Getting Africa on Track to Meet the MDGs on Water and Sanitation

A Status Overview of Sixteen African Countries

December 2006

A regional initiative by
Contents

Foreword vi
Introduction 6
Benin 1
Burkina Faso 7
Democratic Republic of Congo 13
Ethiopia 19
Ghana 25
Kenya 33
Madagascar 39
Malawi 45
Mauritania 51
Mozambique 57
Niger 63
Rwanda 69
Senegal 75
Tanzania 83
Uganda 91
Zambia 99
Foreword

Is Africa on target towards halving the proportion of people without access to safe drinking water and basic sanitation by 2015? This is one of the key questions that the African Ministers’ Council on Water (AMCOW) has been addressing in a bid to support national initiatives to measure and track progress towards the MDG and WSSD global targets.

Recognizing that the continent requires a mighty effort to achieve the Millennium Development Goals on water supply and sanitation, AMCOW has been collaborating with regional partners to bring together current data so that African sector leaders and support agencies can assess progress and have a comparative basis for sharing country experience and identifying remedial action.

These MDG Country Status Reports are the result of collaborative inputs by AMCOW, the African Development Bank, the European Union Water Initiative, the United Nations Development Programme, the Water and Sanitation Program-Africa, and the World Bank.

What is distinctive about these Country Status Overview reports (CSOs) is that the data and summary assessments have been drawn from local data sources, and, as much as possible, the assessments have been subject to broad-based consultations with lead government agencies and country sector stakeholders, including donors institutions.

AMCOW intends these country reports to be used in designing better, demand-driven and result-oriented national programs. They should also support coordination of water and sanitation programs and projects, aiming at a more effective use of existing funds and mobilizing additional financial resources - where this is required - based on an analysis of gaps. Further, they should enhance cooperation for proper implementation of programs and projects, based on peer review and strategic assessment.

Ultimately, these MDG Country Status Reports should help African countries to align their national priority setting processes against global targets on water supply and sanitation, in terms of policy reforms, institutional change and resource allocation and to link these country efforts to existing supportive regional frameworks.

Ms Maria Mutagamba
Minister of Water and Environment, Uganda

December 2006
| Benin | Burkina Faso | DRC | Ethiopia | Ghana | Kenya | Madagascar | Malawi | Mauritania | Mozambique | Niger | Rwanda | Senegal | Tanzania | Uganda | Zambia |

### Introduction

In sub-Saharan Africa, decreasing the number of people without access to safe drinking water and basic sanitation has proved to be a significant challenge. The region is lagging behind the rest of the world with respect to achieving the Millennium Development Goals (MDGs) on water supply and sanitation, which aim to halve the proportion of people without access to safe drinking water and basic sanitation by 2015. While some impressive progress towards meeting the MDGs is noted, the continent, as a whole, still requires more focused efforts towards meeting the global targets.

Most African countries have developed plans to reach the MDGs on water supply and sanitation, but these often exist only as documents and are neither country-owned nor actively implemented. Further, the plans have little consistency between different countries, making it difficult for policy makers to measure and track progress. In response to this gap, an Africa-wide, country-owned, regionally supported WSS MDG Roadmap process was conceived by the African Ministers' Council on Water (AMCOW) to help support achievement of the targets and to enable more effective learning processes and support mechanisms. The roadmaps were conceived as planning frameworks and include strategic investment programs to align and accelerate existing country plans towards the targets.

As part of the MDG roadmap process, a Status Overview has been prepared to gauge the success of sixteen African countries in implementing these Roadmaps, and assess progress towards their water and sanitation goals, as of mid-2006. This undertaking under the auspices of AMCOW was supported by the Water and Sanitation Program-Africa (WSP-Africa), in collaboration with the African Development Bank, the European Union Water Initiative, the United Nations Development Programme (UNDP), and The World Bank.

The Country Status Overview consists of individual country reports produced through consultation, data gathering using local sector experts, detailed discussion with country sector stakeholders, and endorsement by lead government sector agencies. The use of an agreed-upon and standardized format means that while it is a country-led initiative, it allows a sector-wide perspective and creates a comparative basis for sharing country experience and identifying corrective action.

Unlike other reports on MDG progress which focus on water and sanitation coverage, the Status Overview examines countries' level of preparedness to meet the targets, the financing requirements and gaps, the sustainability of the sector and includes recommendations for each country regarding steps needed to improve performance.

The Status Overview provides quality information in a digestible format about efforts to achieve the targets and are based on the best available, locally accepted country data. An important part of the Overview is an analysis made by the countries themselves, of the progress of their own MDG Roadmaps. Using a standard format, the Overview allows countries to track progress on the steps they have committed to take to prepare and mobilise the sector. These include identifying the agency that will lead in each sub-sector, ensuring that all stakeholders are involved and consulted, creating an MDG Action Plan, and mobilizing financial and other resources.

Another fundamental part of the Overview is the projection of water supply and sanitation coverage in each of the countries in 2015. This was created by using data from 1990 and an interim year as provided by the participating countries. This projected coverage was then compared to the planned coverage, whose figure was obtained from the country itself. While...
these targets are usually based on the WSS MDGs, they may differ from the MDGs used by UNICEF and WHO for a number of reasons: countries may use different figures for the coverage in the base year (1990) or may use a different base year altogether; countries may apply the targets in different ways to rural and urban populations; countries may feel that the UNICEF MDG targets are too ambitious, and wish to set more achievable goals for themselves; and conversely a number of countries set national targets that are higher than the MDGs.

However, these projections have several limitations and assume that rates of coverage increase (or decline) are the same as that between 1990 and the year for which interim data are available and that the rate of increase in coverage is linear over the remaining years to 2015. However, despite these limitations, the projections were useful tools for comparison.

The Overview presents a summary of each country’s progress on these issues and shows the extent to which the sixteen countries have started to make progress towards their WSS targets, and the areas in which they need to redouble their efforts. It reveals that very few countries are reaching high levels of preparedness, and a large number are very far from being prepared to take on the challenges of the sector. The information on sector preparedness is complemented with a large amount of data on sector financing, including the total investment required for both new systems and rehabilitation of existing ones. The commitment to reaching the water supply and sanitation targets in each country is illustrated by examining the planned public investments, which were derived from investment plans, budget documents and project reports.

Progress towards the targets is determined by examining the increase in capacity required in the WSS sectors. This is calculated by taking the rate of people served per year, at which coverage has increased in the period between 1990 and the year for which interim data are available, and the rate at which coverage would have to increase to meet the MDGs, taking population increase into account. The ratio of these two numbers is the capacity increase necessary. From the analysis, it is clear that many countries are lacking the capacity they need, in terms of new people provided with coverage every year, to reach the targets. However, some countries will not only meet, but exceed their targets, and the Overview highlights the areas in which they have made gains: realistic and robust planning, establishing institutional leadership, and allocating sufficient investment, among others.

A unique feature of the Overview document is the Sustainability Scorecard which is designed to provide an assessment, in a quantitative form, of overall sector and sub-sector sustainability, looking beyond simple coverage figures to predict whether access, once provided, will endure. The Scorecard is created by posing to sector leaders in each country a series of questions relating to generally accepted success factors in the institutional and financial aspects of the sector. Based on the responses, scores out of 100 were computed for each aspect and an overall score weighted by 70 percent for institutional and 30 percent for financial factors.

Of particular concern is the fact that sanitation lags behind water supply in terms of the progress made in strengthening the sector; this is particularly true of rural sanitation. Also of concern is the lack of preparedness of most countries to scale up their capacity to the extent needed, and the uncertainty about whether the investments made will be sustainable in the long-term.

The sixteen countries included in 2006 are those in which there was government interest in this diagnostic process, where funding and human resources were available to support data collection, and where there was a need for support to achievement of the targets.
Despite the challenges of acquiring reliable data from such a broad range of countries and agencies, the Country Status Overview has proved itself to be a powerful tool for comparison and analysis to be used by African sector leaders and support agencies to assess progress of the MDG Roadmaps over time. It is envisaged that the Overview will be reviewed and updated periodically.

Piers Cross  
Principal Team Leader, Water and Sanitation Program-Africa (WSP-Africa)
A. MDG Outlook

1. Is Benin on the right track to reach the MDGs for water and sanitation?

By the end of 2005, 48 percent of Benin’s population had access to safe water while 40 percent had access to sanitation. To reach the MDGs in 2015, an additional four million people will require access to safe water, and 3.8 million people to sanitation. If these objectives are reached, nearly 3.3 million people will still lack access to safe water, and four million will lack access to sanitation. To achieve the MDGs, current capacity needs to be increased by 5.1 times for water and 2.8 times for sanitation. Importantly, the MDGs are within reach in Benin, particularly in the rural sub-sector for water supply (where capacity has increased rapidly since 2002, more than two times between 2002 and 2004), and potentially for sanitation, if nearly 300,000 people mostly in rural areas can be provided with services each year for the next ten years.

2. Main issues to be addressed

Over the last few years, Benin’s rural sub-sector has improved considerably by creating a coherent strategy and programmatic approach that included investment projections and a M&E framework. The main challenge appears to be capacity building to keep the current pace of 1,350 new water points per year. Some of the other core issues that need to be addressed include:

- Effective decentralisation, since most of the newly created municipalities lack the ability to exercise their new competencies, whether in functional terms, or in managing finance.
- In urban areas, support for planning and management functions will be critical in the coming months and years, to help sustain SONEB as a nationwide water utility. In particular, support is
### Measures to improve national strategies

- Develop and adopt National Water Policy (Rural and Urban);
- Integrated WRM and sanitation/hygiene promotion programme.
- Develop and implement sanitation programme and hygiene promotion.

### Coverage targets and investment requirements

<table>
<thead>
<tr>
<th></th>
<th>Access (%)</th>
<th>Access (%)</th>
<th>Access (%)</th>
<th>Add Pop to be covered (m/year)</th>
<th>Total Investment Required</th>
<th>Public Invest Required</th>
<th>Planned Public Invest.</th>
<th>Surplus (Funding Gap)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1990</td>
<td>2005</td>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
<td>Rural</td>
<td>Urban</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>35</td>
<td>44</td>
<td>35</td>
<td>44</td>
<td>0.221</td>
<td>11</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.183</td>
<td>7</td>
<td>10</td>
<td>7</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>37</td>
<td>48</td>
<td>0.388</td>
<td>18</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Sanitation</td>
<td>2</td>
<td>53</td>
<td>2</td>
<td>53</td>
<td>0.215</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>0</td>
<td>(6)</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
<td>Rural</td>
<td>Urban</td>
<td>0.166</td>
<td>6</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>14</td>
<td>40</td>
<td>0.381</td>
<td>12</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>Sanitation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>37</td>
<td>48</td>
<td>0.388</td>
<td>18</td>
<td>9</td>
<td>27</td>
</tr>
</tbody>
</table>
| Source: GoB, 2006.

needed to develop the company’s commercial plan and financing strategy, both for water supply and sanitation, and also for increasing water services delivery in poor peri-urban areas.

- **Stronger WSS M&E**, to help track progress and assess results in the near term. WSS M&E frameworks should link closely with broader poverty reduction frameworks, with particular attention to the linkages between sanitation and health.

## B. Sector Preparedness Overview

### 1. National Strategies

Benin’s water sector is divided into rural and urban sub-sectors. In rural areas and small towns, a national strategy was developed and implemented in the 1990s, as a result of a rural WSS programme (PADEAR), which created a unified framework for WSS interventions. Recently, the strategy has been renewed to focus on achieving the MDGs, and is premised on a demand-responsive approach, decentralisation of decision making, cost recovery, private sector participation, and reinforcement of the central government in the role of sector co-ordinator and regulator. Interestingly, the rural and small towns sub-sector has also adopted a programmatic approach through its Water Budget Programme (Budget Programme par Objectif - BPO) in effect a Medium Term Expenditure Framework, started in 2001. The BPO seeks to balance investment amongst the different districts throughout the country, and also tracks expenditure. Most donors are aligned with the BPO, which accounts for about 90 percent of rural and small town financing.

In urban areas, SO NEB (Société Nationale des Eaux du Benin) is a new, national public service provider in charge of water supply in urban areas. At present, the urban sub-sector lacks a cohesive strategy, although discussions were held towards the end of 2005 to start a planning process. One of the major challenges for the urban sub-sector relates to billing and financing. It is expected that with two new policy documents - a long-term investment plan (with a ten-year horizon), and SO NEB’s Provisional Plan for Company Development (with a five-year horizon), will help to organise the sector more effectively.

In the last few years, Benin has embarked on an ambitious policy reform programme (Gestion Intégrée des Ressources en Eau - GIRE) that includes updating its Water Charter (the existing one is ineffective), creating a co-ordination unit for the sector, as well as a National Water Council, drafting a National Policy for Water, and establishing four inter-communal agencies throughout the country. While the policy frameworks are not completed, the Water Charter is expected for approval towards
the end of 2006, and the National Policy for Water exists in a preliminary version. Other relevant strategies include the 1999 Local Governmental Law, which identifies communes as responsible for WSS.

2. Institutional Arrangements

The Ministry of Mines, Energy and Water is responsible for water supply in Benin. The Water General Directorate (DG Eau) is responsible for rural and small towns, while SONEB, an autonomous public company, is responsible for urban areas. DG Eau plays an important role in planning and implementing projects, while user associations and municipalities are responsible for management. Although the private sector is involved in drilling and maintenance activities, the institutional frameworks for increased private sector participation in the rural sector is limited. In the urban sector, SONEB is a 100 percent publicly held company, and is working to become viable as an autonomous agency. No participation of the private sector is anticipated.

In contrast to water supply, sanitation (including solid and liquid waste management) in both urban and rural areas is handled by a department within the Ministry of Health (Direction de l’Hygiène et de l’Assainissement de Base- DHAB). DHAB directly works in institutions, such as schools, health centres, and markets, and shares responsibility for sanitation with SONEB, communities, and departments in the Ministry of Environment, Housing and Urbanism (MEHU), and Ministry of Public Works and Transportation.

3. Sector Financing

According to estimates, Benin requires US$26.8 million per year for water supply and US$18.7 million per year for sanitation to achieve the MDGs. Of this, a projected US$23.4 million is required from the public sector (budget and ODA) for water supply, and US$15.9 million for sanitation. Planned public investment amounts to US$33.3 million for water supply and US$1.9 million for sanitation.

However, the current financial flows should be enough to achieve the MDGs in rural and small towns, if the pace of investment continues. Recently, the rural sub-sector created a comprehensive strategy, coherent with the PRSP, that presented a clear, three-year budget with operation and capital expenditure, levels of internal and external finance required, targets, and indicators for M&E. But there is some concern, given the historic weak governance, and poor mechanisms for accountability. For example, while some donors have expressed interest in pursuing a programmatic approach for the sub-sector, implementation of the last BPE showed that the government tends to decrease allocated funds before the end of the fiscal year. At the same time, budgetary reform has increased the predictability of flows, such that they are available at decentralised levels at the start of the year. States and communities are responsible for co-financing capital costs, and communities are responsible for full cost recovery of O&M.

In urban areas, the situation is less advanced, as substantial funds and capacity will be required to help the newly-created SONEB increase its coverage and provide improved services in urban areas. Still, SONEB is on a reform track, with the Provisional Plan for Company Development, expected in 2006.
4. Sector Monitoring and Evaluation

Benin’s 2003 PRSP calls for a harmonised overall M&E system, which would include a co-ordinating network of NGOs, the private sector, and government. For the water sector, as part of its sub-sector strategy, Benin’s rural sub-sector has developed a clear M&E framework with linkages between objectives, activities, expected results, and expenditures. Particular attention was paid to quantifiable and cost-efficient indicators. Overall, however, these activities are largely donor funded at a national level, and therefore dissociated with local level monitoring, or local empowerment to monitor. In the urban sub-sector, M&E is barely existent; in both the urban and rural sub-sectors, sanitation monitoring is very poor.

Measures to improve sector monitoring and evaluation

- M&E capacity, including co-ordination mechanisms, is required within the DG Eau M&E unit, DPP, and SONEB.
- Further support for BDI is needed, particularly for tracking the functionality of water points.

5. Sector Capacity

While Benin has experienced considerable progress over the last few years, especially in the rural sub-sector, the country still faces considerable capacity constraints - to the extent that capacity may be a bigger issue than financing. At a national level, public companies face a shortage of skilled personnel, and even where skilled staff is available, they tend to work under short-term contracts, which limits their effectiveness. At decentralised levels, municipalities generally lack the technical capacity to perform the functions ascribed to them in legislation. Many municipalities were only created in 2003.

In contrast, the private sector has in recent years demonstrated its effectiveness in the water services sector through some interesting cases (e.g. FORAG and FO RATECH private drilling companies managing sub-sector scaling-up success story). In rural areas and small towns, they install an estimated 1,000 new water points per year. There appears to be sufficient capacity for drilling, although there is need for more engineering skills as well as construction. In the urban sector, the newly created SONEB requires considerable capacity building in all areas, particularly for large-scale investments.

Measures to improve sector capacity

- As the sector strategy calls for increased reliance on the private sector to engage in the water sector, capacity within private firms to meet demand is required.
- With decentralisation, local authorities are increasingly responsible for WSS. To do their jobs effectively, capacity is needed for public administration, public finance, and procurement/hiring and managing of the private sector.

C. Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognised in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range from 0-100 percent.

<table>
<thead>
<tr>
<th>Overall Sector Sustainability Score</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>76%</td>
<td>91%</td>
<td>84%</td>
</tr>
</tbody>
</table>

Key issues to be addressed to improve sustainability

- Lack of capacity at the district and local levels to implement policy changes that shift responsibility to these levels.
- Institutional capacity to implement legislative and regulatory reforms.
- Financing capacity to implement and scale up programmes at a national level.
### Key issues to be addressed to improve sustainability

- Lack of capacity at the district and local levels to implement policy changes that shift responsibility to these levels.
- Limited fiscal decentralisation to empower district and local levels to claim responsibility.

### Key issues to be addressed to improve sustainability

- The urban sub-sector lacks a clear sanitation strategy.
- The urban sub-sector lacks a programmatic approach, which could help to improve performance.
- Lack of true autonomy within SONEB, and continued reliance on government subsidies.

### Key issues to be addressed to improve sustainability

- Limited attention to rural sanitation, and limited capacity within DHAB's district and local levels.
- Limited attention through government budgets and donors for rural sanitation.

### Key issues to be addressed to improve sustainability

- Limited awareness of the need for proper drainage systems in urban areas.
- Financing issues, particularly for storm water pipes and drainage systems.
- There is a need for increased public latrines, particularly in peri-urban areas.

### Sustainability Score for Rural/Small Town WS

<table>
<thead>
<tr>
<th>Sustainability Score for Rural/Small Town WS</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>67%</td>
<td>73%</td>
<td>70%</td>
</tr>
</tbody>
</table>

### Sustainability Score for Urban Water Supply

<table>
<thead>
<tr>
<th>Sustainability Score for Urban Water Supply</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>74%</td>
<td>51%</td>
<td>63%</td>
</tr>
</tbody>
</table>

### Sustainability Score for Rural Sanitation

<table>
<thead>
<tr>
<th>Sustainability Score for Rural Sanitation</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>78%</td>
<td>54%</td>
<td>66%</td>
</tr>
</tbody>
</table>

### Sustainability Score for Urban Sanitation

<table>
<thead>
<tr>
<th>Sustainability Score for Urban Sanitation</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>76%</td>
<td>54%</td>
<td>65%</td>
</tr>
</tbody>
</table>
Benin

Acronyms

BPO  Budget Programme par Objetif
DG Eau  Water General Directorate
DHAB  Direction de l’Hygiène et de l’Assainissement de Base
DPP  Department of Planning and Projections
GIRE  Gestion Intégrée des Ressources en Eau
IWRM  Integrated Water Resources Management
MDGs  Millennium Development Goals
MEHU  Ministry of Environment, Housing and Urbanism
M&E  Monitoring and Evaluation
MTEF  Medium Term Expenditure Framework
NGOs  Non-Governmental Organisations
OCS  Observatoire du Changement Social
ODA  Overseas Development Assistance
O&M  Operations and Maintenance
PADEAR  Programme d’Assistance au Développement du secteur de l’Alimentation en Eau Potable et d’Assainissement Urbain
PRSP  Poverty Reduction Strategy Paper
SIBEAU  Société Industrielle d’Équipement et d’Assainissement Urbain (private company managing liquid waste in Cotonou)
SONEB  Société Nationale des Eaux du Benin (autonomous water company)
WSS  Water Supply and Sanitation

References

A. MDG Outlook

1. Is Burkina Faso on the right track to reach the MDGs for water and sanitation?

If national public services provider ONEA continues to invest and operate as it has over the last few years, the MDGs for water supply and sanitation in urban areas will likely be met. Given the current policy frameworks and financing outlook, however, success in rural areas will be problematic and likely missed. In 2005, 8 million (62.5 percent) of Burkina Faso’s 12.9 million people had access to safe water, and 1.4 million (11 percent) had access to sanitation. To achieve the MDGs targets, 5.8 million people will require access to safe water, and 7.9 million people will require sanitation. This will require an increase in capacity of two times for water supply and more than six times for sanitation. Even if the MDGs are reached, 3.1 million people would still lack access to safe water and 7.7 million people would lack access to sanitation.

2. Main issues to be addressed

The situation in urban areas appears positive for both water supply and sanitation. However, in rural areas particularly in settlements of more than 5,000 inhabitants, investments will not likely keep pace with the rapid population growth over the next ten years. Some of the core issues that need to be addressed include:

- Sanitation policies and guidance, particularly in rural and semi-urban areas where population is too low to attract ONEA, but the population density is high enough to warrant comprehensive sanitation models.
- Capacity at decentralised levels of governance, which includes human resources but also the ability to manage finance, procure and manage local private sector contracts. From a water resource...
### Coverage targets and investment requirements

<table>
<thead>
<tr>
<th></th>
<th>Access (%)</th>
<th>Add Pop to be covered (m/year)</th>
<th>Total investment (m$/year)</th>
<th>Required Public Invest. (m$/year)</th>
<th>Planned Public Invest. (m$/year)</th>
<th>Surplus (Funding Gap) (m$/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1990</td>
<td>2005 (Target)</td>
<td>New</td>
<td>Rehab</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td></td>
<td></td>
<td>62.17</td>
<td>78.3</td>
<td>70</td>
<td>10.97</td>
</tr>
<tr>
<td>Rural</td>
<td>50</td>
<td>60</td>
<td>80</td>
<td>0.402</td>
<td>1.48</td>
<td>16.52</td>
</tr>
<tr>
<td>Urban</td>
<td>74</td>
<td>70</td>
<td>87</td>
<td>0.181</td>
<td>1.18</td>
<td>16.52</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>63</td>
<td>82</td>
<td>0.583</td>
<td>63.65</td>
<td>24.35</td>
</tr>
<tr>
<td><strong>Sanitation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>10</td>
<td>10</td>
<td>54</td>
<td>0.575</td>
<td>15.20</td>
<td>14.57</td>
</tr>
<tr>
<td>Urban</td>
<td>8</td>
<td>14</td>
<td>57</td>
<td>0.213</td>
<td>11.65</td>
<td>11.52</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>11</td>
<td>53</td>
<td>0.788</td>
<td>26.85</td>
<td>28.25</td>
</tr>
</tbody>
</table>

Source: GoB, 2006.

• **Stronger sector coordination.** Although a platform has been created recently through the MDG Roadmap to promote dialogue and coordination between stakeholders, including donors and civil society organisations, the General Directorate of Water Resources (DGRE) requires substantial support to manage, maintain, and continue this function.

### B. Sector Preparedness Overview

#### 1. National Strategies

In March 2003, the Government of Burkina Faso adopted an Action Plan for the Integrated Management of Water Resources (PAGIRE). PAGIRE complements a series of management tools prescribed by the governing law on water management, which was adopted in 2001, and includes a water action plan. Currently, in urban areas, covering 42 cities and towns, the National Office for Water and Sanitation (ONEA) implements the strategies set forth in the water strategy. Importantly for rural areas, the General Charter of Territorial Collectives (CGCT) (2004) establishes that local communities will be responsible for water supply and sanitation as of 2009. Given the weak implementation of decentralisation in Burkina Faso (the first municipal elections were held in April 2006), and the lack of technical and legal mechanisms to transfer this responsibility, it is unclear how well this national policy will be implemented. A national sanitation plan is still in development, and is expected to pose ambitious targets for urban and rural areas. Currently, the country’s two largest cities, Ouagadougou and Bobo Diolasso, have adopted strategic sanitation plans.

Despite the sector frameworks, linkages between the water sector and the Strategic Framework for Fighting Poverty (CSLP) are weak. Funding for water supply is limited, while sanitation is not included. Still, the MDG Roadmap for WSS was adopted in May 2005, and includes the development of a program approach for 2007-2009). The budget program aims to improve coordination, increase transparency, align budget items with sector objectives, and increase financial flows.

#### Measures to improve national strategies

- Stronger linkages are needed between water sector strategies and national poverty reduction/development frameworks, as well as between WSS strategies and budgeting.
- The national sanitation strategy needs to be accompanied by clear guidance on how to implement at decentralised levels.

#### 2. Institutional Arrangements

In Burkina Faso, the Ministry of Agriculture, Hydraulics, and Fishery Resources has overall responsibility for WSS. The current institutional structure divides responsibility between the General Directorate of...
Measures to improve institutional arrangements

- Considerable capacity building at a local government level is needed in anticipation for the transfer of responsibility in 2009.
- The expected national sanitation strategy needs to outline clear roles and responsibilities for sector actors, amongst different sector ministries as well as at different levels.

Measures to improve sector financing

- Adapt WSS services to reflect affordability, willingness to pay, appropriate technology, and other sustainability factors.
- Establish public/private/civil society partnership modalities for improved WSS in rural areas.

3. Sector Financing

An estimated US$116.25 million is required per year for the next nine years to achieve the MDGs, with US$88 million targeted for water supply, and US$28.25 million targeted for sanitation annually. In comparison, annual planned public investment totals estimated US$17.76 million, for water supply (US$13.33 million) and sanitation (US$3.96 million). Compared with public requirements for rural areas (US$68.96 million per year looking forward), public finance over the last five years (sovereign and ODA) has averaged just US$15 million per year. Of this, 89 percent of total public spending in rural areas was provided through international ODA. In urban areas, ONEA has invested an average of US$30 million per year over the last nine years for WSS, of which 70 percent has been spent on the Ziga Project in Ouagadougou. Of this, US$22 million has been spent on sanitation and sewerage. To achieve development targets, rural WSS must receive additional financing, but not at the expense of the urban sub-sector. In particular, considerable improvements are needed in urban sanitation and sewerage, especially in secondary towns.

The prospects for securing additional finance are limited to increased user fees, greater alignment between national strategies and the budgeting process, and working to secure additional ODA. While there has been some success in cost recovery for WSS, based on experience with microfinance at one end of the spectrum, and utility tariffs on the other, consumption patterns are weak in semi-urban areas/secondary towns (5-10 litres/day/person), and willingness to pay appears limited. ONEA’s billing approach is based on a cross-subsidy model between users (the first block is US$0.35 per m³, and the second is US$0.80 per m³). Given the low consumption patterns of the poor, ONEA’s financial balance may depend either on increased water consumption, or tariff increases.

4. Sector Monitoring and Evaluation

While monitoring and evaluation strategies in the urban sub-sector are strong, overall M&E frameworks are weak. Input and output indicators are not clear, which limit ability to track changes in access and coverage. Also, there is limited expenditure tracking to connect inputs and outputs with outcomes and impacts, and no significant review of public expenses. This relatively poor WSS M&E system means...
that appropriate information from the sector has not fed into the PRSP process, which may account (to some extent) for the lack of prioritisation and funding for the sector.

Importantly, the MDG Roadmap, adopted in May 2005, gives priority to implementing a comprehensive M&E program, largely in 2006. While only a few activities have commenced, a complete inventory of water and sanitation infrastructure in semi-urban and rural areas, financed by the African Development Bank, was validated in mid-February 2006.

### Measures to improve sector monitoring and evaluation

- Set up a decentralised sector information monitoring system (SIM), that includes implementation and results monitoring, input-output-outcome factors, with necessary learning capacity for all users.
- Ensure that public expenditures are monitored and become part of standard operations, as part of working towards a more sector-wide approach.

