Governance and Financing of Water Supply and Sanitation in Ethiopia, Kenya and South Africa

A Cross Country Synthesis
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1. Introduction

Recent country studies of the water and sanitation sector (WSS) in Ethiopia, Kenya and South Africa have captured initial baseline data on institutional structures and resource flows in three rapidly changing contexts. This report is intended to synthesize the findings of the country studies and identify the key institutional and resource flow issues affecting the effectiveness, efficiency and sustainability of water sector investments. It also makes recommendations on further work required in these three countries and on approaches to replicating the study in other countries in Sub-Saharan Africa.

The country studies and this synthesis have been inspired by the WSS Millennium Development Goals (MDGs) which aim to half the number of people without access to water and sanitation by 2015. There is an emerging consensus on two key issues related to the WSS MDGs:

- WSS goals cannot be seen in isolation from other MDGs, particularly those related to basic health care. Indeed, the interdependencies between these goals need to be actively strengthened in the implementation process if sustainable and appropriate outcomes are to be achieved.
- While additional financing for the sector will be required to meet these goals, there is an emerging consensus that the efficiency and effectiveness of existing expenditures need to be enhanced in order to make rapid and sustainable progress. The quality and coherence of institutions (in terms of governance arrangements and processes) is generally held to be the primary factor behind improved productive efficiencies and development effectiveness, both in the WSS and elsewhere.

Considerable variation exists between countries in sub-Saharan Africa both with respect to WSS institutions and resource flows as well as the availability of key data sets. Despite these inconsistencies, considerable value exists in undertaking a synthesis of this nature, including supporting ongoing refinement of country study methodologies, developing approaches to output and outcome benchmarking between countries, providing scope for shared learning between countries and identifying common support requirements.

This paper represents a preliminary step in the collation and evaluation of the individual country studies. It is primarily a comparative evaluation of the key features and challenges in the three countries. As a synthesis of the country reports, it is relies heavily on them for data and analysis and should be read in conjunction with these studies for a more detailed understanding of the individual country contexts and issues. Given the significant contributions made to this paper by each of these reports they are acknowledged here rather than throughout the document, unless significant paraphrasing or direct quotations are used. As such, this report is also limited by the availability of data reported in the country studies. These country studies are, in turn, first efforts at capturing the complex set of institutional and financial mechanisms that define the WSS. They have been developed during a period of rapid change in all three countries. In future years considerably more information is likely to become available.

2. The conceptual framework for the synthesis

The level of WSS expenditure, while important, is not in itself an indicator of the effectiveness, efficiency or sustainability of investments. Information on spending levels and assignments tends to measure progress in absolute (and nominal) rather than relative (and real) terms, and thus ignores the opportunity costs of spending. In other words, improvements in the quality of spending are largely ignored.
Although the absence of data often prevents meaningful analysis of these issues an analysis of the development of systems and procedures to improve efficiencies is possible, and indicates what measurements may be possible in future. The literature emphasizes the “quality of governance” as the key determinant of effective spending. For the purposes of this synthesis, and in order to explicitly allow for data constraints that are prevalent in the three countries being studied, issues related to the robustness of monitoring and evaluation systems are also emphasised.

Thus, for the purposes of this synthesis, two dimensions to the evaluation of the sustainable provision of water and sanitation services are proposed. These are sector governance and sector finance.

2.1 Sector Governance

Both public finance and water sector literature consistently emphasize the quality of governance, or the policies and institutions that manage expenditures on service delivery and sector regulation, as the most important determinant in the efficiency and effectiveness of public expenditure. Getting policies right and building well-functioning institutions enhances the quality of public spending and leads to better development outcomes. Although there are no standard prescriptions on organisational structures, the key design principles and features that are emphasised are:

- **a) Clarity of policy and legal frameworks:** Sector policy frameworks need to clarify roles and responsibilities of different stakeholders, specifically through delineating clear functional and geographic jurisdictions. More recently emphasis has been placed on creating an institutional separation between policy making, regulatory and implementation functions (often called the authority-provider or client-contractor split), with clear rules and protocols to govern interactions between these stakeholders. If private sector partners are to be attracted into the sector then clear commitment to the implementation of basic contract law and a clear framework for regulatory interventions is a critical pre-requisite.
  
  Many countries, including those in this study, are struggling to conceptualise two aspects of this institutional framework, namely:

  - The role of an independent regulator that, in design terms at least, is intended to mediate the relationship between client and contractors.
  - The powers of recourse existing between stakeholders. The existence of robust contract law may assist in reducing regulatory risk in more developed legal systems. However, powers to sanction non-performance by public sector providers are often absent or under-utilised.

- **b) Accountable service providers:** Frameworks and practices that enhance the accountability of service providers extend beyond the definition of functional jurisdictions or formal regulatory interventions. Specifically, they include the alignment of fiscal powers with functions, the internalisation of accountability for capital and operating expenditure decisions, the extent to which consumers are able to exercise choice or voice over service delivery mechanisms and the definition of responsibilities within organisations.

This synthesis evaluates the extent to which the basic conditions for good governance exist.

2.2 Sector Finance

Sector finance is traditionally viewed in terms of the adequacy of the financial resources available to the sector. This can be assessed in terms of allocations to the sector relative both to other development sectors (such as health or education) and to the costs facing the sector, as well as through reviewing the channels and sources of sector financing within a service provider framework.
While the adequacy of resources is important the performance of sector finance (in terms of both its efficiency and equity) are key determinants of the long term sustainability of spending. They can be measured through an evaluation of productive efficiencies and development effectiveness.

Productive efficiency measures the absolute impact of spending. This recognises that a unit’s worth of public spending does not necessarily buy an equivalent unit’s worth of service. While spending may support service development and delivery, it may be the case that it does not create any productive capital. There are a number of reasons why this may be the case including corruption, inefficiency in the delivery process and instances when the public sector undertakes activities that are best performed by the private sector, and thus displaces private sector effort. In these respects it is important to distinguish between public expenditures (made through the public budgeting process) and those of non-government role players. Ideally, longitudinal unit cost data can provide a basis for measuring improvements in the unit cost of producing services although this is not currently possible.

Development effectiveness measures the impact of spending relative to key development priorities and programmes. Key to this concept is the equity of spending, which measures the distribution of resources relative to social needs. Indicators include the distribution of funding by indicators of poverty and relative need, which should preferably move beyond income poverty indicators. The positive correlation of spending to basic health indicators is often preferred, as is an assessment of the extent of rural bias in funding.

However, in the context of severe data limitation the key baseline issues relevant to the assessment of development effectiveness include the quality of available expenditure information and analysis, the existence of a medium-term, policy-sensitive perspective and structure in budgeting, compliance with basic public financial management standards and timelines, a performance focus with clear associated programmes and incentives and participative and transparent decision making processes. These baseline issues are thus directly linked to issues of sector governance: in many cases the planning, budgeting and monitoring systems fail to create the necessary linkages between inputs, outputs and outcomes. Thus, the three dimensions of development effectiveness that are commonly assessed are:

a) **Transparent planning processes**: Participatory planning systems are, in particular, thought to deliver far greater allocative efficiencies through ensuring the scale and design of investments responds to effective user demand. Planning systems need to explicitly identify policy priorities and provide a framework for their translation into capital and recurrent spending priorities. On the capital side, the selection of projects has historically been determined through political processes modified, at least retrospectively, by resource constraints. In this model, investments are contested between politicians with an eye on future electoral performance. Little evaluation of social and economic returns on investment is usually undertaken, nor its impacts on longer term sustainability of services.

b) **Good budgeting and expenditure management**: Fragmented budgets and an exclusive focus on inputs have undermined the ability of the budget systems to discipline policy making and to facilitate performance feedback that would in turn improve outcomes. As a result, public spending has historically benefited the rich rather than the poor, money has failed to reach frontline service providers and service quality has been low for poor people. The development of medium term budgeting systems provides:

   - A platform to link policies and plans to budgets, through the use of multi-year revenue and spending projections with associated trade-offs, that results in greater fiscal discipline
   - A predictable, hard budget constraint
   - A basis for improved efficiency in resource allocations, due to their comprehensiveness
- improved accountability, through increasing transparency and legibility of the budget process
- a credible budget process (fiscal calendar)

Alongside this requirement of good governance is the need for coherent and comparable accounting standards. Coherence refers not only to formal reporting standards but also to expenditure monitoring systems such as the use of appropriate and comparable activity based costing (ABC) methodologies that directly link policy priorities to spending programmes. Comparability is required both between agencies and countries. In the longer term inter-country comparisons should be more readily applicable with the adoption of IMF standard for national accounts (the GFS), but at sub-national level accounting reforms are subject to national standards.

c) The robustness of monitoring and evaluation systems: The coverage, quality and timeliness of WSS management information systems is critical to the monitoring of sector performance and the ongoing evaluation of the appropriateness of investment outcomes. Information systems have both financial and service delivery components. The efficacy of these systems depends on the integration of these two aspects, the use of indicators that are appropriate relative to desired outcomes and the speed at which information is made available.

Typically the scope of financial information exceeds its quality and overshadows the availability of service delivery information. This synthesis evaluates the timeliness, coverage and appropriateness of available information relative to desired outcomes, and suggests key baseline research requirements for the future.

Considerable quantitative information is required for the evaluation of efficiencies and distributive equity that in many cases is not yet available; particularly as the use of activity based costing methods are not widespread and regionally based data sets are not available. This synthesis, however, identifies key baseline information required to generate baseline data for their study.

3. An overview of the water and sanitation sectors

This section provides a broad comparative overview of the WSS in Ethiopia, Kenya and South Africa.

3.1 Coverage

People in Ethiopia, Kenya and South Africa have vastly different levels of access in water and sanitation services. Only 26.8% of the population have access to a basic minimum level of service in Ethiopia, while 64.2% have access in Kenya and 84.5% have access in South Africa. In all countries the levels of access are significantly higher in urban areas, as shown in table 1.

Ethiopia’s level of water services coverage is among the lowest in the world, with 26.8% of the population having access to basic services. The situation is worse in rural areas, where only 16.9% of the population have access to safe water and 6% to adequate sanitation services. Only 57% of the population in urban areas have access to adequate sanitation services. The conditions of basic access to services, in terms of the distance to and quality and reliability of water services, are also poor. For instance, rural water supply in Ethiopia is provided mostly through point sources. Time and effort spent on fetching water is a major concern among poor women in rural areas. Results from a 1998 welfare monitoring survey suggest that a third of rural population has to walk more than one kilometre to fetch water. Another problem is poor sustainability of sources in rural areas with an estimated 26 to 57 percent of the rural schemes not functioning. A key issue in urban areas is the poor reliability of supply, both in terms of quantity and breakdowns, which primarily affect the poor (WSP-Af, 2003b).
Table 1: Level of water access and provider shares (% of serviced population)

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent of Total Population Served</th>
<th>Share of served population by type of WSP...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central or regional government / central utility</td>
<td>Local government/ local utilities</td>
</tr>
<tr>
<td>Ethiopia (1998)</td>
<td>Urban 85.7</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Rural 16.9</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Total 26.8</td>
<td>-</td>
</tr>
<tr>
<td>Kenya (2001)</td>
<td>Urban 94.1</td>
<td>37.9</td>
</tr>
<tr>
<td></td>
<td>Rural 48.1</td>
<td>65.6</td>
</tr>
<tr>
<td></td>
<td>Total 64.2</td>
<td>51.4</td>
</tr>
<tr>
<td>South Africa (2001)</td>
<td>Urban 71</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Rural 29</td>
<td>14.6</td>
</tr>
<tr>
<td></td>
<td>Total 84.5</td>
<td>7.0</td>
</tr>
</tbody>
</table>


Kenya’s levels of coverage also differ significantly between urban and rural areas, with under half of the rural population having reliable access. There are reports that levels of coverage have declined due to the collapse of some large rural water schemes and operational problems experienced in others. 64% of the urban population has access to basic water services, but again poor people are likely to receive an inferior quality of service and it is reported that coverage does not provide a good indication of the level of service. In many instances the cost of service is higher for poor households due to the difficulties of gaining reliable access. Sanitation access is reportedly very high, with 87% of the population having access, including 97% of urban residents and 82% of rural residents respectively.

