor

# Box 1. Example sources of water and sanitation performance data in Uganda

Management Information System data for water points held at DWD and NWSC

Health Inspectors Annual Sanitation Survey (HIASS)

Uganda Population and Housing Census (UPHC)

Uganda National Household Survey (UNHS)

Uganda Demographic and Health Survey (UDHS)

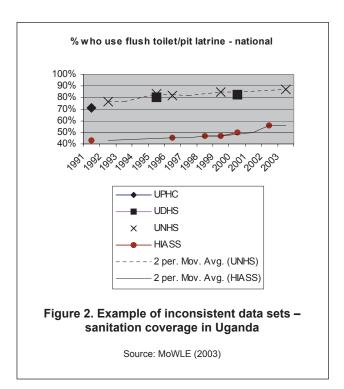
Uganda National Service Delivery Survey (UNSDS)

Uganda Participatory Poverty Assessment Process (UPPAP)

National Service Delivery Survey (NSDS)

Monitoring visits carried out by MoWLE, DWD, EHD and others

Miscellaneous data provided by NGOs and others



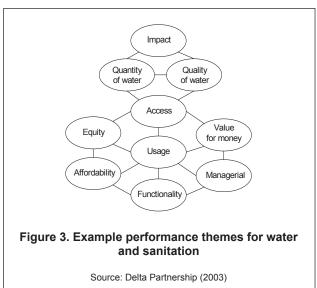
consumers who use unprotected sources. The declared Ugandan government policy is 'Some for all rather than all for some'. Further detailed studies are required in low income areas to determine a better understanding of service levels, coping strategies and the best means of improving services these areas.

Up until 2003, sector reporting in the Ugandan water and sanitation sector was focused predominantly on the amount of infrastructure works completed and on access rates to water and sanitation services. A stakeholder workshop was held in July 2003 to develop a broader framework for performance reporting. This developed 10 performance 'themes' which are set out in Figure 3.

These 'themes' were then used to develop a set of 'golden'

Table 1: Drinking water source poor & non-poor households							
	Non-poor	Poor	All				
Piped in dwelling	1.5%	.1%	1.1%				
Piped outside dwelling	2.6%	.2%	1.8%				
Public tap	10.3%	1.5%	7.7%				
Borehole	20.9%	29.8%	23.6%				
Protected well/spring	24.2%	17.5%	22.2%				
Unprotected well/spring	31.4%	41.8%	34.6%				
Rain water	.6%	.6%	.6%				
Vendor/Tanker	2.1%	.2%	1.5%				
Other	6.4%	8.4%	7.0%				

Source of data: UNHS 1999



performance indicators for the sector that would be used to report on overall performance in a more focused and balanced way, and act as the basis for strengthening data collection and analysis systems.

It is important to identify a select list of 'golden' indicators that can be reported upon at national level to inform future resource allocation. Reporting on too many indicators can lead to confusion and unclear messages. In Uganda, the 'golden' indicators (refer to Box 2) have been cascaded down to sub-sector levels — rural water and sanitation, urban water and sanitation, water for production and water resources management — so that a greater level of detail can be obtained where necessary.

For each 'golden' indicator, a 'primary' or 'headline' data source is being chosen from (in some cases) the various

## Box 2. 'Golden' performance indicators for the Uganda water and sanitation sector

- Access/use (water) % of people within 1.5km (rural) and 0.2km (urban) of an improved water source
- Functionality % of improved water sources that are functional at the time of a spot-check
- Cost Average investment cost per beneficiary of new water and sanitation schemes
- Access/use (sanitation) % of people with access to (and use of) improved and basic latrines/toilets
- Quantity of water % increase in cumulative storage capacity of water for production
- Quality of water % of water samples taken at the point of collection or discharge that comply with national standards
- Equity Mean parish deviation from the district average in persons per improved water point
- Access / use (hygiene) % of people with access to (and use of) hand-washing facilities
- Community capacity % of water points with actively functioning water and sanitation committees
- % of water and sanitation committees/water boards with women holding key positions

possible sources that are available. This will ensure greater consistency of performance measurement. Other data sources are being used as 'secondary' sources to help to triangulate the accuracy of the 'primary' source.

# The development of an effective performance monitoring system

The second step in the development of a performance reporting system is the monitoring of data over time, by spatial location, compared to plans, by income group, by gender etc. In the past, a lot of the 'monitoring' effort in Uganda has taken the form of collection of uncoordinated data and conduct of overlapping monitoring visits to the field. The development of the 'golden' indicators has led to more focused and developed monitoring arrangements.

