



Ministry Of Water, Lands and Environment

Uganda Water and Sanitation sector

Performance Measurement Framework

March 2004

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Acronyms and Glossary

CBM	Community Based Management
DFID	Department for International Development (UK)
DWD	Directorate of Water Development
GoU	Government of Uganda
HIASS	Health inspectors' annual sanitation survey
GDP	Gross Domestic Product
ICWP	Improved Community Water Point
IDA	International Development Assistance
JSR	Joint Sector Review
M&E	Monitoring and Evaluation
MoFPED	Ministry of Finance, Planning and Economic Development
MIS	Management Information System
MTEF	Medium Term Expenditure Framework
NEMA	National Environment Management Authority
MoWLE	Ministry of Water Lands and Environment
NWSC	National Water & Sewerage Corporation
PEAP	Poverty Eradication Action Plan
PMA	Plan for the Modernisation of Agriculture
PMAU	Poverty Monitoring and Analysis Unit
PMF	Performance measurement framework
PMS	Poverty Monitoring Strategy
PPA	Participatory Poverty Assessment
PRSP	Poverty Reduction Strategy Paper
SWAp	Sector Wide Approach
SWG	Sector Working Group
UBOS	Uganda Bureau of Statistics
UDHS	The Uganda Demographic and Health Survey
UNHS	The Uganda National Household Survey
UPHC	The Uganda Population and Housing Census
UNSDS	Uganda National Service Delivery Survey
UPPAP	Uganda Participatory Poverty Assessment Programme
VFM	Value for Money
WEDC	Water Engineering and Development Centre (UK)
WELL	Resource Centre Network for Water, Sanitation and Environmental Health including WEDC (UK), LSHTM, IRC and Delta Partnership
WHO	World Health Organisation
WFP	Water for Production
WatSan	Water and Sanitation
WRM	Water Resources Management

Table of contents

Executive Summary.....	iv
Uganda water and sanitation sector Performance measurement framework	1
1.1 Background.....	1
1.2 Process	2
1.3 Structure of the Framework	2
1.4 Definitions of performance.....	3
1.5 Links with monitoring, evaluation and review.....	3
1.6 Benefits of improved performance measurement	4
1.7 Steps of performance measurement	5
2. Overview of current performance measurement.....	6
2.1 A framework for measurement	6
2.2 Current roles for data collection and analysis	7
2.3 Main data that is currently be collected	8
2.4 Sources of data.....	8
2.5 Sector report recommendations	9
3. New Sector performance Measurement.....	12
3.1 Development of performance indicators.....	12
3.1.1 Objectives of the sector	12
3.1.2 Performance themes.....	14
3.2 Development of sector performance indicators.....	15
3.2.1 Performance indicator structure.....	15
3.2.2 Performance indicators for the sector.....	16
3.3 Value for money considerations	18
3.4 Data analyses and presentations	18
3.5 Qualitative performance review.....	19
3.6 Linkage with the planning and budgeting cycle.....	20
4. Institutional roles for key performance measurement functions.....	24
5. Capacity building for the implementation of performance measurement.....	28
6. Action plan	32
Annex 1: Current data sources	34
1. The Uganda Population and Housing Census (UPHC)	34

2. The Uganda National Household Survey (UNHS)	34
3. The Uganda Demographic and Health Survey (UDHS).....	35
4. The Uganda National Service Delivery Survey (UNSDS).....	36
5. Ministry of Health, Health Inspectors' annual sanitation survey (HIASS)	37
6. The Uganda Participatory Poverty Assessment Process (UPAP)	37
7. Directorate of Water Development Management Information System (DWD-MIS).....	38
8. National Water and Sewerage Corporation Management Information System (NWSC-MIS).....	38
9. Tracking Study of the Water Sector Conditional Grants	39
10. Value for Money Technical Audit.....	39
Annex 2: Suggested performance indicators for the water and sanitation sector	40

List of tables

Table 1: Aspects of performance.....	3
Table 2: Performance measurement mechanisms	4
Table 3: Current roles for data collection and analysis	7
Table 4: Improved and unimproved water and sanitation	18
Table 5: Proposed timings for performance measurement tasks	24
Table 6: Institutional roles for performance measurement.....	20
Table 7: Types of performance reviews	23
Table 8: Performance measurement and capacity building.....	28
Table 9: Action plan.....	32

List of figures

Figure 1. General steps in performance measurement.....	5
Figure 2. Levels of performance measurement in Uganda	6
Figure 3. Summary of objectives of the sector	13
Figure 4. Performance themes.....	14
Figure 5. Example of performance presentation by theme.....	19
Figure 6. Institutions involved in performance measurement.....	26
Figure 7. Timing of key performance measurement roles	22

Executive Summary

The past few years has witnessed a growing interest in the performance of public sector service delivery in Uganda. This is partly a consequence of the desire to see positive outcomes from investments made in social sectors such as water and sanitation, but is also in response to the general move away from project funding modalities towards sector wide approaches to planning (SWAPs).

The Joint GOU/Donor Technical Review of Water and Sanitation Sector held in March 2003 identified and endorsed the need to improve performance measurement in the Uganda water and sanitation sector.

This framework has been prepared in highly consultative processes. A consultant team from WELL reviewed key sector documentation, conducted a series of meetings, held consultative workshops and built on good international practice. Then, the sector performance team reviewed the consultant's draft report. The recommendations, including the golden indicators, were presented to the Sector Working Group for adoption.

Performance¹ encompasses a range of issues that are important when assessing how well the water and sanitation sector is doing, both at the operational and strategic levels. In most countries and in most sectors, performance measurement has historically focused on the review of inputs and outputs, separately, and less has been done to assess the relationship between inputs and outputs (efficiency) and to assess whether outcome and impact objectives have been achieved (effectiveness).

Performance is currently measured at the national, sector and district levels within the Uganda water and sanitation sector. Performance measurement mechanisms can conveniently be divided into monitoring, evaluation and review elements. Currently, objective setting, data collection and data review / action elements are well established, although not always well integrated. A particular challenge is to improve the translation of objectives into streamlined performance measurement.

Various institutions are currently involved in data collection and analysis roles. There are twelve national data sources that have a role to play in monitoring the performance of this sector¹. These are:

1. The Uganda Population and Housing Census (UPHC)
2. The Uganda National Household Survey (UNHS);
3. The Uganda Demographic and Health Survey (UDHS);
4. The Uganda National Service Delivery Survey (UNSDS);
5. The Ministry of Health, Health inspectors' annual sanitation survey (HIASS);
6. Ministry of Education and Sport(MOES), Education Management Information System (EMIS);in particular on the primary school sanitation facilities ,
7. The Uganda Participatory Poverty Assessment Process (UPAP);
8. Directorate of Water Development Management Information System (DWD-MIS);

¹ There are certainly more data sources that could be drawn on such as ad hoc surveys that include a water and sanitation (Watsan) component e.g. Kampala City Council Household Survey. Our justification for only concentrating on regularly collected data is that we are concerned with a framework for monitoring past and future performance.

9. National Water and Sanitation management information system (NWSC-MIS);
10. Financial tracking studies; and
11. Technical Audits
12. Water and sanitation sector NGOs

Various initiatives are under way to measure performance in the Uganda water and sanitation sector, but there is scope for improving these. A recent study on behalf of the Ministry of Finance, Planning and Economic Development² has looked at the role of monitoring and evaluation in the health, education and water sectors. The report found that across the three sectors there is a need for:

- Harmonization of definitions and concepts (within and across sectors)
- Simplification of reporting (prioritisation of indicators, reduction of reporting)
- Consolidation of inspection (within ministries and among central ministries)
- Focus on service delivery results (in terms of goals/targets and incentives)
- Institutionalisation of in-depth evaluation studies

These and other issues are covered by this framework.

The new performance measurement should focus on themes. The performance themes for the water and sanitation sector have been identified by asking 'what are the key things that we need to know about each objective?'. The broad performance themes agreed on are:

- Impact (or overall importance) – this assesses the 'big picture' of water and sanitation initiatives such as the effect on improving the health of the population and productivity
- Quantity and quality – these measure the extent to which there is enough water resource of the right quality to meet sector needs
- Access and usage – these are inter-related themes that assess whether water and sanitation facilities are located in places where they can and are used
- Equity and affordability – these consider whether facilities are fairly distributed and whether there are within the means of the population
- Functionality and managerial – these can be termed 'operational issues' as they are necessary to ensure the operation of water and sanitation infrastructure and the reliability of services
- Value for money – this assesses whether investments in the sector are delivering the results that should be expected. The scope for vfm type studies have been reviewed and considered to combine various tools together into a 'performance audit' type approach.

To measure the themes, sets of performance indicators for the Uganda water and sanitation sector were determined at three levels:

- 8 'golden' performance indicators that are the most important cross-cutting indicators, based on good international practice and can form the basis for

² The role of monitoring and evaluation (M&E) in the Health, Education and Water Sectors, Arild Hauge et al, on behalf of MoFPED (Nov 2002).

negotiation as sector indicators upon which Central and District level performance can be assessed

- 15 sector performance indicators, including the 'golden' indicators and cover all the key performance themes
- 5-8 Indicators for each sub-sector covering the balance of themes and are clearly linked to one or more of the sector indicators.

Selected 'golden' indicators' are:

1. % of people within 1.5 km (rural) and 0.2km (urban) of an improved water source
2. % of improved water sources that are functional at time of spot-check
3. Average cost per beneficiary of new water and sanitation schemes
4. % of people with access to improved sanitation(Household and schools)
5. % of water samples taken at the point of water collection , waste discharge point etc that comply with national standards
6. % increase in cumulative storage capacity availability of water for production
7. Mean Parish deviation from the District average in persons per improved water point
8. % of people with access and using hand-washing facilities

Other performance sector indicators:

9. Average % of household expenditure paid for water and sanitation services
10. % of people that use improved sanitation(Household and schools)
11. % of men and women who are satisfied with water and sanitation services
12. Average daily per capita total consumption of water
13. % change in average ground and surface water levels
14. % of sector annual approved budgets that is actually spent on water and sanitation investment programmes
15. % of staff positions in central and local government that are filled

Operational level indicators by Sub-Sectors

Rural water and sanitation

1. % new water facilities built vs plan
2. Average total time to collect the daily water for the household (from all sources)
3. Funds allocated and spent on hygiene promotion per capita
4. Quality of data for sanitation and hygiene(at all levels)

Urban water and sanitation:

1. % of Unaccounted for water
2. staff productivity (staff per 1000 connection)

3. Collection/billing ratio
4. Number of water and sewage connections.
5. % of urban population with on site sanitation facilities(Septic Tanks , EcoSan ,Pit latrines etc),
6. % Effective response to customer complaints with 24 hours

Water for production

(to be provided by the sub-sector)

Water resources management

1. Percentage of water permits issued within the stipulated 90 days.
2. Number of permit holders monitored to ensure compliance every quarter.
3. Percentage of water samples analysed within 10 days of receipt.
4. Percentage of monitoring stations operated and maintained satisfactorily
5. Percentage of data entered within 14 days of receipt
6. % of water assessment studies completed on scheduled

The procedures and process for data collection, analysis , reporting etc have been determined . There is need to link with the Government of Uganda planning and budgeting processes so that:

- Performance indicators can be linked to sector plans
- Planned levels of performance can be linked to resource availability
- Resources can be targeted at key priorities
- Performance monitoring and evaluation can influence future policy making, planning and budgeting

A key part of the establishment of an improved performance measurement system , the roles (along with the relevant competencies) have been identified between the different institutions involved and to ensure effective integration of activities as below:

- The Sector Working Group takes on the responsibilities for
 - Reviewing and prioritising objectives and targets for the sector as a whole
 - Selecting /approving sector performance indicators and reviewing these over time
- The Planning and Quality Assurance Department of MWLE takes on the roles of **coordinating** the sector Performance management and specially carry out:
 - Policy setting ,Inspection and other monitoring processes so that roles are performed efficiently
 - Undertake qualitative assessment of performance and linking this to the more quantitative performance indicator framework
 - Preparation and presentation of performance reports

- The Policy Analysis Unit of MWLE conducts regular evaluations of the effectiveness of policies in improving water and sanitation sector performance
- DWD units, the EHD and the Ministry of Education produce better balanced and more output focused sub-sector indicators and specially carry out:
 - o Target setting for performance indicators
 - o The collection of the data needed to measure the indicators
 - o The collation, analysis and presentation of sector performance data
- UWASNET takes on the role of coordinating the NGOs inputs in the sector performance measurement

For effective strengthening of performance measurement within the Uganda water sector, there is a need to assess current capacity and gaps that need to be filled. By capacity building in the context of performance measurement we include:

- Process improvements
- Systems developments and infrastructure support
- Staff training needs

An initial assessment that requires careful review with links made to the development of sub-sector sector strategies for capacity building. More work is needed to assess capacity building requirements, bearing in mind the potential role of the Technical Support Units (TSUs) and the results of capacity building programmes such as the Training for Real project inception phase (October 2003).

