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Sector Finance and Resource Flows for Water Supply

A Pilot Application for Kenya

wsp
water and
sanitation program

The Water and Sanitation Program is an international partnership for improving water and sanitation sector policies, practices, and capacities to serve poor people

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ACKNOWLEDGMENTS

This assessment of resource flows in the water sector in Kenya has been done as a part of the regional thematic work on of sector finance by the Water and Sanitation Program Africa. It focuses on institutional and financial mapping based mainly on secondary sources of information. We do hope that this will contribute the ongoing implementation of water sector reforms in Kenya and particularly to the development of a financing strategy and preparation of an investment plan for the water sector.

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ABSTRACT

The assessment of resource flows for water and sanitation in Kenya has been done as part of the regional thematic activities of the Water and Sanitation Program, Africa. It focuses on the financial arrangements and resources within the existing and emerging institutional frameworks for the water sector in Kenya. This first phase of the study is based mainly on a synthesis of available information regarding public expenditures at the national and local levels, other available studies and preliminary inquiries with a number of actors in the sector. The study provides an approach for the preliminary assessment of sector finance for the water supply sector. It uses tools of institutional and finance mapping within a 'service provider' approach, and an analysis of public finance, including: decision-making within national and local government budgeting, as well as the institutional and financing rules and mechanisms.

Some key findings from the existing situation include:

- at present, the water services sector is dominated by centralized public providers in terms of coverage, although local service providers are significant players in urban areas and in terms of expenditure;

- similarly, while the Government of Kenya (GOK) budget is the dominant channel for finance (37 percent), there is an equal use of other channels, such as: local authority budgets (17 percent), off-budget funding through NGOs (19 percent), and internal generation (19 percent) by utilities and community-based organizations (CBOs);

- within these channels, the two main sources of funds are donor assistance (27 percent) and user charges (36 percent). Despite their prominence, user charges are not utilized to their full potential. This particularly affects the possibility of utilities and CBOs using their internally generated surplus for development expenditure to augment services and carry out major maintenance, and adversely affects the sustainability of assets and reliability of service delivery. Market borrowing is absent despite the possibility of some potential in the domestic financial market and micro-finance;

- household and community expenditure other than for user charges is likely to be high, though information is not readily available and further analysis is necessary; and

- utilization of budgetary allocations has improved in recent years, but a strong M&E system is needed to assess links between allocations and output/ outcomes, and assess sustainability of public finance.

With the ongoing sector reforms in the WSS sector in Kenya, institutional and financial arrangements will undergo significant changes. This requires a carefully designed transition strategy whose key component would be a transfer program including both the transfer of assets to the proposed water services boards, and the transfer of operations to commercially viable water service providers (WSPs). The design of new financing mechanisms will need to address issues such as, enhancing internal cash generation by WSPs, better output and outcome linkage of budget allocations and improved coordination of sector resources. In the longer term, strategies to leverage additional market based resources will also be required.

Further work in Kenya will be determined after stakeholder consultation. It may include aspects such as:

- support GoK in the development of an improved sector information and monitoring and in

designing a new financing framework within the emerging institutional framework;

- enhancing the resource flows analysis, with a particular emphasis on sanitation in the next phase; and
- development of performance indicators for sector finance against the three critical finance benchmarks: adequacy to meet MDG targets, development effectiveness of resources, and efficiency in terms of unit cost of services and value for money achieved.

The next steps involve wider consultations with sector stakeholders within Kenya, contributing to the regional comparative analysis, and benchmarking sustainability of sector finance in Kenya in relation to other countries in Sub-Saharan Africa.

EXECUTIVE SUMMARY

Background, Objectives and Approach

Regional Study of WSS Resource Flows. The Sub-Saharan African Region (SSA) has a high proportion of countries with the lowest incomes in the world and high levels of poverty. In this context, inadequate financial resources and inappropriate financing mechanisms are often cited as constraints to scaling up sector reforms. However, the lack of comprehensive understanding of the existing flows of financial resources often makes it difficult to assess their links with sector reforms. This understanding is particularly relevant in the context of Millennium Development Goals (MDGs) and is also identified as one of the key reasons for the weak representation of the water and sanitation sector in the preparation of the poverty reduction strategy papers (PRSPs) and the linked budget process through the medium term expenditure framework (MTEF). It is in this context that the regional study aims to: a) develop a framework to assess the WSS related financial resource flows, and b) develop a benchmarking tool to assess the sector financial performance. The main outcomes of the regional work are to develop a better understanding of the water sector finance for its improved integration with the PRSP and MTEF and contribute to the development of a country-level financing strategy. The central premise of this study is that these outcomes are essential to develop more meaningful country level action plans for achievement of the MDGs.

Studies have been initiated in three countries in the region for resource flows assessment using the tools of institutional and financial mapping, and public finance analysis. The preliminary analysis was based largely on available studies and information. Detailed studies will be taken up later as appropriate. Findings of the country studies will also feed into the benchmarking exercise.

Study Objectives and Approach in Kenya. Kenya was selected for pilot application of resource flows assessment. In developing the framework for Kenya, the assessment is also positioned in the context of recently initiated WSS sector reforms. The objectives of the study in Kenya are:

- To develop and test a framework for measuring resource flows and public finance – including:
    - mapping the existing and emerging institutional arrangements and preliminary estimation of expenditures by all key service providers;
    - mapping the existing and emerging financing arrangements and assessing the relative contribution of funds by different channels and sources of finance; and
    - analysis of public finance: a) a review of allocation and expenditure at national and local levels, and b) the financing rules and mechanisms that influence public institutions and sector finance
- To review the implications of the study findings in the context of sector reforms in Kenya and identify the next steps for a sector financing strategy for the water sector in Kenya; and
- To contribute to the development of guidelines for country studies and benchmarking the performance of WSS sector finance as a part of the regional study.

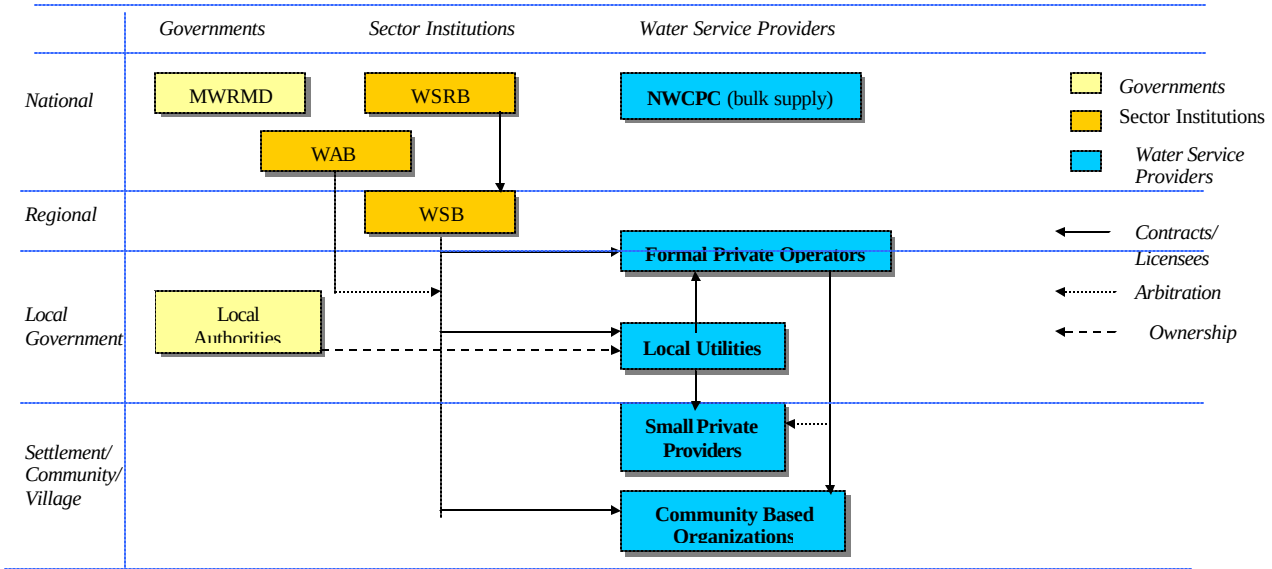
The study is based on available information from a number of sources: government budget documents, actual expenditure from the sector ministry and other institutions, for local authorities from the database on Local Authority Transfer Fund (LATF) and information on small private providers in Nairobi from

the Nairobi City Council. The information on NGOs is obtained from the NGO Bureau, NGO Council and consultations with selected NGOs. Other information on the community schemes and small providers is based mainly on secondary sources of information available from earlier studies. A few words are needed on the limitations of information for this first phase of the study. In some cases, such as for the non-governmental sector, community schemes, and small private providers, it has been necessary to use the limited available information with 'best judgment' assumptions to arrive at national estimates. Finally, though it was intended to include sanitation and household/community expenditures (other than for user charges) in the study, this has not been possible due to the lack of adequate information at this stage.

Key Study Findings

Institutional Mapping – Service Providers in Kenya. Several different water service providers operate within the existing institutional arrangements in Kenya (refer Figure 1), including the public sector providers as well as community-based and private small service providers (PSSPs). Almost 50 percent of the total 'served' population is within the ambit of two national providers: the water supply department (WSD) of the Ministry for Water Resource Management and Development (MWRMD), and the National Water Conservation and Pipeline Corporation (NWCPC). These national entities serve both the urban (37 percent) and rural (65 percent) population. The remaining population in urban areas is served by local authorities (47 percent), local level public utilities (2 percent) and PSSPs – (11 percent).

Figure 1: Emerging Institutional Arrangements

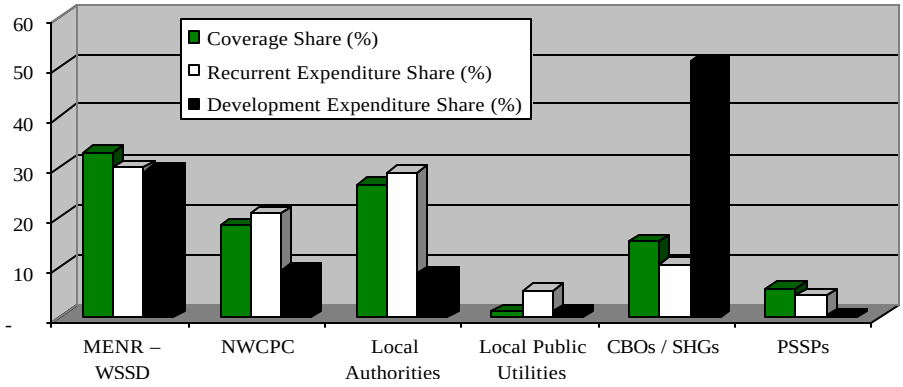


MWRMD: Ministry of Water Resources Management and Development
NWCPC: National Water Conservation and Pipeline Corporation
WSRB: Water Services Regulatory Board
WSB: Water Services Board
WAB: Water Appeals Board

In rural areas the remaining population is mainly served by community-based organizations (CBOs). These estimates are based on a weak information base as some schemes may not be functional or number

of connections may have declined, though such details are not available. In several cases, the definition of served population needs greater rigor and clarity. Centralized public service providers in Kenya dominate the sector in terms of expenditure, though local authorities also appear to play an important role in urban areas, and CBOs in rural areas (refer figure 2). Recurrent expenditures by the service providers largely match their coverage levels. However, the share in development expenditure is significantly higher for CBOs. It is likely that the coverage by CBOs has increased through these investments, though this has proved difficult to assess due to the lack of detailed information on coverage through community-based schemes.

Figure 2: Relative Shares for Coverage, Recurrent and Development Expenditures 2000-01 *(%)*



The existing institutional arrangement is constrained by several factors. Sector policy development, operation/ service delivery and sector regulation have not been adequately separated. CBOs who provide services to a third of the rural population lack an adequate legal basis. Local authorities play an important role in urban areas but there is a lack of incentives for improved performance and weak or non-existent monitoring. In several urban areas, efforts have been made to develop locally owned public utilities through donor-supported projects. However, the progress has been slow, with only two out of about ten LAs showing positive results. In some of the larger urban areas PSSPs play an important role both in meeting the lack of services in informal settlements, and in helping businesses or the wealthy to cope with inadequate services. However, they often operate in the context of uncertainty and rent seeking due to the lack of an appropriate legal and regulatory framework and tenure issues in the informal settlements.

The ongoing sector reforms in Kenya attempt to address key issues in institutional arrangements by restructuring the role of national sector institutions and regional/ local service providers. The new institutions envisaged under the recently enacted new Water Act include the Water Services Regulatory Board (WSRB), the Water Services Board (WSB) and the Water Appeals Board. The WSBs are to be appointed for different regions and large urban areas and will in turn contract with Water Service Providers (WSPs) for service delivery. Thus, the Government of Kenya is in the process of initiating the implementation of major reforms in institutional arrangements for water services through a separation of policy, regulation and service delivery. During this process, it will need to pay 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.

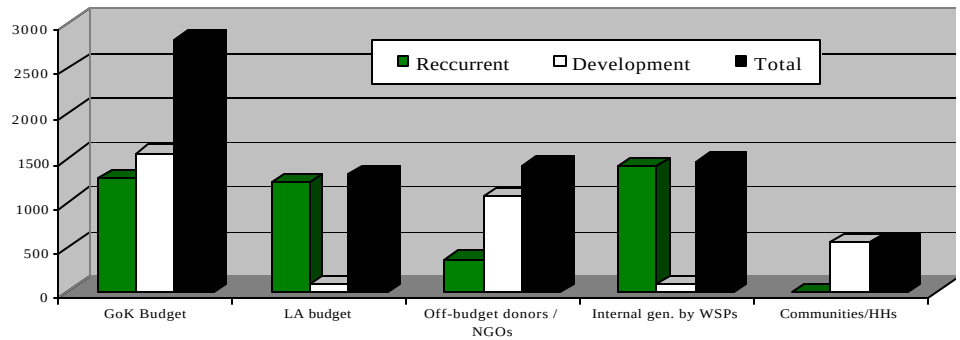
Implementation of reforms will need to be coordinated through a well-designed transfer program, including capacity building for different stakeholders and the development of a strong sector information system. A key aspect of implementation will be development of a program for the transfer of rural and urban schemes of national service providers as well as local authorities. While these institutional reforms are being implemented, it will be important to not lose sight of the need to enhance the coverage of sustainable access to safe water in both urban and rural areas. A clear planning and monitoring framework will be required to link the coverage targets with the planned public expenditure.

Financial Mapping for WSS Services. Within the institutional arrangements mapped above, service providers use a number of channels and sources of funds (refer figures 3 and 4). While the GOK budget is the dominant channel for WSS sector finance in Kenya, local authorities and off-budget channels are also important. The five main channels of finance are: i) the GOK budget mainly used by the WSD of the MWRMD and NWCPC, ii) local authority budgets, relevant for those LAS that provide water services, iii) off-budget routes through NGOs mainly for CBOs, iv) internal generation by service providers – mainly by NWCPC, local utilities, CBOs and PSSPs, and v) other direct expenditures by communities and households.

Table 1: WSS Resource Flows Matrix, Expenditures in 2000 -01 *(In million US$)*

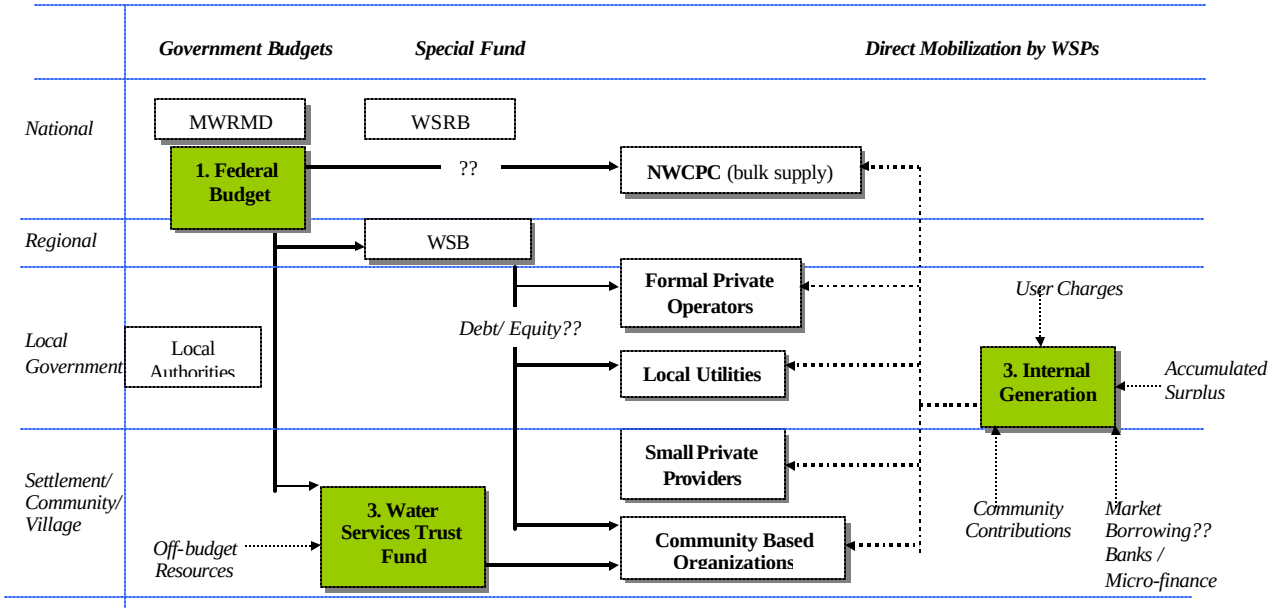
Channels of Finance	Public Service Providers				Other Providers		Total
	MENR	NWCPC	Local Auth.	Local Utilities	CBOs / SHGs	PSPs	
Government of Kenya – budget [i]	28.5	4.0	2.7		0.9		36.0
Recurrent	16.2	0.0	0.0		0.0		16.2
Development	12.3	4.0	2.7		0.9		19.8
Local authority budget			16.8				16.8
Recurrent			15.7				15.7
Development			1.0				1.0
Off-budget donors / NGOs					18.1		18.1
Recurrent					4.5		4.5
Development					13.6		13.6
Internal Generation by WSPs		11.2		3.4	1.5	2.5	18.6
Recurrent		11.2		2.9	1.3	2.3	17.8
Development		0.0		0.5	0.2	0.2	0.9
Communities/Households					6.9		6.9
Recurrent					na		na
Development					6.9		6.9
Total Resources	28.5	15.2	19.4	3.4	27.4	2.5	96.4
Recurrent	16.2	11.2	15.7	2.9	5.8	2.3	54.2
Development	12.3	4.0	3.7	0.5	21.6	0.2	42.2

Figure 3: Channels of Finance Used By Different Service Providers 2000-01 *(Ksh. million)*



The total sector finance is estimated to be close to 100 million USD or 0.9 percent of GDP. It appears that while allocation through the GOK budget is the largest contributor (29 percent), three other sources constitute about 20 percent each: LA budgets, off-budget contributions by NGOs and internal generation by WSPs. A significant portion of WSS sector resources is mobilized through user charges and donor support, though user charges are neither always protected nor used in a timely manner for operations. Similarly, most donor resources flow outside the framework of government decision-making.

Figure 4: Emerging Financial Arrangements



MWRMD:	Ministry of Water Resources Management and Development
NWCPC:	National Water Conservation and Pipeline Corporation
WSRB:	Water Services Regulatory Board
WSB:	Water Services Board
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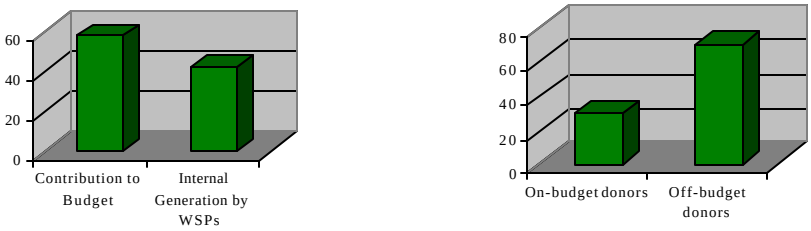
Water Service Providers — *Budget Allocations/ Dev. Grants* → — Off-Budget Resources - - → — *Internal Generation* ···→

Figure 5: User Charges and Donor Funding through Different Channels – 2000-01 *(%)*



Some key findings include:

- *There is a preference for off-budget routes by donors/NGOs.* A large proportion of total donor resources (nearly 70 percent) is provided through off-budget support, mainly through a number of NGOs, and is devoted to development expenditures for new community-based schemes.

- *Internal generation is important but is not contributing to development expenditure*. WSPs such as NWCPC, local public utilities and the PSSPs depend on internal generation. However, their expenditure on development expenditure from this source is either non-existent or very limited.
- *Incentives for enhanced internal generation are weak*. While internal generation emerges as an important source, most WSPs lack incentives and capacity to maximize it.
- *Local authority expenditures seem to be largely from user charges*. However, these are not always protected, and an estimated 20 percent of revenues mobilized through water charges is probably used to finance other sectors / activities.
- *User charges for other public sector WSPs are generally protected but there may be cash-flow and efficiency problems.* The user charges flow upwards to the general account (for MWRMD and NWCPC to the national level and for the LAs to the LA consolidated accounts) leading to two problems:

i) cash-flow problems for operations, especially for regular maintenance, and ii) lack of incentives for the service provider to improve collection efficiency and service quality.

The reform framework envisages more streamlined sector finance with an emphasis on sustainable internal generation by service providers. The three main channels of finance in the emerging system are: i) Water Services Trust Fund (WSTF) for areas without adequate water services, ii) more streamlined GOK budget allocations, particularly through the new WSBs taking into account issues of equity, efficiency and coverage targets that may be set by the government, and iii) a greater reliance on internal generation by WSPs as a main basis for sector finance. In further designing the WSTF recent experience with the WSS component in social investment funds and RWSS reforms needs to be taken into account, including aspects such as: ensuring a demand responsive approach, improved coordination with off-budget resources, exploring support to PSSPs, role of local authorities in local planning and use of output-based aid to ensure that community and private resources are not crowded out. While the WSTF is clearly positioned to receive and allocate grants, it is not clear how the WSBs will be financed through the GOK budget, and further how the WSBs will provide funds to the WSPs. A clearer understanding of whether this will be through debt or equity contributions, or simply as one time grants needs to be developed. In developing this, the rather poor experience of the GOK loans in the past needs to be reviewed.

Within this emerging scenario, there is a need to explore other potential sources of funds in the medium to long term including: i) market borrowing by WSBs and/ or WSPs, ii) potential for micro-finance, especially for the community based schemes, and iii) the possibility of private sector participation, which is more likely for efficiency improvements rather than direct finance in the initial period. To promote such resource leveraging, appropriate sequencing of activities is critical. As a first step, the need is to identify the potential borrowers within the sector and their creditworthiness and to assess the interest and potential of domestic financial sector and micro-finance industry. It is likely that the initial focus is needed on enhancing creditworthiness of potential borrowers. For example, recent inquiries regarding possibility of private sector investments in Nairobi Water Services suggest that initial investments need to be made through the public sector. However, with efficiency improvements, in the next phase the utility would be able to service debt and finance development expenditure through internal generation.

Public Finance for Water and Sanitation. Within the financial flow estimates presented above, public channels comprised 55 percent of total flows. Decision making for allocation of budgetary resources to

the water sector is currently done at two levels: a) national - through the Government of Kenya budget, and b) local - through the local authority budgets. At the national level, the allocations are determined first within the PRSP and MTEF process and then within the priorities set by the MWRMD. At the local authority level there is direct consultation with the community groups as a part of the recently introduced Local Authority Service Development Action Plan (LASDAP). Both are important channels and at each level WSS appears to be important in comparison with other key sectors. However, the current institutional and budgeting framework does not provide adequate links between the sector objectives, priorities and programs, resulting in a decision-making process that is difficult to review and monitor.

Some key issues and observations on the national and local level financing processes are:

- *At the national level, compared to other social sectors, share of water is lower*. For recurrent expenditure this is justifiable with an emphasis on cost recovery. For development expenditure it is difficult to assess as estimates of resource requirements against agreed targets are not available;
- *Who receives the service delivery allocations*? Detailed analysis of the equity and coverage is difficult due to the lack of appropriate detailed budget classification. Based on limited information, in recent years emphasis on urban in development expenditures has increased.
- *The expenditure approval process and fund flow create disincentives for efficiency at local levels.*. Despite the practice of district level allocations, resource utilization is hampered by a practice of an upward flow of locally collected user charges to the 'headquarters' and problem in flow of funds due both to the liquidity in district treasuries and approval processes;
- *How much is actually utilized from planned allocations?* In general, utilization of recurrent expenditure is good. However, utilization of development expenditure has also improved in recent years. This may reflect a greater realism in budget allocations due to the MTEF process;
- *Role and influence of donor funding.* Donor funding, either through grants or soft credit, forms an important source of budget allocation for development expenditure, ranging from 45 to nearly 80 percent over the past five years. A large share of off-budget donor funds may reflect a lack of confidence in public governance systems and there is a case for improved coordination;
- *Local authority expenditure is mainly from user charges* unlike the significant reliance on budget allocations of other public service providers. However, there may be reverse flow of resources from water to other sectors. Interestingly, such resource outflow is more likely with the municipal councils and for Nairobi than in the rural areas;
- *Issue of large outstanding LA debt for past water investments* will need to be addressed during implementation of institutional reforms under the new Water Act. A system of appropriate incentives and financing mechanisms will be needed to ensure that the debt for water related investments is serviced properly. This is essential to enhance the creditworthiness of WSBs/ WSPs to mobilize resources from the financial markets.