Trend analysis is one of the most common forms of presenting data, an example of which is shown in Figure 2 above. A way of enriching this analysis is to look at performance levels around a country. This is now being done in Uganda for the 'golden' indicators where data currently exists. For example performance 'league tables' have been developed to show the average cost of new water points per beneficiary in each district in Uganda. provides a basis for identifying where there is most potential for learning about good performance and more scope for improving performance.

Comparison of performance to plans is another key part of performance monitoring. In this regard, it is useful to set targets or planned performance levels to measure against as is illustrated in Table 2. Long-term targets for 2015 had previously been established in the development of a Sector Investment Plan (SIP) and a Poverty Eradication Action Plan (PEAP). These were then broken down into annual targets by considering current performance levels and the

Table 2: Target levels of performance for 'golden' sector performance indicators in Uganda

Indicators		Sub-	Target		
		Analysis	2004/05	2005/06	2014/15
1	1 % of people within 1.5 km (rural) and 0.2 km (urban) of an improved water source	Rural	58	60	77
		Urban	70	72	100
2	2 % of improved water sources that are functional at time of spot-check	Rural	82	83	90
ı		Urban	83	87	95
		WfP	NA	NA	NA
3	3 Average cost per beneficiary of new water and sanitation schemes (USD)	Rural	45	40	40
l		RGCs	58	57	50
l		Urban	80	78	75
4	4 % of people with access to improved sanitation (household	Rural HHs	58	60	77
		Urban HHs	77	84	100
İ	and schools)	Schools	82	90	100
	Pupil to latrine/toilet stance ratio in schools		49	44	40
5	5 % of water samples taken at the point of water collection, waste discharge point etc that comply with national standards	Protected	95	95	95
		Treated	100	100	100
		Waste- water	NA	NA	NA
6	% increase in cumulative storage capacity availability of water for production		3.1	3.1	3.1
7		Rural	NA	NA	NA
a p		Urban	NA	NA	NA
8	8 % of people with access to and using hand-washing facilities	HHs	14	20	50
		Schools	NA	NA	NA

increments that were necessary to achieve the 2015 targets. Table 2 also shows how some of the 'golden' indicators have been broken down into sub-sectors.

More sophisticated systems provide a link between the monitoring of results and the monitoring of the water and sanitation expenditure. This is taking place in Uganda through the development of the Fiscal Decentralisation Strategy (FDS) – an overview of this is presented in Box 3. A key success that been that local government are now reporting on performance against the 'golden' indicators for the water and sanitation sector and this is then linked to future resource allocation decisions.

# The move towards sector performance management

Proper sector performance management involves the collection of performance data, the interpretation of this data and, most importantly, the agreement and implementation of actions to improve future performance. The latter is now being addressed in Uganda, but there is a need for further strengthening.

One area that is currently being addressed is the development of 'in-depth' studies to investigate the causes of good

# Box 3. The Fiscal Decentralisation Strategy (FDS) in Uganda

The Government of Uganda (GoU) has embarked on an ambitious programme of decentralisation where responsibility for planning, resource management and service delivery is being devolved to 5 local government levels – district/municipality, county, sub-county, parish and village. In summary, the FDS is the process for:

- Achieving transparent, needs based and poverty sensitive allocations of sector funds between local governments
- Streamlining transfers to local government to remove administrative burdens while increasing transparency and efficiency
- Increasing local government autonomy with respect to planning, budgeting and implementation of national sector policy, with the eventual aim of moving to block grants

# Box 4. Components of an in-depth performance study in Uganda – the scope for improving the functionality of water points

A 2005 study is following up concerns presented in the 2004 sector performance report that functionality rates of water points are low in many parts of Uganda. Four broad areas will be looked into and recommendations for improving performance will be sought.

#### Overall:

- Assess what are the overall barriers to improved functionality
- Assess what are the reasons when functionality levels are good
- Assess how the proposed 'spare parts' initiative can support improved functionality
- Suggest what else can be done to improve overall functionality
- Compare functionality rates with poverty levels (to the extent that is possible in the time available)

### Cost implications:

- Assess how O&M costs are varying over time
- Assess how the amounts spent on O&M compare to that amounts spent on new water and sanitation installations
- Assess whether there are significant differences in O&M costs of District and NGO managed projects
- · Assess what are the barriers to reducing O&M costs
- Suggest what can be done to reduce the overall costs of water and sanitation operation and maintenance

# Community and gender perspectives:

- Determine to what extent the establishment of water user committees affects functionality levels
- Determine to what extent the inclusion of women on water user committees affects functionality levels
- Assess what are the overall barriers to improved operation of water user committees
- Suggest what can be done to improve the operation of water user committees and the participation of women in water and sanitation projects

or bad performance. These could be described as 'evaluation' studies. Two of the key issues coming out of the 2004 sector performance report were:

• Significant differences in the level of functionality rates

### Box 5. The five Es of performance management

- Economy can inputs (e.g. water pipes or latrine components) be purchased more cheaply?
- Efficiency can inputs (such as health workers) be used to produce more outputs (such as more hygiene awareness campaigns)?
- Efficacy is it possible to achieve more outputs (such as new water points)?
- Effectiveness have the desired outcomes been achieved (such as increased water use)?
- Equity have resources been allocated in the most equitable way (so that the poor have been targeted)?

of water points around the country

Poorer overall performance in the areas of sanitation and hygiene targets as opposed to water supply

These two issues have led to the suggestion of two 'in-depth' studies for 2005. To make best use of available resources, these are being extended further to cover related issues of interest, as shown in Box 4.