The recommendations and other actions required to improve performance measurement are summarised in matrix below.

Action plan

When	What	Who
Sep 2003	Presentation of sector performance report at the Joint Sector Review	Minister of MoWLE / consultants
Sep 2003	Review past performance and assess future priorities	Joint Sector Review
Dec 2003	Review and agree the Performance Measurement Framework Report	Sector Working Group
Feb 2004	Agreement of sector indicators and targets	Sector Working Group, supported by consultants
March 2004	Agreement of qualitative mechanisms for assessing performance	Sector Working Group, supported by consultants
Mar-June 04	Training policy analysts in policy evaluation techniques	Would require consultancy support
Mar-June 04	Consider and agree links between performance measurement and the evolving HRD and training strategies for the sub-sectors	Would require consultancy support
Mar 04	Introducing new policy development and evaluation	Would require consultancy

	systems	support
Mar-June 04	Training of planning and quality assurance staff in target setting, data coordination, data analysis and reporting	Would require consultancy support
Mar-May 2004	Introducing new data coordination, analysis and reporting systems	Would require consultancy support
Mar-June 04	Agreeing mechanisms for streamlining performance checking functions – such as inspections, tracking studies, technical audits, value for money studies	Would require consultancy support
Mar-June 04	Support departments to improve sub-sector indicators and integrate into plans	Would require consultancy support
Mar 2004	Review sub-sector performance	Joint Technical Review
Mar 2004	Assess progress against PSRC undertakings	Joint Technical Review
May 2004	Commissioning of in-depth VFM / programme evaluation studies	Joint Technical Review
May 2004	Setting of annual target levels of performance for sector indicators	Sector Working Group
May 2004	Setting of annual target levels of performance for sub-sector indicators	Sub-sector working groups
Jul – Aug 2004	Analyse and present sector data for FY 2003/04	Directorate of Water Development
July – Aug 2004	Finalise tracking studies and technical audits for FY 2003/04	Directorate of Water Development
Sep 2004	Review performance for FY 2003/04, assess policy and resource allocation implications	Joint Sector Review
Sep 2004	Commissioning of in-depth VFM / programme evaluation studies	Joint Sector Review
Jul – Dec 2004	Support the conduct of improved value for money studies	Would require consultancy support

Uganda water and sanitation sector Performance measurement framework

1.1 Background

The past few years has witnessed a growing interest in the performance of public sector service delivery in Uganda. This is partly a consequence of the desire to see positive outcomes from investments made in social sectors such as water and sanitation, but is also in response to the general move away from project funding modalities towards sector wide approaches to planning (SWAps). SWAps call for common financing and accountability mechanisms, with donors conceding much of the control of fund management to Government.

The Joint GOU/Donor Technical Review of Water and Sanitation Sector held in March 2003 identified and endorsed the need to improve performance measurement in the Uganda water and sanitation sector. This will provide improved evidence of the sector's contribution to poverty reduction in Uganda.

There are currently systems for performance measurement in the Uganda water and sanitation sector but the topic needs to be tackled in a more structured and consistent manner than at present. To achieve this, the sector needs to develop and adopt a more comprehensive performance measurement framework which:

- Provides a clear definition of what is meant by performance and the indicators by which it is measured;
- Is consistent with the Government of Uganda (GoU) mission statements and sector objectives; defines the purpose and scope of each of the tools used for measuring performance;
- Provides for an incremental approach, perhaps focusing on different aspects of performance as the SWAp develops;
- Identifies which agencies are responsible for each aspect of performance measurement;
- Links development and implementation of performance measurement to wider ongoing management of the sector, specifically the efficient and effective management of human resources (employee and manager selection, competence, development, deployment and appraisal);
- Identifies the various fora (Sector Working Group meetings; Public Expenditure Review; Annual Joint Sector Review, etc.) at which performance will be assessed;
- Maps out the processes which need to take place to ensure agreement and ownership of the performance framework;
- Links to a broader performance management structure, whereby it can be demonstrated that remedial actions have led to improved performance;
- Is part of an incentive structure which has clear and transparent criteria for rewarding good performance and penalising under-performance; and
- Informs the preparation of an annual "State of the Water and Sanitation Sector" publication for presentation at annual joint GoU/Donor sector reviews.

This framework does not deal in detail with the readiness of the sector (the enabling environment- e.g. restructured institutions, human resource management and capacity and related strategies) that ideally should be in place to improve performance and meet agreed targets. This needs to be done in parallel with effective performance measurement. Wider reforms are being addressed in the sector, DWD restructuring for example and the Training for Real (TFR) Project focused on the rationalisation and targeting of sector capacity development activities. It is clear however that the success of a performance measurement framework will in part depend on the efficient and effective management of people, and their commitment to, and involvement with the approach.

1.2 Process

This framework has been prepared in highly consultative processes. A consultant team from WELL from the Water, Engineering and Dev. Centre(WEDC)Loughborough University(UK), London School of Hygiene & Tropical Medicine(UK), IRC International Water and Sanitation Centre(Netherlands) and Delta Partnership(UK) were engaged and carried the task to prepare the sector Performance framework between June-September 2003. The consultant reviewed key sector documentation, conducted a series of meetings, held consultative workshops and built on good international practice.

A consultative workshop held at Munyonyo on 1st and 4th August 2003, where 55 key stakeholder representatives of the water and sanitation sector attended and discussed the consultants first draft report. The consultant submitted a draft Report in September 2003, during the joint Review.

The consultant work also involved the publication the first sector performance report entitled: 'Water and Sanitation in Uganda - Measuring Performance-for Improved Service Delivery', in September 2003 as a separate document.

One of the undertakings for Joint Sector Review (JSR) is to carry out comprehensive performance monitoring of the sector based on the recommended Framework. In November 2003, the Sector Working Group appointed a **Sector Performance thematic team**, among 4 others, to follow up the implementation of this joint Sector Review (JSR) undertaking. The sector performance team meeting was held on December 2003 and January 2004 to review the consultant's draft report. A second workshop was held on 31st January 2004, where the stakeholders reviewed key areas of the report and selected the golden indicators and agreed on roles and responsibilities. The recommendations, including the golden indicators, were presented to the Sector Working Group for adoption in February 2004.

This provides a framework for measuring all aspects of performance in the Uganda water and sanitation sector.

1.3 Structure of the Framework

This framework is structured in the following sections:

- Section 1 is an introduction to general concepts

- Section 2 explains how performance is currently measured in the Uganda water and sanitation sector and sets out some recommendations for improvement (based on the 2003 Sector Performance Report)
- Section 3 New Performance measurement and presents a methodology for developing an improved set of performance indicators for the sector, shows the performance indicators for the sector and examples of how data can be analysed, links these roles with current planning and budgeting processes in the sector
- Section 4 focuses on the institutional roles that are necessary for performance measurement
- Section 5 sets out capacity building needs for the implementation of the performance measurement framework
- Section 6 presents a summary action plan for ensuring that improved performance measurement is implemented effectively

1.4 Definitions of performance

'Performance' encompasses a range of issues that are important when assessing how well the water and sanitation sector is doing, both at the operational and strategic levels. International definitions vary, but 'performance' commonly includes each of the three following aspects:

Table 1: Aspects of performance

Aspect of performance	Definition	Example
Economy	Obtaining inputs of the right quality at the right price	Procurement of quality spare parts for water pumps at the lowest possible cost
Efficiency	Converting inputs into outputs with as few resources as possible	Construction of as many functional bore holes as possible from a given level of investment
Effectiveness	Achieving desired objectives	Adoption of improved hygienic practices

In most countries and in most sectors, performance measurement has historically focused on the review of inputs and outputs, separately, and less has been done to assess the relationship between inputs and outputs (efficiency) and to assess whether outcome and impact objectives have been achieved (effectiveness).

This framework, therefore, is based on the consultants report with inputs from the performance thematic team and the Sector Working Group

1.5 Links with monitoring, evaluation and review

Performance measurement mechanisms can conveniently be divided into monitoring, evaluation and review elements, each having various possible components as shown below:

Table 2: Performance measurement mechanisms

Monitoring	Evaluation	Review
<ul style="list-style-type: none"> • Regular measurement of performance - annually or more frequently • Focuses on the review of inputs and intermediate outputs • Aims to identify operational problems that can be rectified and operational successes that can be replicated • Common techniques include field inspections, quarterly District reporting, technical audits, financial tracking studies 	<ul style="list-style-type: none"> • Periodic measurement of performance - annually or less frequently • Focuses on the review of outputs and outcomes • Aims to identify the reasons for good or poor performance • Common techniques include participatory user assessments, analysis of household survey data, value for money studies, one-off studies to review a particular policy or issue 	<ul style="list-style-type: none"> • Periodic assessment of what has been learned – during the course of the year and at the end • Focuses on the identification of implications of the monitoring and evaluation analysis • Aims to develop mechanisms for disseminating learning, influencing policy and affecting resourcing • Common techniques include policy forums, joint sector reviews

Scope for improving performance measurement

Various initiatives are under way to measure performance in the Uganda water and sanitation sector, but there is scope for improving these. A recent study on behalf of the Ministry of Finance, Planning and Economic Development³ has looked at the role of monitoring and evaluation in the health, education and water sectors. The report found that across the three sectors there is a need for:

- Harmonization of definitions and concepts (within and across sectors)
- Simplification of reporting (prioritisation of indicators, reduction of reporting)
- Consolidation of inspection (within ministries and among central ministries)
- Focus on service delivery results (in terms of goals/targets and incentives)
- Institutionalisation of in-depth evaluation studies

These and other issues are covered by this framework.

1.6 Benefits of improved performance measurement

Improved performance measurement will have the following benefits:

- More focused and better integrated performance data
- Easier identification of good and poor performance

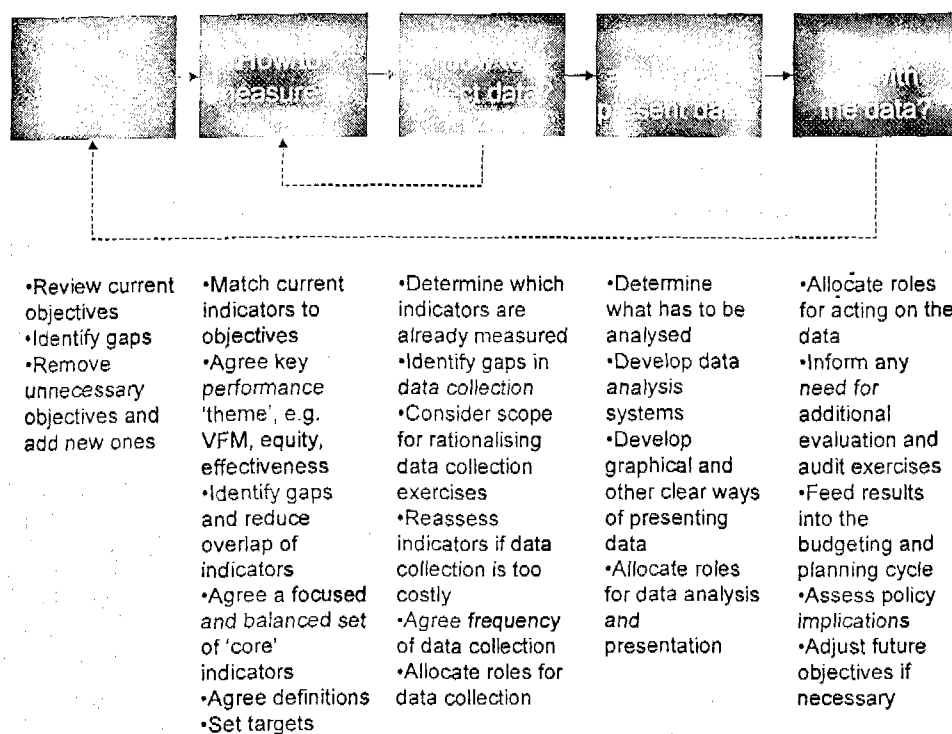
³ The role of monitoring and evaluation (M&E) in the Health, Education and Water Sectors, Arild Hauge et al, on behalf of MoFPED (Nov 2002).

- 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.

1.7 Steps of performance measurement

The steps can be broken down into five components as shown in the diagram below.

Figure 1. General steps in performance measurement



The above diagram is a general interpretation of performance measurement. The rest of this report builds on this to develop a tailored framework for the Uganda water and sanitation sector.