While budgetary resources are important for the WSS sector, a significant proportion of the resources to the WSS sector accrue through other channels. Even for budgetary resources, user charges constitute an important component at both national and local levels. As a result, mobilization and use of financial resources in the sector can potentially be significantly affected by the institutional and regulatory arrangements, and design of financing rules and mechanisms.

Sector finance in the future will depend critically on governance of sector institutions that defines their independence and autonomy. Both are essential to introduce commercial orientation while protecting and enhancing the services for the poor. In the emerging institutional arrangements, appropriate incentives are also necessary for improved sector monitoring and transparency. This may be through the regulatory framework as well as well-designed contracts. Further, to ensure sustainability of existing and new investments, appropriate support framework for sector institutions and service providers is essential.

Appropriate design of financing mechanisms is equally critical and should be guided by three key principles: i) focus on internal cash generation by enhancing and protecting user charges, and enhancing creditworthiness of WSBs and WSPs for market borrowing, ii) to use the limited public resources in a demand responsive manner and ensuring resource leveraging, and iii) coordination of sector resources through programmatic approaches within a SWAp framework. This will require a better alignment of financing rules to enhance resource leveraging and improved targeting of subsidies.

Public finance for WSS in Kenya at present is dominated by budget decisions at national and local levels intertwined with service delivery. With the emerging institutional arrangements, however, there is a possibility of separating these, though success will depend on an appropriate transition arrangement. Thus, design of public finance allocations and mechanisms will need to focus on financing the transition arrangements and achieving a better link between budget allocations and sector outputs and outcomes.

The Way Forward. Three key activities are envisaged: i) development of guidelines to assess resource flows and benchmarking sector finance, ii) comparative assessment of sector finance in Kenya through the regional benchmarking tool, and iii) further development of resource flows analysis for Kenya based on stakeholder feedback. The first two are a part of the WSP-AF's regional thematic work. For the third activity, in the context of sector reforms, three aspects may be explored for further work in Kenya.

- support GoK in the development of an improved sector information and monitoring system and in designing the new financing framework within the emerging institutional framework;
- enhancing the resource flows analysis, with a particular emphasis on sanitation in the next phase; and
- support GOK in the design of a financing framework within the emerging arrangements under the Water Act including aspects related finance through the WSTF as well as allocation of public finance from the GOK budget to different WSBs, and possibly to WSPs.

These will be discussed with stakeholders to decide on priorities for the next phase of work.

1. A FRAMEWORK AND APPROACH TO RESOURCE FLOWS ANALYSIS

The assessment of resource flows for water and sanitation in Kenya has been done as a part of the regional thematic activities of the Water and Sanitation Program, Africa. The study focuses on the financial arrangements and resources within the existing and emerging institutional frameworks for the water sector in Kenya. This first phase of the study is based mainly on a synthesis of available information regarding public expenditures at the national and local levels as well as preliminary inquiries with a number of actors in the non-governmental sectors.

1.1 Regional Study of WSS Resource Flows

The Sub-Saharan African Region (SSA) has a high proportion of countries with the lowest incomes in the world and high levels of poverty. Several countries among these have initiated WSS sector reforms. However, many countries have been unable to effectively scale up these sector reforms due to inadequate financial resources and inappropriate financing mechanisms. The lack of a comprehensive understanding of the flow of financial resources often makes it difficult to assess their links with sector reforms. This understanding is critical, as the allocation of financial resources will fail to achieve sustainable long-term impact on the WSS status and coverage, unless made within the context of sector reforms. This was identified as one of the key reasons for the weak representation of the water and sanitation sector in the preparation of the poverty reduction strategy papers (PRSPs) and the linked budget process through the medium term expenditure framework (MTEF).[1] This is particularly relevant in the context of Millennium Development Goals (MDGs). Other studies suggest that for better integration of the sector, it is essential to enhance its effectiveness and efficiency as well as work within a sector-wide approach.

In this context the regional study aims to work at the country level through: a) development of a framework to assess the WSS related financial resource flows, and b) development of a benchmarking tool to assess the sector financial performance. The main outcomes of the regional work are to develop a better understanding of the water sector finance for its improved integration with the PRSP and MTEF and contribute to the development of a country-level financing strategy. The central premise of this study is that these outcomes are essential to develop more meaningful country level action plans for achievement of the MDGs.

Studies have been initiated in three countries in the region with a focus on the first part of the analysis using the tools of institutional and financial mapping, and public finance analysis. The preliminary analysis was based largely on available studies and information, with detailed studies to be taken up later as appropriate. The development of a benchmarking framework has been initiated using three sets of performance benchmarks: a) adequacy of sector finance to meet the MDGs and country's own targets and extent of resource leveraging, b) effectiveness in terms of match between sector strategy and public allocations, decentralization and financial viability of service providers, equity and poverty focus, and c) efficiency in terms of utilization of resources, value for money achieved in the sector and operating performance of service providers. Findings of the country studies will also feed into the benchmarking exercise.

[1] Water and Sanitation Program – Africa. 2002.

1.2 A Framework for WSS Resource Flows Analysis

The WSS sector in general is characterized by complex institutional arrangements, and a variety of channels and sources of funds are used for financing the sector. The 'water service provider' framework used in the study attempts to capture these complexities while permitting a comparative picture across countries in this region. It also enables the development of comprehensive and countrywide estimates and analysis of sector finance within the institutional context of the sector.

The study framework has been developed to respond to the special characteristics of the WSS sector, and includes three tools:

Sector Institutional Mapping. The study uses the concept of WSS service providers as those that actually deliver water service to the consumers. The two key distinguishing principles of service provision are: i) the notion of an 'independent' utility where the full revenues are retained for its own use by the service provider, as against government departments that mainly rely on the consolidated government funds on the basis of budget allocations, and ii) the notion of public service as evidenced by government departments versus entities providing the service on a 'commercial' basis (such as utilities), private profit basis (such as private providers), or on a mutual benefit basis (such as the CBOs). In general it may be argued that the reforms in the sector suggest a movement towards greater independence through a direct correspondence between sector revenues and their use by the service providers.

For a given country the identification of service providers is done by: a) distinguishing between sector institutions (those that determine policy, monitor implementation and provide regulatory oversight) and service providers, along with classifying the national budget allocations between wider sector development related expenditures versus those focused on actual service delivery[2], b) assessing the nature of decentralization particularly in relation to the role of local governments and local level service providers, and c) determining the emerging institutional arrangements as most countries in the region are undergoing change. In order to capture the contribution of different service providers two indices are used: relative share in total population coverage and in total sector expenditures on service delivery.

Based on a broad understanding of the prevailing systems in this region, the generic categories of service providers used are:

- *National level government departments* – when a national (or a large provincial) department delivers water to consumers or provides bulk water supply as a public service;
- *National level utility* – when a national (or large provincial) 'independent' utility delivers water to consumers or provides bulk water supply on a 'commercial' basis – it may be owned/ managed as a public parastatal, public company or a private company;
- *Local government WSS department* – when a WSS department within a local government delivers water within its jurisdiction as a public service;

[2] While it may also be possible to identify 'support service providers' as a third group, this has not been included in the study framework at this stage. Future work may explore this with the associated broadening of sector finance analysis to include this group.

- *Local level utility* – when a local level 'independent' utility delivers water to consumers within the local jurisdiction on a 'commercial' basis – it may be owned/ managed as a public parastatal, public company or a private company;
- *Private small service providers (PSSPs)* – when PSSPs deliver water to consumers on a commercial private profit basis; and
- *Community-based organizations (CBOs)* as service providers – when CBOs deliver water to their own members on a mutual benefit basis.

Sector Financial Mapping. To capture the contours of sector finance, the analysis is based on the concepts of channels, sources and uses of finance. Channels of finance are ways in which funds from specific sources reach the service providers to meet the costs of delivery of services or to sector institutions for wider sector development related expenditure. Channels are defined by the associated decision making processes as well as the manner in which the resources actually flow from the origin to its use in service delivery process. Based on a broad understanding of the prevailing systems in this region, the generic categories of channels and sources of finance used in this framework are:

- *Channels of Finance:*
  - *national government budget allocations*, (or for large federal countries - provincial/ regional government budget allocations) – increasingly within the framework of PRSPs and MTEFs and therefore influenced by MTEF linked budgetary ceilings, poverty linkages and sector monitoring and reporting;
  - *local government budget allocations* – in contexts where the LAs have the mandate for water services and associated resources for decision making within their own budgets;
  - *special fund mechanisms* – with independent decision making in allocations and often not covered by sectoral budgetary ceilings;
  - *internal generation of resources* – used by 'independent[3]' water service providers who are able to protect the internally generated resources (from user charges, borrowing or accumulated surplus) for own use to meet WSS related expenditures;
  - *off-budget routes often used by donors, mostly through NGOs* – often resorted to due to a lack of confidence in public fiduciary and accountability systems; and
  - *direct expenditures/ contributions by households/ communities* – other than for user charges and generally to meet the costs of self provision or as a partial contribution

- *Sources of Finance:*
  - *own resources of the governments* – at national (taxes and overall public debt) and at local (local taxes, general local authority borrowing and unconditional intergovernmental transfers)[4];
  - *user charges* – paid by consumers to water service providers as fees and charges for services delivered;

[3] The term is used to refer to independence in decisions about the use of internally generated resources by its own board in the case of utilities/ formal private providers, by a committee in the case of CBOs, or by the entrepreneur in the case of small private providers.

[4] It is important to distinguish between general borrowing by national or local government, which may then be passed on to the WSS sector versus borrowing by a utility, a CBO or a private provider that is meant for specific use and is to be repaid from WSS related earnings.

- *internally generated surplus of service providers* – accumulated through surplus on the utility accounts as well as through special provisions (as for depreciation), and would be particularly relevant for all utilities as well as community based providers and small private providers;
- *external donors and international financial institutions (IFIs)* – either as grant assistance or as concessional lending;
- *household savings* – to meet costs of self service provision, or to meet partial capital contributions other than for user charges levied by service providers; and
- *market borrowing* – generally for rehabilitation or new investments, and would be relevant for all service providers that are able to borrow from the market.

Table 1.1: Potential Channels and Sources of Finance by Different Service Providers

	Channels of Finance					
	National government budget allocations	**Local government budget allocations**	**Special fund**	**Internal generation of resources**	**Off-budget routes (NGOs)**	**Direct by households / communities**
Service Providers						
National government department	■			■		
National level 'utility'	■			■		
Local government WSS department	■	■		■		
Local level utility	■	■	■	■		
Small private providers		■	■	■	■	■
Community-based organizations	■	■	■	■	■	■
Sources of Funds						
Government own resources	■	■	■			
User charges	■	■		■		
Accumulated internal surplus				■		
External donors and IFIs	■		■	■	■	
Household savings						■
Domestic market borrowing				■		■

	Sources of Funds					
	Government own resources	**User charges**	**Accumulated internal surplus**	**External donors and IFIs**	**House-hold savings**	**Domestic market borrowing**
Service Providers						
National government department	■	■		■		
National level 'utility'	■	■	■	■		■
Local government WSS department	■	■				
Local level utility	■	■	■			■
Small private providers		■	■	■		■
Community-based organizations	■	■	■	■	■	■

Note: Shaded cell denotes the possibility of use of that channel or source of finance.

- *Uses/ utilization of finance*:
  - *Expenditure by different service providers* – use of different channels and sources across different service providers;
  - *Development and recurrent expenditures* – use of different channels and sources for ongoing expenditures for operation and maintenance versus capital investments for new services, augmentation or rehabilitation.

For a given country, sector financial mapping is done by: a) determining the actual channels and sources used by different service providers, and the manner in which resource flows take place, b) measuring the actual resources flows within this framework, and c) determining the emerging financial arrangements as most countries in the region are undergoing change. The measurement is done for both development and recurrent expenditures. Given the difficulties in sources of information for this analysis, this analysis has been attempted only for one or two years.

Analysis of Public Finance. Despite the prevalence of a number of different channels and sources of finance, public finance dominates the sector both in terms of public sector resources as well as the framework of rules and regulations within which service providers operate, and mobilize and expend resources. Three aspects are important in an analysis of public finance:

- *Decision making for allocation of public resources* – essentially within the framework of national and local budget allocations. For national level, these decisions are increasingly within the framework of a medium term expenditure framework that defines the total resources, though allocation within the sector are determined generally by key sector ministries. For the local level, the important aspect is whether the decentralization framework ensures adequate untied resources for local authorities. In both cases, the nature and level of consultations, and the monitoring and evaluation systems to provide feedback to the decision makers are important influences.
- *Review of rules, procedures and regulatory framework* – which affect the incentives for efficiency, in reaching the poor, the potential for service providers to mobilize finance from different sources, and the extent of community contributions and cost recovery; and
- *Analysis of monitoring and accountability systems* – as it affects the possibility of linking public finance allocations with actual results and an assessment of value for money achieved with public resources.

1.3 Study Objectives and Approach in Kenya

Kenya has been selected as one of the three countries for pilot application in the first phase. In developing the framework for Kenya, the attempt has also been to position this assessment in the context of recently initiated WSS sector reforms. Thus the objectives of the study in Kenya are:

- To develop and test a framework for assessing resource flows and public finance – including:
  - mapping the existing and emerging institutional arrangements and preliminary measurement of expenditures by all key service providers;
  - mapping the existing and emerging financing arrangements and assessing the relative contribution of funds by different channels and finance sources; and

- analysis of public finance including: a) a review of allocation and expenditure at national and local levels, and b) the financing rules and mechanisms that influence public institutions and sector finance

- To review the implications of the study findings in the context of sector reforms in Kenya and identify the next steps for improved sector financing for the water sector in Kenya; and

- To contribute to the development of guidelines for country studies and benchmarking the performance of WSS sector finance as a part of the regional study.

The study is based on available information from a number of sources: government budget documents, information on actual expenditure from the sector ministry and other institutions, information on local authorities from the database on Local Authority Transfer Fund (LATF) and information on small private providers in Nairobi from the Nairobi City Council. The information on NGOs is obtained from the NGO Bureau and consultations with selected NGOs. Other information on the community schemes and small providers is based mainly on secondary sources of information available from earlier studies[5].

A few words are needed on the limitations of information for this first phase of the study. The emphasis in the study has been to develop a framework and an approach that can be generalized for resource flows assessment in different countries in the region. In some cases, such as for the non-governmental sector, community schemes, and small private providers, it has been necessary to use the limited available information with 'best judgment' assumptions to arrive at national estimates. In addition, the decision-making processes for allocation and expenditures are reviewed based on the analysis of information and preliminary discussions with different stakeholders. Finally, though it was intended to include sanitation and household/ community expenditures (other than for user charges) in the study, this has not been possible due to the lack of adequate information at this stage. Similarly, while some attempt has been made to assess the information on monitoring, a detailed inquiry of the M&E system has not been done. A key related area, water resources management, despite its importance, is beyond the scope of this study.

The following three chapters provide results of the three tools for Kenya: institutional mapping, financing arrangements and an analysis of public finance. The final fifth chapter provides ideas on the way forward particularly focusing on the next phase of work under the WSS Resource Flows assessment for Kenya. Specific areas of focus for further work in Kenya will be decided after the consultation with stakeholders.

2. INSTITUTIONAL MAPPING– SERVICE PROVIDERS IN KENYA

The water services sector in Kenya is characterized by a variety of service providers in the public, private and community sectors. To capture this diversity in the measurement of resource flows, a 'service provider approach' is used. This approach provides interesting insights into the relative roles of different service providers and their share in total WSS related expenditures. For its effective application, it first maps the existing and emerging institutional arrangements in the sector. The impact of recently initiated sector reforms in Kenya is also discussed.

[5] Refer to Annex 2 for details of the main sources of information used and assumptions made for estimation for different water service providers.

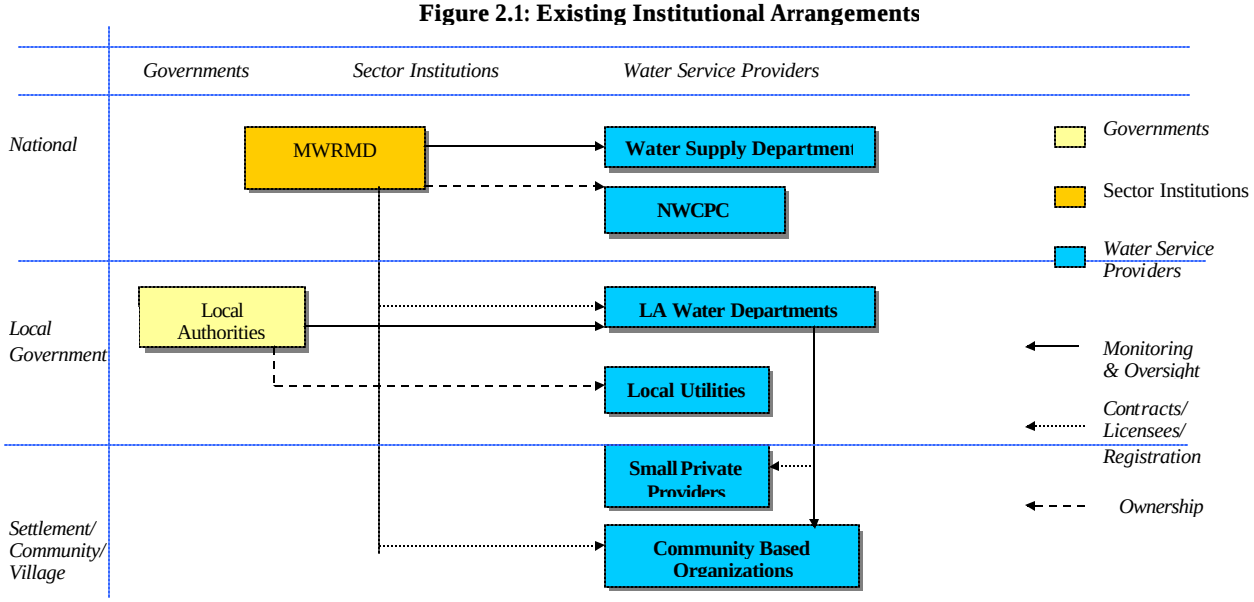
2.1 Institutional Mapping of Service Provision in Kenya

The ongoing sector reforms in Kenya attempt to address key issues in institutional arrangements by restructuring the role of national sector institutions and regional/local service providers. These, however, need to be coordinated through a well-designed transfer program, capacity building of different stakeholders and development of a strong sector information system…

Existing Institutional Arrangements

A number of service providers operate within the existing institutional arrangements in Kenya, both in the public sector, as well as community-based and informal private small providers. Figure 2.1 provides an illustration of the institutional arrangements within which key service providers in Kenya currently operate. Six main water service providers are identified for Kenya. Their main characteristics are outlined in Table 2.1.

Figure 2.1: Existing Institutional Arrangements



Note: Existing in this figure refers to the situation prior the new Water Act.

Some critical issues in the institutional mapping of existing arrangements are:

- *The lack of separation between sector policy development, operation/ service delivery and regulation* – the MWRMD at present combines these various roles, which probably results in a potential conflict of interest and ineffective sector regulation and development.

- *Inadequate legal basis for the rural CBOs and SHGs* – Despite probable large numbers, these groups lack a firm legal basis for service provision. This may result both in a lack of regulation and effective supervision, and creates difficulties for them to directly access market-based funds. While clearly a number of other measures will be needed to support improved supervision and creating market access, a firm legal basis is an initial necessary, though not sufficient, condition.

Table 2.1: Existing Water Service Providers in Kenya

	Type of Service Provider	Brief Description and Characteristics
	Public Providers	
1	Water Supply Department of the Ministry of Water Resources Management and Development	The Ministry was formed in 1974. It took over the services provided by the county council and community water supplies, as well as functions then performed by the Water Resources Authority. As a service provider, it operates through its provincial and district offices. The Ministry also supports policy development, and as the sector regulator, provides the rights to the use of water resources. Under the new Water Act 2002, its role will be restricted to policy formulation, sector coordination, financing and research.
2	National Water Conservation and Pipeline Corporation	NWCPC was set up as a state corporation in 1988 under the State Corporations Act (Cap 446) to take over the management of WSS schemes that could be run on a commercial basis. Its long-term objective is to manage specified gazetted projects in a self-sustaining manner at an affordable level. It provides services in both urban and rural areas and has established regional and area offices through which the water schemes are administered. It operates in six out of the eight provinces in Kenya with a total of 43 schemes and serves about 1.5 million people in the Coastal region and an additional 2.3 million in other areas. Within this jurisdiction, NWCPC determines the appropriate supply standards and water tariffs, with the approval of MWRMD
3	Local Authorities	Local authorities (LAs) are autonomous, self-governing entities under the Local Government Act (Cap 265) regulated by the Ministry of Local Government. For providing water supply, LAs have to apply for a water undretakership to the ministry in charge water. About 9 LAs currently have such a mandate. The largest is Nairobi City Council with service coverage of about 1.8 million population. There are about 20 other Municipalities and 19 town councils, which do not have a water undertakership, but provide water services in their jurisdiction, as water distributors or by extracting water from small systems such as boreholes. For service delivery, local authorities operate through their water supply departments.
4	Local Public Utilities	A few LAs have taken the initiative under donor projects to set up local utilities fully owned by them, but expected to operate and provide WSS services on a commercial basis. Only two such utilities, in Nyeri and Eldoret, have so far started operations. The Board of directors consist mainly public officers, with a few representatives from the community served, and include the mayor, town clerk, town treasurer, the Managing Director, representatives of MWRD, MOLG and MoF as well as representatives of business community, women and consumers
	Other Providers	
5	Community and Self-Help Groups	Community-based organizations play a significant role in the provision of RWSS services. Though most have been promoted through NGO or donor projects, there are a sizeable number of schemes promoted by self-help groups themselves. They operate schemes ranging from large piped schemes to small communal water points/ protected springs. Details of actual numbers cannot be properly ascertained, but estimates suggest a significant number. Most groups are registered as SHGs with the Ministry of Culture and Social Services or under the Societies Act.
6	Private small providers	In some large urban areas where urban utilities fail to provide adequate services, or any service in informal settlements, a number of secondary service providers have filled the gap. These include: a) service through kiosks that draw water from the utility or independent sources, b) service by vendors, who collect water from the kiosk or the public utility for doorstep resale in medium to low income areas, ranging from tankers to handcarts, and c) primary operators who sell water from private boreholes or wells. Often, they combine services for extraction and distribution and operate as small water companies, independent of municipal or utility services.

Source: Based on various GoK documents; Mohammed (1999); Njoroge (1999) and World Bank (2000).

- *Role of local authorities* – local authorities appear to play an important role in delivery of water services at present, but there is lack of clarity in terms of their mandate and responsibilities. Thus, while a few LAs have water undertakership from the MWRMD, and several smaller LAs, rural councils, municipalities

and town councils provide water for their citizens as water distributors. However, their powers and responsibilities are not clearly defined, and there is inadequate performance monitoring. All the LAs operate through their water supply departments and the revenues from water are thus put into the overall LA budget and consolidated account. This has often led to a criticism that the aggregate expenditure on water by the LAs is less than their receipts from water charges[6]. This is particularly relevant in terms of cash flows, where the sector revenues are often not available for normal expenditures in a timely manner. In the overall sector, there is a lack of appropriate incentives for enhanced revenues and better expenditure management by LAs.

- *Slow emergence of local public utilities* – as an outcome of the GTZ supported Urban Water and Sanitation Management (UWASAM) project, about 7 local authorities have formed separate utilities owned by them. Of these, only two (Nyeri and Eldoret) have shown some positive results. These are meant to operate on a commercial basis but the regulatory framework is still unclear. It is likely that there are no clear incentives to the LAs to encourage these to operate independently on a commercial basis.

