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More, Better, or Different Spending?

Trends in Public Expenditure on Water and Sanitation in Sub-Saharan Africa

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Acronyms and Abbreviations

AfDB	African Development Bank
AICD	Africa Infrastructure Country Diagnostic
AMCOW	African Ministers Council on Water
COFOG	Common Functions of Government (UN system used by IMF-GFS and PEFA)
CSOs	Country Status Overviews
DAC	Development Assistance Committee
GDP	gross domestic product
GFS	Government Finance Statistics
HDR	Human Development Report
HIPC	highly indebted poor countries
IB-NET	The International Benchmarking Network for Water and Sanitation Utilities
IBT	increased block tariff
IMF-GFS	International Monetary Fund, Government Finance Statistics
JMP	Joint Monitoring Program
LICs	low-income countries
MDG	Millennium Development Goal
MIC	middle-income country
MTEF	Medium-Term Expenditure Framework
NGO	nongovernmental organization
O&M	operation and maintenance
OECD	Organisation for Economic Co-operation and Development
PEFA	Public Expenditure and Financial Accountability
PER	Public Expenditure Review
PETS	Public Expenditure Tracking Surveys
PRSP	Poverty Reduction Strategy Paper
RWSN	Rural Water Supply Network
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
WDI	World Development Indicator
WDR	World Development Report
WHO	World Health Organization
WSP	Water and Sanitation Program
WSS	water supply and sanitation

Executive Summary

Improvements in water supply and sanitation access in Sub-Saharan Africa have fallen short of national and international targets. Past explanations for this slow progress toward the Millennium Development Goals (MDGs) include lack of capacity, low levels of financing, inappropriate technologies, and institutional and governance challenges. This overview paper zooms in on the public financing for water supply and sanitation (WSS) in the anticipation that knowledge of the quantity, quality, and drivers of public expenditure is a prerequisite for governments and donors to adjust their policy and practice, which is itself a prerequisite to improved access to WSS.

This overview paper aims to determine the size and composition of the flow of funds, assess the quality of public spending, and identify common issues in public expenditure in the water sector. How much public money (domestic resources and donor financing) was budgeted for the sector? Was it spent in a timely manner? Who benefits from public spending? What are the major bottlenecks in increasing expenditure and the efficiency of these expenditures?

This overview paper presents an assessment of the findings of public expenditure reviews (PERs) conducted by the World Bank in 15 countries in Sub-Saharan Africa in the past few years. Eight of these PERs concentrated on rural WSS only ("rural-only countries" in this executive summary) and seven considered both urban and rural WSS ("rural-and-urban countries").

The scope of the present review includes expenditures by public institutions (at central and local government levels) on domestic resources and grants or loans provided by external funding agencies. The review does not include off-budget spending by water utilities. In other words, while the numbers in this review include public subsidies to utilities, they do not include utility spending, including spending funded by cost-recovery from consumers.

The Rationale for Public Spending on WSS

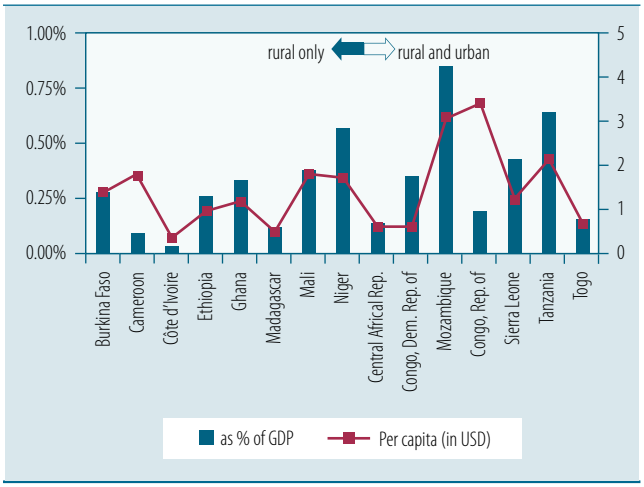
This overview paper tests current public spending patterns against the economic rationale for such spending, including reducing disparities in service delivery and overcoming market failures. Reducing the disparities in access to basic WSS is a responsibility of government. Individuals have little incentive to build and maintain extensive WSS infrastructure, but communities and societies do. Targeted public spending benefitting households that otherwise would be unable to afford those services can be a component of a broader social policy agenda to redistribute resources to the poor. Several market features call for government intervention in the WSS sector:

- WSS is a mixed public and private good; while services benefit individuals, they also have considerable public health and environmental benefits.
- WSS is a good example of a natural monopoly, as WSS network infrastructure cannot practically be duplicated.
- The sector is characterized by a high degree of sunk costs.
- The sector suffers from imperfect information, which can lead to less than desirable investment and consumption.

Public Expenditure Falls Short of Government Statements

Public expenditure on WSS averaged 0.39 percent of gross domestic product (GDP) ($1.71 per person) in rural-and-urban countries, and 0.26 percent ($1.21 per person) in rural-only countries (figure A). This is well below the 1 percent benchmark suggested by the 2006 Human Development Report,

Figure A: Public Expenditure as a Percentage of GDP and on a Per Capita Basis



Source: PER Reports.

and one-tenth of what is needed to meet the MDGs for Sub-Saharan African states.

Many of the countries in the sample are highly donor dependent, with on average 61.9 percent of total WSS expenditures coming from donor financing. On average, 2 percent of total government expenditures go toward the WSS sector.

We observed a general upward trend in public expenditures for the sector, both absolutely and as a share of GDP and per capita. Annual expenditure on WSS is extremely volatile, which obstructs efficient budget execution.

Needier Countries Spent Less of Their Own Resources and Received Less Donor Funds

We noted large disparities in public WSS expenditures between countries. For instance, per capita expenditure in the urban-and-rural countries ranged from $0.01 per person (Democratic Republic of Congo, 2002) to $8.93 per person (Republic of Congo, 2006).

In cross-country comparisons, richer countries spent more per capita on WSS, but their spending comprised a slightly smaller share of overall GDP. Public expenditure on WSS as a share of GDP depends heavily on the total public expenditure as a share of GDP, and thus on the tax revenue ratio. Going forward, economic growth and increasing the tax base of governments is, therefore, a key ingredient to progress in the sector.

Donor financing was not targeted at countries with low levels of access. Donor targeting is guided by factors such as political stability, adherence to principles of good governance, and sound project financial-management processes. Donors often target relatively rich countries that have already made some progress on WSS access.

Public-Expenditure Targeting Exhibited a Bias toward Capital Budget, Water Supply, and Capital Cities

According to national PERs, public expenditure favored development (87.3 percent of total sector expenditures) over recurrent expenditure (12.7 percent), half of which was subsequently allocated to salaries. Underfunding of basic maintenance severely limits public sector institutions' ability to fulfill their operations, maintenance, monitoring, and enforcement duties and weakens sectoral capacity to bolster access rates and reach MDG targets.

In general, the sanitation subsector, maintenance of existing WSS facilities, and areas outside of capital cities appeared to be underfunded.

Investments in urban water supply have not kept up with urbanization and population growth. Urban access to drinking water has fallen by 1 to 2 percent each year, on average, over the past decade. In many cases, inefficient water utilities are underperforming and are increasingly a drain on state coffers, with revenues unable, or barely able, to cover operations and maintenance (O&M) costs. As a result, water utilities often used transfers from national governments to maintain, rather than expand, current coverage. This is effectively a subsidy to households that already have piped water, the majority of whom are in the top 40 percent of income distribution. Further, funding new household connections often receives priority over public standpipes. We noted that few countries have specific public expenditure programs for those who are not connected to the network.

Investment in rural water supply just kept pace with population growth. Over the past decade, rural access to drinking water increased by 1 to 2 percent on average each year in

the countries surveyed. More than half of rural dwellers still do not have access to drinking water, though coverage in Sahelian countries is substantially better than in other African countries, as is public expenditure on rural water supply. A key obstacle to improved rural access is the breakdown rate of rural water supply facilities, which was 25 percent or higher in most of the countries surveyed and more than 50 percent in postconflict countries.

Sanitation receives only a small part of public expenditure, even though only one in five households in the countries considered had access to improved sanitation in 2008. As the sanitation sector is dominated by household on-site facilities and is generally financed from household expenditures, limiting public expenditure in this area might be partly justified. The data are admittedly limited and uncertain but suggests some progress in access to improved sanitation in rural areas over the past decade. Huge public investments will soon be required as countries get richer and people move up the sanitation ladder and move toward public infrastructure, such as condominial sewerage.

The review showed large regional expenditure disparities within countries. National utilities tend to privilege capital cities, leaving secondary cities underfunded, understaffed, and sometimes without functioning facilities altogether. Important regional disparities persist in rural access to drinking water, with sizeable gaps between the best served and less served. Public expenditure often goes to where it is most easily spent instead of where it is most urgently needed.

Almost Two-Thirds of Water Supply and Sanitation Budgets Were Executed

Recurrent budgets (70 percent) were executed more often than development budgets (62 percent). Budget execution in rural-only countries (66 percent) was higher than that in rural-and-urban countries (47 percent). In the eight countries where data were available, execution of domestically funded sector expenditure fared better (66) than externally funded expenditures (57 percent). But the distinction between "development" expenditure and "recurrent" expenditure is becoming increasingly blurred, as donor funding seems to include considerable rehabilitation expenditures that could be classified as either capital or current.

Bottlenecks along the Budget Execution Chain: Budget Ambition and Volatility, Capacity Constraints, and Incomplete Reforms

Obstacles and bottlenecks to improving low budget execution rates occur all along the budget execution chain and are to some extent outside the control of water sector professionals. We distinguish between level of ambition and volatility of budgets, capacity gaps, incomplete implementation of sector reforms, and incomplete decentralization. In most countries it has been hard to distinguish which obstacle is the most critical.