South Africa’s levels of coverage are high in comparison, at 84.5%. Levels of water and sanitation access are 85% and 82% respectively. Recent census data has revealed that South Africa has improved water access by 5% between 1996 and 2001, although made no progress in improving sanitation coverage. Improvements in water sector coverage have been offset by sustainability problems in rural areas. This has led government to decentralise funding programmes in order to ensure that communities are willing and able to pay for services. Municipal restructuring in South Africa has removed the formal distinction between urban and rural areas. However, this paper estimates¹ that water and sanitation coverage levels are approximately 71% and 67.5% respectively in urban areas and 29% and 32% respectively in rural areas.

Thus, despite significant differences between countries in the level of coverage, similar distinctions are evident in the level of coverage in between urban and rural areas and common problems exist in the sustainability of access, particularly in rural areas.

3.2 Institutional arrangements

Diverse institutional arrangements for the delivery water and sanitation services are employed in Ethiopia, Kenya and South Africa, although the public sector is the dominant water services provider in all three countries.

In Ethiopia, water and sanitation infrastructure is provided primarily by local governments (or “Woredas”) and the non-government sector, with central and regional governments accounting for under 4% of total WSS

¹ Based on Census 2001 data (Statistics SA, 2003)
expenditure. This reflects the significant decentralisation of sector functions over the last few years. Local government dominates all service provision in urban areas, while the non-government sector is the only provider in rural areas.

The Ministry of Water Resources is the main sector role player at federal government level. Its role has changed, with decentralisation, from one of service provision to development facilitation, with provision functions being devolved to regional governments (the Regional Water Bureaus or RWBs) and Woredas. The Ministry is responsible for policy and strategy development and coordination with external financing agencies. With the enhanced role of regional and local government, the Ministry’s role is also to ensure effective monitoring and evaluation and provide capacity building support. With the envisaged policy emphasis on appropriate pricing in urban areas the federal government will also need to explore the possibility of an independent framework for economic regulation in the sector, although this has not yet been done (WSP-Af, 2003b).

The RWBs, along with their other responsibilities for water resources, are responsible for water and sanitation at the regional level. Regions are divided into administrative zones, each of which might have a water department tasked with supporting the development, implementation and regulation of WSS activities. In some of the larger regions, Woreda water offices with a small staff of two persons have been established (WSP-Af, 2003b). This trend will be strengthened in the coming years.

NGOs and donor agencies are also important sector role-players, with the Ethiopia Social Rehabilitation and Development Fund (ESRDF) being particularly significant. This agency provides grant funding through the national budget, which is partially financed by donors, to demand-driven, small and simple rural water supply and sanitation projects, provided that communities cover 10% of capital costs and all operating costs. The ESRDF has funded nearly 2000 small schemes serving an estimated 2 million people. Private sector involvement in the sector is limited to consultancy and construction services, reflecting a lack of demand over the past 2 decades.

With the government moving away from direct service provision, the notion of service providers for WSS services has become important. A number of different forms of service providers exist with considerable inter and even intra-regional variations, including the Addis Ababa Water and Sewerage Authority (AAWSA), the Urban Water Supply Services (UWSS), and Village Water and Sanitation Committees in rural areas. Some of the regions are in the process establishing Water Boards to oversee urban water supply services (WSP-Af, 2003b).

The Ethiopian water and sanitation sector is undergoing rapid decentralisation and associated restructuring. Government has yet to articulate its final vision for the sector in response to decentralisation, including the roles, institutions and capacity requirements of different entities. Detailing the role, legal basis, powers and regulatory accountability of service providers is an especially critical issue, as is the location and scope of monitoring and regulatory functions. Additionally, while integration of sanitation and hygiene with water schemes is mentioned in government water policy, institutional responsibilities are currently with the Health sector. Resolution of institutional and financial responsibilities thus also requires a critical emphasis. Government is currently finalising a Water Sector Development Programme to address these issues that will also include action plans, implementation and review guidelines.

In Kenya, the central government remains the dominant service provider, though local authorities in urban areas are becoming more important and non-government providers play a significant role in rural areas. The Department of Water Supply has historically played a direct service provider role, following the centralisation of water services responsibilities in 1974. A national public utility, the National Water Conservation and Pipeline Corporation (which reports to the Ministry) manages projects and provides services in specific areas. Collectively, these central agencies service 51.4% of the population and account for 45.3% of total water sector expenditure.
In urban areas the central government shares provider responsibilities with local governments. The latter services 27.6% of the population but only accounts for 23.7% of total expenditure (including, more recently, expenditure through wholly owned local utilities). Non-government agencies\(^2\) account for 31% of total sector spending and provide services to 11.6% of the urban population and 31.1% of the rural population. Local government plays an insignificant role in providing services in rural areas.

The national Department is also responsible for policy development, the allocation of water rights and the regulation of the water and sanitation sector. These functions focus on policy development and general administration. However, little formal regulation is reported to occur. The legal authority of local governments and non-governmental organisations to provide water services is unclear, and their performance not subject to credible monitoring (there is no reported recurrent expenditure on monitoring and evaluation).

The absence of a credible regulatory framework for sub-national or non-governmental service providers has resulted in inadequate reinvestment in the sector, due to water sector revenues being used to cross-subsidise other municipal activities and through the inability of these agencies to effectively access financial markets. 

**In South Africa**, municipalities are now primarily responsible for water and sanitation services, accounting for 93.3% of total sector expenditure and providing services to 89% of the population. However, in the past the national government (through the Department of Water Affairs and Forestry (DWAF) and publicly owned Water Boards) have installed and operated basic water services infrastructure in rural areas and the process of decentralising functions and assets is incomplete. Central government provides services to 7% of the population and accounts for 5.6% of total spending, all in rural areas. The non-government sector provides services to only 4% of the population and accounts for only 1.1% of sector expenditure. In urban areas this is predominantly private sector operators, while in rural areas it reflects the activities of community-based organisations in operating small schemes.

As a result of apartheid, urban local governments in formerly white areas have significant capacity and financial resources with which to deliver water services. Black, disadvantaged areas have lower levels of institutional capacity due to systematic underdevelopment. Central government (and its agencies) have taken the lead in managing existing services and providing infrastructure in these areas, often through nationally owned water boards\(^3\). However, until recently only limited attention has been paid to the sustainability of these investments as this approach emerged in response to the need to rapidly roll out water services after apartheid. Central government is now transferring schemes it has inherited or constructed to municipalities (water services authorities) with subsidies flowing from the national fiscus to municipalities, which in turn take decisions over the allocation of such subsidies. This has been possible due to the geographic restructuring of local government, although significant capacity differential remain between those municipalities in more and less urban areas\(^4\) (Palmer, 2003).

In policy and legal terms the separation of functions in the sector has advanced significantly since democratisation. Water and sanitation services are considered to be a single “water services” function, and a clear distinction is made between water services authorities (WSAs) and water services providers (WSPs). The WSA function, which is the statutory responsibility to provide services, is assigned to most municipalities\(^5\) by central

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\(^2\) Non-government agencies in urban areas commonly include small private sector providers operating through kiosks, vendors or with their own boreholes. In rural areas these agencies are typically community self-help groups, often supported by donor agencies.

\(^3\) There are 14 water boards in South Africa, whose primary responsibility is the provision of bulk services. Distribution functions are legally regarded as secondary activities that must be ring-fenced from primary operations and only undertaken with the agreement of the relevant water services authority.

\(^4\) Almost all municipalities now contain both urban and rural areas in their jurisdictions making this distinction speculative at best.

\(^5\) Only municipalities may become WSAs although the twotier structure of local and district government outside of metro areas implies a choice between the local bodies or the district in the WSA assignment. In general assignments have been made to local bodies other than in cases where capacity is limited. It should be noted that fiscal flows between these tiers do occur, but it is not possible to track them with any accuracy at this point.
government. In principle, and increasingly in practice, grant funding flows directly from the national fiscus to WSAs.

The actual delivery of services is undertaken by WSPs appointed by the authority, theoretically in terms of a formal contract. However, few formal contracts regulate these arrangements at present, although a number are reportedly under development. In practice most municipalities continue to perform both authority and provider functions for distribution functions, while they share the provider role with water boards in bulk functions (particularly in large urban areas). However, few water boards are involved in sanitation services provision and some debate exists as to whether WSAs should be compelled to use them as WSPs. DWAF has, however, clearly indicated that it does not wish to remain a WSP in future and will transfer all assets to WSAs. This is a complex process that will take many years, not least as these schemes are costly and tend to generate little revenue. The private sector and community based organisations are being encouraged to take up the role of WSPs, although only a few municipalities have shown interest in contracting these agencies to date. Similarly, few municipalities have established local public utilities for the provision of services.

Beyond the authority - provider distinction the regulation of the sector is currently fairly weak, relying on constitutionally established inter-governmental relationships. Municipalities generally cooperate with programmes established nationally and rely on their own political checks and balances to regulate in-house provider activities. However, in the few cases of private sector involvement there is a body of experience being developed on contract regulation. Sector support and regulation activities account for 3.4% of total sector expenditure (or $2.19 per capita annually), and is primarily directed to building WSA capacity enhancement (accounting for 1.9% of sector spending). Only 0.5% of sector expenditure (or $0.31 per capita annually) is provided for monitoring and evaluation activities, reflecting the limited and fragmented nature of national-level activities in this regard.

### 3.3 Sector reform programmes

Despite the significant differences in the countries under review there is a surprising commonality in the key governance issues they are now facing. All three countries under review have embarked on ambitious decentralisation programmes in the water and sanitation sector. These initiatives have been a result of the experience of centralised delivery systems, which have failed to either achieve or sustain basic service access. The reforms are predominantly institutional: focusing on the decentralisation of functional authority for service provision and reforming the regulatory arrangements for the sector.

**In Ethiopia**, an ambitious, multi-sector programme is being pursued to decentralise functions and resources to local government level. Government visualises devolving sector ownership and management autonomy to the lowest possible level and has developed a related emphasis on capacity building at this level. Fiscal decentralisation measures are being pursued in conjunction with this approach, including the introduction of a general-purpose block grant for local authorities and a move to full cost recovery for urban water services and partial capital cost sharing and full operating cost recovery for rural water schemes. Decentralisation is envisaged to bring with it more appropriate choices on the level of technology employed, relative to management and local financing capacity.

**In Kenya**, reforms are restructuring the role of national sector institutions and regional/ local service providers, through the appropriate separation of policy, regulation and service delivery functions. The national government is restricting its role to policy formulation, sector coordination, financing and research. The new arrangements will need to develop a well-informed and funded transfer programme, while paying attention to the role of local
authorities as well as the private sector, including small providers, and strengthening the legal basis and capacity of community-based service providers.