- *Need to understand role of PSSPs in urban areas* – In some of the larger urban areas small private providers play an important role both in meeting the lack of services in informal settlements, and in helping businesses or the wealthy to cope with inadequate services. Besides the estimated population of 1.1 million that depends on them as a primary source, another 1.7 million probably depend on them as a secondary source. Despite this, they often operate in the context of uncertainty and rent seeking due to the lack of an appropriate legal and regulatory framework and tenure issues in the informal settlements.

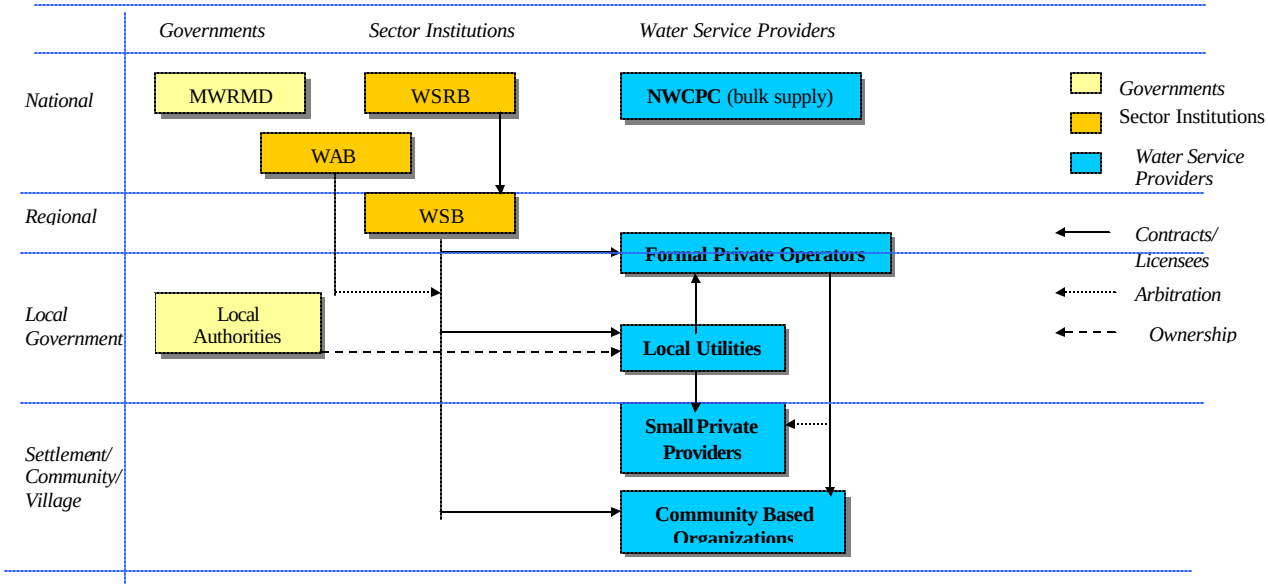
Emerging Institutional Arrangements

Key provisions in the new Water Act. Over the past several years, the Government of Kenya has embarked on a process of defining reforms in the WSS sector, with an emphasis on introducing institutional arrangements that address some of the issues raised above. This culminated in the new Water Act that received the Presidential assent in 2002. Figure 2.2 and table 2.2 provide an overview of the institutional arrangements envisaged under this Act. Several new sector institutions are envisaged with a focus on separating the functions related to planning, operations and regulation to MWRMD, water services boards (WSBs) and the Water Services Regulatory Board (WSRB) respectively. It is envisaged that all the water services assets will be transferred to the WSBs who in turn will contract with one or more water service providers (WSPs) to provide water in their jurisdictions. While the type of WSPs is not specified, it is exoected that services will provided "on a commercial basis and in accordance with sound business principles'.[7] Some key provisions suggest that of the existing WSPs (see table 2.1), the Ministry and the local authorities can not themselves be water service providers. For local authorities a possibility would be to create independent utilities operated on commercial principles[8].

Following the recent elections, the new government has constituted a new Ministry of Water Resources Management and Development (MWRMD) with a separate mandate for water services and resources[9].

[6] Refer to the details in Table 3.4.
[7] GoK 2002 the Water Act, Section 57 (5) (d).
[8] This is mainly due to the provision in the Section 57 (5) (f) of the Water Act 2002, which requires that in case the WSP also performs other functions, the water services will be managed and accounted for as a separate business enterprise.
[9] The earlier Ministry of Environment and Natural Resources (MENR) had a wider mandate as its name suggests. In several places in this report the reference may still be made to MENR for past information.

Figure 2.2: Emerging Institutional Arrangements



MWRMD: Ministry of Water Resources Management and Development
NWCPC: National Water Conservation and Pipeline Corporation
WSRB: Water Services Regulatory Board
WSB: Water Services Board
WAB: Water Appeals Board

Table 2.2: Emerging Water Service Providers in Kenya

	Brief Description and Key Roles
Sector Institutions	
MWRMD -WSS depart.	Policy development, sector planning, coordination with dev. partners, sector finance
Water Services Regulatory Board (WSRB) – (Sections 46-48, 68,69)	To: license and supervise WSBs; ensure access and expand quality; determine standards and compliance; develop guidelines for tariffs and determine fees / charges for water services; monitor agreements between WSBs and WSPs; monitor and reassess water services strategy; and gather, maintain and disseminate information on water services
Water Appeals Board (Sections 84-88)	To act as an arbitrator of disputes among regulator, WSBs, WSPs and consumers
Water Services Board (WSBs) – (Sections 51-54, 56-65, 70-78)	To: have the legal mandate for water provision in their jurisdiction through the licenses from the WSRB on submission and approval of strategic and business plans; enter into agreements with one or more WSPs to provide services in their jurisdictions; to make regulations for water services and tariffs as necessary
Reform secretariat (RS)	To guide the implementation of reform process through development of programs, information dissemination and stakeholder consultations
NWCPC – bulk water supply - Section 22 (4)	Under the new Act, NWCPC will provide bulk water supply, especially to other public utilities and large rural schemes.
Water Service Providers (WSPs) (Section 55)	To operate based on agreement with the WSBs for operation, maintenance, rehabilitation and development of water services infrastructure and facilities of the WSBs. An interpretation of the Act suggests that WSPs may include the following:
Community and Self-Help Groups	Mainly in rural and small towns, through the existing CBOs as well as the small rural schemes transferred for operations from MENR, NWCPC and rural local authorities
Local ind. utilities	For larger urban centers and towns, owned by local authorities and run commercially
Private small providers	Though not well defined, potential in informal settlements in larger urban centers and towns, through sub-contracts from WSPs (local utilities or formal private sector).
Other formal private sector	Mainly in larger urban centres and for large comprehensive schemes through appropriate contracts. Initial emphasis may be on management or lease contracts

Source: Based on GoK (2002)- the Water Act and Stower (2003).

MWRMD has taken some early steps in implementation by appointing the WSRB and the Nairobi Water Services Board (NWSB). The appointment of other WSBs is being explored and may soon be implemented [10]. A reform secretariat in the MWRD is defining further steps for the implementation.

Need for a transfer program. A key aspect of the reform process will be to develop and support a program for the transfer of water schemes as illustrated in figure 2.2. While this will first involve the transfer of assets to relevant WSBs, it will ultimately transfer the operation to appropriate service providers, such as CBOs, formal private providers, local public utilities and small private providers. The transfer program will need to define three main components:

i. a rural component for the transfer of MENR and NWCPC rural schemes through small schemes to community based organizations (CBOs), and by exploring other options to implement the larger schemes including joint schemes with the participation of small/ local private sector;
ii. an urban component for the transfer of operation of existing MENR and NWCPC urban schemes to local utilities or formal private providers through appropriate contracts; and
iii. the transfer of operation of rural schemes/ urban services presently being run by local authorities to appropriate independent water service providers: CBOs, local utilities or private providers.

Each of these components will also need to incorporate appropriate measures and incentives to rehabilitate the schemes before such transfers can take place. To help this process, it would be useful to review both the experience under the UWASAM projects, as well as transfers to CBOs initiated under the SIDA program. Other recent global examples might also provide some lessons such as: a) the consultative transfer process, backed by a strong information base, being explored in South Africa, and b) the transfer of single-village rural schemes to CBOs with the involvement of rural local governments being implemented under the World Bank funded RWSS project in the state of Kerala, India.

Other key issues. The implementation of reforms within this framework will also need to address some issues related to the roles and incentives for various existing and new service providers. These include: the creation of a legal basis for CBOs and PSSPs, an enabling framework to incorporate them in this process, and specific problems of dealing with the large city regions such as Nairobi, Mombasa and Kisumu, possibly through greater private sector participation. A key aspect of the implementation will be to identify the role of local authorities within this arrangement, particularly in urban areas, where they provide services to 50 percent of the population served.

2.2 Population Coverage and Expenditures by Types of Service Providers

Centralized public service providers in Kenya dominate the sector in terms of coverage and expenditures, though local authorities also appear to play an important role in urban areas, and CBOs in rural areas…

The information base on WSS service coverage by different service providers is weak and generally outdated. At present, the main source of information is an old inventory available with the WSD of the MWRMD. Information for urban areas and particularly on access for the poor in informal settlements is scarce. To support the reforms in Kenya critical attention needs to be given to the development of an

[10] Under GTZ technical assistance, some alternatives have been developed with recommendations for about seven WSBs to be set up (GOK 2003b).

inventory of existing schemes. This will also help to form a basis for the transfer process as discussed in section 2.3 below. Another key aspect is the proper definition of 'access', and some more meaningful estimates of coverage[11]. Discussions on resource requirements to achieve the national targets and MDGs will be further strengthened through this clarity.

Variations in Coverage by Different Service Providers

Based on the available information, some key observations on the analysis of service coverage are reported in tables 2.3 and 2.4, and illustrated in figure 2.3:

- *Coverage levels*. About 18.5 million persons have access to some form of piped or improved water supply. This includes about 48.1 percent of the rural population and nearly 94 percent of the urban population. While the present urban coverage is high, it may worsen with population growth without sustainable planning. For example, as per the corporate plans of the two local utilities, coverage levels may not improve over the next decade despite new investments[12].

Table 2.3: Population Coverage by Type of Water Service Providers, 2000

Type of Service Provider	Rural Water Supply		Urban Water Supply		Total	
	Population Coverage in Millions	Share of Population Covered (%)	Population Coverage in Millions	Share of Population Covered (%)	Population Coverage in Millions	Share of Population Covered (%)
Public Sector Providers						
1. Ministry of Environment and Natural Resources	4.7	52.2	1.4	14.7	6.1	33.0
2. National Water Conservation and Pipeline Corporation	1.2	13.3	2.2	23.2	3.4	18.4
3. Local Authorities	0.3	3.3	4.6	48.4	5.9	26.5
4. Local level Public Utilities	-	-	0.2	2.1	0.2	1.1
Sub-total for Public	6.2	68.9	8.4	88.4	14.6	78.9
Other Service Providers						
5. Community and Self-Help Groups:	2.8	31.1	-	-	2.8	15.1
6. Private small providers	-	-	1.1	11.6	1.1	5.9
Sub-total for others	2.8	31.1	1.1	11.6	3.9	21.1
Total (As a share of total population (%)	9.0	100.0 (48.1)	9.5	100.0 (94.1)	18.5	100.0 (64.2)
Uncovered population	9.7		0.4		10.3	
Total Population	18.7	-	10.1	-	28.8	

Sources: Refer Annex 1. For a) Rural coverage by MENR, NWCPC and community-based schemes: Orina (2001) Section 2.3, table 2.3.4, and section 2.4, table 2.4, pp. 13; b) Urban coverage by MENR NWCPC World Bank 2000: p.4; c) Local authorities: MENR n.d. p.5. Also refer Table A1.2; d) PSSPs: refer Table A1.3; and e) Total population: GOK 2001c. 1999 Population and Housing Census, pp.1-1 and pp.3-1.

[11] For example, under the Welfare Monitoring Survey access is defined as "those with reasonable access to safe water supply, including treated surface water, untreated and uncontaminated water such as piped water, roof catchments, protected spring and Wells. However access to safe water does not mean water reliability/availability (CBS 1994). In the Sessional Paper on water resources, however, the emphasis seems to be on distance to a safe water source. For rural areas access is also defined as "has access to potable water from various schemes including piped water schemes, boreholes, protected springs, pans and dams."

[12] According to ELDOWAS Corporate plan 2001-2011, the percentage of total population served is expected to decline from 82 in 2000/01 to 79 percent in 2010/11. The budget for NYEWASCO for the calendar year 2002 indicates that the planned water sales per person declined from 17.6 cubic metres in 2000 to 17.5 cubic metres in 2002, while unaccounted for water will remain unchanged at 35 percent.

- *Dominance of national providers*. About 50 percent of the total 'served' population is within the ambit of two national providers: the water supply department (WSD) of the Ministry for Water Resource Management and Development (MWRMD), and the National Water Conservation and Pipeline Corporation (NWCPC). These national entities serve both urban and rural populations.

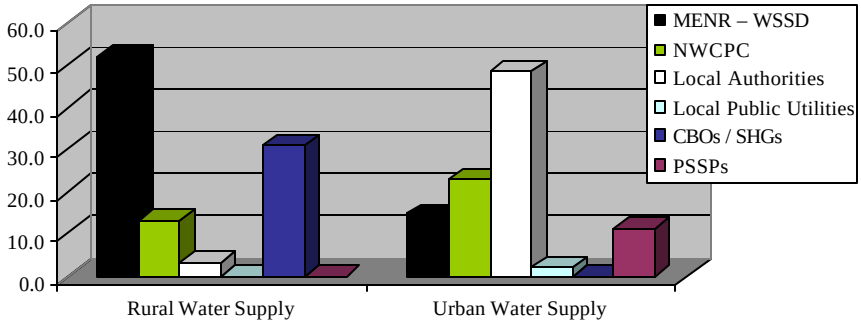
- *Other urban and rural providers*. The remaining population in urban areas is served by local authorities (47 percent), local level public utilities (2 percent) and small 'informal' private providers (11 percent). In rural areas the remaining 31 percent of the population is served by community-based organizations.

Table 2.4: Estimated Number of Schemes and Other Characteristics

Type of Service Provider	Rural Water Supply		Urban Water Supply	
	Number of Schemes	Number of Connections	Number of Schemes / LAs	Number of Connections
Public Sector Providers				
1. Ministry of Environment and Natural Resources	554	230,000	73	52,000
2. National Water Conservation and Pi peline Corporation	14	82,000	24	150,000
3. Local Authorities	29	na	8 undertakers 41 distributors	208,477
4. Local level Public Utilities	-	-	2	14,624
Other Service Providers				
5. Community and Self-Help Groups:	335 Piped 1183 pt.sources	-	na	na
6. Private small providers	-	-	2085 kiosks 348 vendors 48 tankers	-

Source: Same as for Table 2.3

Figure 2.3: Population Coverage by Type of Water Service Providers – 2001 (%)



This information, however, fails to highlight some important issues. In the large RWS schemes, population coverage has often declined with a significant share of original customers having been disconnected[13]. The information also does not reflect on the quality of services provided under these schemes. For example, even the community water schemes that account for over a fourth of total coverage are reported to have significant operational problems (Orina 2001). Similarly, for urban areas, the definition of 'served population' is rather wide and probably includes those served by individual connections as well as those with common taps or with access only to kiosks or vendors who may collect their water from municipal systems. Thus, the figures summarizing the coverage do not really provide a good indication of level of service.

[13] Based on information in Orina (2001), sections 2.1 and 2.2.

In addition to the public, community-based and private providers, households are often their own service providers through their private sources or the use of other natural sources such as wells or rivers. This is particularly true in smaller urban centers and rural areas. It is estimated that nearly 57 percent of households in rural areas and 28 percent in smaller urban centers depend on natural sources of water. There are no exact estimates available to indicate the extent to which this is through self-provision by households. Many households depend on their own sources such as wells or boreholes, estimated to be about 2 to 3 percent of total households in urban areas[14]. Often households build additional storage capacity to cope with inadequate or poor quality of services and to improve the quality of drinking water.

Studies in other countries show that when services are inadequate or unreliable the expenditure for self-provision is high.[15]

Expenditures by Different Service Providers

The total annual expenditure in the WSS is estimated to be about Ksh. 7.6 billion, which is about 1.0 percent of the GDP.[16] As illustrated in figure 2.4, the total expenditure is distributed almost equally (one third each) across national level public agencies (MENR and NWCPC), local public sector (through LAs and utilities) and other providers (dominated by CBOs). There are however significant variations in the recurrent and development expenditures by different service providers. Table 2.5 provides an estimate of these expenditures by water service providers in Kenya for the year 2000-01. Except for the MENR and CBOs, share of recurrent expenditure is very high for all other service providers.

Table 2.5: Estimated Expenditure by Service Providers – 2000-01

Type of Service Provider	Recurrent Expenditure		Development Expenditure		Total Expenditure	
	In million Kenya shillings	Share of Total Expenditure (%)	In million Kenya shillings	Share of Total Expenditure (%)	In million Kenya shillings	Share of Total Expenditure (%)
Public Sector Providers						
1. MENR – WSSD	1273	56.8	967	43.2	2240	100.0
2. NWCPC	883	73.9	312	26.1	1195	100.0
3. Local Authorities	1236	80.9	291	19.1	1527	100.0
4. Local Public Utilities	230	86.5	36	13.5	266	100.0
Sub-total for Public	3622	71.7	1606	28.3	5228	100.0
Other Service Providers						
5. CBOs / SHGs	456	21.2	1698	78.8	2154	100.0
6. PSSPs	183	92.9	14	7.1	197	100.0
Sub-total for others	639	27.2	1712	72.8	2351	100.0
Total	4261	56.1	3318	43.9	7579	100.0

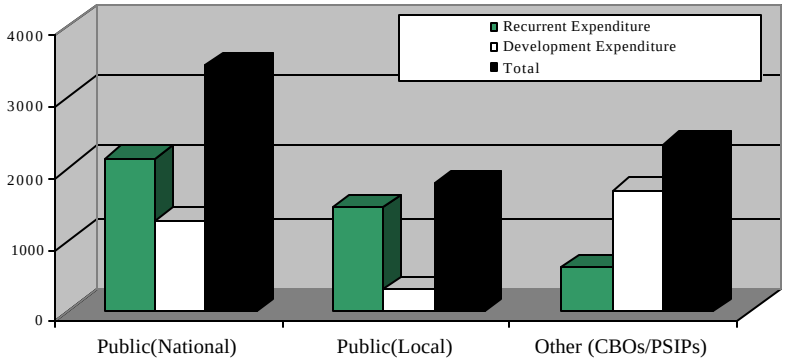
Source: Refer Annex 1. a) MENR-WSSD and NWCPC (dev): GoK Estimates of Rec. and Dev. Expenditures, various years; b) NWCPC (recurrent): from NWCPC finance department; c) local authorities: LATF database from MoLG; d) Local utilities: budget documents and corporate strategy from NYEWASCO and ELDOWAS; e) CBOs/ SHGs: tables A1.2; for PSSPs: table A 1.3.

[14] Refer to annex table A3.

[15] For instance a study on unreliable supply in Delhi, India concluded that the unreliability cost for the whole of Delhi was Rs. 3 billion annually (about US $ 64 million), which was an average of Rs. 2,000 per household. Households in Delhi spent six times more on reducing the effects of unreliability than they did on illness and water treatment (Zerah 2000).

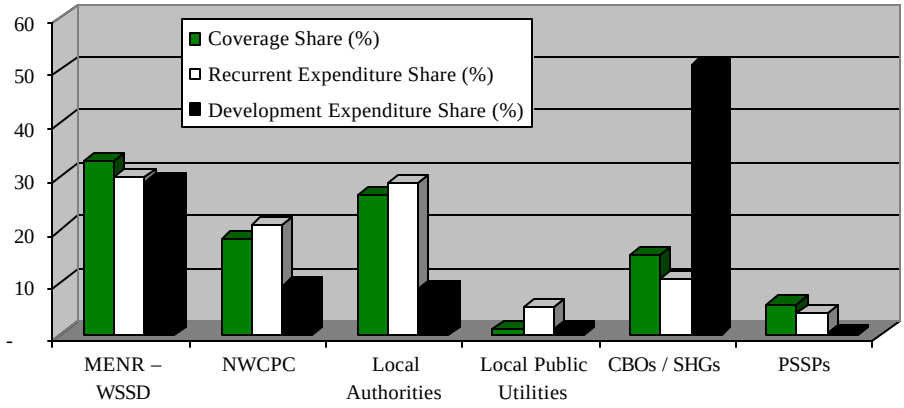
[16] Comparative performance from South Africa and Ethiopia suggest that this share is estimated to be 2.1 and 1.1 percent respectively (WSP-AF 2003 forthcoming). GDP for Kenya for 2000-01 is estimated to be Ksh. 773 billion (Central Bureau of Statistics 2002).

Figure 2.4: Expenditure Levels for Different Service Providers – 2000-01. *Ksh. Million*



For most service providers, the share of sector financing often does not reflect their coverage levels. This is particularly apparent in the share of development expenditure by different service providers (refer to table 2.6 and figure 2.5). While the Ministry has continued to mobilize resources through budget allocations, the NWCPC and local authorities do not appear to spend much on the development of new infrastructure. In contrast, community-based service providers seem to receive a third of total development expenditures in the sector, a fact that essentially reflects the off-budget channels used to disburse resources through the NGOs. It is likely that the coverage by CBOs has increased as a result of these investments, but it is not possible to assess this easily due to the lack of detailed information. This disparity is less pronounced for the recurrent financial expenditure, although the MENR serves a higher percentage of the population, but has a lower recurrent expenditure, and the recurrent expenditure of public utilities is high compared to its share in coverage.

Figure 2.5: Relative Shares for Coverage, Recurrent and Development Expenditures – 2000-01 (%)



A word is required on the availability of information about expenditures by service providers. While general information on the public service providers is easily available, it is difficult to obtain appropriate details and classification. There is also a lack of information related to outputs that would then enable an assessment of cost effectiveness, impact on service coverage and the value for money achieved through the public expenditures. In addition, information for the other service providers, particularly the CBOs, SHGs and PSSPs, has been difficult to obtain. The expenditure estimates in this study are based on estimates of

number of units or schemes, and unit expenditures based on available sample cases from earlier studies[17]. The main reason for generating these estimates is to demonstrate the urgent need for sector information in order to develop a proper understanding of WSS sector finance. It also illustrates the nature of information required for meaningful analysis and the development of a sector financing strategy.

Table 2.6: Comparison of Service Coverage and Expenditure by Service Providers, 2000-01.

Service Provider	Coverage Share (%)	Expenditure Share (%)			Per Capita Recurrent Expenditures (Ksh)
		Recurrent	Development	Total	
Public Sector Providers					
1. MENR – WSSD	33.0	20.6	19.7	20.2	209
2. NWCPC	18.4	23.5	10.7	17.9	260
3. Local Authorities	26.5	32.9	10.1	23.0	252
4. Local Public Utilities	1.1	6.1	1.2	4.0	885
Other Service Providers					
5. CBOs / SHGs	15.1	12.1	57.8	32.0	163
6. PSSPs	5.9	4.9	0.5	3.0	166
Total	100.0	100.0	100.0	100.0	233
Total pop. covered (in million) or total expenditure (in Ksh. Million)	18.5	4261	3318	7579	

Source: a) Coverage: based on table 2.3; b) Expenditures based table 2.4.

2.3 Summary of Key Issues

Kenya is in the process of initiating the implementation of major reforms in institutional arrangements for water services through the separation of policy, regulation and service delivery. The new arrangements will need to develop a well-informed and funded transfer program, 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…. As the Government of Kenya moves to implement the institutional reforms initiated through the new Water Act, some key issues will need to be addressed:

Greater clarity is required in the role of local authorities, CBOs and PSSPs. A key aspect of the emerging institutional framework is greater clarity in terms of the potential roles of existing service providers. This is particularly relevant for the local authorities, as well as community and self-help groups that are presently providing services on a mutual benefit basis, and the large number of private small scale informal providers mainly in the large urban centers. The issue for LAs is more complex as the new Water Act specifies that for "a WSP which conducts some other business or performs other functions not authorized by the license, the supply of those services will be undertaken, managed and accounted for as a separate business enterprise"[18].

This will imply that the LAs that are currently providing WSS services will need to transfer operation of these services to a local company (utility). While the utility may still be under LA ownership, there is a certain lack of clarity as the Act envisages all WSS assets to be transferred to the WSBs. Furthermore, under this definition of WSP, the NWCPC can continue to be a WSP, though it may not fully meet the requirements for providing services "on a commercial basis and in accordance with sound business

[17] Annex tables A29 and A30 provide details of the estimates for CBOs and PSPs respectively
[18] Section 57(5) (e).

principles" as also suggested by the new Water Act[19]. Thus, appropriate WSPs will need to be identified for existing schemes by the NWCPC and those run by the MENR. 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.