Low execution is caused partly by overambitious plans and budgets. Several PERs noted that line ministries are not adequately involved in the budgeting process. As a result, line ministries are not interested in budget preparation work, which they view as an exercise involving the ministry of finance only.

The volatility of WSS budgets forms a major obstacle for efficient budget execution as the unspent budget of one year cannot typically be carried over into the next year. Delays in budget processes exacerbate this problem, as contract bid invitations cannot be issued until the budget is approved, and spending authorization may not happen until months into the fiscal year. Donor-funded development expenditure has the lowest and most erratic rates of budget execution. Donor planning and monitoring is not necessarily linked to the government budget calendar; information on multiple parallel donor systems can be hard to track, disbursement processes can be lengthy and administratively cumbersome, and delays in counterpart contributions can further slow donor disbursements. Channeling funds directly to regional and district authorities helps donors avoid delays and reduces risks of unauthorized cash diversions along the way, but levels bypassed in the process do not always get the information, compounded by still weak local standards of accounting and reporting.

Further downstream, another systemic obstacle to budget execution is the lack of capacity, mainly project management and contracting capacity in the government and its partners. Well-considered plans and budgets can be undermined by truncating planning horizons, scrambling projects, splitting contracts, and undercutting economies of scale. Procurement procedures can be cumbersome, with multiple donor agency rules and procedures creating huge demands on host governments with limited capacity. Throughout, costs rise with delays, inflation, and stop-and-start resource management,

and suppliers soon become reticent to bid on government contracts in the future, or they raise their prices in defense.

Spending public budgets is slowed by unclear responsibilities due to unfinished implementation and enforcement of water sector reforms. Nearly all of the countries studied have elaborated a comprehensive set of water sector policies and subsector strategies. Multiple sector institutions—some newly created—have overlapping or conflicting mandates and strategies, with insufficient human and financial resources to go around.

While most countries have officially decentralized all or part of WSS service delivery, the devolution of responsibilities to local, regional, and district authorities has not come with the requisite authority, budget, staff, and operational support to implement them. We found that WSS budgets were almost never transferred to local authorities, with the notable exception of Tanzania. In rural areas in particular, incomplete decentralization has created a dangerous institutional vacuum, where neither national nor local governments have taken responsibility for the safe provision of water. Water supply in urban areas has been less disrupted, if only because national utilities continue to provide water in two-thirds of the countries reviewed. Central governments sometimes use the insufficient management capacity of lower levels of government to rationalize their reticence to give up power, budgets, and staff.

The Current Link between Spending and Services

No countries have managed to increase access without a substantial increase in public expenditure. In other words, increasing public expenditure on WSS is a necessary but insufficient tool for improving services. For instance, successful programs to improve access to water supply in Senegal, Burkina Faso, and Niger all included large public investment programs. Similarly, progress in rural water supply access in Benin and Mali has followed increases in public expenditure.

Overall, however, we found no relationship between levels of spending and levels of access to water supply and sanitation. This might be due to poor data quality, might be an indication that spending is not the key determinant in increasing access to water supply, might be because the review period was too short, or might be a combination of these reasons.

A Note on Data

All public expenditure reviews faced serious limitations with respect to data definitions, classifications, and coverage. We found incomplete or contradictory data in many countries, compounded by the fact that "water and sanitation" is not a distinct stand-alone sector that would enable international comparison of government finance. Additionally, a large part of donor resources are off budget, leaving sizeable holes in the bigger picture of public expenditure for WSS. On the sector side, access is often measured using different methodologies, even within a given country over time. Full standardization of PERs would serve global officials but would limit the use of the PERs for their main audience—in-country stakeholders (including politicians), government officials, donor representatives, and civil society representatives—because the WSS sector is defined and organized differently in different countries.

Patterns of Public Spending are in Stark Contrast with the Public Spending Rationale

Public spending contributes little to overcoming market failures. Current public spending patterns are not in line with stated public health objectives; they focus on higher-level services at the expense of channeling money into cheaper service levels that would have considerably higher health returns per dollar invested, leaving sanitation underfunded. Public spending patterns do not fully reflect the long asset life of WSS infrastructure, as the upkeep of existing WSS facilities appears to be underfunded. Low water tariffs undermine the rationale that governments prefinance capital investments that will be recovered from consumers over time.

Current spending patterns contribute to inequality, despite the fact that the gap between rural and urban access is closing. We found that the poor do not get their fair share of public spending on services, let alone the larger share that might be justified on equity grounds. Spending is skewed to services disproportionately used by richer people in capital cities at the expense of people in slums, secondary cities, and rural areas. Water utility tariff subsidies for WSS are starkly regressive. Social connection programs that provide subsidies to reduce the costs of connecting to the network are a progressive alternative to consumption subsidies in some countries.

Weak utilities act as a buffer between public spending and public policy, reducing "bang for the buck." The PER review findings show that a large part of public spending on urban WSS is absorbed by utilities to cover recurring losses caused by revenues being well below O&M costs. Only 36 percent of the utilities in Africa have tariff levels to meet their full O&M costs.

There are Several Drivers behind the Misallocation and Poor Implementation of Public Resources in WSS

Spending patterns in WSS are in line with cross-country evidence that clientelism significantly influences the provision of public services. The tendency for political patrons to provide private rewards to clients can help explain the disproportionate spending in capital cities. Public money is often spent where the politically powerful reside; this is where elections are won, or at least where potential social discontent has to be controlled. Political patronage might also explain low revenue collection caused by uncollected bills and malfunctioning meters. A political economy perspective on public service delivery suggests that choices in capital spending may be driven by the corruption, employment, and profit opportunities that construction provides. Utility management decisions are often driven by the interests of their employees or organized labor. Politicians and central bureaucrats have been allowed to keep public budgets concentrated in national administrations, stalling decentralization and leading to a dangerous institutional vacuum in the rural provision of water supply with neither national nor local governments fully taking responsibility. This might be convenient for all—except rural people without water.

Politicians' refusal to raise tariffs makes for good political pro-poor rhetoric but in practice mainly benefits the middle and upper classes that are connected to the public water network. Recovering full costs from existing customers and using the resulting cash flow to accelerate access expansion for the poor would substantially increase equity, although it is a hard political sell.

Looking at political dynamics also helps explain why sanitation is an orphan sector, suffering from slow technology change. Low household demand for sanitation results in politicians not seeing sanitation as a vote winner, and therefore allocating scarce resources to sectors with higher perceived political rewards. But sanitation is a cheap lifesaver, and as such might merit higher public spending. Mistrust of cheaper service levels and other cultural norms within the engineering profession form the background of the strong barriers to technological innovations.

Global debates are influencing local decision making. The sometimes heated debate on privatization led to blanket opposition to cost-recovery by some politicians and activists. But the global environmental debate drove a push for higher levels of sanitation services, and the recent global movement for basic sanitation has further rebalanced the debate. The observed gaps between policies and practice can partly be traced back to policy prescriptions from donors, which have been adopted superficially but have not been followed through because of local political resistance. In this respect, it is interesting to note that the call for more direct accountability of service providers by increasing the client's power has not really taken hold in the sample of countries yet.

More, Better, and Different Spending

There are compelling arguments to increase public spending for WSS. Redistributive arguments and market failures call for public intervention. The investment needs are huge, but this review found that current spending patterns are inefficient and ineffective and do not match the public spending rationale. Increasing the volume of public expenditure without changing the targeting and execution will not have a large impact.

The findings of this review point to a strong need for better budget execution. A major focus should be on solving institutional bottlenecks in WSS public expenditure both within and without the control of sector professionals. Such professionals, including international actors, should broaden their scope from the design to the implementation of sector policies and should work with others to address the bottlenecks along the whole of the budget execution chain. The challenge for practitioners is not to identify the perfect "magic bullet," but the more subtle one of building capacity and instilling and maintaining appropriate management cultures. The choice of budget execution tools must be appropriate to the current and evolving state of the country and sector.

The need for better targeting is a major conclusion of this review. This includes channeling funds to the sanitation subsector, to areas outside of the capital, and to the upkeep of existing WSS facilities that currently appear underfunded.

A review of PERs reveals huge gaps between policy and practice. PERs can be a useful tool to hold governments accountable for the implementation of their own policies and promises.

At the sector level, we found that while nearly all countries have elaborated comprehensive water sector policies and strategies, implementation and enforcement of sector reform strategies remain incomplete, and efforts are needed in terms of capacity building, general public awareness campaigns, and further development of the legal framework that would facilitate implementation of policies and strategies. We have also found that, rather than streamline the process, reforms had, in many cases, led to the creation of new institutions with overlapping mandates. Furthermore, decentralization has stalled, with little or no progress in devolving financial resources to local government. This has created a dangerous institutional vacuum in the provision of water supply, particularly in rural areas, as neither national nor local governments are fully taking responsibility.

A second implementation gap is seen in donor financing, which is often badly targeted and unpredictable, resulting in execution rates that are lower than those of internal resources. A significant opportunity is available for more pro-poor-targeted donor financing by shifting resources to the areas with the largest WSS needs. We found that the WSS sector in most countries was characterized by a large number of donors operating on terms and conditions specific to their individual projects. Thus, donor funding is unpredictable, and donor planning and monitoring is not necessarily linked to the government budget calendar. Transaction costs for governments are high. Donors should consider rethinking extending their financing to not only cover "development" expenditures, but also maintenance—especially in rural areas.