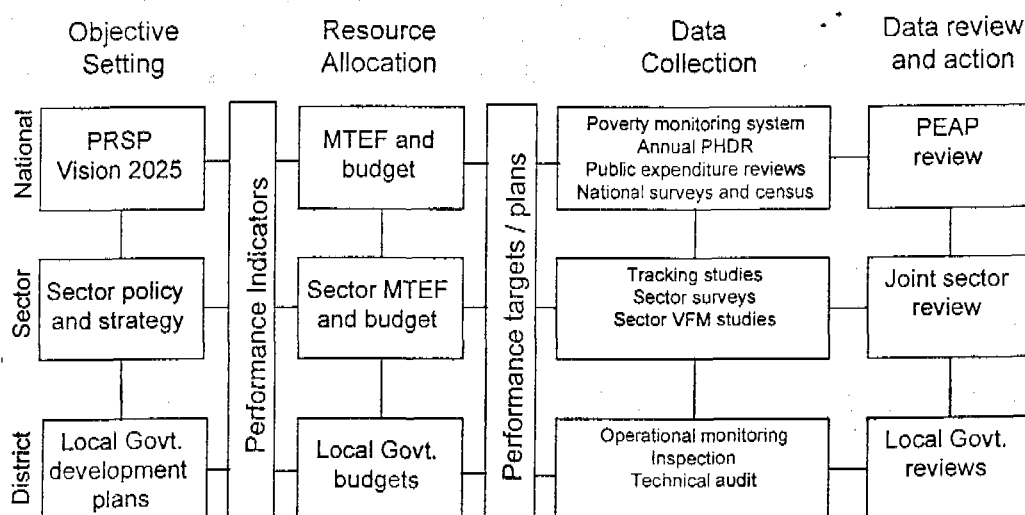
2. Overview of current performance measurement

2.1 A framework for measurement

Performance is currently measured at the national, sector and district levels within the Uganda water and sanitation sector. Overall performance objectives are set out in various documents such as the Poverty Eradication Action Plan (PEAP) at the national level, the National Water Policy, Sector Investment Plans at the sector level and Local Government Development Plans at the District level. This hierarchy of objectives provides a framework for developing performance indicators and allocating resources. It is then possible to set targets or planned performance levels at each of the three levels. This provides a framework for collecting data to assess whether plans are achieved. Data review can then lead to improved policy making and resource allocation decisions in the future.

The following diagram sets out these steps. Most of the parts of this framework currently exist, but many could be improved. The challenge is to effectively synthesise and integrate current mechanisms to provide an overall structure for performance measurement.

Figure 2. Levels of performance measurement in Uganda



Currently, objective setting, data collection and data review / action elements are well established, although not always well integrated. A particular challenge is to improve the translation of objectives into streamlined performance measurement through:

- A review of objectives to ensure that all key aspects of performance are covered

- The establishment of more clearly defined, focused and better balanced performance indicators
- The development of mechanisms for allocating resources more clearly to priority areas and
- Agreeing challenging yet realistic target levels for all key sector objectives

2.2 Current roles for data collection and analysis

Various institutions are currently involved in data collection and analysis roles as shown below.

Table 3: Current roles for data collection and analysis

Institution	Summary data collection and analysis roles
Directorate of Water Development (DWD)	(a) Collect data and analyse Maintains a water and sanitation management information system (b) Coordinates technical audits and financial tracking studies
Planning and Quality Assurance Department(PQAD), Ministry of Water, Lands and Environment (MWLE)	(a) Conducts inspections of water and sanitation facilities (b) Performs some analysis of overall sector performance
National Water and Sewerage Corporation (NWSC)	Maintains a water and sanitation management information system
Ministry of Health	Conducts the Uganda Demographic and Health Survey – this contains some data on water and sanitation
Environmental Health Division of the Ministry of Health	Oversees the health inspectors' annual sanitation survey
Ministry of Finance, Planning and Economic Development, Poverty Monitoring Unit	Coordinates the Uganda Participatory Poverty Assessment Process – this contains qualitative information about the quality of water and sanitation services
Uganda Bureau of Statistics (UBOS)	Conducts the Uganda Population and Housing Census and the National Household Survey – these contain some data on water and sanitation

2.3 Main data that is currently be collected

Some current aspects of performance that are measured in the Uganda water and sanitation sector are summarised below: Number of improved water sources that are constructed

- Length of pipes that have been constructed
- Number of people with access to improved water sources
- Number of water tests that are carried out
- Number of other types of activity that have been carried out, e.g. maps produced, permits issued, plans produced etc.
- Distances to water source
- Types of water source
- Types of sanitation facilities
- Amount of money invested in the water and sanitation sector
- Tracking studies of the flow and amount of resources spent on programmes in the districts
- Value for money assessments of water and sanitation initiatives

There are various inter-related challenges:

- (a) Certain aspects of performance are not as well measured as others – for example equity of water provision, usage of facilities, functionality of infrastructure, impacts of water and sanitation initiatives
- (b) Quality of data varies for each of these items.
- (c) There is no well-defined framework for ensuring that all aspects of performance are well measured
- (d) There could be better linkages to poverty objectives
- (e) Key terms such as 'improved water source' need to be clearly defined and used consistently

2.4 Sources of data

There are twelve national data sources that have a role to play in monitoring the performance of this sector⁴. These are:

13. The Uganda Population and Housing Census (UPHC)
14. The Uganda National Household Survey (UNHS);
15. The Uganda Demographic and Health Survey (UDHS);

⁴ There are certainly more data sources that could be drawn on such as ad hoc surveys that include a water and sanitation (Watsan) component e.g. Kampala City Council Household Survey. Our justification for only concentrating on regularly collected data is that we are concerned with a framework for monitoring past and future performance.

16. The Uganda National Service Delivery Survey (UNSDS);
17. The Ministry of Health, Health inspectors' annual sanitation survey (HIASS);
18. Ministry of Education and Sport(MOES), Education Management Information System (EMIS);in particular on the primary school sanitation facilities ,
19. The Uganda Participatory Poverty Assessment Process (UPAP);
20. Directorate of Water Development Management Information System (DWD-MIS);
21. National Water and Sanitation management information system (NWSC-MIS);
22. Financial tracking studies; and
23. Technical Audits
24. Water and sanitation sector NGOs

The first five of these sources are regular national household surveys while the sixth is based on group discussions within 60 communities. Both types of data are well suited to asking those people who are meant to benefit from investment in the sector whether they have received the intended Watsan services. There are issues of how well the specific questions used in the surveys capture service delivery and the extent to which there is comparability across data sources. However, the focus in all of these is on the *outcome* of investment in the sector.

The DWD and NWSC management information systems capture the services provided (boreholes or piped connections for example) in rural areas and large towns respectively. This data can be combined with Census data to measure outcomes of investment in terms of services provided to households at a local level – down to the village – which the other data sources cannot. Unlike the survey or UPAP data, the users of water or sanitation services do not tell us how much they actually use. The focus is on provision of services to *potential users* in a given area. However, as data is available at a local level, it is possible to look at how services are distributed within districts and to explore how equitable service provision actually is.

Tracking studies and technical audits differ from the foregoing data sources as these are concerned with monitoring the outputs of investment (boreholes sunk for example) rather than the outcomes of this investment (e.g. people with safe water supply). In addition to playing an important role in identifying how services are being developed in each area and the associated cost, the results of these studies need to be compared with the evidence of outcomes to help us identify where we are getting the best value for money.

Annex 1 presents details about each of the 10 data sources.

2.5 Sector report recommendations

The recommendations contained in the 2003 Sector Performance Report should be implemented to improve future data collection and analysis systems. These are:

1. Various pieces of data are currently collected by five regular household surveys. There are likely to be considerable benefits from:

- Thinking through which survey instruments should be used to collect which data;
 - Ensuring consistent variable definitions
 - Ensuring that key variables are collected in the same survey to allow consistent monitoring;
 - Identifying which data has to be available at the district level; and
 - Identifying which water and sanitation data needs to be analysed by household poverty status.
2. Some relevant issues to consider are:
 - Which water and sanitation questions are essential to ask annually (those relating to key sector indicators and headline targets) and by which survey mechanism can these be measured?
 - Will broader watsan questions be picked up in the UNSDS in future? (if not, how will they get asked?)
 - How to assess the "affordability" of water? (this is perhaps best addressed by including expenditure on water in the UNHS, but at the moment it does not seem to be picking up expenditures such as operation and maintenance for rural water users)
 - How do we want to analyse performance at the district level? (and how can we use UNSDS or revise UNHS?)
 - How important is having both analysis at the district level (for PAF monitoring and a disaggregated picture of watsan performance) and an accurate poverty status for households (to allow tracking of access and coverage by poor and non-poor)? (if both are required, the best option may be to expand the UNHS, if a less accurate poverty status is acceptable, the main survey instrument for watsan could be the bi-annual UNSDS).
 3. It is better to use the term "improved" rather than "safe" water sources as the latter cannot be directly measured in practice.
 4. The current water and sanitation questions in the UNHS do not include time taken to collect water or the time the usual improved source is available each year. These questions should be added as soon as possible. The time taken should be monitored alongside distance travelled to get a meaningful picture of water availability - particularly in urban and peri-urban areas. The precise definition of the time taken to collect water in the UNSDS survey needs to be reviewed, in the light of the proposed indicators. It may be necessary to split this between wet and dry seasons as the 2000 UNSDS confirms that there are significant differences – this is a lower priority, however, and is something to discuss for future work. Note that where responses are split by wet and dry season, it is important to ask how long each season is according to the respondent (this was not done in the UNSDS).
 5. UNSDS results for water and sanitation need to be reported by rural/urban categories (and not just regions) in order to compare with other survey results.
 6. If the UNSDS is going to be an important survey instrument for monitoring progress against watsan targets it will be necessary to use the same asset list and other variables most closely associated with poverty status (from analysis of UNHS) to allow predicted poverty status to be estimated for each household in the UNSDS (It is relatively straightforward to use econometric analysis on the

UNHS data to check how well we would predict poverty using this method and this could be done immediately using the 1999/2000 UNHS data)

7. The apparent inconsistency between "distance to drinking water source" data in the 1995, 1996 and 1999 data sets will need to be checked.
8. Household perception data on whether coverage has improved is collected in the 2000 UNSDS and appears to be a useful check on the standard quantitative data. It is worth keeping this in future UNSDS survey rounds.
9. For the UNSDS:
 - The main water source question should be split into water for "drinking" and "other" – consistent with UNHS
 - Similarly, distance, time and litres consumed should be requested for "drinking water" and "other water" separately
 - The number of containers of water collected and capacity of container in litres should be asked for
 - If it is wanted to continue to ask for wet and dry season figures separately, the number of months that the respondent considers the wet and dry seasons to last should be obtained
10. Wider use should be made of the MoH HIASS data. If this was shared with UBOS it would permit triangulation with household survey data. Adjustment to the headline sanitation coverage figure derived from UNHS for the proportion of latrines that are non-functional would be possible.
11. The Ministry of Health Disease Surveillance team should be able to provide regular data on the incidence of diarrhoeal disease among children and this impact should be monitored on a yearly basis
12. The new DWD-MIS is likely to be very useful for performance monitoring , although the assumed coverage figures (e.g. 300 persons/borehole) can be very inaccurate and improved water coverage projections should not be made on the basis of these assumptions. The DWD-MIS and Census data should be used to regularly report coverage in terms of population per improved water points for each parish, sub-county and district. Tables could be published in national newspapers to increase public discussion and performance monitoring.

3. New Sector performance Measurement

3.1 Development of performance indicators

The sets of application of a tried and tested methodology used for establishing and prioritising a set of performance indicators for the Uganda water and sanitation sector. The basic steps are:

- Review the objectives of the sector
- Identify key 'performance themes'
- Identify sets of 'golden', sector and sub-sector indicators
- Prioritise indicators

3.1.1 Objectives of the sector

The objectives of the water and sanitation sector are set out in various key documents such as the:

- Uganda Poverty Eradication Action Plan (PEAP)
- National Water Policy
- Rural and Urban Water Strategic Investment Plans
- The Health Sector Policy and Strategic Plan
- Draft Water for Production Strategy
- Water and Sanitation Sector Medium Term Budget Framework
-