Finally, greater clarity will also be required in the role of LAs within the envisaged WSBs. Ongoing discussions in the Constitution Review call for the devolution of powers and functions (including water and sanitation) to LAs in the form of elected district councils, and may require further review.

Transfer program to support implementation of institutional reforms. A key aspect in the implementation of institutional reforms envisaged under the Water Act is the significant need to transfer assets and operations of services. Besides addressing governance issues in setting up the new sector institutions (see section 4.2 later), implementation of the reforms requires the articulation of the strategy in terms of a Transfer Program. Such a program will need to be developed consultatively for each key transfer option discussed above[20] and will need to include: i) clarifications of issues related to ownership of assets and any outstanding liabilities, ii) developing an inventory of schemes to be transferred, iii) an assessment of the need for rehabilitation before transfer, and iv) designing the transfer procedures. Appropriate local (for example under the ongoing SIDA and GTZ supported programs) and global experience should also be taken into account during program development.

Enhanced coverage, and improved matching of coverage and expenditures. While these institutional reforms are being implemented, it will be important to not lose sight of the need to enhance coverage of sustainable access to safe water in both urban and rural areas. This requires a clear planning framework to link the coverage targets with the planned public expenditure. 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. This is discussed further in chapter.

3. FINANCING ARRANGEMENTS FOR SERVICE PROVIDERS

Within the institutional arrangements mapped in the previous chapter, service providers in Kenya use a number of channels and sources of funds. This section delineates the current and emerging financing arrangements and traces the channels and sources of funds used.

3.1 Mapping the Existing Financing Arrangements

While the GOK budget dominates as the channel for WSS sector finance in Kenya, local authorities and off-budget channels are also important. Significant WSS sector 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.

[19] Section 57 (5) (d).
[20] In Section 1.1, pp. 3-5.

Existing Financing Arrangements

The current financing arrangement within the existing institutional arrangements mapped above is illustrated in Figure 3.1. 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). As shown in figure 3.1 and described in Table 3.1, five channels of finance are important for the WSS sector in Kenya.

Figure 3.1: Existing Financial Arrangements

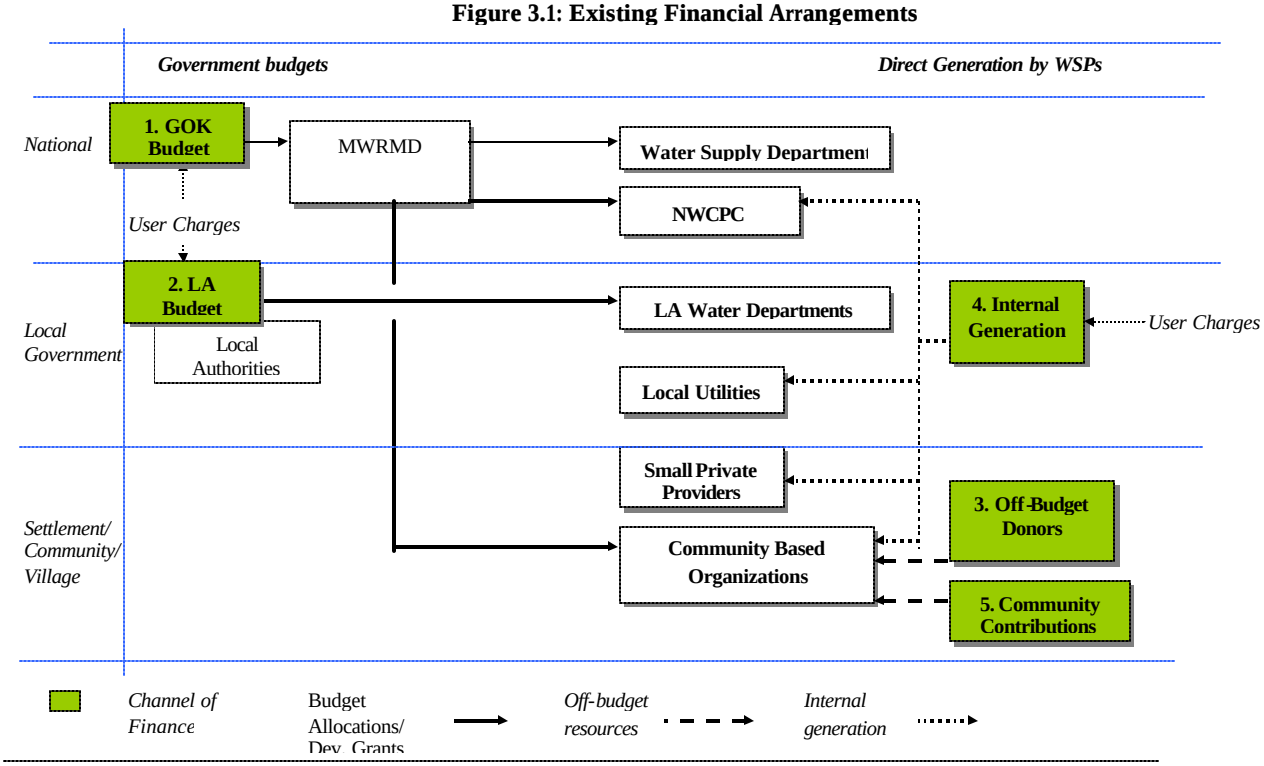


Table 3.1: Main Channels of Finance Used for WSS Sector in Kenya

Channels of Finance / Used by	Brief Description
Government of Kenya Budget Used by: MENR, NWCPC, local authorities, CBOs	Allocations from the Government of Kenya budgets are available for a number of service providers: a) to MENR for both development and recurrent expenditures, b) to NWCPC for development expenditure as allocations for recurrent expenditures have been stopped, c) to community based schemes, d) to local authority schemes through the MoLG, and e) to MENR for sector development and management.
Local authority budgets Used by local authorities	Several local authorities allocate funds in their annual budgets for both recurrent and development expenditures related to water and sanitation. Some of these are undertakers, while others (both rural and urban LAs) have responded to the local needs of its citizens. Since last year, all LAs have adopted a participatory process (local authority service development action plan – LASDAP) through which WSS has often emerged as a local priority. Water charges comprise main source of revenue for the WSS sector. As per the provisions of the Local Government Act, LAs would be able to borrow from the markets with the permission of the Minister, though they probably lack the necessary creditworthiness for such borrowing.

Channels of Finance / Used by	Brief Description
Off-budget donors and NGOs Used by CBOs	A large proportion of total development funds in the sector accrues 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 of the donors transfer funds directly to the community. Unfortunately, however, the NGO activities are not well coordinated or monitored effectively.
Internal generation Used by NWCPC, local utilities, CBOs and PSSPs	Several service providers, including NWCPC, local utilities, community based organizations, and the small private operators use sources generated internally through user charges as well as surplus from earlier operations. While only limited information is available at this stage, this channel is largely confined to O&M expenditure, and it is necessary to review whether the resources are adequate for efficient O&M. 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, risks are manageable and a firm legal basis and framework for such borrowing exists. This may be used for further development of service delivery through augmentation, rehabilitation or expansion. A first step, however, would be to generate a sustainable operational surplus as a basis for financial viability and later market borrowing.
Communities and households (other than regular charges by service providers)	Besides user charges, communities and households also contribute through: a) community share in CBO schemes which in general ranges from 10 to 30 percent, and b) expenditure for their own provision (though its extent is not known at this stage) and for coping costs to deal with inadequate or poor quality of services (such as for water treatment and storage).

Note: Refer to Annex 1 for details of sources of information and related assumptions made for each service provider.

Resources from Existing Channels and Sources

It is useful to distinguish between channels of finance and sources of funds. 'Channels' refer to the way the funds are mobilized and allocated. For the WSS sector in Kenya, these include: government budgets (national and local), off-budget routes used by donors and NGOs, internal generation by utilities and CBOs, and other direct expenditure by communities and households. 'Sources' represent the contribution from user charges, donors (loan/ grants), and other sources including: general government revenues, household savings, WSPs' internal surplus and user charges. Within the current service provider framework for Kenya, tables 3.2 to 3.4 provide estimates of channels of finance used by different service providers to meet their expenditures. The relative shares are also illustrated in figure 3.2. User charges are an important source of funds as illustrated in table 3.5.

As for coverage and expenditure estimates, the information base for non-public channels and sources is weak, and the estimates have been made based on available information (refer annex 1 for details). Some important observations on the levels and relative shares of these channels and sources are:

Several channels are important… While allocation through the GOK budget is the largest contributor (37 percent) to financial expenditures by WSPs, nearly 80 percent of this is concentrated on the Ministry. There are three other important sources: LA budgets, off-budget contributions by NGOs and internal generation by WSPs, constituting nearly 20 percent each. Their relative shares differ across recurrent and development expenditures (see figure 3.2 and table 3.3). While the GOK budget is used for both, the local authority budget and intemal generation are confined to recurrent expenditures. The off-budget donors mainly finance development expenditure.

Table 3.2: WSS Resource Flows Matrix, Expenditures in 2000-01 *(In million Kenya shillings)*

Channels of Finance	Public Service Providers				Other Providers		Total
	MENR	NWCPC	Local Auth.	Local Utilities	CBOs / SHGs	PSSPs	
Government of Kenya – budget [i]	2240	312	210		68		2830
Recurrent	1273	0	0		0		1273
Development	967	312	210		68		1557
Local authority budget			1317				1317
Recurrent			1236				1236
Development			81				81
Off-budget donors / NGOs					1422		1422
Recurrent					354		354
Development					1068		1068
Internal Generation by WSPs [ii]		883		266	119	197	1465
Recurrent		883		230	102	183	1398
Development		0		36	17	14	67
Communities / Households [iii]					545		545
Recurrent					na [iv]		na
Development					545		545
Total Resources	2240	1195	1527	266	2154	197	7579
Recurrent	1273	883	1236	230	456	183	4261
Development	967	312	291	36	1698	14	3318

Source: Refer to annex 1 for details of these estimates. Detailed information is also available in annex tables.
Notes: i) Use of resources from the GOK budget by MENR also includes expenditure on general sector development and management. However, this is not possible to separate based on the details in the budget documents; ii) internal generation as a channel is assumed to be used only by WSPs that are able to protect the revenues for use within the sector, and hence include NWCPC, local public utilities, CBOs/ SHGs and PSSPs, iii) communities/ households as a channel is used for other than charges paid to service providers, and iv) it has not been possible to estimate the recurrent expenditures by households and communities besides those paid as user charges to various service providers.

Figure 3.2: Channels of Finance Used for WSS Sector Finance – 2000-01 *(% to total expenditure)*

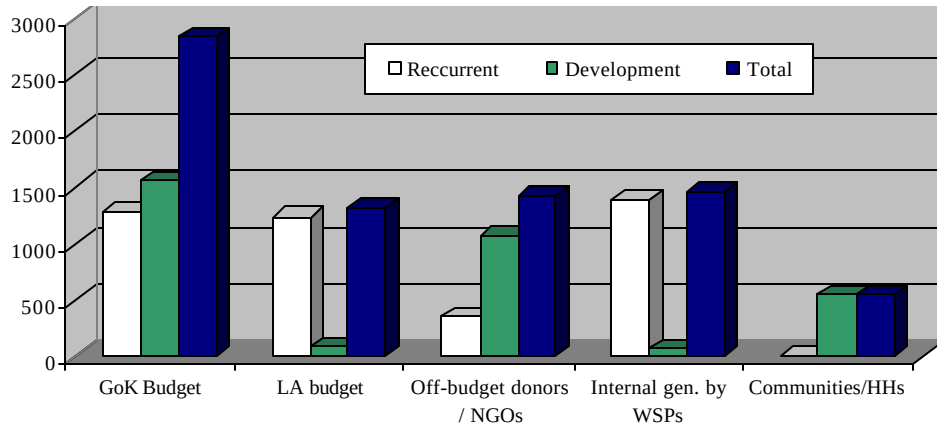


Table 3.3: Channels of Finance used for Development and Recurrent Expenditures

(Percentage to total)

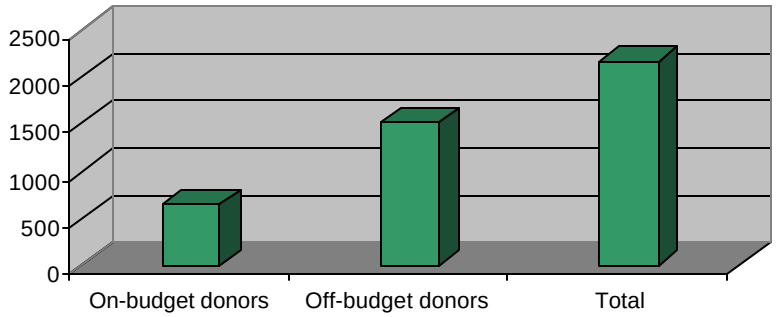
Channels of Finance	Recurrent	Development	Total
Government of Kenya – budget	29.9	46.9	37.3
Local authority budget	29.0	2.4	17.4
Off-budget donors / NGOs	8.3	32.2	18.8
Internal Generation by WSPs [I]	32.8	2.0	19.3
Communities / Households	na	16.4	7.2
Total Resources	100.0	100.0	100.0

Source: Based on table 3.2.

There is a preference for off-budget route by donors/NGOs.. A large proportion (nearly 70 percent) of total donor resources, is through off-budget support, mainly through a number of NGOs, and is devoted to

development expenditures for new community-based schemes. As these efforts are not coordinated, it is unclear whether they are implemented within a demand responsive approach. The preference for the off-budget routes probably reflects the lack of confidence on part of the donors in the accountability and fiduciary management of public systems, as well as the overall low-case scenario for donor lending to Kenya during those years. Similar donor preference has also been observed in Ethiopia and suggests that it is essential to understand the reasons for the use of this route by donors.

Figure 3.3: Donor Funding through Different Channels – 2000-01 *(Ksh. Million)*



Internal generation is important but does not contribute to development expenditure.. Among WSPs, NWCPC, local public utilities and the PSSPs depend entirely on internal generation for their recurrent expenditure. However, their expenditure on development expenditure through internal generation is either non-existent or very limited (refer to tables 3.2 and 3.3). The local utilities are relatively new entities, and over time, with appropriate governance, they may be able to utilize this source better. For PSSPs, an enabling regulatory framework and transparent contracts will be necessary to increase internal generation, while for NWCPC, this issue is linked to the inability to revise tariffs. However, in the last two years, there has been some improvement in the collection performance from about 63 percent in 2000-01 to about 87 percent in 2002-03[21].

Table 3.4: WSS Resource Flows Matrix for Service Delivery – 2000-01 *(Percentage Shares)*

Channels of Finance	Public Service Providers			Other Service Providers			Total	
	MENR	NWCPC	Local Auth.	Local Utilities	CBOs / SHGs	PSSPs	(%)	In Ksh Million
GoK – budget	79.2	11.0	7.4	-	2.4	-	100.0	2830
LA budget	-	-	100.0	-	-	-	100.0	1317
Off-budget donors / NGOs	-	-	-	-	100.0	-	100.0	1422
Internal Generation	-	60.3	-	18.2	8.1	13.4	100.0	1465
Communities / HHs	-	-	-	-	100.0	-	100.0	545
Total (%)	20.4	17.8	22.8	4.0	32.1	2.9	100.0	7579
GoK – budget	100.0	26.1	13.8	-	3.2	-	37.3	
LA budget	-	-	86.2	-	-	-	17.4	
Off-budget donors / NGOs	-	-	-	-	66.0	-	18.8	
Internal Generation	-	73.9	-	100.0	5.5	100.0	19.3	
Communities / HHs	-	-	-	-	25.3	-	7.2	
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Total (Ksh Mill.)	2240	1195	1527	266	2154	197	7579	

Source: Based on estimates reported in table 3.2.

[21] Refer annex table A15 for details.

Local authority expenditures seem to be largely from user charges. Unlike the water supply department of MENR, WSS related expenditure by the local authorities appears to be based largely on user charges, except for a few donor projects funded by the Ministry of Local Government through the GOK budget. However, there is very limited funding of development expenditure in the WSS sector through user charges or other general revenues of the LAs. On the other hand, about 20 percent of revenues through water charges is probably used to finance other sectors / activities (refer to table 3.5). This is particularly relevant for the larger urban areas, since the smaller LAs and county councils apparently spend more on water than what they collect through user charges.

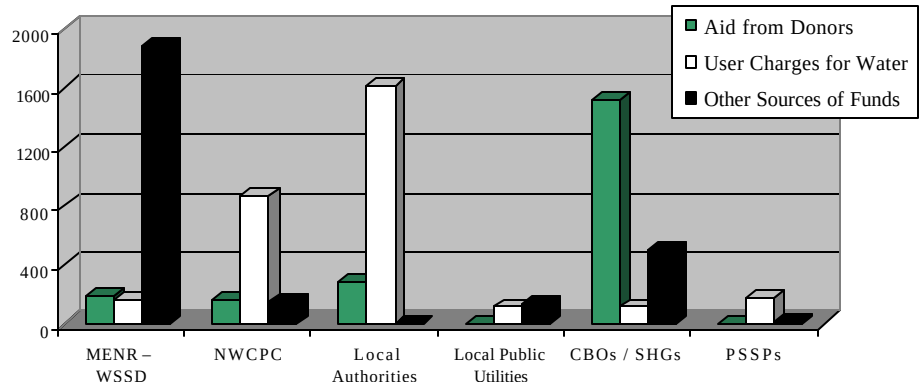
Table 3.5: Sources of Funds Used By the Service Providers, 2000-01

In Ksh. millions

Service Provider	Sources of Funds				Total Expenditure	Difference between resources mobilized and expenditure
	Aid from Donors	User Charges for Water	Other Sources of Funds	Total Resources Mobilized		
Public Sector Providers						
1. MENR – WSSD	191	173	1876	2240	2240	0
2. NWCPC	171	865	159	1195	1195	0
3. Local Authorities	291	1615	0	1906	1527	379
4. Local Public Utilities	0	118	148	266	266	0
Sub-total for Public	653	3353	1152	5607	5228	379
Other Service Providers						
5. CBOs / SHGs	1523	119	512	2154	2154	0
6. PSSPs	0	183	14	197	197	0
Sub-total for others	1523	302	526	2351	2351	0
Total	2176	3655	1678	7958	7579	379

Sources: a) For donors – the on-budget estimates are based on GOK budget documents, and the off-budget estimates are based on the assumption that expenditures by NGOs are sourced from donors; b) user charges: i) MENR – based on GOK budget documents as Aid in appropriations for recurrent account, ii) NWCPC – from NWCPC finance department, iii) local authorities – from LATF database in MoLG, iv) local utilities – from their finance reports, v) CBOs/ SHGs –table A1.2, and vi) PSSPs –table A1.3. Notes: i) Other sources include internal accumulated surplus and own savings of households through community contribution; ii) For CBOs and PSSPs it has been assumed that the user charges collected are the same as recurrent expenditures. For PSSPs this is probably an under estimation and a better estimation needs to be made.

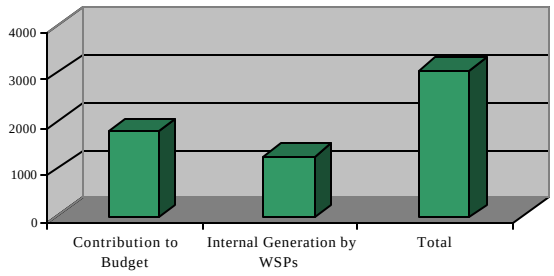
Figure 3.4: Sources of Funds for Different Service Providers 2000-01 *(Ksh. Million)*



User charges for other public sector WSPs are generally protected but there may be cash-flow and efficiency problems.. At an aggregate level, the user charges collected by other public service providers are ploughed back into the sector, as evident from table 3.4. More importantly, however, these collections are not protected for the immediate use of service providers. In most cases, the user charges flow upwards to the general account (in case of MENR and NWCPC at the national level and for the local authorities, in the LA consolidated

accounts) and there is no close correlation between user charges and expenditure. This leads to two problems: i) cash-flow problems for operations, especially for regular maintenance, and ii) a lack of incentives for the service provider to improve collection efficiency and service quality. This is discussed further in section 4.2 in the next chapter.

Figure 3.5: Channels for User Charges – 2000-01 (Ksh. Million)



Tariffs and their determination. Given the importance of user charges, a key aspect in resource flows is the tariff structure in the WSS sector and its determination[22]. This process varies across service providers. For example, MENR and NWCPC tariffs are fixed with a countrywide application, with an implicit assumption to cross subsidize the poorer regions and those that have higher costs. However, the tariffs are not fixed with any clear relation to expenditure requirements. For the MENR and NWPWC, tariffs are determined by the Director for Water in WSSD and approved by the Minister for Water. While the local council determines the tariffs for local authorities, approval of the Minister for Water is required. Interestingly the tariffs for MENR and NWCPC are the same and do not vary across the rural or urban consumers. However, there is considerable variation in per capita collection from the rural and urban consumers as evident from table 3.6 below. While this differential also persists among the local authorities, they collect higher level of revenues in urban areas.

Table 3.6: User Charges by Key Service Providers and Rural / Urban – 2000-01

Service Provider	Total charges collected (Ksh million)			Per capita charges collected (Ksh.)		
	Rural	Urban	Total	Rural	Urban	Total
1. MENR – WSSD	70	102	173	15	73	28
2. NWCPC	253	611	864	82	290	254
3. Local Authorities	5	1,567	1,573	18	341	330
4. Local Public Utilities	-	629	629	-	2,420	2,420
Total	329	2,282	2,611	53	278	192

Source: Same as for table 3.5 above. Details are available in annex tables A7, A14, A15, A24b, A 18 and A19.

Interestingly, the two local public utilities collect much higher per capita revenues. However, this probably also reflects a greater share of collections from commercial and industrial users in their jurisdictions.

3.2 Emerging System of Sector Finance for Water Service Providers

The reform framework envisages a more streamlined sector finance system with an emphasis on sustainable and enhanced internal generation by service providers. Within this emerging scenario, there is a need to also explore the potential for other sources of funds …

[22] Refer to annex table A 25 for details of prevailing tariffs.

The sector reforms for improved institutional arrangements also have implications for service providers in terms of sector finance. This section identifies the emerging financing arrangements and their implications on sector finance. It also discusses the need to explore other potential sources of finance in light of the overall financial sector development in Kenya.

Emerging Financing Arrangements

Some key changes are envisaged in the financing arrangements within the sector reforms. Figure 3.6 provides an overview of these changes. While the new arrangements visualize a more streamlined sector finance system, the key emphasis is on internal generation by independent service providers.

Based on a review of selected provisions in the new Act and the GOK Strategy document, it appears that there will be three main channels of finance in the emerging system:

1. *Streamlined GOK allocations.* The main channel of finance under reforms will continue to be allocations through the GOK budget at least in the initial stages. However, these will need to become more streamlined as the new institutional arrangements come into place through: i) first, a clear distinction between expenditure to support key sector institutions including: MWRMD-WSSD, WSRB and WAP; and ii) secondly, 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 and appropriate equity considerations. The MWRMD role will thus be to assess the requirements and priority across the WSTF and different WSBs. In developing the rules and principles for allocation of public resources emphasis will need to be placed on a demand responsive approach with applications backed by business plans and clarity in appraisal responsibilities backed by transparent procedures and adequate capacity. The criteria for allocation will need to reflect incentives for improved financial performance while addressing the equity issues.