**In South Africa**, local government has been significantly restructured and water and sanitation functions progressively decentralised over the last 5 years. Currently, fiscal instruments are being restructured into an unconditional operating entitlement and a formula-driven, decentralised infrastructure grant for all municipal services. Sector regulation is also moving into the limelight, as evidenced by the attention it is receiving in the new draft water services 'White Paper' and the fact that DWAF has just set up a directorate specifically tasked with regulation, under its 'Policy and Regulation' branch. There are also some lessons beginning to emerge from a period of ad hoc regulation of the few private sector water services provider contracts in existence. While there is likely to be some consideration given to an independent regulator, the status quo with regard to regulatory responsibility at the national sphere remains: DWAF is the regulator. But it currently must play this role without a clear regulatory strategy with inadequate information.

### 3.4 Key issues in governance

Governance reforms in all three countries have required significant effort to be dedicated to the design and management of decentralisation programmes. Five key issues related to these decentralisation efforts are evident from this overview.

Firstly, considerable uncertainty on functional assignments to different role-players has, and in some cases continues to, afflict the sector. Sector policy frameworks have typically ignored or duplicated efforts to reform local government systems, leading to a duplication of reform efforts and overlapping assignment of responsibilities. Dovetailing local government and WSS reform efforts is a huge task, but one which is critical to building the capacity of local agencies to sustainably deliver services.

Secondly, the division of different responsibilities within the sector has been only partially accomplished. Typically, central level authorities continue to conflate all or some of their policy-making, regulatory and provision roles. Most often this reflects the absence of credible regulatory and policy-making functions. In particular, regulatory arrangements for the water services sector are in their infancy and need urgent attention in the coming years. However, it also reflects the absence of innovation with regard to institutional models for local level service delivery. Even in South Africa, where a clear legal distinction is made between authority and provider roles at the local level, few examples of concrete progress in institutionalising this split are evident.

Thirdly, with the decentralisation of decisions relating to services provider identification to municipalities, there are some indications that civil society (NGOs and CBOs) are being marginalised. Contributory processes include both an expending role of local government (with an associated assumption of direct delivery functions) and the streamlining of donor resources behind government programmes. While not problematic in itself it does highlight the risk that the significant civil-society capacity and experience for small scale service provision may be lost through restructuring. At present this trend is most evident in South Africa, although international experience confirms that these risks of restructuring need careful management.

Fourthly, effective functional decentralisation requires the large scale transfer of assets, staff, finance and, in some instances, liabilities for existing schemes. The complexity of these transfers highlights the importance of adequate policy and regulatory frameworks to guide the process, clear programming of transfers, and the need for significant support to recipient authorities that are assuming operational responsibility.

Finally, the role of large, nationally owned public sector service providers is increasingly uncertain. Sector restructuring will also require a significant restructuring of these utilities, although to date little clarity on their future role exists. Clarity on the future role and restructuring required by these agencies is critical to ensuring a
smooth transfer process, particularly given the powerful vested interests and resources found within these agencies.

4. Evaluating sector governance

The quality of governance is widely considered to be a key factor in the effectiveness of water delivery systems. Good governance can be assessed across two dimensions, namely the clarity of policy and legal frameworks and the accountability of service providers.

4.1 Policy and legal frameworks

Sector policy frameworks need to clarify roles and responsibilities of different stakeholders, specifically through delineating clear and non-overlapping functional and geographic jurisdictions. More recently emphasis has been placed on creating an institutional separation between policy making, regulatory and implementation functions (often called the authority-provider or client-contractor split), with clear rules and procedures to govern interactions between these stakeholders. If private sector partners are to be attracted into the sector then clear commitment to the implementation of basic contract law and a clear framework for regulatory interventions is a critical pre-requisite. Many countries, including those in this study, are struggling to conceptualise two aspects of this institutional framework. Firstly, the role of an independent regulator that, in design terms at least, is intended to mediate the relationship between client and contractors. Secondly, the powers of recourse existing between stakeholders. The existence of robust contract law may assist in reducing regulatory risk in more developed legal systems. However, powers to sanction non-performance by public sector providers are often absent or under-utilised. The remit of the underlying country studies did not extend into an evaluation of the legal parameters and status of contract and intergovernmental law, although these remain perhaps the two most critical aspects of the legal framework for the water and sanitation sector.

In Ethiopia, government has established a policy framework designed to provide universal, efficient and sustainable sector services. This policy framework recognises the economic value of water, allows for subsidies for the development of basic infrastructure for poor, rural communities and promotes full cost recovery for operating expenditure. It emphasises the use of appropriate technology and the need for an integrated approach to water, sanitation and hygiene promotion. Specific sector targets by 2016 include full coverage in large towns, doubling the coverage in smaller towns, increasing rural water supply coverage from 23% to 71% by gradually improving implementation capacity and increasing urban sewerage coverage by 3.5% annually in order to raise the urban sewerage coverage from the current 7% to 60%. These targets are more ambitious than the Millennium Development Goals (WSP-Af, 2003b).

Government has introduced reforms to the institutional framework for water sector management in order to encourage demand responsiveness in the sector. This involves devolving ownership and management autonomy to the lowest possible level of government (the Woreda) and introducing associated capacity building programmes. The role of federal and regional government is changing from service provision to facilitating and providing an enabling environment for service provision by Woreda’s.

However, clarity is required in appropriate roles, related forms and capacity of different entities within the decentralization framework. The location and scope of regulatory functions has not been clarified and the distinction between Woreda government and municipal government overlaps or remains unclear in some regions. Moreover, Woredas typically lack the technical and managerial capacity to assume functional responsibilities in the sector. A critical issue is thus the notion of a service provider, their legal basis and powers, and their links with appropriate government units (WSP-Af, 2003b). Key outstanding issues include defining institutional models for service providers, strengthening their capacity, strengthening sector monitoring and
regulation, and developing and implementing a sector information management system (SIMS) linked to planning and monitoring (WSP-Af, 2003b). In summary, a clear institutional model for the sector has yet to emerge.

In Kenya, government has embarked on a process of defining sector reforms, with an emphasis on restructuring institutional arrangements. This process culminated in the new Water Act (2002) and has been pursued through the formation of a new Ministry of Water Resources Management and Development (MWRMD) with a separate mandate for water resources, policy development, coordination with development partners and sector finance. The Ministry has taken some early steps in implementation by appointing the Water Services Regulatory Board (WSRB) with authority to license, regulate and supervise Water Services Boards, to mobilize funds for service providers, to ensure access and to expand quality. A Water Appeals Board will also be formed to mediate disputes among all sector role-players. A reform secretariat in the MWRD is defining further steps in the implementation programme. Already, the Nairobi Water Services Board (NWRB) has been licensed to provide water services in the capital city and the appointment of other boards is being explored. These Boards will be licencees for water provision in their jurisdiction on submission and approval of strategic and business plans.

In theory Water Service Providers (WSP’s) will be responsible for the actual delivery of services. These may take many legal forms. Considerably legal and institutional uncertainty remains with regard to the potential roles of existing service providers, which include local authorities, community groups and the large number of private small scale informal providers mainly in the large urban centres. New legislation requires providers to ring-fence water trading operations from other business activities. This implies that local authorities will need to transfer water services operations to a local utility company. While the utility may still be under local government ownership, there is a certain lack of clarity as the Act envisages all water and sanitation assets to be transferred to the Boards. Greater clarity is thus required in the role of local government within the envisaged Boards, particularly in the light of broader constitutional discussions on the devolution of functions (including water and sanitation) to elected district-level local government (WSP-Af, 2003a).

In addition, although the Act appears to permit the current national-level utility to continue as a service provider it may not fully meet the legal requirements for providing services “on a commercial basis and in accordance with sound business principles”. Thus, appropriate service providers may need to be identified for existing nationally-run schemes (including those operated directly by government). Similarly, in the case of smaller WSS schemes, where these may be transferred to CBOs, it will be important to attain some clarity in terms of ownership and their appropriate legal form (WSP-Af, 2003a).

In sum, considerable challenges remain for sector policy. In practice, significant asset and operational transfers will be required. This will require the articulation of a clear strategy and programme that clarifies issues related to ownership of assets and any outstanding liabilities, develops an inventory of schemes to be transferred, assesses the need for rehabilitation before transfer, and designs transfer procedures.

In South Africa, considerable progress has been made in restructuring the water sector, specifically through decentralising the responsibility to ensure the provision of services to empowered local government units. Although this has been a long, occasionally unwieldy process, a clear delineation of the functional responsibilities of national and local government has been reached and a multi-year programme has been initiated to transfer assets and staff to local level. Alongside this, a number of steps have been taken to encourage private sector participation in service delivery, primarily through clarifying the “rules of the game” for tariff setting, asset ownership, contracting and intervention, particularly as they relate to long term debt and equity agreements by local governments.
More recently national government has identified the need to strengthen the regulatory framework for decentralised delivery and private sector involvement. Sectoral concerns resulting from the decentralisation of water services authority to local government have led national government to seek to clarify the location and scope of national government’s involvement in water distribution, including issues of access, subsidies, price and quality. To date national government has introduced a requirement that poor households receive 6 kilolitres of water free every month, although has left considerable discretion on how this is implemented. Legislation provides the Minister of Water Affairs with the authority to cap municipal water tariffs. Technical quality and basic access standards have been established. Although regulatory mechanisms exist they are seldom (if ever) used, largely due to a lack of capacity to monitor compliance and the absence of a clear legal framework or capacity for sustainable intervention. Policy is under development in this regard but has not yet been finalised and it thus remains unclear if an independent regulatory body will emerge.

Private sector debt participation in local service delivery has also received considerable attention, as part of efforts to stimulate cost-effective, un-guaranteed access to local capital markets by municipalities. In particular, the ability of municipalities to borrow over the long term for infrastructure investment has been expanded and the consequences of municipal debt defaults given detailed legal basis.

Considerable progress has thus been made in creating a clear, predictable and fair framework for all parties in water services delivery in South Africa. The policy and legal environment is thus no longer a significant constraint to sustainable and universal access to water services.

**In summary**, all three countries have initiated institutional reforms in their WSSs as part of broader policy shifts. These reforms have introduced a broad concept of institutional separation between different sector functions. In Ethiopia, no clear institutional model for the implementation of policy targets has yet emerged. In Kenya, some uncertainty on the role of existing local governments and service providers remains. In South Africa, the location and scope of regulatory functions remains unclear. In both Kenya and South Africa a significant challenge remains in designing and implementing the transfer of functions to become compliant with emerging policy frameworks.

### 4.2 Accountable service providers

Frameworks and practices that enhance the accountability of service providers extend beyond the definition of functional jurisdictions or formal regulatory interventions. Specifically, they include the alignment of fiscal powers with functions, the internalisation of accountability for capital and operating expenditure decisions, the extent to which consumers are able to exercise choice or voice over service delivery mechanisms and the definition of responsibilities within organisations. In this respect, reforms to financial practices have typically lagged behind institutional restructuring.