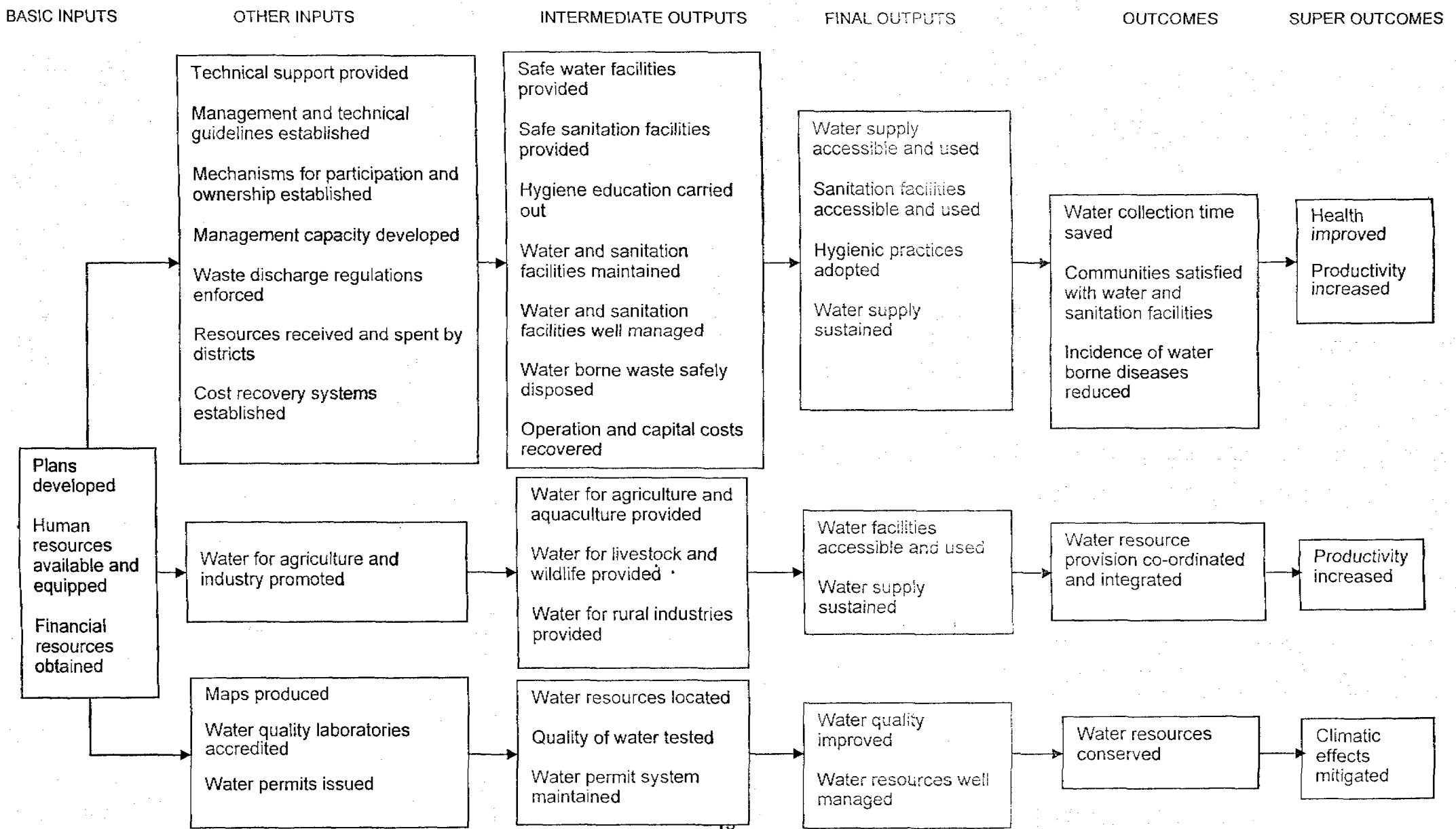
The sector goals and targets set out in the PEAP are:

- 'To promote co-ordinated, integrated and sustainable water resources management to ensure conservation of water resources and provision of water for all social and economic activities'
- To provide 'sustainable safe water supply and sanitation facilities, based on management responsibility and ownership by the users, within easy reach of 65% of the rural population and 80% of the urban population by the year 2005 with an 80%-90% effective use and functionality of facilities; then eventually to 100% of the urban population by 2010 and 100% of the rural population by the year 2015'
- To promote development of water supply for agricultural production in order to modernise agriculture and mitigate effects of climatic variations on rain-fed agriculture'

The above objectives encapsulate all major aspects of what the sector is aiming to achieve. Other documents state objectives in varying ways – there is some overlap with what is stated in the PEAP, some expansion into more detail and (occasionally) some contradictions between documents.

To provide a useful starting structure for performance measurement, various policy documents were studied and an 'objectives map' that shows how all the various objectives in the sector are linked. This is shown in Figure 3.

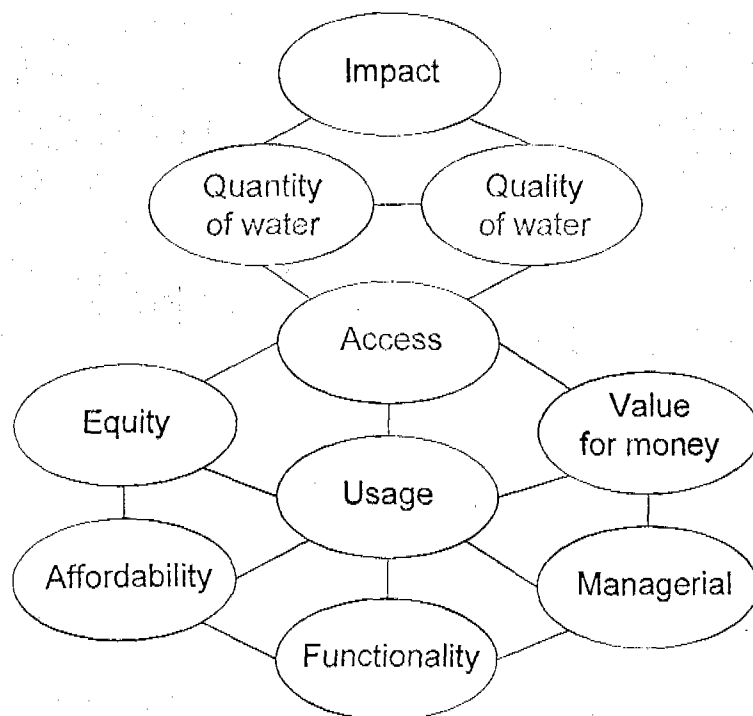
Figure 3. Summary of objectives of the sector



3.1.2 Performance themes

The performance themes for the water and sanitation sector were identified by asking 'what are the key things that we need to know about each objective?'. Possible themes were discussed at the consultative workshop of sector representatives in August 2003 and ten themes were agreed as the most important, reflected in Figure 4).

Figure 4. Performance themes



These broad performance themes can be defined as follows:

- Impact (or overall importance) – this assesses the 'big picture' of water and sanitation initiatives such as the effect on improving the health of the population and productivity
- Quantity and quality – these measure the extent to which there is enough water resource of the right quality to meet sector needs
- Access and usage – these are inter-related themes that assess whether water and sanitation facilities are located in places where they can and are used
- Equity and affordability – these consider whether facilities are fairly distributed and whether there are within the means of the population
- Functionality and managerial – these can be termed 'operational issues' as they are necessary to ensure the operation of water and sanitation infrastructure and the reliability of services
- Value for money – this assesses whether investments in the sector are delivering the results that should be expected

3.2 Development of sector performance indicators

The performance themes were applied to key objectives relating to each of five sub-sectors within the water and sanitation sector:

- Rural water and sanitation
- Urban water and sanitation
- Water for production
- Water resources management
- General sector issues

During the Workshop in August, the participants determined the key themes for each objective and then came up with a potential performance indicator for each theme and also based on good international practice and a prioritisation exercise was carried out where:

- All the sub-sector indicators, including some indicators that have been used in other countries, were grouped into the 10 thematic groups
- The three criteria used for the initial prioritisation of indicators were: the ease and cheapness of collecting data, the reliability of data and the simplicity of the indicator
- The participants prioritised three indicators for each of the theme and presented to the main body of the workshop
- The workshop agreed that further review of indicators was needed to reduce them to a more manageable number – 'key checks' to consider are that the indicators cover frequently asked questions, are easily verified, relate well to the Poverty Eradication Action Plan, are measurable across the whole of Uganda and are internationally recognised
- The participants discussed the indicators and sent email comments to the consultants that came up with a draft set of sector indicators

3.2.1 Performance indicator structure

The performance indicators at three levels:

- 8 'golden' performance indicators that are the most important cross-cutting indicators, based on good international practice and can form the basis for negotiation as sector indicators upon which Central and District level performance can be assessed
- 15 sector performance indicators, including the 'golden' indicators and cover all the key performance themes
- 5-8 Indicators for each sub-sector covering the balance of themes and are clearly linked to one or more of the sector indicators.

With the move towards increased decentralisation of sector management within Uganda, the 'golden' indicators can play a particularly important role in a performance incentive / penalty framework. The performance of Districts in key sectors such as water and sanitation will be critically assessed and greater autonomy and potentially greater resources will be given to

those districts that perform well. An outline framework for District level performance measurement and reward is contained in a document titled 'Design of the Financial Management, Accountability and Reporting Systems under the Fiscal Decentralisation Strategy'. Steps are needed to ensure that performance measurement in the water and sanitation sector is linked to developments in these District level initiatives.

3.2.2 Performance indicators for the sector

The factors considered for the set of 'golden' indicators for the water and sanitation sector, are based on:

- The Poverty Reduction Strategy Credit (PRSC) 3 Policy Matrix;
- Key sector strategy and policy papers;
- Points made at the 2003 Joint Sector Review;
- Content of the 2003 Sector Performance Report.
- All the 10 performance themes are covered
- Best international practice has been considered
- Data can be realistically collected
- Stakeholder views have been incorporated as far as possible

Selected 'golden' indicators' are:

16. % of people within 1.5 km (rural) and 0.2km (urban) of an improved water source
17. % of improved water sources that are functional at time of spot-check
18. Average cost per beneficiary of new water and sanitation schemes
19. % of people with access to improved sanitation(Household and schools)
20. % of water samples taken at the point of water collection , waste discharge point etc that comply with national standards
21. % increase in cumulative storage capacity availability of water for production
22. Mean Parish deviation from the District average in persons per improved water point
23. % of people with access and using hand-washing facilities

Other performance sector indicators:

24. Average % of household expenditure paid for water and sanitation services
25. % of people that use improved sanitation(Household and schools)
26. % of men and women who are satisfied with water and sanitation services
27. Average daily per capita total consumption of water
28. % change in average ground and surface water levels
29. % of sector annual approved budgets that is actually spent on water and sanitation investment programmes

30. % of staff positions in central and local government that are filled

Operational level indicators by Sub-Sectors

Rural water and sanitation

5. % new water facilities built vs plan
6. Average total time to collect the daily water for the household (from all sources)
7. Funds allocated and spent on hygiene promotion per capita
8. Quality of data for sanitation and hygiene(at all levels)

Urban water and sanitation:

7. % of Unaccounted for water
8. staff productivity (staff per 1000 connection)
9. Collection/billing ratio
10. Number of water and sewage connections.
11. % of urban population with on site sanitation facilities(Septic Tanks , EcoSan ,Pit latrines etc),
12. % Effective response to customer complaints with 24 hours

Water for production

Water resources management

7. Percentage of water permits issued within the stipulated 90 days.
8. Number of permit holders monitored to ensure compliance every quarter.
9. Percentage of water samples analysed within 10 days of receipt.
10. Percentage of monitoring stations operated and maintained satisfactorily
11. Percentage of data entered within 14 days of receipt
12. % of water assessment studies completed on scheduled

Annex 2. More detail justification for each indicator, suggested data sources and, where possible, an overview of current performance and targets for each indicator.

Hygiene indicators have been included in list above, as hygiene promotion is an important activity that is often combined with water and sanitation activities, as a means of delivering significant health benefits. Where the word 'average' is included in the indicator, an alternative presentation of the data could be the 'percentage that meet the minimum target'. A particularly important consideration is how to define 'improved' water and sanitation services. We suggest that this is defined as follows:

Table 4: Improved and unimproved water and sanitation

Water supply		Sanitation	
Improved	Unimproved	Improved	Unimproved
<ul style="list-style-type: none"> • Household connection • Public standpipe • Borehole • Protected dug well • Protected spring • Rainwater collection 	<ul style="list-style-type: none"> • Unprotected well • Unprotected spring • Vendor provided water • Bottled water • Tanker truck water 	<ul style="list-style-type: none"> • Connection to a sewer • Connection to a septic system • Pour-flush latrine • Simple pit latrine • VIP latrine 	<ul style="list-style-type: none"> • Service or bucket latrine (where manually emptied) • Public latrines • Latrines with an open pit

3.3 Value for money considerations

Ensuring 'value for money' in the water and sanitation sector was a subject of high prominence at the 2003 Joint Sector Review meeting in September 2003. From a performance measurement perspective, there are two main facets of this:

- *Developing and measuring value for money indicators*
- *Reviewing and implementing value for money studies*

The list of 8 golden sector indicators include one vfm indicator - average cost per beneficiary of new water and sanitation schemes. This is the indicator contained in the PRSC3 Policy Matrix and the revised PEAP.

International definitions of 'value for money' vary, but it is generally thought of as a broad concept that covers aspects of economy, efficiency and effectiveness. In fact, it could be argued that most of the 15 sector indicators form part of vfm – especially when they are compared to the amount of resources invested in the sector. Only if investments lead to satisfactory increases in access, usage, quantity, quality, functionality, equity etc. can it be said that full vfm has been achieved.

The breadth of vfm studies in the water and sanitation studies have been reviewed and the 'value for money review' has been replaced with the term 'performance audit'. This is a broader review of performance which assesses whether money has been spent well, what has contributed to good performance and what can be learned to improve future performance. The scope for vfm type studies have been reviewed and considered to combine various tools together into a 'performance audit' type approach.