Closing the implementation gap and improving the efficiency of public spending will require addressing the underlying power patterns. Changes in spending patterns will risk being marginal or temporary if these factors are not properly addressed. But addressing underlying power patterns should not be an excuse to pursue an exclusively technocratic approach to improving the targeting and execution of WSS public spending; instead, technocratic short-term measures should be complemented by exploring, exposing, and addressing the longer-term drivers behind the current status quo. PERs can be a powerful tool to help change social dynamics as they can help to open up debate by showing the lack of efficiency in current public spending. Advocates for better WSS services can use the outcomes of PERS, as well as this regional review, to expose the capture of public resources by interest groups and lobby for different and better spending in the sector. As the quality of spending will improve, the argument for more spending will not only be based on the compelling needs in the sector but also grounded in the economic rationale for public spending.

1. Introduction

This review mines the rich data of 15 Public Expenditure Reviews (PERs) conducted in Sub-Saharan Africa and funded by the World Bank over the past years. From 2003 the World Bank has funded more than 40 PERs that contain an analysis of the water supply and sanitation (WSS) sector. In most of these, the WSS sector is discussed alongside other sectors. A set of stand-alone PERs specifically addressing the WSS sector have also been carried out in African countries.[1]

The purpose of the present review is to provide, based on the 15 PERs selected, an overview of:

- The size and composition of the flow of funds of to sector.
- The quality of public spending in the sector including distributional issues (who benefits from public spending? rich/poor, urban/rural, water/sanitation, coastal/inland, and so on), efficiency (cost recovery, and so on), public financial management (tracking budget allocations, including tools such as public expenditure tracking surveys [PETS], assessing investment planning and allocation policies, and so on), and trying to link sector spending to outcomes (access to services, quality of services).
- Common issues in public expenditure in the water sector, such as major bottlenecks in increasing expenditure and the efficiency of these expenditures.

The scope of the present review includes expenditures by public institutions (at the central and local government levels) on domestic resources and grants or loans provided by external funding agencies. The review does not include off-budget spending by water utilities. In other words, while the numbers in this review include public subsidies to utilities, they do not include expenditure by utilities, thus disregarding expenditures paid for by consumer cost-recovery.

The public expenditure analyses in all reviews focus on WSS services, although some reports also discuss water resources management. Almost all of the PERs, however, are limited to WSS, thus excluding water resources management and irrigation issues from the analyses. Furthermore, most of the studies focus on rural water supply and it is only in recent years that the urban water supply subsector has been included in the scope of the reviews.

Sanitation is defined as the sanitary removal of liquid waste and excreta and the promotion of hygiene. The approach to sanitation, however, is not fully consistent across the various PERs. Sanitation is a broad concept potentially covering a large range of intervention areas such as household sanitation, public latrines, waste water treatment, drainage, and solid waste disposal.[2] The review is limited to household-based sanitation—that is, latrines—and excluded expenditure related to other forms of sanitation except where this is not separable (for example, the PER for Togo also deals with solid waste disposal).

The reviewed PERs did not use standard definitions, which has led to some data limitations described later. This review is a data mining exercise of country PERs that were written to serve in the political dialogue on the challenges in achieving the Millennium Development Goals (MDGs) by 2015 and on bottlenecks in enhancing public finance management performance. These PERs provide a wealth of data on WSS sectors in the surveyed countries; this overview paper tries to draw regional conclusions from that data.

[1] The list of PERs carried out in the WSS sectors in African countries is included in annex 1.

[2] This is especially true in francophone countries where the term *assainissement* covers a large range of services.

1.1 Why Should Governments Spend their Scarce Financial Resources on WSS?

This review tests WSS public spending patterns against the economic rationale for such spending, including reducing disparities in service delivery and overcoming market failures. Reducing the disparities in access to basic WSS services is a responsibility of government. Individuals have little incentive to build and maintain extensive WSS infrastructure, but communities and societies do. Targeted public spending benefitting households that otherwise would be unable to afford those services can be a component of a broader social policy agenda to redistribute resources toward the poor. Several market features call for government intervention in the WSS sector:

- WSS is a mixed public and private good; while services benefit individuals, they also have considerable public health and environmental benefits.
- WSS is a good example of a natural monopoly, as WSS network infrastructure cannot practically be duplicated.
- The sector is characterized by a high degree of sunk costs.
- The sector suffers from imperfect information, which can lead to less-than-desirable investment and consumption.

Table 1.1: Key Indicators for Countries Included in this Review

Country	Population (millions)	Urbanization rate (%)	Land area (1,000 sq. km)	GDP/capita ($)
Burkina Faso	13.2	18	274	425
Cameroon	16.3	54	465	1,035
Central African Republic	4.0	38	623	337
Congo, Dem. Rep. of	57.5	32	2,267	126
Congo, Rep. of	4.0	47	342	1,522
Côte d'Ivoire	18.2	47	318	899
Ethiopia	71.3	16	1,000	160
Ghana	22.1	48	228	486
Madagascar	18.6	29	582	271
Mali	13.5	31	1,220	387
Mozambique	19.8	35	784	345
Niger	14.0	16	1,267	238
Sierra Leone	5.5	37	72	221
Tanzania	38.3	24	884	302
Togo	6.1	40	54	346

Source: World Development Indicators (World Bank 2005).

1.2 The Sample of Countries

Fifteen countries have been selected for the review. From the 40 World Bank–funded PERs, we made a selection based on: (i) similarity of country circumstances (all countries are Sub-Saharan African countries); (ii) period of review (from 2002 to 2008); and (iii) scope and depth of PERs. Table 1.1 presents some key data on the sample countries.

About half of the PERs deal only with rural WSS, while the others deal with both urban and rural WSS. The PERs focusing on rural WSS cover the following countries: Burkina Faso, Cameroon, Côte d'Ivoire, Ethiopia, Ghana, Madagascar, Mali, and Niger. The PERs that cover both urban and rural WSS are: the Central African Republic, the Democratic Republic Congo, Mozambique, the Republic of Congo, Sierra Leone, Tanzania, and Togo.

1.3 A Reading Guide for Various Audiences

This overview paper is structured to serve multiple audiences, including WSS professionals and economists, financial management specialists, and others working across sectors on public management and service delivery. The overview paper is structured as follows:

- Chapter 2 reviews trends in WSS access.
- Chapter 3 identifies and classifies sector expenditures, looking into how much is being spent and the sources of funding.
- Chapter 4 looks at the targeting of sector expenditures, including recurrent and capital expenditures and how these are split by subsector and geography.
- Chapter 5 examines budget execution and analyzes the budget execution chain to explore the obstacles to better budget allocation and execution.
- Chapter 6 examines the link between expenditure and access to WSS.
- Chapter 7 tests the observed spending pattern against the economic rationale for public spending on WSS and explores the political economy underlying the spending patterns.
- Chapter 8 provides some concluding remarks.

Box 1.1: How Representative Are the 15 Reviewed Countries of Africa as a Whole?

The Africa Infrastructure Country Diagnostic (AICD) uses a four-way country typology to explore the underlying drivers of progress:

- Middle-income countries (MICs) have per capita gross domestic products (GDPs) in excess of $745 but less than $9,206.
- Resource-rich countries are countries whose behaviors are strongly affected by their endowment of natural resources.
- Fragile low-income countries face particularly severe development challenges, such as weak governance, limited administrative capacity, violence, or a legacy of conflict.
- Nonfragile, low-income countries compose a residual category of countries with per capita GDP below $745 that are neither resource rich nor fragile.

The 15 countries reviewed in this report fall into three out of four of these groupings; no MICs were reviewed. The distribution across the other three groupings is relatively similar to the overall distributions of African countries, although the resource-rich countries are somewhat underrepresented. The sample is thus reasonably representative for the whole of Sub-Saharan Africa.

	Sub-Saharan Africa (excluding MICs)		Sample of 15 PER countries		
	Number	%	Number	%	Countries
Resource-rich countries	9	24	2	13	Cameroon, the Republic of Congo
Fragile, low-income countries	13	35	5	33	The Central African Republic, Côte d'Ivoire, the Democratic Republic of Congo, Sierra Leone, Togo
Nonfragile, low-income countries	15	41	8	53	Burkina Faso, Ethiopia, Ghana, Madagascar, Mali, Mozambique, Niger, Tanzania

Source: Foster and Briceño-Garmendia 2009.

WSS professionals probably might want to focus on chapter 3 and higher. While chapter 2 may be of interest to them, it contains information they will be familiar with.

Generalists interested in the WSS sector might be specifically interested in chapters 2 to 4 and chapter 6 and higher. These chapters contain a wealth of information on the current status of the sector and its public expenditures (chapter 2 and 3) and a political economy perspective on the sector (chapter 7). The discussion on the budget execution chain in chapter 5 contains information they will be familiar with.

1.4 Methodology

The current study has been conducted purely as a desk study; we relied mainly on the data presented in the 15 PER studies along with some other sources that use a standard set of indicators. We used general geographic, economic, and population data derived from several international databases to complement the data in the PERs.[3] Several recent studies on WSS were used to compare and validate our findings.[4] Chapter 7, on the underlying political economy considerations in the WSS sector, follows a slightly different methodology than the rest of the chapters, as it builds on a broader literature review on the topic. A references section is included at the end of the paper. All data throughout the overview paper are from the core data set derived from the 15 PER studies unless otherwise indicated. All financial data presented are based on nominal figures.

Each of the individual country PERs followed a similar methodology, combining a review of literature and government documents with interviews and consultations with sector actors. Budget data were normally obtained from the ministry of finance and cross-checked with data from the ministry or ministries responsible for WSS. Budget lines were individually examined and assigned to the correct capital or recurrent expenditure category and by subsector. Expenditure

[3] Databases used include the World Bank's World Development Indicators (http://data.worldbank.org/indicator), data on access to water supply of the Joint Monitoring Program (JMP) (www.wssinfo.org), and data from the International Benchmarking Network for Water and Sanitation Utilities (IB-NET: www.ib-net.org).