**In Ethiopia**, the introduction of the block grants from federal to regional government and from regional to Woreda government both represent a radical change in the intergovernmental system. It appears that the policy intention is to provide a single, unconditional block grant to Woredas for both operating and capital expenditure. At present, the size of the block grants to Woredas is reportedly insufficient to cover even operating expenditure and thus, in practice, retrospective transfers are provided to cover shortfalls. It is not possible to estimate the size of the funding gap at present as the transfer of functions and staff is not complete, and revenue sources remain under-exploited. In principle, once transfers have occurred and clarity on local revenue mobilisation capacity has been determined, the emerging fiscal system should result in an alignment of functional and fiscal powers, within the constraints of public resources. This will significantly enhance the accountability of Woredas for sector outcomes as they will be responsible for capital expenditure decisions and their operational finance consequences.
Woredas are democratically elected local government institutions. In theory this provides an opportunity for consumers to express their preferences regarding water and sanitation services through the ballot box. In practice, institutions of local democracy in Ethiopia are new and relatively inexperienced. Direct public sector service provision at a local level is thus not subjected to the checks and balances found elsewhere. As little private sector involvement in the sector exists, there are no alternatives for consumers. These weaknesses highlight the importance of robust regulatory mechanisms to enhance the equity and efficiency of service delivery. At present, however, these do not exist in an institutionalised form.

Public sector water utilities at present face far lesser pressure to account for their performance. Funding is provided from public budgets for development expenditures, and shortfalls in revenues to cover recurrent expenditure are made up by subsidies.

The framework for accountability of service provision in Ethiopia is currently weak. However, the emerging set of reforms to the sector, and to local government as a whole, hold the promise of considerable improvements to accountability.

In Kenya, the institutional arrangements and regulatory framework determine the nature of incentives for improved accountability and performance by sector institutions. Considerable uncertainty continues to exist on the future sources and flows of finance in the WSS. There is, at present, a lack of congruity between sector reforms, objectives and targets, and related funding. If developed through transparent and demand responsive approaches, the proposed WSTF will address issues related to the financing of community schemes to some extent. However, there is still a lack of clarity regarding the financing systems for other WSS sub-sectors. Introducing transparency in the process will necessitate the development and operation of a strong sector performance monitoring system. This will significantly enhance accountability for the use of resources by service providers. However, the challenge of aligning financial and functional responsibilities remains unaddressed.

At present, water service providers face little pressure to account for their performance. Funding, often retrospective, makes up for own revenue shortfalls and central government guarantees utility and municipal borrowings. It is reported that these guarantees have removed incentives for providers to repay debt, amounting to an opaque and retrospective subsidy.

Under the new Water Act a number of sector institutions are envisaged including the Water Services Regulatory Board, Water Services Boards, a Water Appeals Board and the Water Service Providers. Key issues to be addressed include:

- Ensuring independence and autonomy of sector institutions, in order to address the issues facing the sector and to introduce professional management in the operation of water services. The nomination of the boards of key sector institutions and their budgetary independence from the sector ministry are important aspects to be considered. Three key sector institutions in this regard are WSRB, WAB and WSBs, as well as for the proposed companies for the local level public utilities in urban areas.

- Clarifying the role of local authorities. The new institutional framework needs to define the role of local authorities with greater clarity. At present, a number of roles are probably envisaged: some of the larger LAs will have a seat on the board of WSBs, and as owners of the local public water utilities. For this, however, urban LAs who are also water undertakers will need to form water companies. Such transfers will require significant preparation. The role of local authorities will also need to be addressed with regard to the broader decentralisation process in Kenya. The Draft Constitution being reviewed at present provides for the devolution of powers for water services to district councils and for the creation of joint authorities for functions where cooperation across districts may be required.
• Role of users and communities in sector monitoring and regulation. While the new Water Act envisages that the WSRB will collect and disseminate relevant information, there is no reference to the potential role of communities and user groups in sector monitoring and regulation. Global experience suggests that such participation and active engagement is crucial for the success of any monitoring and regulatory system.

• Commercial orientation for WSPs. Different types of WSPs may be permitted under the Water Act, though the emphasis is placed on their commercial orientation. They will operate under contract from Water Services Boards. This may be through mutual benefit groups, such as CBOs/ WUAs or through public utilities. To ensure a commercial orientation, it may not be sufficient to separate WSS operations into a separate business as envisaged in the Act. It will also be necessary to have autonomy in decision-making, particularly for operations, staffing, and tariff setting. At present the basis for contracting WSPs is not clear. This requires a legal framework for the establishment of WSPs (including CBOs), a framework for the contract itself, and adequate contract enforcement capacity at WSB level.

• Economic regulation for water. A key aspect in sector governance will be the framework for economic regulation especially in relation to fixing tariffs. The Act envisages that the WSRB will “develop guidelines to fix tariffs for the provision of water services”. However, it is unclear how this will be monitored and regulated. The aspect of user charges will need greater attention, as they are an important and critical source of sector funds.” (WSP-Af, 2003a: 32-33)

Despite these challenges and uncertainties the framework for accountability of service provision in Kenya is being significantly improved.

In South Africa, considerable effort has been dedicated to aligning fiscal powers with the expanded functions of local government. Operating transfers have largely been consolidated into an unconditional, multi-sector and formula-based transfer to local governments. The water and sanitation sector retains one operating grant (which is not a cash transfer and is based on existing direct national government expenditure on scheme operations) that is being phased into this mechanism as water schemes are transferred to municipalities. A conditional, multi-sector and formula-based infrastructure transfer is also being introduced, which will eliminate any direct national government involvement in distribution asset construction. All project identification, planning, and implementation decisions are thus being assigned to the authority that will be responsible for the operation and maintenance of the asset, thus internalising accountability for outcomes. Similarly, national government has developed a policy framework to enable responsible borrowing for infrastructure investment by local governments - provided that they remain accountable for the outcomes of their decisions.

Local governments in South Africa are democratically elected and experience suggests that consumers are increasingly using the ballot box to hold service providers to account. Those municipalities that have contracted private providers are building skills and experience of contract management and enforcement. This suggests that considerable enhancement to the accountability of service providers is occurring. However, uncertainties regarding the future of regulatory institutions in the sector remain, and the outcomes of these policy debates may destabilise emerging lines of accountability, particularly is the scope of national government intervention is expanded in practice.

In particular, the role of water boards remains uncertain. At present these utilities face limited pressure to account for their performance. Tariff levels are established by the national government, which in the past has also provided guarantees on their borrowing (although this practice has been terminated). Non-performing utilities are provided with retrospective operating subsidies by the national department, although these have been difficult to track as they are not directly reported in government financial statements.
In summary, all three countries are attempting to entrench the accountability of service providers through democratizing and reforming their institutional frameworks and devolving fiscal resources. However, discontinuities have emerged in the implementation of institutional and fiscal reforms. Regulatory strategies have been slow to emerge, creating uncertainties in the respective roles of local and national level regulatory agencies. Fiscal reforms have also tended to lag behind institutional reforms, creating an accountability vacuum. Two specific problems that currently undermine the accountability of service providers are the use of central government guarantees for sub-national or utility borrowing, and the use of opaque and retrospective subsidies to support under-performing utilities.

4.3 Evaluating good governance

Significant progress has been made in re-designing the WSS in all three countries covered in this review. A process of significant decentralisation of functions has been embarked on and complementary fiscal decentralisation measures have been identified. Four key governance challenges remain to be resolved in the emerging framework for sector governance.

Firstly, the mismatch between functional responsibility and fiscal capacity needs to be addressed, specifically through enhancing own revenue sources, decentralising and streamlining inter-governmental transfers, and ensuring the transparency of all resource flows. In itself, these measures will have a significant positive impact on the capacity of local structures to plan effectively and be held accountable for service delivery.

Secondly, institutional responsibilities for various aspects of the service delivery chain require clarification. This is necessary to avoid duplication, ensure effective restructuring of existing service providers and avoid the overlap of regulatory responsibilities between national and local levels.

Thirdly, coherent programmes are required to address the implementation challenges associated with complex transfer processes - involving a major restructuring of roles in an environment of limited capacity. This involves not only the modalities of staff and asset transfers - together with mechanisms to meet associated costs - but also capacity to refine policy on sector governance when weaknesses are exposed during implementation.

Finally, as these challenges essentially constitute a strategy to manage the risks associated with decentralisation, a robust capacity to monitor the decentralisation programme is required in each country. This includes both monitoring progress with transfers and evaluating their impacts, and requires input tracking, output monitoring and outcome evaluation systems in all countries.

5. Financing water and sanitation in sub-Saharan Africa

This section of the report evaluates WSS resource flows in the countries under review. It should be noted that weak and opaque budgeting and accounting procedures in all countries make rigorous comparative evaluation of resource flows difficult (and often incomparable). This point highlights, from an analytical perspective, the importance of reforms to accounting standards reform in the WSS. In particular, a lack of adequate attention to capturing and analysing financial data in the sector emphasize the importance of measures to enhance financial transparency.

5.1 Description of resource flows

The channels and sources of finance available in each country reflect in large measure the prevailing institutional arrangements, as outlined in section 3.
### Table 2: Expenditure Estimates for Different Levels and Service Providers

<table>
<thead>
<tr>
<th></th>
<th>National/ Federal Govt. + National Utility</th>
<th>Local Govt. + Local Utility</th>
<th>Non-Government</th>
<th>Total WSS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Federal</td>
<td>Regional</td>
<td>Utility</td>
<td>Total</td>
</tr>
<tr>
<td><strong>Ethiopia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurrent</td>
<td>5.1%</td>
<td>-</td>
<td>-</td>
<td>5.1%</td>
</tr>
<tr>
<td>Development</td>
<td>3.2%</td>
<td>-</td>
<td>-</td>
<td>3.2%</td>
</tr>
<tr>
<td>Total</td>
<td>3.9%</td>
<td>-</td>
<td>-</td>
<td>3.9%</td>
</tr>
<tr>
<td><strong>Kenya</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurrent</td>
<td>29.9%</td>
<td>-</td>
<td>20.7%</td>
<td>50.6%</td>
</tr>
<tr>
<td>Development</td>
<td>29.1%</td>
<td>-</td>
<td>9.4%</td>
<td>38.5%</td>
</tr>
<tr>
<td>Total</td>
<td>29.6%</td>
<td>-</td>
<td>15.8%</td>
<td>45.3%</td>
</tr>
<tr>
<td><strong>South Africa</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurrent</td>
<td>4.3%</td>
<td>-</td>
<td>2.3%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Development</td>
<td>-</td>
<td>-</td>
<td>1.7%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Total</td>
<td>3.4%</td>
<td>-</td>
<td>2.2%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

Sources: Based on ongoing work on Regional Comparative Indicators by WSP Africa. Original sources are: Ethiopia: WSP-AF 2003b; Kenya: WSP-AF 2003a; South Africa: Based on information in Palmer 2003.

In Ethiopia, the bulk of WSS expenditure occurs at local government level through water utilities and through non-governmental community-based organisations. While local utilities spend primarily on operational activities, CBO spending is focussed on development of infrastructure. This reflects the urban and rural emphases of the respective agencies. Though the National Water Policy envisages financing from domestic financial institutions, sector financing has been largely through budgetary allocations, external debt or grants from bilateral donors and international NGOs sometimes provided either directly to communities or local levels of government (WSP-AF, 2003b).

With decentralization, a large share of federal resources is transferred to regional governments; and regional and Woreda governments allocate funds for the WSS sector from their own budgets. However, an effective decentralization process is constrained by the lack of medium term federal subsidy estimates and donor practices that inhibit multi-year planning. WSS allocations within this emerging decentralization framework depend on the planning process at these levels and the issue of relative preparedness of the WSS sector at this level will be an important determinant.

A water resource development fund (WRDF) will, however, be introduced to pool government and donor resources and channel these in line with the overall sector policy. In the longer term it is visualized that WRDF will also mobilize additional resources (WSP-Af, 2003b). Unfortunately, a detailed analysis of WSS financing at the regional and Woreda levels is constrained by the lack of disaggregated sector data. External aid contributes over 95 percent of federal level capital expenditure allocations to the sector.