Another issue, which is part of wider performance management, is the planning and conduct of 'value for money' (VFM) reviews in the water and sanitation sector. The water and sanitation sector in Uganda has commissioned 'value for money' studies over the past three years or so. However, there is still concern that these studies are not yet well defined and do not link in to wider performance measurement processes.

Although there is no universally agreed definition for what constitutes a value for money review, there are some well-documented international principles that cover VFM type approaches. A main one is that VFM is concerned with the economy, efficiency and effectiveness of resource use. In some countries, efficacy and equity of resource use are also included. Broadly, these terms refer to the following inter-related concepts (which can be called the 5 E's):

It is suggested that the VFM approach in Uganda could have the long-term objective of addressing six key issues in relation to water and sanitation schemes as shown in Table 3.

These issues relate in various ways to the five E's noted earlier, but are easier to understand and are more practically related to performance reporting. It might be sensible to focus on three of these elements initially. Each year, it will be possible to set out specific questions that the VFM study should address based on findings from the previous year's performance report and other issues raised during the current year. The VFM review could, in other words, be thought of as one of the in-depth studies for the sector. However, to ensure maximum impartiality, VFM work should be done by an organisation/organisations external to the sector itself. In the case of other in-depth studies, these can be led by teams internal to the sector.

'Tracking studies' are also performed within the Uganda water and sanitation sector. These are required to monitor the flow of Poverty Action Fund resource, to identify bot-

Table 3. Suggested elements of a value for money approach in Uganda

Element	Key Performance Question	
Cost	How can cost savings be made in the provision of water and sanitation services?	
Quality	How can the quality of water and sanitation initiatives be improved?	
Equity	How can equity in the provision of water and sanitation be improved?	
Impact	Have the desired impacts of water and sanitation initiatives been achieved?	
Sustainability	Are the water and sanitation services sustainable and what can be done to make improvements?	
Accuracy of data	What can be done to improve the accuracy of performance data?	

tlenecks to the implementation of financial processes and to make recommendations for ensuring that funds are allocated to the activities for which they were intended. Because of this focus of tracking studies, the VFM approach should not start with a review of operations and processes. It should start with broader questions (like those noted above) and 'drill down' to operational issues where relevant. For example, are there any process issues that explain why some projects cost more than others?

Good operational practices can be identified by all sector studies and there should be mechanisms for sharing this at the local government level (where most operational decisions are made). One approach to pursue is the holding of an annual workshop for District and Municipality water and sanitation officers, with the objectives of:

- Sharing successes and learning points (with reference to the sector 'in-depth' and VFM studies)
- Recognising good performers (based on the league tables)
- Recognising the 'best improvers' (based on changes in league table positions)
- Identifying 'beacon' local governments (the best performers) and to allocate some resources to these for providing support to other local governments
- Addressing concerns of local government (e.g. in relation to the accuracy of performance data)
- Getting suggestions for the themes of future 'in-depth' studies

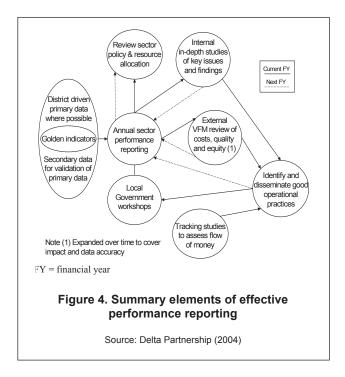
Another possible development would be to 'cluster' local governments based on socio-economic and/or agro-climatic characteristics to enable more meaningful comparisons of performance.

A further area that needs to be developed in the future is the use of performance data and analysis as a way of lobbying for more resources and for reallocations of the resources within

the sector. Comparison of current levels of performance against targets can help to identify funding 'gaps' that need to be bridged. Also, in the negotiations with the MoFPED, budget submission papers could make more reference to the recommendations of the sector studies.

Good performance reporting provides evidence for better policy making within the water and sanitation sector. For example, performance trends may show improving functionality of water points in certain parts of the country. 'Indepth' studies may reveal that this was due to a particularly innovative method of engaging communities in the operation and maintenance (O&M) of water points. This might then lead to a change in national policy around O&M and corresponding changes in how resources are allocated.