[4] Notably, the Africa Infrastructure Country Diagnostic (AICD, www.infrastructureafrica.org/) and the Country Status Overviews (CSOs) of the African Ministers Council on Water (AMCOW), the Water and Sanitation Program (WSP), and the African Development Bank (AfDB, www.wsp.org/wsp/content/pathways-progress-status-water-and-sanitation-africa).

estimates were obtained from sector ministries and directly from agencies and subnational governments wherever necessary and possible. Various donor assistance databases—maintained by governments or the United Nations—have been used to obtain donor data, and where necessary, donor data were obtained directly from the respective donor-agency country offices. Similarly, in many countries, data on expenditure by nongovernmental organizations (NGOs) were obtained directly from NGOs. Data from various sources were cross-checked to avoid double counting. Draft PERs were discussed during meetings in all countries. Governments were requested to provide written comments on final drafts, which were incorporated in the final PERs. PER teams combined water sector expertise with experience in public financial management. In most countries, international consultants spent 40–80 days working on the PER, with a similar effort put in by local consultants.

We selected the following indicators for the quantitative comparison between countries:[5]

- *General trends in WSS public expenditure*
  - Sector budget allocation as a share of total general government budget[6]
  - Sector expenditure as a share of gross domestic product (GDP)[7]
  - Domestic/external sector allocations as shares of total sector public allocations
  - Sector allocations transferred to subnational levels as share of total sector allocations
  - WSS spending per capita[8]
- *Access to WSS services*
  - Access to water (national, urban, and rural)
  - Access to sanitation (national, urban, and rural)
- *WSS sector spending performance*
  - WSS sector budget execution rate
  - Execution of WSS sector domestic resources
  - Execution of WSS sector external resources
  - Recurrent and investment spending as share of total sector spending
  - Salary costs as share of total recurrent spending
  - Rural/urban investment spending as share of total WSS investment spending.

This review faced considerable data limitations. As a result, all analyses in this review are based on partial and sometimes unreliable data and should be used with care. Data scarcity poses problems well beyond this review. To set and monitor programs, policy makers require quality and timely disaggregated data gathered by local jurisdictions. Often, special information is required to respond to the needs of the poor, who often do not appear as a disaggregated unit in consumer databases or even in survey and census information. The first conclusion of this review is thus that more attention needs to be paid to WSS information systems. Details on data limitations are included in annex 2.

5 Data sheets for all countries surveyed are included in annex 4.

6 Government budget includes both internal and external resources.

7 Expenditure as a share of GDP is calculated, whenever possible, on the basis of total executed sector budget (both domestic and internal).

8 Per capita cost is calculated as the total executed budget, both domestic and internal, divided by population.

2. Trends in Access to Water and Sanitation Services

2.1 Access to Water in Rural Areas

Despite the priority given by governments to water supply, access to drinking water in rural areas has increased only marginally over the last decade. As shown in table 2.1, rural water supply investment has just kept up with population growth, with the exception of Tanzania, which experienced a decline in access to rural water from 2000 to 2007.

Rural water supply coverage is higher than average in Sahelian countries and lower than average in postconflict states. Although access to water in rural areas remains low in all countries (in most countries, more than half of rural dwellers do not have access to safe drinking water), Sahelian countries have substantially better coverage than other African countries (Burkina Faso, 60 percent, 2005; Niger, 62 percent, 2007; and Mali, 50 percent, 2006). Not surprisingly, coverage in the fragile states is extremely low (Central African Republic, 32 percent, 2008; Sierra Leone, 35 percent, 2008; Democratic Republic of Congo, 17 percent, 2008; Togo, 29 percent, 2007).

The alarmingly high percentage of nonfunctional facilities is a key obstacle to substantially boosting rural access to drinking water. In most countries surveyed, the breakdown rate of ru-

Table 2.1: Access to Drinking Water in Rural Areas—2000–08 (% of population)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average increase per year
Burkina Faso		46.0		64.2		60.0				2.8
Cameroon			32.0	34.0	36.0	39.0	40.0	45.0		2.2
Central African Republic			17.7	17.6	17.3	17.0	16.8	16.9	32.0	9.4
Congo, Dem. Rep. of						12.0			17.0	1.3
Congo, Rep. of									15.0	
Côte d'Ivoire							65.0			
Ghana		41.0					53.0			2.0
Madagascar	22.2	24.0	25.3	27.2	29.5	30.1				1.3
Mali		45.0	45.5	46.2	47.9	49.4	50.3			0.9
Mozambique	24.0						26.0		30.0	0.7
Niger			55.0	57.0	59.0	59.0	58.0	62.0		1.2
Sierra Leone									35.2	
Tanzania	56.0							42.0		−1.8
Togo								29.0		

Source: PER Reports.
Note: Coverage data for Ethiopia are not available.

ral water facilities is at least 25 percent.[9] In postconflict countries, such as the Democratic Republic of Congo and the Republic of Congo, breakdown rates exceed 50 percent. The few available data indicate that the rate of nonfunctional facilities had not decreased during the study period. In several of the countries surveyed, substantial and systematic efforts have been made at the project level to mobilize beneficiary communities and to promote an understanding of the economic value of water and of adequate maintenance of facilities. The country PERs observe, however, that the concept of community-level management of water facilities has not consistently proven successful and faces severe problems in ensuring adequate operation and maintenance (O&M) of facilities. In Ghana, an interesting approach to postconstruction support in community-managed rural water supply has apparently boosted the functionality of handpumps (box 2.1). But no one has assessed the cost efficiency of the setup.

Several attempts have been made to privatize or professionalize the operation and maintenance of rural water facilities. It has proven difficult to achieve a financial viability for the sector when WSS facilities are geographically dispersed over a large area. Lease contracts with private companies have not taken place on a large scale in the survey countries during the study period, although other countries, such as Senegal, have tested such models on a large scale. Other approaches have shown promising signs regarding ensuring functionality of rural water infrastructure (box 2.2). Likewise, in Mali a combination of community-based management and technical and financial postconstruction supervision by private advisers and auditors (STEFI concept) of rural piped schemes was introduced in 2000. This model has proven viable and contributed to approximately 90 percent functionality in 2009 (as compared to 66 percent functionality for handpumps in 2006). In neighboring Burkina Faso, where no such system has been introduced, the 2005 national survey showed that at least 33 percent of the rural piped schemes were nonfunctional.

Box 2.1: Post-construction Support in Ghana

In Ghana, WSS committees have access to a multifaceted system for postconstruction support that includes district WSS teams to provide training and support, a network of local private mechanics for maintenance and repair work, and a spare-part system, including a central warehouse and three regional warehouses for the four standard models of handpump used in the country. A case study in two regions has shown a low handpump breakdown rate (8 percent in Volta and 12 percent in Brong Ahafo).

Source: Bakalian and Wakeman 2009.

Box 2.2: Private Sector Participation in the Operation and Maintenance of Rural Water Schemes in Niger

Since 2006, private operators are providing monitoring services and support to the O&M of rural piped schemes operated by individuals or private companies in Niger. Currently, 79 of 761 facilities are covered by the private operators. Four regions are covered to date. Basic O&M principles include decentralized ownership (communes), delegation to private operators, organization of user groups to defend their interests, and cost-recovery through tariffs. Outcomes include a rise in the number of functional facilities to approximately 85 percent, an increase in the funds available for major repair works and extensions, enhanced transparency of management and operation, enhanced user satisfaction, and conflicts between user groups on one hand and operators and communes on the other.

Source: www.reseaux-aep.org.

2.2 Access to Water in Urban Areas

Urban water supply access has not been able to keep pace with urbanization. Access to water in urban areas has declined in the new millennium in all surveyed countries, confirming the general trend for the whole of Sub-Saharan Africa, which experienced a 4.2 percent decline in the percentage of the urban population with access to drinking water between 1990 and 2006 (see table 2.2).[10]

The PERs in this sample do not include a comprehensive analysis of utility performance, but they do show that inefficient utilities are a drain on state coffers as many utilities are either unable or barely able to cover O&M through their revenues. The operating cost coverage (total annual operational revenues over total annual operating costs) varies widely between utilities. Table 2.3 below shows selected performance indicators from those utilities in 11 of the reviewed countries that have reported performance indicators to the International Benchmarking Network (IB-NET) for Water and Sanitation Utilities. For 4 out of 10 countries,[11] the operating cost coverage is

[9] Functionality is not systematically monitored on a regular basis in any country. The estimates are thus based on isolated studies. In some cases, such as in Burkina Faso, functionality has been assessed more comprehensively through water supply baseline studies in the context of the preparation of a national water and sanitation program. Lockwood and Smits (2011) estimate that 20–40 percent of water points are not functional. A recent UNICEF study (cited in RWSN [2009]) showed an average of 36 percent of handpumps in 20 African countries were nonfunctional. Other studies and sources reveal similar levels.

[10] *Source:* UNICEF-WHO Joint Monitoring Programme 2008.

[11] No data are available for Ethiopia.

Table 2.2: Access to Drinking Water in Urban Areas, 2000–08 (% of population)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average annual change
Central African Republic									28	
Congo, Dem. Rep. of	60					37			38	−2.4
Congo, Rep. of			54	52	52	46	45	46	45	−1.3
Côte d'Ivoire							90			
Mozambique	83						71			−1.7
Sierra Leone									81.7	
Tanzania	90							80		−1.3
Togo								39		

Source: PER Reports.

less than one, which means that these utilities do not even cover their operating costs (let alone investment costs). But even these numbers are probably too positive, as they are self-reported by utilities, and the worst utilities normally do not report, driving up the average.

The causes of low financial viability vary from one country to another. Some countries (for example, the Central African Republic and the Democratic Republic of Congo) have a large number of "inactive connections," which is often a euphemism for connections that have been disconnected in the past and have been illegally reconnected, with or without implication of utility staff. In other countries (for example, Sierra Leone), the main problem seems to lie not so much with billing as with the collection of billed amounts. In addressing low financial viability and moving to solutions, it will be critical to prioritize among the various causes of financial losses.