In Kenya, national government is the dominant channel of WSS funding although local authorities and off-budget channels are also important. Significant resources are mobilized through user charges and donor support, though user charges are neither always protected nor used in a timely manner for operations, and most donor resources flow outside the framework of government decision-making.

National budget allocations are available to the national public utility for both development and recurrent expenditures (although operating finance support is being stopped) and to community based and local authority schemes. Several local authorities allocate funds in their annual budgets for both recurrent and development expenditures. This spending is primarily effected directly by the local authority, although a few local utilities have been established as ring-fenced, public service providers.
A large proportion of total infrastructure development funds in the sector accrue through off-budget mechanisms mainly through a large number of NGOs operating in the sector. This is probably due to the lack of confidence of the donor community in the public systems with regard to the effectiveness and efficiency in the use of funds and a lack of accountability. Even for funds routed through the budget, some donors transfer funds directly to the community. Unfortunately, however, the NGO activities are not well coordinated or monitored effectively. The bulk of non-government spending is undertaken by community-based organisations for the development of infrastructure, with the private sector having a limited role (WSP-Af, 2003a).

While user charges are an important source of funds, these accrue both through the national and local budgets, and through internal generation by service providers that are independent to some extent (including the NWCPC, local public utilities, CBOs and the small private providers). While only limited information is available at this stage, it is likely that the resources are not adequate in relation to requirements for efficient operations and maintenance. Many CBOs probably do not collect user charges on a regular basis and depend on ad-hoc payments as and when required. Internal generation of resources can be enhanced by access to market-based borrowing (for example from micro-finance institutions, cooperative sector and banks), when the utilities / service providers are creditworthy and risks are manageable. This may be used for further development of service delivery through augmentation, rehabilitation or expansion. Besides user charges, communities and households also contribute through community contributions to CBO schemes (ranging from 10 to 30 percent), expenditure for private provision and for coping costs to deal with inadequate or poor quality of services (such as for water treatment and storage).

Budget allocations are the largest contributor (29.6%) to financial expenditures by WSPs, although nearly 70 percent of this is concentrated on the national department. There are three other important sources: municipal budgets, off-budget contributions by NGOs and internal generation by WSPs, constituting about 20% each. A large proportion (nearly 70%) of total donor resources is off-budget, mainly through a number of NGOs, and is devoted to development expenditures for new community-based schemes.

User charges, while an important element of total WSS expenditure, contribute only to a very limited extent to capital expenditure. This reflects both the relative youth of a number of WSPs, an inadequate focus on cost recovery in the past and a possible lack of incentives for improved performance. Municipal revenue generated through user charges is also reportedly used to finance other activities. At an aggregate level, the user charges collected by other public service providers are reinvested in the sector. More importantly, however, these collections are not protected for the immediate use of service providers. In most cases, the user charges flow upwards to general revenue funds and there is no close correlation between user charges and expenditure. This leads to cash-flow problems for operations, especially for regular maintenance, and a lack of incentives for the service provider to improve collection efficiency and service quality.

In South Africa, municipal financial arrangements, under which water services fall, are being re-structured to reflect the policy of decentralizing responsibility to municipalities. Municipalities account for 97.3% of WSS capital expenditure and 83.6% of recurrent expenditure. This has required a major shift over the last few years as national programmes to deliver services, run by national government departments, are shifted to local level. While there is still considerable control exerted by national departments over the allocation of funds to municipalities, and even to particular projects, this is waning and the intention of government is for municipalities to have full control within about five years. With this in mind grant finance from the South African fiscus to municipalities is being streamlined into three multi-sector channels for infrastructure, operations and capacity building respectively. All these grants will be allocated to municipalities by formula and paid directly into their accounts. However, the infrastructure and capacity building grants will be conditional and municipalities will have to perform in relation to certain criteria if they are to continue to receive the grants. The
operating (or equitable share) 'grant' is considered to be a constitutional right and therefore cannot be made conditional (Palmer, 2003).

The majority of WSS capital funding (59%) originates from the South African fiscus. At present there are three major channels of infrastructure grants available for water services. The consolidated municipal infrastructure programme (CMIP) grant is controlled by the Department of Provincial and Local Government (DPLG). 44% of this grant is used for water supply and 17% for sanitation. 53% is used in rural areas. The community water supply and sanitation grant which is controlled by DWAF. This is applied almost exclusively in rural areas. The housing subsidy which is used for subsidizing housing packages which include internal services (services in the streets adjacent to residential plots). It is estimated that 45% of the housing subsidy goes to infrastructure and 21% to water supply and sanitation. While DWAF continues to exert considerable influence over the way the water services capital grant is used it is assigned under the Division of Revenue Act to local government. Municipalities play an active role in selecting projects in all grant programmes. National departments (together with provinces in the case of CMIP) assess project business plans and approve them. CMIP funds appear on the budgets of municipalities in most cases but evidently not in all. DWAF grants typically do not appear on municipal budgets. Housing subsidies are presently controlled by provincial government and are allocated directly to developers, both public and private. However, municipalities are playing an increasing role in decisions around the use of these funds and there is an intention to allow high capacity municipalities to receive these funds directly in the future.

Donor funding has played a central role in transforming the water sector in South Africa over the last decade and in improving access to services. Some have been used for capital works but the scale is relatively small, constituting less than 1% of WSS capital finance. It is notable that in the early 1990s donor channelled funds directly to NGOs, with Mvula Trust being by far the largest recipient. However, this trend has been reversed and NGOs get little funding direct from donors, particularly for capital investment in water services infrastructure.

South Africa has a well developed financial services sector and this is reflected in the fact that there is substantial lending to water services institutions (authorities and providers) for the provision on water services infrastructure. A substantial amount of sector capital finance (24%) is borrowed from banking institutions. There are two major players in the banking sector which, between them, are estimated to make 80% of the loans to the sector. The Development Bank of Southern Africa (DBSA) is a parastatal body specialising in project based infrastructure loans. Of an estimated R3 billion lent per year for infrastructure DBSA has about 50% of the market share. The Infrastructure Finance Corporation (INCA) also specialises in lending for infrastructure, primarily to municipalities. It is a privately owned body and has rapidly grown its loan book over the last decade. It increasing lends based on an assessment of balance sheet rather than for specific projects. It has about 30% of market share. The remaining 20% or so of the market is occupied by several other banking institutions. Lending is concentrated on high capacity agencies with good credit ratings: metros, larger water boards and secondary cities. Private sector WSPs are also assumed to borrow but the scale of this is small in South Africa. Interestingly INCA (the private sector lender) has been most active in lending to smaller municipalities. The two large water boards (Rand and Umgeni) have raised funds through bonds but it has not been possible to include an assessment of the extent of this for this study. The municipal bond market in South Africa is largely inactive (Palmer, 2003).

The principles of aligning financial flows with a decentralized approach to infrastructure delivery have been outlined earlier in this report. It has been noted that in the future the intention is to have only two channels of non-capital grant funding to municipalities: the equitable share and a capacity building grant. In the current transition period the only significant grant funding stream going from national government to projects is the DWAF operating subsidy. This is in fact an indirect allocation as DWAF use it for their own operations but the
National Treasury records it in the national accounts as funding to municipalities. This is consistent with the principle that DWAF is acting as a WSP on behalf of the water services authority. A further principle of a decentralized system, particularly one where a grant such as the equitable share grant cannot be made conditional, is that municipalities (water services authorities in this case) take decisions around the allocation of grant funds to water services providers. This applies both to other municipalities acting as WSPs on their behalf and to the range of other WSP types: parastatal, private and community based. The policy of providing free basic water (and free basic sanitation in the near future) represents a key principle and requires that the financial system delivers operating subsidies to the poor or to the WSP serving them. 14% of operating finance flows as a result of the subsidy system in South Africa. Unfortunately no data is available on the extent to which subsidies flow from municipalities to WSPs.

Where there is a separate body providing bulk water services, with water boards being the most obvious case, payment flows from the retailer (typically a municipal WSP) to the bulk supplier. In South Africa this relationship and the payments which flow through it has been reasonably successful, although some water boards do have high debtors.

Payments from consumers constitute by far the largest flow of funds (86% of total) in the sector, reflecting the relatively large proportion of commercial and high income residential consumers in the South African economy. These consumers are located in large urban areas (44% of operating expenditure is in metropolitan municipalities, which spend 4.5 times more than predominantly rural municipalities) use large volumes of water and are willing to pay for this and for a high level of sanitation service. They are also required to provide subsidies to the poor through cross-subsidy mechanisms which function in most large urban municipalities. As can be expected there is considerable variation in the extent to which revenue can be raised from users by municipal WSPs. In some cases little income is raised both because of high levels of poverty and because the capacity does not exist to bill higher income consumers and collect the revenue effectively. DWAF raises little income from consumers it serves through it trading operations. Water boards have had mixed success in raising income from consumers who they serve directly. It is not possible to measure this as water board accounts seldom reflect their retail operations separately.

Municipal entities and private sector WSPs have a high degree of success but there have been political problems with the Nelspruit concession which is resulting in increasing levels of non-payment. CBO type WSPs have also had mixed success. There are examples of well run water committees where people pay for the service and the CBO maintains positive bank balances. But there are also many cases where the water committees are unable to generate sufficient revenue to operate the local service properly.

In summary, sector financing strategies are weakly developed. Central government transfers for infrastructure investment are typically fragmented and poorly designed. Although governments are taking steps to streamline them they remain the dominant form of capital financing. This reflects (and may contribute to) the weakness of capital markets outside of South Africa. User charges and debt financing are serious alternatives to grant finance only in South Africa, although even here collection levels are variable and transparent end-user subsidy mechanism a recent phenomenon.

5.2 Adequacy of sector resources

The quantum of resources available to the sector is an important determinant of coverage levels. In part, this is a function of the relative priority attached to the WSS. Table 3 demonstrates that South Africa, which has the highest levels of coverage, spends more on the sector as a percentage of GDP, with the majority of this spending from public funds. In Ethiopia, public and non-government spending make equal contributions to total sector spending. Comparatively less emphasis is given to the sector in Kenya.
Table 3: WSS Expenditures in Relation to GDP

<table>
<thead>
<tr>
<th>Country/ Year</th>
<th>WSS Public Expenditure (%)</th>
<th>WSS Non-Govt Expend. (%)</th>
<th>Total Sector Expenditure (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>National</td>
<td>Local</td>
<td>Total</td>
</tr>
<tr>
<td>Ethiopia (2000)</td>
<td>0.0</td>
<td>0.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Kenya (2001)</td>
<td>0.4</td>
<td>0.2</td>
<td>0.6</td>
</tr>
<tr>
<td>South Africa (2003)</td>
<td>0.1</td>
<td>1.8</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Sources: Based on ongoing work on Regional Comparative Indicators by WSP Africa. Original sources are: Ethiopia: WSP-AF 2003b; Kenya: WSP-AF 2003a; South Africa: Based on information in Palmer 2003.

The importance attached to WSS relative to other development sectors is shown in Table 4. However, given the differences in the production processes associated with these functions (health and education requiring spending on teachers and health professionals) they are not strictly comparable.