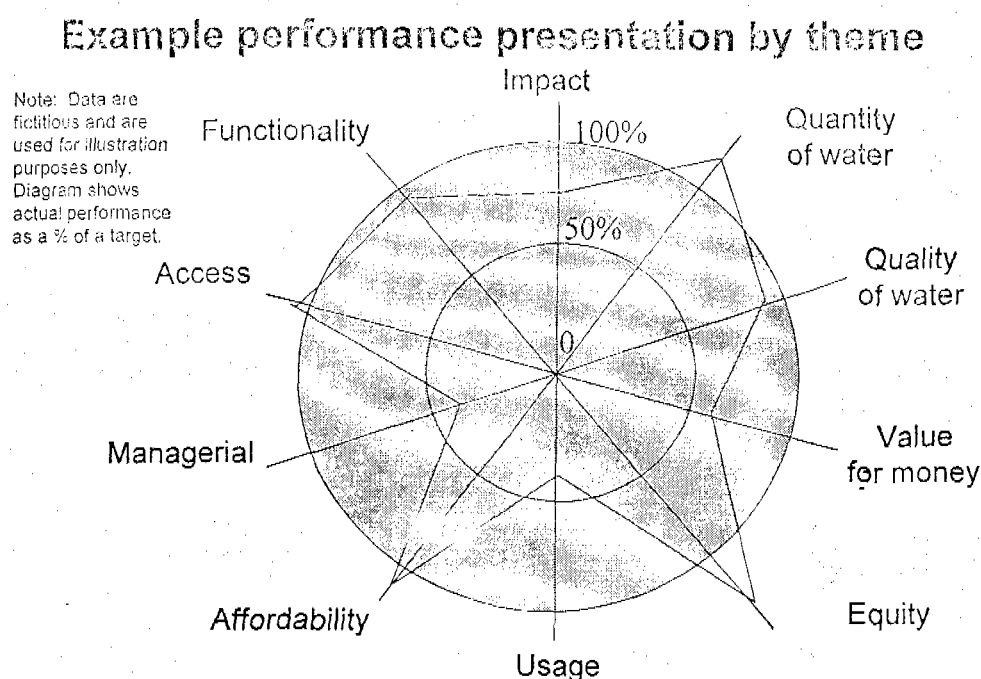
3.4 Data analyses and presentations

For the most effective use of performance data, it will be necessary to analyse and present information in ways that are readily digestible and that facilitate decision-making. Where possible, data should be presented in tabular and graphical formats. Analyses can usefully show:

- Trends over time
- Geographical comparisons by district / country etc.
- Comparisons by men / women or by rich / poor
- Comparisons by income quintiles
- Comparisons of actual performance against plans or targets
- Comparisons of key trends in 'golden' indicators against amount of money invested in the sector (a broader review of 'value for money')

A good way of summarising performance each period is to show sector key indicators on a 'spider diagram' like in the example shown below.

Figure 5. Example of performance presentation by theme



The diagram shows a performance indicator for each of the 10 performance themes that were identified at the consultative workshop. The perimeter of the circle shows the target of planned level of performance for each indicator. The star shape plots actual performance as a proportion of the plan for each indicator. As the measurement starts at the centre of the diagram, 'equity' is performing well, but 'usage' is well below what was expected. This sort of analysis helps to focus managerial effort and to target resource on priority areas.

3.5 Qualitative performance review

The above discussion of performance indicators focuses on the quantitative aspects of performance measurement. An indicator can measure subjective issues such as 'customer

satisfaction' but an indicator is always quantifiable, e.g. 'the percentage of users who are satisfied with the service'.

Qualitative performance review can be thought of as a narrative review of performance. This should be used as a complement to indicator analysis. Qualitative review involves discussion with key stakeholders in the water and sanitation sector to find out opinions and reasons about performance levels and the likely reasons for these. One of the best-developed ways of doing this at the moment is through the Participatory Poverty Assessment process. This process targets a sample of service users, using a combination of questionnaire and more participatory data collection exercises to find out opinions about the quality of water and sanitation services, to ascertain commonly perceived problems and to suggest policy changes to bring about improved service delivery.

Qualitative assessments should be used alongside the performance indicator framework as part of the review of performance of the sector as a whole. This is an area in which members of the Uganda Water and Sanitation Network (UWASNET) could become more involved through their research and advocacy work.

3.6 Linkage with the planning and budgeting cycle.

A key issue to address is effective integration with current Government of Uganda planning and budgeting processes so that:

- Performance indicators can be linked to sector plans
- Planned levels of performance can be linked to resource availability
- Resources can be targeted at key priorities
- Performance monitoring and evaluation can influence future policy making, planning and budgeting

The following table gives timings for key performance measurement tasks, starting in September 2003. This is based on a three year rolling approach similar to that intended in the Medium Term Budget Framework (MTBF). The table only shows tasks that are specifically required at key times of the year. There are other performance measurement tasks that take place continually. These are shown as a note below the table.

Table 5: Proposed timings for performance measurement tasks

When	Tasks	Responsibility
Sep 2003	<ul style="list-style-type: none"> • Review performance for FY 2002/03 • Determine priorities for FY 2004/05 and 2005/06 • Determine key resource allocation principles for FY 2004/05 and 2005/06 • Agree on division of indicative budget for FY 2004/05 • Agree on technical issues to be researched for presentation to the next Joint Technical Review 	Joint Sector Review

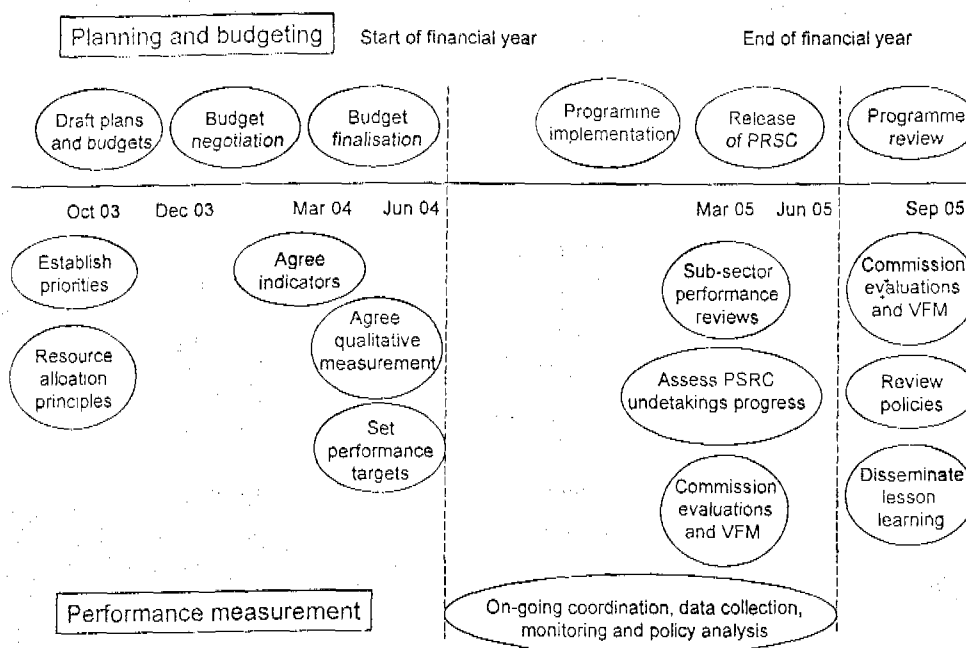
Mar 2004	<ul style="list-style-type: none"> • Present technical papers • Review sub-sector performance for FY 2003/04 • Assess progress against JSR undertakings • Commission VFM and in-depth evaluations • Present draft budget for FY 2004/05 	Joint Technical Review
Apr 2004	<ul style="list-style-type: none"> • Review / select indicators for FY 2004/05 	Sector Working Group
May – Jun 2004	<ul style="list-style-type: none"> • Agree qualitative performance mechanisms • Set planned performance levels (based on indicators) 	Planning and Quality Assurance Department , MoWLE
Jul – Aug 2004	<ul style="list-style-type: none"> • Analyse and present sector data for FY 2003/04 • Finalise tracking studies and technical audits for FY 2003/04 	Directorate of Water Development
Sep 2004	<ul style="list-style-type: none"> • Review performance for FY 2003/04 • Review policies • Determine key resource allocation principles for FY 2005/06 and 2006/07 • Agree on division of indicative budget for FY 2005/06 • Commission VFM and in-depth evaluations • Determine channels for disseminating lesson learning • Agree on technical issues to be researched for presentation to the next Joint Technical Review 	Joint Sector Review
Mar 2005	<ul style="list-style-type: none"> • Present technical papers • Review sub-sector performance for FY 2004/05 • Assess progress against JSR undertakings • Commission VFM and in-depth evaluations • Present draft budget for FY 2005/06 	Joint Technical Review
Apr 2005	<ul style="list-style-type: none"> • Review / select indicators for FY 2005/06 	Sector Working Group
May – Jun 2005	<ul style="list-style-type: none"> • Agree qualitative performance mechanisms • Set planned performance levels (based on indicators) 	Planning and Quality Assurance Department , MoWLE
Jul – Aug 2005	<ul style="list-style-type: none"> • Analyse and present sector data for FY 2004/05 • Finalise tracking studies and technical audits for FY 2004/05 	Directorate of Water Development
Sep 2005	<ul style="list-style-type: none"> • Review performance for FY 2004/05 • Review policies • Determine key resource allocation principles for FY 2005/06 and 2006/07 	Joint Sector Review

	<ul style="list-style-type: none"> • Commission VFM and in-depth evaluations • Determine channels for disseminating lesson learning 	
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other key performance measurement functions are ongoing and so are not shown here. These include: Coordination of indicator data collection, Coordination of checking mechanisms, Collecting indicator data, Checking performance, Conducting on-going programme evaluations, Assessing stakeholder capacities to achieve objectives, Conducting value for money studies, Analysis of policy implications

The following diagram shows an overview of current planning and budgeting processes in Uganda and, alongside these, shows how relevant performance measurement roles can be effectively integrated. For simplicity, we have only shown those roles relating to the 2004/05 financial year.

Figure 6. Timing of key performance measurement tasks



The above diagram summarises when we suggest key performance measurement functions take place.

Periodic performance reviews

Special mention needs to be made about periodic reviews that include tracking studies, technical audits, value for money studies and evaluations. These are currently being performed in the sector, but there are different interpretations about what is meant by each.

Clarity is required in definitions, the scope of work and the timing of the various reviews. The following table provides an initial guide to this.

Table 6: Types of performance reviews

Type of performance review	Suggested definition	Suggested objectives	Suggested timing
Tracking study	Review of the allocation of resources to projects and programmes	To ensure that money has been disbursed to the programme or projects for which it was intended To ensure that money was spent on programmes and projects as intended	Interim review during the course of the financial year Final review in July to August after the end of the financial year
Technical audit	Review of the operation of projects and programmes	To ensure that water and sanitation programmes are operationalised according to plans	Interim review during the course of the financial year Final review in July to August after the end of the financial year
Value for money study	Review of the costs of projects and programmes and comparison of these to the outputs produced	To test whether inputs of the right quality have been procured as cheaply as possible To compare inputs with outputs, to identify differences in such performance across programmes and to ascertain the reasons for these differences	Ideally July to August following the end of the financial year, but realistically July to December
Evaluation	Review of if and how projects and programmes achieve desired objectives	To test whether programme outcomes and / or policy objectives have been met To identify the causes of good or poor performance	This can be an ongoing process, covering different programmes or policies over time

As noted above in this report, the breadth of vfm studies in the water and sanitation studies needs to be reviewed. Perhaps it would be useful to replace 'value for money review' with the term 'performance audit'. This is a broader review of performance which assesses whether money has been spent well, what has contributed to good performance and what can be learned to improve future performance. We recommend that time is set aside to review the scope for vfm type studies and to consider combining various tools together into a 'performance audit' type approach.