In most countries, financial viability is compromised by high technical and commercial losses. The volume of produced water that is actually billed remains low. The IB-NET data show that on average 34 percent of produced water is nonrevenue

Table 2.3: Key Performance Indicators for Utilities in Reviewed Countries

	Burkina Faso	Congo, Dem. Rep. of	Côte d'Ivoire	Ethiopia	Ghana	Madagascar	Mali	Mozambique	Niger	Tanzania	Togo	
	2006	2005	2004	2006	2005	2005	2006	2007	2005	2007	2004	Mean
# of utilities in sample	1	1	1	6	1	1	1	5	1	19	1	
Nonrevenue water (%)	24	35	21	33	53	34	25	59	19	45	28	34
Staff/1,000 people served	0.3	n.a.	0.21	0.5	n.a.	n.a.	0.3	1	n.a.	0.5	0.6	0.49
Continuity of service (hours/day)	n.a.	11	24	22.7	11	n.a.	24	19.2	24	8.2	24	19
% sold that is metered (%)	100	n.a.	100	100	n.a.	n.a.	100	44	100	100	90	92
Collection period (days)	n.a.	1,834	7	87	n.a.	n.a.	n.a.	334	193	n.a.	n.a.	491
Collection ratio (%)	105	n.a.	94	36	n.a.	n.a.	n.a.	85	n.a.	85	54	77
Operating cost coverage (ratio)	0.89	0.64	1.04	n.a.	1.13	1	1.88	0.82	1.3	1.04	0.69	1.04
Annual bill for households consuming 6m^3 of water/ month (US$/year)	59	35	32	13	43	14	43	50	39	26	60	38

Source: The International Benchmarking Network for Water and Sanitation Utilities (IB-NET), www.ib-net.org.
n.a. = not applicable.

water—the difference between system input volume and billed authorized consumption. This number should be used with caution, however, because the volume of water sold is only a rough approximation in countries with no or low metering, and metering rates vary widely. Some countries have all connections metered, while in the Republic of Congo, at the other extreme, only 2.7 percent of consumers are billed on actual water consumption.

Collection rates (the percentage of billed volume that is paid for) vary widely among countries. In some countries, public institutions' failure to pay for their water consumption remains a major problem, especially because public institutions consume nearly half of the water billed. In some countries, this problem has been addressed, if perhaps temporarily, by the centralized payment of the government's bills, a conditionality for debt relief or donor budget support (for example, the Central African Republic and the Democratic Republic of Congo).

In many countries, water tariffs have not been adjusted for years and do not cover production and distribution costs. Tariff adjustment for water is a very sensitive political issue, and governments have proven reluctant to approve increases. For instance, tariffs have remained unchanged in the Republic of Congo since 1994, in the Central African Republic since 1998, and in Togo since 2001. In the surveyed countries, water rates for private consumers range from $0.10 to $0.46 per cubic meter. The PER findings confirm the AICD. Studies in African countries indicate that the average African water tariff of about $0.67 per cubic meter is well below the full cost of production and distribution of $1.00 per cubic meter (Foster and Briceño-Garmendia 2009).

Many utilities are financially inefficient, due in part to overstaffing. High labor costs account for an important part of total operating expenses in the countries surveyed. According to one study, labor costs amount to an average of 29.3 percent of water-supply operating expenses in African low-income countries (LICs) (Banerjee and Morella. 2011). Some of the countries in our sample, however, have significantly higher costs; staff costs in the Democratic Republic of Congo and the Republic of Congo, for instance, amount to almost 45 percent of operational costs. Though the PERs had little data on staff in professional categories, some figures suggest an imbalance in staff composition; in the Democratic Republic of Congo, field staff represents only 25 percent of total staff, compared with 42 percent and 62 percent in Mali and Côte d'Ivoire, respectively.

Table 2.4: Urban and Rural Access to Improved Sanitation in 2008 (%)

	Urban	Rural	Total
Burkina Faso	33	6	11
Central African Republic	43	28	34
Côte d'Ivoire	36	11	23
Cameroon	56	35	47
Congo, Dem. Rep. of	23	23	23
Congo, Rep. of	31	29	30
Ethiopia	29	8	12
Ghana	18	7	13
Madagascar	15	10	11
Mali	45	32	36
Mozambique	38	4	17
Niger	34	4	9
Sierra Leone	24	6	13
Tanzania	32	21	24
Togo	24	3	12
Total	31	14	19

Source: JMP (www.wssinfo.org).

2.3 Access to Sanitation

In 2008 only 20 percent of households in the reviewed countries had access to improved sanitation according to household survey data collected by the World Health Organization (WHO) and United Nations Children's Fund (UNICEF's) Joint Monitoring Program (JMP). Several PERs found access levels well below the figures reported by the JMP. An improved sanitation facility is one that hygienically separates human excreta from human contact. Possible explanation for the disparity in numbers includes differences in definitions and in methodologies.

Not more than 10 percent of rural dwellers in the countries surveyed have access to improved sanitation facilities, although the few available data on access to improved sanitation in rural areas suggest that some progress has been achieved over the last decade. From 2000 to 2008, the percentage of the total (rural and urban) population without access to an improved latrine decreased (for example, in Mozambique from 57 to 43 percent), but still remained very high, especially in rural areas (for example, 96 percent in Mozambique and 89 percent in Burkina Faso). According to household

surveys in Tanzania, however, the percentage of rural people without access to an improved latrine increased from 8.2 percent to 9.3 percent from 2000 to 2008. Some countries have introduced a community-led total sanitation approach at a pilot scale (for example, Ghana, Sierra Leone, Cameroon, and the Central African Republic), but it is too early to measure results.

About one-third of urban households have access to an improved latrine or a septic tank. Sewerage systems are virtually nonexistent, and in the few cities where they exist they serve only a small percentage of the population (Freetown, Sierra Leone) or are nonoperational (Douala, Cameroon). The limited data available on access to improved sanitation in urban areas suggest that access has been stable over the past decade.

3. Who is Spending What?

3.1 Expenditure as a Share of GDP

Actual expenditure on the whole water supply and sanitation (WSS) sector between 2000 to 2008 averaged 0.32 percent of the gross domestic product (GDP), while expenditure on rural WSS in particular was 0.26 percent of GDP. Table 3.1 identifies the eight countries where surveys covered only rural WSS and the other seven where both rural and urban WSS were covered. The mean (all countries, all years) was 0.26 percent, with a range from nearly zero expenditure as a share of GDP (Côte d'Ivoire, rural sector, 2005–06) to 1.16 percent (Tanzania, rural and urban, 2005). Actual spending totals are only one-tenth of the estimated 2.58 percent of GDP required each year by Sub-Saharan African states to meet the water Millennium Development Goals (MDGs) (Briceño-Garmendia, Smits, and Foster 2008). It is also well below the suggestion by the 2006 Human Development Report that all countries should spend at least 1 percent of their GDP on WSS.[12] This assumes, however, that greater funding could be spent effectively. Low rates of spending out of current budget releases indicate that more budget releases might not increase spending. The focus should then be on capacity building to increase "absorptive capacity."

WSS expenditure has grown over the study period. Annual expenditure is extremely volatile, both absolutely and as a share of GDP and per capita (see below). But there is a general upward trend in the sample countries. Over the period 2002 to 2006, to which most of the data relate, rural WSS expenditure in seven countries grew from 0.18 percent of GDP to 0.24 percent, and total WSS expenditure in four other countries grew from 0.15 percent of GDP to 0.64 percent. As a share of GDP, it appears that rural WSS spending grew much more slowly than urban sector spending, though the sample is too small to generalize.

Public expenditure on WSS as a share of GDP depends heavily on the total public expenditure as a share of GDP, and thus on the

Table 3.1: Expenditure as a Percentage of GDP

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Rural sector only										
Burkina Faso		0.42	0.14	0.19	0.15	0.26	0.49			0.28
Cameroon			0.16	0.09	0.07	0.11	0.05	0.11		0.10
Côte d'Ivoire			0.06	0.02	0.02	0.01	0.01	0.03		0.03
Ethiopia									0.26	0.26
Ghana		0.15	0.38	0.36	0.17	0.41	0.48			0.33
Madagascar	0.08	0.13	0.06	0.09	0.12	0.26				0.12
Mali		0.38	0.27	0.18	0.30	0.53	0.60			0.38
Niger			0.28	0.36	0.75	0.62	0.40	0.97		0.57
Rural mean	*0.08*	*0.27*	*0.19*	*0.18*	*0.23*	*0.32*	*0.34*	*0.37*	*0.26*	*0.26*
Rural and urban										
Central African Republic			0.02	0.06	0.11	0.04	0.14	0.18	0.44	0.14
Congo, Dem. Rep. of			0.01	0.01	0.20	0.54	0.48	0.69	0.51	0.35
Congo, Rep. of			0.12	0.16	0.16	0.09	0.42	0.19	0.16	0.19
Mozambique		0.30	0.51	0.88	0.67	1.24	0.82	1.21	1.20	0.85
Sierra Leone			0.18	0.15	0.30	0.50	0.97	0.53	0.38	0.43
Tanzania		0.35	0.29	0.58	0.54	1.16	0.95			0.64
Togo			0.06	0.12	0.17	0.16	0.42	0.05	0.12	0.16
Rural and urban mean		*0.65*	*0.24*	*0.39*	*0.43*	*0.93*	*0.84*	*0.71*	*0.70*	*0.39*
Overall mean	0.08	0.35	0.21	0.27	0.31	0.49	0.57	0.49	0.77	0.32

Source: Country WSS PER papers, World Bank World Development Indicators, and authors calculations. All means are arithmetic unweighted averages.