A final issue to address is that there needs to be a good mechanism in place for ensuring that recommendations of all types, whether they are concerned with policy changes, resource reallocations or operational improvements, are monitored to ensure that they are actually implemented. Figure 4 shows a summary of key elements for effective sector reporting.



# Capacity building and institutionalisation

The MoWLE requested a team of consultants to compile the 2003 water and sanitation sector performance report in conjunction with key government staff, with funding provided by DfID. The consultants WELL included WEDC, Delta Partnership and Gil Yaron Associates. In 2004, consultants were engaged under the Joint Partnership Fund (Danida, Sida and DfID), and they trained and supported a team of around 40 sector officials to collect and analyse data and to prepare the annual sector report. Limited consultancy

support is being given in 2005 to support the creation of a sector led performance reporting Coordination Group which will oversee work by sector performance reporting teams. This three-stage process has had the result of transferring skills and building up capacity within the sector itself for performance reporting.

There are a number of reasons why this process of gradually transferring responsibility for performance reporting from consultants to government staff has been a success in Uganda. Perhaps the most important is that a Sector Wide Approach has been adopted in the Ugandan water sector, where government and donor funding is pooled and dispersed through government channels. This provides the government with incentives to achieve value for money. In countries where donor money bypasses government, the incentives to monitor performance are less. In addition, the first annual sector performance report produced in 2003 was valued by a broad range of stakeholders, so there was a demand for future annual reports. The participation of capable staff in key government departments and agencies has also enabled better sector performance reporting.

The main challenge to the use of the sector/ government led performance measurement is the institutionalisation of the coordination and reporting processes. These processes need to be mainstreamed in the work schedules of the relevant sector personnel, and handled as continuous processes in order to be effective.

## Lessons learned

The experience gained in the development of performance reporting systems in Uganda has lessons for sector managers, central and local government policy makers, NGOs and donors.

# For overall sector managers

- Participate in the development of a focused and balanced set of sector indicators
- Prioritise performance indicators and cascade down to sub-sector levels
- Identify 'primary' or 'headline' data sources to ensure consistency of reporting
- Set realistic yet challenging performance targets
- Lobby for sector resources based on performance levels and comparison with targets
- Ensure that there is a mechanism for monitoring the implementation of recommendations for improving performance coming out of the various key studies and reviews

# For central government

- Allocate roles for data collection, analysis and reporting
- Develop clear methodologies and homes for 'in-depth' and 'value for money' type performance studies
- Use performance monitoring to focus value for money and in-depth evaluation studies

- Identify good local performers (both the best and the best improvers) and support the dissemination of good operational practices
- Use performance information to provide evidence for better policy making
- Link local government resource allocation to performance levels.

## For local governments

- Link financial and performance monitoring systems
- Take part in the exchange of good operational practices with other local governments.

### For NGOs

- Lobby for inclusion of equity, gender, community etc. issues in sector indicators / analysis of indicators
- Contribute to the inclusion of qualitative and case study material in sector performance reports
- Interpret performance reports and lobby for policy change and resourcing adjustments.

### For donors

- Support capacity building efforts to improve sector performance reporting particularly related to reform and poverty issues
- Support the development of methodologies for better assessment of the 'value for money' provided by water and sanitation sector investments

### References

Batley R.A. and Larbi G. (2004) The changing role of government – the reform of public services in developing countries, Palgrave, Macmillan, UK

Delta Partnership (2003) Improving the Performance Measurement Framework for the Uganda Water and Sanitation Sector – Consultative Workshop, Kampala, Uganda

Delta Partnership (2004) Performance Measurement in the Water and Sanitation Sector: Institutionalisation Report, Uganda.

Sansom, K.R., Kayaga, S.M., Franceys, R.W.A.F, Njiru, C., Coates, S. and Chary, S. (2004) Serving all Urban Consumers: A marketing approach to water services in low and middle-income countries. Book 1 – Guidance for government's enabling role, WEDC, Loughborough University, UK.

MoWLE (2003) Water and Sanitation in Uganda – Measuring Performance for Improved Service Delivery.

MoWLE (2004) Water and Sanitation Sector Performance Report 2004, Uganda

World Bank (2004) World Development Report 2004: Making Services Work for Poor People. World Bank, Washington, DC.

# **Contact address**

Mike Thomson Director, Delta Partnership Berkeley Court, Glentworth Street, London NW1 5PG

Patrick A. Okuni Senior Water Officer, Directorate of Water Development 22-28 Port Bell Road, Luzira, PO Box 20026, Kampala, Uganda

Kevin Sansom Programme Manager, WEDC Loughborough University, Leicestershire, LE11 3TU, UK