4. Institutional roles for key performance measurement functions

A key part of the establishment of an improved performance measurement system is to identify the roles (along with the relevant competencies) that are required, to allocate these between the different institutions involved and to ensure effective integration of activities. The key roles that are required are:

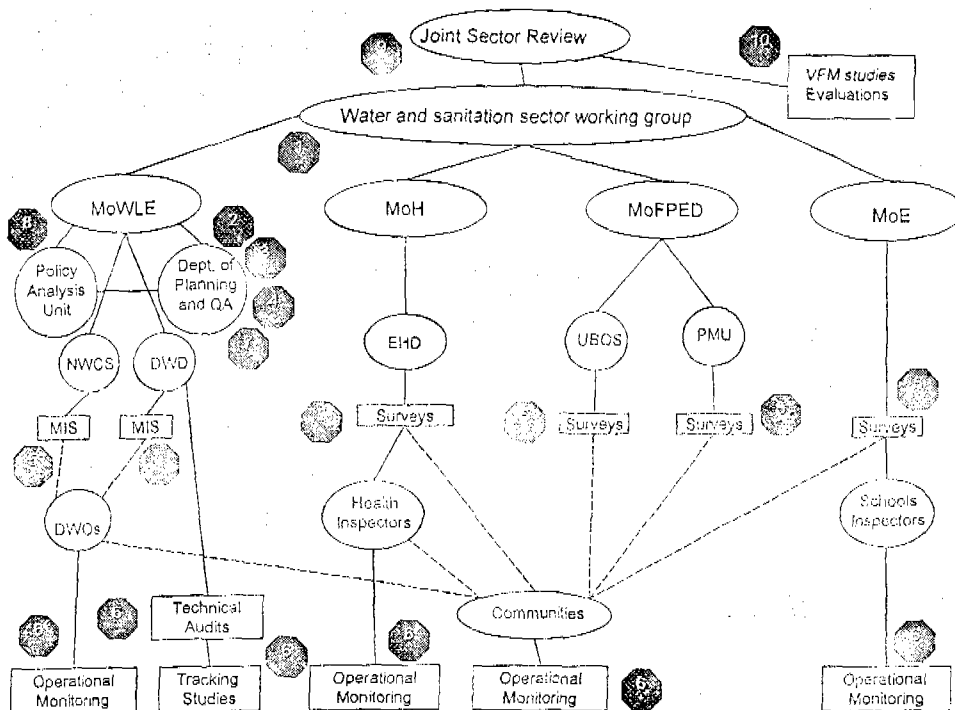
Table 7: Institutional roles for performance measurement

Role	Current Home	Potential Home	Reasoning for Potential Home
1. Agreement of sector objectives and targets	Each Ministry involved in the sector sets objectives and targets, but there are sometimes inconsistencies	Ministries to set own objectives and targets, but water and sanitation working group to propose objectives and targets for the sector as a whole	All key stakeholders are represented and this is a key overarching task
2. Selection / review of the set of sector performance indicators	The consultants are facilitating the setting up of this process	Water and sanitation sector working group	All key stakeholders are represented and this is a key overarching task
3. Establishment of planned / target levels of performance for each indicator	Each unit in DWD, EHD and parts of other Ministries are doing this for current indicators. Not done at the moment for all the sector indicators as these are only just being established	DWD, EHD(MOH), MOES	This is part of the lead sector Ministry and has the overarching planning role
4. Coordinating the collection of data to measure indicators	Not done at the moment for all the sector indicators as these are only just being established	Planning and Quality Assurance Department of MWLE	This is part of the lead sector Ministry and has the overarching planning role
5. Coordinating the checking of performance	There is a lot of overlap at the moment and little coordination, e.g. DWD, MWLE, Districts, MFPED all conduct inspection 'monitoring' visits	Planning and Quality Assurance Department of MWLE	This is part of the lead sector Ministry and has the overarching quality assurance role
6. Collection of the data	Various sources at the moment including DWD, Districts, EHD, MFPED, UBOS	Will continue to be various, with better coordination provided	Different institutions are best placed to collect different data – the challenge is to streamline and to reduce overlap

7. Checking of performance	Various roles at the moment e.g. by DWD, MWLE, District Water Officers, Health Inspectors, MFPED	DWD in liaison with the Districts, contracting out some monitoring such as tracking studies and aiming to get more user participation	DWD and Districts are well placed to monitor operational performance; specialised monitoring might best be contracted out; users are best placed to judge service quality
8. Co-ordination of qualitative research / performance assessment	Various NGOs perform research work on qualitative aspects of performance	UWASNET to coordinate the qualitative assessment of performance	UWASNET has a broad membership of NGOs across the sector
9. Analysis and presentation of sector data	Not done at the moment for all the sector indicators as these are only just being established	Department of Planning and Quality Assurance of MWLE	it is logical to combine planning, data coordination and analysis roles
10. Interpretation / evaluation of data from a policy perspective	The Policy Analysis Unit of MWLE has this function, but is relatively new and inexperienced	Policy Analysis Unit of the MWLE	This unit has a specialised policy evaluation role
11. Review of policy and resource allocation decisions based on the performance data	These roles are performed, but not in a well coordinated way	Joint sector review discussion (based on working papers coordinated by the sector working group)	Big decisions to be taken at the bi-annual get together of all key stakeholders
12. Assessment of the need for value for money studies / in-depth evaluations of performance	Narrowly defined 'operational' value for money studies have been contracted out; evaluations are not well coordinated	Joint sector review to identify themes for value for money and in-depth programme evaluations	Big issues can be identified at the bi-annual get together of all key stakeholders

These roles are summarised in the following diagram.

Figure 7. Institutions involved in performance measurement



Key:

- | | |
|---|--|
| 1: Agreement of sector objectives | 7: Checking performance |
| 2: Selection / review of indicators | 8: Co-ordination of qualitative research |
| 3: Setting planned performance levels | 9: Analysing and presenting sector data |
| 4: Coordinating indicator data collection | 10: Analysis of policy implications |
| 5: Coordinating checking mechanisms | 11: Policy & resource allocation decisions |
| 6: Collecting indicator data | 12: VFM and in-depth evaluations |

Figure 6 shows the four key Ministries that are involved in performance measurement roles within the water and sanitation sector. The solid lines refer to actions, whilst the broken lines relate to data flow. The numbers refer our suggested location for key performance measurement roles. Again, more discussion is required around these potential roles before 'homes' can be finalised.

Recommended roles and responsibilities:

- Each Joint Sector Review contains a session when overall water and sanitation sector performance is assessed, using graphical presentations of all sector indicators, showing trends over time, geographically and against plans as most appropriate

- The Joint Sector Review meetings are the forum in which policies and reviewed and resource allocation decisions assessed with the overall objective of improving sector performance
- The Joint Sector Review and Technical Review meetings identify the priorities for in-depth value for money and programme evaluation studies, with an emphasis on outputs and outcomes
- Time is set aside to review the scope for vfm type studies and to consider combining various tools together into a 'performance audit' type approach.
- The Sector Working Group takes on the responsibilities for
 - Reviewing and prioritising objectives and targets for the sector as a whole
 - Selecting /approving sector performance indicators and reviewing these over time
- The Planning and Quality Assurance Department of MWLE takes on the roles of coordinating the sector Performance management and specially carry out:
 - Policy setting ,Inspection and other monitoring processes so that roles are performed efficiently
 - Undertake qualitative assessment of performance and linking this to the more quantitative performance indicator framework
 - Preparation and presentation of performance reports
- The Policy Analysis Unit of MWLE conducts regular evaluations of the effectiveness of policies in improving water and sanitation sector performance
- DWD units, the EHD and the Ministry of Education produce better balanced and more output focused sub-sector indicators and specially carry out:
 - Target setting for performance indicators
 - The collection of the data needed to measure the indicators
 - The collation, analysis and presentation of sector performance data
- UWASNET takes on the role of coordinating the NGOs inputs in the sector performance measurement

5. Capacity building for the implementation of performance measurement

For effective strengthening of performance measurement within the Uganda water sector, there is a need to assess current capacity and gaps that need to be filled. By capacity building in the context of performance measurement we include:

- Process improvements
- Systems developments and infrastructure support
- Staff training needs

The following table gives an indicative assessment of specific capacity building needs in each of the key areas of performance measurement. This is an initial assessment that requires careful review with links made to the development of sub-sector sector strategies for capacity building.

Table 8: Performance measurement and capacity building

Performance measurement area	Assessment of current capacity	Indicative capacity building needs
1. Agreement of sector objectives and targets	There is the general capacity to do this, but not always good co-ordination between institutions.	Support the Water and Sanitation Working Group to review sector objectives and targets.
2. Selection / review of performance indicators	<p>(a) Sub-sectors within water and sanitation have developed performance indicators, but these could be improved. The majority focus on quantity to the exclusion of other performance themes. The consultative workshop was a good step in developing some new sub-sector indicators.</p> <p>(b) This consultancy assignment has put together a draft set of sector wide indicators for the first time. The consultative workshop provided a lot of participation into this process and shows that there is good understanding, but there is a need to institutionalise the role in future.</p>	<p>(a) Support departments in the DWD, the Environmental Health Division (EHD) and the Ministry of Education to produce a more balanced set of sub-sector indicators in future annual and strategic plans.</p> <p>(b) Support the Water and Sanitation working group to prioritise and select sector wide indicators.</p>
3. Establish planned / target levels of performance for each indicator	There is patchy assignment of targets for performance indicators. Some targets are for several years into the future and could be broken down into annual targets. Staff members have the skills to take on	Support the Department of Planning and Quality Assurance of MWLE to set guidelines and to coordinate target setting once the indicators have been finalised.

	new roles, if supported by improved systems.	
4. Coordinate the collection of data to measure indicators	At present, there is poor co-ordination of data collection with the result that there are both overlaps and gaps. Some overlap is required to be able to triangulate data. Staff members have the skills to take on improved coordination roles, if supported by new systems.	Support the Department of Planning and Quality Assurance of MWLE to develop a strategy for data coordination, with participation from key data providers.
5. Coordination of the checking of performance	Many institutions or departments in the sector conduct monitoring activities, e.g. DWD, MWLE, District institutions, auditors etc. carry out inspections of water and sanitation facilities. However, it is not clear who should co-ordinate these functions so little is done. The capacity would be there if the responsibility were clear and there were good systems in place.	Agree the mechanisms for coordinating monitoring arrangements – the Department of Planning and Quality Assurance of MWLE is best placed to take the lead on this.
6. Collection of data	There are well-developed survey methodologies, but some questionnaires need to be amended to collect key data.	Redesign / suggest improvements to data collection forms.
7. Checking of performance	This is done in a variety of ways through inspections, tracking studies, technical audits etc. There is overlap of processes and some unclear focus.	Review inspection, tracking study and technical audit processes to allow more streamlining and better focus.
8. Co-ordination of qualitative research / performance assessment	Various pieces of qualitative research are carried out, but these are not well coordinated.	Support UWASNET to develop and implement a strategy for the coordination of qualitative performance assessment.
9. Analyse and present sector data	This is done in an incomplete way at the moment. Many documents have to be reviewed and interpreted to gain an overview of performance and this is time-consuming.	(a) Train staff to conduct analysis and presentation roles. (b) Develop guidance notes for data analysis and presentation. Focus this support in the Department of Planning and Quality Assurance of MWLE.
10. Interpret / evaluate policy issues	This is a complex task. To be done well, it requires the application of such techniques as cost-benefit analysis, risk	Conduct training in, and develop new systems for, policy evaluation. Focus this support in the MWLE

	assessment, consultation, statistical evaluation, case study review etc. There is little evidence of any of this happening in a systematic way.	Policy Analysis Unit.
11. Review policy and resource allocation	The Joint Sector Review participants have more than enough competence to do this, but with so many people involved there needs to be exceptionally clear systems for reviewing policy and resource allocation.	Develop systems for reviewing policy and resource allocation at Joint Sector Review meetings.
12. Commission in -depth value for money and evaluation exercises	Value for money exercises are currently done, but there is no clearly defined definition / terminology. There is no coordinated system for prioritising and delivering in-depth programme evaluation studies.	Agree definitions, scope and outline methodologies for VFM and evaluation studies

More work is needed to assess capacity building requirements, bearing in mind the potential role of the Technical Support Units (TSUs) and the results of capacity building programmes such as the Training for Real project inception phase (October 2003).

It is recommended that:

- More work is done to clarify the objectives, timings and responsibilities associated with tracking studies, technical audits, VFM studies and evaluations
- A three year rolling approach to performance measurement is adapted which ties in with the MTBF
- Processes are developed for use at the Joint Sector Review meetings for:
 - Presentation of key sector performance data
 - Dissemination of sector learning
 - Review of sector policies
 - Selection of criteria for future resource allocation
 - Identification of key in-depth evaluations that are required
- The Planning and Quality Assurance Department be supported with training the rationalisation of monitoring systems
- Representatives from DWD units, the EHD and the Ministry of Education are supported to prepare better sub-sector performance indicators, data analysis and presentation and systems development for target setting, data collection
- Support is given to UWASNET to improve the prioritisation, collection and dissemination of qualitative performance data

- The Policy Analysis Unit is supported with training and systems development to conduct strengthened policy evaluation functions
- A plan is developed for providing necessary support to Districts so that they can contribute to, and take part in, the performance measurement framework
- All capacity building for the implementation of performance measurement is linked to the development of sub-sector strategies for human resource development and training.

6. Action plan

The recommendations and other actions required to improve performance measurement are summarised in the matrix in the table below.