[12] The 2006 Human Development Report recommends that "countries should spend 1% on CAPEX plus 1% should come from cost-recovery and community contributions providing an equivalent amount" (UNDP 2006: 65).

tax revenue ratio. For instance, in the Central African Republic, tax revenue was only 8.7 percent of GDP in 2009. Even if the government allocated a considerable share of that to the WSS sector, the ratio to GDP would remain low.

The different findings of the public expenditure review (PER) overview paper and the Africa Infrastructure Country Diagnostic (AICD) can be explained by their different scopes. While the PER data exclude off-budget spending by water utilities, the AICD study included utility spending (see box 3.1).

Box 3.1: Comparing the PER Findings with the Africa Infrastructure Country Diagnostic (AICD)

The findings of the PERs are in line with the findings of the AICD taking into account that the PERs focused on budgetary spending (excluding off-budget spending by water utilities), while the AICD study included utility spending. As a result of this wider scope, one would expect the AICD report to show considerably higher domestically funded expenditure on recurrent costs for urban water supply. This is indeed the case. The following differences between the two reports are caused by the differences in scope:

The overview paper found that less than 0.4 percent of GDP was spent on WSS in "rural and urban" countries for only 0.3 percent in "rural only." This is substantially lower than the 1.2 percent found in the AICD report.

According to the AICD report, domestically funded spending in the WSS accounted for over half of total spending. This contrasts with the findings of the regional overview paper that show a clear predominance of donor funding in the sector spending. But the AICD and the overview paper both found a predominant role of donor funding in investment expenditures.

While the regional overview paper concluded on a slight bias of public expenditures toward urban areas, the AICD report found a more pronounced bias.

The recurrent expenditures reported in the AICD were three times higher than that in the regional overview paper.

	PER overview paper	AICD report
Total spending in WSS (as % of GDP)	0.4	1.2
Capital budget execution rate (%)	62.0	75.0
Share of donor funding (as % of total sector funding)	61.9	53.9
Recurrent expenditures (as % of total sector expenditure)	12.7	40.0
Investment in sanitation (as % of GDP)	—	0.5
Share of spending by subnational governments (% of total)	6	—

Source: AICD reports and PER reports.

3.2 Expenditure Per Capita

The expenditure per capita shows a positive trend over time. Among the countries surveyed, average annual per capita expenditure was $1.21 for rural-only WSS, and $1.71 in countries whose PER covered both rural and urban sectors. Expenditure in the latter countries ranged from $0.01 per person (the Democratic Republic of Congo in 2002) to $8.93 per person (the Republic of Congo in 2006).

3.3 Sector Budget as a Share of Government Budget

WSS budgets are 2.0 percent of the total government budgets of the sample countries. The WSS budgets range widely, from less than 0.1 percent of the total government budget of Cameroon for most of the period covered to 6.5 percent in Tanzania in 2008. A relatively high share of total budget is allocated to water in the Sahelian countries of Burkina Faso and Niger. The average share fell from 2001 to 2004 but has risen since 2004.

3.4 Sector Funding Sources

The WSS sector is highly donor dependent, with donors covering more than 60 percent of total sector expenditures in the countries reviewed. Donor funds are formally targeted at capital expenditure but also include an unknown amount of recurrent expenditure. Individual countries experienced wide fluctuations in donor funding, in some cases due to political and social unrest, such as in Côte d'Ivoire, the Republic of Congo, and the Democratic Republic of Congo. In total, donors provided a fairly stable share of funding from year to year. As shown in table 3.4, the sector's dependency on external funding varies from around 20 percent to more than 80 percent of total expenditure.

3.5 Trends over Time

Although WSS budgets have increased relatively quickly in most countries, public expenditure still falls considerably short of government commitments. The review showed that annual WSS expenditure falls short of international and national targets. WSS expenditure is well below what is needed to meet Sub-Saharan MDG targets.

Table 3.2: Expenditure Per Capita (US$)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Rural sector only										
Burkina Faso		1.30	0.49	0.86	0.82	1.48	2.96			1.32
Cameroon			2.15	1.58	1.32	2.31	1.12	2.73		1.87
Côte d'Ivoire			0.68	0.31	0.31	0.09	0.18	0.53		0.35
Ethiopia									0.97	0.97
Ghana			0.57	1.63	1.34	0.85	1.31			1.14
Madagascar	0.26	0.47	0.21	0.38	0.40	0.98				0.45
Mali		1.17	1.03	0.87	1.62	2.97	3.51			1.86
Niger			0.62	0.95	2.12	1.93	1.31	3.57		1.75
Rural mean	*0.26*	*0.98*	*0.82*	*0.94*	*1.13*	*1.52*	*1.73*	*2.28*	*0.97*	*1.21*
Rural+urban										
Central African Republic			0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Congo, Dem. Rep. of			0.01	0.02	0.25	0.73	0.76	1.20	1.04	0.57
Congo, Rep. of			1.13	1.66	2.25	1.54	8.93	3.94	4.54	3.43
Mozambique			1.09	2.13	1.96	4.06	2.93	4.43	5.31	3.13
Sierra Leone			0.38	0.32	0.65	1.20	2.65	1.62	1.32	1.16
Tanzania			0.69	0.30	1.02	2.97	2.22	3.73	4.32	2.18
Togo			0.17	0.39	0.61	0.61	1.44	0.18	0.58	0.57
Rural+urban mean			*0.63*	*0.82*	*1.09*	*1.72*	*2.83*	*2.29*	*2.58*	*1.71*
Overall mean	0.26	0.98	0.72	0.88	1.11	1.62	2.33	2.29	2.37	1.44

Sources: Country WSS PER papers, World Bank World Development Indicators, and authors calculations. All means are arithmetic unweighted averages.

Table 3.3: WSS Budget as a Share of Overall Government Budget (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Rural sector only										
Burkina Faso		2.9	2.5	1.7	1.1	1.8	2.9	3.1		2.3
Cameroun			1.3	0.7	0.4	0.7	0.3	0.5		0.6
Côte d'Ivoire			0.5	0.4	0.3	0.5	0.1	0.1	0.4	0.3
Ethiopia										
Ghana		0.9	2.5	2.3	1.1	2.1	2.6			1.9
Madagascar	0.6	1.2	0.7	1.6	1.3	1.3	1.4			1.2
Mali		1.9	1.4	1.4	1.6	2.3	2.1			1.8
Niger						4.2	3.2	5.4		4.3
Rural mean	*0.6*	*1.7*	*1.5*	*1.3*	*1.0*	*1.8*	*1.8*	*2.3*	*0.4*	*1.8*
Rural+urban										
Central African Republic			0.2	0.4	0.7	0.3	1.2	1.0	4.3	1.2
Congo, Rep. of			0.6	0.1	0.3	0.5	0.9	1.4	2.3	0.9
Congo, Dem. Rep. of										
Mozambique			2.6	1.6	2.1	3.6	3.5	2.3	3.5	2.7
Sierra Leone										
Tanzania							2.4	4.0	6.5	4.3
Togo			3.3	2.8	4.9	1.2	1.9	0.8	1.0	2.3
Rural+urban mean			*1.7*	*1.3*	*2.0*	*1.4*	*2.0*	*1.9*	*3.5*	*2.3*
Overall mean	0.6	1.7	1.6	1.3	1.4	1.7	1.9	2.1	3.0	2.0

Sources: Country PERs and authors calculations. All means are arithmetic unweighted averages

Table 3.4: Externally Funded Expenditure as a Share of Total WSS Expenditure (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Rural sector only										
Burkina Faso		78.3	78.2	77.6	77.8	72.4	74.6			76.5
Cameroun			22.0	39.8	48.5	50.9	0.0	11.5		28.8
Côte d'Ivoire			52.1	96.8	96.4	83.9	36.9	18.6		64.1
Madagascar	65.4	24.2	39	39	47.5	64.1				46.5
Mali		84.4	86.1	72.9	81.5	89.6	83.7			83.0
Niger			87	79	76.1	81.6	65.2	72.9		77.0
Rural mean	*65.4*	*62.3*	*60.7*	*67.5*	*71.3*	*73.8*	*52.1*	*34.3*		*60.9*
Rural+urban										
Central African Republic				62.5	86.4	51.2	86.6	85.5	95.4	77.9
Congo, Dem. Rep. of			5.5	15.6	63.1	67.0	93.0	95.8	95.0	62.1
Congo, Rep. of			64.4	75.1	4.3	9.3	1.5	4.6	2.0	23.0
Sierra Leone					54.2	89.2	93.2	93.1	84.8	82.9
Togo			44.6	77.1	79.5	73.6	40.0		66.8	63.6
Rural+urban mean			*38.2*	*57.6*	*57.5*	*58.1*	*62.9*	*69.8*	*68.8*	*59.0*
Overall mean (unweighted)	65.4	62.3	53.2	63.54	65.03	66.62	57.47	54.57	68.8	61.9

Sources: Country PERs and authors calculations.

Economic growth often caused budget increases over the review period in countries that use incremental budget procedures. In some countries increases in budget have happened without a dramatic decline in the budget expenditure ratio, meaning that the countries were able to absorb a rapid increase in their budgets.

Economic growth and an increasing tax base are strong determinants of the level of public WSS expenditure and thus are key to making progress in WSS access. In cross-country comparisons, richer countries spend more on WSS on a per capita basis, although the higher spending comprises a slightly smaller share of overall GDP. Public WSS expenditure as a share of GDP depends heavily on total public expenditure as a share of GDP, and thus on the tax revenue ratio.