Table 4: Comparing WSS with Education/ Health Expenditures in Relation to GDP

<table>
<thead>
<tr>
<th>Country/ Year</th>
<th>Public Expenditure as a Share of GDP (%)</th>
<th>Total Expenditure as a Share of GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>0.6</td>
<td>1.8</td>
</tr>
<tr>
<td>Kenya</td>
<td>0.6</td>
<td>1.8</td>
</tr>
<tr>
<td>South Africa</td>
<td>1.9</td>
<td>3.7</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>n/a</td>
<td>2.5</td>
</tr>
</tbody>
</table>

*Public Expenditure as a share of GNP


Vast differences in the financial capacity of the countries in this study are shown in Table 5. South Africa spends a total of $64.37 annually per capita on water and sanitation, while Kenya spends $3.13 and Ethiopia only $1.31.

In Ethiopia, adequate information on the actual resource availability to the sector is not available in a systematic manner at present. Based on available information, preliminary and indicative estimates suggest that the current level of funding allocation to the sector is about $34 million annually (excluding contributions by the WSPs themselves, as information is not readily available). Of the total estimated expenditure 62% is estimated to be for capital expenditure. The total requirements of the sector to achieve government's own coverage targets are estimated to be $742 million, or about $150 million annually. Based on the available evidence it is likely that any significant increase in allocation will probably be constrained by sector's absorptive capacity. Clearly, to achieve improvements in non-income dimensions of poverty reduction water supply and sanitation deserves an equal attention as other comparable sectors such as education, health and roads. However, WSS allocations compare very unfavourably with these sectors. This more likely reflects a lack of sector readiness to absorb larger resources rather than a low priority for water supply and sanitation (WSP-Af, 2003b).

In Kenya, 1.2% of total national public expenditure is allocated to the WSS, which amounts to 0.4% of GDP. Total WSS expenditure is 0.8% of GDP. No modelling of the cost of providing improved basic service coverage is available at present. This is fairly evenly spread between development and recurrent expenditures, although the mix varies significantly between urban and rural areas by service provider.
### Table 5: Comparative annual per capita expenditure

<table>
<thead>
<tr>
<th></th>
<th>Annual total per capita expenditure (USD)</th>
<th>Capital: Operating Expenditure</th>
<th>Adjusted per capita expenditure (USD) per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Capital</td>
<td>Operating</td>
<td>Total</td>
</tr>
<tr>
<td>Ethiopia (2000)</td>
<td>1.18</td>
<td>0.14</td>
<td>1.31</td>
</tr>
<tr>
<td>Kenya (2001)</td>
<td>1.37</td>
<td>1.76</td>
<td>3.13</td>
</tr>
<tr>
<td>South Africa (2003)</td>
<td>13.59</td>
<td>50.79</td>
<td>64.37</td>
</tr>
</tbody>
</table>

Note: Foreign exchange rates valid as at July 2003 (USD Rates: ETB=8.47; KSh=74.43; ZAR=7.44)
Sources: Based on ongoing work on Regional Comparative Indicators by WSP Africa. Original sources are: Ethiopia: WSP-Africa 2000b; Kenya: WSP-Africa 2003a; South Africa: Based on information in Palmer 2003.

In **South Africa**, government has attempted to provide everyone with a basic level of water and sanitation service within 10 years. Government has estimated that the sector will require $6.45 billion over the next 10 years to provide new infrastructure and for rehabilitation (asset replacement). Expenditure estimates also include provision for infrastructure for high income households and for infrastructure for business and institutions. Of this, $3.3 billion will require grant financing. This translates into an annual grant financing requirement of $336 million, with the remainder (approximately $300 million) to be sourced from loans and finance from internal WSP sources. Current allocations are only slightly below these levels and are anticipated to grow strongly into the future. Total sector expenditure, the vast majority of which is undertaken by the public sector, accounts for 2% of GDP. Recurrent expenditure accounts for 78.9% of the total, and is dominant across most categories of service providers. If loan finance and the use of own funds are going to play a role much depends on the extent to which WSPs can raise funds from users. The trends in this regard are uncertain but indications are that there will not be great improvement or great decline.

### 5.3 Sector financial performance

There is an increasing recognition in all countries in this study that the efficiency and effectiveness with which currently available resources are utilised is an important determinant of the sustainability of service access. Moreover, a direct comparison of relative allocations between sectors is of limited value as important differences between the cost drivers in each sector is not accounted for (e.g. the labour intensiveness of the production process). The efficiency and equity of WSS expenditure are key determinants of the long term sustainability of spending. They can be measured through an evaluation of productive efficiencies and development effectiveness.

Considerable quantitative information is required for the evaluation of efficiencies and distributive equity that in many cases is not yet available; particularly as the use of activity based costing methods are not widespread and regionally based data sets are not available. This synthesis, however, identifies key baseline information required to generate baseline data for their study.

**a) Productive efficiency**

Productive efficiency measures the absolute impact of spending. This recognises that a unit’s worth of public spending does not necessarily buy an equivalent unit’s worth of service. While spending may support service development and delivery, it may be the case that it does not create any productive capital. There are a number of reasons why this may be the case including corruption, inefficiency in the delivery process and instances when the public sector undertakes activities that are best performed by the private sector, and thus displaces private sector effort. In these respects it is important to distinguish between public expenditures (made through the public budgeting process) and those of non-government role players. Ideally, longitudinal unit cost data can
provide a basis for measuring improvements in the unit cost of producing services although this is not currently possible.

In Ethiopia, capital spending accounts for 62% of sector spending reflecting low current levels of coverage. What operating expenditure is incurred is spent only by local government (predominantly large city spending). Low levels of operating spending in rural areas are likely to result in poor sustainability of schemes, which is reportedly the case in Ethiopia. However, the absolute lack of resources for the sector is also reflected by the very low levels of per capita spending - $1.63 annually per unserved person.

In Kenya, capital spending accounts for 43.8% of sector spending. This reflects the relatively higher coverage levels in Kenya. Local government spending in particular is focused on operating costs, with limited asset refurbishment and replacement. This is in contrast to non-government providers (predominantly in rural areas) where spending is focused on asset construction. High levels of operating expenditure are not problematic in themselves, and data is unavailable to assess the relative efficiency of this spending.

In South Africa, capital spending accounts for only 21.1% of total sector spending, reflecting the highest levels of coverage among countries in this study. Per capita sector spending is high, with capital spending per unserved person at $87.67 annually. Operating expenditure per serviced person is also high - at $60.10 annually. This reflects the comparatively far higher level of resources available to the sector in South Africa.

In summary, available comparative spending data does indicate some important differences between countries. Unsurprisingly, it demonstrates a positive correlation between levels of coverage and operating expenditure. Direct unit cost data is currently not available for any of the countries covered in this study.

b) Development effectiveness

Development effectiveness measures the impact of spending relative to key development priorities and programmes. Key to this concept is the equity of spending, which measures the distribution of resources relative to social needs. Indicators include the distribution of funding by indicators of poverty and relative need, which should preferably move beyond income poverty indicators. The positive correlation of spending to basic health indicators is often preferred, as is an assessment of the extent of rural bias in funding.

However, in the context of severe data limitation the key baseline issues relevant to the assessment of development effectiveness include the transparency of planning processes, the quality of available expenditure information and analysis, the existence of a medium-term, policy-sensitive perspective and structure in budgeting, compliance with basic public financial management standards and timelines, a performance focus with clear associated programmes and incentives, and the robustness of monitoring and evaluation systems.

Problems with the sustainability of investment have been reported in all countries under review, specifically related to operational problems experienced in rural water schemes. Institutional reforms to restructure the sector and decentralise service delivery have been introduced in all countries. These measures are intended to enhance allocative efficiency through ensuring appropriate incentives for communities and service providers in the selection of delivery technologies.

(i) Distributive equity

At present little data on the distribution of sector resources is available, nor is a correlation of spending data with public health and income data possible. Although public subsidies for capital investment are typically to basic levels of service, this is not always the case – particularly as retrospective subsidies (or bailouts) are used to fund providers in all countries. These subsidies are difficult to track. Subsidies for operating finance tend to be
delivered in an opaque manner – for instance through the replacement of collapsed infrastructure or failure to collect revenue from user charges.

**In Ethiopia**, formal subsidies are only provided for capital investment in rural areas. However, significant additional payments are made to providers for capital and operating purposes. These have not been assessed substantively to date, and the impacts are thus unknown.

**In Kenya**, the formal subsidy system has not been directly assessed. However, implicit subsidies are provided through retrospective financing of guaranteed sub-national debt (or the absence of sanction for non-payment, as in the case of Nairobi). Tariff structures are also fixed nationally, implying some inter-regional cross-subsidy with an implicit intention to cross-subsidise poorer regions with higher cost structures. However, the process is not transparent and tariffs are not fixed with any clear relation to expenditure requirements. Grant financing mechanisms are poorly developed, with rules and mechanisms of transfer under-specified and actual distributive outcomes difficult to determine. The emerging sector framework will create new financing channels and reorient some existing channels. However, it will require considerable efforts to ensure their alignment with the proposed institutional arrangements and to enable a proper link with the sector coverage targets envisaged under the sector strategy and the poverty reduction strategy paper (PRSP). This includes the design of WSTF and a stronger strategic basis for the national government allocations.

**In South Africa**, a more transparent system of capital and operating subsidies has been developed, as described above. However, adequate data to enable an analysis of the equity of the distribution of funds is not entirely available. Capital grants are broadly targeted to areas with low service levels. Operating subsidies, particularly through the free basic services strategy, have been recently introduced and insufficient information on their performance is currently available. However, it is reported that the adequacy of funds provided to municipalities under the equitable share can be questioned, particularly for largely rural municipalities. This needs to be seen in the context of the free basic water and sanitation policy which is being introduced by government which implies that sufficient operating grant finance will be provided to poorer municipalities to finance these services

**(ii) Transparent planning processes**

Participatory planning systems are, in particular, thought to deliver far greater allocative efficiencies through ensuring the scale and design of investments responds to effective user demand. Planning systems need to explicitly identify policy priorities and provide a framework for their translation into capital and recurrent spending priorities. On the capital side, the selection of projects has historically been determined through political processes modified, at least retrospectively, by resource constraints. In this model, investments are contested between politicians with an eye on future electoral performance. Little evaluation of social and economic returns on investment is usually undertaken, nor its impacts on longer term sustainability of services. Indeed, at present no formal evaluation of social or economic returns on investments occurs in any of the countries covered in this review.

With the growing emphasis on the use of ring-fenced service providers, the role of public finance will increasingly need to shift from direct development and recurrent expenditure to providing appropriate incentives for greater productive efficiency and development effectiveness by service providers. Other than in South Africa little concrete progress has been made in the redesign of fiscal instruments in this regard. Indeed, fiscal flows tend to disrupt local planning processes and undermine accountability for outcomes. This is a result of a lack of predictability in the size and timing of funding flows, and the use of retrospective financing the rescue failing service providers. These problems are often magnified by the provision of opaque, supply side subsidies to providers, the artificial lowering of service charges or the provision of guarantees from central government for local borrowings. Collectively, these factors significantly undermine the relevance of local planning processes.
In Ethiopia, a water sector development program (WSDP) has recently been developed covering all aspects of the sector. This process included detailed consultation at regional level to identify local priorities, articulate targets and identify investment projects. Basic household water and sanitation access is an important component of the plan. Unfortunately a rigorous review of the project selection procedure has not yet been conducted. However, it is recognised that poor planning and implementation is a major constraint, especially in rural projects, and thus that adequate provision needs to be made for project planning and implementation management in total project costs. Similarly, adequate provisions at national and regional levels for programme support functions will need to be enhanced. Data on current spending on these items is currently not available.