### Measures to improve sector capacity

- Technical assistance and capacity building to local and district authorities to support implementation – e.g. drilling, construction, and operations/maintenance skills.
- Technical assistance and capacity building to support the local private sector on all issues relating to water supply and sanitation.

5. **Sector Capacity**

Although Ouagadougou is known for its education, training, and research on water supply and sanitation, capacity for implementing the national strategies to achieve the MDGs remain a key challenge. At a governance level, current capacities for human resources, including legal and administrative functions, are limited. Wide-scale capacity for local governance is needed at decentralised levels, particularly with the transfer of responsibility expected by 2009. Skilled staff to conduct planning, needs assessment, project design, fund raising, regulation, and water resource management, are all in short supply, and will likely hinder progress to achieve the MDGs.

Still, Burkina Faso has many private companies with experience in engineering and consulting, as well as local and international NGOs that could work to improve capacity building at these local levels. In general, the Government encourages participation by NGOs and the private sector in WSS, although the modalities for cooperation, particularly in rural and semi-urban areas, are still unclear. An ongoing project, conducted by WaterAid with local partners, is working to develop different modalities to help increase capacity in select municipalities around the country, with the intention of scaling up successes. Other activities are also targeted to raise capacity within the local private sector and NGOs, in anticipation for the considerable needs in coming years.

### C. Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognised in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The score range from 0-100 percent.

<table>
<thead>
<tr>
<th>Overall Sector Sustainability Score</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>45%</td>
<td>82%</td>
<td>64%</td>
<td></td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability

- Overall, the different sub-sectors should be integrated and co-ordinated at a national level.
- Capacity building is needed in the public and private sectors, including attention to supply chain constraints in rural areas.
### Sustainability Score for Rural/Small Town Water Supply

| Institutional | Overall 64% |
| Financial    | 70%         |
| Overall      | 57%         |

### Sustainability Score for Urban Water Supply

| Institutional | Overall 47% |
| Financial    | 40%         |
| Overall      | 44%         |

### Sustainability Score for Rural Sanitation

| Institutional | Overall 69% |
| Financial    | 30%         |
| Overall      | 50%         |

### Sustainability Score for Urban Sanitation

| Institutional | Overall 34% |
| Financial    | 13%         |
| Overall      | 24%         |

### Key Issues to be Addressed to Improve Sustainability

- Capacity building for local WATSAN committees, supply chains, and local private sector (including drilling companies).
- An improved financial management system to support fiscal decentralisation is needed.
- Greater participation by the private sector.

- Budget allocations for sanitation and hygiene promotion are weak relative to water supply, and need to be prioritised.
- Supply chains for sanitation parts and equipment are weak; greater attention to social marketing is required.

- A market needs to be developed for excreta removal, treatment and disposal, including appropriate finance mechanisms.
- Capacity building for the private sector is needed to engage in different areas of urban sanitation, for example garbage collection.

- Capacity building for business planning, pro-poor arrangements and managing the private sector (e.g. procurement, hiring and firing, contract administration).
- Ongoing support for ONEA to maintain momentum in providing quality services and extending connections in peri-urban areas.
- Support for small-scale independent service providers.
Notes

1. WSS National Program of Burkina Faso on MDGs Target in 2015.

Acronyms

AfDB  African Development Bank
CGCT  General Charter of Territorial Collectives
CSLP  Strategic Framework for Fighting Poverty
DGRE  General Directorate of Water Resources
MDGs  Millennium Development Goals
M&E  Monitoring and Evaluation
NGOs  Non-Governmental Organisations
ODA  Overseas Development Assistance
ONEA  National Office for Water and Sanitation
PAGIRE  Action Plan for the Integrated Management of Water Resources
PRSP  Poverty Reduction Strategy Paper
SIM  Sector Information Monitoring
WATSAN  Water and Sanitation
WSS  Water Supply and Sanitation

References

A. MDG Outlook

1. Is DRC on the right track to reach the MDGs for water and sanitation?

DRC is not on track towards meeting the MDGs for water and sanitation, partly because the country has just emerged from conflicts that led to the deterioration of the sector’s infrastructure. Currently, only 22 percent (11.5 million inhabitants) and 10 percent (4.8 million inhabitants) of the population have access to safe drinking water and sanitation respectively. To reach the MDGs, the coverage must expand to 71 percent for water and 55 percent for sanitation.

Because the coverage is lower today than in 1990 for both water and sanitation, and given limited financial resources, the sector has set national targets that are less ambitious than the MDGs, 49 percent coverage for safe drinking water (36 percent for rural areas and 65 percent for urban areas) and 45 percent for sanitation. Even these targets are ambitious, requiring the sector to add 33 times more people per year to sanitation as well as reversing the negative trend in water. To attain these goals, an additional 27.3 million people require access to safe drinking water and 30.8 million to sanitation. This requires an estimated annual public investment of US$214 million, US$171 million for safe drinking water and US$43 million for sanitation.

2. Main issues to be addressed

To attain the national, and ultimately the water and sanitation-related MDG targets, the government has committed to institutional reforms as well as the development of a roadmap. For example, REGIDESO (the National Company for Water Supply in Urban Areas) has committed to a process of developing a Decennial Plan (2006-2015) for the improvement of safe drinking water coverage in urban areas, while the National Committee for Water and Sanitation (CNAEA) is working to extend its
### Coverage targets and investment requirements

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2004</th>
<th>2015 (Target)</th>
<th>Add Pop to be covered (m/year)</th>
<th>Total Investment Required (m$/year)</th>
<th>Public Invest Required (m$/year)</th>
<th>Planned Public Invest. (m$/year)</th>
<th>Surplus (m$/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Access (%)</td>
<td>Access (%)</td>
<td>Access (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Rural</td>
<td>21</td>
<td>12</td>
<td>36</td>
<td>1.05</td>
<td>52</td>
<td>12</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>68</td>
<td>37</td>
<td>65</td>
<td>1.47</td>
<td>117</td>
<td>18</td>
<td>135</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>37</td>
<td>22</td>
<td>49</td>
<td>2.48</td>
<td>169</td>
<td>30</td>
<td>199</td>
</tr>
<tr>
<td>Sanitation</td>
<td>Rural</td>
<td>11</td>
<td>10</td>
<td>46</td>
<td>1.49</td>
<td>21</td>
<td>13</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>9</td>
<td>8</td>
<td>43</td>
<td>1.28</td>
<td>188</td>
<td>11</td>
<td>199</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>10</td>
<td>9</td>
<td>45</td>
<td>2.80</td>
<td>209</td>
<td>24</td>
<td>233</td>
</tr>
</tbody>
</table>


### Action Plan for sanitation in Kinshasa to other large or medium-sized towns throughout the country.

Despite these activities, some of the core challenges include:

- **Technical and commercial reform of REGIDESO**, to address the glaring deficiencies in urban service provision. This includes shifting the focus of the utility towards customer service, improving management performance, and increasing coverage in urban areas, particularly in secondary centres and low-income urban settlements.
- **Strengthened co-ordination**, increased investment and institutional capacity building in rural areas, including increased attention to the role of the private sector in water service delivery.
- **Re-organisation of the sanitation sub-sector**, including institutional reform to rationalise different actors in this sub-sector, as well as capacity building for service provision.

### B. Sector Preparedness Overview

#### 1. National strategies

As a post-conflict country facing deteriorated water and sanitation infrastructure, DRC has made considerable efforts to organise and promote sector reform through national strategies. For example, the country’s new constitution acknowledges access to water as a basic human right, while the PRSP acknowledges the need to restructure the water and sanitation sectors, and identifies decentralisation as a key factor for the mobilisation of resources.

In 1990, DRC developed a Master Development Plan for the Safe Drinking Water and Sanitation Sector that outlined specific objectives and a strategy for each sub-sector. While the Master Plan was postponed due to political instability, in 2003, a national seminar on water and sanitation reform focused on the MDGs, made recommendations on government commitment to carry out reform and the development of an institutional, business and technical assessment of the sector. This was followed by a Round Table Meeting on Infrastructure in 2004, which emphasised the need for sector strategies, better co-ordination and increased investment.

In urban areas, support for water services reform has resulted in the creation of a Steering Committee for Public Enterprise Reform (COPIREP) and the Sectoral Working Sub-Group for the Water Sector (SGSTEAU), to spearhead reform measures.

### Measures to improve national strategies

- **Government support for the works initiated by COPIREP and SGSTEAU**, as well as the effectiveness survey of the REGIDESO, of the institutional framework and the organisation of the sector.
- **The roadmap survey for the achievement of safe drinking water related MDGs and sanitation sector in the urban and rural centres**, from the reforms to be carried out in the sector and the action plans per sub-sector.
of REGIDESO, as well as an overall review of the organisation of urban water management, with support from the World Bank. Urban sanitation is addressed through a National Sanitation Programme (PNA), which is seeking, through pilot projects and studies in Kinshasa, to identify appropriate institutional arrangements capable of increasing effectiveness and sustainability of urban sanitation. In rural areas, the government recently conducted a study on institutional strengthening of the National Rural Water Service (SNHR), and is working on a development plan for both water and sanitation. This study proposed the rehabilitation of existing works and extending coverage through new systems, but perhaps more importantly, transforming SNHR to become a co-ordinating body, and institutional strengthening of rural sanitation. These studies and activities will be complemented by an analysis of the MDG roadmap for water and sanitation.

2. Institutional Arrangements

Water and sanitation services are technically decentralised, although decentralised bodies at the provincial, district, and municipal levels do not have any role in defining policy or developing sector strategies. Instead, CNAEA - an inter-ministerial committee that sits under the Ministry of Planning - has a role to perform policy and strategy work at national level, in association with relevant line ministries.

In terms of service delivery, REGIDESO, a public institution with management autonomy, enjoys legal monopoly for the supply of safe drinking water throughout the country, although in practice it only provides services to urban centres and secondary towns. In the rural areas, drinking water is provided by the SNHR (a public utility), health centres and NGOs. Although SNHR was active between 1985 and 1990, its institutional status is currently unclear, which hinders it from developing a long term action plan and generating its own internal resources. For sanitation, PNA, a public utility under the Ministry of Environment, is the main actor, while NGOs and private sector actors also play a role. Rural sanitation, which includes a focus on hygiene behaviour, is provided by Zones de Santé (health centres) that operate under the Ministry of Health.

3. Sector Financing

An estimated US$214 million in annual public funding is required to achieve DRC’s water and sanitation specific goals such as MDGs, with US$171 million for urban water supply and US$43 million for sanitation. Compared with these requirements, annual planned public investments amount to 40 percent (US$69 million) for safe drinking water and seven percent (US$3 million) for sanitation, resulting in a financing gap of US$102 million (for water) and US$41 million (for sanitation). To address this gap, the government is considering different options, including lowering the projected per-capita costs to provide access, through use of different technologies. (For example, per capita costs for water supply are estimated at US$50 in rural and US$80 in urban areas, based on projects completed between 1981-1990.)
Over the next five years, donors are expected to provide the bulk of funds, including, *inter alia*, the World Bank, the African Development Bank, the European Union, Japan, DGCD (Belgium) and KFW (Germany). In rural areas, public investment is geared towards sensitisation and capacity building, as service provision is the responsibility of the population. In urban areas, the current investment programme calls for prioritisation of low income settlements currently lacking water supply. This is in line with the PRSP, which emphasised the need of focusing programmes on the poor.

Despite these efforts, cost recovery is a major constraint to sustainable water services. For example, the average tariff of US$0.65 per m$^3$ for water supply in urban areas does not cover the cost of water. In rural areas, maintenance of water systems is a sizeable problem, and there is no cost recovery mechanism for urban sanitation.

### 4. Sector Monitoring and Evaluation

DRC’s post conflict situation, coupled with at least a decade of bad governance, has hindered it from monitoring the development of key sectors such as water and sanitation. As a result, the investment programming and sector reform efforts discussed above are all quite new, and not grounded in data or previous evaluations. Currently, ongoing and planned projects are developing key indicators, which will be used as the basis for monitoring and evaluation; monitoring and evaluation activities are being co-ordinated by CNAEA. The MDG Roadmap process will assist in determining specific objectives for a monitoring and evaluation framework.

In addition to these efforts, the PRSP has also identified key performance indicators, including the number of new centres equipped with water infrastructure per year; the number of new water points and connections built or rehabilitated per year; length of extensions a year; volume of safe drinking water consumed per inhabitant per day; number of latrines built per year; proportion of additional persons with access to water points and adequate structures for sanitation; and reforms within REGIDESO, SNHR and PNA. The objectives retained in the PRSP are to supply 49 percent of the population with safe drinking water and 45 percent with improved sanitation facilities in 2015.

### Measures to improve sector monitoring and evaluation

- Organising consultation with stakeholders in order to agree on (i) performance indicators to be evaluated, and (ii) the timelines to be determined.
- Making beneficiaries (users) participate in the evaluation of the sector.

### 5. Sector Capacity

Although DRC has made considerable progress in planning for reform, there is a strong need for improving the capacity of all water and sanitation sector stakeholders, including the sector’s institutional arrangements. Specifically, capacity is needed to strengthen health centres to provide sanitation and hygiene behaviour; material and financial support of SNHR and health centres. The market for spare parts, particularly for rural water and sanitation services needs attention, while an understanding of the potential role and capacity of the private sector to engage in the sector is needed. In the case of drilling companies, the country currently has only four - insufficient for the country’s overwhelming need. In urban areas, REGIDESO lacks sufficient technical, commercial, and financial management capacity: it services only 37 percent of the population it should, and of the 94 centres it runs, 32 are not operational (destroyed during civil war or disrepair).

### Measures to improve sector capacity

- Training a big number of staff from Zones de Santé (health centres) of SNHR, PNA, NGOs, craftsmen and consumers associations, as well as equipping these training institutions to make them more operational.
- Involving the private sector in the management of REGIDESO, provision of safe drinking water to small centres and poor settlements in various towns.
Another area where capacity is needed is to replicate and scale up successes, for example the successful experiences in rural communities for recovering operations and maintenance costs in Kasai, Kivu, Kinshasa, and Bas-Congo.

C: Sustainability Overview Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognised in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range from 0-100 percent.

<table>
<thead>
<tr>
<th>Overall Sector Sustainability Score</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional</td>
<td>32%</td>
</tr>
<tr>
<td>Financial</td>
<td>36%</td>
</tr>
<tr>
<td>Overall</td>
<td>34%</td>
</tr>
<tr>
<td>Sustainability Score for Rural/Small Town WS</td>
<td>Key issues to be addressed to improve sustainability</td>
</tr>
<tr>
<td>Institutional</td>
<td>23%</td>
</tr>
<tr>
<td>Financial</td>
<td>16%</td>
</tr>
<tr>
<td>Overall</td>
<td>20%</td>
</tr>
<tr>
<td>Sustainability Score for Urban Water Supply</td>
<td>Key issues to be addressed to improve sustainability</td>
</tr>
<tr>
<td>Institutional</td>
<td>50%</td>
</tr>
<tr>
<td>Financial</td>
<td>57%</td>
</tr>
<tr>
<td>Overall</td>
<td>54%</td>
</tr>
<tr>
<td>Sustainability Score for Rural Sanitation</td>
<td>Key issues to be addressed to improve sustainability</td>
</tr>
<tr>
<td>Institutional</td>
<td>86%</td>
</tr>
<tr>
<td>Financial</td>
<td>44%</td>
</tr>
<tr>
<td>Overall</td>
<td>65%</td>
</tr>
<tr>
<td>Sustainability Score for Urban Sanitation</td>
<td>Key issues to be addressed to improve sustainability</td>
</tr>
<tr>
<td>Institutional</td>
<td>22%</td>
</tr>
<tr>
<td>Financial</td>
<td>17%</td>
</tr>
<tr>
<td>Overall</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Notes

1. For water supply in DRC, the absolute number of people added in the past is negative due to deterioration of infrastructure, so it is not meaningful to calculate how many more times the increase in capacity is needed.

Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COPIREP</td>
<td>Comité de Pilotage de la Réforme des Enterprises Publiques (Steering Committee for Public Enterprise Reform)</td>
</tr>
<tr>
<td>CNAEA</td>
<td>Comité National d’Action de l’Eau et de l’Assainissement (National Committee for Water and Sanitation)</td>
</tr>
<tr>
<td>DGCD</td>
<td>Direction Général de Coopération pour le Développement (Directorate-General for Development Cooperation)</td>
</tr>
<tr>
<td>DRC</td>
<td>République Démocratique du Congo (Democratic Republic of Congo)</td>
</tr>
<tr>
<td>KFW</td>
<td>German Finance Co-operation</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non-Governmental Organisations</td>
</tr>
<tr>
<td>PNA</td>
<td>Programme National d’Assainissement (National Sanitation Programme)</td>
</tr>
<tr>
<td>PRSP</td>
<td>Poverty Reduction Strategy Paper</td>
</tr>
<tr>
<td>REGIDESO</td>
<td>Régie de Distribution d’Eau de la République Démocratique du Congo (National Company for Water Supply in DRC)</td>
</tr>
<tr>
<td>SGSTEAU</td>
<td>Sous-Groupe Sectoriel de Travail Eau (Sectoral Working Sub-Group for Water Sector)</td>
</tr>
<tr>
<td>SNHR</td>
<td>Service National d’Hydraulique Rurale (National Rural Water Supply Service)</td>
</tr>
</tbody>
</table>

References

A. MDG Outlook

1. Is Ethiopia on the right track to reach the MDGs for water and sanitation?

Given current financial commitments, and a shift towards low-cost solutions and increased community investment, Ethiopia appears to be on the right track to reach the MDGs for water supply. According to the 2005 MDG-NAR, access to safe water was 39.4 percent as of 2004, up from 31 percent in 2000. The MDG target for water is 62 percent; an additional 38 million people will require access by 2015 to achieve success. This would require current performance capacity to increase by a factor of 1.3. For sanitation, coverage must increase from 11.5 percent (2002/03) to 52 percent, with an additional 44.8 million people gaining access. To achieve this, the sector’s performance capacity would have to increase by a factor of 12.7. The Government of Ethiopia (GoE) is adopting a more ambitious Universal Access Plan that aims to achieve 100 percent and 98 percent coverage for water supply and sanitation, respectively, by 2012. The practicality of the plan requires additional analysis, and would affect both capacity and financial projections. Capacity to implement strong sector reforms coupled with limited absorption capacity may hinder progress.

2. Main issues to be addressed

Ethiopia has made considerable progress in sector reform and capacity. If this trend continues, MDG targets for water supply appear within reach by 2015. This is particularly so if commitments by government and donors are disbursed on time, and efficiently. Some of the core issues that need to be addressed include:

- Capacity for policy implementation at decentralised levels. As local government responsibility for WSS increases, measures to ensure effectiveness of services and financial accountability are key.

Snapshots

**Capacity increase needed for water supply x 1.3**

**Capacity increase needed for sanitation x 12.7**

**Sector Investment Requirements**

**Key milestones towards MDG Roadmap**

Note: The graphs and chart are based on sector coverage and investment requirements data, and WSP analysis.
### Coverage targets and investment requirements

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2000</th>
<th>2005 (Target)</th>
<th>2015 (Target)</th>
<th>Add Pop to be covered (m/year)</th>
<th>Total Investment Required (m$/year)</th>
<th>Public Invest</th>
<th>Planned Public Invest.</th>
<th>Surplus (Funding Gap)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>11</td>
<td>23</td>
<td>31.4</td>
<td>65.5</td>
<td>2.9</td>
<td>119.2</td>
<td>9.8</td>
<td>25</td>
<td>154.2</td>
</tr>
<tr>
<td>Urban</td>
<td>70</td>
<td>74</td>
<td>83.1</td>
<td>90.9</td>
<td>0.6</td>
<td>6.29</td>
<td>6.99</td>
<td>19</td>
<td>88.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19</td>
<td>31</td>
<td>39.4</td>
<td>62</td>
<td>3.5</td>
<td>182</td>
<td>168</td>
<td>44</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sanitation</strong></td>
<td>-</td>
<td>-</td>
<td>3.9</td>
<td>52</td>
<td>3.43</td>
<td>30.9</td>
<td>20.6</td>
<td>0</td>
<td>51.6</td>
</tr>
<tr>
<td>Rural</td>
<td></td>
<td>-</td>
<td>-</td>
<td>49.7</td>
<td>0.7</td>
<td>190.5</td>
<td>126.9</td>
<td>0</td>
<td>317.4</td>
</tr>
<tr>
<td>Urban</td>
<td></td>
<td>-</td>
<td>11.5</td>
<td>52</td>
<td>4.07</td>
<td>221</td>
<td>147.6</td>
<td>0.14</td>
<td>369</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6.5</td>
<td>-</td>
<td>11.5</td>
<td>52</td>
<td>4.07</td>
<td>221</td>
<td>147.6</td>
<td>0.14</td>
<td>369</td>
</tr>
</tbody>
</table>

Source: GoE, 2005; GoE, 2006.

This includes M&E frameworks that are meaningful at local levels, but ‘fit’ in a national framework. It includes incentives to attract and retain middle/upper level government managers.

- **Inclusion of a range of non-government stakeholders**, including the local private sector and consumers. Broader participation in design and construction of water supply systems, and for O&M, will be critical to ensure sustainability of new systems. While stronger participatory frameworks are needed, capacity building is also required, and should be encouraged.

- **Increasing political awareness and consensus** that lack of sanitation and hygiene poses a real problem to society, and is better addressed through preventative measures. Emerging success stories on sanitation and hygiene promotion reveal clearly that progress in sanitation coverage relies on political will. Given the substantial progress required to achieve the MDG targets, this should be a priority.

### B: Sector Preparedness Overview

#### 1. National Strategies

The Government of Ethiopia (GoE) has put in place the right policies, strategies, sector development programme and implementation arrangements to achieve the MDGs. The comprehensive National Water Resources Management Policy (1998) and Strategy (2000) provide guidance for investments in rural, town and urban water supply and sanitation. A National Water Sector Development Programme (2002) has also been prepared. In line with the decentralisation policy, regions have developed specific WSS programme implementation plans and are trying to align donor support and other sector financing around these plans. WSS is also given high priority in the second Sustainable Development and Poverty Reduction Plan (SDPRP) document, with substantially increased budgetary allocation for FY06. The PASDEP WSS targets for the medium and long-term are based on the concept of achieving a Universal Access Plan (UAP) by the year 2012, and are more ambitious than the MDGs. Although highly ambitious, this shows the clear commitment by the GoE to the WSS UAP. The World Bank has started to support this programme, and other donors such as African Development Bank (AfDB) and UNICEF are following suit, using the project implementation manual (PIM) jointly developed by the MoWR and the World Bank. The immediate challenge in coming years will be to increase capacity for implementation.

Improving sanitation and hygiene is recognised by the Government as an important precursor to poverty eradication. Both the Ministries of Health and Water Resources have sound...
sanitation components in their wider policies. Although there is some variance in emphasis and approach, sector policies converge around overall environmental health goals, emphasizing sanitation and hygiene promotion as key interventions to prevent disease, protect the environment and enhance socio-economic development. A sanitation and hygiene strategy has also been developed and adopted, and a corresponding Protocol has been prepared. These efforts are expected to provide the necessary guidance for the development of national and regional medium and long-term sanitation investment plans. There is a strategic shift towards low cost sanitation coupled with large-scale sanitation and hygiene promotion, as part of a health extension programme. A national MoU defining the roles and responsibilities of the sector ministries (MoWR, MoH, MoE) is now in place.

2. Institutional Arrangements

The sector appears to be on the right path in terms of water supply programme implementation. The National Water Resources Management Policy and Strategy mandates that local governments plan, implement and maintain their WSS schemes. The federal ministry is mainly responsible for formulation of policies and regulations, provision of technical support and raising of funds. Regional water bureaux will do the same at the regional level, but with additional mandate to provide technical assistance to the woredas and towns when needed. Actual implementation is left to woredas, towns, and communities, with assistance from local stakeholders.

The institutional arrangements for sanitation also follows a decentralised pattern, and although identifying the leading institution (between water and health) has been a challenge, it has been resolved by the national MoU which was signed in March, 2006.

3. Sector Financing

Estimates of required finance depend on projected coverage targets. The 2005 WSS MDG NAR by the GoE estimates the investment requirements for water at US$297 million per year for the next ten years (2006-2015). Per capita Investment for water in urban and rural areas is US$105 and US$41 respectively while Investment for sanitation in urban and rural areas is US$271 and US$9 respectively. Total government allocation and commitment for WSS over the next seven years has been projected at US$12 million (US$5.4 million for rural, and US$6.6 million for urban). Given the cost recovery policy for capital and O&M costs, community investment is projected at US$16 million over the next ten years. Projected ODA is US$75 million per year for the next ten years, based on commitments from a variety of donors. Still, this leaves a financing gap of US$197 million per year. The UAP focuses on low cost solutions, and has lower projected per capita costs for rural water (from US$52.7 for the MDGs to US$19.8). While there may be cost savings on a per-capita basis, total costs may be higher, given the higher numbers
of people requiring access, and also noting that the marginal cost to provide services increases as coverage improves, as those without coverage tend to be situated in areas that are harder (and more expensive) to reach. Importantly, all cost figures are indicative only, and will need to be validated by achievement on the ground in the years to come.

Despite the projected finance gap, the substantial financial commitments made reflect improvements in Ethiopia’s sector reform strategy. The National Water Resources Management Policy requires urban centres to cover their investment, operation and maintenance costs, while rural WSS is required to cover O&M costs, with some cost sharing (up to 10 percent) for initial investment cost. The National Sanitation Strategy calls for a shift towards funding ‘sanitation promotion and leveraging resources’, and away from subsidy for hardware, and gives priority to low-cost, pro-poor solutions. Importantly, the financial requirements to achieve WSS targets are premised on the capacity to implement the approaches outlined in policy. Currently, it is not apparent that Ethiopia will be able to spend the additional funds efficiently and effectively without substantial capacity building in all areas within the sector.

4. Sector Monitoring and Evaluation

The Government has set ambitious targets for WSS, whether by the MDG or UAP. The SDPRP includes outcome-related indicators for coverage by urban and rural areas. However, it is not clear whether performance indicators have been developed to link inputs to outcomes, particularly at decentralised levels of governance. Overall, Ethiopia lacks a coherent performance monitoring system for sanitation and hygiene interventions, and the existing M&E system for water supply is not well developed. Still, there are some on-going initiatives, by the GoE, the WB, and WSP-AF to develop a comprehensive M&E system that is sector-wide, to shift away from project-based M&E. Because of the weak M&E system, appropriate information has not fed into any assessments of national planning processes. Likewise, it is imperative that the GoE and its development partners agree on baseline information to be collected at the start of projects to serve as the basis for measuring progress towards achieving annual targets and to enable establishment of the associated management information system. Tracking and monitoring of the water sector needs to be more coherent and accurate, in order to feed into efficient planning and budgeting. This includes analysis of value for money, and tracking unit costs.

5. Sector Capacity

Although sector frameworks and financial commitments are in place, Ethiopia requires considerable capacity to implement activities efficiently and effectively, particularly to achieve the UAP targets. Ongoing reform in the WSS sector has created the opportunity for local service providers to be engaged in assisting communities, woredas and water utilities in planning and managing WSS schemes. However, the capacity gap extends into the NGO and local

<table>
<thead>
<tr>
<th>Measures to improve sector monitoring and evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A comprehensive, sector-wide M&amp;E system needs to be established with clear guidance on what is being collected and for whom. Processing, reporting, and feedback mechanisms are strongly needed.</td>
</tr>
<tr>
<td>• Results from a stronger M&amp;E framework need to feed into planning and budgeting processes, particularly to inform more efficient allocations, given the financing gap to achieve coverage targets.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measures to improve sector capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>• There is a strong need for the full and active participation of the private sector, NGOs, and other stakeholders, in order to bring diverse experiences into the sector, which can help in the path towards achieving the MDGs.</td>
</tr>
<tr>
<td>• Greater efforts should be made to increase the capacity and participation of NGOs, CSOs, and local private sector actors in the sector.</td>
</tr>
</tbody>
</table>
private sectors. Special efforts have been made to encourage entrepreneurs - particularly in consultancy, construction works, and water supply - to grow and gain experience through on-the-job training and close guidance and support by senior international and national experts. Further, while there are many gains to be realised through participation of NGOs and civil society organisations in the planning, design and implementation of projects, the GoE has been slow in facilitating their participation in government supported programmes.