4. How is Money Being Spent?

4.1 Capital and Recurrent Expenditure

In the sample countries, 12.7 percent of total sector expenditure went toward recurrent expenditure, with 87.3 percent going toward development expenditure (see table 4.1). Shares dedicated to recurrent expenditure varied among the countries considered, from 1.2 percent in Côte d'Ivoire (2002) to 94.5 percent in the Democratic Republic of Congo (2002). In rural-only water supply and sanitation (WSS) sectors, average recurrent expenditures were only 6 percent of total sector expenditures, as compared to 20 percent in countries with both rural and urban sectors.

Low levels of nonsalary recurrent expenditures severely limit public sector institutions' ability to carry out their mandated roles. This may be one reason why monitoring of sector prog-

Table 4.1: WSS Recurrent Expenditure as a Percentage of Total WSS Expenditure

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Rural sector only										
Burkina Faso		1.9	4.7	4.8	3.6	2.4	1.3			3.1
Cameroon			5.1	8.3	9.8	4.4	12.6	4.4		7.4
Côte d'Ivoire			1.2	2.2	3.5	12.1	5.6	2.5		4.5
Ethiopia										
Ghana		10.6	13.3	5.0	6.3	13.8	10.9			10.0
Madagascar	9.1	5.2	12.1	6.5	3.8	1.5				6.4
Mali		4.9	6.6	10.0	6.7	3.8	3.5			5.9
Niger			13.0	10.2	5.9	6.4	11.5	4.3		8.6
Rural mean	*9.1*	*5.7*	*8.0*	*6.7*	*5.6*	*6.3*	*7.6*	*3.7*		*6.6*
Rural+urban										
Central African Republic			48.6	21.4	9.7	28.5	7.7	5.3	2.3	17.6
Congo, Dem. Rep. of			94.5	84.4	5.9	32.9	6.0	1.2	1.3	32.3
Mozambique			56.0	33.6	25.1	17.9	26.8	19.4	13.7	27.5
Congo, Rep. of			4.4	4.1	3.4	5.6	1.7	3.8	7.5	4.4
Sierra Leone			0.0	0.0	0.0	10.8	5.1	6.4	12.3	4.9
Tanzania	13.6	20.8	26.0	89.4	18.4	23.6	22.4	17.5	16.7	27.6
Togo			25.1	9.2	10.9	10.7	6.5	48.8	13.6	17.8
Rural+urban mean	*13.6*	*20.8*	*42.4*	*48.4*	*14.7*	*26.0*	*15.2*	*20.5*	*9.6*	*23.5*
All countries	11.3	10.8	22.2	20.7	8.1	12.5	9.4	11.4	9.6	12.7

Source: Country PERs and authors calculations. All means are arithmetic unweighted averages.

ress and support to water users and local governments have been extremely weak in all countries surveyed. These figures should be interpreted with caution for two reasons. In many cases, high recurrent expenditure levels reflect low external investment funding, particularly in politically and socially unstable countries. Also, external expenditures categorized as capital expenditures often include recurrent funding. The volume of this "hidden" contribution to recurrent costs is impossible to determine, but is likely to be quite substantial, relative to recurrent budget allocations inscribed in the national budgets. In any case, this external contribution to the recurrent budget is volatile by nature, as it is dependent on the lifetime of a specific project.

4.2 Salary Component

On average, half of recurrent WSS spending goes toward salaries.[13] A lack of donor data means that we do not know the comparable share in development spending, but it is probably low, as most development partners no longer allow for salary expenditures. Table 4.2 shows considerable variation among countries, ranging from 4.2 percent in the Republic of Congo (2008) to 98.8 percent in the Central African Republic (2005). This may be due to a combination of varying accounting arrangements (for example, WSS personnel not charged to WSS codes, non-WSS personnel charged to WSS codes), varying activity and technology mixes (rural social marketing, for instance, is labor intensive), and varying degrees of political intervention. The data are insufficiently detailed and robust to make an analysis.

There is no norm or international standard for the salary share of recurrent WSS expenditures, but the salary share found in the public expenditure reviews (PERs) appears high relative to nonsalary charges, that is, operation and maintenance (O&M) expenditures are too low. Given the insufficiency of O&M expenditures evidenced above, a lower share of salaries in recurrent expenditure would release more funds for keeping WSS facilities functional, thus raising access rates and Millennium Development Goal (MDG) achievements. Table 4.2 shows that the average share of recurrent expenditures dedicated to salaries has gone down from 66.7 percent in 2002 to 54.8 percent in 2007, but the sample is too small and the data too unreliable to conclude that this is a real trend.

4.3 Targeting

4.3.1 *The Rural and Urban Split*

Overall, public expenditures exhibit a slight urban bias. The bias might be (partially) justified because of the differential unit

[13] "Salaries" includes wages, allowances, and social security contributions.

Table 4.2: Salaries as a Share of Recurrent Expenditure (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Rural only										
Burkina Faso		73.1	86.8	64	81.2	86.9	72.3			77.4
Cameroon			66.6	65.2	57.7	69.5	63.6	74.4		66.2
Côte d'Ivoire			38.3	37.8	39.4	43.7	46.4	39.3		40.8
Madagascar	16.8	18.9	18.7	21.4	25.3	25.9				21.2
Mali		79.3	76.4	77.9	79.8	77.2	73			77.3
Niger			82.5	83.1	69.9	72.6	70.6	73		75.3
Rural mean	*16.8*	*57.1*	*61.6*	*58.2*	*58.9*	*62.6*	*65.2*	*62.2*		*55.3*
Rural + Urban										
Central African Republic			97.8	98.7	98.2	98.8	98.5	98.5	88.2	97.0
Congo, Rep. of						10.1	5.5	7.2	4.2	6.7
Tanzania							31.9	36.6	32.4	33.7
Rural+urban mean			*97.8*	*98.7*	*98.2*	*54.45*	*45.3*	*47.43*	*41.6*	69.07
Mean (unweighted)	16.8	57.1	66.7	64.01	64.5	60.6	57.7	54.8	41.6	53.8

Source: Country WSS PER papers and authors calculations.

costs in urban and rural areas. Taking into account the limited number of PERs including both rural and urban water supply and the difficulties encountered in disaggregating investment data along rural/urban lines, it is difficult to quantify the distribution of investment funds to rural and urban areas respectively. Yet, the PER studies suggest that the percentage of public expenditure that goes to urban areas is higher than the share of the population that lives there. For instance, in Togo, half of total public sector expenditure has been directed toward urban areas in which only 41 percent of the population resides. In the Republic of Congo, more than 80 percent of actual expenditure between 2002 and 2008 was directed to urban areas that housed 72 percent of the total population. That said, since 2006, the Republic of Congo has also seen a substantial increase in funds allocated to rural water. In Mozambique the lion's share of funding goes to urban water, though two-thirds of the population live in rural areas and get just 12 percent of the total funding. In Sierra Leone, however, the relationship between expenditures and the rural/urban population split seemed to be more or less comparable: rural water supply accounted for up to 60 percent of public expenditure in the review period (nearly all of it from donors), and an estimated 62 percent of the population lives in rural areas. The fact that the average per capita expenditure for rural-only PERs ($1.21) is lower than for PERs that cover both urban and rural ($1.71) confirms this bias.

The bias toward urban areas seems to be partly caused by incomplete decentralization in rural areas, which has led to institutional paralysis. But where this paralysis is resolved, rural expenditure can go up. For instance, in Tanzania, the decentralization and devolution process resulted in a significant increase in the share of the investment budget directed toward rural water, whereas allocations for urban water supply have increased far less over the same period (see box 5.4 below).

4.3.2 *Water Supply versus Sanitation Split*

In most of the countries surveyed, sanitation receives only a small part of public WSS expenditure. This comes as no surprise, as the sanitation sector is dominated by household on-site facilities (latrines, septic tanks) that are generally financed from household budgets. The amount of expenditure on hygiene education is particularly hard to assess, as the responsibility is often diffused across various ministries (water, health, rural development, and so on). We observed a trend toward more specific sanitation-targeted donor projects in the latter half of the review period, including the introduction of community-led total sanitation in several countries. Sewerage and wastewater treatment (normally financed from public budgets) are virtually nonexistent in many of the countries. As countries get richer, however, and people move up the sanitation ladder, huge public investments will be required.

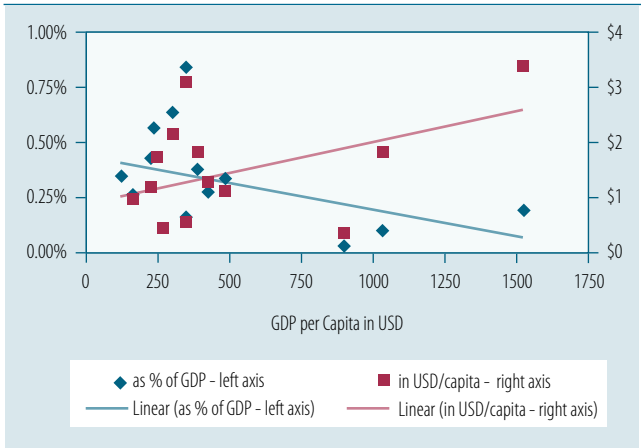
4.3.3 *Geographical Disparities between Countries*

Richer countries spend more on WSS per capita but slightly less as a percentage of gross domestic product (GDP) (figure 4.1). Richer countries can afford to spend more money per capita to provide their citizens with basic services such as WSS. As countries grow richer, however, WSS expenditures do not keep pace with overall GDP growth, resulting in richer countries spending a relatively lower percentage of their GDP in the WSS sector.

The Sahelian countries have substantially better rural water supply coverage than other African countries and a higher percentage of sector expenditure as a share of GDP.