At a local level it is reported that an “established tradition of bottom-up identification of priorities” exists (World Bank, 2003:9). Poor households have repeatedly identified water and sanitation as priorities and government policy statements have confirmed this. Demand responsiveness is predominantly pursued through community contributions to capital costs, generally at around 10%. This approach is reportedly limited to rural schemes, and operates without a nominal cap on total connection costs per household, reducing equity and incentives for the selection of appropriate technology.

New policy will, however, considerably enhance demand responsiveness and the sustainability of rural water schemes. It includes a greater emphasis on sanitation promotion and the use of participatory and informed demand articulation during the planning stage to improve technology choices, improved collection of user fees, the development of supply chains (in relation to technology choices) that makes access to spare parts easier and cost effective, the provision of technical support to service providers, and access to bridging finance for emergency or large scale repairs or augmentation (World Bank, 2003).

In urban areas, fully cost reflective tariffs are reportedly being introduced for both capital and operating costs, with assistance being provided in the establishment of tariffs to providers. Providers are also facing clear incentives to achieve financial viability, including facing a hard budget constraint, and are being provided with assistance to strengthen their technical and financial capacity, reduce unaccounted for water and to improve the consumer orientation of services. However, the current capital financing framework for large urban suppliers is reported to be insufficiently pro-poor, in that it provides bulk capital finance to utilities without parallel requirements to enhance access or ensure scheme sustainability (World Bank, 2003).

Over the longer term the process of fiscal decentralization is likely to have a significant positive impact on planning processes and outcomes in Ethiopia, as Woredas assume responsibility for infrastructure provision and operations. However, capacity shortfalls at all levels of government and negative perceptions of the risks of decentralization are likely to delay its full impact.

In Kenya, the current sector planning process is difficult to clearly discern as decisions are made at both local and national level. Within the emerging institutional framework, the role of water service boards will become increasingly important in the allocation of public resources from the national government.

Local authorities are required to arrive at development priorities through local level community consultations and budget analysis to assess ceilings on development expenditure. However, with the institutional arrangements envisaged under the new Water Act, it is likely that planning for water services will move outside the local budget process.

A clear sector planning framework to link the coverage targets with planned public expenditure at local level is required. However, this is not simply a question of pouring in investments, but rather developing a better assessment of existing coverage, the options available, the development and recurrent costs of meeting and sustaining these targets, and finally identifying the expenditure priorities to ensure equity and sustainability.
At consumer level, urban households requiring individual connections to water or sanitation networks are required to pay the full cost of connection. In theory this should measure effective demand for services although in practice these costs are beyond the reach of poor households, who rely on kiosks or vendor services. The framework for rural consumers is not known at this stage.

In South Africa, the sector has received ongoing priority at all levels of government in both policy and budgets. Budget allocations have grown significantly since democratisation, although the bulk of these resources have been committed to water rather than sanitation programmes. Formal planning authority rests with municipalities who are required to prepare Water Services Development Plans (WSDPs) as an element of their multi-sector Integrated Development Plan (IDP). At present, the national department also undertakes detailed project identification and planning although this function is being transferred as part of the broader decentralisation process. Similarly, fiscal transfers are being decentralised to reinforce local level planning activities through the introduction of a multi-sector infrastructure grant. Although at community level there are no formal requirements for capital contributions planning processes are required to be participatory. Moreover, the full operating cost of schemes must be met by communities.

In summary, while planning processes exist in all countries there is often a mismatch between functional responsibility and fiscal discretion. Moreover, Kenya demonstrates the risk that sector reforms may undermine existing or emerging multi-sectoral planning processes at local level. This highlights the importance of understanding the effects of institutional reforms to broader service delivery planning processes, particularly in that development planning functions may become fragmented. However, the most significant constraint to effective and transparent planning in all three countries remains the opacity and extent of central control exercised over sector revenues, specifically intergovernmental transfers.

(iii) Good budgeting and expenditure management

Fragmented budgets and an exclusive focus on inputs have undermined the ability of the budget systems to discipline policy making and to facilitate performance feedback that would in turn improve outcomes. As a result, public spending has historically benefited the rich rather than the poor, money has failed to reach frontline service providers and service quality has been low for poor people. The development of integrated, medium term budgeting systems provides a platform to link policies and plans to budgets, through the use of multi-year revenue and spending projections with associated trade-offs, that results in greater fiscal discipline. It also provides a predictable, hard budget constraint, a basis for improved efficiency in resource allocations, due to their comprehensiveness, and improved accountability, through increasing transparency and legibility of the budget process.

Alongside this requirement of good governance is the need for coherent and comparable accounting standards. This refers not only to formal reporting standards but also to expenditure monitoring systems such as the use of appropriate and comparable activity based costing (ABC) methodologies. At present, none of the countries in this review have completed the introduction of accounting reforms.

In Ethiopia, the absence of a clear sector financing framework in the past has allowed service providers to avoid facing a hard budget constraint. Providers were seldom entitled to keep revenues, and were reliant on transfers for operational spending. This provided them with little incentive for cost control or enhancing efficiencies in the allocation of resources, but rather encouraged them to compete for the limited budgetary allocations that were available.

A detailed sector financing strategy is under development, in conjunction with the design of the broader intergovernmental fiscal system in Ethiopia. Although the government envisages financing from domestic
financial institutions, sector financing has been largely through budgetary allocations, external debt or grants from bilateral donors and international NGOs sometimes provided either directly to communities or local levels of government, and more recently other off-budget mechanisms such as ESRDF.

With decentralization, a large share of federal resources is transferred to regional governments and regional and Woreda governments allocate funds for the water and sanitation sector from their own budgets. In recent years the federal government has made very little direct investment in WSS from its own budget resources. Urban water supply has been financed primarily from loans and grants channelled through the federal budget and from the regional budgets. Responsibility for financing urban water supply will increasingly pass to municipalities and their utilities. They will be expected to cover full operation, maintenance and replacement costs, less an initial capital grant for the establishment of schemes provided by regional governments (WSP-A f, 2003b).

Rural water supply is financed primarily from Regional budgets, the ESRDF, bi-lateral funding and NGOs working primarily at the local level. It is increasingly expected to be financed through the Woreda budgets, with some capital contribution from communities. Woredas are expected to take full responsibility for financing operations, maintenance and replacement of schemes through recovering costs from users and the use of the block grant for capital investment. In rural areas this includes working with Village Water Supply Committees, which contribute 10% of capital costs and take full responsibility for the operational management and financing of small scale schemes. The ESRDF is being phased out within the next two years, although it is expected that donors will support rural water supply through a multi-sector decentralized infrastructure fund.

An effective decentralization process is, however, constrained by the lack of medium term federal subsidy estimates and donor practices that inhibit multi-year planning. Anecdotal evidence suggests that in the early stages of the latest decentralization reforms very little is being spent by Woreda’s on rural water supply and sanitation. This is probably due to insufficiency of block transfers to cover even recurrent expenses and the absence of trained personnel in most Woreda’s. Sector allocations within this emerging decentralization framework depend on the planning process at these levels and the issue of relative preparedness of the WSS sector at this level will be an important determinants.

In Kenya, sector allocations at national level are made through the medium term budget process, in terms of government’s eight clusters of priorities, of which the sector is reflected in two (physical infrastructure for urban water and rural development for rural water). Sector allocations are then divided among various sector agencies on the basis of fixed costs and an evaluation of additional spending requests. The capital or recurrent nature of allocations is also determined at this level, with the bulk of resources targeted to capital spending. The bulk of these resources are then transferred to implementing agencies, either at national, district or local level. The basis for the allocation of resources between authorities at sub-sector level has not been established. However, the use of district allocations for rural water services remain subject to central approvals, locally collected revenue must be remitted to central level, and funds are often unpredictably diverted from capital projects. This suggests that little discretion (and less accountability for outcomes) exists at district level at present and that the ability of local planning systems to meet community demands is constrained.

At local level, water and sanitation continues to be a single department in most local authorities, and a part of the overall LA planning and budgeting process. Allocations for capital expenditure are likely to become more responsive to local community demands following the recent introduction of more participatory planning processes. However, with the institutional arrangements envisaged under the new Water Act, it is likely that planning for water services will move outside the local budget process.

At present the sector finance framework lacks coordination with a number of different donor projects and considerable off-budget donor support through a large number of NGOs. Another issue with donor funding in
the past is the lack of separate accounting for debts that are incurred by the national government for the water sector, and then passed on to various sector agencies at national and local level (including the Nairobi City Council). In most cases, these sub-borrowers do not repay this debt, though the government repays the debt to its lenders. This is neither reported explicitly in government budget documents, nor taken into account in the MTEF ceilings, making it extremely difficult to assess its implications on sector finance in the move towards a more transparent, commercial orientation. It also reflects the absence of a hard budget constraint currently facing service providers.

Government is, however, promoting a streamlined, sector-wide financing approach to address fragmentation. It appears that there will be three main channels of finance in the emerging system:

- "A Water Services Trust Fund (WSTF) for areas without adequate water services will be established for more coordinated mobilization and allocation of resources in community level schemes within a demand responsive framework. The fund is to be capitalized mainly through funds from the GOK budget and donor grants and will provide funding according to pre-agreed principles. It seems from past experience that the initial emphasis of the fund may be on community-based schemes for rural water supply.

- Streamlined GOK allocations will continue to be a significant channel of finance. However, it is expected that these will become more streamlined as the new institutional arrangements come into place. The GOK budget resources for development expenditure will be allocated mainly to the WSTF and the WSBs, possibly on the basis of their business plans. The role of national government will thus be to assess the requirements and priority across the WSTF and different WSBs. A contingency fund will also created to assist WSB licensees with the renewal, repair, enlargement or improvement of any scheme. WSBs will then allocate resources to their service providers, essentially replacing the role formerly undertaken by national government. It remains unclear what requirements for transparency, fairness and demand responsiveness will be imposed on WSBs in this process.

- Internal generation by WSPs will become the main basis for sector finance. While not explicitly stated, the new arrangements focus on internal cash generation by the service providers. They aim to achieve this mainly through a better match between the revenues generated by WSPs through water charges and their expenditures. In addition to meeting the recurrent expenditure in an efficient manner, the gradual move towards operational surplus will need to receive emphasis through efficiency improvements particularly through the reduction in the supply of non-revenue water. A credible history of such surplus can help the WSPs to mobilize market-based resources for development expenditures in the future." (WSP-Af, 2003a:16-17)

The transition to new institutional and financing arrangements is likely to be complex and lengthy, requiring a sequenced set of risk mitigation measures to be implemented prior to the full decentralisation of financial authority.

In South Africa, national government budgets within a three-year framework that explicitly targets development priorities as identified by Cabinet. Sector needs are assessed and prioritised within the budget process, with water and sanitation allocations assessed under both social development and infrastructure clusters. In addition, as water services are increasingly a local government competency, sector needs are assessed within the vertical division of revenue between levels of government. The bulk of finance to the sector is passed to local government through the grant system, and is increasingly budgeted for by municipalities themselves also on a multi-year basis.
Major strides have been taken to promote the process of decentralisation through the allocation of capital and operating grant finance to municipalities, with increasing autonomy given to them in deciding how to use such grants. The reforms to the system of intergovernmental grants have aimed to increase the fairness, predictability and transparency of the grant system. Grants are thus made on a three-year basis, with a preference for cash (rather than asset) transfers. A new integrated municipal infrastructure capital grant (MIG) is being introduced which will substantially empower municipalities. However, over the next three years as old grant arrangements are phased out and the MIG phased in there will be a fairly complex set of capital grant flows into the water services sector.