C: Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognised in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range from 0-100 percent.

### Overall Sector Sustainability Score

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity building</td>
<td>46%</td>
<td>82%</td>
<td>64%</td>
</tr>
<tr>
<td>Private sector participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply chain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration of sub-sectors</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Key issues to be addressed to improve sustainability

- Capacity building.
- Private sector participation
- Supply chain
- Business plan
- Integration of sub-sectors

### Sustainability Scorecard

#### Sustainability Score for Rural/Small Town WS

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity building</td>
<td>70%</td>
<td>57%</td>
<td>64%</td>
</tr>
<tr>
<td>Woreda (District)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WATSAN Committee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply chain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved financial management system</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability

- Capacity building for Woreda (District).
- Capacity building for WATSAN Committee.
- Capacity building for LSP
- Supply chain
- Improved financial management system

#### Sustainability Score for Urban Water Supply

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity building for utilities and TWB.</td>
<td>47%</td>
<td>40%</td>
<td>44%</td>
</tr>
<tr>
<td>Business plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Addressing the poor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Sector Participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Scale Independent Service Providers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability

- Capacity building for utilities and TWB.
- Business plan.
- Addressing the poor.
- Private Sector Participation.
- Small Scale Independent Service Providers

#### Sustainability Score for Rural Sanitation

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low level budget allocation for hygiene promotion and sanitation.</td>
<td>69%</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>Improved supply chain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social marketing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability

- Low level budget allocation for hygiene promotion and sanitation.
- Improved supply chain.
- Social marketing

#### Sustainability Score for Urban Sanitation

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing marketing for excreta removal, treatment and disposal.</td>
<td>34%</td>
<td>13%</td>
<td>27%</td>
</tr>
<tr>
<td>Strategy to develop urban sanitation financing mechanism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity building for the private sector</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability

- Developing marketing for excreta removal, treatment and disposal.
- Strategy to develop urban sanitation financing mechanism.
- Capacity building for the private sector.
Notes

1. The MDG NAR 2005 estimates total investment for rural and urban at US$243 million per year over the 11 year period between 2005-2015.

Acronyms

AfDB  African Development Bank
CSOs  Country Status Overviews
FY  Financial Year
GoE  Government of Ethiopia
LSP  Local Service Providers
MDGs  Millennium Development Goals
MDG-NAR  Millennium Development Goal-Needs Assessment Report
M&E  Monitoring and Evaluation
MoE  Ministry of Environment
MoH  Ministry of Health
MoU  Memorandum of Understanding
MoWR  Ministry of Water Resources
NGOs  Non-Governmental Organisations
NWRMPS  National Water Resources Management Policy and Strategy
ODA  Overseas Development Assistance
O&M  Operations and Maintenance
PASDEP  Programme for Accelerated and Sustainable Development for Eradication of Poverty
PIM  Project Implementation Manual
SDPRP  Sustainable Development and Poverty Reduction Plan
TWB  Town Water Board
UAP  Universal Access Plan
WATSAN  Water and Sanitation
WSP-AF  Water and Sanitation Program-Africa
WSS  Water Supply and Sanitation

References

A. MDG Outlook

1. Is Ghana on the right track to reach the MDGs for water and sanitation?

Ghana has made considerable progress in improving governance, developing policy and institutional frameworks and building capacity in the water sector. However, WSS financing in the past has been about a third of required investments, implying that Ghana could be on track to achieve the MDGs if more funding is made available, and reform efforts are continued. In 2004, Ghana’s water supply coverage was 56 percent (52 percent for rural/small town and 61 percent for urban areas). For sanitation, coverage was 35 percent (32 percent for rural/small towns and 40 percent in urban areas). Importantly, Ghana aims to achieve 85 percent coverage for both water supply and sanitation by 2015, a higher coverage ratio than the MDGs targets. To reach the 85 percent target, Ghana will need a capacity increase of 4.8 times for water supply and five times for sanitation. The total cost to achieve 85 percent coverage is estimated at US$1.5 billion - an annual US$68 million for the rural and small towns WSS, and US$81 million for urban water supply. In total 12 million and 15 million more people will need to be provided with potable water and improved sanitation respectively, leaving an unserved population of 4.1 million and 4.8 million for water and sanitation respectively.

2. Main issues to be addressed

Over the last several years, Ghana has implemented the types of policies and institutional frameworks for WSS that have been noted as best practice. To remain on track and achieve progress towards the MDGs and national goals, some of the core issues that need to be addressed include:

- Matching financial resource allocations with policy commitments, especially in rural areas, where the potential for off-budget finance remains limited. Attention to leveraging non-budget resources.

Snapshots

- **Capacity increase needed for water supply x 4.8**
  - Trend: The trend shows the increase in water supply coverage from 1990 to 2015, with a target of 85% coverage.

- **Capacity increase needed for sanitation x 5**
  - Trend: The trend shows the increase in sanitation coverage from 1990 to 2015, with a target of 85% coverage.

Sector Investment Requirements

<table>
<thead>
<tr>
<th>Investment Requirements (US$ M)</th>
<th>Public Investment Required</th>
<th>Planned Public Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(Funding Gap) (77)</td>
<td>N/A</td>
</tr>
<tr>
<td>Sanitation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key milestones towards MDG Roadmap

- Institution leader identified
- Stakeholder consultation
- MDG Roadmap/plan of action
- Resources mobilised
- Implementation underway towards MDGs

Note: The graphs and chart are based on sector coverage and investment requirements data, and WSS analysis.
Measures to improve national strategies

- Establish a direct link between sector plans and requirements with national budgeting, and revise targets if needed to ensure that they are realistic.
- Advocate increased resource allocation to match the commitment to WSS as a priority area, as expressed in national policy documents.

### Coverage targets and investment requirements

<table>
<thead>
<tr>
<th></th>
<th>1990 Access (%)</th>
<th>2004 Access (%)</th>
<th>2015 (Target) Access (%)</th>
<th>Add Pop to be covered (m/year)</th>
<th>Total Investment Required (m$/year)</th>
<th>Public Invest. Required (m$)</th>
<th>Planned Public Invest. (m$)</th>
<th>Surplus (Funding Gap) (m$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>37</td>
<td>52</td>
<td>85</td>
<td>0.535</td>
<td>42</td>
<td>44</td>
<td>42</td>
<td>(2)</td>
</tr>
<tr>
<td>Urban</td>
<td>85</td>
<td>61</td>
<td>85</td>
<td>0.536</td>
<td>72</td>
<td>81</td>
<td>81</td>
<td>(36)</td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td>56</td>
<td>85</td>
<td>1.071</td>
<td>116</td>
<td>125</td>
<td>125</td>
<td>(78)</td>
</tr>
<tr>
<td><strong>Sanitation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>11</td>
<td>31</td>
<td>83</td>
<td>0.747</td>
<td>25</td>
<td>14</td>
<td>10</td>
<td>(4)</td>
</tr>
<tr>
<td>Urban</td>
<td>40</td>
<td>40</td>
<td>85</td>
<td>0.653</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>35</td>
<td>80</td>
<td>1.400</td>
<td>25</td>
<td>25</td>
<td>14</td>
<td>-</td>
</tr>
</tbody>
</table>


in rural areas, for example through increased participation by the private sector and microfinance institutions, may be required.

- Improving capacity at decentralised levels, both for sector agencies and local government to perform the roles and responsibilities allocated by the institutional and policy frameworks, and for the urban sub-sector.

- Finalising an action plan to achieve WSS targets, including a well-defined sector investment and financing plan, and an effective national M&E system to track progress and impact of WSS investments.

- More specific attention to sanitation in relation to assessing coverage, and deriving investment and financing requirements.

### B: Sector Preparedness Overview

#### I. National Strategies

Ghana’s Growth and Poverty Reduction Strategy (GPRS) aims to increase growth and reduce poverty. To achieve these aims, the Government of Ghana’s (GoG) strategy is geared towards decentralisation and devolution of power from the Central Government to District Assemblies and grassroots, to enable individuals and communities participate in the decision-making process. In the water sector, urban and rural areas are considered separately, although these sub-sectors will be guided by a consolidated National Water Policy. In rural areas, the National Community Water Supply and Sanitation Programme (NCWSP) and a corresponding Strategic Investment Programme aim to rationalise, promote and improve the WSS service delivery. The NCWSP requires an accelerated provision of potable water and hygienic sanitation facilities based on the demand-driven approach and community ownership. The National Water Policy, which will soon be released by GoG, seeks to encourage greater private sector participation in small towns water supply. In the urban sub-sector, the Ghana Water Company Ltd. (GWCL) a public owned utility, has the remit to provide water supply throughout the country. In late 2005, a private operator was selected on a five-year management contract to improve efficiency. While the status for water supply appears positive, sanitation remains a formidable challenge, due to institutional weaknesses and lack of a clear investment strategy. At a sector-wide level, the Ministry of Water Resources, Works and Housing (MWRWH) has initiated a process towards a sector-wide programmatic approach (SWAP) to WSS delivery as a means of resolving several challenges in harmonisation of project delivery. The MWRWH is also...
considering the preparation of a Sector Investment Plan which will consolidate and harmonise the sub-sector plans, to be used as a tool for sourcing more investments.

2. Institutional Arrangements

Ghana’s institutional framework for the water sector is quite well-structured. The government’s role is in policymaking, facilitation and regulation, whilst the private sector, communities/user groups and NGOs deliver goods and services. The MWRWH, through a Directorate of Water, is responsible for setting and monitoring policy implementation on WSS, and co-ordinating sector agencies. The Community Water and Sanitation Agency (CWSA) provides District Assemblies (DAs) with support in WSS delivery for rural communities and small towns, whilst the Ghana Water Company Limited (GWCL) undertakes urban water supply. The Water Resources Commission (WRC) oversees water resources management while the Public Utilities Regulatory Commission (PURC) provides pricing regulation for urban water supply. In collaboration with sector agencies, the Ministry of Local Government, Rural Development and Environment (MLGRDE) sets the policy framework for the development of local communities, oversees local government performance, and is responsible for formulating environmental sanitation policy, through an Environmental Health Unit. The Ministry of Finance and Economic Planning (MFEP) provides financial resources from both internal and external sources, whilst National Development Planning Commission (NDPC) co-ordinates the GPRS and the MDGs. DAs are responsible for formulation and implementation of development plans, programmes and strategies for the overall development of their areas. Multidisciplinary District Water and Sanitation Teams (DWSTs) represent the DAs in all WSS activities and ensure integration of WSS in the district planning agendas. DAs support community level structures to function as autonomous and accountable entities in the management of rural/small town WSS. There is also a significant presence of NGOs in community WSS, providing both hardware and software. The private sector delivers goods and services, and is encouraged to enter into small town water supply management contracts.

While the framework for water delivery is quite clear, it is less so for sanitation, where undefined roles and responsibilities between the MWRWH and MLGRDE results in a lack of co-ordination. This is however improving. Responsibility for sewerage has been transferred to local government, even though there is little capacity at that level for implementation. In rural/small towns, the policy requires full integration of WSS and hygiene education. DAs have been receiving support from CWSA in this respect. Women are also required to be part of WSS planning and management groups. One area of policy that remains unclear is the use of subsidies for household latrines (as opposed to emphasis on social marketing).

3. Sector Financing

WSS is clearly articulated in national strategies and expenditure framework but the link between targeted goals and resource allocations remains limited. While the WSS sector follows a Medium Term Expenditure Framework, what is becoming clear is the wide gap between the requirements needed to meet the government’s more ambitious WSS targets (unconstrained budget) with what is annually released to meet them (constrained budget).

Further, the WSS sector is heavily dependent on donor funding (over 90 percent), and there is little predictability of sector inflows. For example, the government’s WSS allocation for 2006 is lower than previous years even though GoG is required to increase its portion of expenditures considerably to meet the set targets. Of a total expected funding for WSS in 2006 of US$85 million, the government’s portion is only 3.7 percent, whilst donors are to provide the rest. This amount represents 57 percent of annual WSS requirements to meet the targets. Closing this financial gap is critical for both the MDGs.
Measures to improve sector financing

- Leverage more government funding for the water sector to match policy commitments.
- Governments and utilities must ensure that users who can pay do pay to fund O&M and expansion of services and ensure that the needs of poor households are met.

Measures to improve sector monitoring and evaluation

- A comprehensive M&E system needs to be established. There are some on-going initiatives both by the government, the World Bank, and WSP-AF to develop a comprehensive M&E system for the sector.
- GLSS-5 is currently underway and the agencies should use the opportunity to agree on definitions so that its findings can provide useful indicators of WSS accessibility.

4. Sector Monitoring and Evaluation

Many WSS agencies have acknowledged weaknesses in the M&E framework. The Ghana Statistical Service (GSS) is mandated to release statistical information, but has limited resources to provide high quality data on a timely basis. Through the various surveys it carries out (Ghana Living Standards Surveys (GLSS), Core Welfare Indicators, Census, Demographic and Health Survey) it captures information on water and sanitation accessibility, which are fed into the JMP for tracking MDG progress. However the link with sector agencies has been weak and this explains the differing definitions and data on access/coverage. Lacking a common M&E framework, the sub-sector agencies - CWSA, GWCL, WRC, and the relevant ministries - produce quarterly and annual reports on their performance in relation to the targets they have set for themselves, and wide variations in reporting are common. The MWRWH, GSS and NDC/GPRS, together with other agencies, have started a process to reach common definitions, define institutional roles and align their monitoring activities using the GhanaInfo system. The GSS is currently undertaking GLSS-5, and collaboration with the sector agencies is crucial in arriving at a common interpretation of the data to be gathered.

In the area of evaluation, both the CWSA and GWCL sign Performance Contracts with the State Enterprises Commission by which their performance is assessed.

5. Sector Capacity

Although Ghana has adequate institutional capacity to undertake its WSS strategic and budgeting planning at a central level, additional support is needed at the district and local levels. In rural areas and small towns, water boards and WATSAN committees rely on themselves, CWSA or trained area mechanics and artisans to provide them with technical support. There is however a need for more professional and technical backup to be mainstreamed into the WSS sector. The use of private local firms to operate water systems is on trial in some small towns, but requires greater government support. In the local private sector, capacity exists to undertake WSS civil works contracting and supervision. A number of local firms have lived up to expectation, whilst foreign firms have partnered with local counterparts to undertake projects funded by donors, assuring reasonable post-delivery back-up. The increasing number of drilling companies has raised the drilling capacity and considerably lowered the cost of delivery; but there is a need for the supply side to improve for scaling up throughout the country. Further, attracting interest from the private sector in spare parts supply continues to be a challenge, as the market remains limited.
In urban areas, GWCL operates 82 urban water supply systems and currently covers about eight million of Ghana’s 21 million people. The utility faces considerable challenges, including over-aged facilities, a growing population, previously low tariffs that affected its ability to generate sufficient revenue for rehabilitation and expansion, high levels of Unaccounted for Water (UFW) (52 percent); management deficiencies, and an oversized work force. It is hoped that the recent management contract, signed with a private operator, will help to improve the management of human and financial resources.

C: Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognised in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range is from 0-100 percent.
### Key issues to be addressed to improve sustainability

- Stronger co-ordination mechanisms are needed between MWRWH & MLGRDE and establish more credible investment requirements for rural sanitation.
- More resources are needed for sanitation, while subsidies for household latrines should be clarified. Social marketing should be emphasised, while sanitation and hygiene targets should be linked with national budget allocations.
- Policies and programs that are appropriate for small town sanitation need to be developed.

### Overall Financial Institutional Sustainability Score for Rural Sanitation

- **Institutional**: 56%
- **Financial**: 50%
- **Overall**: 54%

### Sustainability Score for Urban Sanitation

<table>
<thead>
<tr>
<th>Institutional</th>
<th>70%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>17%</td>
</tr>
<tr>
<td>Overall</td>
<td>54%</td>
</tr>
</tbody>
</table>

### Key issues to be addressed to improve sustainability

- Strengthen capacity of municipal and district assemblies to implement sanitation and hygiene plans.
- Identify investment requirements for water-related sanitation.
- Develop innovative approaches for financing urban sanitation, particularly in low income and peri-urban communities.
- Enforce local laws and regulations relating to sanitation and hygiene.
Notes

1. Population and access statistics: 2000 National census report (adjusted by annual growth rate) for other years,
   CW SA Strategic Investment Plan (SIP) - 2005-15, for rural WSS, GWCL, for urban water, from 2004 and 2005
   sector annual reports; 1990 data for WSS coverage from WHO/UNICEF’s JMP; 2004 WSS Anticipated Capital

2. The target figures taken from sector agencies differ from those of the Joint Monitoring Programme (JMP) for
   Water Supply and Sanitation. According to the JMP Ghana had achieved 79 percent coverage by 2002, suggesting
   that it is an ‘on track’ country to achieve the water MDGs by 2015. Even at the national level differences still
   exist between the numbers quoted by various government bodies. The JMP figures are based on various surveys
   but the methodology and the definitions for interpreting have hardly been agreed with the sector agencies.
   This raises the key issue of harmonising definitions. The Water Directorate is bringing all the relevant agencies
   together in a process to arrive at common definitions and collaboration in collection and dissemination of
   relevant information. A further area where clarification is required is in the urban water sector where figures
   provided by the utility are in respect of coverage (ratio of supply over demand), whereas the MDGs refer to
   access. It is likely that the coverage numbers supplied by GWCL underestimate access as the average per-
   capita figure used in their definition is very high (120 l/day). These and several other issues were raised during
   the National Round Table to discuss the CSO. It was agreed these will be issues to be taken on board by the
   Working Group that will look at the definition of indicators.

3. Some of the numbers for rural WSS as provided in CW SA’s Strategic Investment programme (SIP) are questionable
   in a number of areas particularly for sanitation and this is conceded by the agency itself. The agency has
   commenced a review in mid-2006 and hopes to do this in a more consultative manner. GWCL should do
   likewise and should be brought in to do more reporting in alignment with the MDGs and in collaboration with
   other players.

4. The funding gap is likely to be more than this as donors inflows which primarily is responsible for over 90
   percent of the investments is unpredictable.

Acronyms

CWI Core Welfare Indicators
CW SA Community Water and Sanitation Agency
DA District Assemblies
DHS Demographic Health Survey
DWSts District Water and Sanitation Teams
EHU Environmental Health Unit
GLSS Ghana Living Standards Survey
GSS Ghana Statistical Service
GoG Government of Ghana
GSS Ghana Statistical Service
GPRS Growth and Poverty Reduction Strategy
GWCL Ghana Water Company Limited
HIPC Heavily Indebted Poor Countries
JMP Joint Monitoring Programme
MDGs Millennium Development Goals
M&E Monitoring and Evaluation
MFEP Ministry of Finance and Economic Planning
MLG RDE Ministry of Local Government Rural Development and Environment
MTEF Medium Term Expenditure Framework
MWRWH Ministry of Water Resources, Works and Housing
NCWSP National Community Water Supply and Sanitation Programme
NDPC National Development Planning Commission
NGOs Non-Governmental Organisations
NWP National Water Policy
PRS Poverty Reduction Strategy
PURC Public Utilities Regulatory Commission
SEC State Enterprises Commission
SIP Strategic Investment Programme
SWAp Sector-Wide Approach
UFW Unaccounted for Water
UNICEF United Nations Children’s Fund
WATSAN Water and Sanitation
WB World Bank
WBs Water Boards
WHO World Health Organisation
WRC Water Resources Commission
References

1. Ghana Water Company, Internal Memo on Capital Expenditure Requirements to meet the MDGs, prepared by Planning Department. 2004.
Kenya

A. MDG Outlook

1. Is Kenya on the right track to reach the MDGs for water and sanitation?

Kenya appears to be on the right track to achieve the water MDG, while sanitation is lagging. In both areas, greater attention needs to be paid to resource allocation and equity. In 2002, 62 percent of Kenya’s 32 million people had access to water supply, and 48 percent had access to sanitation. To achieve the MDGs, 15.8 million more people need to obtain access to water and 16.5 million to sanitation. This would require an increase in current capacity of about 1.2 times for water supply and 2.2 times for sanitation. Even if targets are met, an additional 8.5 million people will remain without access to safe water, and 12.2 million will lack sanitation. The government is ambitiously striving to exceed the sanitation MDG to achieve a 90 percent access rate by 2015. In achieving the water and sanitation goals, there are financial constraints and it is unclear whether flows are allocated and spent efficiently. Financing data is weak and investment planning new, which may affect projections of need.

2. Main issues to be addressed

Over the last few years, Kenya has embraced water sector reform and developed a good overall framework for providing sustainable WSS services to the poor. The biggest challenge over the next few years will be to address bottlenecks that hinder better implementation, so as to demonstrate results. Some of the core issues include:

- Restructuring the Ministry of Water and Irrigation, so that it functions as designed, to concentrate on policy formulation and oversight, as well as operationalise new institutions. This includes capacity
Measures to improve national strategies

- While there are positive signs that the GoK is serious about water sector reform, the NWSS, Water Resources Management Strategy (WRMS) and Sector Investment Plan remain in draft form, and need to be finalised, opened for public consultation, and adopted.
- The environmental sanitation and hygiene policy under preparation needs to be finalised, and coordination in the implementation of programmes with the Ministry of Health and Ministry of Education improved.
- A thorough review of the implementation status of all National Strategies in the WSS sector is required annually.

B: Sector Preparedness Overview

1. National Strategies

The GoK has embarked on the implementation of a comprehensive reform programme aimed at better management of water resources, improving access to water and sanitation services, enhancing accountability and decentralising provision of services. The legal framework guiding the implementation of these reforms is the Water Act 2002, which was enacted in March 2003. The key principles underlying the reforms are: separation of policy, regulation and service provision within the water and sewerage sector; separation of water resource management from provision of water and sewerage services to avoid conflict of interest in resource allocation and management; devolution of responsibilities for water resource management and water service provision to the local level to create a sense of ownership and responsibility; and enhancing the sustainability of service provision.

To guide implementation of the Water Act, a draft National Water Services Strategy (NWSS) spells out the overall framework for how to ensure water supply and sanitation throughout the country, and identifies objectives with regard to quantity, quality and the timeline of reaching the MDG water target. The strategy aims to meet the water related MDGs by 2015. Further, the building for establishing rules, regulations and procedures, as well as efficient working relationships through a transfer period, to establish empowerment, trust, respect, and professional behaviour on behalf of the Ministry and other sector actors.

- Operationalise the new sector institutions, by equipping them adequately with the resources (human, financial, logistics) required to function effectively and execute their duties efficiently.
- The need to move towards a Sector-Wide Approach, including an improved sector investment plan and a collaborative budget process, to ensure that funding for WSS is prioritised, and that sector investments are allocated towards activities to achieve goals.
- Strengthen the existing legal and institutional frameworks to clarify roles, encourage private sector participation, civil society, and community participation in sanitation and hygiene.
- Improved M&E systems are needed to track progress, particularly regarding access, financing, and cost-effectiveness.
Kenya

Measures to improve institutional arrangements

- The Ministry of Water and Irrigation needs support to complete its restructuring, and operationalise new institutional arrangements as set forth in the law. This includes leadership and measures to support engagement with the Ministry of Health and the Ministry of Education for sanitation and hygiene issues.
- With the new institutional frameworks, capacity is required in all areas, relating to staffing, work/business plan development, strategic planning, and funding.
- There is a need to implement effectively the transfer plan to adjust to the new institutional arrangements facing the Ministry, including a human resources development strategy, within the stipulated timeframe.

The Water Act (2002) provides for clear separation of regulatory functions, asset ownership and operation of water and sanitation facilities and services. It also provides a clear separation of water resources management and provision of water supply and sanitation services. The Ministry of Water and Irrigation (MWI) is responsible for all aspects of water supply in Kenya, with a role to develop policy, regulation formulation, overall monitoring and sector co-ordination, while service provision has been devolved down to regional Water Services Boards (WSBs). To enable this, each WSB has the legal mandate for water and sewerage provision within its area of jurisdiction through a licence issued by the WSRB on submission and approval of its strategic and business plans. Key reform operationalisation constraints in transfer of services need to be tackled. The Transfer Plan (MWI 2004) draws up the framework for how to transfer the management and operations of water services to the Water Services Boards, but there is a need to bring greater clarity on how to tackle bottlenecks at each level under reform to speed up the process, especially the operationalisation of Water Services and Regulatory Board, Water Services Boards, the Water Services Trust Fund and Water Service Providers.

While the water sector is undergoing considerable change, there is also a need for clarity at the service provider level, especially for CBOs and small scale service providers, particularly over the potential for public-private partnerships. A new environmental sanitation and hygiene policy has been developed and is expected to be passed by Parliament in the coming months.

3. Sector Financing

Estimated resource gaps have proven difficult to assess due to poor data on unit costs across different technology options and the range of service providers throughout the country. Several attempts have been made to outline WSS financing requirements;
including the Water Sector Investment Plan (MWI 2003), the World Bank Country Assessment (World Bank 2003), the MDG Needs Assessment 2004 (Ministry of Planning 2004). Data from the last five years shows that 62 percent of funding for WSS has originated from donors, while 38 percent comes from the Government of Kenya.

Importantly, none of the studies have sought to match resource requirements with current and projected availability of funds. The sector is working to develop an improved Sector Investment Plan that would be intertwined with the MTEF and budget. Within government, funding is very centralized, while a considerable proportion of ODA for WSS is off-budget. It is hoped that a programmatic-focused sector investment plan will increase donor confidence with budgetary procedures.

4. Sector Monitoring and Evaluation

The WSS M&E system is weak, and it is unclear whether and how the information will feed into the ERS (PRSP) or the overall planning and budgeting systems. The ERS includes outcome-related indicators for coverage by urban and rural areas, as well as some output indicators. However, targets are not adjusted to reflect the actual budget. It is also unclear whether the national targets and indicators are aligned with the MDG targets.

While attempts have been made to incorporate WSS reporting in Social Welfare Monitoring Surveys and Census data, analysis of the data to reflect the state of the sector is poor. At the moment, M&E is largely limited to externally funded projects, and individual government projects/work programmes. Work is currently ongoing to develop a sector information system under the leadership of the lead regulatory agencies (WSRB and WRMA). To better track progress - especially with regard to access, financing and cost-effectiveness - improved sector information and performance monitoring systems need to be developed and adapted to feed into the planning and budget system within the sector, but also to overall ERS (PRSP) and MDG reporting. This is particularly important given the decentralisation (de-concentration) implied by the on-going sector reforms.

5. Sector Capacity

Kenya’s WSS capacity needs tend more towards planning, management, and business development rather than construction capacity and spare parts. For example, the Ministry of Water and Irrigation needs to improve its budget process by aligning it with the national budget and the MTEF. Actualising the institutional arrangements as defined by policy will require considerable human resources capacity. To operationalise the sector framework, service providers - including from the private sector - will need to be identified, contracted, and managed.
At community level, management is often handicapped by a lack of management skills. Limited gender mainstreaming also hampers sustainable projects. In urban areas, managerial expertise to operate water systems using a commercially-minded model is important, particularly in peri-urban areas. In urban centres, existing systems will need considerable improvements and expansions - requiring substantial capital costs - to match future demand. In small towns, issues of operations and maintenance, and sustainable financing are paramount.

**C: Sustainability Scorecard**

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognised in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range from 0-100 percent.