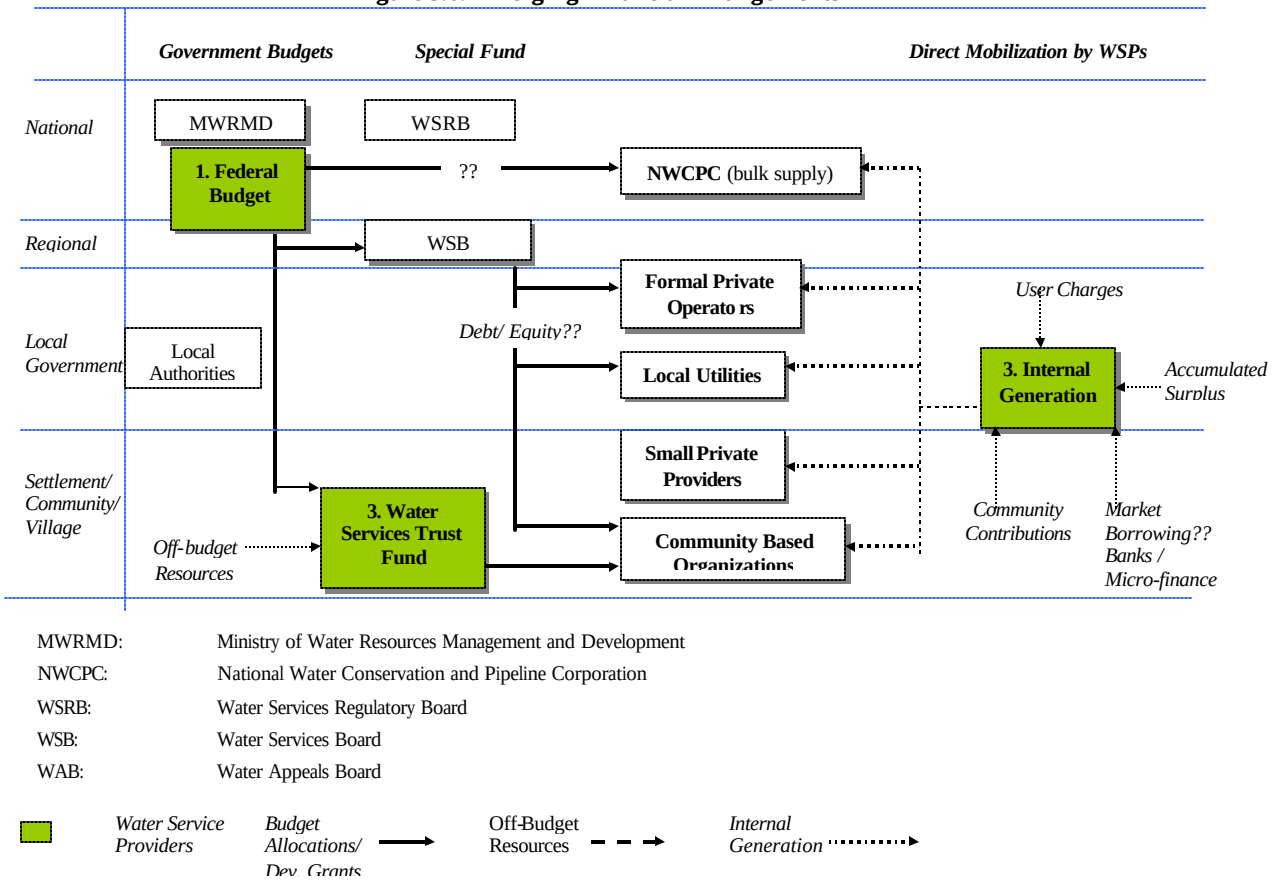
   For such streamlining to happen in practice in an effective manner, three measures are essential: i) a supporting management information system (backed by a strengthened M&E system), ii) clarity in institutional responsibilities for allocation decisions and appraisal, with related capacity building, and iii) capacity building and business plan development support for potential applicants. Further, in the medium term the emphasis will first be on financing a transfer program to implement the institutional reforms envisaged under the new Water Act.

2. *Water Services Trust Fund (WSTF) for areas without adequate water services.* The new Water Act provides for a financing mechanism in the form of a trust fund for "financing the provision of water services to areas of Kenya that lack adequate water services"[23]. The fund is to be capitalized mainly through funds from the GOK budget as well as donor grants. Trustees appointed by the Minister of WRMD will manage the WSTF by developing principles for allocation of grants from the fund. While the Act does not specify its use for any particular sub-sector, from the past experience[24], the initial emphasis may be on community-based schemes for rural water supply.

[23] As per Section 83.
[24] For example, under an ongoing Swedish Agency for International Development (SIDA) funded program assistance is being provided to the GoK to set up the fund, possibly with a rural CBO focus.

3. *Internal generation by WSPs as a main basis for sector finance*. The various provisions in the new Act are likely to result in a greater focus on internal cash generation by the service providers, mainly through a separation of WSPs as an independent business enterprise[25] that is likely to result in 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 non-revenue water.[26] Other efficiency improvements may include aspects such as better staff to connection ratios and demand management for use of electricity. It is only with a credible history of such surplus that the WSPs would be able to mobilize market-based resources for development expenditures in the future.

Figure 3.6: Emerging Financial Arrangements



For this new system to emerge successfully, significant changes will be required in the existing institutional and financing arrangements. The former is linked to implementation of a transfer program as discussed in the previous chapter. Some of the other critical issues that need to be addressed in this shift include:

[25] See footnote 7 above.
[26] Non-revenue water refers to both the technical losses due to inadequate distribution systems, as well as commercial losses due to illegal connections and low collection performance.

The new role of WSBs in allocating GOK resources to different service providers.. The Water Service Boards will need to take on a new role in allocating the GOK budget resources, particularly for development expenditure, to different service providers, by essentially replacing the earlier role of MWRMD, NWCPC, MoLG and local

authorities through the budget process[27]. Such allocations will need to take into account issues of equity, efficiency and coverage targets that may be set by the government.[28] In addition, to ensure that other community and market resources are not crowded out, these allocations will need to develop appropriate rules and mechanisms (refer to discussion in the following section and section 4.2 in the next chapter).

Several aspects of recent experience and sector reform need to be taken into account while designing the WSTF…The Government of Kenya has already registered the WSTF and the Minister has appointed the trustees. While designing the planning and operations of WSTF, available regional experiences with such funds as well as the specific reform context of Kenya should be taken into account. For example, some of the aspects to be considered include:

- *Ensuring a demand responsive* approach (DRA) for the community-based schemes, especially for water supply in rural areas. The operations of WSTF need to learn from the global experience in this field and use the standard principles of the DRA such as: social mobilization for demand articulation, full management responsibility with the CBOs for implementation and operations, and community cost sharing through partial capital contributions and full coverage of O&M costs;

- *Coordinating off-budget resources* by making efforts to attract these resources to WSTF. This is especially important, as the estimated share of these resources is quite high at present. This may also be supported by developing appropriate modalities for the WSTF to work with and through NGOs that have the necessary sector experience;

- *Exploring possible WSTF support to PSSPs..* since they constitute the only source of water for the poor and low income families living in informal settlements in some of the large urban centers. For the PSSPs the emerging global experience in minimum subsidy concessions may prove to be a useful mechanism[29]. Alternatively, the WSTF support may be for the CBO based small providers in these settlements;

- *Capturing community contributions as internal generation…* to ensure that they are not crowded out by offering very high partial grants that may not be fiscally sustainable with countrywide scaling up. Available evidence for community schemes in Kenya suggests that community contributions range from 10 to 30 percent in donor/ NGO funded schemes. Besides, there are many community schemes that are totally self-funded.[30] The WSTF operations need to be designed to capture these as much as possible and not crowd them out.

[27] The existing budget process is discussed in more detail in the following chapter 4.

[28] The Government of Kenya is also a signatory to the Millennium Development Goals (MDGs) agreed by the heads of several countries. The MDGs suggest that the proportion of population without sustainable access to safe water will be halved by 2015.

[29] For example, see Mehta 2003 for details of such experiences.

[30] See Orina, 2001 and World Bank, 2000 among others. See also the information on these in annex table A29.

- *Exploring the potential role of LAs..* especially in supporting a demand responsive approach and providing the technical support to the CBOs to ensure the long term sustainability of their services. In this regard, it would be good to draw from the recent decision of the European Union to redesign the existing funding mechanism of the Community Development Trust Fund (CDTF). The new program proposes the direct involvement of the local authorities in identifying investments. The main rationale behind the EU decision is to enhance the sustainability of community level investments[31].

There is need to clearly distinguish between grants, and debt or equity contributions from the budget allocations… Based on available details from the Water Act and the water Services Strategy, the WSTF is clearly positioned to receive and allocate grants. However, it is unclear how the WSBs will be financed through the GOK budget, and further how they will provide funds to the WSPs. A clearer understanding needs to be developed to know if this financing will be through debt or equity contributions, or simply as one time grants. The rather poor experience of the GOK loans in the past should be reviewed as a part of the development process[32], especially as the past experience has not been very positive in terms of the ability and willingness of the LAs to repay these loans. For example, the Nairobi City Council has an outstanding loan of Ksh 19.5 billion as of June 30, 2001, which is in arrears and is not being repaid at all (Graham et. al. 2001).

Accessing Other Sources of Finance

A number of new opportunities need to be explored within the emerging institutional and financing framework, in the context of financial sector development in Kenya. Three potential sources are:

Market borrowing by WSBs and/ or WSPs. As the new institutional arrangements in the water sector unfold, there will be greater potential for market-based borrowing for new investments, rehabilitation and augmentation. Compared to many other countries in the region, Kenya has a relatively better developed financial sector. It would, therefore, be appropriate to explore the possibility of tapping into this for the water sector. However, the WSBs and most WSPs will be relatively new entities and will not have a cash-flow history to back up such borrowing. Therefore, initial government support will probably be needed to exploit this potential. The most important aspect of this process will be to ensure a transparent and rigorous framework of licensing (between the WSRB and WSB) and contracts (between WSBs and WSPs). The support also needs to be designed to ensure sustainability and could include partial guarantees and technical assistance grants to WSBs for business planning and to WSPs for project development. Further inquiries may be required to assess the potential interest of the financial sector and related requirements for the water sector.

Potential for micro-finance. It would also be useful to explore the possibility of accessing micro-finance, especially for community-based organizations. The micro-finance sector in Kenya is relatively well developed, both through mainstream micro-finance institutions (MFIs) as well as the cooperative sector.

[31] Refer to GoK, 2003 on EU support for the decentralized development support programme. A recent program in Nigeria to provide performance linked finance also provides an useful example (refer Mehta 2003 for details).

[32] For example, most GOK loans to LAs, either directly or through the Local Government Loans Authority have been in arrears with little chance of repayment (Refer to World Bank 2002 pp. 61-63 and chapter 4).

Access to such finance would make it possible to enhance community contributions while still keeping them affordable for rural communities. However this will only be possible if some key issues are addressed, including: an appropriate legal basis and contracts for the CBOs to provide water services, coordination of WSTF operations with different donors and NGOs to ensure consistency in rules for cost-sharing, and finally, capacity building support to CBOs for financial management.

Private sector participation and investments. So far, there has not been any significant private sector participation (PSP) in the operation and management of water services in Kenya[33]. However, as institutional reforms proceed, new opportunities for PSP are likely to emerge. PSP in water will be relevant for sector finance from two perspectives: a) to enhance the efficiency of WSPs through different, and possibly more limited, forms of delegated management. This will result in improved internal cash generation through reduction in non-revenue water and improved customer relations and over time make it possible to access market based resources; and b) attracting direct private sector investments through more advanced contracts. It is likely that given the early days of reforms, the finance potential of PSP will be realized more through the first option. A better understanding of the quality of existing systems and assets will also be developed during this period creating a possibility of direct private investments in the subsequent phases.

However, it is essential to get the sequencing right in exploring these new sources… A key aspect of this process is to identify the appropriate sequencing of critical activities. As a first step, the need is to identify the potential borrowers within the sector and their creditworthiness and to assess the interest and potential of domestic financial sector and micro-finance industry. It is likely that the initial focus is needed on enhancing creditworthiness of potential borrowers. For example, recent inquiries regarding possibility of private sector investments in Nairobi Water Services suggest that initial investments need to be made through the public sector. However, with efficiency improvements, in the next phase the utility would be able to service debt and finance development expenditure through internal generation.

3.3 Summary of Key Issues

The main issues affecting sector finance enhancing internal generation of resources to improve operations and support investments, and designing new financial arrangements to provide appropriate incentives and improve coordination with off-budget resources, and in the long term leverage additional market based funds through sustainable measures….

As the Government of Kenya takes up reform implementation, certain critical issues for financing arrangements will arise in further efforts:

Further enhancing internal generation. With nearly half of the total sector resources being generated through user charges, it may be argued that there is already significant internal generation in the sector. This is important both to enable generation of resources for development expenditure and creating an operational surplus, which can become a basis of potential market borrowing in the future. However, in reality, local authorities lack adequate incentives for improving internal generation, as the savings do not necessarily flow back into the sector, and for other service providers a clear relationship between cash generation and WSP

[33] Private sector has probably been active in support services such as for design and construction management, construction, and supply of equipment.

performance is neither planned nor monitored. For further enhancing internal generation different avenues need to be explored: using the GOK and possibly even the LA budget resources to provide incentives by linking access to public resources to performance, improved performance monitoring by WSRB and WSBs, and ensuring governance structure in WSBs and WSPs for a commercial orientation. This is explored further in chapter 4.

Designing the new financial arrangements including a) the design of WSTF for demand orientation, coordination with off-budget resources and crowding in greater community and market resources, and b) a stronger strategic basis for the use of GOK resources to WSBs and WSPs by linking the allocations to outputs and financial performance as well as regional coverage and sustainability targets.

In the long term, leveraging new resources by enabling access to market funds. To achieve any significant additions to sector resources, it will be important to develop measures to support market access for the WSBs and/ or WSPs. These measures are necessary, but they cannot replace capacity building and efficiency enhancement, and will need to be developed in tandem with them. These measures could include: a) partial guarantees and other credit enhancements to overcome the lack of credit history, and to cover policy and regulatory risks, b) support to WSPs through project development facilities for the development of commercially viable projects with appropriate risk sharing mechanisms, and c) benchmarking and rating facility for measuring WSB and WSP performance, to overcome the information constraint for the market-based lenders. The issue of appropriate sequencing of activities should be addressed while developing these measures further.

4. PUBLIC FINANCE FOR WATER AND SANITATION

In most developing countries a high proportion of the financial resources in the WSS sector generally flows through the public finance framework. In Kenya, public finance comprised nearly 55 percent of total resources, including the national and local government budgets. The public finance framework also includes rules and regulations that govern sector institutions and finance. These provide the incentives for leveraging other resources, for the enhanced internal generation of funds by service providers, and for a more efficient and effective utilization of public resources.

4.1 Allocation and Use of Public Resources for WSS in Government Budgets

Both national and local budgets are important channels of finance for the WSS. However, it is difficult to discern the WSS related budget decision-making process due to the current institutional and budgeting framework that does not easily provide the links between sector objectives, priorities and programs… and resource utilization seems to be influenced by donor commitments

Decision making for the allocation of public resources to the water sector in Kenya is currently done at two levels: a) national - through the Government of Kenya budget, and b) local - through the local authority budgets. Within the emerging institutional framework, the role of water service boards will become increasingly important in the allocation of public resources from the Government of Kenya.

National Budget Allocations

Three aspects of decision-making are relevant at this level:

i. *Allocations within PRSP and MTEF* - Determining the allocations to the water sector from the overall GOK budget, as decided through the MTEF process. Within this ceiling, to further determine allocations to different agencies: MWRMD, NWCPC, Ministry of Local Government and Ministry of Agriculture;

ii. *Who receives the service delivery allocations* - Determining allocations within each agency by sub-sectors, rural versus urban, and by regions; and

iii. *How do allocated resources flow to the end users* – Determining the process by which resources are transferred to different agencies for actual use.

Other important issues that influence these decisions are: the extent to which the allocations are actually realized, the role of donor funding in these allocations, and the accounting for past 'sector debts'. These various aspects are discussed below to the extent possible with the available information:

WSS allocations within PRSP and MTEF. National level decisions are made within the context of the MTEF process adopted for budget preparation in Kenya as illustrated in box 4.1. Water is included in two MTEF sectors: physical infrastructure (PI), and agriculture and rural development (ARD). The ARD sector is the relevant resource envelope for rural water , while it is the PI sector for urban water. Main responsibility for developing the water related allocations falls on the MWRMD. The Ministry also receives most of the recurrent allocations for water. However, allocations to the other ministries, particularly the Ministry of Local Government and the Ministry of Agriculture are relevant for development allocations.

Table 4.1: Estimates of Government of Kenya Allocations for Water and Sanitation

In Ksh million

Expenditure Categories	1998-99	1999-00	2000-01	2001-02	2002-03
Recurrent Expenditure					
MENR – WSSD	1,359	1,322	1,292	1,567	1,750
Ministry of Agriculture	-	3	3	5	5
Sub-Total for WSS	1,359	1,325	1,295	1,572	1,755
Total for all sectors by GOK	203,376	244,142	267,639	264,904	277,716
Share of WSS in Total GOK (%)	0.7	0.5	0.5	0.6	0.6
Development Expenditure					
MENR – WSSD	816	1,163	1,534	1,235	1,673
MENR – NWCPC	539	353	403	419	1,261
Ministry of Local Government	431	210	277	466	1,079
Ministry of Agriculture	15	22	32	34	24
Sub-Total for WSS	1,801	1,749	2,246	1,842	4,037
Total for all sectors by GOK	37,033	53,329	38,420	43,577	46,469
Share of WSS in Total GOK (%)	4.9	3.3	5.8	4.2	8.7
Total Expenditure on WSS	3,160	3,074	3,541	3,726	5,792
Total for all sectors by GOK	240,409	297,777	344,095	308,481	324,185
Share of WSS in Total GOK (%)	1.3	1.0	1.2	1.2	1.8

Sources: a) allocation to ministries: based on various GoK budget documents; b) total GOK expenditures: CBS, Economic Survey, 2002 and GoK Estimates of Recurrent and Development Expenditure, 2001/02 and 2002/03.

Notes: Recurrent expenditure by other ministries is not accounted for as WSS expenditure, though some of the recurrent budget would be used for WSS related activities. No recurrent allocation is made to the NWCPC from the GOK budget after 1997-98.

Tables 4.1 and 4.2, and Figure 4.1 provide brief highlights of the trends in allocation to the water sector as a result of this process. The water sector receives a small share of budget resources for recurrent expenditure. While this may be appropriate with a greater emphasis on cost recovery in this sector, its share in development expenditure is also less at about a half to a third of other sectors. This differential further worsens if the actual expenditures are taken into account though there is some improvement evident in 2000-01 (refer to tables 4.2 and 4.7, and figure 4.2).

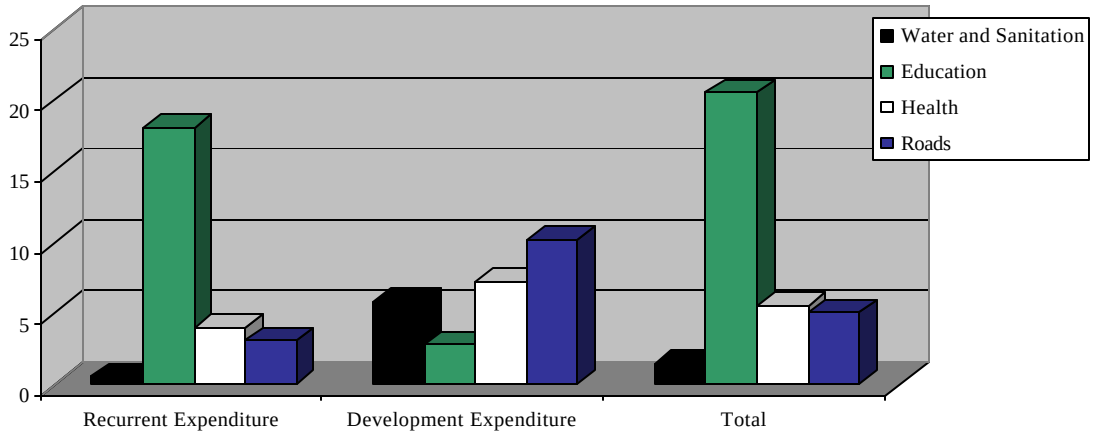
Table 4.2: Allocations for Water and Other Social or Infrastructure Sector

(Allocations or Actual as a percent of total by the GOK)

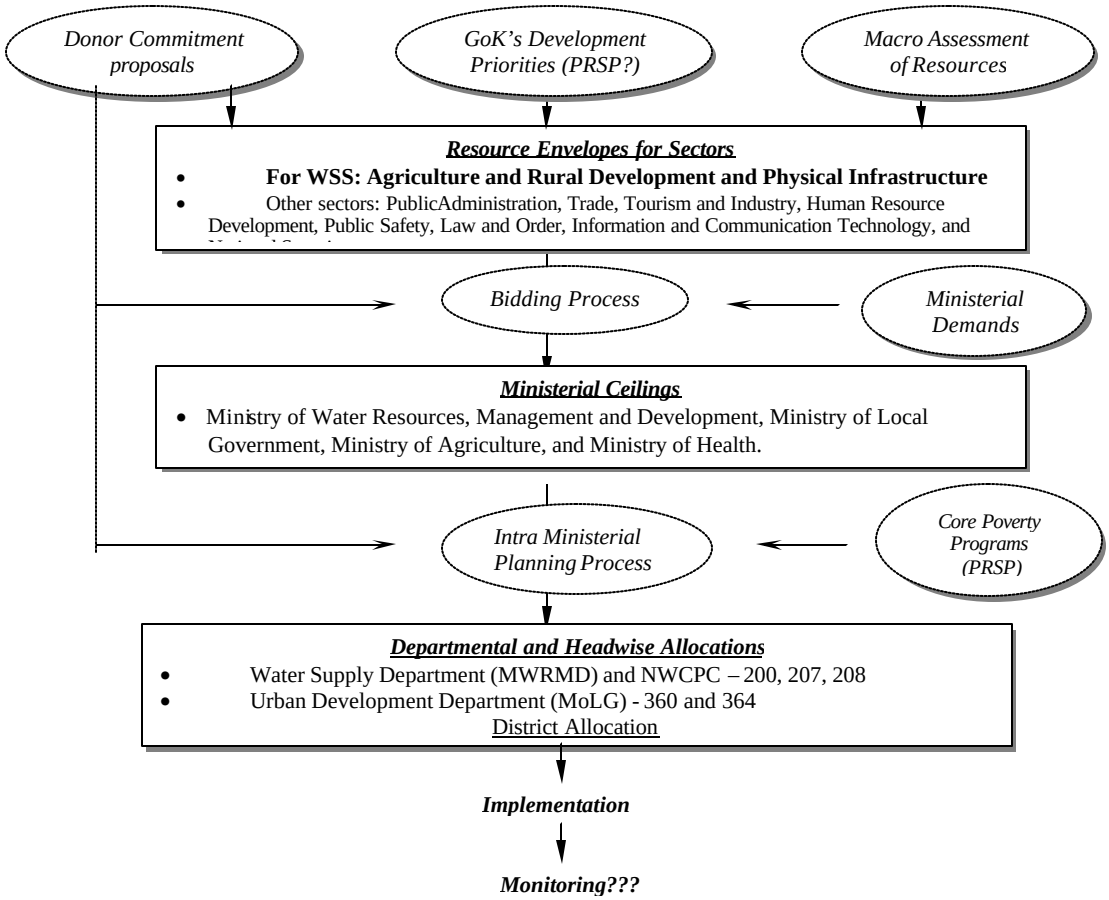
Expenditure Categories	1998-99		1999-00		2000-01		2001-02	2002-03
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Planned
Recurrent Expenditure								
Water and sanitation	0.7	1.2	0.5	1.2	0.5	1.0	0.6	0.6
Education	21.7	41.6	18.2	42.0	18.1	36.0	18.4	19.7
Health	4.3	11.5	3.8	8.5	4.0	11.2	4.0	4.9
Roads	2.7	5.0	2.8	5.7	3.1	5.2	4.5	3.8
Total (Ksh. Million)	203,376	103,861	244,142	109,394	267,639	132,632	264,904	277,716
Development Expenditure								
Water and sanitation	4.9	2.7	3.3	1.6	5.8	5.8	4.2	8.7
Education	5.4	15.0	2.5	9.3	2.8	4.5	5.1	6.9
Health	12.7	12.3	9.2	12.2	7.3	4.5	8.6	10.0
Roads	9.1	27.5	11.3	37.2	10.2	15.6	9.7	11.3
Total (Ksh. Million)	37,033	10,148	53,329	7,096	38,420	16,785	43,577	46,469
Total Expenditure								
Water and sanitation	1.3	0.6	1.3	0.6	1.5	0.9	1.4	2.4
Education	19.2	18.6	19.0	19.4	20.6	20.2	21.2	24.1
Health	5.6	5.5	5.9	4.2	5.6	6.5	5.9	7.6
Roads	3.7	3.3	5.4	3.7	5.1	3.9	6.7	6.6
Total (Ksh. Million)	240,409	114,009	297,471	116,490	306,059	149,417	308,481	324,185

Source: Same as for table 4.1. Full details are available in annex tables.