Table 9: Action plan

When	What	Who
Sep 2003	Presentation of sector performance report at the Joint Sector Review	Minister of MoWLE / consultants
Sep 2003	Review past performance and assess future priorities	Joint Sector Review
Dec 2003	Review and agree the Performance Measurement Framework Report	Sector Working Group
Feb 2004	Agreement of sector indicators and targets	Sector Working Group, supported by consultants
March 2004	Agreement of qualitative mechanisms for assessing performance	Sector Working Group, supported by consultants
Mar-June 04	Training policy analysts in policy evaluation techniques	Would require consultancy support
Mar-June 04	Consider and agree links between performance measurement and the evolving HRD and training strategies for the sub-sectors	Would require consultancy support
Mar 04	Introducing new policy development and evaluation systems	Would require consultancy support
Mar-June 04	Training of planning and quality assurance staff in target setting, data coordination, data analysis and reporting	Would require consultancy support
Mar-May 2004	Introducing new data coordination, analysis and reporting systems	Would require consultancy support
Mar-June 04	Agreeing mechanisms for streamlining performance checking functions – such as inspections, tracking studies, technical audits, value for money studies	Would require consultancy support
Mar-June 04	Support departments to improve sub-sector indicators and integrate into plans	Would require consultancy support
Mar 2004	Review sub-sector performance	Joint Technical Review
Mar 2004	Assess progress against PSRC undertakings	Joint Technical Review
May 2004	Commissioning of in-depth VFM / programme evaluation studies	Joint Technical Review
May 2004	Setting of annual target levels of performance for sector indicators	Sector Working Group
May 2004	Setting of annual target levels of performance for sub-sector indicators	Sub-sector working groups
Jul – Aug	Analyse and present sector data for FY 2003/04	Directorate of Water

2004		Development
July – Aug 2004	Finalise tracking studies and technical audits for FY 2003/04	Directorate of Water Development
Sep 2004	Review performance for FY 2003/04, assess policy and resource allocation implications	Joint Sector Review
Sep 2004	Commissioning of in-depth VFM / programme evaluation studies	Joint Sector Review
Jul – Dec 2004	Support the conduct of improved value for money studies	Would require consultancy support

Annex 1: Current data sources

1. The Uganda Population and Housing Census (UPHC)

Sample	Census, 100% of households
Years covered	1991, 2002
Most recent data	1991 (2002 available end 2003/2004)
Data collection method	Household survey
Smallest analysis area	Village
Water coverage info.	Source type
Same for each year?	Yes
Sanitation coverage info	Toilet type
Same for each year?	Yes
Data strengths	Ability to monitor progress at sub-regional level Direct measurement of population as well as household coverage Can compare household results with UNHS & UDHS
Data weaknesses	Only 1991 data available at time of writing (2003) Only two relevant questions Asks for <i>main</i> water source only Asked if they <i>have</i> a pit latrine but in practice it could be non-functional or not used

2. The Uganda National Household Survey (UNHS)

Sample	National, 10,000 households (6000 in early 1990s)
Years covered	1992/3-2002/3 (92,95,97,99,02 have watsan info)
Most recent data	2002/3 headline data only, 99/00 complete data
Data collection method	Random sample of households
Smallest analysis area	Region. 15/46 Districts can be analysed for the 99/00 Survey
Water coverage info	Water source – in 1992 protected & unprotected wells/springs are not separated and boreholes are not identified separately from wells so we cannot identify improved sources (same applies to the UDHS 95). Water source (95,96,99,02) - consistent with 91 Census Water source for drinking & other (95, 97, 99 only) Distance to sources (95 onwards) Time to collect water (95, 96 only) Litres collected (95, 96, 99 only) Reasons for unprotected source use (95, 96, 99 only) Comparing distance to sources in 99 and 92 (99 only)
Same for each year?	Asks for main source of water in 2002/3 Splits "open water sources or neighbours" into two categories in 2002/3
Sanitation coverage info	Toilet type (92,95,96,99,02) – consistent with 91 Census (although UNHS has more categories) Distance from dwelling (95 only)
Same for each year?	Change of wording in 2002 - which toilet facility do you mainly <i>use</i> , not <i>have</i>
Data strengths	1. Detailed poverty profiles have been constructed using this data – can be used for access by poor/non-poor 2. Watsan data for a number of years & regular annual survey 3. Panel data of @1000 & recall of water source in 92 in the 1999 survey 3. Willingness of UBOS to use questions that meet MWLE objectives 4. Statistically representative sample

Data weaknesses	<ol style="list-style-type: none"> 1. Household survey data does not include temporal variation (e.g. rainwater not available) or water source is working – hence tends to overstate <i>effective</i> coverage. 2. Changes in question definitions makes it more difficult to identify changes in access to services over time 3. It is only possible to analyse data at the district level for a small number of districts and only for 1999/00 4. Some questions require a lot of interviewer time & skill to get accurate answers e.g. km to water source, litres collected – current answers are probably inaccurate particularly for those with piped water. 5. Fails to capture time taken to get water (v. important for urban supply when demand is rising) 6. We cannot judge the impact of sanitation on health just by asking about use of toilet facilities
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3. The Uganda Demographic and Health Survey (UDHS)

Sample	National, 7550 households (1995), 7885 (2000/1)
Years covered	1988 (not watsan), 1995, 2000/2001
Most recent data	2000/2001
Data collection method	Random sample of households
Smallest analysis area	Region
Water coverage info	<p>Water source (does not strictly use improved categories & is not consistent with the UNHS). The 1995 categories are too crude to identify improved sources.</p> <p>Where is water stored</p> <p>Litres used</p> <p>Time taken to collect water</p>
Same for each year?	Water source categories were changed in 2000 – these are still not fully consistent with UNHS (the spring category is not divided into protected and unprotected) and hence the definition of safe water will differ.
Sanitation coverage info	<p>Toilet type – which do you <i>have?</i> – same as UNHS 1999 but not UHNHS 2002</p> <p>Shared with other households? (2000)</p>
Same for each year?	Yes
Data strengths	Water and sanitation data can be analysed with health status data to potentially identify health impacts
Data weaknesses	Water and sanitation variables are not consistent with UNHS data.

4. The Uganda National Service Delivery Survey (UNSDS)

Sample	13,604
Years covered	2000 only (although builds on 1998 District Resource Endowment Profile Study – DREPS)
Most recent data	2000
Data collection method	Random sample of households
Smallest analysis area	District (>300 households in each district)
Water coverage info	<p>Piped water in house or standpipe</p> <p>Access to a protected water source</p> <p><u>Wet season and Dry season separately:</u></p> <p>Distance to main water source (does not separate out drinking or other – this is inconsistent with UNHS and main water source may not be the protected source)</p> <p>Approximate waiting time for water collection from main source (see concern above).</p> <p>Is water from this source safe to drink without boiling (main source may not be used for drinking)</p> <p>Does household boil water before drinking (main source may not be used for drinking)</p> <p>Do you share the water source with animals</p> <p>How many 20L cans of water/day do you use for household consumption (Not consistent with other surveys that ask for litres consumed but will give an estimate of litres consumed⁵)</p> <p>Money spent by household per day on water</p> <p>Has the availability of clean water for household consumption changed in this community over the past 5 years</p>
Same for each year?	N/A – 2000 only
Sanitation coverage info	<p>Sewerage system present</p> <p>Cesspool emptying</p> <p>Household latrine (available but may not be <i>used</i> – not consistent with latest UNHS)</p> <p>Public/NGO officials to advise on protection of water sources</p> <p>Public/NGO officials to advise on construction of latrines</p> <p>Has the number of useable toilet facilities changed over past 5 years?</p> <p>Are there some households that use the bush as no toilet?</p>
Same for each year?	N/A – 2000 only
Data strengths	<p>Widest range of water and sanitation questions of any national survey</p> <p>Good use of perception & behaviour questions</p> <p>Division between wet and dry season</p>
Data weaknesses	<p>No household expenditure data and limited asset ownership data. Hence it is not straightforward to get poverty status of household. It could be estimated using a number of variables (e.g. low assets, lack of funds to pay for medicine or school) BUT the definition of the poor in the UNSDS will NOT be the same as that in the UNHS.</p> <p>Data reported by Region only, not urban/rural</p>

⁵ The Drawers of Water II Study notes that 91.2% of their Ugandan sample now used 20-24L jerry cans.

5. Ministry of Health, Health Inspectors' annual sanitation survey (HIASS)

Sample	In theory, all households, aggregated to district level reports
Years covered	1993-2002
Most recent data	2002
Data collection method	Local health assistants complete forms for sub-counties, compiled for districts by the District health Inspector, all district reports are presented at the annual National Sanitation Review
Smallest analysis area	Village/Parish (in theory). Data available at District level
Water coverage info	Access to safe water %
Same for each year?	Yes
Sanitation coverage info	School & health centre sanitation and safe water access. Rural households - % with latrines, Urban - % with excreta disposal. Note that assistants should only report properly functioning systems (with superstructure & > 3ft unfilled in the pit)
Same for each year?	Yes
Data strengths	Good health assistants complete the forms as part of their local visits & can use visual inspection & local knowledge Only functioning latrines included Only functioning safe water sources included Ministry of Health Funds available to support field visits from 2003
Data weaknesses	Some health assistants do not make an effort to complete the forms accurately Some health inspectors have not seen sanitation and water quality as being as important as revenue-related issues such as permits for selling food. Hence the data quality has been highly variable. High population densities in peri-urban and urban areas make it difficult to use this system and the results for urban areas reported for 2002 do not appear robust MoH cannot find the data for 1993-1999 – paper copy only

6. The Uganda Participatory Poverty Assessment Proccess (UPAP)

Sample	36 sites PPA1 and 60 sites (PPA2), rural & urban with purposive sampling to capture major types of communities
Years covered	1998/9 and 2001/2
Most recent data	2001/2
Data collection method	Group interviews using PRA techniques
Smallest analysis area	District – but case studies from village sites are quoted
Water coverage info	Group views on use of unprotected water sources and problems faced (health impact, distance, costs, water quality etc.)
Same for each year?	Depends on problems identified by the groups, so may vary
Sanitation coverage info	Group views on latrine use and problems faced (health impact, costs etc)
Same for each year?	Depends on problems identified by the groups, so may vary
Data strengths	Open ended discussion – captures unexpected impacts Qualitative data provides the context for quantitative data and so helps us understand what national survey results really mean Local level data and informative case studies
Data weaknesses	Open ended discussion is not designed to monitor change in the same thing (such as distance to source) over time. If the PPA is to be used for monitoring, groups will need to address specific and common themes in each round e.g. time and distance to safe water, functioning of water points We do not know how representative the views expressed in any one village are

7. Directorate of Water Development Management Information System (DWD-MIS)

Sample	All rural areas & small towns
Years covered	2000-2003 depending on area
Most recent data	2000-2003 depending on area
Data collection method	Improved water points installed x assumed coverage per water point. GIS system from 2003 onwards. Baseline survey using GIS will be completed in 2003
Smallest analysis area	Village
Water coverage info	Improved water points by type Whether water point is functioning
Same for each year?	Yes
Sanitation coverage info	None
Same for each year?	NA
Data strengths	Water point data is combined with Census data to produce four measures of service delivery Local level data An indication of whether supply points are functioning GIS-based from 2003
Data weaknesses	Coverage data is based on the assumed average use of each type of water point. It is ball-park accurate at the national level (although not sufficient to monitor progress against targets) but can be wildly inaccurate for any village or district. The measure of functioning is too crude – we need to know <i>how many weeks during the year</i> it has been available. Current population per water point figures are based on extrapolated 1991 Census figures (should be updated with 2002 Census figures by the end of 2003)

8. National Water and Sewerage Corporation Management Information System (NWSC-MIS)

Sample	All larger towns
Years covered	Since early 1990s, annually
Most recent data	2003
Data collection method	No of connection in each service level category , in each town X assumed average number of people served per connection. Each service level in various towns has an assumed number of people served. This is a rule-of-thumb number derived by Corporate Planning Department
Smallest analysis area	GIS block (0.5 km by 0.5 km square)
Water coverage info	Water connections in each service level Whether water the water connection is active or inactive
Same for each year?	Yes
Sanitation coverage info	Only sewerage services
Same for each year?	Yes
Data strengths	This data is available at any time in NWSC data base Local level data An indication of whether supply points are functioning GIS-based
Data weaknesses	Coverage data is based on the assumed average use of each type of service level, which also varies from town to town. Even these assumed are not published. Data is not available for the poorer informal settlement areas.

9. Tracking Study of the Water Sector Conditional Grants

Sample	Primary sample of 10 districts and 6 urban centres; secondary sampling units of 10 watsan points per sampled district
Years covered	2001 and 2002
Most recent data	2002
Data collection method	21 questionnaires for different types of respondents in each district
Smallest analysis area	National
Information covered	Average number of days taken to process water sector conditional grant payments in various offices
Same for each year?	N/a
Sanitation coverage info	N/a
Same for each year?	N/a
Data strengths	Provides a double average, firstly for each district over the reference period, and then for all sampling districts
Data weaknesses	Basis for sampling not mentioned Survey aggregates can only be derived at national levels only

10. Value for Money Technical Audit

Sample	All districts grouped under Technical Support Units
Years covered	Annually from 1996/97 to 2000/01
Most recent data	2002
Data collection method	Assessment of district work plans and budgets; physical inspection of sampled infrastructure
Smallest analysis area	District
Information covered	Sector Planning and management capacity; procurement process; contract supervision and monitoring; functionality of O & M of structures; financial management, reporting and accountability; private sector capacity
Same for each year?	N/a
Sanitation coverage info	N/a
Same for each year?	N/a
Data strengths	Covers all districts
Data weaknesses	Data collection method not well defined in availed documents Study carried out by eight different consultants using varying methods Most data is descriptive (e.g. VFM judged in categories such as 'Fair' or 'poor')

Annex 2: Suggested performance indicators for the water and sanitation sector

Candidates for 'golden' indicators

No.	Indicator	Theme	Justification for the indicator	Suggested data source	Overall current performance	Example stated current targets
1.	% of people within 1.5 km (rural) and 0.2km (urban) of an improved water source	Access	<p>% of households within a certain distance of an improved water source is the most frequently cited indicator in the sector policy documents. At present, the most commonly quoted distances are 1.5km for rural areas and 0.5 km for urban areas. However, these ranges need to be reviewed:</p> <ul style="list-style-type: none"> - The need for a review was made during the performance measurement Consultative Workshop on 1 and 4 August 2003; - There is international evidence to suggest that per capita consumption of 20 litres per day cannot be obtained if water has to be carried more than 1.5km; - 1 km is consistent with the WHO Global Water Supply and Sanitation Assessment 2000 report; - The target in the Uganda National Water Policy is actually 0.2km for urban areas. <p>'Access' is also one of the four key 'outcome' indicators contained in the Poverty Reduction Strategy Credit (PRSC) 3 Policy Matrix.</p>	DWD data sources	Data not readily available for distances of 1 km and 0.2 km. However, access to improved water is now between 50 and 60% for rural areas (at 1.5 km) and around 80% for urban areas (at 0.5 km).	65% of the rural population and 80% of the urban population are within easy reach of improved water by 2005. 100% target for urban by 2010 and rural by 2015 (Sector MTBF 2002/03 to 2004/05).