<table>
<thead>
<tr>
<th>Overall Sector Sustainability Score</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional</strong></td>
<td>• Effective planning as well as monitoring and evaluation systems need to be developed.</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>• An accurate sector information system nationally and across Water Services Boards needs to be established.</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>• A Sector Investment Plan (SIP) and financing strategy needs to be prepared and implemented.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Rural/Small Town WS</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional</strong></td>
<td>• Increased funding and better targeting through the Water Services Trust Fund (WSTF).</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>• Better management of Community Water Supply Schemes through capacity building.</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>• Development of effective pricing policies, as well as clear strategies for rural water supply and small town water supply.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Urban Water Supply</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional</strong></td>
<td>• Development of autonomous and highly efficient Water Services Providers and promotion of PSP.</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>• Develop pro-poor pricing policies that are economically sound.</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>• Pro-poor policies to target informal settlement dwellers are needed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Urban Sanitation</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional</strong></td>
<td>• Adopt and implement the environmental sanitation and hygiene policy.</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>• Launch a vigorous public hygiene education campaign to popularise safe water use and safe disposal of human wastes.</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>• Increase funding to the sub-sector and, integrate sanitation in all rural water supply programmes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Rural Sanitation</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional</strong></td>
<td>• Develop a strategy for urban sanitation and a corresponding investment plan, to increase overall funding to the sub-sector.</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>• Harmonise and clarify the roles of different actors in the sub-sector.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Financial &amp; Institutional Sustainability Score for Rural/Small Town WS</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong> 55% 43% 52%</td>
<td>• Increased funding and better targeting through the Water Services Trust Fund (WSTF).</td>
</tr>
<tr>
<td><strong>Institutional</strong> 55% 50% 52%</td>
<td>• Better management of Community Water Supply Schemes through capacity building.</td>
</tr>
<tr>
<td><strong>Financial</strong> 43% 36% 43%</td>
<td>• Development of effective pricing policies, as well as clear strategies for rural water supply and small town water supply.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Financial &amp; Institutional Sustainability Score for Urban Water Supply</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong> 50% 36% 43%</td>
<td>• Development of autonomous and highly efficient Water Services Providers and promotion of PSP.</td>
</tr>
<tr>
<td><strong>Institutional</strong> 50% 50% 50%</td>
<td>• Develop pro-poor pricing policies that are economically sound.</td>
</tr>
<tr>
<td><strong>Financial</strong> 36% 36% 36%</td>
<td>• Pro-poor policies to target informal settlement dwellers are needed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Financial &amp; Institutional Sustainability Score for Urban Sanitation</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong> 23% 32% 28%</td>
<td>• Develop a strategy for urban sanitation and a corresponding investment plan, to increase overall funding to the sub-sector.</td>
</tr>
<tr>
<td><strong>Institutional</strong> 23% 23% 23%</td>
<td>• Harmonise and clarify the roles of different actors in the sub-sector.</td>
</tr>
</tbody>
</table>
Notes

2. The Planned Public Investment figures are based on the Interim Sector investment Plan for the Water and Sanitation Sector in Kenya, September 2006 released during the first Kenya Water Sector Conference and SWAp Launch. The SIP projects that the 90 percent of the sanitation investments are urban.

Acronyms

CBOs  Community Based Organisations
ERS  Economic Recovery Strategy
FY  Financial Year
GoK  Government of Kenya
MDGs  Millennium Development Goals
M&E  Monitoring and Evaluation
MTEF  Medium Term Expenditure Framework
MWI  Ministry of Water and Irrigation
NWSS  National Water Services Strategy
ODA  Overseas Development Assistance
PRSP  Poverty Reduction Strategy Paper
PSP  Private Sector Participation
SIP  Sector Investment Plan
SWAp  Sector-Wide Approach
TA  Technical Assistance
WRMA  Water Resources Management Authority
WRMS  Water Resources Management Strategy
WSBs  Water Services Boards
WSPs  Water Service Providers
WSRB  Water Services and Regulatory Board
WSS  Water Supply and Sanitation
WSTF  water Services Trust Fund

References

A. MDG Outlook

1. Is Madagascar on the right track to reach the MDGs for water and sanitation?

In 2005, a reported 31 percent of Madagascar's 17.9 million population had access to safe water supply while 56 percent had access to sanitation. To reach the MDGs by 2015, an additional 8.4 million people would require access to safe water supply and 3.3 million to sanitation. This implies a capacity increase of five to six times for water supply, assuming that the coverage figures for sanitation are correct since the sector is adding more people each year than is required to reach the MDGs. The high coverage figure reported for sanitation in 2004 is, however, disputed and needs to be reviewed. Notably, if the MDGs are reached, 9.3 million people would still have no access to safe water supply while ten million would have no access to improved sanitation. Financially, an estimated US$54 million is needed per year to achieve the MDG for water supply, and US$65 million for sanitation. The Government of Madagascar (GoM) has sought to integrate private sector and non-governmental sources of finance to help the sector, which should be seen positively. If all pledges materialise, the sector has enough funds to finance the investment needs for subsequent years. However, given past funding trends, it’s unlikely that all pledges will come through even as there are also concerns regarding the capacity of the sector to absorb additional finance.

2. Main issues to be addressed

Madagascar's water and sanitation sector has a strategy, a legal land regulatory framework, and a national programme that is aligned with MDG targets. It is now in the process of adapting to considerable institutional change, and faces a series of challenges, including the following:

---

**Snapshots**

**Capacity increase needed for water supply × 5.6**

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2005</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage</td>
<td>0%</td>
<td>20%</td>
<td>50%</td>
</tr>
<tr>
<td>Trend</td>
<td>10%</td>
<td>30%</td>
<td>60%</td>
</tr>
<tr>
<td>Target</td>
<td>30%</td>
<td>60%</td>
<td>90%</td>
</tr>
</tbody>
</table>

**Capacity increase needed for sanitation × 1**

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2005</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage</td>
<td>20%</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Trend</td>
<td>30%</td>
<td>50%</td>
<td>70%</td>
</tr>
<tr>
<td>Target</td>
<td>50%</td>
<td>70%</td>
<td>90%</td>
</tr>
</tbody>
</table>

**Sector Investment Requirements**

<table>
<thead>
<tr>
<th></th>
<th>Water</th>
<th>Sanitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned Public Investment</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Public Investment Required</td>
<td>80%</td>
<td>80%</td>
</tr>
</tbody>
</table>

**Key milestones towards MDG Roadmap**

<table>
<thead>
<tr>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>S</td>
</tr>
<tr>
<td>Institution leader identified</td>
<td>☐</td>
</tr>
<tr>
<td>Stakeholder consultation</td>
<td>☐</td>
</tr>
<tr>
<td>MDG Roadmap/plan of action</td>
<td>☐</td>
</tr>
<tr>
<td>Resources mobilised</td>
<td>☐</td>
</tr>
<tr>
<td>Implementation underway towards MDGs</td>
<td>☐</td>
</tr>
</tbody>
</table>

*Note: The graphs and chart are based on sector coverage and investment requirements data, and WSP analysis.*
Coverage targets and investment requirements

<table>
<thead>
<tr>
<th></th>
<th>1990 Access (%)</th>
<th>2005 Access (%)</th>
<th>2015 (Target) Access (%)</th>
<th>Add Pop to be covered (m/year)</th>
<th>Total Investment Required (m$/year)</th>
<th>Public Invest Required (m$/year)</th>
<th>Planned Public Invest. (m$/year)</th>
<th>Surplus (Funding Gap) (m$/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>9</td>
<td>16</td>
<td>55</td>
<td>0.7</td>
<td>24</td>
<td>7</td>
<td>31</td>
<td>26</td>
</tr>
<tr>
<td>Urban</td>
<td>73</td>
<td>67</td>
<td>87</td>
<td>0.2</td>
<td>14</td>
<td>9</td>
<td>23</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>31</td>
<td>55</td>
<td>0.8</td>
<td>38</td>
<td>16</td>
<td>54</td>
<td>33</td>
</tr>
<tr>
<td>Sanitation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>8</td>
<td>49</td>
<td>54</td>
<td>0.3</td>
<td>18</td>
<td>41</td>
<td>59</td>
<td>6</td>
</tr>
<tr>
<td>Urban</td>
<td>25</td>
<td>75</td>
<td>63</td>
<td>0.0</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>56</td>
<td>54</td>
<td>0.3</td>
<td>20</td>
<td>44</td>
<td>65</td>
<td>6</td>
</tr>
</tbody>
</table>


- Limited commercial and financial capacity at JIRAMA, the national water utility, given its state of transition into an autonomous public company.
- Weak linkages between policy frameworks, budgets, and M&E frameworks, which limits the potential to realise the measures proposed in policy frameworks or track successes.
- Weak linkages between the government and other sector actors. In both water supply and sanitation, the NGO and domestic private sector has skills to support the reform efforts, and is being courted as a necessary part of the solution. However, efforts are required to increase transparency in procurement and contracting.
- Monitoring and Evaluation frameworks are established, but need considerable strengthening to be effective. Co-ordination and harmonisation of input data is a critical first step towards more effective datasets for analysis.

B: Sector Preparedness Overview

1. National Strategies

The core national policy documents guiding Madagascar’s WSS sector are the Sectoral Strategy and Action Plan for Water and Sanitation (1991), The Statement of a Sectoral Policy for Water and Sanitation (1997), and the Water Charter (1998), which was followed by implementation decrees published in 2003. In 2005, the National Programme for Safe Water Supply and Sanitation (PNAEPA) was adopted, and was included in the State’s General Policy (PGE). PNAEPA includes the budget programme, by presenting the objectives to be reached, the anticipated results, the actions to be undertaken, the resources to be mobilised, especially the human and financial resources and the monitoring and evaluation system. The law was based on recommendations contained in the “Water for All” and “CDMT for Water and Sanitation Sector” documents produced in 2004.

Overall, the water and sanitation policy presents objectives and a strategy for implementation to achieve the MDGs. The objectives are to achieve a rapid increase in access to safe water supply and sanitation services, through new infrastructures and ensuring the functioning of existing structures; and to contribute to good health and economic productivity for the Malagasy population. According to the DSRP (PRSP), the sector’s strategy calls for a clear definition of objectives, as well as legal land regulatory frameworks for pro-poor infrastructure implementation; rational subsidies for social infrastructure as well as a strategy for cost recovery; reinforcement of national and local capacities, particularly amongst poor populations to organise and manage WSS; and an efficient M&E system to measure and
2. Institutional Arrangements

The Ministry of Energy and Mining’s (MEM) Water and Sanitation Division is responsible for the development of policy and programmes for safe WSS, while the National Authority for Water and Sanitation (ANDEA) is responsible for Integrated Water Resources Management (GIRE). The Water Code of 1998 divided the roles of State, communes, and JIRAMA, a State-owned, commercialised utility, as well as for domestic waste water sanitation. JIRAMA is responsible for 58 urban centres, and autonomously owns and manages water supply assets. In other urban centres whose infrastructure is not managed by JIRAMA, the government finances the capital investments, but delegates management functions to communes. Where communes lack the capacity to manage these contracts, the State provides transitional support. The Water Code also allows for private sector participation (e.g. management contract, leasing, or distributorship contract). However, there is not enough capacity in the national private sector to carry out fully the functions of a water systems manager through a delegated management contract. The government is aware of this constraint, and has initiated measures to develop that capacity. In rural areas, villages with fewer than 1,000 residents tend towards community management of WSS, through water point committees. Maintenance is done by artisans who are trained through projects, while spare parts retailers are identified and a cost recovery system established. In settlements with more than 1,000 residents, consideration is given for lease contracts.

In comparison, the sanitation sector is lagging behind, and presents many institutional, organisational, and operational setbacks. MEM, through its Water and Sanitation Division is in charge of conceiving, implementing and managing the sanitation policy. This policy is materialised by health education actions and assistance from the WASH Committee, to bring families to adopt a positive behavioural change vis-à-vis hygiene, and to build latrines along hygiene norms. The WASH Committee is meant as a multi-stakeholder platform for all WSS actors (including financiers, administrators, national and international NGOs, and the private sector). However, the Ministry of Health and the Ministry of National Land Use Planning also have stakes in the sanitation sector thus collaboration amongst the sector actors is limited. Functionally, responsibility is decentralised to a community level, although local government structures lack adequate human and financial resources to carry out that responsibility.

3. Sector Financing

An estimated US$54 million per year is required to achieve the MDGs for water supply, divided between urban (US$23 million) and rural (US$31 million). Projected estimates for sanitation call for US$65 million per year, with US$59 million allocated to rural, and US$6 million to urban areas. In sanitation, there is a strong history of household contributions, but public investment will be critical for financing information campaigns, education and communication, and subsidies.
Madagascar’s M&E system presents an interesting example of the positives and negatives of technology, and the impact this can have on reporting and tracking progress. On the one hand, Madagascar uses a computerised database to maintain an inventory of latrines and safe water supply systems, and relies on Instat surveys, which should serve to improve M&E. The design of the system appears to be less functional, in that it does not harmonise different rates of access figures, depending on the concepts and definitions used by different surveys/tools to track access. Data obtained from surveys does not seem to satisfy some actors in the WSS sector, which limits its use.

5. Sector Capacity

Overall, while the frameworks for water supply and sanitation are in place, capacity building is needed in all areas to support the changing and often transitory environment. For example, while NGOs, research departments, and the private sector operators and engineers have qualifying experience to support WSS, annual contracts with the public sector are highly bureaucratic and not transparent, which limits their interest to participate. Still, a pilot project is underway in 30 communities to develop capacity for construction and enable local government to set up and manage a leasing contract with private operators. A public awareness and explanation campaign on leasing contracts was conducted in all of Madagascar’s provinces, all urban communities, and mayors seemed interested in adopting the model.

In rural areas, water point committees are created to take care of the water point management, maintenance, and cost recovery. In the case of a breakdown, repairs are made by artisans in the village, or by repairmen who travel from village to village. Networks of spare parts dealers are also developed. Specifically for sanitation, the training of artisans for construction is underway, but limited given the great need. One NGO that produces china flagstones has expressed interest in building a factory in Madagascar, using local materials, but the project is on hold due to lack of financing. In other areas, NGOs are assuming more responsibility for latrine construction and hygiene education.

<table>
<thead>
<tr>
<th>Measures to improve sector monitoring and evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Rational operation of M&amp;E databases through a consensus on the concepts and definitions to be used, especially with the Instat.</td>
</tr>
<tr>
<td>• Reinforcement of DEA’s monitoring and evaluation co-ordination capacity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measures to improve sector capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Technical and financial support needed for the management system of water points in rural areas.</td>
</tr>
<tr>
<td>• Technical support needed for the private operators who manage water supply in small towns.</td>
</tr>
</tbody>
</table>
### C: Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognized in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range from 0-100 percent.

#### Overall Sector Sustainability Score

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8%</td>
<td>44%</td>
<td>26%</td>
</tr>
</tbody>
</table>

#### Sustainability Score for Rural/Small Town WS

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32%</td>
<td>44%</td>
<td>38%</td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability for Rural/Small Town WS

- Programmatic Approach not thoroughly mastered.
- Concepts and definitions not harmonised in data collecting.
- Gaps at the level of information flow.
- Understanding of the situation not properly shared.
- No priority is given to sanitation so far.

#### Sustainability Score for Urban Water Supply

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50%</td>
<td>32%</td>
<td>41%</td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability for Urban Water Supply

- Insufficiency of support to operators interested in leasing contracts.
- Weak development of infrastructures in centers without JIRAMA.
- Develop Mayors’ capacities to manage leasing contracts.
- Insufficient exploitation of DEA database.

#### Sustainability Score for Rural Sanitation

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23%</td>
<td>0%</td>
<td>12%</td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability for Rural Sanitation

- Rural sanitation needs a clear institutional lead and a strategy that will apply at a national level. This should correspond with a clear financing programme.
- The census should track access levels for rural sanitation.

#### Sustainability Score for Urban Sanitation

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23%</td>
<td>33%</td>
<td>28%</td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability for Urban Sanitation

- Urban sanitation lacks financing, and while there are activities planned, implementation is happening slowly.
- There are divergent viewpoints between different sector actors on appropriate technologies and options for drainage ditches.
Notes

1. The CSO spreadsheet tool was used to calculate investment requirements.
2. Population figures are from INSTAT and DEA/MEM (based on 1996 census).
3. Coverage figures, levels of services and unit costs are from INSTAT and DEA/MEM.
4. Infrastructure estimates are from Jirama-Jica mission.
5. Borehole Investment Programme needs are from DEA/MEM.

Acronyms

ANDEA National Authority for Water and Sanitation
DEA Directorate of Water and Sanitation
DSPR Poverty Reduction Strategy Paper
GIRE Integrated Water Resources Management
GoM Government of Madagascar
JICA Japan International Co-operation Agency
JI RAMA National Water Utility
MDGs Millennium Development Goals
M&E Monitoring and Evaluation
MEM Ministry of Energy and Mining
NGOs Non-Governmental Organisations
PGE State’s General Policy
PNAEPA National Programme for Safe Water Supply and Sanitation
PRSP Poverty Reduction Strategy Paper
WASH Water, Sanitation and Hygiene
WSS Water Supply and Sanitation

References

Malawi

A. MDG Outlook

1. Is Malawi on the right track to reach the MDGs for water and sanitation?

Malawi is reasonably on track in terms of water supply, but far behind in sanitation. Malawi has a population of 12 million that is growing at 3 percent per year. Coverage statistics for water supply are uncertain as they have recently changed from supply side data to direct observation. Official rural water coverage may fail to account properly for constructed facilities that are not actually working. Reported high urban water coverage masks the reality in unplanned peri-urban settlements, where public tap stands serve a large number of people with an unreliable supply. However, given that about three quarters of water-work in Malawi is implemented off-budget, it seems reasonable to conclude that if current rates of funding are maintained, policies are implemented with strong leadership, and 300,000 people attain safe water per year for the next ten years, Malawi will be on track to achieve 75 percent water coverage.

For sanitation, Malawi does not have a sanitation policy or planning documents (although a national sanitation policy is in preparation). Most agencies include sanitation funding in their water data, although it is usually unspecified, so the total investment in sanitation is unknown, but very small. As for coverage, most sector agencies including the Ministry of Irrigation and Water Development feel that official figures are gross over-estimates. In rural areas, coverage is informally estimated at about 15-30 percent, while urban coverage figures fail to reflect either the rapidly-growing peri-urban populations or the lack of wastewater treatment for those people served by centralised sewer networks. It is clear that Malawi is not on track to achieve the MDG target of 87 percent sanitation coverage, which would involve about 600,000 people attaining adequate sanitation each year.
2. Main issues to be addressed

Malawi’s water sector is headed in the right direction to achieve the MDGs by 2015, while the sanitation sector requires substantial reform. Some of the core issues constraining progress include:

- **Historic weak sectoral leadership and co-ordination** (including poor advocacy of water issues at a national level; lack of a national sanitation policy; and poor co-ordination between sector agencies, especially NGOs). This also includes poor quality information for decision makers and consumer/citizens.
- **Poor sustainability of existing water and sanitation services**, coupled with financial poverty of the people, inadequate human capacity (including impact of HIV/AIDS), and climatic, environmental and land tenure problems.

### B: Sector Preparedness Overview

#### 1. National Strategies

The Government of Malawi (GoM) has written a national water policy, but has not actively promulgated it to other sector agencies. It has not developed a specific MDG Action Plan or Roadmap. While GoM has expressed a commitment to scaling up reform programmes, there is little tangible evidence that this has happened or whether funding has been allocated for these purposes. For example, the GoM’s 2006 WSS allocation is lower than in previous years, even as it is required to increase its portion of expenditure to meet the established targets of 75 percent for water and 87 percent for sanitation. For sanitation, Malawi does not yet have a sanitation policy, although one is under preparation.

At the moment, there is no Sector-Wide Approach, nor any element of one, with monitorable targets and goals. The GoM has various investment plans, but these are not shared with external agencies, including donors, which limit potential for alignment. Further, WSS are given poor priority in the PRSP and have not been incorporated into the PRSP as implementable plans. The Ministry of Irrigation and Water Development (MoIWD) is trying to improve this situation, but it is a small understaffed ministry and faces an uphill struggle.

#### Measures to improve national strategies

- The national sanitation policy should be finalised as soon as possible.
- WSS should gain higher prominence in the MGDs (successor to the PRSP), which is currently being written. MoIWD is currently championing this effort.
2. Institutional Arrangements

The Ministry of Irrigation and Water Development (MoIWD) is the government agency responsible for water and, since 2004, sanitation. It is a young ministry, formed in 1995 from a department within another ministry. Its previous ministerial leadership was weak and changed frequently; it suffers from staff shortages and a low capacity. Despite these operational handicaps, it retains an implementation role especially for rural work. While there is a decentralisation policy, the budget is still held at a central government level. MoIWD’s posts at a district level are categorised at low levels in the government hierarchy, and many of the posts are vacant. Five public sector Water Boards supply water to the cities and towns, while sanitation and sewerage remain the duty of municipal authorities. The World Bank-funded Malawi Social Action Fund had previously been operating virtually as a parallel government agency in rural areas, financing water among other development activities: now it is trying to integrate its work with District Assemblies.

The Ministry of Health and Population has an Environmental Health Unit working on sanitation and hygiene. The Ministry of Local Government is responsible for decentralisation and local government reform, under which District Assemblies are nominally responsible for implementing water and sanitation programmes. It is expected that the forthcoming national sanitation policy will delineate clear institutional mandates and co-ordination mechanisms for sanitation and hygiene promotion.

It is estimated that there are several hundred Malawian civil society organisations working in water, most of which are faith-based, small and work in isolation. A few are large and do good-quality work in WSS, notably the Church of Central Africa Presbyterian and the specialist Fresh Water Project. Several international NGOs work in water and many of their programmes are descended from relief projects started a decade ago when there were over a million Mozambican refugees in Malawi. In contrast, the private sector is hardly active in the water sector, other than a proliferation of borehole-drilling companies. International private companies are absent while small local companies make a few hand pumps and spare parts and provide design and construction services to government and NGO projects.

3. Sector Financing

It is difficult to quantify the planned investments. The most reliable figures, obtained recently by the MoIWD-led Water and Sanitation Task Force on Inputs to the Malawi Growth and Development Strategy 2006-2011, indicate government investment to the tune of US$6-8 million per year, of which over half will come from external donors. (Off-budget investment, which is overwhelmingly by NGOs, might amount to three times this, but is not tabulated.) Almost all of this is thought to be for water, not sanitation.

There are few external support agencies active in development in Malawi, and their investment in water has apparently dropped from US$14 million in 2003/04 to US$2 million in 2005/06 (the main stated reason for this decline is because water was not prominent in the PRSP.) The World Bank financed a large water project that ended in 2003, and is currently planning another project to start in 2007. The European Union has a large programme in Malawi, though not yet in water. Regarding cost

---

**Measures to improve institutional arrangements**

- Donors need to support MoIWD’s decentralisation process.
- MoIWD need to encourage NGOs and CBOs to join the sector mainstream.

**Measures to improve sector financing**

- The GoM is stabilising its macro-economic indicators, making finances transparent, and trying to defeat corruption. This will help to persuade the bilateral donors, most of which have left the country, to return and put more money into Malawi’s development.
- If the water sector can become more prominent in the MGDS (PRSP), it will share in these benefits.
- More funding must be allocated to sanitation.
recovery, the official policy is to recover costs for O&M, but not replacement. Most indications are that the rural users find it very difficult even to achieve this level of cost recovery, since they are among the poorest people in the world, whereas in the urban areas it may be achievable, but many government departments do not pay their water bills.

4. Sector Monitoring and Evaluation

Progress in terms of sector status and performance is hardly measured in Malawi. GoM as a whole does not issue MDG targets, nor monitor progress against them. MoIWD’s monitoring system is inactive. As a result, the only water point mapping (and hence monitoring of coverage) available is through a project, led by the Water Supply and Sanitation Collaborative Council, which does not relate coverage to targets. This project is currently being handed over to MoIWD to merge into the national monitoring system. There is no sanitation monitoring except through the DHS surveys. Because WSS was not identified in the first PRSP, there are few linkages between WSS and core poverty indicators, while WSS is also limited in poverty diagnostic tools. There is limited engagement by sector stakeholders in M&E activities.

5. Sector Capacity

Malawi’s potential capacity to meet the MDGs for water supply is premised on substantial off-budget programmes by international and domestic NGOs. In comparison, the current institutional arrangements do not suggest capacity to deliver the sector strategy and national programme. The GoM is unable to manage a National RWSS programme at scale, for example, the district levels are very weak while regional levels are understaffed. At a national level, MoIWD has capable managers but many unfilled posts. At a village level, technical support to plan and maintain WSS facilities is limited, while at a town level, regional water boards have some capacity to lend assistance. As a result, rural communities, while nominally empowered to manage WSS, do not typically manage their existing facilities effectively. At urban level, the city water boards are working under difficult circumstances to operate and expand existing WSS facilities.

From a functional perspective, there are many drilling contractors available in Malawi to provide rural water points, although there is limited managerial/ supervisory support. In cities, spare parts are available at a price while in rural areas, their availability is more limited. MoIWD made an excellent policy decision some years ago to standardise two hand pumps for rural use, but even for these spares are difficult to find.
### C: Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognised in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range from 0-100 percent.

<table>
<thead>
<tr>
<th>Overall Sector Sustainability Score</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional</strong></td>
<td>• Continued improvement of the national economy.</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>• More emphasis to water and sanitation in the Malawi Growth and Development Strategy</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td></td>
</tr>
<tr>
<td><strong>27%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>12%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>20%</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Rural/Small Town WS</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional</strong></td>
<td>• Stronger leadership by the government.</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>• Move towards a sector-wide approach with consistent policies, clear aims and basket-funding by donors.</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td></td>
</tr>
<tr>
<td><strong>40%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>28%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>34%</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Urban Water Supply</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional</strong></td>
<td>• Payment of bills by Government departments.</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>• Ability of utilities to plan for the long term without the uncertainty of institutional reform hanging over them.</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td></td>
</tr>
<tr>
<td><strong>31%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>36%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>34%</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Rural Sanitation</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional</strong></td>
<td>• Adoption and implementation of the forthcoming national Sanitation Strategy.</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>• Move from subsidy-led to marketing-led philosophy for sanitation.</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td></td>
</tr>
<tr>
<td><strong>6%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>10%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>8%</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Urban Sanitation</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional</strong></td>
<td>• Improved operation of existing wastewater treatment plants.</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>• More imaginative solutions for on-site sanitation for low-income areas.</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td></td>
</tr>
<tr>
<td><strong>18%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>8%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>13%</strong></td>
<td></td>
</tr>
</tbody>
</table>
Notes

1. All coverage figures are from the WHO/UNICEF Joint Monitoring Programme (JMP).
2. The 1990 figures are highly uncertain, especially the sanitation figures which appear to have been based on unreliable definitions.
3. As for the 2002 figures, although the JMP had changed from using supply-side data to household surveys, which resulted in a decrease in the figures, even these are probably over-estimates. There is a particular problem with sanitation, in that the usefulness of the figures depends entirely upon the definition of adequate sanitation. Almost all the facilities in Malawi are pit latrines, the majority of which are merely holes in the ground with some sort of squatting arrangement and are inadequate to prevent faecal-oral disease transmission. The JMP recognises this and has halved its previous estimates to arrive at the figures. Hence the MDG targets are almost meaningless, since they derive mathematically from the 1990 figures. The Government of Malawi recognises this problem and is working to clarify its official MDG targets.
4. Since the coverage figures are meaningless, these figures for population to be covered are commonsense estimates by WSP’s Country Sector Adviser using average costs per person of US$40 for water and US$20 for sanitation.

Acronymns

CBOs Community Based Organisations
DA District Assemblies
DHS Demographic and Health Survey
EHU Environmental Health Unit
GoM Government of Malawi
MDGs Millennium Development Goals
M&E Monitoring and Evaluation
MGDS Malawi Growth and Development Strategy
MoIWD Ministry of Irrigation and Water Development
MASAF Malawi Social Action Fund
NGOs Non-Governmental Organisations
O&M Operations and Maintenance
PRSP Poverty Reduction Strategy Paper
RWSS Rural Water Supply and Sanitation
SWAp Sector-Wide Approach
WB Water Boards
WSS Water Supply and Sanitation
WSSCC Water Supply and Sanitation Collaborative Council

References

5. WSP-AF estimates.
A. MDG Outlook

1. Is Mauritania on the right track to reach the MDGs for water and sanitation?

In 2004, 40 percent of the 2.9 million inhabitants of the Islamic Republic of Mauritania had access to safe water supply while 36 percent had access to sanitation. To reach the MDGs in 2015, an additional 1.4 million people require access to safe water supply and 1.3 million to sanitation. This would require 4.1 times more people per year to receive water supply, largely in urban areas and especially in the capital, Nouakchott, where demographic growth is high and services poor. For sanitation, it would require a capacity increase of 2.3 times. The accuracy of the coverage figures in the sector is however, disputed and needs to be reviewed. Notably, even if the MDGs are reached, an additional 1.2 million people would still not have access to safe water, and 1.5 million would lack access to adequate sanitation.