Figure 4.1: Budget allocation for Water and Other Sectors – 2000-01 *(%)*



Box 4.1: Key Steps in Integrating Water Sector in the MTEF Process in Kenya



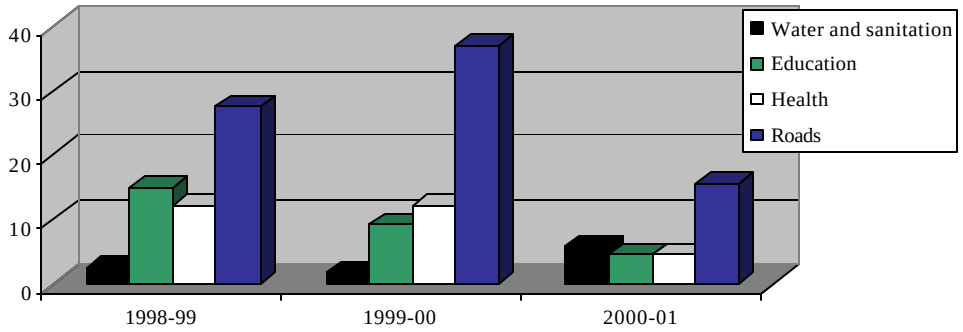
Determining Sectoral Resource Envelopes': Within the MTEF, the Kenyan economy has been divided into 8 sectors or MTEF working groups as shown above. Resource envelope for each sector is decided on basis of a macro assessment of resource availability as well as the development priorities of the GOK, broadly influenced by the PRSP. These provide the ceiling for a competitive platform for the ministries to negotiate and bid for resources. In the initial two years of MTEF the highest emphasis was placed on agriculture and rural development. However, this year, the new government has decided to give emphasis to 'physical infrastructure' sector. The WSS receives allocation from two MTEF sectors: i) the physical infrastructure sector – for urban water supply, and ii) the agriculture and rural development sector – for rural water supply.

Bidding Process and Ministerial Ceilings: The bidding process within each sector is coordinated by sector working groups and initiated by 'demands' from each ministry. The allocation to each sector is determined by the priorities identified in the PRSP as well as the government's overall priorities. It is also influenced by actual and potential donor commitments as well as priority commitments to be protected under the 'core poverty programmes'. A consultative process is followed for arriving at ministerial and selected departmental ceilings. These are indicated separately for recurrent and development expenditure as well as for GOK's own resources and donor assistance. It is important to recognize that provisions such as for the LATF and Road Maintenance Levy Fund are not included within these ceilings. The allocations for WSS services accrue through several ministries: MWRMD, MoLG, MoA and MoH, though MWRMD has the largest share.

Departmental and Headwise Allocations: Within each ministerial ceiling, recurrent and development allocations are made to detailed 'sub-votes', 'heads' and 'items' by the concerned ministry and departments. However, the link of these allocations to sectoral strategy and targets needs to be better articulated in order to assess development outcomes of different allocations.

Source: Based on discussions with the MTEF secretariat.

Figure 4.2: Actual Utilization of Development Expenditures *(%)*



Who receives the service delivery allocations? As discussed above, the GoK allocations accrue mainly to three actors: MWRMD, NWCPC and MoLG. A more detailed analysis to assess the equity and coverage implications is difficult due to the lack of appropriate detailed budget classification. In general, while the MoLG allocations essentially accrue to a few urban local authorities (about 20 out of 174[34]). Other allocations to MWRMD and NWCPC go to different parts of the country based on their respective jurisdictions. The broad distribution of MWRMD development allocations across rural and urban services as reported in table 4.3 suggests that in recent years, a greater emphasis has been placed on urban investments. More detailed analysis of recurrent expenditure on service delivery is, however, not possible due to the nature of budget classifications.

Table 4.3: Distribution of Development Expenditure for Service Delivery for MENR-WSSD *(%)*

Type of Expenditure	1998/99		1999/2000		2000/2001		2001/02	2002/03
	Approved Estimate	Actual Expend.	Approved Estimate	Actual Expend.	Approved Estimate	Actual Expend.	Approved Estimates	Estimates
Rural	91.0	92.3	71.8	87.4	69.8	69.8	67.2	58.2
Urban	9.0	7.6	28.2	12.6	30.2	30.2	32.8	41.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
In million Kshs.	570	228	673	87	865	570	1036	1459

Source: a) approved estimates: same as for tables 4.1; b) actual expenditure from Ministry finance department; c) rural / rban shares are based on an analysis of detailed headwise expenditures. Details available in annex tables.

Another key aspect is the introduction of district level allocations in the GoK budget since 2000-01. About a third of development and a fourth of recurrent expenditure of MENR-WSSD is allocated to the districts (refer to table 4.4). This is mainly for the construction of rural water supplies and O&M of district water supplies, which suggests that MENR urban water services are essentially centrally managed. The basis for development allocations to the districts is not very clear as most districts receive a minimum share (ranging from Ksh. 0.5 to 2 million), whereas a few districts receive large allocations (refer to annex tables A8 and A9). The recurrent allocations are generally based on past trends. A more rigorous process linked to envisaged targets and equity considerations needs to be established in order to create a better balance in resource allocations.

[34] Refer to annex table A16. It should, however, be noted that this expenditure is done by the MoLG itself and the funds are not passed t the local authorities at all.

Figure 4.3: Rural and Urban Distribution of Development Expenditure for MENR-WSSD (%)

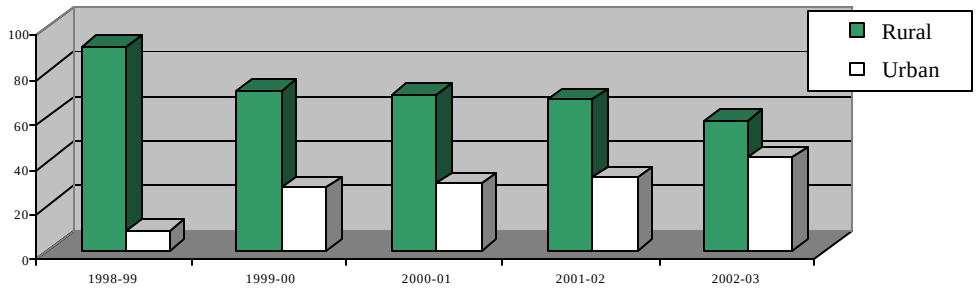


Table 4.4: Share of District Allocations in MENR-WSSD

Type of Expenditure	Share of District Allocations (%)		Total Allocations (Ksh. Million)	
	2000/01	2001/02	2000/01	2001/02
Development				
524: Construction of rural water supplies	68.4	56.6	218	294
560: Construction of urban water supplies	2.4	-	303	564
896: Water Conservation and Dam Construction	55.4	77.8	78	138
897: Water rights	80.4	140.3	50	87
Sub-total	37.0	36.5	649	1083
Total for MENR-WSSD	15.6	32.1	1534	1235
Recurrent				
887: District Water Services	15.4	27.0	540	546
892: Coastal Water Supplies	6.3	12.8	56	64
894: Other Municipalities Water Supplies	26.3	27.7	95	115
897: Water rights	-	61.0	7	10
Sub-total	16.0	26.3	698	735
Total for MENR-WSSD	8.7	12.3	1292	1567

Source: Various GoK budget documents giving district allocations.
Note: The estimates in this table include Water Resources.

The expenditure approval process and fund flow create disincentives for efficiency at local levels.. Despite the practice of district level allocations, resource utilization is hampered by the process of approvals, fund transfers and the practice of an upward flow of locally collected user charges to the 'headquarters'. The district water office receives funds for some of the local level development expenditure and for the maintenance of rural water supplies when the value is below agreed thresholds. Other major operational costs related to payments for salaries, electricity bills and chemicals are met at the headquarters. District level expenditures are to be met through quarterly payments in the district treasuries against the district budget allocations, and approval for its use has to be obtained through the 'authority to incur expenses (AIE)' process. Box 4.1 illustrates the impact of these processes of fund flows and centralized approvals.

Figure 4.4: Relative Shares of Revenue and AiA in Donor Assistance

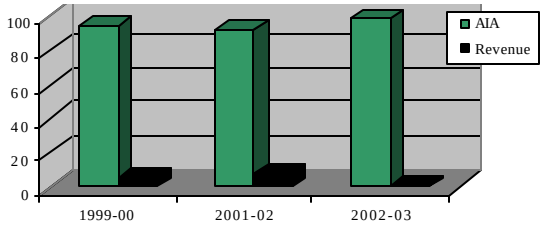


Table 4.5: Actual Disbursements Relative to Planned Expenditures (%)

	1998-1999			1999-2000			2000-01		
	Recurr.	Develop.	Total	Recurr.	Develop.	Total	Recurr.	Develop.	Total
MENR – WSSD	90.4	33.9	69.2	96.1	9.7	55.7	98.5	63.0	79.3
NWCPC	97.1	93.6	95.6	86.2	57.9	78.3	88.3	76.9	85.0
Health	135.5	26.7	97.6	100.4	17.7	71.8	138.8	27.2	115.8
Education	97.9	76.4	97.0	103.5	48.6	101.9	98.4	70.0	97.8
Roads	93.9	83.0	89.8	90.4	43.9	68.7	82.8	66.9	77.7
Total GoK	51.1	27.4	47.4	44.8	13.3	39.2	49.6	43.7	48.8

Source: a) MENR: based on information on allocations from GoK budget documents and actuals from MENR finance department; b) NWCPC: planned development from GoK budget documents, and recurrent and actual from NWCPC finance department; c) Total GOK and health, education and roads: based on CBS, Economic Survey: various issues. Details are in annex tables.

Role and influence of donor funding. Donor funding, either through grants or soft credit, forms an important source of budget allocation for development expenditure, ranging from 45 to nearly 80 percent over the past five years (refer to table 4.6). Actual realization of donor funding has been less than 25 percent and hit a low of just 10 percent in 1999-00 (refer table 4.7).

Table 4.6: Share of On-budget Donor funding in Development Expenditure (%)

Type of Provider	1998/99		1999/00		2000/01		2001/02	2002/03
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Planned
MENR-WSSD	56.7	44.5	81.9	49.5	49.6	19.8	56.4	63.2
NWCPC	30.8	46.0	62.1	47.0	78.7	55.2	75.8	29.3
MOLG	42.3	-	80.7	-	96.6	-	59.2	52.8
Total	44.6	45.4	78.0	47.9	59.7	28.4	60.9	49.8
Donor funding *(In Ksh Million)*	1081	355	1519	152	1281	362	1290	1997
MENR-WSSD - Direct payment versus credit purchase (%)								
Share of Credit purchase	45.3	83.4	23.2	95.9	18.3	51.1	-	-
Share of Direct Payment	54.7	16.6	76.8	4.1	81.7	48.9	-	-

Source: Same as for table 4.5. Details are in annex tables.

Table 4.7: Realization of Donor Funding

(Actual expenditure as a % of planned dev expenditure)

Service Provider	1998/99	1999/2000	2000/2001
MENR-WSSD	26.6	5.9	25.1
NWCPC	139.8	43.8	53.9
Total	32.9	10.0	28.3

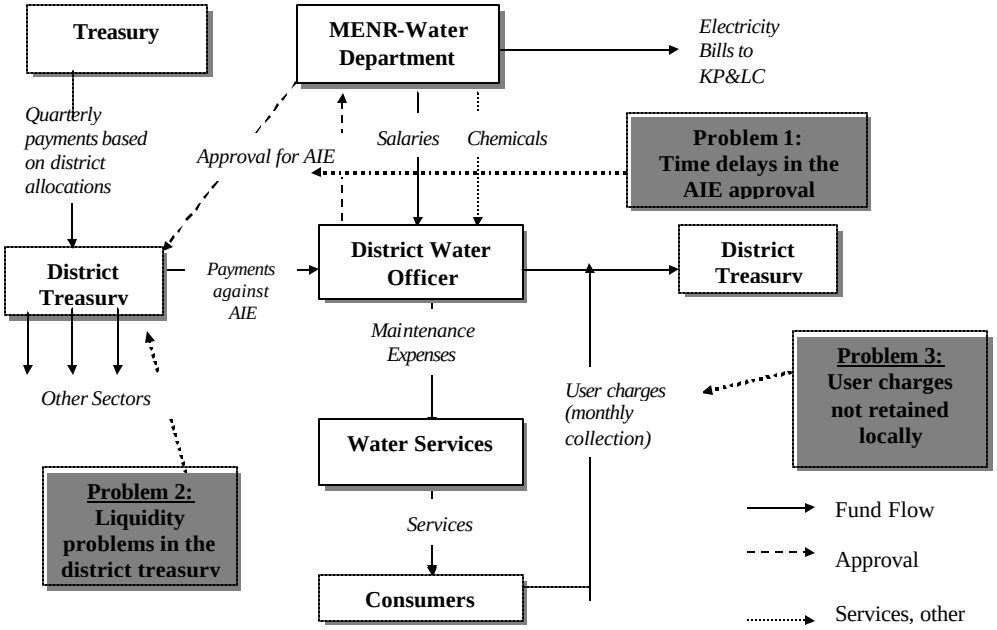
Source: Based on information in table 4.6

How much is actually utilized from planned allocations? A key aspect that affects public finance for the sector is the gap between allocations and actual expenditures, evident from the analysis in Table 4.5. In most years and most sectors, the planned recurrent expenditure has been protected or even exceeded. The utilization gap is generally found in development expenditures, arising partly out of a greater reliance on donor funding. Comparison with other sectors such as health, education and roads suggest that in earlier years water has lower utilization levels for development expenditure (refer to figure 4.2). Interestingly, however, the performance during 2000-01 has improved even for development expenditure compared to the previous years. This may be due to the introduction of the MTEF and a greater degree of realism in the budgeting process.

Box 4.2: Flow of Funds for Service Delivery within MENR

The flow of funds within the Ministry for service delivery from the headquarters to the district offices deserves more attention. There are three issues related to this process as illustrated in the figure below: i) there is often inadequate liquidity in the district treasury as it receives funds for all sectors and then has to deal with competing demand, which results in delays in processing requests, ii) delays in the AIE process as the final approval and authority is centralized (see the table below), and iii) the upward movement of user charges collected locally with very little powers to retain the revenues locally. These problems result in a lack of incentives for the staff at the district level to achieve efficiency for enhanced revenue collection and appropriate expenditure management. Often a share of development resources is diverted to critical recurrent expenditure for which the funds are not available in a timely manner. It also creates a lack of predictability in resource availability, which makes it difficult to have meaningful implementation of district level plans. The lack of timely availability of resources also adversely affects system maintenance.

A comparison with the health sector is relevant where "the issuance of the AIE has been delegated to the provincial level and the District Health Management Boards have been empowered to superintend the management of the exchequer and cost-sharing funds" and "fiscal incentives to the local health facilities have been created through the Health Care Services Fund and by the provision that 75 percent of the revenues generated locally are utilized by the collecting facility and the 25 percent directed to the source districts to support primary health care activities" (World Bank 2000b, as quoted in World Bank 2002).



The Process of Approval for the Authority to Incur Expenses (AIE)

	Steps	Responsible Office(r)	Number of days
1	Request for AIE	AIE Holder	1-2
2	Receiving AIE request on behalf of Accounting Officer	Director	1-2
3	Issue of blank AIE for processing - AIE origin	Chief Finance Officer	2-3
4	Initiation of AIE preparation process	Senior Finance Officer	3-5
5	Drafting of AIE	Estimate Officer	2-3
6	Typing of AIE	Typist/Secretary	7-21
7	Proof reading typed AIE	Estimate Officer	1-2
8	Signing of AIE	Senior Finance Officer	3-5
9	Capturing the AIE and entering	Vote Book Control Sect.	1-2
10	Signing commitment certificate and Sealing	Vote Book Accountant	1-2
11	AIE Audit	Audit Section	1-2
12	Preparation of diskette for Treasury	Vote Book Accountant	1-2
13	Referral or submission of near complete AIE	Estimate Officer	1-2
14	Preparation of Covering letter before AIE submitted to treasury	SPFO's Office	3-5
15	AIE capture into the accounting system	Treasury	1
16	Issue of AIE	Estimate Officer	1
17	Deposit of AIE at district Treasury and accessing funds for expenditure	AIE holder	14-42
18	Expenditure	AIE Holder	2-3
	Total		46-105

Use of Appropriations-in-Aid varies for recurrent and development expenditures. Box 4.3 illustrates the use of A-I-A mechanisms for recurrent and development expenditures. While for recurrent expenditures it is linked to collection of various charges and fees, for development it is essentially the donor funds. Donor funds are accounted for as A-I-A when these are not paid as 'revenue' - where the government pays for goods and services and then seek reimbursements from the donor. In the WSS sector in Kenya, over 90 percent of donor resources flow as A-I-A (refer figure 4.4). Table 4.8 and box 4.3 also highlight the donor preference for 'credit purchase'. Implementation of reforms being put in place in Kenya in general, and in the WSS sector in particular would help to reverse this process, as well as over time lead to a greater share of 'revenue' channel in donor assistance.

Box 4.3: Aid-in-Appropriation: Fund Flow Mechanisms Used for User Charges On-budget Donor Funding

Under the Government of Kenya budget 'Aid in Appropriations' (AIA) is used for resources mobilized either through donor support or through internally generated resources from various user charges. Its composition is generally different in recurrent and development allocations.

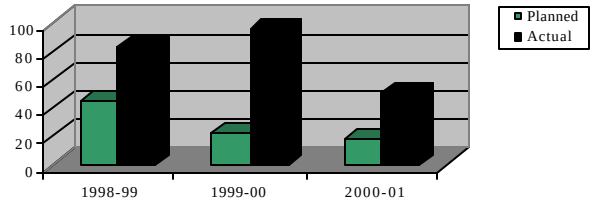
In Recurrent….

AIA is made up of user charges and other miscellaneous receipts (penalties, water connection fees, ...) collected by different Ministries and departments on behalf of the Treasury. The money collected is first deposited in the district treasuries and subsequently transferred to the main treasury in Nairobi. For ministries/ departments to spend the money, they must obtain AIEs (refer Box 4.2). In some ministries such as health, district officers or have been allowed to open 'spending accounts' - where district treasuries transfer an approved AIE equivalent before the officer issues cheques to suppliers. Some Ministries also seek approval from the Treasury to spend the "excess" amounts above the original approval for recurrent expenditure, when actuals exceed planned collections. The ministry of water has not had any excess in the last 4 years. Also, as noted in box 4.2 above, local health facilities are given incentives for improved collection by permitting retention of 75 percent of their collections. However, such measures have not been used in the MWRMD so far.

In Development…

AIA is generally made up of donor assistance (grants and loans). Two modes of resource flows are used for this: i) Direct payment, where, donors make direct payments to suppliers to the government, and ii) Credit Purchase, where donors acquire goods and services on behalf of the beneficiary, the government of Kenya.

Share of Credit Purchase in AIA for Development Expenditure



The nature of donor support varies significantly across donors as is evident from the details in Table 4.8. This creates issues of coordination due to the need to respond to varying donor expectations. This may arise partly out of the absence of a strong government-owned sector program in the past and the donors' general lack of confidence in governance systems. However, with the introduction of sector reforms along with wider governance reforms, there will be a need to review this and explore the possibilities of government led sector program within the framework of a sector wide approach (SWAp). This can gradually enable a more coordinated sector framework and the possibility of pooled funding or sector budget support.

Table 4.8: Details of Donor Support to WSS

	Development Partner	Type of WSS Activities and Support
1	Sida	▪ Rural water and sanitation programmes
2	FRG	▪ Grant for rehabilitation and revenue improvement in Malindi ▪ Grant for construction and rehabilitation of Eldoret Sewerage ▪ Grants for the training of water works personnel (KEWI) ▪ Grant to support the " Urban Water and Sanitation Management Project" ▪ Loan facility to MOLG for the Nyeri Water supply
3	Finland	▪ Grants in support of the Finland Community Water Supply Management Project
4	Belgium	▪ Grant support to Water Users Association (WUASP)
5	FAO	▪ Drought monitoring
6	UNICEF	▪ Grants for the promotion of access to Water and Environmental Sanitation services
7	IFAD	▪ Grants and loans in support of dry areas and small holders Community Support projects
8	AFDF	▪ Water development loan and Grants (for Nakuru Water supply and Sanitation project)
9	France	▪ Loan for the Four Towns Water Supply Project and the Mombasa Water Dam
10	China	▪ Supports borehole drilling projects
11	Saudi Arabia	▪ Loans to support the construction of urban water supplies (such as the Garissa Municipal Council water supply, Mombasa MC sewerage project)
12	Italy	▪ Grant to Construct water supplies (for Kiambere water supply)
13	Japan	▪ Grants for the development of Ground Water (for Baringo, Laikipia, Koibatek districts)
14	Netherlands	▪ Grants to support rural water and sanitation programme ▪ Grant in support or Water Resources Assessment Programme
15	Austria	▪ Grant in support of construction of water supplies (for Kitui water supply)

Source: GoK Budget Documents, 1998/99 to 2001/2002, and discussion with selected donors.

Another issue with donor funding in the past is the lack of separate accounting for debts that are incurred by the GoK for the water sector, and then passed on to the NWCPC, the LGLA or selected local authorities such as Nairobi City Council. In most cases, these sub-borrowers do not repay this debt, though the GoK repays the debt to its lenders. This is neither reported explicitly in the GoK 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.

WSS in Local Authority Budgets

Water and sanitation is an important service at the local level for several local authorities. This is reflected in their WSS expenditure as well as in revenue mobilization through water charges. The main source of information for the local authorities is the financial reports submitted as required under the Local Authority Transfer Fund (LATF) and it is a good incentive for the LAs to provide this information on a regular basis. Detailed information based on this source is reported in annex table A24[35]. Several observations are possible through the analysis of this information:

[35] Information available from this essentially relates to: a) planned and actual revenues through water charges levied by local authorities for the services provided, and b) planned and actual recurrent expenditure on water as reflected in the expenditure of the Water Supply Departments. As most LAs have a separate water department, this analysis is possible for all LAs. Information for development expenditure is however, reported by projects and the analysis is based on categorization of these projects, which includes a code for water and sanitation.

A large number of LAs provide water services. As reviewed in Chapter 1, about 10 LAs function as water undertakers, while a fairly large number of LAs are involved in providing these services as water distributors. Based on the available information, nearly 80 (45 percent of total) LAs provide water services to their constituents. The share for county councils and town councils serving mainly rural areas is about a third, while it is about three-fourths for municipal councils that serve mainly urban areas (refer to table 4.9 and figure 4.5). At this stage, a detailed estimate of coverage by each of the 80 LAs is not available. However, under LATF and the recently introduced process of LASDAP, more information on current service levels is likely to become available during the next year.

Table 4.9: Estimated Number of Local Authorities Providing Water Services

Type of Local Authority	Total Number of Local Authorities	Number of Local Authorities Providing water Services
County Council	66	29
Town Council	62	19
Municipal Council	45	31
City Council	1	1
Total	174	80

Source: Based on analysis of information reported by the LAs under the LATF requirements. Details are in annex tables

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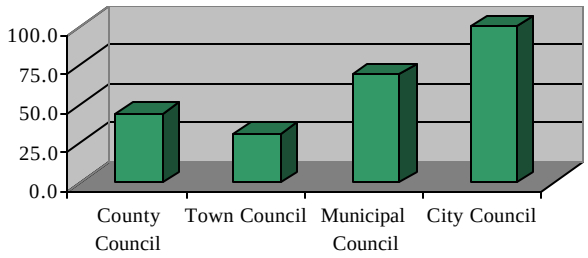
Figure 4.5: Estimated Share of Local Authorities Providing Water Services, 2002 (%)



The importance of LA expenditure in sector and local finances. Expenditure by the LAs comprise about a fifth of total sector expenditure. This is about two-thirds of total budget allocation by the GOK (refer to table 3.3). However, the Nairobi City Council holds a lion's share of this at about 70 percent of the total LA expenditure and revenue mobilization. The importance of water in local authority finances is also evident from table 4.10 and figure 4.6 as it is about 15 percent of total LA expenditure and water charges constitute more than a fifth of their total own source revenues in recent years.

Local authority expenditure is mainly from user charges. As evident from table 4.10 local authority recurrent expenditures on water services are met entirely from the user charges. This is very different from the public service providers like the ministry and NWCPC that have a significant reliance on budget allocations. In fact, the concern for LAs is that there may be a reverse flow of resources from water to other municipal sectors, estimated to be about 423 million Ksh in 2000-01 (refer to table 3.4). Thus, there may be a need to protect the user charges for water for the sector. Interestingly, the resource outflow is more likely with the municipal councils and for Nairobi than in the rural areas. This expenditure estimate does not include the cost of administrative and financial management support within the LA, and it does need better assessment.

Also, the cost of debt servicing for the outstanding debt, especially for Nairobi City Council and some of the municipal councils needs to be better accounted for.