No.	Indicator	Theme	Justification for the indicator	Suggested data source	Overall current performance	Example stated current targets
2	Average total time to collect the daily water for the household (from all sources)	Impact / access	<p>Time taken is arguably more important than distance when it comes to assessing access to services as it also factors in waiting time and difficulty of terrain. It is also a good indicator of the opportunity cost of collecting water – the time that could be spent on other activities – and, as such, is a measure of impact as well. 'Time' is also one of the four key 'outcome' indicators contained in the Poverty Reduction Strategy Credit (PRSC) 3 Policy Matrix.</p> <p>Need to review the precise definition of the current indicator, compared with the proposed indicator.</p>	Independent national consumer surveys, e.g. UNHS, UDHS and UNSDS	Rural areas - 30 minutes (median), 40 minutes (mean). Urban areas – 15 to 9 minutes (median).	Reduction in average time spent fetching water in rural areas from 30 to 25 minutes by 2005 (PRSC3 Policy Matrix).
3.	% of improved water sources that are functional at time of spot-check	Function -ality	<p>At the 2003 JSR, there was repeated concern about a high proportion of non-functionality of facilities. 'Functioning' is also one of the four key 'outcome' indicators contained in the Poverty Reduction Strategy Credit (PRSC) 3 Policy Matrix.</p> <p>The results from the spot-check approach can be cross-checked with DWD and service provider functionality records.</p>	Specifically commissioned independent 'spot-check' surveys	Overall data difficult to assess, but indications are that there is less than 70% functionality.	80% functioning of systems in rural areas by 2005 (PRSC Policy Matrix).

No.	Indicator	Theme	Justification for the indicator	Suggested data source	Overall current performance	Example stated current targets
4.	% of people that use improved sanitation	Usage	At the 2003 JSR, there was some concern that over recent years sanitation has been neglected by the sector. A major finding contained in the Sector Performance Report presented at the JSR is that whilst some estimates of access to improved sanitation facilities exceed 90%, use is probably below 60% – this suggests that usage of improved sanitation needs more careful review. Also, international evidence suggests that increased use of improved sanitation can have significant health impacts.	Include in HIASS with further training of enumerators	Difficult to assess due to inconsistent data sets – possibly around 55%.	Not available at the time of writing this report.
5.	% of men and women who are satisfied with water services	Impact/ equity	There is a growing move in the Uganda water and sanitation sector to focus on improved service delivery. The best way of measuring this is to ask the customers themselves what they think about various aspects of performance, such as quantity of water supplied, ease of access, functionality, quality of water etc. By asking men and women separately, this will isolate particular gender issues that might need addressing. By analysing satisfaction ratings for water and sanitation services separately, this will reveal more useful information.	Can be incorporated in to national survey questionnaires , e.g. UNHS, UDHS and UNSDS, or separate surveys can be undertaken; also can use District Health Inspectors' Assessments	Data not readily available at the time of writing this report.	Not available at the time of writing this report.

No.	Indicator	Theme	Justification for the indicator	Suggested data source	Overall current performance	Example stated current targets
6.	% of men and women who are satisfied with sanitation services	Impact/ equity	There is a growing move in the Uganda water and sanitation sector to focus on improved service delivery. The best way of measuring this is to ask the customers themselves what they think about various aspects of the services they experience. By asking men and women separately, this will isolate particular gender issues that might need addressing.	Can be incorporated in to national survey questionnaires , e.g. UNHS, UDHS and UNSDS, or separate surveys can be undertaken; also can use District Health Inspectors' Assessments	Data not readily available at the time of writing this report.	Not available at the time of writing this report.
7.	Average daily per capita total consumption of water	Quantity	The 2003 Sector Performance Report shows that the quantity of daily water consumption has been falling in recent years and is below the stated sector objective of 20 litres per capita. This is a cause for concern as international evidence suggests that too little water from improved sources can be more damaging to health than enough water of poor quality. It is therefore very important to monitor trends in consumption.	National survey questionnaires , e.g. UNHS, UDHS and UNSDS	11 litres in rural areas and 15 litres in urban areas.	20 to 25 litres per capita per day (National Water Policy).

8.	% of people who use improved water sources	Usage	The current focus is on access to improved water sources, whilst actual usage is less closely monitored. The most important stakeholder perspective is that of the users – what water sources do they actually use, rather than relying on assumed access or coverage data produced by local officials.	National survey questionnaires e.g. UNHS, UDHS and UNSDS	Data not readily available for actual usage at the time of writing this report.	Not available at the time of writing this report.
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Suggested other key sector indicators

No.	Indicator	Theme	Justification for the indicator	Suggested data source	Overall current performance	Example stated current targets
9.	Average cost per beneficiary of new water schemes	Value for money	At the 2003 JSR, there was repeated concern about uncertainty surrounding value for money in the sector. 'Average investment cost per beneficiary' is also one of the four key 'outcome' indicators contained in the Poverty Reduction Strategy Credit (PRSC) 3 Policy Matrix. It is recommended to exclude rehabilitation and maintenance of existing schemes in this indicator (because the same amount of people could be covered by large or small expenditures, depending on the type or scale of the rehabilitation / maintenance work performed). However, care is needed when interpreting data as there are many factors that influence cost of new schemes.	DWD data sources	Overall data difficult to assess due to differences in assumptions for calculations.	Average investment cost per beneficiary of US\$ 50 in rural areas, US\$ 100 in small towns and US\$ 150 in urban areas (PRSC Policy Matrix).

No.	Indicator	Theme	Justification for the indicator	Suggested data source	Overall current performance	Example stated current targets
10.	% of householders / school children with access to improved sanitation	Access	Use of improved sanitation is suggested above. Data on access to improved sanitation is more easily available and can be combined with use to assess whether increasing numbers of people are actually using facilities that currently exist. Access can also be usefully disaggregated into householders and school children. International studies suggest that the availability of improved sanitation facilities in schools can be a major contributor to school attendance rates, especially among girls.	Ministry of Health and Education data sources	Difficult to assess due to inconsistent data sets – possibly around 90% (access not usage).	60% of the population with access to good sanitation facilities by 2004 (Sector MTBF 2002/03 to 2004/05).
11.	% increase in cumulative storage capacity availability of water for production	Quantity	This indicator is suggested as it presents a key piece of data for the 'water for production' sub-sector.	DWD data sources	13.2 million litres.	Not available at the time of writing this report.
12.	% of water samples taken at the point of water collection that comply with national standards	Quality	This represents a good assessment of the quality of water at the point at which becomes available to the user – that is the key point from a health perspective.	DWD data sources	Data not readily available at the time of writing this report.	Not available at the time of writing this report.
13.	Average % of household expenditure paid for water and sanitation services	Affordability	This represents one of the simplest and most easily available measures of the affordability of water and sanitation services.	National survey questionnaires, e.g. UNHS and UNSDS	9% (richest quintile) to 22% (poorest quintile) of expenditure for those who purchase water.	Not available at the time of writing this report.

No.	Indicator	Theme	Justification for the indicator	Suggested data source	Overall current performance	Example stated current targets
14.	Mean Parish deviation from the District average in persons per improved water point	Equity	<p>This indicator has been developed and tested by Water Aid in Uganda and provides a very good measure of the geographical equity of water point distribution. It requires the calculation of the number of improved water points per person in each Parish:</p> <ul style="list-style-type: none"> - Calculate average number of people per water point for all Parishes in the District - Calculate the difference between the Parish figure and the District Average for all Parishes in the District - Calculate the average of these differences <p>This indicator will potentially be very useful at suggesting how resources can be more equitably allocated both between Parishes in a District, and between Districts.</p>	DWD data sources, with some independent verification surveys	Limited data available. Variations between 200 and 500 people in four sample districts assessed by Water Aid.	Not available at the time of writing this report.
15.	Total costs recovered from users as a % of total sector investment	Managerial	There is growing emphasis within the Uganda water and sanitation sector on cost recovery and financial sustainability. A summary measure of this is total user revenues as a proportion of total sector spending. An increasing ratio over time will indicate that the sector is becoming more financially sustainable as less reliant on external funding support.	MoWLE data sources	Data not readily available at the time of writing this report.	Not available at the time of writing this report.

Other potential sector indicators

The following indicators can be thought of as a 'reserve list' of other sector performance indicators. If changes are made, it is recommended that only 15 sector indicators are kept so as to avoid excessive data collection and analysis work. It might be that some of the indicators can be used at the sub-sector level. Also, sector indicators might be changed in future years with as priorities change or unforeseen data collection problems occur.

No.	Indicator	Theme	Justification for the indicator	Suggested data source	Overall current performance	Example stated current targets
16.	Average distance to nearest usable improved water source	Usage	It provides valuable information on the service levels experienced by users and is a useful cross-check on the time taken to collect water. It is also useful for government departments and service providers as a means of undertaking initial project prioritisation for bringing water infrastructure closer to users.	National survey questionnaires , e.g. UNHS	Rural c.0.8 km, urban c.0.3 km (according to 1999/2000 data).	Not available at the time of writing this report.
17.	% of staff positions in central and local government that are filled	Managerial	As the water sector in Uganda is undergoing substantial reforms, this is a beneficial process indicator, for checking that there are sufficient staff in place to manage sector activities. If lower than expected percentages against this indicator are revealed than urgent action is required, if sector targets are to be achieved.	Data from sector institutions	Data not readily available at the time of writing this report.	Not available at the time of writing this report.

No.	Indicator	Theme	Justification for the indicator	Suggested data source	Overall current performance	Example stated current targets
18.	% change in average ground water levels	Quantity	This indicator is suggested as it presents a key piece of data for the 'water resources management' sub-sector.	DWD data sources	Data not readily available at the time of writing this report.	Not available at the time of writing this report.
19.	% of sector annual approved budgets that is actually spent on water and sanitation programmes	Managerial	Concerns have been expressed that funds on hardware, capacity development and support to community management etc. have not been spent. This indicator is useful in demonstrating the absorptive capacity of key institutions and the efficiency in managing resources.	Sector budgets and expenditure summaries	Data not readily available at the time of writing this report.	Not available at the time of writing this report.
20.	% of staff with agreed job descriptions in central and local government	Managerial	As the water and sanitation sector in Uganda is undergoing substantial reforms, this is a beneficial process indicator, for checking that staff members in key sector organisations have agreed their key roles and responsibilities with senior staff, as a key step towards achieving objectives.	Data from sector institutions	Data not readily available at the time of writing this report.	Not available at the time of writing this report.

21.	% of men and women who are satisfied with their participation in improving water and sanitation services	Managerial / equity	At the community level, women often have the biggest incentives to improve water and sanitation services. They should therefore participate in decision-making. Such an indicator can be used to assess women's satisfaction in their involvement in decision-making processes.	Data can be obtained from pilot surveys based on a number of key questions, from which a weighted average satisfaction % is derived	Data not readily available at the time of writing this report.	Not available at the time of writing this report.
22.	% of householders / schools with available hand-washing facilities and / or materials	Access	Hygiene promotion is an important part of water and sanitation aimed at improving health. This indicator is also being proposed for the next global water and sanitation assessment.	Data can be obtained from Ministry of Health and Education surveys	Data not readily available at the time of writing this report.	Not available at the time of writing this report.
23	% of households who properly dispose of children's (0 to 3 years) faeces	Impact	This is a key international indicator of hygiene awareness and practice and it is related to the most vulnerable group – young children	Data can be obtained from Ministry of Health surveys	Data not readily available at the time of writing this report.	Not available at the time of writing this report.
24.	% of water collected by women and children outside of the home	Equity	This indicator is useful for the ministry dealing with gender issues.	Ministry of Gender surveys	Data not readily available at the time of writing this report.	Not available at the time of writing this report.