2. Main issues to be addressed

Mauritania does not have a sector plan to reach the MDGs, even though many elements of such a plan already exist. Water supply in rural areas and small towns is organised through a system of management delegated to small operators and functions rather well, while in urban areas, water projection constraints in Nouakchott are expected to be resolved by 2010. This should allow the public water utility, SNDE to increase its coverage. Still, some of the core issues that need to be addressed include:

- Integration of WSS into the next CDMT (PRSP) in 2006, to ensure reform in the sector as well as prioritise budget allocations, particularly for sanitation.
- Addressing weaknesses in the sanitation sub-sector, by providing it with a solid institutional basis and a national strategy with implementation guidelines for both rural, small towns, and urban areas.
Mauritania

Measures to improve national strategies

- Prepare and validate a national sanitation strategy and associated MDG Roadmap that is applicable in both urban and rural areas. Further, water supply and sanitation should be elaborated and prioritised as part of the next CDMT programme.
- Finalise and validate the main implementation decrees as provided in the Water Charter.

B: Sector Preparedness Overview

1. National Strategies

Mauritania’s safe water supply and sanitation strategy was adopted in 1998, and was translated into a wave of reforms - no less than four new institutions were created in 2001 alone. Still, the sector remains fragmented, and there is no programmatic approach or organisation. In rural areas and small towns, the strategy set the stage for increased inclusion of local private firms to support operations and management: over 350 contracts have been signed for networked service provision, with private operators in over two thirds of the cases. In urban areas, responsibility for water and energy, formerly the responsibility of Sonélec, was separated, such that SNDE is now a separate public water company. Still, SNDE’s development has been slowed due to its lack of administrative and financial autonomy.

There is no clear strategy for urban water supply, particularly in the peri-urban areas of Nouakchott. Likewise, there is no strategy for urban or rural sanitation. A draft strategy was intended for development in 2005, but was not completed. A study on the elaboration of the safe water supply and sanitation part of the next CDMT (PRSP) is now being prepared, but the results will not be available before the second half of 2006. In the absence of a comprehensive strategy, an investment plan has been elaborated in rural areas (PNAR), which promotes a demand-based approach, and proposes co-financing of autonomous sanitation structures for families and public institutions (schools, health centres, etc.).

2. Institutional Arrangements

As a result of the reform process started in the late 1990s, the Government shifted towards a role of policy making, regulation, and sector co-ordination. In 2005, the sector was reorganised such that the majority of authority for water supply and sanitation rests with the Ministry of Water. The National Agency for Drinking Water and Sanitation (ANEPA)’s role is to identify and set up appropriate schemes.
Mauritania

Measures to improve sector financing

- Increase levels of finance available to local actors and particularly to managers of small water supply networks operating under concession contracts.
- Increase public funding for sanitation programmes in urban and rural areas, both for IEC campaigns and for household infrastructure subsidies.

Measures to improve institutional arrangements

- Renew and reinforce the terms of the convention linking ANEPA to the State and clarify its institutional position.
- Stronger co-ordination amongst different sectors should be organised via a widened dialogue framework, as part of national planning and decision-making.

3. Sector Financing

An estimated US$65.3 million per year is required for WSS to achieve the MDGs by 2015. Of this, US$56.7 million is needed for water supply, and US$8.6 million for sanitation. For water supply, the bulk of required investments (US$42.1 million) are targeted for urban water supply, and specifically for the financing of safe water supply in Nouakchott, through the Aftout Es-Saheli Project (AEP). However, urban water supply requires considerable additional investments beyond the AEP project in order to extend 100,000 connections per year in urban and peri-urban areas. In rural areas, anticipated actual investments (US$11.4 million) is in the same order of magnitude as projected public contributions (US$13.1 million), with the rest to be financed through user contributions. But actual spending between 2001-2003 (through the budget and ODA) was US$5.1 million by comparison. This suggests that the pace of investments needs to be more than double, raising other issues of absorptive capacity and implementation ability.

In the case of sanitation, financing estimates are premised on the historic strong financial contributions by households. Hence, while the annual investment needs total US$8.6 million, only US$3.9 million is projected to derive from public funds, which aim to fund Information, Education and Communication (IEC) campaigns, with partial subsidies for household infrastructures. Still, secured funding for sanitation in Mauritania is only US$1 million per year, 25 percent of the projected estimate. As a result, additional public (national...
budget and ODA) funds are required, specifically to support the Rural Sanitation National Programme, implementation of sanitation frameworks for Nouakchott, and overall urban sanitation.

4. Sector Monitoring and Evaluation

Despite all of the reform efforts implemented in recent years, monitoring and evaluation for the sector is very limited. The recent restructuring of the sector, with new actors and implementers has led to a dispersion of data throughout different programmes and agencies. Although the National Centre for Water Resources (CNRE) has developed a database of water points, the quality of data collected is poor, and its usefulness as a basis for analysis or input to decision making is limited. Other databases, including the water supply (AEP) network database, managed by the National Agency for Drinking Water and Sanitation (ANEP), has recently been ‘modernised’ through database programmes and software, but the systems to collect and enter data at a central level remain out of date. Some indicators have been defined during the programming work realised by the Sectoral Technical Committee in 2005, but there is no real structure capable of centralising data collection, treatment and publication. Notably, within the framework of preparing the CSLP-II, a Sectoral Joint Technical Committee (CTS) of the Ministry of Water and donors prepared a high-quality diagnostic and proposal document, and identified monitoring indicators. However, a more formalised dialogue process to enable co-ordination does not currently exist.

5. Sector Capacity

Despite the existence of many investment plans and directing diagrams, programming capacity in the WSS sector remains weak. For example, the sanitation sector lacks a comprehensive strategy and visibility within the sector. Linkages between public expenditure and broader national development policies - including budgeting - remain undeveloped. From the perspective of decentralisation, although communities are anticipated to assume greater responsibility for water sector management through the Water Charter, they currently have limited exposure to WSS management and operations, which limits their potential to operate as designed without significant support. In urban areas, SNDE’s performance is weak, and despite the institutional reform, it is not autonomous from the GoM. Coverage and quality of service has decreased since 2000; on the other hand, SNDE’s overall capacity is a focus area during the start-up phase of the AEP project.

Positively, private sector capacity has developed considerably over the last decade, even if there is still room for improvements. In areas with small networks, the local private sector is dynamic, and some operators (providing O&M through concessions) are progressively becoming effective small companies providing high quality services. Drilling companies are currently limited both in terms of quality of services and potential for growth. In the sanitation field, the potential for private companies is in theory large, demand outside of urban areas is dispersed, which limits the potential for companies to operate.

In the NGO sector, the number of NGOs working on WSS issues is increasing, although performance is typically limited, particularly in the fields of civil engineering, sanitation, and hygiene behaviour.

Measures to improve sector monitoring and evaluation

- Harmonise the different existing tools for M&E into a comprehensive framework, and maintain the data, for example by updating existing water points databases (SIPPE and SYGAEP) to reflect recently-implemented surveys.
- Organise a joint public expenditure review between the State and development partners.

Measures to improve sector capacity

- Reinforce administrative and financial autonomy and improve SNDE’s overall capacity and performance.
- Provide technical support to private operators who manage water in small towns, and improve public market bidding and contracting procedures to help facilitate increased private participation by local firms.
## C: Sustainability Scorecard

This section provides a 'quantitative' and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of 'success factors' with regard to institutional and financial aspects of sustainability as recognised in the literature and among practitioners. Performance on the 'success factors' is captured by specific questions. The scores range from 0-100 percent.

### Overall Sector Sustainability Score

<table>
<thead>
<tr>
<th>Institutional</th>
<th>4%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>34%</td>
</tr>
<tr>
<td>Overall</td>
<td>19%</td>
</tr>
</tbody>
</table>

### Sustainability Score for Rural/Small Town WS

<table>
<thead>
<tr>
<th>Institutional</th>
<th>45%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>27%</td>
</tr>
<tr>
<td>Overall</td>
<td>36%</td>
</tr>
</tbody>
</table>

### Sustainability Score for Urban Water Supply

<table>
<thead>
<tr>
<th>Institutional</th>
<th>31%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>37%</td>
</tr>
<tr>
<td>Overall</td>
<td>34%</td>
</tr>
</tbody>
</table>

### Sustainability Score for Rural Sanitation

<table>
<thead>
<tr>
<th>Institutional</th>
<th>16%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>26%</td>
</tr>
<tr>
<td>Overall</td>
<td>21%</td>
</tr>
</tbody>
</table>

### Sustainability Score for Urban Sanitation

<table>
<thead>
<tr>
<th>Institutional</th>
<th>12%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>0%</td>
</tr>
<tr>
<td>Overall</td>
<td>6%</td>
</tr>
</tbody>
</table>

### Key issues to be addressed to improve sustainability

- Programmatic approach not implemented yet.
- No systematic promotion policy.
- No specific financing mechanism.
- The local private sector is not supported.
- Bottlenecks (e.g., installation of draining mud depots).

### Key issues to be addressed to improve sustainability

- Financing must be focused on small towns.
- SWSS technical and financial monitoring is not generalised.
- Tariff Review mechanisms are still missing.
- SYGAEP database should be a planning instrument.
- The State/ANEPA Convention is not sufficiently secured yet.

### Key issues to be addressed to improve sustainability

- Weak and stagnating coverage rate (30 percent).
- SNDE’s lack of administrative and financial autonomy.
- Weak integration of poor peripheral districts.
- Absence of public-private partnership around SNDE.
- The financing of the supply part is not assured yet.

### Key issues to be addressed to improve sustainability

- Texts do not specify the role of communes.
- No national strategy for rural sanitation.
- No specific financing mechanism.
- No institutional leader for the sub-sector yet.
- Sub-sector financing is very insufficient.

### Key issues to be addressed to improve sustainability

- No institutional leader and lack of strategy.
- No systematic promotion policy.
- No specific financing mechanism.
- The local private sector is not supported.
Notes

1. Investment requirement estimates are from a financial model elaborated by WSP-AF.

Acronyms

AEP Aftout Es-Sahel Project
ANEPA National Agency for Drinking Water and Sanitation
ARM Multi-Sectoral Regulatory Agency
CNRE National Centre for Water Resources
CDMT Poverty Reduction Strategy Paper
CTS Joint Technical Committee
CSP Strategic Framework for Poverty Reduction
GoM Government of Mauritania
IEC Information, Education and Communication
MDGs Millennium Development Goals
M&E Monitoring and Evaluation
MSRA Multi-Sector Regulation Authority
NGOs Non-Governmental Organisations
ODA Overseas Development Assistance
O&M Operations and Maintenance
PNAR Investment Plan
PRSP Poverty Reduction Strategy Paper
SNDE Public Water Utility
WSP-AF Water and Sanitation Program-Africa
WSS Water Supply and Sanitation

References

7. WSP-AF Estimates.
A. MDG Outlook

1. Is Mozambique on the right track to reach the MDGs for water and sanitation?

By 2005, Mozambique’s overall access to water supply was 40 percent (37 percent in urban areas, and 41 percent in rural areas), while access to sanitation was 36 percent (38 percent in urban areas and 35 percent in rural areas). Compared to the 2015 target access rates of 70 percent for water supply in urban and rural areas, and 60 percent for sanitation (80 percent urban, 50 percent rural), Mozambique will require a capacity increase of over five times for water, and nearly three times for sanitation, to meet the MDGs. While there are positive signs, including evidence that the population continues to self-fund, build and use latrines in rural and peri-urban areas, further efforts are required to get on, and maintain, the ‘right track’ to achieve the MDGs. As a result, the sector is now preparing a Strategic Plan and MDG Roadmap, and significant funds have been pledged by donors.

2. Main issues to be addressed

Mozambique has the potential to achieve the MDGs for water supply in its major cities (representing 75 percent of the urban population). New institutional structures, reform of sector finance, and increasing cost recovery suggest positive progress in this area. In contrast, rural areas and small towns have been slower in implementing reform strategies, while sanitation in both urban and rural areas is limited largely to household initiatives. Some of the core issues for the sector include:

- Implementation capacity at all levels and amongst different actors to transition to the new institutional arrangements, particularly in rural areas and small towns.
- M&E systems need to be developed and maintained, in order to provide reliable information on planning and financing.

Snapshots

Capacity increase needed for water supply x 5

<table>
<thead>
<tr>
<th>Year</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>20</td>
</tr>
<tr>
<td>2005</td>
<td>40</td>
</tr>
<tr>
<td>2015</td>
<td>70</td>
</tr>
</tbody>
</table>

Capacity increase needed for sanitation x 2.8

<table>
<thead>
<tr>
<th>Year</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>5</td>
</tr>
<tr>
<td>2005</td>
<td>15</td>
</tr>
<tr>
<td>2015</td>
<td>30</td>
</tr>
</tbody>
</table>

Sector Investment Requirements

- Water: Public Investment Required (15%), Planned Public Investment (10%)
- Sanitation: Surplus (18)

Key milestones towards MDG Roadmap

- Institution leader identified
- Stakeholder consultation
- MDG Roadmap plan of action
- Resources mobilised
- Implementation underway towards MDGs

Mozambique
A Status Overview of Sixteen African Countries

Mozambique

Measures to improve national strategies

• While considerable attention has been paid to urban areas, there is no clear RWSS strategy. The National Water Policy needs to include a focus on RWSS, and adoption of an implementation strategy.

• It is not clear whether sanitation and hygiene are given enough priority in the current national strategy. Roles and responsibilities amongst different national and decentralised agencies need to be clarified.

B: Sector Preparedness Overview

1. National Strategies

Mozambique’s 1995 National Water Policy called for a changing role of Government towards regulation, monitoring arrangements and reforms, and the sector’s development for the last ten years has been influenced by this policy. The policy is currently being reviewed and updated taking into account the MDGs. The policy redefines the Government’s role, while other stakeholders and beneficiary communities are expected to have greater responsibility for facilitation, planning, and management of investment funds, as well as greater supervision of project implementation. The policy calls for a demand-responsive approach, building on principles of decentralisation and decision-making by local managers, together with other stakeholders. Water supply and sanitation are meant to be integrated with hygiene education and environmental conservation, as a framework for sustainable development. From a financing perspective, cost recovery is promoted for operations and maintenance, while private sector participation is promoted.

The National Water Policy, which is implemented in all provinces, aims to address infrastructure needs in urban areas, wastewater and drainage, and encourages private sector participation in service provision, as well as encouraging clarified roles and responsibilities for the sector through legislative reform.

Overall targets for water and sanitation coverage are set in the five-year Government Programme, currently through 2009. A second PRSP approved in May 2006 is consistent with the Government Programme. As of the 2006 budget, allocations to the water sector have doubled and the government projections are to maintain the levels at 5 percent of the national budget.

Coverage targets and investment requirements

<table>
<thead>
<tr>
<th></th>
<th>1990 Access (%)</th>
<th>2005 Access (%)</th>
<th>2015 (Target) Access (%)</th>
<th>Add Pop to be covered (m/year)</th>
<th>Total Investment Required (m$/year)</th>
<th>Public Invest. Required (m$/year)</th>
<th>Planned Public Invest. (m$/year)</th>
<th>Surplus (Funding Gap)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>30</td>
<td>41</td>
<td>70</td>
<td>0.566</td>
<td>14</td>
<td>22</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>Urban</td>
<td>33</td>
<td>37</td>
<td>70</td>
<td>0.326</td>
<td>42</td>
<td>12</td>
<td>53</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>40</td>
<td>70</td>
<td>0.892</td>
<td>56</td>
<td>34</td>
<td>89</td>
<td>82</td>
</tr>
<tr>
<td><strong>Sanitation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>16</td>
<td>35</td>
<td>50</td>
<td>0.352</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Urban</td>
<td>15</td>
<td>38</td>
<td>80</td>
<td>0.415</td>
<td>15</td>
<td>2</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>36</td>
<td>60</td>
<td>0.746</td>
<td>16</td>
<td>4</td>
<td>20</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: GoM, 2005; DNA, 2005; FIPAG, 2005.

• High dependence on off-budget, donor funding limits effectiveness of national strategies. While dependence will remain high in the medium term, the sector needs to address the number of one-off projects by NGOs and other donors, and increase co-ordination and collaboration amongst different sector actors. Rather, a long-term financial strategy to support implementation of the roadmap should be a priority.

• Asymmetries in attention to urban areas at the expense of rural WSS, understanding that urban WSS is still not sustainable. Flows to rural and small towns should increase, while disbursements in urban areas should be made in a timely fashion.
2. Institutional Arrangements

On paper, institutional arrangements are consistent with current thinking on WSS service provision, including decentralisation, commitment to expanded stakeholder participation at all levels, greater involvement of the private sector, and the redefinition of the Government’s role from implementer to facilitator. In practice, the implementation of this vision is a considerable challenge. The National Directorate of Water (DNA) is the sector leader, responsible for policy formation and facilitation. In addition to the DNA, several new institutions have recently been created, including a corporate public utility FIPAG, for 13 cities.

DNA and some municipal corporations also supply water in urban areas, and there is also an independent regulator, CRA. With increased scope for urban private sector management, and systems for fiscal decentralisation for rural water supply, new roles for the private and NGO sectors have also emerged. All of these have started to come together just as the MDG challenge is coming to the forefront of policy discussions. Consequently, making these new arrangements work, and finding a way to move towards full implementation will be critical.

Measures to improve institutional arrangements

- DNA needs to strengthen its skills for its new role as facilitator and planner as opposed to direct implementer, and needs to incorporate more participatory approaches, including more horizontal decision making.
- Existing institutional arrangements and implementation capacity need to be strengthened, rather than creating new ones to suit the MDG challenge.

3. Sector Financing

Mozambique has a relatively strong national framework for sectoral finance (WSS and others). The management plan has a five-year time horizon which is revised annually to reflect budget realities. Sectors are presented with indicative expenditure limits. The sector must then develop a programme of expenditures, and prioritise activities if resources are insufficient. Once plans are drafted, there is an inter-sectoral discussion, which leads to a joint decision on expenditures. Once this budgeting process is complete, expenditure needs to be protected through pro-poor or core arrangements. The evidence of costing suggests that it tends to be infrastructure-based, and focused on capital costs.

While this framework presents a good process, Mozambique’s water sector is characterised by a high reliance on donor funding (over 80 percent of investment funding over the last decade), of which nearly 90 percent is project based. Some of the financial constraints include the illiquidity of public finance, debt accumulation within sector agencies, low transparency in resource allocations from national to decentralised levels, unwieldy donor procurement rules, and unpredictable finance flows. Despite ever-increasing funding availability - nearly US$100 million budgeted for the sector in 2006 - absorptive capacity has not increased proportionally, resulting in chronic under-achievement of targets over the last three years.

Investment for WSS is limited largely to DNA, provincial governments, FIPAG, some small district-base projects and some regional development programmes. The project-based approach adopted by multiple donors has led to implementation inefficiencies, but there are no social investment funds, debt relief programmes, or other sector-related funds operating in the country. The Dutch government has recently started to provide

Measures to improve sector financing

- Government needs to align the water sector within the national framework for sectoral finance, whether the bulk of funding derives from the budget or donors. This includes aligning annual budgets with medium term expenditure frameworks. Donors should account for their off-budget ODA as part of sectoral spending, and work towards longer-term, stable funding to enable better planning and implementation.
- The water tariff policy should be implemented in all areas, along with standard criteria for setting tariffs to cover operations, maintenance, and management costs for urban sanitation and small town water systems.
Mozambique

4. Sector Monitoring and Evaluation

The PARPA includes indicators for water supply relating to access, as well as targets that include input/output based indicators. These are clearly identified as urban and rural, with roles and responsibilities as well as outlined timelines for completion. It is unclear how the Government promotes transparency and accountability through the M&E framework, or the role of civil society and other stakeholders. Interestingly, the M&E framework within the PARPA includes clear targets and indicators for donor coordination, which could impact how donors operate.

While urban monitoring in a few major cities, undertaken by FIPAG and CRA is somewhat reliable, monitoring is weak in rural and small town WSS. In 2005, several provinces began work on a water and sanitation database, which revealed significant information gaps. Building on these findings, DNA has requested assistance to organise its M&E system, although it is unlikely that significant progress can be made in the short-term. Given the uncertainty over existing sector data, the sector relies upon periodic national surveys and the census for updated access figures. Still, conflicts arise between official estimates and survey results, owing to the application of inconsistent criteria used to determine access, and questions about the capacity of non-specialists to apply infrastructure surveys. DNA is currently working with the Statistics Authority and other key players to improve and harmonise the criteria and figures.

5. Sector Capacity

Implementation capacity in Mozambique’s government, civil society, and private sector is limited. Organisational issues include a highly centralised system compounded by slow decision-making procedures, lack of integration between sector institutions, poor communication amongst sector stakeholders, and too many off-budget projects. Human resources constraints include inadequate skills mix amongst sector actors, understaffed agencies at a local level, low civil service wages, limited incentives to retain experienced staff at decentralised levels, and a non-strategic capacity building plan.

Private sector actors, such as construction firms, social work organisations, drilling companies, NGOs, and local artisans are increasingly implementing projects, although the quality and timeliness of delivery may need improvement. No specific programmes of capacity building for the local private sector is currently in place, but DNA is studying different approaches, drawing on the experiences of stand alone projects that have dedicated resources to local capacity building. Urban activities attract almost all of the country’s budgetary support, and is expected to provide nearly US$6 million to DNA in 2006. DNA considers this positively, and hopes to extend budgetary support to other donors, although there is reluctance within the broader donor community to participate.

With regards to cost recovery, urban water tariffs in the major urban areas are increasing, and are within 80 percent of the utility’s breakeven point, while rural and small town water fees are often unable to meet operating costs, if collected at all. Despite investments made in the last decade, there are insufficient funds for rural WSS.

Measures to improve sector monitoring and evaluation

- A functional, national framework for M&E that can be implemented at decentralised levels, and particularly in rural and small towns is required.
- Although there is an identified role for civil society and other stakeholders in M&E, it needs to be made more clear and actively implemented.

Measures to improve sector capacity

- Review all policy schemes, including planning, budgeting, and monitoring and evaluation, to ensure sufficient capacity at a district level to facilitate sustainable WSS.
- Capacity building for procurement and responsibility at a public sector level, as well as training and skills to domestic private sector actors, to implement WSS reforms.
highest-qualified professionals, while it is rare to find more than a handful of degree-holding professionals at the provincial level and practically none at district level. Recognising these shortcomings, the Government’s current capacity building plan has identified needs for capacity building that includes training programmes at a provincial level, monitoring and evaluation skills at provincial and district levels; improving water sector capacity in budget planning and project execution, and developing the local private sector, particularly for O&M of small town water supplies.

C: Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognised in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range from 0-100 percent.’

<table>
<thead>
<tr>
<th>Overall Sector Sustainability Score</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>41%</td>
<td>47%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Key issues to be addressed to improve sustainability

- A baseline study needs to be developed, in order to inform a national action plan to achieve the MDGs. This should include the coordination and dialogue of all sector actors.

<table>
<thead>
<tr>
<th>Sustainability Score for Rural/Small Town WS</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>39%</td>
<td>25%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Key issues to be addressed to improve sustainability

- A baseline study needs to be developed in order to understand the current situation in rural areas and small towns, to help inform a national program.
- Unit costs for different technologies and approaches need to be identified, to help inform planning and decision making.

<table>
<thead>
<tr>
<th>Sustainability Score for Urban Water Supply</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>56%</td>
<td>70%</td>
<td>63%</td>
</tr>
</tbody>
</table>

Key issues to be addressed to improve sustainability

- A long term strategy and plan for the development of Urban Water infrastructures is needed.
- A bill of appropriate standards of service delivery to urban poor and informal settlements need to be set towards alternative informal solutions.

<table>
<thead>
<tr>
<th>Sustainability Score for Rural Sanitation</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>26%</td>
<td>24%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Key issues to be addressed to improve sustainability

- Designation of sector leadership, coupled with a national policy and definitions of norms.
- Wide-spread promotion of the sector, through social marketing, information, training, IEC etc., is needed.

<table>
<thead>
<tr>
<th>Sustainability Score for Urban Sanitation</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>28%</td>
<td>12%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Key issues to be addressed to improve sustainability

- Designation of sector leadership, coupled with a national policy and definitions of norms is needed.
Notes

1. The data was collected from the National Directorate of Water (Rural) and FIPAG (Urban) in 2005.

Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRA</td>
<td>Water Regulatory Council</td>
</tr>
<tr>
<td>DNA</td>
<td>National Directorate of Water</td>
</tr>
<tr>
<td>FIPAG</td>
<td>(Urban) Water Investments and Assets Holder</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, Education and Communication</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MTEF</td>
<td>Medium Term Expenditure Framework</td>
</tr>
<tr>
<td>NGO's</td>
<td>Non-Governmental Organisations</td>
</tr>
<tr>
<td>ODA</td>
<td>Overseas Development Assistance</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>Operations and Maintenance</td>
</tr>
<tr>
<td>PARPA</td>
<td>Poverty Reduction Strategy Paper</td>
</tr>
<tr>
<td>PRSP</td>
<td>Poverty Reduction Strategy Paper</td>
</tr>
<tr>
<td>RWSS</td>
<td>Rural Water Supply and Sanitation</td>
</tr>
<tr>
<td>WSS</td>
<td>Water Supply and Sanitation</td>
</tr>
</tbody>
</table>

References

**Niger**

**A. MDG Outlook**

1. **Is Niger on the right track to reach the MDGs for water and sanitation?**

Niger’s ability to achieve the Millennium Development Goals (MDGs) on water and sanitation (WSS) is weak, worsened by the country’s hydro-climatic and geographically unfavourable conditions and one of the world’s highest population growth rates (3.3 percent). In 2004, Niger’s population was about 12.4 million. Of this, 59 percent had access to safe water while 18 percent had access to sanitation. To achieve the MDGs by 2015, nearly seven million people will need access to water supply and nearly 8.5 million will require sanitation. The number of people that should get access to water and sanitation each year needs to be increased by four times for water supply and ten times for sanitation. Even if this is achieved, an additional 3.5 million people would still lack access to safe water and seven million would lack access to sanitation. Progress towards the MDGs will require a significant increase in political goodwill, behavioural change and a substantial increase in public investment.

2. **Main issues to be addressed**

Niger has redefined its policy and strategies and has initiated innovative reforms in rural as well as urban hydraulic sub-sectors. This has enabled Niger to resume links with its development partners, especially after the sectoral water supply and sanitation meeting of May 2001. Niger has adopted institutional, legal and regulatory arrangements, which are favourable to MDG realisations. In this vein, elaborate roadmaps involving all actors are of extreme urgency. Despite these actions, some of the core challenges include:

- Strengthening the information system, adopting realistic and transparent methods for calculating WSS coverage, including updating the database on water systems.

**Snapshots**

**Capacity increase needed for water supply x 4**

**Capacity increase needed for sanitation x 10**

**Sector Investment Requirements**

**Key milestones towards MDG Roadmap**

<table>
<thead>
<tr>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>S</td>
</tr>
</tbody>
</table>

- Institution leader identified
- Stakeholder consultation
- MDG Roadmap/plan of action
- Resources mobilised
- Implementation underway towards MDGs

Note: The graphs and charts are based on sector coverage and investment requirements data, and WSP analysis.
Measures to improve national strategies

- In the short term, establishing a leader to promote national water and sanitation commission (CNEA) should help to improve the country’s progress toward achieving the MDGs by creating a framework for co-ordination and dialogue amongst sector actors.

- The national program study, in preparation by the DTNAEP needs to include baseline information set against the targets, along with achievable activities and targets for sector actors.

### B: Sector Preparedness Overview

#### I. National Strategies

The Government of Niger’s (GoN) water and sanitation policy was updated in 2000, and is supported by urban and rural implementation strategies. Other fundamental texts include the Public Hygiene Code, the orientation principle of Rural Code, the law on mining, and associated policies relating to environmental management, decentralisation, water resource management, transportation, and creating SPEN (asset holding company for urban water supply) and SEEN (Water Supply Utility). Overall, water policy is implemented using a project-based approach rather than strategic alignment, although steps are being taken to organise the sector at a central level, through co-ordination of ministerial departments and technical and financial partners, particularly through sectoral strategies. Further, the Directorate for New Water Supply Works (DTNAEP), under the Ministry of Water, is taking initial steps to consider a national programme for water supply and sanitation.