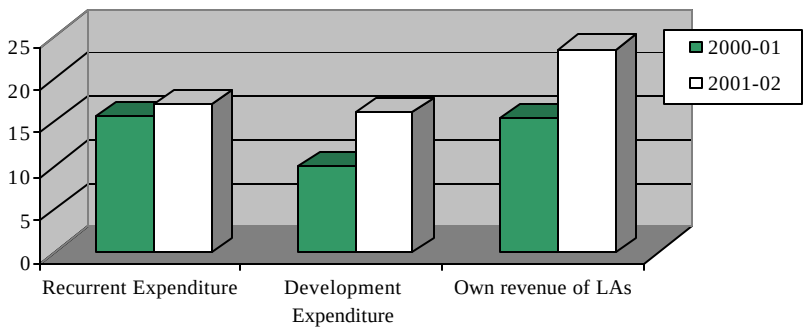
Local authority planning and budgeting process. Water and sanitation continues to be a single department in most local authorities, and a part of the overall LA planning and budgeting process. Resource allocations for water are thus subjected to this overall planning process. Further inquiries are needed to understand their likely impact on the timely availability of funds to meet the necessary O&M expenditure. Of the recurrent allocation, about 25 percent is made on personnel and about 65 and 10 percent respectively on operations and maintenance. Allocations for development expenditure through the local authority budget are more likely to be responsive to local community demands especially since a more participatory planning process has been introduced through the Local Authority Service Delivery Action Plan (LASDAP) last year. Under LASDAP, LAs arrive at development priorities through local level community consultations and budget analysis to assess ceilings on development expenditure[36]. However, with the institutional arrangements envisaged under the new water Act, it is likely that planning for water services will move outside the LA budget process as discussed earlier in section 2.1.

Table 4.10: Relative Shares of Local Authority Expenditures on Water and Sanitation *In Ksh. Million*

Expenditure of Local Authorities	2000/01		2001/02		2002/03
	Planned	Actual	Planned	Actual	Planned
Recurrent Expenditure					
WSS Expenditure	1467	1,238	1,714	1,437	1722
Total Recurrent Expenditure	10,125	7,823	10,536	8,400	10,465
WSS as a share of total (%)	14.4	15.8	16.2	17.1	16.4
Development Expenditure					
WSS Expenditure	136	81	521	188	358
Total Development Expenditure	1315	817	1,877	1,158	1911
WSS as a share of total (%)	10.3	9.9	27.8	16.2	18.7
LAs Own revenue					
Water charges	1996	1613	2905	1857	2618
Total own revenue	na	10,317	na	7,910	11757
WSS as a share of total own revenue (%)	na	15.6	na	23.5	22.3
Net surplus (Revenues from water charges less Recurrent and development expenditure)	393	294	670	232	538

Source: LAs recurrent Expenditure and own revenue based on information from LATF database in MoLG. Development expenditure is based on World Bank 2002, GoK 2000d, GoK.2001d and GoK.2002a. Details are in annex tables .
Note: These expenditure estimates do not include any debt servicing related to the water sector done by the local authorities. However, it is likely that this is not being done at present. Detailed information on outstanding debt of LAs in this regard is, however, not available.

Figure 4. 6: Share of WSS in Total Expenditures and Revenues of Local Authorities - Actual (%)



Issue of outstanding LA debt for past water investments. Based on the LATF submissions for 2001-02, the total debt incurred by the LAs for all purposes in June 2001 was estimated to be about Ksh 25 billion. Of this, about 80 percent (or Ksh 20 billion) is owed by the Nairobi City Council, with Ksh 15 billion due in long-term loans, and of this an estimated 10.9 billion for water related investments.[37] Of the remaining total LA debt, about Ksh 2.8 billion is for loans through the Local Government Local Authority (LGLA) and other loans. It is likely that a significant proportion of this debt is also for water related investments. Clearly, the issue of this outstanding debt will need to be addressed when implementation of institutional reforms under the new Water Act is taken up. A system of appropriate incentives and financing mechanisms will be needed in the future to ensure that the debt for water related investments is serviced properly. This is essential to enhance the creditworthiness of the sector to help mobilize resources from the financial markets.

4.2 Public Institutions and Finance Framework Affecting Resource Flows

Sector finance in the coming years will depend critically on the governance of sector institutions, which will define their independence and autonomy, and help to introduce the necessary commercial orientation while protecting and enhancing services for the poor. Along with designing the new arrangements, there is also a need to explore new programmatic approaches within a SWAp framework….

Table 4.11: Measures That Influence Introduction of Sector Reforms

Description of Performance Parameters	Illustrative Measures	
	Incentives	**Disincentives**
Establishing / promoting commercially operating water service providers	▪ clear requirement in the legislation ▪ transparent and effective regulatory framework for price determination ▪ appropriate governance structures for independent service providers introduced ▪ access to public finance linked to establishment of commercial utilities	▪ continued access to public funds regardless of establishing commercial utilities ▪ public finance allocations not linked to performance
Implementing a transfer program	▪ clear national level assessment of inventory of schemes and costs of rehabilitation ▪ linking access to funding for rehabilitation / augmentation to the transfer program ▪ demand based access to technical support for takeover	▪ continued access to funds regardless of transfers to appropriate service providers ▪ lack of information about the transfer program
Demand responsive approaches for rural water supply	▪ clearly linking the partial subsidies for RWS to demand responsive approaches, particularly for capital cost contributions ▪ institutional framework to support promotion and community mobilization	▪ fragmented and uncoordinated funding from different sources ▪ availability of subsidies without any link to demand

[37] GoK (2003c), pp. 14-15 and Glenday (2001), p. 43.

While budgetary resources are important for the WSS sector, a significant proportion accrues through other channels. Even for budgetary resources, user charges constitute an important component at both national and local levels. As a result, the mobilization and use of financial resources in the sector can be significantly affected by the institutional and regulatory arrangements, and the design of financing mechanisms. Tables 4.11 and 4.12 provide illustrations of the type of institutional and financing measures that either positively or negatively influences implementation of reforms and sector performance. Based on these, measures related to the institutional and regulatory issues as well as those lined to financing policies, rules and mechanism are necessary. These are discussed in the context of reforms envisaged in the WSS sector in Kenya.

Institutional and Regulatory Arrangements and Related Issues

The institutional arrangements and regulatory framework determine the nature of incentives for improved performance by institutions. With significant institutional restructuring envisaged under the new Water Act in Kenya, some key issues to be addressed are:

The Governance of sector institutions. Under the new Act a number of sector institutions, often new, are envisaged: the Water Services Regulatory Board, Water Services Board, Water Appeals Board and the Water Service Providers. A key aspect of the enabling environment for sector finance will be the appropriate governance of these institutions. Several issues are relevant in the design and operationalization of these institutions:

- *Ensuring independence and autonomy of sector institutions*. This is critical 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. The new Water Act only provides that the President will appoint the chairman and the 10 members of the WSRB will be appointed by the Minister. The Act also envisages that the Minister will constitute the WSBs and specify the members appointed to it and their respective qualifications[38].

- *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 along the lines of local public utilities in Nyeri and Eldoret. Such transfers will require significant preparation and it would be useful to review the lessons from the GTZ funded UWASAM project, where only 2 utilities have shown success, though efforts were initiated in about 10 LAs. The role of local authorities will also need to be addressed in potential proposals related to the devolution of powers that may arise from the ongoing Constitution Review process. 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[39].

[38] As per Section 46 (3) and Section 51 of the new Water Act respectively.
[39] As per Section 229 in Chapter Ten of the Draft Constitution (GoK, 2003).

Table 4.12: Measures that Influence Performance

Description of Performance Parameters		Illustrative Measures	
		Incentives	**Disincentives**
Development Effectiveness	**For national and local governments:**		
	Matching sector strategy and activities with policy, objectives and targets Equity in budget allocations	▪ strong MTEF process, ▪ a coordinated sector program approach, ▪ strong sector M&E system ▪ participatory and decentralized budgeting ▪ strong sector M&E system ▪ democratic decision making	▪ fragmented and uncoordinated funding from a large number of donors ▪ large share of off-budget funding ▪ budget process not backed by ongoing monitoring of outcomes
	Focus on reaching the poor	▪ carefully identified and protected 'core poverty programs' ▪ mandatory pro-poor provisions in WSP contracts	▪ inadequate pro-poor provisions in WSP contracts
Efficiency in investments and operations	**For water service providers:**		
	Reduction in non-revenue water (for urban water services) – technical losses/ commercial losses	▪ commercial orientation of WSPs required in legislation and backed by monitoring ▪ use of performance based co ntracts ▪ access to partial subsidies/ finance linked to NRW performance ▪ benchmarking and performance rewards	▪ revenue from water services not protected for the sector ▪ lack of authority at the operational levels and undue delays in approvals ▪ lack of a transparent and effective regulatory process for price determination
	Value for money in new investments	▪ finance policy and rules geared to selection of cost effective technologies – e.g. max. subsidy linked to basic service level ▪ readily available information base on technology options/ costs ▪ easy (though commercial) access to credit through micro-finance	▪ partial subsidies linked to a 'percent of costs' without clear rules on maximum basic service levels
	Value for money in financing operations	▪ complete stopping of subsidies for operational expenditure from national / local budgets ▪ clear separation of service providers – at least as a cost-center and preferably independent 'company' ▪ benchmarking and performance rewards	▪ varying and complex rules that enable O&M expenditures to be effectively subsidized by government or donors
Leveraging resources	**For water service providers:**		
	From households and communities/ micro-finance	▪ policy and rules create a 'financing space' for household/ community share ▪ easy (though commercial) access to credit through micro-finance	▪ finance policy/ rules requiring no/ 'limited' cost contributions for RWS
	From markets – banks, capital markets	▪ developed financial markets is pre-condition ▪ technical support for development of bankable projects ▪ commercially sustainable partial guarantees	▪ concessional donor funding 'cherry picking' and crowding out private finance

- *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. 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 (section 57). It will also be necessary to have autonomy in decision-making, particularly for operations, staffing, and tariff fixation. The experience of the NWCPC is a good example in this regard. For the CBOs/ WUAs, this may occur through a mutual benefit type of operation where the government role would be limited to providing performance incentives and capacity building support.

- *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..

- *Transparency in sector finance*. The review of sector finance highlights the lack of clarity in sources and the flow of funds, due to which it has been difficult to assess the level of resource flows to different service providers. A major lacuna is also the 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.

Contracts with water service providers. The Act envisages that the WSBs will contract with different service providers. Several issues will be relevant in developing this contractual framework:

- *Legal form of the water service providers.* For contracting with WSPs, it would be essential for them to have a firm and legal basis. This is particularly important for the CBOs (WUAs) as well as for the local level public utilities. It will be necessary to ensure that the provision of water services is within their legal mandates and that their legal form enables them to enter into such contracts.

- *Contract design and implementation.* The performance of the WSPs will probably be greatly influenced by contract provisions since they determine the incentives for improved performance and the possibility of market borrowing by the WSPs. Important aspects to be addressed in the design are: designing performance linked incentives, and appropriate contract provisions to enable access to market sources of funds.

Support framework for sector institutions. For ensuring the sustainability of existing and new investments, it is critical to strengthen and maintain the capacity of various sector institutions. The GoK needs to explore two main areas of support:

- *Capacity development.* Independent key sector institutions will require the capacity to carry out their mandates. These are envisaged to be either new institutions, or take on new roles, which are likely to be very demanding in terms of capacity. Appropriate measures will be necessary to build capacity for these new roles.

- *Ongoing technical/ market support.* Many of the WSPs, particularly the CBOs, will require ongoing technical support to ensure long-term sustainability. There may be a possibility to explore outsourcing for such support through local private sector agencies and NGOs that have been engaged with such activities in the past. Besides, smaller WSPs may also benefit from appropriate market support to help with access to supply of hardware and services during production and operation.

Impact of Financing Policy, Rules and Mechanisms on Sector Finance and Resource Flows

Appropriateness of sector financing reflects use of mechanisms to provide incentives for introduction and implementation of reforms, and improving sector performance as illustrated in tables 4.11 and 4.12.

Key principles in designing financing mechanisms. Based on the analysis of the sector finance framework, three key principles that drive the design of financing mechanisms are identified:

- to focus on internal cash generation by the service provider in order to: a) protect user charges for use within the sector in a timely manner, and b) support operations and create a cash-flow history for WSPs that will help enhance the credit-worthiness for market borrowing to augment services;
- to use the limited public resources in a demand responsive manner that can help ensure performance linkages and create space for crowding in savings, as well as additional community and private resources; and
- to better coordinate sector resources (government, community, NGOs, donors and other private) towards achieving the objectives of the national water services strategy.

New financing mechanisms proposed under sector reforms. The new Water Act proposes a number of mechanisms that will influence sector resource flows: a) the WSTF for more coordinated mobilization and allocation of resources in community level schemes within a demand responsive framework, b) creation of a contingency fund with the WSB licensee "for the purpose of renewal, repair, enlargement or improvement of any plant, equipment, facilities or works used for the purposes of the license", and c) an implicit understanding that the public budgetary resources of GOK will be allocated mainly to the WSBs based on their own business plans and within the framework of the national water services strategy. As discussed earlier in section 3.2 [40] several concerns will need to be addressed in the further design and implementation of these mechanisms.

[40] See the sub-section on Emerging Systems of Finance.

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. With the new Kenyan government taking steps to address wider governance issues, donor confidence in public finance systems is likely to increase over time. It may, however, take some time for the increase in comfort level to enable a shift from this route. This process may be aided by a GOK focus on a sectorwide approach (SWAp) for the water services sector that will facilitate a programmatic approach by donors to support the GOK medium term program rather than have different projects that may be difficult to coordinate effectively.

Aligning financing rules to create financing space and enhance resource leveraging. The financing rules applied to public finance determine the environment for leveraging additional resources. They determine the extent to which other market based resources and households/ community savings are crowded out or included. To attract these resources, a space for private resources needs to be created through appropriate rules. This will require a detailed review, but may include rules such as: a) maximum share of funding from Government of Kenya for urban water services to enable market resources to flow in, b) specified mandatory community capital contributions for rural water supply schemes to enable community resources through savings and possibly borrowing through micro-finance institutions, and c) use of government funds as grants or equity to ensure that the service providers will maximize market sources for accessing debt. For such rules to be successful, however, measures such as those described in section 3.3 will be essential[41].

Their development also needs to be done in the background of development of the financial markets and for community-based schemes the access to micro-finance services. Though compared to other East African countries Kenya may fare better, further review is necessary to assess the potential. Also, it would be necessary to get the sequencing right in these cases by developing creditworthiness of potential borrowers particularly through a focus on enhanced internal generation of funds through operational surplus. At the same time opportunities may be explored to develop mutually benefiting measures for the WSS and micro-finance sectors particularly through financial services for the small service providers[42].

4.3 Summary of Key Issues

Public finance for the WSS in Kenya is at present dominated by budget decisions at national and local levels intertwined with service delivery. With the emerging institutional arrangements, however, there is a possibility of separating these, though its success will depend on an appropriate transition arrangement...

The public finance arrangements will undergo significant changes as sector institutional reforms are implemented in Kenya. While making these changes key issues to be addressed include:

Public finance for transition arrangements. The new institutional arrangements envisage transfer of assets for water services and schemes to WRBs, and WRB contracts with water service providers for operation as required. The WSPs may be community-based organizations (CBOs) such as water users' associations, local level public utilities, or private service providers. In areas where services are already being provided by either national service providers (MENR-WSSD or NWCPC) or by local authorities, appropriate incentives

[41] Those described above in section 2.2.
[42] Refer to Mehta and Virjee 2003 for some options in this regard.

will be needed for these transfers to take place. For CBOs or private organizations to manage these services, initial investments will be needed to bring them to a minimum performance level before transfer. In the case of local authorities, the Act envisages that the WSP should exclusively be the 'business' of water. For this to happen transfers of operations of water services will need to be made to either CBOs, public utilities or private operators; who in turn will contract with the WSBs. A key aspect of such a transition would be developing and implementing a medium term transfer program based on the provisions in section 113 of the new Act. Such a program will need to address issues related to transfer of assets, liabilities and staff, as well as associated funding.

Need to link budget allocations to outputs and outcomes. In the current system of planning and allocations, it is difficult to establish a close link between public sector WSS allocations and clear outputs or outcomes. This makes it difficult to assess their implications for coverage targets or the Millennium Development Goals (MDGs). This link is also essential in assessing their sustainability implications. As public resources may be used to leverage additional community and market resources, this relationship is likely to be complex and a careful assessment of the multiplier effects is essential. The National Water Service Strategy, as per the Water Act (Section 49-4) will need to be developed within such an approach.

5. THE WAY FORWARD

The assessment of the WSS Resource Flows has been developed as a part of the regional thematic work of the Water and Sanitation Program, Africa. In line with its main objectives, it has contributed to the development of a framework that can be used in further studies in the region as well as provide a base for further work on sector finance assessment in Kenya.

5.1 Key Activities for the Way Forward

Three key activities are envisaged for the way forward. Two for the regional work include: i) continued assessment of WSS sector finance and resource flows through further country studies in the region, and ii) comparative assessment of WSS sector finance through a regional benchmarking tool. These activities are being developed as a part of the WSP-AF's ongoing regional thematic work and the comparative indicators under benchmarking are also planned for Kenya. The third activity, which focuses on further work in Kenya using the findings of this assessment, is discussed further below.

5.2 Further Work in Kenya

In the context of sector reforms, three aspects are particularly important for further work in Kenya. These will be discussed with stakeholders to decide on the priorities for the next phase of work:

i. *Sector information system* to support and strengthen the link between sector objectives and allocation of public funds. Within the emerging institutional arrangement, this process would be within the mandate and responsibility of the MWRMD, WSRB and WSBs. Thus, the focus could be to assist these institutions to identify the information requirements in relation to the planning process and develop a framework for information management system. Sector information would include aspects related to coverage and expenditure by different service providers, flow and utilization of public funds (expenditure tracking), and unit cost and value for money analysis;

ii. *Sanitation resource flows* to identify in more detail the institutional and financial mapping for sanitation. An assessment of sanitation sub-sector requires a separate emphasis with a particular focus on participation of different ministries and stakeholders; and

iii. *Design of a financing framework* within the emerging arrangements under the Water Act. This may include aspects related to the new channels of finance through the WSTF as well as allocation of public finance from the GOK budget to different WSBs and onwards possibly to WSPs. Use/ allocation of these funds needs to be designed to provide incentives for improved performance of service providers, enhance access for the poor and leverage additional market based-resources in the medium to long term.

5.3 Next Steps

A number of next steps are envisaged. The findings of this review will be shared within Kenya with Government of Kenya and other key stakeholders to get their feedback and to identify priorities and an action plan for further work in Kenya. This paper also provides a basis for the development of the regional comparative review of sector finance resource flows for the water and sanitation sector. Parallel studies have been also initiated in two other countries (South Africa and Ethiopia), and are planned in Zambia and Uganda. Findings from these various country studies will be disseminated to sector stakeholders and shared at various regional meetings during the year. The study will also provide inputs for the development of a benchmarking tool for assessing performance of WSS sector finance in the sub-Saharan Africa.

REFERENCES

Aligula, E.M. 1999. "Improving the performance of urban water Infrastructure Services Delivery and Management in Kenya. A case study of Nairobi City, Kisumu and Eldoret Towns". Processed.

Annamraju, S., B. Calaguas, and E. Gutierrez. 2001. "Financing Water and Sanitation: Key Issues in Increasing Resources to the Sector." WaterAid Briefing Paper. Processed.

Bevan, D. and G. Palomba. 2000. "Uganda: The Budget and Medium Term Expenditure Framework Set in a Wider Context". Processed.

BG Associates. 2000. Kenya - Sweden "Rural Water Supply & Sanitation Programme (KSRWSSP)". Final Report for the Ministry of Environment and Natural Resources, Government of Kenya. Processed.

Billtech Environmental Consultants. n.d . "Water Users Associations Support (WUAS) Project – Makueni District". Final Report for Belgian Administration for Development Cooperation. Nairobi, Kenya. Processed.

Business Economic Research (BER). 1998. "Study of Water Kiosks in Kibera". Nairobi, Informal Paper, Water and Sanitation Program – Africa. Nairobi, Kenya. Processed.

CAS Consultants. 2000 a. Study on Financing and Institutional Mechanisms for Community Based water Supply and Sanitation. Report prepared for the Ministry of Environment and Natural Resources.

_____. 2000 b. Study on Financing and Institutional Mechanisms for Community Based Water Supply and Sanitation, Ministry of Environment and Natural Resources, Republic of Kenya.

_____. 2000 c. Study on Private Sector Participation in Rural Water Supply and Sanitation, Final Study Report, Ministry of Environment and Natural Resources, Republic of Kenya.

Central Bureau of Statistics.2002, "Economic Survey", Government of Kenya.

Collignon, B. and Vezina, M. 2000. Independent Water and Sanitation Providers in African Cities: Full Report of a Ten-Country Study. Water and Sanitation Program – Africa.
Glenday, Graham, et al. 2001. "Nairobi City Council Budget 2001: Preparation and implementation." A report prepared for the Nairobi City Council Interim Oversight Board. Processed.

Government of Kenya. 1978. *The local Government Act Chapter 265.*

Government of Kenya. 1999a. *Estimates of Development Expenditure of the Government of Kenya for the Year ending 30th June, 2000.*

_____. 1999b. "*Estimates of Recurrent Expenditure of the Government of Kenya for the Year ending 30th June, 2000*".

_____. 2000a. "Estimates of Development Expenditure of the Government of Kenya for the Year ending 30th June, 2001".

_____. 2000b "Estimates of Recurrent Expenditure of the Government of Kenya for the Year ending 30th June, 2001".

_____. 2000c. Country Strategy on Water and Sanitation Services, Ministry of Environment and Natural Resources.

_____. 2000d. Local Authorities Transfer Fund. Annual Report. FY 1999-2000

_____. 2001a. "Estimates of Development Expenditure of the Government of Kenya for the Year ending 30th June, 2002".

_____. 2001b. Estimates of Recurrent Expenditure of the Government of Kenya for the Year ending 30th June, 2002".

_____. 2001c. *The 1999 Population and Housing Census Report*, Volumes I and II. Central Bureau of Statistics.

_____. 2001d. Local Authorities Transfer Fund. Annual Report. FY 2000-2001

_____. 2002a. Local Authorities Transfer Fund. Annual Report. FY 2001-2002

_____. *2002b. The Water Act Cap 372*

_____. 2003a. Decentralized Development Support Programme: Financing Proposal by the EC Delegation, Nairobi.

_____. 2003b. Proposed Delineation of WSB Boundaries.

_____. 2003c. Local Authorities Transfer Fund: Annual Report 2001-02.

_____. 2003d. "Draft Report of the MWRMD for the Public Expenditure Review." Processed.

Gulyani, S., Talukdar, D. and Kariuki, M. 2002. "Water for the Urban Poor: Insights from Household Surveys in Kenya". Water and Urban Region I, Africa Region, World Bank.

KWAHO. 1995. "Kwale Water and Sanitation Project, Proposal for the Phasing Out Period 1995-1998". Processed.

Lesley et al. 1989. "Domestic water use in East Africa, Two decades after Drawers of Water". Processed.

Lindelow M and J. Dehn. 2001. "Public Expenditure Tracking Survey: The Health Sector In Mozambique, Motivation, Approach and Methodology". Processed.

Local Authorities Transfer Fund (LATF), *Annual Report, FY 2000-2001*. Government of Kenya.

Makokha A. et al. 1997. *"Management Options for the NGO Water and Sanitation Programme*" Report Prepared for the Kenya-Sweden WSS Programme. Processed.

Masua, L. and A. Makokha. 1997. "Legal and Institutional Options for Community Management of Water Supplies in Kenya, A Desk Study." Water and Sanitation Program – Africa, World Bank. Processed.

Mehta, Meera. 2001. "Government Financing and Subsidies for Rural Water Supply – A Case of Kenya." Water and Sanitation Program. Processed.

Mehta, Meera. 2003. *Meeting the Financing Challenge for Water Supply and Sanitation.* Water and Sanitation Program and the World Bank.

Mehta, Meera and Kameel Virjee. 2003. Forthcoming. ""Financing Small WSS Service Providers – Exploring the Micro-finance Option in Sub-Saharan Africa." Water and Sanitation Program, Africa.

Ministry of Environment and Natural Resources - MENR and Swedish International Development Agency – SIDA. 2002. "Kenya Sweden Rural Water Supply and Sanitation Programme July 1995 to June 2000 Results Analysis". Processed.

Ministry of Environment and Natural Resources - MENR. 1999a . "Approved Estimates and Actual Expenditure of Development Expenditure of the MENR for the Year ending 30th June, 1999". Processed.

_____. 1999b. *Approved Estimates and Actual Expenditure of Recurrent Expenditure of the MENR for the Year ending 30th June, 1999.* Government of Kenya.