With regard to operating grants, the adequacy of funds provided to municipalities under the equitable share can be questioned, particularly for largely rural municipalities. This needs to be seen in the context of the free basic water and sanitation policy which is being introduced by government which implies that sufficient operating grant finance will be provided to poorer municipalities to finance these services.

The greatest financial challenge facing the water services sector currently is to build the capacity of municipalities to allocate the financial resources they have soundly. At present far too little attention has been paid to this aspect and often resource allocation decisions are poor. The clearest indication of poor resource allocation arrangements is the effectively non-existent flow of operating grant funds to community based water services providers.

The resource distribution mechanisms in dominantly urban municipalities are generally simple as mostly they undertake the water services provider function 'in house'. Issues are confined to decisions relating to the prioritisation of water services over other services. However, in rural areas where the water services authority is typically a district municipality which undertakes little - if any - services provider activity itself, resources distribution decisions are very important. The mechanisms for doing this are poorly developed. Resource distribution takes place firstly to the water services provider and then to consumers. A sound subsidy framework (if there was one) should deal with both together to ensure that subsidy funds provided to providers reach the poor, particularly in rural areas. Currently the tendency is for subsidy funds to fund deficits of public sector services providers. This favours urban areas and softens the budget constraints facing providers. CBO type services providers have not received subsidy funds directly although the support services to them are often subsidised.

**In summary**, all countries are introducing significant reforms to their systems of intergovernmental transfers. These are aimed at improving the predictability and fairness of resource flows and will assist in significantly improving local budgeting and expenditure management outcomes. However, this streamlining and decentralisation may reduce the transparency of financial flows, and highlights the importance of developing robust input tracking, output monitoring and outcome evaluation systems in all countries.

**(iv) Monitoring sector performance**

The coverage, quality and timeliness of WSS management information systems are critical to the monitoring of sector performance and the ongoing evaluation of the appropriateness of investment outcomes. This information is particularly important in managing the risks associated with decentralisation programmes, which requires robust systems for input tracking, output monitoring and outcome evaluation to replace the direct controls exercised in the past.

Information systems have both financial and service delivery components. The efficacy of these systems depends on the integration of these two aspects, the use of indicators that are appropriate relative to desired outcomes and the speed at which information is made available.
Typically the scope of financial information exceeds its quality and overshadows the availability of service delivery information. This synthesis evaluates the timeliness, coverage and appropriateness of available information relative to desired outcomes, and suggests key baseline research requirements for the future.

**In Ethiopia**, decentralisation has made it increasingly difficult to monitor the level of spending in the sector and to evaluate the efficiency and effectiveness of spending. Data is not collected and reported in a consistent manner from region to region and what does exist is not passed up to the Federal level. Current approaches to sector monitoring are not sector-wide but rather primarily focussed on financial inputs and infrastructure projects. While some innovations in monitoring and evaluation systems are reported to exist at different levels in Ethiopia, a systematic and linked M&E system does not exist at present. It is reported that institutional responsibilities and the channels for the flow of information are unclear (World Bank, 2003). Moreover, sector monitoring is not linked to broader poverty surveys.

Current sector capacity for monitoring and evaluation is reportedly also very weak, though one or two regions have developed input and output monitoring systems in a systematic manner. These existing efforts will need to be assessed to develop ideas for appropriate institutional responsibilities for M&E. A concerted effort will be needed to implement effective monitoring and evaluation systems throughout the country in order to provide the data and feedback necessary to attract resources for sector development.

**In Kenya**, little information is currently available on sector monitoring and evaluation systems. Efforts are, however, currently limited – as evidenced by limited spending on this function. It is reported that the capacity of sector institutions is currently weak and, as monitoring and evaluation is a weakly developed function, it is likely to require extensive support in future. However, some experience of intergovernmental monitoring does exist in the local government system that provides an opportunity for learning.

**In South Africa**, monitoring and evaluation systems are fragmented between three national departments and the statistical agency. Each monitors different aspects and the financial and service delivery status of the sector. Reported sector expenditure on monitoring and evaluation thus underestimates total spending. Institutional fragmentation together with weak regulatory capacity (as discussed above) undermines the utility of current monitoring systems. Significant effort will be required to improve these systems as fiscal and functional decentralisation deepens.

**In summary**, the coverage, quality and timeliness of information systems in all three countries require significant strengthening to accommodate the additional demands of sector management in a decentralised environment. Unfortunately, however, current country reports have not provided sufficient information on financial and service delivery reporting performance.

### 5.4 Evaluating sector finance

Major strides have been taken to promote the process of decentralisation through the allocation of capital and operating grant finance, with increasing autonomy given to them in deciding how to use such grants. Rules of access, however, remain uncertain.

The greatest financial challenge facing the water services sector currently is to build the capacity of water service authorities in each country to allocate the financial resources they have soundly. At present far too little attention has been paid to this aspect and often resource allocation decisions are poor. The clearest indication of poor resource allocation arrangements is the lack of transparency in operating subsidies. This results in the leakage of subsidies to relatively wealthier households and the use of capital grants to rehabilitate collapsed schemes (effectively using these funds in place of operating grants).
6. Recommendations for further work

This synthesis has collated and analysed information from three countries in sub-Saharan Africa as an initial step towards mapping institutions and resource flows across the region. It has faced a number of difficulties in finding and comparing appropriate data sets, and has been implicitly limited by the information provided in the underlying country studies.

The availability of finance is a limiting factor in the ability of these countries to achieve sustainable improvements in water and sanitation services provision. However, emerging sector policy in all countries is based on a realisation that additional funding alone will not address sector challenges. Rather, the quality of governance and the efficiency and effectiveness with which exist resources are used are the key to sustainable service provision. In a very practical way this reflects emerging theoretical consensus in the sector.

To this end, all three countries have placed increasing emphasis on reforms to the governance and financing of the sector. Although at very different stages of evolution, all three countries have recognised the importance of greater local-level involvement in service provision and have made tentative steps to broaden the participation of the private sector through clarifying policy frameworks or inviting direct debt or equity participation in the sector. There are important similarities in the challenges facing all three countries as they move to implement these decentralisation reforms. These challenges relate to the complexities of achieving a sustainable transfer of functions and assets to sub-national service providers while managing the risks that structural reforms of this nature imply.

A key measure to manage the risks associated with functional and fiscal decentralisation is to strengthen the coverage, quality and timeliness of information systems in order to accommodate the additional demands of sector management in a decentralised environment.

6.1 Expanding the country studies

This review has been severely limited by constraints in the availability of data and in its comparability between countries. In order to facilitate the expansion of these studies into other countries in the sub-region it is appropriate to make some preliminary recommendations on future work.

The country studies were carried out with an intention to contribute to the development of a framework for assessing resource flows. They have been constrained by the varying availability of information in different countries. This review provides a framework for institutional and financial analysis of water sector while capturing its key characteristics and complexities. It is based on the emerging experience in these countries. In carrying forward this analysis to more countries, it is necessary to emphasize the importance of a common reporting format across countries. While data limitations are inherent in most of the countries in the sub-region it is recommended that the issues covered in this review, and the basic comparative data generated, be used as a template for minimum country reporting requirements in future. This should be supplemented by country-specific qualitative assessments of the procedures for reporting basic financial and service delivery information, with regard to the coverage, quality and timeliness of these reporting systems. This requirement will permit some degree of qualitative verification of the veracity of data supplied.

Beyond this, data gathering may be expanded to increase the utility of country reports and syntheses of this nature. Ideally, longitudinal data would permit an evaluation of the trajectories of coverage levels and costs. This is probably not possible in the short term and may be best pursued through re-commissioning country studies on a regular basis or gradually building such information within the sector M&E systems for each country.
Additional useful information that is currently not available on a comparative basis includes:

a) The status and stability of country legal frameworks, specifically related to contract and intergovernmental law. These factors profoundly influence the status and clarity of functional assignments, as well as the level of autonomy and powers of recourse of different agencies.

b) A vertical dis-aggregation of sector expenditure (type of expenditure by service provider or level of government).

c) The use of standardised economic classifications of expenditure (capital and recurrent, as per GFS standards) across country studies, and the adoption of a broadly standardised activity-based costing approach to coordinate country methodologies. For instance, it is unclear whether costs associated with project identification, planning, design and project management are included in capital expenditures. Basic ABC guidelines might usefully be developed (or adopted from elsewhere) to guide future country studies, even if absolute comparability is not obtained. A similar approach may be necessary for non-financial information (in terms of, for example, minimum basic service standards that are used to calculate coverage levels).

d) Average monthly operating costs and tariff levels associated with the provision of basic water supply services in urban and rural areas respectively.

e) Additional information on sources of finance by level of government, including grants, the treatment of loans (soft and commercial), and own revenue.

f) The average connection cost outcomes by urban and rural areas (or the relevant policy target) by different service provider types.

g) The average operating cost outcomes by urban and rural (or the policy target) by different service provider types for different levels of use.

h) A review of the capital and operating subsidies provided on the supply and demand sides of the WSS, identifying sources of subsidies and estimating the value of subsidies by source. This should include direct cash subsidies (both budgeted and retrospective), as well as asset transfers and guarantees.
REFERENCES


* Denotes that this is a background country study paper prepared as an input for this report.
## ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tr>
<td>ABC</td>
<td>Activity Based Costing</td>
</tr>
<tr>
<td>AAWSA</td>
<td>Addis Ababa Water and Sewerage Authority</td>
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<td>CMIP</td>
<td>Consolidated Municipal Infrastructure Programme</td>
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<tr>
<td>DBSA</td>
<td>Development Bank of South Africa</td>
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<tr>
<td>DPLG</td>
<td>Department of Provincial and Local Government</td>
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<tr>
<td>DWAF</td>
<td>Department of Water Affairs</td>
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<tr>
<td>ESRDF</td>
<td>Ethiopia Social Rehabilitation and Development Fund</td>
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<tr>
<td>GOK</td>
<td>Government of Kenya</td>
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<tr>
<td>IDP</td>
<td>Integrated Development Plan</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>INCA</td>
<td>Infrastructure Finance Corporation</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<tr>
<td>MIG</td>
<td>Municipal Infrastructure Capital Grant</td>
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<td>MWRMD</td>
<td>Ministry of Water Resources Management and Development</td>
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<td>NGO</td>
<td>Non Governmental Organization</td>
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<tr>
<td>NWCP</td>
<td>National Water Conservation &amp; Pipeline Corporation</td>
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<td>NWSB</td>
<td>Nairobi Water Services Board</td>
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<td>RWBs</td>
<td>Regional Water Bureaus</td>
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<td>SIMS</td>
<td>Sector Information Management System</td>
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<td>TWSU</td>
<td>Town Water Service Unit</td>
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<td>WAB</td>
<td>Water Appeals Board</td>
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<td>WRDF</td>
<td>Water Resource Development Fund</td>
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<tr>
<td>WSA</td>
<td>Water Services Authorities</td>
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<td>WSBS</td>
<td>Water Services Board</td>
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<tr>
<td>WSDP</td>
<td>Water Sector Development Programme</td>
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<tr>
<td>WSDPs</td>
<td>Water Services Development Plans</td>
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<td>WSP</td>
<td>Water Service Providers</td>
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<td>WSRB</td>
<td>Water Services Regulatory Board</td>
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<td>WSS</td>
<td>Water and Sanitation Sector</td>
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<td>WSTF</td>
<td>Water Services Trust Fund</td>
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<tr>
<td>WUA</td>
<td>Water Users Associations</td>
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To help the poor gain sustained access to improved water and sanitation services.

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