In January 2002, Niger adopted an orientation framework for governmental action over the 2002-2015 period for Poverty Reduction Strategy (PRS). Its ambition is to reduce poverty from 63 percent to less than 50 percent by 2015. Among the PRS’s priorities, rural and urban development is prominent, supported by strong sectoral strategic documents approved in 2003 and 2004. The Rural Development Strategy and National Urban Development Strategy action plans are included in the Medium Term Expenditure Framework (CDMT), although it’s in a draft stage. According to the PRS, the budget share allocated to water was about 6 percent. Importantly, NGOs are also recognised for attaining the MDGs for WSS.

### Coverage targets and investment requirements

<table>
<thead>
<tr>
<th></th>
<th>1990 Access (%)</th>
<th>2004 Access (%)</th>
<th>2015 Target Access (%)</th>
<th>Add Pop to be Covered (m/year)</th>
<th>Total Investment Required (m/year)</th>
<th>Public Invest Required (m$/year)</th>
<th>Planned Public Invest. (m$/year)</th>
<th>Surplus (Funding Gap) (m$/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>51</td>
<td>57.4</td>
<td>79.5</td>
<td>0.54</td>
<td>52</td>
<td>6.2</td>
<td>58.2</td>
<td>50</td>
</tr>
<tr>
<td>Urban</td>
<td>65</td>
<td>64</td>
<td>82</td>
<td>0.12</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>53</td>
<td>59</td>
<td>80</td>
<td>0.66</td>
<td>52</td>
<td>26.2</td>
<td>78.2</td>
<td>70</td>
</tr>
<tr>
<td><strong>Sanitation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>4</td>
<td>5</td>
<td>52</td>
<td>0.62</td>
<td>3.6</td>
<td>1.2</td>
<td>4.8</td>
<td>2.8</td>
</tr>
<tr>
<td>Urban</td>
<td>71</td>
<td>79</td>
<td>90</td>
<td>0.11</td>
<td>2.8</td>
<td>0.7</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>14</td>
<td>18</td>
<td>60</td>
<td>0.73</td>
<td>6.4</td>
<td>1.9</td>
<td>8.3</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Source: GoN, 2005.
2. Institutional Arrangements

The Ministry of Water is responsible for all water supply activities, co-ordination with other ministries and overall sector co-ordination. Over the last few years, the government’s role has shifted towards policy formation and co-ordination, while other sector actors emerged as WSS implementing partners. In 2000, the urban sub-sector was de-linked from rural water supply and SPEN was created and it is now responsible for water supply in all urban centres. In addition to SPEN, SEEN manages 52 urban and secondary towns. Other operators, including SONEXI, manage small WSS networks. These small scale projects are designed as delegation contracts and are preferred by technical and financial partners. This reorganisation was accompanied by the creation of a Water Sectoral Project (PSE), with a function to improve access to WSS, increase the sector’s effectiveness and financial viability, and reinforce institutional capacities.

From a governance perspective, the lowest level of government is responsible for public services based on a demand-led approach. In particular, water points belong to communities in which they are implemented, and can be used and managed by local authorities (e.g. water boards), or let to a private operator through a management contract or concession. This decentralised structure is relatively new (March 2005), and capacity for managing contracts or maintaining water points at the local level are limited.

Donors play a core role in Niger’s water sector, particularly in rural areas. Currently, the Swiss Development Corporation (SDC) is the lead donor for the water sector. It has planned a number of donor meetings to help organise the sector and has also played a role within the Transitory Committee for Water and Sanitation which is in charge of the elaboration of a draft consensus text for the implementation of the CNEA.

Whereas the water sector has an identified lead, sanitation faces institutional fragmentation, coupled with overlapping responsibilities and competencies. To co-ordinate all sanitation sector actors, a National Monitoring and Evaluation Committee for Water and Sanitation Sector (CNSESEA) and corresponding regional branches were created in 1995. While CNSESEA had a good start, and worked to develop the Africa Action Plan 2000, it has not produced or accomplished much since.

3. Sector Financing

Projected cost requirements to achieve the MDGs total US$78.2 million annually for water supply and US$8.3 million for sanitation. Of this amount, US$58.2 million is required for rural water supply, compared with US$20 million in urban areas. For sanitation, the amounts are considerably less: US$4.8 million for rural and US$3.5 million for urban. The government and donors are expected to provide the bulk of finance, but due to lack of data, the funding gap within the sector is unclear. According to the draft Medium Term Expenditure Framework 2007-09, the public funding gap for rural water and sanitation is estimated at about six percent of the planned public investment. Due to macro-economic challenges, however, government funding for WSS is limited and donors provide nearly 90 percent of WSS funding.

In rural areas, users are responsible for O&M as well as rehabilitation of light equipment, while the GoN is responsible for larger maintenance projects, rehabilitation and extension works (including boreholes, wells, water towers, and networks). Contributions vary, according to technology used, although the estimated contribution ranges from 0 percent to six percent of total investment. Users are asked to contribute financially or in-kind. In practice, cost recovery is minimal while affordability is a

Measures to improve institutional arrangements

- While the policy framework has been transformed in recent years, dissemination and application is limited. Guidance, skills transfers, and competencies are needed within the framework of decentralisation.
- The GoN needs to assign and reaffirm roles and responsibilities, with a sector lead, for the sanitation sector. This needs to be accompanied by firm political will.
challenge to many communities, particularly in rural areas. Adding to this, water infrastructure is expensive compared to other areas in Africa due to hydro-geologic conditions and a dispersed population. Tillabery and the capital city (Niamey) rely on the Niger River for water supply.

With the reorganisation of the urban sector into SPEN and SEEN, tariffs are set by the Ministry of Water using a pro-poor formula (SEEN tariffs in 2004 varied from US$0.27/m³ to US$0.83/m³). Considerable funds are spent providing free connections in peri-urban areas.

4. Sector Monitoring and Evaluation

Niger lacks a national sector framework for monitoring and evaluation; M&E activities are mostly confined to the capacity and interest of individual projects. For example, stakeholder participation is limited, data is not uniform, and there is no integration of data on sanitation. The extent to which PRS monitoring and sector monitoring are aligned is unclear.

Despite the fragmentation, project evaluations do occur, and often include capacity building components, including training on information, education and communication campaigns. For example, the SDC made an evaluation of the impact of its own water programme on poverty among Téra residents. The Ministry of Water has created a permanent technical committee to monitor safe water and sanitation coverage rates on an annual basis.

5. Sector Capacity

To achieve the MDGs, Niger will require a near doubling of capacity for both water supply and sanitation. This will require reinforcement of actors’ capacities in terms of the decentralisation framework, and the role of civil society, NGOs, and the private sector. It will also require considerable training in all areas to boost the skills and abilities of all sector actors.

At a national level, government agencies need to improve their co-ordination and organisation amongst different ministries, especially for sanitation. Decentralised services need to be reinforced, in terms of expertise, technical and scientific materials (guidance) and, operationally, decentralised authorities need financial resources to enact their responsibilities effectively. Importantly, accommodation for the novelty of local authorities’ responsibility for public services must be prioritised. Local authorities do not have real expertise or experience in water supply and sanitation, and have historically relied on donor projects for support.

In both urban and rural areas, technical skills need to be developed to ensure local participation, given historic prevalence of foreign engineers and companies operating in the sector. For example, there are only a few national companies able to construct boreholes, and an insufficient number of drills to meet the demands imposed by the MDG targets. Given the lack of a competitive market for spare-parts, the reality that most breakdowns are the result of poor user-

---

<table>
<thead>
<tr>
<th>Measures to improve sector financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Strategies to ensure cost recovery from users are needed, particularly in rural areas.</td>
</tr>
<tr>
<td>• Need to develop a programmatic approach to align with the CDMT.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measures to improve sector monitoring and evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Need to review existing information and monitoring systems in light of developing a programmatic approach to secure sector-wide monitoring.</td>
</tr>
<tr>
<td>• The system needs to provide for both implementation monitoring (inputs-outputs) and results stratégic monitoring (outcomes).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measures to improve sector capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Policy framework needs to include strategies for broader participation in the sector, with attention towards finance mechanisms to allow for increased participation of private actors and local banks.</td>
</tr>
<tr>
<td>• Overall capacity is needed to implement national programmes and activities surrounding sanitation and hygiene.</td>
</tr>
</tbody>
</table>
management requires significant attention for sustainability of services provided. In rural areas, 30 percent of wells are estimated to be non-functional; this figure is likely underestimated. In terms of sanitation and hygiene, NGOs have received some training, although more is necessary to meet the need.

### C: Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognised in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range from 0-100 percent.

<table>
<thead>
<tr>
<th>Overall Sector Sustainability Score</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td><strong>30%</strong></td>
</tr>
<tr>
<td>Financial</td>
<td>15%</td>
</tr>
<tr>
<td>Institutional</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Rural/Small Town WS</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td>Financial</td>
<td>25%</td>
</tr>
<tr>
<td>Institutional</td>
<td>75%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Urban Water Supply</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td><strong>55%</strong></td>
</tr>
<tr>
<td>Financial</td>
<td>50%</td>
</tr>
<tr>
<td>Institutional</td>
<td>60%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Rural Sanitation</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td><strong>20%</strong></td>
</tr>
<tr>
<td>Financial</td>
<td>5%</td>
</tr>
<tr>
<td>Institutional</td>
<td>35%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Urban Sanitation</th>
<th>Key issues to be addressed to improve sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td><strong>15%</strong></td>
</tr>
<tr>
<td>Financial</td>
<td>5%</td>
</tr>
<tr>
<td>Institutional</td>
<td>25%</td>
</tr>
</tbody>
</table>
Notes

2. Urban WSS based on SPEN data.

Acronyms

CDMT  Medium Term Expenditure Framework
CN EA  National Water and Sanitation Commission
CN SESEA National Monitoring and Evaluation Committee for Water and Sanitation Sector
DTNAEP Directorate of New Water Supply Works
GoN  Government of Niger
MDGs  Millennium Development Goals
NGOs  Non Governmental Organisations
O&M  Operations and Maintenance
PSE  Water Sector Project
SDC  Swiss Development Corporation
SDR  Rural Development Strategy
SEEN  Niger water supply utility
SPEN  Asset Holding Company for Urban Water Supply in Niger
SONEXI  Water Private operator
WSS  Water Supply and Sanitation

References

A. MDG Outlook

1. Is Rwanda on the right track to reach the MDGs for water and sanitation?

The Government of Rwanda (GoR) policies and institutional frameworks are in place, following best practices to achieve the MDGs. The water sector performed very well in 2005, both priority expenditures and results increased exponentially during the year compared to previous years. Water and sanitation expenditures tripled in 2005 compared to 2004, providing access to clean water to an additional 598,000 people. Eight percent of the 830 rural piped water systems are operated under delegated management by private operators. The key issue for the sector is now to ensure adequate level of financing and building capacities at the central and districts levels to further scale up and reach the MDGs.

In 2005, 57 percent of Rwanda’s 8.2 million people had access to safe water supply and 10 percent had access to hygienic sanitation (85 percent had access to basic sanitation). The national targets which are more ambitious than the MDG targets aim to achieve 100 percent coverage by 2020. To achieve this, an additional 4.9 million people would need to have access to water supply, and 6.5 million to improved sanitation. An estimated minimum investment of US$250 million is needed by 2015 to reach these goals, on rehabilitation and construction of new infrastructure, as well as for sector management and capacity building. Even if the MDGs are achieved, a significant share of the population will be left without access to water and sanitation.

2. Main issues to be addressed

Rwanda has an ambitious program and strong frameworks to achieve its long-term WSS targets. Still, the issues of financing and monitoring and evaluation require support, and especially capacity building.
Measures to improve national strategies

- Develop a national sanitation MDG Roadmap.
- Develop guidelines for hygiene and sanitation promotion at a district level, building on practical experience and lessons learned.

Section B: Sector Preparedness Overview

1. National Strategies

The Government of Rwanda (GoR) has developed clear strategies for rural and urban water supply, and is committed to scaling up reform programs through the decentralisation process. Nevertheless, it lacks a clear policy and legal basis for sustained urban/rural sanitation. Rwanda’s overall objectives and policy direction in water and sanitation are driven by the country’s 2020 Vision and by the Poverty Reduction Strategy (PRSP), while the national water policy was most recently revised in 2004. The 2020 Vision calls for universal access to potable water and hygienic sanitation facilities, integrated and sustainable water resource management, and water collection and conservation to support economic development to be achieved by 2020. These objectives are mirrored in the national program for rural WSS, which includes a comprehensive, long-term investment plan to achieve 100 percent WSS coverage. Further, these themes have been incorporated in the PRSP through specific objectives, including improved water supply systems, optimisation of agricultural water use, energy and transport, support to community management of water supply infrastructure, increased access to sanitation services, and capacity building at all levels of government.

Complementing these objectives, Rwanda’s National Investment Strategy (NIS) seeks to promote private sector participation to mobilise investment as well as develop and manage potable water and sanitation infrastructures. It also promotes development of WSS facilities in rural and urban areas at affordable cost, while emphasising local financing initiatives in rural areas.
In practice, the reform process has resulted in a management contract with a private operator for Electrogaz, the public company in charge of water, sewerage, and power services in urban centers. The contract was interrupted in 2006. In rural areas, the ministry supports the involvement of local private operators at a district level for management of water supply systems, and the formation of rural habitat centers.

2. Institutional Arrangements

Under the decentralisation process, responsibilities related to water supply and sanitation services have been transferred to the districts. Although the sector’s institutional arrangements reflect the decentralisation policy, the sector still suffers from lack of capacities at the district level. The GoR’s 2004 national water policy defines guidelines for efficient use of water resources, and also integrates concepts of decentralisation, participatory approaches, privatisation and funding using a programmatic approach.

As a result of the decentralisation process, the Ministry is working to strengthen its technical assistance capabilities, and implement capacity building at the district level to enhance local resources in project implementation and management and hygiene and sanitation promotion. In this regard, the project management units have been merged in a single national implementation unit, to become the future “National Water Agency”. This unit is also working to develop necessary skills for the districts to engage with the private sector in water supply operations and maintenance and develop delegated management contracts.

Measures to improve institutional arrangements

- Develop a nationwide monitoring and evaluation framework linking the districts to the sector database already existing, revive it, and ensure regular update.
- The ministry and the national implementation unit encompass sanitation in their mandate, but lack appropriate resources to develop the policy tools and action plans needed to meet the MDGs. Additional technical assistance is needed to strengthen sanitation and hygiene promotion.

3. Sector Financing

For Rwanda to reach the water and sanitation MDGs (i.e. provide 85 percent of the population with access to potable water and 65 percent with access to hygienic sanitation by 2015) it will require providing 4.5 million additional people with potable water and 5.7 million with adequate sanitation. This will necessitate (a) an increase in sector financing to about US$40 million per year; (b) provision of adequate technical support to districts for planning, executing, and managing water and sanitation projects; and (c) effective cost recovery and public private partnerships to ensure the long-term sustainability of water services and sanitation provision, and proper maintenance of facilities newly constructed.

From a policy perspective, Rwanda’s Medium Term Expenditure Framework (MTEF) developed by the government is clearly result-oriented and linked with policy actions. The GoR has also carried out several preliminary studies to establish a framework for public transfers to Districts, to develop water supply under private management in rural areas. In the frame of the PRSP process, the first Joint Budget Support and Public Finance Management Review took place in September 2006 in Kigali. This Review brought together the Government of Rwanda with the partners providing budget support to Rwanda, and to review the implementation of the PRSP over 2005.

Measures to improve sector financing

- Although funding needs to rehabilitate existing facilities and new investments have been identified, more resources need to be made available or leveraged to support investment planning.
- The sustainability of operations and maintenance needs to be strengthened both in urban and rural areas, through PSP and appropriate tariff structures allowing recovery of production and distribution costs.
The water supply program for Kigali City aims to address the current water resource deficit of approximately 32,000m$^3$/day across the city. The currently estimated investment cost of the Kigali WSS program is US$75 million in the short term (2005-2007). Of the investment required over 2005-2007, US$49 million remains without financing. This will need to be filled by leveraging additional finance to the sector, coupled with targeted investments.

Projected financing requirements to achieve the MDG targets call for an annual US$30 million for water supply (US$23 million for rural and US$7 million for urban) and US$10 million for sanitation (US$5 million for rural and US$5 million for urban). Of this amount, public investment requirements are projected at US$11 million per year for water and US$1 million for sanitation, of which the GoR has secured US$40 million (water supply) and US$1 million (sanitation), either through the budget or from donors. These contributions, channeled largely through the PRSP process, focus mostly on RWSS.

In rural areas, it is estimated that around 30 percent of the existing infrastructures require rehabilitation. Together with the new investment requirements, an estimated US$140 million would be needed to achieve the program by 2020. Out of this amount, only US$85 million is already secured, which represents more than 10 percent of the total amount. Within the physical contingencies, price escalation, program management, institutional arrangement, study and capacity building, the total cost program is US$250 million. The expected repartition of funding is donors’ 81 percent, beneficiaries’ 4 percent, and government 15 percent.

Overall, current tariffs are below the cost of treatment, and do not support proper O&M. A significant proportion of urban consumers can afford to pay more for their water services, giving the possibility of water tariffs being more in line with production, maintenance and rehabilitation costs. This will make O&M more sustainable and the private sector will remain interested in the provision of PSP options. The GoR has committed itself to revising water tariffs to ensure sustainability of services, and to develop pro-poor arrangements to secure access to water for all.

4. Sector Monitoring and Evaluation

Rwanda’s WSS sector monitoring is weak, with little capacity to gather, process, or report data. For example, the decentralisation process has transferred responsibility for rural water supply systems to districts without consideration of whether resources and skills are available for them to perform M&E tasks effectively, and without transfer of financial resources and appropriate M&E tools. Still, there are some activities including a WSS projects database, and a rural baseline survey, which was used by DEA to create a M&E tool. DEA plans to revise and update the projects database regularly, and develop from it a reliable, national inventory of water facilities. DEA also intends to strengthen its technical support capabilities to provide assistance to district managers in charge of WSS at a local level. This technical assistance will include support to the nation-wide deployment and use of the M&E tool at a national level.

5. Sector Capacity

Rwanda’s limited sector capacity relates strongly to how policy was implemented: with responsibility for WSS transferred to the district level, and with concurrent administrative reform, the number of staff at national level plummeted in a short period of time. For example, in 2004 alone, DEA staff was reduced from 40 to seven. At the same time, the decentralisation process has not included fiscal decentralisation, severely constraining the newly empowered districts. As a result, the local administrative body has limited staff capabilities to manage the sector appropriately, both on technical
getting Africa on track to meet the MDGs on water supply and sanitation

Overall

Financial

Institutional

Overall Sector Sustainability Score

41 %

50%

32%

Key issues to be addressed to improve sustainability

• The new sector coordination and dialogue mechanism works well, but needs to be complemented by a joint performance review process.

• The monitoring and evaluation mechanism for the sector is still weak and work is on-going to develop it.

• Appropriate reporting, performance related to output and impact evaluation, and financing mechanisms, are being reviewed and discussed to prepare the second PRSP.

Section C: Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognized in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The score range from 0-100 percent.

### Measures to improve sector capacity

- MINITERE/DEA plans to organise training for districts by contracting private operators for the management of local WSS systems, and initiate private management in at least 16 districts (with new or rehabilitated systems) spread over four pilot provinces.
- A technical support unit will be created under DEA to reinforce the capacity at district level.

Rwanda

Aspects (projects and O&M) and financial and contractual aspects. The lack of financial resources restrains them from building this capacity by recruiting skilled staff. Finally, with the loss of knowledgeable staff at a national level, the districts lack support from the central government. As a result, neither districts nor the central government have the capacity to deliver on their roles as outlined in the sector strategy and national programme.

Within the private sector, Rwanda has capacity in terms of project implementation (engineering services and contractors). In some pioneering districts, operations and maintenance of rural water supply facilities have started to attract local private operators. The target is for 25 percent of rural water supply systems to be managed by private operators by 2007. The main constraint for these operators is the supply of spare parts and chemicals, especially in rural areas.

### Section C: Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognized in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The score range from 0-100 percent.

#### Overall Sector Sustainability Score

<table>
<thead>
<tr>
<th>Institutional</th>
<th>50%</th>
<th>50%</th>
<th>41%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability

- The monitoring and evaluation mechanism for the sector is still weak and work is on-going to develop it.
- Appropriate reporting, performance related to output and impact evaluation, and financing mechanisms, are being reviewed and discussed to prepare the second PRSP.

#### Sustainability Score for Rural/Small Town WS

<table>
<thead>
<tr>
<th>Institutional</th>
<th>50%</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability

- The GoR supports private sector participation options for RWS, but scaling up successes remains a challenge. Supply chains for spare parts and chemicals remain the main constraint for O&M of rural water supply schemes, while capacities and resources at local levels under the decentralisation process are yet to be defined for investments implementation.

#### Sustainability Score for Urban Water Supply

<table>
<thead>
<tr>
<th>Institutional</th>
<th>50%</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability

- Urban WSS services are operated by Electrogaz, the public autonomous utility in charge of water and power supply. In 2006 the management contract signed with an international operator was interrupted. The main challenges for Electrogaz are services expansion in low-income areas, which lack specific investments, and improvement on costs recovery to reach O&M sustainability.
Sustainability Score for Rural Sanitation

| Institutional | 38% |
| Financial     | 20% |
| Overall       | 29% |

Sustainability Score for Urban Sanitation

| Institutional | 23% |
| Financial     | 8%  |
| Overall       | 16% |

Key issues to be addressed to improve sustainability

- Hygiene and sanitation are promoted in target districts using the PHAST methodology, and the HAMS program, focusing on schools. Private sanitation remains the responsibility of the households, and government strategy only focuses on public places (schools, health centers and market places). GoR lacks a national policy and clear strategy and investment plan to achieve the RSH MDGs objectives.

- The city of Kigali lacks a proper sanitation master plan. A study is under implementation to define the appropriate technology options and the related investments needs. This will contribute to the definition of a national hygiene and sanitation MDGs roadmap.
Rwanda

Notes

1. The government of Rwanda has decided to pursue the same level of coverage for both rural and urban supply water and sanitation despite the lag in rural water access compared to urban.

Acronyms

DEA Directorate for Water and Sanitation  
GoR Government of Rwanda  
HAMS Hygiene et Assainissement enMilieuScolaire  
JBS Joint Budget Support  
MDGs Millennium Development Goals  
MINITERE Ministry of Lands, Resettlement and Environmental Protection  
MTEF Medium Term Expenditure Framework  
NIS National Investment Strategy  
O&M Operations and Maintenance  
PAEMR Rural Water Supply and Sanitation Project  
PEAMR Rural Water Supply and Sanitation Project  
PFMR Public Finance Management Review  
PHAST Participatory Hygiene and Sanitation Transformation  
PER Public Expenditure Review  
PNEAR National Rural Water Supply and Sanitation Programme  
PSP Private Sector Participation  
RSH Reproductive and Sexual Health  
RWS Rural Water Supply  
RWSS Rural Water Supply and Sanitation  
UNFPA United Nations Population Fund  
WSS Water Supply and Sanitation

References

A. MDG Outlook

1. Is Senegal on the right track to reach the MDGs for water and sanitation?

Based on analysis of strategy and implementation, Senegal appears to be on the right track to achieve the MDGs for water supply, with lesser prospects for sanitation. In 2004, Senegal’s water supply coverage was 75 percent (64 percent rural, 90 percent urban), compared with 33 percent sanitation coverage (17 percent rural and 57 percent urban). To achieve the MDG targets, it will require nearly doubling the numbers of people gaining access per year, and nearly four times as many for sanitation. Importantly, Senegal has outlined a strategy, investment plan and an action plan to achieve the MDGs, with a focus on resource mobilisation. Expected financial resources from public funds (budget and ODA) are within reach of projected investment requirements, particularly when considering the role created for private firms in both urban and rural water supply. An exception is rural sanitation and hygiene, which has minimal planned financial commitments.

2. Main issues to be addressed

Several years of ongoing reform in Senegal have placed the country in a position to achieve the MDG targets for water supply in rural and urban areas, and sanitation/sewerage in urban areas. Still, the improvement of services and extension of water supply and sanitation in urban and rural areas will require co-ordinated and significant effort, by both government and non-government actors. Some of the core challenges include:

- Resource mobilisation at a national level for rural sanitation, to keep pace with anticipated gains in rural water supply. The lack of a clear strategy for rural sanitation, coupled with the lack of committed

---

### Snapshots

**Capacity increase needed for water supply x 1.5**

- **Coverage**
  - 1990: 20%
  - 2004: 60%
  - 2015: 80%
- **Target**
  - 2015: 80%
- **Trend**
  - Linear increase

**Capacity increase needed for sanitation x 3.5**

- **Coverage**
  - 1990: 20%
  - 2004: 60%
  - 2015: 80%
- **Target**
  - 2015: 80%
- **Trend**
  - Linear increase

### Sector Investment Requirements

- **Investment Requirements (US$ M)**
  - **Water**
    - Public Investment Required: (37.2)
    - Planned Public Investment: (38.3)
  - **Sanitation**
    - Public Investment Required: (17.2)
    - Planned Public Investment: (18.3)

### Key milestones towards MDG Roadmap

- **Rural**
  - Not started
  - In progress
  - Completed
- **Urban**
  - Not started
  - In progress
  - Completed

Note: The graphs and charts are based on sector coverage and investment requirements data, and WSP analysis.
Measures to improve national strategies

- Although the PEPAM presents a clear national strategy for WSS, it will need to align with future poverty reduction strategies, which should focus on eradication of structural inequality in access to WSS.
- The sanitation charter should be developed and adopted as quickly as possible to align with ongoing planning frameworks.

B: Sector Preparedness Overview

1. National Strategies

The Government of Senegal (GoS) has developed a national, programmatic approach (PEPAM) to co-ordinate different sector actors’ efforts under a unified platform to achieve the MDGs for water supply and sanitation. In effect, PEPAM reviewed the WSS situation in Senegal in 2004, which were used to help set targets for 2015. Following this, an investment programme was developed for the 2005-2015 period. PEPAM was introduced in 2005, and is also a component of the Integrated Water Resources Management action plan, which is expected in 2006. As safe water supply and sanitation infrastructures are identified as priorities in the Strategic Plans for Poverty Reduction (PRSP), the PEPAM targets are expected to align with the PRSP targets during the next PRSP process.

In rural areas, substantial improvements to water supply and sanitation are expected, in line with specific targets (e.g., extension of water supply to 3,250 settlements, and installation of 355,000 autonomous household sanitation systems). PEPAM suggests a national strategy to scale up the principles and techniques of the Management Reform Projects of Rural Boreholes (REGEFO R). In the medium term, a more balanced and sustainable system for distributing costs and charges is slated for development, along with increased ASUFORRs throughout the country, coupled with contracting relations with the private sector and the reinforcement of ASUFOR-local collectivities. In urban areas, universal access to safe water and sustainable preservation of the financial sector balance are targeted. In the sanitation sub-sector, the realisation of 92,000 connections to sewers and the installation of 135,000 autonomous systems are foreseen between 2005 and 2015. Therefore, expenses for water and sanitation based on sector and in the short-term were earmarked in the action plan as early as 2005 and will continue to be well beyond that date. Building on the PEPAM strategy, a law on safe water supply public services and on collective and semi-collective public funding (against projected estimates of needed public funds) will likely hinder the required capacity gains to achieve the MDGs.

- Maintenance and further progress in the urban sub-sector, to continue gains in cost recovery while strengthening efforts for sewerage and sanitation (including garbage collection).
- Stronger co-ordination in the rural sub-sector, to increase the implementation capacities of User Associations of Rural Boreholes (ASUFOR) and of private operators to manage water services and maintain hydraulic installations.

<table>
<thead>
<tr>
<th>Coverage targets and investment requirements¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access (%)</td>
</tr>
<tr>
<td>1990</td>
</tr>
<tr>
<td>Water</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Sanitation</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

sanitation is expected to be passed before the end of 2006. The objective of this law is to set up a legislative framework for the public service of water supply and sanitation, and to specify the State’s policy for the improvement of the public service. A Sanitation Charter, which will condense the arrangements of the current Environment Charter, Water Charter and Urban Planning, will be elaborated in 2007.