_____. 1999c. *National Policy on Water Resource Management and Development.* Sessional Paper No.1. Republic of Kenya.

_____. 2000a. *Approved Estimates and Actual Expenditure of Development Expenditure of the MENR for the Year ending 30th June, 2000.*

_____. 2000b. "*Approved Estimates and Actual Expenditure of Recurrent Expenditure of the MENR for the Year ending 30th June, 2000.*

_____. 2000c. "Draft Water Bill". Processed.

_____. 2001a. *Approved Estimates and Actual Expenditure of Development Expenditure of the MENR for the Year ending 30th June, 2001.*

_____. 2001b. *Approved Estimates and Actual Expenditure of Recurrent Expenditure of the MENR for the Year ending 30th June 2001.*

_____. 2001c. "Kenya Sweden Rural Water Supply and Sanitation Programme Annual Report". Processed.

_____. 2001d. "Country Strategy on Water and Sanitation Services". Processed.

Mohamed, F. 1999. "Small Scale Independent Providers of Water and Sanitation to the Urban Poor: A Case of Nairobi, Kenya". Report prepared for the Water and Sanitation Program and International Water and Sanitation Centre. Processed.

Ministry of Water Resources. N.d. "Water and Sanitation Sector programmes co-ordination committee. The Urban Water Group. Study team1: Commercialization and private sector participation." Report Prepared by FAMA Resources Ltd.

Muigai, A. 2000. "Survey of the Kenyan Urban Water Sanitation Sector". Report prepared for the Ministry of Environment and Natural Resources and Water and Sanitation Program, Africa. Processed.

Njoroge, B. 1999. "Small Scale Independent Providers of Water and Sanitation to the Urban Poor". A Case of Mombasa, Kenya." Report prepared for the Water and Sanitation Program and International Water and Sanitation Centre. Processed.

NWCPC. 2002. Annual Accounts. Details of Recurrent Expenditure.

Orina, P. 2001. "*Survey of Kenya's Rural Water and Sanitation Sector*". Report prepared for Water and Sanitation Program-Africa and the World Bank. Processed.

Pricewaterhouse Coopers (PWC). 2003. "Background paper on Water Supply and Sanitation." Conference on Private Sector Participation Kenya's Infrastructure organized by the Government of Kenya. Processed.

Ratcliffe, A. 1997. "A Comparative study on Water Well Drilling Costs in Kenya". An Informal Paper. WSP-AF. Processed.

Stower, David. 2003. " The Reforms Planned in Water Services." Daily Nation. April 17.

Sydney, R. and R. J Vincent. 1999. "Household Water Resources and Rural productivity in Sub-Saharan Africa: A Review of Evidence". Development discussion paper No. 673.

Thompson, J., I. Porras, E. Wook, J. Tumwine, M. Mujwahuzi, M. Katui-Katua, and N. Johnstone. 2000. "Waiting at the Tap: Changes in Urban Water Use in East Africa Over Three Decades." Environment and Urbanization, 12:2. pp. 37-52.

Thompson, J., I. Porras, E. Wook, J. Tumwine, M. Mujwahuzi, M. Katui-Katua, and N. Johnstone. 2001. *Drawers of Water: 30 years of change in domestic water use and environmental health – summary.* IIED.

Water and Sanitation Program Africa. 2002. *Summary Proceedings of the Regional Workshops on Water and Sanitation on Poverty Reduction Strategies.* December.

White, G.F., D.J. Bradley, and A.U. White. 1972. "*Drawers of Water: Domestic Water Use in East Africa*". Chicago: University of Chicago Press.

World Bank. 2000. 'Aide Memoire: Republic of Kenya- Review of the Water supply and Sanitation Sector". Joint World Bank, Kfw, GTZ and AFD Mission. Nairobi. Processed.

World Bank. 2002. *An Assessment of Local Service Delivery and Local Governments in Kenya*.

World Bank. 2003. "Public Sector Governance: Medium Term Expenditure Framework." A World Bank Website http://www1.worldbank.org/publicsector/pe/MTEF process.doc.

Zerah, Marie-Helene. 2000. *Water: Unreliable Supply in Delhi*. Manohar Publishers. New Delhi.

ABBREVIATIONS
CURRENCY EQUIVALENTS

(Exchange Rate Effective March 30, 2003)

Currency Unit		Kenyan Shillings (Kshs)
US$1.00	=	78.6 Kenyan shillings
Kenyan shillings 1.00	=	US$0.0127226

AFD	Agence Française de Développement.
AfDB	African Development Bank
AHC	Asset Holding Company
AIE	Authority to Incur Expenditure
ARD	Agriculture and Rural Development
CBK	Central Bank of K enya
CBO	Community Based Organization
CDTF	Community Development Trust Fund
CIDA	Canadian International Development Agency
DANIDA	Danish International Development Authority
DDC	District Development Committee
DFID	Department for international Development
DRA	Demand Responsive Approach
DWO	District Water Officer
FAO	Food & Agriculture Organization
FINNIDA	Finland International Development Agency
FY	Financial Year
GoK	Government of Kenya
GTZ	German Technical Cooperation
HQ	Headquarters
IDA	International Develo pment Agency
IFAD	International Fund for Agricultural Development
IFIs	International Financial Institutions
JICA	Japan International Cooperation Agency
KLGRP	Kenya Local Government Reform Programme
KM	Kilometre
Ksh	Kenya shillings
KWAHO	Kenya Water for Health Organisation
LA	Local Authority
LASDAP	Local Authority Service Delivery Action Plan
LATF	Local Authority Transfer Fund
LC	Local Council
LGLA	Local Government Local Authority
M^3	Cubic metre
MDGs	Millenium Development Goals
MENR	Ministry of Environment and Natural Resources
MFI	Micro Finance Institutions
MOA	Ministry of Agriculture
MoF&P	Ministry of Finance and Planning
MOH	Ministry of Health
MOLG	Ministry of Local Government
MWRMD	Ministry for Water Resources Management and Development
MTEF	Medium term expenditure Framework
NGA	Non Governmental Agency
NGO	Non Governmental Organisation
NMC	Nyeri Municipal Council
NWRB	Nairobi Water Services Board
NWCPC	National Water Conservation and Pipeline Corporation
NYEWASCO	Nyeri Water and Sewerage Company Ltd.
O&M	Operation and Maintenance
PER	Public Expenditure Review
PI	Physical Infrastructure

PMU	Project Management Unit
PRSP	Poverty Reduction Strategy Paper
PS	Permanent Secretary
PSP	Private Sector Participation
PSSP	Private small service provider
PWO	Provincial Water Officer
SHG	Self Help Group
RWSS	Rural Water and Sanitation Services
SIDA	Swedish International Development Agency
SSA	Sub Saharan Africa
SWAp	Sectorwide approach
TARDA	Tana and Athi Rivers Development Authority
TOR	Terms of reference
USAID	United States Agency for International Development
UWASAM	Urban Water and Sanitation Management
WAB	Water Appeals Board
WB	World Bank
WHO	World Health Organisation
WRB	Water Regulatory Board
WSB	Water Services Board
WSD	Water and Sanitation Department
WSD	Water Supply Department
WSP	Water Service Providers
WSS	Water Supply and Sanitation
WTP	Willingness to Pay
WUA	Water Users' Association

Annex 1: Information on Coverage and Resource Flows for Service Providers

A. Estimates for Coverage, Expenditure and Resource Mobilization by Service Providers

Provider	Estimation Procedure, Related Assumptions and Main Sources of Information
Coverage	
1. MENR – WSSD	The main source of information is the report by Orina (2001) to support the joint mission in 2002 refer to annex table A1). The original information is from the MENR database. The assumptions relate to the planned population for MENR schemes in urban and rural areas. This fails to take account of non-functional schemes and disconnections as well as additional connections made.
2. NWCPC	Same as above for MENR.
3. Local Authorities	Two sources of information have been used: • First, the estimates for the LAs, which are water undertakers are based on Ministry of Water Resources (n..d.), and World Bank (2000). Refer to table A1.1. • Secondly, about 70 LAs provide services as water distributors. However, the only information about these is from the LATF database, in the form of expenditure on water and revenues collected through water charges. This information as used to arrive at estimates of population served by using per capita recurrent expenditure estimates from other similar service providers (refer to table A1.1)
4. Local Utilities	Coverage estimates for local utilities are based on NYEWASCO budget documents and ELDOWAS Corporate strategy. Refer also to annex table A2. While about seven utilities were registered, only two of these are functioning as utilities and hence only two (for Eldoret and Nyeri) have been considered for these estimates/
5. CBOs / SHGs	Coverage estimates for community schemes is based on Orina (2001) as above (refer to table A1.2). The estimates in this report were based on an internal survey done by the Ministry. As above, for these schemes also the planned population is taken into account and non-functional schemes and disconnections are not taken into account. On the other hand, inquiries in two district water offices of the ministry and discussions with resource persons suggest that there may be an equal number of schemes that are not covered in this database.
6. PSSPs	The weakest base of information is for this category. The two sources of information available were: i) the kiosk licenses issues by the Nairobi City Council –mainly for food stalls and for water services in informal settlements, and ii) estimates of proportion of population in 3 cities (Nairobi, Mombasa and Kakamega) using kiosks and vendors as their primary source of water as reported in Gulyani et. al. 2002. Coverage estimates were based on the second source. Estimates of number of PSSPs were derived based on the first source as reported in table A1.3.
Estimates of Resource Flows (expenditure, channels and sources of funds)	
1. MENR – WSSD	The main source of information for expenditure by the MENR-WSSD is the GOK budget and expenditure estimates. This provided details of allocations, and share of user charges and donors in these. Expenditure estimates ('actuals') for the same headings ('budget lines') were available from the finance section of the MENR. Assumptions were made regarding the share of rural and urban in these (refer to table A4), and for service delivery versus sector administration and management (refer to table A10). While district allocations are available from the budget from 2001-02, these constitute only a small proportion of total allocations.
2. NWCPC	The main source of information is the GOK budget for development expenditure. Recurrent expenditure and expenditure estimates are from the NWCPC records for both rural and urban. Details of the company's balance sheet and income were also available from NWCPC. Annex tables A12 to A14 provide the details.
3. Local Authorities	The main source of information is the information reported by all local authorities for availing the transfer funds under the Local Authority Transfer Fund (LATF) (refer to annex tables A24). This information is maintained in a database under LATF by the Kenya Local Government Reform Program (KLGRP) cell. For recurrent expenditure, expenditure by the water supply department was assumed to represent the total recurrent expenditure by LAs. This would be an underestimate as the cost of overall administration and finance management support is not taken into account. For development expenditure, the categorization of projects used under LATF provided the basis for delineating the WSS projects. For revenues, planned and actual collections of water charges by LAs as reported under LATF

Provider	Estimation Procedure, Related Assumptions and Main Sources of Information
	was used. One constraint in this information is the lack of details available forthe past LA borrowing for WSS projects. Some details, as available for the Nairobi City Council (from Glenday et. al. 2001) was used for the NCC debt.
4. Local Utilities	For the two local utilities in Nyeri and Eldoret, information was collected from the companies in these two towns.
5. CBOs / SHGs	A number of different sources have been used for CBOs (refer table A1.2): • GOK budget documents and expenditure estimates for budget funded development expenditure on new schemes (refer annex table A23). • It was also assumed that the off-budget EU support was for such schemes and the NGO expenditure on WSS was also through the community schemes. The estimates for expenditures by the NGOs was based on the information from the NGO Bureau where all NGOs have to register and report. As this information is for the total NGO expenditure, it was necessary to make appropriate assumptions related to the share of expenditure in WSS. This was also crosschecked by interviews and/or telephonic inquiries with most of the leading sector NGOs. Refer to annex tables A20 and A22 for the related base information and the assumptions • MENR database as reported in Orina (2001) was used to get details of ongoing schemes and for new schemes completed by the CBOs/ SHGs themselves. The information related to capital cost estimates and recurrent expenditure as reported in Orina 2001. Refer to annex table A1.2 for assumptions made.
6. PSSPs	Two different sources have been used for PSSPs (refer table A1.3): • For estimates of number of PSSPs, information from the available reported licenses for kiosks and other PSSPs with the Nairobi City Council were used. These estimates were then related to the population served to generate estimates for Kenya. • For expenditure estimates available sample studies of PSSPs were used. For kiosks and handcart vendors: WSP-AF(1998), Study of Water Kiosks in Kibera, Nairobi; TNWSKWDIC. Informal Paper; for tankers and borehole operators: Mohammed (1999) Small Scale Independent Providers of Water and Sanitation to the Urban Poor: A Case of Nairobi, Kenya; for handcart vendors: World Bank (2000).

B: Developing a Sector Information System under Reform and During Transition

Provider	Implications for Sector Information and Monitoring System
1. MENR – WSSD	There is a need for a comprehensive inventory of these schemes to support the process of transfers WSBs and then to other water service providers under the reform process. Proper coverage estimates under the new WSPs will need to be developed to assess their performance on a regular basis and for future planning. This type of information will need to be built into the monitoring system of the WSB and the water services regulatory board.
2. NWCPC	Same as above for MENR. In addition, the Water Act envisages the its role as a bulk supplier. To support this, inventory of schemes, and the WSBs and WSPs for such bulk supply is necessary including costs of rehabilitation and operations.
3. Local Authorities	Under the reforms, the assets of LA schemes will be transferred to the WSBs. For transferring operations, the potential WSPs include local utilities, private sector or CBOs for small schemes. For the larger LAs as undertakers, information on coverage is available; though it may be better complied and supplemented with information on access for the poor in informal settlements. For others, details of coverage will be required while preparing the scheme inventories. Proper coverage estimates under the new WSPs will need to be developed to assess their performance on a regular basis and for future planning. This type of information will need to be built into the monitoring system of the WSB and the water services regulatory board.
4. Local Utilities	Proper coverage estimates for these utilities need to be developed to assess their performance on a regular basis and for future planning. This type of information will need to be built into the monitoring system of the WSB and the water services regulatory board.
5. CBOs / SHGs	There is a need for a comprehensive inventory of these schemes to support the process of transfer of assests to WSBs and appropriate contracts with the CBOs as water service providers under the reform

Provider	Implications for Sector Information and Monitoring System
	process. For this, coverage will also need to be assessed. Proper coverage estimates and performance information will be needed to assess their performance on a regular basis and for future planning. This type of information will need to be built into the monitoring system of the WSB and the WSRB.
6. PSSPs	It is not very clear whether the PSSPs would be able to have direct contracts with the WSBs or continue through licenses with the WSPs. Assuming that it is the latter, it will be the responsibility of the WSPs, especially in urban areas with large informal settlements, to develop a better estimate of the coverage by these small providers and develop an enabling framework for their operations.

Table A1.1: Population Coverage Estimates for Local Authorities – 2000-01

Type of Local Authority (LA)	Number of Reporting LAs	Actual Recurrent Expenditure (million Ksh)	Total Population Served (In '000s)		Per capita Actual Expenditure (Ksh/person)	
			Actual	Estimate	Actual	Assumption
County Councils	66	36.6	-	0.31	-	129.4
Town Councils	17	14.6	-	0.04	-	200.7
Municipal Councils						
With undertakership	6	170.4	0.74	-	230.3	-
Other municipalities	20	129.1	-	0.64	-	356.8
Nairobi City Council	1	884.7	1.85	-	478.2	-
Total	110	1236	-	-	-	-

Sources: Actual recurrent expenditure: MoLG-LATF 2002; Population served: MENR n.d.
Notes: a) Of the 9 municipal councils with water undertakership, 2 operate through public utilities, and only 6 others have reported recurrent expenditures under the MoLG-LATF database, b) per capita recurrent expenditures for based on: for county councils – MENR rural service estimates; for town councils – MENR urban service estimates; and for other municipalities – NWCPC estimates, and c) total served population is derived by dividing the actual recurrent expenditure by per capita expenditure estimates.

Table A1. 2: Estimates of Expenditures and Revenues by Community Groups as Service Providers

(For 2000-01 in Ksh million)

Community groups	Recurrent	Development	Total
New schemes			
Government / donor funded			
Donors off-budget [1]	0	209	209
NGOs [2]	354	826	1180
From WSD-MENR [3]	0	68	68
Community contributions (25%)	0	276	276
Community contributions (25% of CDTF expenditure on communities	0	8	8
Sub-total	354	1387	1741
Self funded by SHG/Communities			
Schemes Under Implementation [4]	0	210	210
Schemes Under Planning and Design [5]	0	51	51
Sub-total	0	261	261
Existing schemes			
Schemes under operation by community groups [6]	102	17	119
Total	456	1665	2121

Sources and notes:

1. *Estimate for off-budget donors funding includes only the European Union (EU) funding for the Emergency drought programme through NGOs (ECHO and CORDAID). Refer to annex table A17 .for details.*
2. *NGO estimates are derived from expenditure returns made by NGOs to the NGO Bureau. Expenditure returns made to the NGO bureau are aggregated across all activities and assumptions were made to estimate expenditures in WSS services. These were based on inquiries with some of the main NGOs operating in the water sector in Kenya. Refer to Tables A20 to A22 for details.*
3. *Community support from MENR includes actual expenditures under selected heads as reported in Table A23.*
4. *Estimate of annual development expenditures for schemes under implementation is based on information reported in Orina (2001).Orina (2001) reported that of the schemes under implementation about 56 were funded by the communities themselves. The average cost of these schemes (weighted by size distribution of schemes) was estimated to be 3.75 million. Based on discussions with stakeholders, it was assumed that these represented about 50 percent of total schemes and development expenditure during the year estimated to be 50 % of the total expenditure of 420 million Ksh..*
5. *Estimate of annual expenditures for schemes under planning and design implementation is based on information reported in Orina (2001).Orina (2001) reported that of the schemes under planning and design about 102 were funded by the communities themselves. The average cost of these schemes (weighted by size distribution of schemes) was estimated to be 0.81 million. Based on discussions with stakeholders, it was assumed that these represented about 50 percent of total schemes and development expenditure during the year estimated to be 30 % of the total expenditure of 169 million Ksh.*
6. *Estimate of expenditures for schemes under O&M is also based on information in Orina (2001) and making a number of assumptions: a) The total 161 operational schemes reported in Orina (2001) are about 50 percent of total operational community-run schemes in the country, b) using the information reported in Orina (2001) for about 48 schemes, average annual recurrent expenditure per schemes was estimated to be 0.32 million Ksh. per scheme, and c) of the 54 schemes requiring rehabilitation, about a fourth carried out rehabilitation at Ksh 0.9 million per scheme (about a 25 % of cost of a new scheme under implementation, which is funded by the community).*

Table A1.3a: Estimated Expenditures by Private Small Informal Providers *(Ksh Million)*

Small Scale WSS Provider	Development Expenditure			Recurrent Expenditure		
	Exp. Per Provider	No. of New Providers per year	Total	Exp. Per Provider	Total No. of Providers in Kenya	Total
Kiosk Operators	0.07	90	6.3	0.05	2085	104.3
Tankers/Truckers	3.74	2	7.5	1.57	48	75.4
Handcart Vendors	0.01	15	0.1	0.01	348	3.5
Total			13.9			183.1

Table A1.3b: Estimates for Private Small Informal Providers – Sources and assumptions

Characteristics	Kiosk Operators in Urban Informal Settlements	Handcart Vendors in Urban Informal Settlements	Tankers and Borehole Operators in Large Urban Areas
Description	- Small business premises/ Sheds equipped with a water standpipe/ connection and a storage tank, main reliance on family labour - Mainly cater to urban poor in informal /low income settlements -Source of water is usually a public urban utility and sold through 20 litre containers - Very low turnover, minimal profits and affected by local political dynamics	- Buy water mainly from Kiosk operators for resale at doorstep to households and single member families - resale price is about 3-5 times higher than the kiosk prices, but cheaper than supply by tankers	- Tankers used for supplying water to formal settlements, high income consumers and commercial enterprises/business - Supply is mainly in bulk by half/full tankers - Source of water is mainly boreholes. Often the borehole owners also provide tanker services - High prices varying by distance and season
Number of operators	Information for Kibera slum settlement in Nairobi suggests about 1230 persons in informal settlements per kiosk (650 kiosks serving 0.8 million population). Using this as a base, total number of kiosks in urban Kenya is estimated to be about 2085. It is assumed that share of population residing in informal settlements is 60 and 20 % respectively in Nairobi/Mombasa and other urban centres,	Based on World Bank (2000) AM, handcart vendors are assumed to be one-sixth the number of kiosk operators.	Based on information from Nairobi City Council, there were 17 registered tanker operators in Nairobi. Assuming that these served about 3 percent of residents, population per tanker operator is about 1500 persons. Applying this rate to the urban population of 5.9 million residing in large urban settlements (<85000 population), total number of tankers in Kenya are estimated to be about 48.
Number of operators added during the year	Applying the above assumptions to the estimated annual increase in urban population, about 90 new kiosk operators would have been added during the year.	Same as above	Applying the above assumptions to the estimated annual increase in urban population, about 2 new tanker operators would have been added during the year.
Estimates of costs	According to WSP-AF(1998) study on Water Kiosks and Mohamed(1999), A Kiosk Operator's Set-up cost is in the range of Ksh 20,000 and Ksh 40,000 while monthly operating costs ranges between Ksh 750 and Ksh 4,000.	Set-up fee is in the range of Ksh 8000-10000-the cost of buying the handcart, 20 litre containers and a deposit for the initial load of water. The Monthly operating cost range between Ksh500-700.	Set up fee is about Ksh 3.75 Million and monthly operating costs approximate Ksh 130,000.

Sources: For kiosks and handcart vendors: WSP-AF(1998), Study of Water Kiosks in Kibera, Nairobi; Third Nairobi Water Supply, Kibera Water Distribution Infilling Component. Informal Paper; Population in informal settlements: Matrix Development Consultants (1993), Nairobi Informal Settlements: An Inventory , Report Prepared for USAID/REDSO/ESA; for tankers and borehole operators: Mohammed (999) Small Scale Independent Providers of Water and Sanitation to the Urban Poor: A Case of Nairobi, Kenya; for handcart vendors: World Bank (2000), 'Aide memoire: Republic of Kenya- Review of the Water Supply and Sanitation Sector', Joint World Bank, KfW, GTZ and AFD Mission, Nairobi.

Annex 2: List of Annex Tables in Part II

Annex 3: List of Persons / Organizations met

Eng. D.N Stower	Senior Deputy Director	MENR
Eng. K.H Maina	Engineer	MENR
Eng. S. Thuo	Ass. Director of Water	MENR
Eng. Ombogo	Engineer	MENR
Mr. T. Ogallo	Provincial water Officer	MENR
Mr. Anthony Mwenje	District Water Officer	MENR
Mr. L.K Kimemia	Accountant	MENR
Mr. Mbao	Estimate Officer	MENR
Mr. Thomas Aura	Estimate officer	MENR
Mr. Chepkwonyi	D/DWO-Kericho	MENR
Eng Michael Ochieng	Managing Director	NWCPC
Eng. Isaboke	Engineer	NWCPC
Eng. Ikobe G.	Engineer	NWCPC
Mr. Oluoch Stephen	Regional Manager-S. Coast	NWCPC
Mr. Ong'onge	Areas Manager-Westmainland	NWCPC
Mr. Sammy Rono	Commercial Manager	NWCPC
Eng Nyariki	Deputy Director	MOLG
Mr. Agumba	Ag. WSD General Manager	Kisumu MC
Mr. Philip Kiptoo	General Manager	ELDOWAS
Eng. Samuel Getanda	Technical Manager	Nyewasco
Mr. Samuel Muchai	Commercial Manager	Nyewasco
Mr. Oliver Weicheld	Commercial Manager	JBG-Geuff- Malindi
Mr. Peter Wagar Owenga	Ass. Accountant General	MoF&P
Josephine Kanyi	Economist	MoF&P
Esman Nyamongo	Economist	MOF&P
Phylis Makau	Economist	MoFP
Lars Karlene	Programme coordinator	SIDA
Rebbecca Kavula	Programme Officer	ITDG
Mr. Matsetse	Programme officer	MENR/SIDA
Rachael Ngethe	Ass. GM- Commercial	NCC
Neil MacDougall	Team Leader	GTZ-UWASAM
Eng. Milgo	Consultant	GTZ-UWASAM
Prof. Edward Kairu	Executive Director	Maji na Ufanisi
Mrs Rosemary Rop	Executive Director	SANA
Mr. J. Murage	Consultant	NGOs
Mr. Ezra Anyango	Consultant	NGOs
Mr. Peter Michieka	Accountant	CARE
Mr. Onduru Matthew	Programme Manager	CARE
Mr. Christian Odhiambo	Consultant	NGOs
Alex Tameno	Programme Officer	SIDA
Eng. Orina Patrick	Consultant	Orina and Partners
Mr. Njeru Kirira	Consultant	GEIFIC Ltd
Mr. Isaac Likaro	Executive Director	NGO Bureau
Ms. Deborah Ongewe	Executive Director	NGO Council
Mr. James Thuku	Water Coordinator	World Vision

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