2. Institutional Arrangements

PEPAM’s action plan consolidates the different institutional and organisational reforms that have been introduced in the water sector in recent years. In addition to PEPAM’s co-ordination unit, PEPAM relates to the Hydraulic Division (DH), the Equipment and Maintenance Division (DEM), the Water Resources Management and Planning Division (DGPRE), the Sanitation Division (DAS), the Senegalese National Company for Water (SONES), and the Senegalese National Office of Sanitation (ONAS). The distribution of different tasks and responsibilities between these structures was decided by an Inter-Ministerial decree, which regards PEPAM as a programme.

In rural areas, the State assumes final responsibility for realising national objectives in terms of safe water supply and sanitation, while local authorities have responsibility for planning and signing contracts for small and medium-sized projects, in synergy with support projects to overall local development. Towards mid-2007, the DEM will disengage from its maintenance and restoring activities, which will be taken up by a new type of user associations, ASUFOR (which has been in existence through pilot studies since 1998). As a result of this restructuring, user associations will be responsible for managing or contracting the private sector managed boreholes for rural water supply. NGOs will participate in support and training actions of the different actors. Partners to development will be invited by the GoS to insert all their interventions into a unified intervention framework.

Sector reform in urban areas that started in 1995, has resulted in increased production capacities and improved distribution output substantially. The reform, which introduced a public-private partnership, also redefined and redistributed roles and responsibilities of the main actors. At present, the water sector operators are the Senegalese National Water Company (SONES) an asset holding company, and Senegalese Water (SDE), a private operator which has a leasing contract set to expire in 2006 (this contract will be extended by amendment until 2011). ONAS is responsible for sanitation and sewerage, and will seek to introduce private operators in 2007.

<table>
<thead>
<tr>
<th>Measures to improve institutional arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The WSS sector’s organisational framework changes often, and at inopportune times at a ministerial level, which ultimately hinders the capacity to implement national policies effectively and on schedule.</td>
</tr>
<tr>
<td>• Clear roles and responsibilities, and frameworks for collaboration are needed in the sanitation sector, e.g. linkages and overlaps with health and education, and on specific issues such as garbage collection.</td>
</tr>
</tbody>
</table>

3. Sector Financing

An estimated US$124.5 million per year (US$56.8 million for water supply and US$67.7 million for sanitation) is required to achieve the WSS MDGs. For water supply, the bulk of projected funding is required in rural areas (US$32.8 million), of which the bulk (US$32.4 million) is expected to derive from the public budget and ODA flows. Of this amount, US$9.7 million has already been committed. Interestingly, in urban areas an estimated US$24 million is required per year to achieve the water supply targets, of which the bulk (US$17.8 million) is expected to derive from the public budget and ODA flows. Of this amount, only US$3.3 million has already been committed. The outlook for sanitation is different: of the total US$67.7 million required, the bulk is needed in urban areas (US$45.7 million), compared with projected and planned public expenditures of US$23 million a year. This suggests that US$20.9 million additional funding is required for urban sanitation and sewerage. A similar situation
Measures to improve sector monitoring and evaluation

• Improved co-ordination and collaboration amongst different existing M&E tools is needed, to develop a national framework, also at an ASUFOR level.
• Investment is required to include indicators and M&E tools to track performance (policy and financial) in the sanitation sub-sector.

Measures to improve sector financing

• Authorities need to reconsider the tariff structure in urban areas, to reduce the financial impacts of direct and cross-subsidies, particularly towards gardeners and low consumption clients, as well as improve targeting to poor households.
• Levels of financing for the sanitation sub-sector in both rural and urban areas needs to be addressed as a core priority for poverty reduction.

4. Sector Monitoring and Evaluation

Senegal’s varied M&E frameworks as developed by different sector actors, provided decent data which were used to develop the PEPAM. For example, DGPRE has developed a Geographic Information System of Water Resources in Senegal (SIGRES), along with a database called PROGRES, which track inventory and investment planning. DEM periodically updates a database of rural boreholes and pumps to help ensure adequate monitoring of water supply systems in rural areas. Despite these different databases, there are no truly integrated systems for M&E at a national level, to track and determine overall sector performance. Reinforcement of capacities for regular monitoring is a central element of PEPAM’s plan of action, and will constitute a major task for the PEPAM co-ordination unit. This includes defining and harmonising indicators; implementing standard procedures for data collection and analysis; defining procedures for integrating results into programming and planning tools, and means to translate M&E results with planning objectives. With PEPAM, it is expected that M&E frameworks will improve rapidly. However, it should be noted that while the existing databases and systems are strong, they relate mostly for water supply rather than to sanitation.

5. Sector Capacity

Senegal has a high level of capacity to implement PEPAM. However, there is a need to reinforce the roles and responsibilities as set out in PEPAM, particularly in rural areas. Rural communities need training in local planning and programming, through the development of local WSS action plans. For example, about 700 out of 1,000 boreholes will be transitioning from the ‘borehole committee management’ system towards the ASUFOR model, which is based on volumetric water pricing and contracting maintenance to a private operator. In addition to governance capacity, the private sector needs support to be able to offer quality services, including maintenance, management, quality restoration, and operationalisation at reasonable prices. Senegal has a good network of consultants, research departments and NGOs, whose intervention methods will progressively be harmonised owing
Measures to improve sector capacity

- In the urban sub-sector, the capacity for SONES, SDE, and ONEA must be reinforced and strengthened, in order to increase financial and management performance.
- For the ASUFOR model to be scaled effectively, considerable capacity is needed at decentralised and local levels of governance, as well as within the domestic private sector, to address demand.

C: Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognized in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range from 0-100 percent.

### Overall Sector Sustainability Score

<table>
<thead>
<tr>
<th>Overall Sector Sustainability Score</th>
<th>81%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional</td>
<td>86%</td>
</tr>
<tr>
<td>Financial</td>
<td>75%</td>
</tr>
<tr>
<td>Overall</td>
<td>81%</td>
</tr>
</tbody>
</table>

### Key issues to be addressed to improve sustainability

- Access to WSS services is well articulated within poverty reduction strategies and national frameworks, and a strong priority is now given to sanitation.
- Several operations have been lead, like the extension of the leasing contract with the private operator, SDE, up to 2011; in the same way the amendment to the concession contract of SONES which allows its financial equilibrium up to 2011. But few operations are still on the way to be finalised soon, the performance contract of ONAS and the inter-ministerial control commission to improve the supervision of contracts.
- Investment needs and mobilisation of financing to ensure effective cost recovery, while incorporating principles of equity and affordability, are needed.

### Sustainability Score for Rural/Small Town WS

<table>
<thead>
<tr>
<th>Sustainability Score for Rural/Small Town WS</th>
<th>66%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional</td>
<td>75%</td>
</tr>
<tr>
<td>Financial</td>
<td>57%</td>
</tr>
<tr>
<td>Overall</td>
<td>66%</td>
</tr>
</tbody>
</table>

### Key issues to be addressed to improve sustainability

- The transfer of rural motorised borehole maintenance to the private sector as decided by the State is not applied, and DEM is not yet disengaged from O&M. Likewise the ASUFOR model should be scaled up as quickly as possible.
- Implementation capacity to ensure effective projects and absorption capacity to spend money efficiently, are needed within local authorities at the rural and small town level. This includes programming tools.

### Sustainability Score for Urban Water Supply

<table>
<thead>
<tr>
<th>Sustainability Score for Urban Water Supply</th>
<th>84%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional</td>
<td>81%</td>
</tr>
<tr>
<td>Financial</td>
<td>86%</td>
</tr>
<tr>
<td>Overall</td>
<td>84%</td>
</tr>
</tbody>
</table>

### Key issues to be addressed to improve sustainability

- Current financial strategies for the poor, especially in peri-urban areas should be reviewed and improved through more precise poverty mapping and targeting activities.

### Sustainability Score for Rural Sanitation

<table>
<thead>
<tr>
<th>Sustainability Score for Rural Sanitation</th>
<th>45%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional</td>
<td>50%</td>
</tr>
<tr>
<td>Financial</td>
<td>40%</td>
</tr>
<tr>
<td>Overall</td>
<td>45%</td>
</tr>
</tbody>
</table>

### Key issues to be addressed to improve sustainability

- The rural sanitation sub-sector needs to adapt to the decentralisation process for planning and programmatic investments, including the identification of a sector lead.
- To address the financing gap, finance mechanisms to support rural sanitation, and the promotion of the local private sector, are needed.
### Sustainability Score for Urban Sanitation

<table>
<thead>
<tr>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional</td>
<td>59%</td>
</tr>
<tr>
<td>Financial</td>
<td>58%</td>
</tr>
<tr>
<td>Overall</td>
<td>59%</td>
</tr>
</tbody>
</table>

### Key issues to be addressed to improve sustainability

- Current water tariff may assure the sector’s financial balance, but the sums received for sanitation are not enough to cover all the costs, and need to be adjusted.
- The rate of household connection to sewage system is minimal, while the rate of adequate servicing of autonomous sanitation is very poor (17 percent in 2004). ONAS needs support and capacity building to strengthen its ability to operate effectively.
- The current level of mobilisation of necessary financing in order to reach the sanitation MDGs in urban areas is insufficient with regards to the enormous investment needs.
Notes
1. All figures are from PEPAM and available online.
2. The base year for the MDG targets in Senegal is 2004.

Acronyms

ASUFO R Management Reform Projects of Rural Boreholes
CBOs Community-Based Organisations
DAS Sanitation Division
DEM Equipment and Maintenance Division
D GPRE Water Resources Management and Planning Division
DH Hydraulic Division
GoS Government of Senegal
IWRM Integrated Water Resources Management
MDGs Millennium Development Goals
M&E Monitoring and Evaluation
NGOs Non-Governmental Organisations
ODA Overseas Development Assistance
ONAS Senegalese National Office of Sanitation
ONEA Water and Sanitation Utility
PEPAM Millennium Water and Sanitation Programme
PRSP Poverty Reduction Strategy Paper
SDE Senegalese Water
SIGRES Geographical Information System of Water Resources in Senegal
SONES Senegalese National Water Company
WSS Water Supply and Sanitation

References
2. Government of Senegal. IWRM. 2006
4. Government of Senegal. PRSP.
A. MDG Outlook

1. Is Tanzania on the right track to reach the MDGs for water and sanitation?

If the committed resources from the Government of Tanzania (GoT) and donors materialise on time, and are spent efficiently, Tanzania should be able to achieve the MDG targets. In 2002, 52 percent of Tanzania’s population had access to water while 90 percent had access to some form of sanitation. In an effort to reach the MDG target of 64 percent coverage in water and 95 percent coverage in sanitation, the donor community and GoT have recently come to an agreement on a four-year SWAp, and have pledged sufficient resources to reach the interim targets outlined in Tanzania’s National Strategy for Growth and Poverty Reduction, or MKUKUTA.

2. Main issues to be addressed

A sound enabling environment in terms of reformed institutions, policies, and strategies as well as a coherent WSS programme have been created. The government’s commitment to change is demonstrated in the increasing decentralisation of implementation to the district level (RWSS), utility level (UWSS), and basin level (IWRM). The willingness and readiness of communities to assume responsibility for management, and operation and maintenance (O&M) is a positive development. Some of the core issues constraining Tanzania’s progress include:

- Sector M&E: Lack of structured monitoring and evaluation (M&E) systems, poor management information systems, lack of review mechanisms for district WSS plans and performance. A plan for an improved M&E system is a component of the national Water Sector Development Programme (WSDP).
Tanzania

Source: GoT, 2006.

- **Sector Coordination**: Coordination of External Support Agencies and NGOs has suffered in the past, but recently the Development Partners’ Group - Water has taken a more co-ordinated approach. Cross-ministerial support for components such as sanitation is weak.
- **Resource Allocation**: Poor remuneration for professional staff at all levels; a facility to aid in intragovernmental fiscal transfers needs to be implemented to counter low fund disbursement to districts, weak water resources assessment, planning and allocation.
- **Capacity Building**: Institutional/technical capacity at district level; water quality management; need for training, reorientation, and improved capacity for GoT employees about the changing role of government, low level of advocacy, promotion, public awareness. Capacity building is a key component of the WSDP.
- **Sanitation**: As the graph shows, sanitation coverage is quite high, according to the 2002 census, and confirmed by other independent audits. While many of the latrines are not ‘improved’, and so may not amount to basic sanitation, they do isolate the faeces from the humans. A strict MDG definition may place coverage closer to 50 percent. However, this would overlook the important progress made in terms of behaviour change and household commitment that was necessary to elevate basic coverage so high. A retrofitting approach will rapidly push the basic latrines up the sanitation ladder to “improved”. For year-to-year consistency, the 2002 census data was used here.

**B: Sector Preparedness Overview**

### 1. National Strategies

In Tanzania, all national strategies are developed in the context of the National Strategy for Growth and Poverty Reduction (MKUKUTA), which calls for reducing poverty through economic reform, targeted government resource allocations, accelerated rural economic development, and improved water supply, health, and education services. Within this context, Tanzania has adopted the MDGs’ WSS targets. The main national strategies focusing on water and sanitation include Vision 2025, which includes an objective to provide universal access to safe water through the involvement of the private sector and empowerment of local government; and the National Water Policy (NAWAPO).

NAWAPO aims to achieve sustainable development through efficient utilisation of water resources and increasing availability of water services. It enshrines the principles of decentralisation and localisation of management and services for the sustainable provision of WSS services. The policy constitutes the environment for Integrated Water Resources Management (IWRM), incorporating economic and social development on the one hand, and conservation, protection, monitoring, and control on the other. This policy demonstrates the GoT’s major departure from the previous policy of free water towards cost recovery, economic efficiency, integrated water management, water conservation, and protection.

The Local Government Reform Programme (LGRP), overseen by the local government agency, PMO-RALG, is geared towards devolving the mandate for providing basic services (including WSS) to
The lowest government administrative level. The reform process entails the transfer of roles and responsibilities, decision-making authority and control of resources for the delivery of basic services to the District Councils, including CBOs, NGOs, and private sector.

The national Water Sector Development Strategy (WSDS) sets out a strategy for implementing NAWAPO. It guides the formulation of the MoW’s medium-term strategic plan and sub-sectoral investment programme as inputs to the MTEF planning process. It enables ongoing, sub-sectoral initiatives and projects to be set within an overall strategic framework for the sector.

The National Water Sector Development Programme (WSDP) is centred on community ownership and management of WSS facilities, and demand-driven approaches based on enhanced private sector participation in project implementation. The policy expressly promotes the integration of WSS and hygiene education. The WSDP comprises of the National RWSS Programme, National UWSS Programme, and the National IWRM Programme.

2. Institutional Arrangements

The Ministry of Water (MoW) is responsible for overall co-ordination, monitoring and evaluation of the WSDP, facilitation of capacity building, and for ensuring policy compliance. Cross-sectoral responsibilities also fall on the Ministry of Health and Social Welfare for policy on health, sanitation, and hygiene, and the Ministry of Education and Vocational Training for school sanitation and hygiene education, the Ministry of Community Development, Gender and Children for WSS in community development, and the National Environmental Management Council is responsible for environmental issues relating to WSS. As a result, more co-ordination of policies, strategies, and programs is required at the national level. District and municipal councils, which have become increasingly responsible for ownership and management of water and sanitation, and other local government agencies have a direct link through the Prime Minister’s Office - Regional Administration and Local Government. Through the Local Government Support Program, PMO-RALG has developed formula-based District Resource allocation for service delivery in key social services that includes rural and small towns’ WSS. PMO-RALG also advises and guides district councils on operational matters.

The Ministry of Finance (MoF), the main channel for intra-government funding, looks after control measures, including reporting. Through its Development Assistance Committee, the ministry is responsible for overall co-ordination of external assistance. It has set up a Technical Audit Unit responsible for overall and random inspection of project performance. At a regional level, the Regional Secretariat is the focal unit responsible for overseeing and co-ordinating water supply initiatives and water use planning and allocation. In general, the regional secretariat provides technical support to district councils, assists the national government in M&E activities. At the district level, District Councils assume responsibility for providing all necessary technical support to communities in all publicly-funded RWSS projects. The District Councils facilitate and guide the identification and the development of community plans through a participatory, consensus building and consultative process. At the utility level, the Urban Water and Sewerage Authorities (UWSAs) are to be transformed into WSSAs (Water Supply and Sanitation Authorities), which will be licensed and regulated by the

Measures to improve institutional arrangements

- Fiscal transfer mechanisms need to be implemented to secure dedicated WSS funds as they move from national to local levels.
- District Councils need to improve capacity nationwide (e.g., hiring water engineers)
- With several agencies involved in WSS, formal co-ordination of policies, strategies, and programmes is needed, particularly at a national level.
Measures to improve sector monitoring and evaluation

- A structured M&E system needs to be developed. It is currently planned for in WSDP.
- Public sector capacity in peri-urban and rural areas needs to be strengthened to meet expectations.
5. Sector Capacity

The WSDP aims to support implementation of the changing role of the public sector into policy making, regulation, facilitation, capacity building, and monitoring and evaluation, while shifting service delivery to the private sector wherever feasible or decentralised community management as required. These developments ask for corresponding changes in the capacity of the skilled workforce, available systems and facilities. Capacity building is needed in human resources, systems and facilities geared towards regulation, management, facilitation of standards setting, policy and strategy making for government at national levels. The need for staffing and facilities for programme implementation, planning, supervision, services, and systems for management of contract administration, procurement, finance administration, advocacy, must be strengthened at the regional and district levels. Among other items, capacity is needed for advocacy and promotion of water, sanitation, health and hygiene, to raise public awareness, facilities, and systems including hydro-geological equipment, offices, vehicles, computers, and manuals.

C: Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognised in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range from 0-100 percent.

### Overall Sector Sustainability Score

<table>
<thead>
<tr>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>85%</td>
</tr>
</tbody>
</table>

### Sustainability Score for Rural/Small Town WS

<table>
<thead>
<tr>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>89%</td>
</tr>
</tbody>
</table>

### Sustainability Score for Urban Water Supply

<table>
<thead>
<tr>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>70%</td>
</tr>
</tbody>
</table>

#### Key issues to be addressed to improve sustainability

- Overall, sector is in good shape, with strategies developed.
- Civil society involvement can be improved, as well as poverty impact monitoring, and better communication to district, local levels.
- Co-ordination and fiscal flows for sanitation need to be improved.
- Capacity in terms of supply chains and NGO training still needs to be completed, as well as cost-effective ST technologies and innovative management models.
- A need for improved relationships between national and local governments.
- Private sector participation to be encouraged.
- Capacity needs to be developed.
- Utilities need to become fully functioning commercial enterprises.
- Utilities need to take a stronger pro-poor focus.
Tanzania

**Sustainability Score for Urban Sanitation**

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>58%</td>
</tr>
</tbody>
</table>

**Key issues to be addressed to improve sustainability**

- Sewerage systems in plan, but need to be developed and installed.
- On-site sanitation needs improvement, especially peri-urban Dar es Salaam.
- Funding needs to be secured and co-ordination improved.

**Sustainability Score for Rural Sanitation**

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>68%</td>
</tr>
</tbody>
</table>

**Key issues to be addressed to improve sustainability**

- Hygiene and sanitation promotion are well placed and budgeted.
- Need to improve planning to go to scale, coordination with ministries, local actors.
- No costing yet on anticipated private expenditure on latrines (GoT does not subsidise construction).
- Sanitation marketing strategy needs to be developed.
Tanzania

Notes

1. Joint Sector Assessment, Aide memoire, October 2006. Annual funding estimates are through 2010

Acronyms

CBOs  Community-Based Organisations
GoT  Government of Tanzania
IWRM  Integrated Water Resource Management
LGRP  Local Government Reform Programme
MDGs  Millennium Development Goals
M&E  Monitoring and Evaluation
MKUKUTA  National Strategy for Growth and Poverty Reduction
MTEF  Medium Term Expenditure Framework
MoF  Ministry of Finance
MoW  Ministry of Water
NAWAPO  National Water Policy
NGOs  Non-Governmental Organisations
O&M  Operations and Maintenance
PRO-RALG  Prime Minister's Office - Regional Administration and Local Government
RWSS  Rural Water Supply and Sanitation
SWAp  Sector Wide Approach
UWSS  Urban Water Supply and Sanitation
WSDP  Water Sector Development Programme
WSDS  Water Sector Development Strategy
WSS  Water Supply and Sanitation

References

1. Government of Tanzania. Local Government Reform Programme (LGRP)
5. Government of Tanzania. Vision 2025
A. MDG Outlook

1. Is Uganda on the right track to reach the MDGs for water and sanitation?

Overall, Uganda seems to be on track for water supply, particularly if the 80 percent functionality rate in rural areas is improved. A ten-year Improved Hygiene and Sanitation Financing strategy has been prepared, aimed at meeting sector targets. Although it might appear that all the required investment is committed over the next three years, there is a bias for financing urban water supplies when the demand is greater for rural areas where 80 percent of the poor live. Only 40 percent of the Medium Term Expenditure Framework Allocation went to rural areas in 2005/06. Due to very low coverage in the 1990s, Uganda’s MDG targets are low relative to current progress. The Poverty Eradication Action Plan (PEAP/PRSP) more relevant targets call for 80 percent and 83 percent coverage in water supply and sanitation by 2015. As of 2006, about 61 percent have access to water, and 58 percent have access to sanitation; roughly 14.5 million people will need improved WSS facilities by 2015 to achieve the PEAP targets while nine million people will not be covered even when the targets are met. The 2006 population is estimated at 28.2 million at a growth rate of 3.6 percent while the estimated population in 2015 is 39.3 million at a growth rate of 3.46 percent.

2. Main issues to be addressed

Overall, Uganda’s national policies, institutional arrangements, sector financing strategy, monitoring and evaluation, and capacity are generally on the right track towards achieving the MDGs and the more ambitious SIP targets. However, considerable progress will need to be met, particularly in the following core areas:

Snapshots

- Capacity increase needed for water supply x 1
- Capacity increase needed for sanitation x 1.1
- Sector Investment Requirements
- Key milestones towards MDG Roadmap

Note: The graphs and chart are based on sector coverage and investment requirements data, and WSS analysis.
Measures to improve national strategies

- Further entrenchment of the SIP/SIM into sectoral planning and monitoring.
- Improved budgetary allocations to rural and pro-poor strategies, with a focus on equity and sanitation. Include update in the annual performance report.

B: Sector Preparedness Overview

1. National Strategies

The Government of Uganda (GoU) water policy calls for sustainable access to safe water and sanitation/hygiene, based on demand-led approaches, such that 77 percent of the population in rural areas and 100 percent of the urban population will have coverage by 2015, with between 80-90 percent of facilities functioning. This objective is included in the 2004 Poverty Eradication Action Plan (PRSP), and has led to PEAP targets being more ambitious than the MDGs. Accessibility is defined as within 1.5 kilometres in rural areas, and 0.2 kilometres in urban areas, of an improved water source. In 1999, GoU prepared a 15-year rural WSS strategy, which was followed by strategies for urban and small towns. A five-year (2002-2007) operational plan for RWSS was also produced, and a sector-wide approach (SWAp) was embraced in 2001. Since then, Government and development partners jointly plan and prepare the sector’s MTEF, as well as monitor progress through a Water & Sanitation Sector Working Group, and through two annual joint reviews. The reviews are based on annual WSS sector performance reports. A detailed integrated strategy for sanitation improvement has been finalised in 2006 to guide sanitation and hygiene service delivery amongst the different stakeholders, including the private sector.

In 2004, the GoU prepared an integrated Sector-wide Investment Plan (SIP) and Sector-wide Investment model (SIM), which are used to guide sector planning, resource allocation and monitoring. Working within
the remits of macro-economic stability framework and sector ceilings, the SIM enables the sector to forecast the impact of sub-sectoral allocations on service delivery. The process is, however, constrained by outstanding committed donor projects leading to relative over funding for the urban sector. Urban reform is underway to create an independent regulatory framework and an asset holding authority, which will affect the future management of urban water and sanitation systems.

2. Institutional Arrangements

The Ministry of Water and Environment (MWE) has overall responsibility for initiating national policies and setting national standards and priorities for the water sector. The Directorate of Water Development (DWD), under MWE, is the lead agency for co-ordinating and regulating all WSS activities and providing support services to local governments and other service providers. The Planning and Quality Assurance Department of MWE conducts M&E of sector programmes. In large urban areas, the National Water and Sewerage Corporation (NWSC) is an autonomous public utility, responsible for financing and managing water and sewerage services in 19 areas. In areas not covered by the NWSC (urban and rural areas) districts, towns, sub-counties are empowered by the Local Governments Act (1997) to provide WSS. In line with the fiscal decentralisation strategy, they receive grant funding and mobilise local resources for implementing WSS programmes. They may also appoint and manage private operators. District Water and Sanitation Technical Committees (DWSC) are being created to oversee and provide effective co-ordination of sector activities.

The Ministry of Health (MoH) is the lead agency responsible for hygiene promotion and household sanitation. Within MoH, the Environmental Health Division (EHD) is responsible for developing strategies and approaches, and for providing support to decentralised structures. The Ministry of Education and Sports (MES) is responsible for hygiene promotion and sanitation in primary schools, while the Ministry of Gender, Labour and Social Development (MGLSD) is responsible for gender responsiveness and community mobilisation/development. From a financing perspective, the Ministry of Finance, Planning and Economic Development (MFPED) mobilises and allocates funds, co-ordinates donor inputs, reviews sector plans as a basis for releasing allocated funds, and reports on compliance with sector objectives.

NGOs and Community Based Organisations are engaged in service delivery, both in terms of financing and implementation. The GoU and development partners support the Ugandan Water and Sanitation NGO Network (UWASNET), which has a secretariat and over 150 member organisations. Private sector firms are contracted by government to design and construct water and sanitation facilities and to support O&M in rural and peri-urban areas, and provide piped water in the majority of small towns. Communities organised by a water and sanitation committee (WSC) are responsible for demanding, planning, financing through cash contributions and O&M for most rural WSS facilities.

Measures to improve institutional arrangements

- Need for improved stakeholder co-ordination at the local government level, especially with respect to sanitation and hygiene. Follow up the implementation of undertaking in this regard. Recognise outstanding performers.
- Create/improve enabling environment, especially for the private sector to enhance finance leveraging, O&M, and functionality. Plan and implement social marketing activities.

3. Sector Financing

Uganda requires a total of US$242 million per year for the next 10 years in order to achieve the MDG targets. This is divided into US$95 million for water supply, and US$147 million for sanitation. Uganda is implementing a fiscal decentralisation strategy, to empower local communities with more responsibility for WSS. For both water supply and sanitation, rural areas require considerably more than urban areas. By contrast, the allocated budget through government revenues and donor flows
Measures to improve sector monitoring and evaluation

- Continue harmonisation of indicators measured by different sources in line with golden indicators.
- Build M&E frameworks at district levels, to track financing, and allow for benchmarking to improve performance. Follow up the recommendations of SIMs report of 2006. Use league tables.

Measures to improve sector financing

- Increase budget allocation and release to the rural sub-sector, while investigating how to reduce O&M costs for small towns and ending O&M subsidies, and considering opportunities for leveraging additional resources. Continuously increase efficiency and effectiveness in resource utilisation and implement the pro-poor strategy.
- Donors need to provide more realistic budgets that match actual disbursements, and disburse on schedule. Continuously review including at Joint Sector Reviews.

4. Sector Monitoring and Evaluation

In 2003, the sector launched a performance measurement framework with eight golden indicators (now increased to 10) against which sector performance is monitored and evaluated. M&E is conducted by various institutions using different approaches, all aligned with the golden indicators. DWD Management Information System (DWD-MIS) and National Water and Sewerage Corporation Management Information System (NWSC-MIS) capture infrastructure services provided in rural and urban areas. The Uganda Bureau of Standards (UBOS) undertakes a number of surveys, including the National Population and Housing Census (UPHC) carried out every ten years. The Uganda National Service Delivery Survey (NSDS) gathers information on education, health, water and sanitation, agriculture, transport and governance. The Uganda National Household Survey (UNHS) and The Uganda Demographic and Health Survey (UDHS) are regular national household surveys, which focus on the outcomes of investments, while the Health Inspectors Annual Sanitation Survey (HIASS) is an annual event organised by Environmental Health Division of the Ministry of Health. An Environmental Health Information management System (EHMIS) is under development, to be used as a tool for the Household Sanitation Assessment Book.

From a financial perspective, Value for Money audits, tracking studies and technical audits monitor the flow of resources, efficiency of systems and delivery of services. These studies are used to examine service delivery and associated costs. The Planning and Quality Assurance Department (PQAD) of Ministry of Water and Environment is mandated to monitor and evaluate sector development programs. Professionals from the department undertake field trips on a quarterly (or six-monthly) basis to all 80 Districts, which are used as the basis for the PAF Monitoring Report for Programs and Activities under MWE. The Ministry of Local Governments also carries out regular inspection and support supervision visits. Since was just US$87 million in FY 2005/06, of which US$25 million was targeted by the government, and US$62 million by donors. Compared to the budgeted amount, only US$60 million was disbursed, and US$57 million actually spent (65 percent of money that was not disbursed was from donors). This variance between budgeted and actual expenditures constrains performance and limits available resources, which have a considerable effect particularly in rural and peri-urban areas. This is especially so given the sector ceiling framework, whereby government allocations are limited if they attract non-budgeted resources to the sector.

Additionally, per capita costs for new water facilities vary widely, and are on average, more expensive than neighbouring countries (e.g. for boreholes, Uganda’s per capita cost is US$48-96, compared to US$39-76 in Kenya and US$38-66 in Tanzania). In the urban sector, of 61 small towns with networked water supply, 57 are operated by the private sector, while four are run by town councils. Average production costs in small towns are three times that of large towns, while large towns are able to cover 100 percent of their operational costs, small towns collect just 76 percent of these costs. As a result, small towns rely on government subsidies for O&M costs as well as any extensions or rehabilitation.
2003, the sector produces annual sector performance reports that harmonize and report physical coverage and performance across the different sub-sectors, financing, functionality, and institutional issues.

5. Sector Capacity

The sector is well positioned and destined to deliver the sector strategy and national programme. Local governments have increasing capacity for planning and implementing both water supply and sanitation, and the centre is improving at delivering its mandate. Although challenges exist, strategic and budgetary planning is taking place at all levels of government. A recent budget support instrument study and investigation into unit costs for district projects indicated ample capacity at a district level. However, the capacity building needs are changing with more local governments being created. The number of new districts has increased from 56 to 80 in two years. Regular capacity needs-assessment is required. Villages and towns receive business planning support through both the Technical Support Units (TSUs) and DWD. Challenges still exist with respect to O&M management by communities; arising from financial contributions, spare parts and skills. Functionality is thus still a problem, especially for borehole facilities.

Facilities under NWSC are increasingly better managed but there are challenges for some of the privately operated facilities in small towns. A number of projects (e.g., the Output Based Aid by the GPOBA and capacity building project to be funded by IFC) are under preparation to support this capacity.

C: Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognized in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range from 0-100 percent.

<table>
<thead>
<tr>
<th>Overall Sector Sustainability</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>77%</td>
<td>100%</td>
<td>89%</td>
</tr>
</tbody>
</table>

Key issues to be addressed to improve sustainability

- Strengthen data collection, analysis and dissemination mechanisms to provide a good assessment of WSS coverage at the required disaggregated levels.
- Disseminate best practices.
- Enhance monitoring of financial allocation and utilisation, against delivery of outputs for WSS with a view of improving cost effectiveness and efficiency.
- Increase focus to Integrated Water Resource Management.
### Uganda

#### Sustainability of Rural/Small Town Water and Sanitation

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>80%</td>
<td>57%</td>
<td>69%</td>
</tr>
</tbody>
</table>

**Key issues to be addressed to improve sustainability**

- Improve the O&M framework, including spare parts supply chain, and review tariffs to cover O&M and extensions costs.
- Enhance capacity building for NGOs, private operators and communities to access appropriate WSS professional support.
- Encourage efficiency and improve targeting of investments in rural areas through appropriate financing mechanisms (e.g., smart investments, output-based aid etc.) and empowering local governments. Implement operational plan five.

#### Sustainability of Urban Water Supply

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>65%</td>
<td>74%</td>
<td>70%</td>
</tr>
</tbody>
</table>

**Key issues to be addressed to improve sustainability**

- Review the legal/policy framework to encourage the domestic private sector to be involved in investing and management of water services in urban areas; establish and improve regulation.
- Review and allocate financial flows in the sub-sector sufficient to reach the MDGs, taking into account the urban poor. Improve regulation.

#### Sustainability of Rural Sanitation

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>67%</td>
<td>50%</td>
<td>59%</td>
</tr>
</tbody>
</table>

**Key issues to be addressed to improve sustainability**

- Enhance coordination for rural sanitation and hygiene at the local government level.
- Improve/adapt tools for use in promoting S&H in rural areas to meet national goals/MDGs and, improve monitoring and reporting.
- Finalise assessment of investment requirements to meet MDGs and ensure sufficient financial flows from government and other off-budget sources.

#### Sustainability of Urban Sanitation

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>52%</td>
<td>25%</td>
<td>39%</td>
</tr>
</tbody>
</table>

**Key issues to be addressed to improve sustainability**

- Implement sanitation master plans for Kampala and 14 other towns, and integrated strategy recommendations, including sanitation promotion techniques.
- Promote small operators/entrepreneurs involvement in sanitation services provision (construction, excreta/sludge/solid waste transport and disposal in environment friendly dumping sites, and treatment) in urban areas and build their capacity as appropriate
- Increase financial flows in the sub-sector to reach the MDGs from both on-and off-budget sources, and allow cost recovery/ funds transfer to cover the costs of managing and expanding urban sanitation.
- Promote social marketing.

#### Sustainability of Small Towns Water and Sanitation

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>72%</td>
<td>35%</td>
<td>54%</td>
</tr>
</tbody>
</table>

**Key issues to be addressed to improve sustainability**

- Define and implement appropriate cost-effective technical standards for small town systems.
- Build capacity of the private sector to build facilities, manage contracts and efficiency.
- Increase financial flows in the sub-sector sufficient to reach the MDGs from both on-budget and off-budget (including DPS) sources, and ensure that tariffs cover at least O&M costs.
Notes


Acronyms

CBOs Community Based Organisations
DPS Development Partners
DWD Directorate of Water Development
DWSC District Water and Sanitation technical Committees
EHD Environmental Health Division
EHMIS Environmental Health Information Management System
GoU Government of Uganda
GPOBA Global Partnership on O utput-Based Aid
HIASS Health Inspectors Annual Sanitation Survey
IFC International Finance Corporation
MDGs Millennium Development Goals
M&E Monitoring and Evaluation
MES Ministry of Education and Sports
MOH Ministry of Health
MGLSD Ministry of Gender, Labour and Social Development
MFPE Ministry of Finance, Planning and Economic Development
MTEF Medium Term Expenditure Framework
MIS Management Information System
MWE Ministry of Water and Environment
NGOs Non-Governmental Organisations
NSDS National Service Delivery Survey
NWSC National Water and Sewerage Corporation
O&M Operations and Maintenance
PEAP Poverty Eradication Action Plan
PRSP Poverty Reduction Strategy Paper
PQAD Planning and Quality Assurance Department
RWSS Rural Water Supply and Sanitation
SIM Sector-Wide Investment Model
SIP Sector-Wide Investment Plan
SWAp Sector-Wide Approach
TSU Technical Support Units
UBOS Uganda Bureau of Standards
UDHS Uganda Demographic and Health Survey
UNHS Uganda National Household Survey
UNICEF United Nations Children's Education Fund
UWASNET Ugandan Water and Sanitation NGO Network
WHO World Health Organisation
WSC Water and Sanitation Committee
WSS Water Supply and Sanitation

References

A. MDG Outlook

1. Is Zambia on the right track to reach the MDGs for water and sanitation?

According to the Central Statistics Office (CSO), Zambia had a population of just under ten million in 2000, with an annual average population growth rate of 2.4 percent, (with 1.5 percent for urban and three percent for rural areas). The rural population is 65 percent while 35 percent live in urban areas. CSO population projections indicate that Zambia's population in 2005 was 11.6 million; four million in urban areas and 7.6 million in rural areas. The rural population is projected to rise to 8.96 million by 2010 and 10.65 million by 2015. Taking 30 percent of the current population as 'served', approximately 8.2 million people will need to be served by 2015 to reach the MDGs.

In 2002, Zambia had 53 percent coverage for water supply (37 percent rural and 86 percent urban), and 23 percent sanitation coverage (13 percent rural and 41 percent urban). The government's 2005 MDG status report suggests that Zambia could potentially achieve the targets, if it continues to implement reforms and strategies laid out in its comparatively progressive policy framework. But to meet the MDG targets of 74 percent for water supply and 42 percent for sanitation, the sector needs to increase the number of people gaining access by about six times for water supply and three times for sanitation annually. If the Government of the Republic of Zambia (GRZ) and donors can commit and fulfil their obligations to current policies and strategies, Zambia would potentially reach the MDGs for RWSS. In urban areas, while some investment requirement assessments have been made, the GRZ has not yet accepted these or defined an MDG roadmap.

2. Main issues to be addressed

As noted above, Zambia has the potential to achieve the MDGs for water supply. It has a sound enabling environment of reformed institutions, policy and strategy, and commitment to developing...
Measures to improve national strategies
• GRZ needs to develop an MDG roadmap for urban WSS and operationalise the NRWSSP; discussions are ongoing for both of these.
• GRZ needs to elaborate a national policy for water supply and sanitation. This is currently under preparation by MLGH.

B: Sector Preparedness Overview

I. National Strategies

The Government of the Republic of Zambia (GRZ) has a comparatively progressive policy framework contained in the National Water Policy of 1994, which is based on principles of separation of water resources management from WSS; separation of regulatory and executive functions; devolution of authority to local authorities and private enterprise; achieving eventual full cost recovery for WSS through user fees; human resources development to develop more effective institutions; use of appropriate technologies; and increased government priority and budget spending to the sector.

Following the 1994 Water Policy, the 1997 Water Supply and Sanitation Act, established an independent water regulator and created ten water utilities in urban areas, which are expected in the long term, to be commercially viable.

Coverage targets and investment requirements¹

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2002</th>
<th>2015 Target</th>
<th>Add Pop to be covered (m/year)</th>
<th>Total Investment Required</th>
<th>Public Invest Required</th>
<th>Planned Public Invest.</th>
<th>Surplus (Funding Gap)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Access (%)</td>
<td>Access (%)</td>
<td>Access (%)</td>
<td>New</td>
<td>Rehab</td>
<td>Total</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td></td>
<td></td>
<td>(ms/year)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>29</td>
<td>37</td>
<td>75</td>
<td>0.82</td>
<td>-</td>
<td>14.9</td>
<td>2.3</td>
<td>17.2</td>
</tr>
<tr>
<td>Urban</td>
<td>86</td>
<td>86</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>53</td>
<td>74</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sanitation</td>
<td></td>
<td></td>
<td></td>
<td>(ms/year)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>4</td>
<td>13</td>
<td>60</td>
<td>0.3</td>
<td>-</td>
<td>2.3</td>
<td>-</td>
<td>2.3</td>
</tr>
<tr>
<td>Urban</td>
<td>33</td>
<td>41</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>23</td>
<td>42</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: GoZ, 2005; GoZ, 2006.

coherent WSS programmes. However, success will depend on whether the current policies and strategies are implemented and momentum maintained, particularly as relates to sector financing and cost recovery. Some of the core issues to be addressed include:

• **Institutional clarity:** Non-adherence to agreed policy of separating functions in the sector. For example, water resources from water supply functions, resulting in institutional conflicts.
• **Budget constraints:** Budget allocations and expenditures for WSS are low compared to WSS policies and strategies.
• **Limited co-ordination amongst sector stakeholders,** and in particular, poor co-ordination between ESAs and NGOs’ input in decision making, and cross-ministerial support. The key donors in the sector, together with international NGOs, do hold regular informal meetings. Currently, efforts are being directed at formalising donor co-ordination as part of the development of the Joint Assistance Strategy for Zambia (JASZ).
• **Weak M&E system** for tracking results, including poor management information systems, lack of review mechanisms for WSS activities whether on- or off-budget.
• **Inadequate institutional and financial capacity** within local authorities and commercial utilities, for example to increase efficiencies and recover costs.
• **There is also a need to empower commercial utilities and local authorities** to carry out their sanitation functions.
The institutional framework for rural WSS, adopted by the government in 2004, provides a strong basis and key principles for effective management of services, built on devolved authority for RWSS to the local authorities and communities and the WASH E (Water, Sanitation and Health Education) concept to promote both sanitation as well as environmental health and the promotion of community management in order to ensure service sustainability. A number of other strategies also exist, notably the Strategy and Institutional Framework for the Water and Sanitation Sector (1995), which specifies the institutional arrangements for provision of WSS by local authorities; National Environmental Sanitation Strategy (1998) aimed at raising the profile and delivery of sanitation in provision of basic social services, the Community Water Supply and Sanitation Strategy (2000) targeted at RWSS; and Mainstreaming Gender in Water Supply and Sanitation Sector (2000). The Water Resources Action Programme (WRAP) aims to create a National Water Authority, promote decentralisation of water resources management to catchment level, and create a new water resources management law.

Despite all these strategies, the water component of the PRSP has been rather poor, and the sector largely sidelined, in terms of government financing. In the PRSP implemented between 2002 and 2004, only 3.5 percent of the budget was allocated to the water sector of which only 32 percent of the allocation to RWSS was actually spent. An attempt to redress this has been made with the development, in 2005, of the National Rural Water Supply and Sanitation Programme (NRWSSP) which is the MDG Roadmap for RWSS in Zambia. Unfortunately, the budget for the NRWSSP and the water sector included in the Fifth National Development Plan (2006-2010), and which has replaced the PRSP, is still very low. Similarly, the FNDP provides a limited budget for urban WSS.

2. Institutional Arrangements

The Ministry of Energy and Water Development (MEWD) is responsible for water resources management, while the Ministry of Local Government and Housing (MLGH) is responsible for WSS service delivery. Within MLGH, the Department of Infrastructure and Support Services (DISS) implements WATSAN policies, including facilitation of urban and rural infrastructure development and rehabilitation, and supporting local service delivery through local government. At the regional level, the Provincial Local Government Officer (PLGO) supervises and monitors activities of the District WASHE (D-WASHE) committees. The D-WASHE comprises all line ministries represented at the District level. However, under the new institutional framework for RWSS and in line with the decentralisation policy (2002), all WATSAN functions are to be devolved to local authorities. Recognising the institutional weakness of most local authorities, the GRZ is working to strengthen this local authority function through the NRWSSP and a Local Development Programme (LDP), which is currently under preparation. In urban areas, ten commercial water utilities (two covering a district; three covering one province; and the remaining five covering a province each) have been created to provide WATSAN services.

The utilities’ activities are regulated by an independent regulator (NWASCO). Although the CUs are expected to operate commercially and be financially self-sustaining in the long term, they currently have access to financing for peri-urban services through the Devolution Trust Fund (DTF). Other agencies responsible for water include the Ministry of Health (MoH) and the Ministry of Education (MoE), for hygiene promotion and school sanitation respectively. The Ministry of Community Development and Social Services (MCDSS) plays a role in community mobilisation for basic social service delivery. The Ministry of Finance and National Planning (MFNP) at the national level is the main channel for intra-governmental fiscal transfers. The ministry links its activities to the line ministries through a Sector Advisory Group (currently chaired by the Permanent Secretary of MEWD, but there are discussions for it to be co-chaired with MLGH). Currently, the MFNP is developing an Intergovernmental Fiscal Architecture (IFA) to facilitate devolution of financial resources to local authorities for service delivery. It is also looking

<table>
<thead>
<tr>
<th>Measures to improve institutional arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clarify and enforce institutional roles at national level.</td>
</tr>
<tr>
<td>• Finalise and operationalise the IFA and the capacity building components for local authorities as enunciated in the new institutional framework for RWSS, the LDP and the NRWSSP.</td>
</tr>
</tbody>
</table>
at ways to link district plans into the MTEF process. The MFNP, through its Economic and Technical Co-operation (ETC), and the Department of Debt Management, is responsible for overall co-ordination of external assistance, including development banks and other donors.

3. Sector Financing

Current projections for sector finance suggest that without substantial increases, the MDGs are unlikely to be met. While investment requirements for urban WSS have not been agreed by GRZ, it has prepared a costing estimate for RWSS. This estimate, prepared through the NRWSSP (2006-2015) suggests a total requirement of about US$362 million, covering US$260 million in capital costs, US$45 million in operating costs at district level, US$11 million at community level, US$27 million in sector development costs, and US$18 million for the national operating budget. The investment requirement starts with about US$30 million for the year 2006/07, peaking to about US$50 million for the year 2015, with an annual requirement ranging between US$28 million and US$47 million.

Compared with these investment needs, currently planned donor funding amounts to US$90 million leading up to 2010. Donor funding in Zambia tends to be on a project-based approach, although steps are being made towards harmonisation, for example by formalising the Informal Donor Group (IDM), finalisation of the aid policy and working towards common approaches and procedures. Additionally, the GRZ is moving to improve service delivery and build capacity within the local authorities, building on the recently completed Zambia Social Investment Fund (ZAMSIF).

Full cost recovery from consumer fees over the long term, is one of the seven principles of the national water policy. Despite over 13 years of reform, cost recovery still eludes the commercial water utilities whose tariffs are generally at least 30 percent below cost of operation and maintenance. Cost recovery is almost non-existent in RWSS where most communities do not pay anything for their WSS. Strategies to move towards cost recovery are a pressing need.

4. Sector Monitoring and Evaluation

Currently, sector information is compiled from central statistics figures, annual reporting from NWASCO, the regulator, and occasional sector assessments, as was carried out in the recent peri-urban baseline study undertaken by NWASCO. While good management information systems exist for urban WSS through NWASCO, the rural sub-sector lacks a structured M&E framework. In particular, M&E activities need to be linked to the MLGH, which has ultimate responsibility for planning and monitoring developments in the sector. To address this issue, a M&E system for RWSS has been implemented in three provinces by the MLGH. Plans and funding to roll it out nationwide are in place with support from donors. Part of this work involves getting agreement on key concepts and definitions in the sector.

5. Sector Capacity

Overall, Zambia’s water sector requires significant capacity at national and decentralised levels in order to meet the MDG targets. At a national level, capacity building needs to focus on human resources,
systems and facilities geared towards regulation, management, facilitation standard setting, policy and strategy making. Strengthened WATSAN functions within MLGH, for both urban and rural WSS is needed. At the regional and district levels, capacity needs include skilled workers as well as facilities and systems for management, and planning supervision, procurement, finance administration, and advocacy. M&E management information systems are needed at the district, regional, and national levels.

From a strategic perspective, the WSS policy and legal framework needs to be revised to address the present shortcomings, especially with respect to RWSS regulation, clarification of roles and responsibilities at national, district, and community levels, and WSS service levels. Budget mechanisms to strengthen and streamline fund disbursement to the district level are needed, as are rational staffing and facility planning at the district, regional, and national levels. Functionally, operational manuals for policy and strategy, as well as a coherent plan on sanitation would be helpful.

### Measures to improve sector capacity

- Strengthen the technical, policy, planning and supervisory functions of the Ministry of Local Government and Housing
- Strengthen the technical, planning and commercial functions of the commercial utilities so that they can achieve self-sufficiency.
- Develop and strengthen the WATSAN functions of the local authorities in the rural districts
- Establish a WSS Centre of Excellence as a key instrument for offering training to different cadres of staff for the sector.

### C: Sustainability Scorecard

This section provides a ‘quantitative’ and qualitative assessment of overall sector and sub-sector sustainability by assessing the status of ‘success factors’ with regard to institutional and financial aspects of sustainability as recognised in the literature and among practitioners. Performance on the ‘success factors’ is captured by specific questions. The scores range from 0-100 percent.’

<table>
<thead>
<tr>
<th>Overall Sector Sustainability Score</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>63%</td>
<td>42%</td>
<td>53%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Rural/Small Town WS</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>47%</td>
<td>53%</td>
<td>50%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Score for Urban Water Supply</th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>74%</td>
<td>32%</td>
<td>53%</td>
<td></td>
</tr>
</tbody>
</table>

### Key issues to be addressed to improve sustainability

**Overall Sector Sustainability Score**

- The NRWSSP needs to be finalised, with a focus on sanitation. Institutional roles at a national level are needed, particularly for sanitation.
- Additional funding needs to be secured, while capacitating the district councils and utilities financially and otherwise.

**Sustainability Score for Rural/Small Town WS**

- A strategy for fiscal flows needs to be developed, along with clear policies and mechanisms to recover operations and maintenance costs, in order to address the financing gap.
- These issues should be addressed in a separate strategy or policy for small towns.

**Sustainability Score for Urban Water Supply**

- The policy and legal frameworks for the commercialised utilities needs to be reviewed to allow them to perform more commercially, particularly to achieve full cost recovery.
- Attention needs to be paid to the informal settlements that have developed around all major cities and towns, and illegal borehole drilling.
### Sustainability Score for Rural Sanitation

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>43%</td>
<td>31%</td>
<td>37%</td>
</tr>
</tbody>
</table>

### Sustainability Score for Urban Sanitation

<table>
<thead>
<tr>
<th></th>
<th>Institutional</th>
<th>Financial</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32%</td>
<td>34%</td>
<td>33%</td>
</tr>
</tbody>
</table>

### Key issues to be addressed to improve sustainability

- The government needs to develop a strategy for sanitation and hygiene promotion, in collaboration with other line ministries and local government agencies.

- All of the commercialised utilities need to develop sewerage plans with appropriate cost recovery mechanisms.

- A national sanitation policy needs to be developed and the roles and responsibilities of the commercialised utilities in on-site sanitation needs to be reviewed and agreed.
Zambia

Notes

1. It is generally accepted that these Central Statistics Office (CSO) figures are not very accurate due to a lack of clarity on definitions of coverage. More up to date and accurate figures from the latest Peri-Urban Baseline Study for instance, suggest that the coverage in such areas is as low as 47 percent. There is clearly an urgent need for all relevant stakeholders in Zambia to develop consensus around the definition of coverage so as to ensure reliable MDG targeting based on reality on the ground.

2. Figures worked out from draft FNDP 2006.

3. Investment figures for both water and sanitation for rural areas are taken from the draft NRWSSP 2005, and cover only capital costs.

Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUs</td>
<td>Commercial Utilities</td>
</tr>
<tr>
<td>CSO</td>
<td>Central Statistics Office</td>
</tr>
<tr>
<td>DISS</td>
<td>Department of Infrastructure and Support Services</td>
</tr>
<tr>
<td>DTF</td>
<td>Devolution Trust Fund</td>
</tr>
<tr>
<td>D-WASHE</td>
<td>District Water Sanitation and Health Committee</td>
</tr>
<tr>
<td>ESAs</td>
<td>External Support Agencies</td>
</tr>
<tr>
<td>ETC</td>
<td>Economic and Technical Co-operation</td>
</tr>
<tr>
<td>FNDP</td>
<td>Fifth National Development Plan</td>
</tr>
<tr>
<td>GRZ</td>
<td>Government of the Republic of Zambia</td>
</tr>
<tr>
<td>IDM</td>
<td>Informal Donor Group</td>
</tr>
<tr>
<td>IFA</td>
<td>Inter-governmental Fiscal Architecture</td>
</tr>
<tr>
<td>JASZ</td>
<td>Joint Assistance Strategy for Zambia</td>
</tr>
<tr>
<td>LDP</td>
<td>Local Development Programme</td>
</tr>
<tr>
<td>MCDSS</td>
<td>Ministry of Community Development and Social Services</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MEFWD</td>
<td>Ministry of Energy and Water Development</td>
</tr>
<tr>
<td>MLGH</td>
<td>Ministry of Local Government and Housing</td>
</tr>
<tr>
<td>MoE</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>MoFNFR</td>
<td>Ministry of Finance and National Planning</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non-Governmental Organisations</td>
</tr>
<tr>
<td>NRWSSP</td>
<td>National Rural Water Supply and Sanitation Programme</td>
</tr>
<tr>
<td>NWASCO</td>
<td>National Water and Sanitation Council</td>
</tr>
<tr>
<td>PLGO</td>
<td>Provincial Local Government Officer</td>
</tr>
<tr>
<td>PRSP</td>
<td>Poverty Reduction Strategy Paper</td>
</tr>
<tr>
<td>RWSS</td>
<td>Rural Water Supply and Sanitation</td>
</tr>
<tr>
<td>WASHE</td>
<td>Water, Sanitation and Health Education</td>
</tr>
<tr>
<td>WATSAN</td>
<td>Water and Sanitation</td>
</tr>
<tr>
<td>WRAP</td>
<td>Water Resources Action Programme</td>
</tr>
<tr>
<td>WSS</td>
<td>Water Supply and Sanitation</td>
</tr>
<tr>
<td>WSSCC</td>
<td>Water Supply and Sanitation Collaborative Council</td>
</tr>
<tr>
<td>ZAMSIF</td>
<td>Zambia Social Investment Fund</td>
</tr>
</tbody>
</table>

References

Benin
The World Bank
Route de l'Aéroport
Face Hotel Marina ex Sheraton
Boîte Postale 03-2112
Cotonou, Benin
Telephone: +229-21-305857/49
Telefax: +229-21-301744
Contact Persons: Madio Fall or Sylvain Migan
Email: mfall2@worldbank.org, samigan@worldbank.org

Burkina Faso
The World Bank
179, Avenue du President Saye Zébro
Zones des Ambassades, Kouloba
Boîte Postale: 01 BP 622
Ouagadougou 01, Burkina Faso
Telephone: +226-50-496300
Telefax: +226-50-496364
Contact Person: Seydou Traoré
Email: straore4@worldbank.org

Democratic Republic of Congo
The World Bank
Avenue Wagenia, No. 4847
Kinshasa-Gombe
Democratic Republic of Congo
Telephone: +243-99-9807817
Contact Person: Georges Kazad
Email: gkazad@worldbank.org

Ethiopia
The World Bank
Africa Avenue, Bole Road
P.O. Box 5515
Addis Ababa, Ethiopia
Telephone: +251-11-6827700
Telefax: +251-11-6827717
Contact Person: Belete Muluneh
Email: Bmuluneh@worldbank.org

Kenya
World Bank
Hill Park Building, Upper Hill
P.O. Box 30577, 00100
Nairobi, Kenya
Telephone: +254-20-3226334
Telefax: +254-20-3226386
Contact Person: Patrick Mwangi
Email: pmwangi2@worldbank.org

Mozambique
The World Bank
Avenue Kenneth Kaunda, # 1224
Caixa Postal 4053
Maputo, Mozambique
Telephone: +258-1-482348
Telefax: +258-1-492893
Contact Person: Joseph Narkevic
Email: jnarkevic@worldbank.org

Niger
The World Bank
Niger Country Office
P.O. Box 12402
Telephone: +227-20-735929/734966
Telefax: +227-20-735566
Contact Person: Ibrah Sanoussi
Email: isanoussi@worldbank.org

Rwanda
The World Bank
Blvd. de la Revolution
SORAS Building
Kigali, Rwanda
Telephone: +250-591-300
Telefax: +250-591-365
Contact Person: Bruno Mwanafunzi
Email: bmwanafunzi@worldbank.org

Senegal
Water and Sanitation Program for West and Central Africa
3 Place de l’Indépendance, Immeuble SDIH
C/o The World Bank
B.P. 3296 Dakar
Senegal
Telephone: +221-849-5000/842-6584
Telefax: +221-849-5027/823-6277
Contact Person: Ousseynou Diop
Email: odio@worldbank.org

Tanzania
Water and Sanitation Program
50 Mirambo Street
C/O The World Bank
P.O. Box 2054
Dar es Salaam, Tanzania
Telephone: +255-22-2114575/7, 2116197
Telefax: +255-22-2113039
Contact Person: Nathaniel Paynter
Email: npaynter@worldbank.org

Uganda
The World Bank
Plot 1, Lumumba Road
Rwenzori House, 4th Floor
P.O. Box 4463
Kampala, Uganda
Telephone: +256-41-230094/302256
+256-31-2214167
Telefax: +256-41-230092
Contact Person: Samuel Mutono
Email: smutono@worldbank.org

Zambia
The World Bank
Anglo American Building, 3rd Floor
74 Independence Avenue
P.O. Box 35410
Lusaka, Zambia
Telephone: +260-1-252811/253219
Telefax: +260-1-254283
Contact Person: Barbara Kazimbya-Senkwe
Email: bkazimbyasenkwe @worldbank.org