Donor financing is not targeted for the greatest impact on WSS; per capita donor expenditures are not based on a country's level of economic development and sectoral need. Instead, external funding levels depend on other factors, such as political stability, adherence to good governance principles, and a sound public financial management reform process. The country with the highest per capita donor contribution to the WSS sector is Mozambique, while Madagascar, Togo, Cote d'Ivoire and the Republic of Congo receive the lowest per capita

Figure 4.1: Expenditure as a Percentage of GDP and on a Per Capita Basis



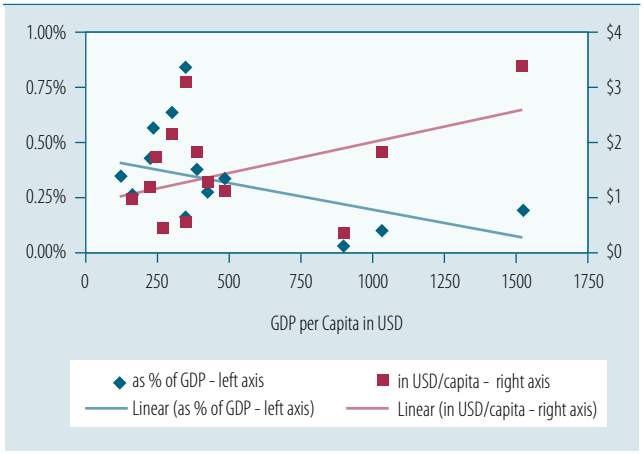
Source: Country WSS PER papers and authors calculations.

contributions (figure 4.2). This finding is in line with the Organisation for Economic Co-operation and Development/ Development Assistance Committee (OECD/DAC) reports showing that donor assistance to the water sector does not very well target countries with low levels of WSS access. For instance, an OECD report found that the least developed countries only received 25 percent of total aid for water and that numerous countries with low levels of WSS access received very little during the period 2001 to 2006 (OEDC, 2008). The share of global donor aid in the water sector benefiting Sub-Saharan Africa actually decreased over that period.

4.3.4 *Geographical Disparities within Countries*

Within the countries surveyed, there are large regional disparities in rural access to water. Although the PERs do not provide data to assess whether disparities in rural water coverage diminished during the study period, gaps between the best-served and less-served regions (the "access gap") remained substantial in 2007–08. In Mozambique the access gap between regions with the highest and lowest levels of access to water supply was 60 percent. The gap was 28 percent in Ethiopia, 38 percent in Burkina Faso, 29 percent in Madagascar, and 26 percent in Ghana.

Figure 4.2: Donor Expenditure Per Capita (US$) Ordered by Country GDP/capita (US$)



Source: Country WSS PER papers and authors calculations.

In general, capital cities have considerably higher rates of access to water supply than secondary cities. Many of the national utilities in the reviewed countries do not pay attention to the secondary cities in which they are supposed to operate systems. As a result, schemes outside the capital cities are underfunded, understaffed, and sometimes without functioning facilities altogether (for example, the Central African Republic and Democratic Republic of Congo). In Sierra Leone, the utility for the capital Freetown (GVWC) has a 38 percent household connection rate, while the utility for secondary cities (SALWACO) connects only 6 percent of the households in its cities.

Sector investment planning and allocation policies have contributed to disparities in access and distribution of WSS services. Even though these disparities might to some extent reflect natural constraints to developing the service level (scarcity of water resources, scattered settlements), there is clearly scope for improving equity and transparency in planning and allocating resources for the development of water services. In some cases, regions might receive lower levels of public expenditure for political reasons. But other times, regions with low access to WSS are often difficult to target because of distance from the capital city or lack of implementation capacity. Access to rural areas in the North Kivu province and, to some extent, the Katanga province in the Democratic Republic of Congo, for instance, has been restricted for many years due to insecurity; as a result, WSS delivery has been negligible. One major challenge for these regions' reconstruction, which started in 2006, is the scarcity of both private and public sector capacity to plan and implement sector activities.

There is a tension between targeting the needy and rewarding good performance. Targeting public expenditure to needy populations is difficult. For instance, Tanzania has developed a formula for allocating sector funds to local government authorities to ensure equity and allocation of funds to the most needy areas. But calculation of the allocation formula is hindered by the quality of underlying data (poverty data and coverage data), and the formula is not consistently implemented, as some regions get significantly more funds than the water formula would allow. Burkina Faso's annual sector planning exercise is based on similar principles, but regional allocations are not strictly respected given the geographic restrictions on virtually all external funding during the study period.

5. Budget Execution Rates

5.1 Trends in Budget Execution

Water supply and sanitation (WSS) budgets in the sample countries were 63 percent executed over the years covered. Recurrent budgets were 70 percent executed, and development budgets were 62 percent executed (see annex 3). Execution rates were slightly higher in rural-only countries (66 percent) than in rural-plus-urban countries (47 percent). This is probably due merely to the selection of countries, however, and we cannot infer that execution is higher in the rural sector generally. The WSS budget execution rates found in our sample of countries compares to the World Bank's recent study on Sub-Saharan countries, showing an average WSS budget execution rate of 75 percent (Banerjee, Sudeshna, and Morella 2011). The trend over time is flat in the sample countries (see table 5.1; figure 5.1).

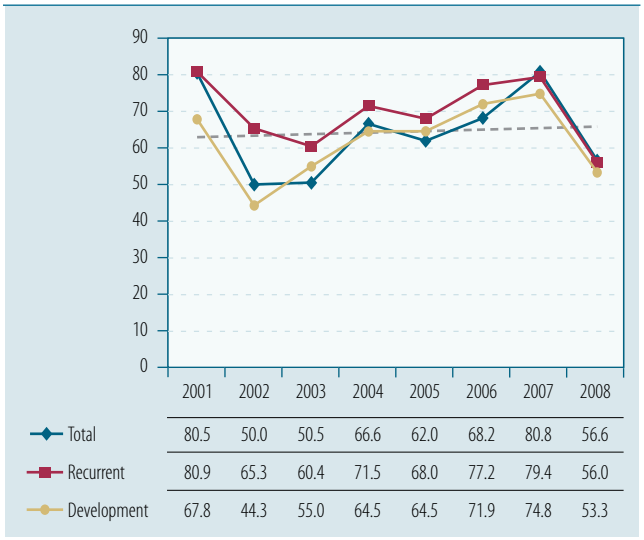
Averaged across the eight countries for which data are available, domestically funded sector expenditures were 66 percent executed, while externally funded expenditures were 57 percent executed. Data deficiencies should be kept in mind, particularly on the development budget. Many governments are struggling to capture all donor disbursements in their accounts; apparently low execution may be due to a failure to record some of the donor project expenditures.

Table 5.1: Budget Execution Rates for WSS Budgets (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Rural sector only										
Burkina Faso		64.1	24.2	49.1	54.5	53.3	62.5			51.3
Mali		67.0	65.3	44.1	63.3	74.8	63.5			63.0
Niger			81.4	30.5	55.7	71.7	63.3	72.9		62.6
Cameroon			98.5	99.3	100.0	100.0	100.0	93.5		98.6
Côte d'Ivoire			42.4	25.2	31.2	5.8	46.0	119.9		45.1
Ghana		145.4	49.0	123.4	185.3	42.7	47.0			98.8
Madagascar	58.9	43.1	31.9	26.6	45.7	83.6				48.3
Mean rural only	*58.9*	*79.9*	*56.1*	*56.9*	*76.5*	*61.7*	*63.7*	*95.4*		*68.6*
Rural+urban										
Central African Republic			51.6	78.5	99.9	76.0	65.2	113.2	59.5	77.7
Sierra Leone			20.6	54.4	62.2	12.8	39.8	19.9	35.8	35.1
Tanzania		82.9	88.5	18.8	63.4	86.0	73.4	85.4	55.4	69.2
Togo			9.7	22.9	17.6	71.1	101.9	28.5	54.9	43.8
Mean rural+urban		*82.9*	*42.6*	*43.7*	*60.8*	*61.5*	*70.1*	*61.7*	*51.4*	*59.3*
Total (overall mean)	58.9	80.5	51.2	52.1	70.8	61.6	66.3	76.2	51.4	63.2

Source: Country WSS PER papers and authors calculations.

Figure 5.1: WSS Budget Execution Rates 2000–08 (%)



	2001	2002	2003	2004	2005	2006	2007	2008
Total	80.5	50.0	50.5	66.6	62.0	68.2	80.8	56.6
Recurrent	80.9	65.3	60.4	71.5	68.0	77.2	79.4	56.0
Development	67.8	44.3	55.0	64.5	64.5	71.9	74.8	53.3

Source: Country WSS PER papers and authors calculations.

5.2 Systemic Problems Causing Low Rates of Budget Execution

Low rates of budget execution are due to systemic and sectoral obstacles all along the execution chain. It has been hard to distinguish which obstacle is the most critical in most countries. Most governments have made significant improvements to their public financial management systems over the past few years. But many of these improvements have not yet trickled through to line ministries. The general message is that improvements are needed all along the budget execution chain, and the public expenditure reviews (PERs) can tell us what needs to be done. For instance, Benin's rural WSS PER was part of a larger suite of analysis that enabled Benin to overcome systemic and sectoral problems and, ultimately, improve rural WSS access (see box 5.1).

5.2.1 *Limited Communication during the Budgeting Process*

Low execution is caused partly by overambitious plans and budgets. In Sierra Leone, for example, some projects may enter the budget without prior government appraisal, while others enter from outside of the budget process, and many enter without sufficient scrutiny and debate by the Cabinet or by Parliament. There is less scrutiny of the development budget than the recurrent budget. Similarly, in Ghana, the low rate of execution of WSS budgets is partially attributed to weaknesses in budget preparation, especially externally funded projects.

Several PERs noted that line ministries are not adequately involved in the budgeting process. When the ministries receive the budget guidelines, the guidelines often already contain an indication of budget envelopes, a situation that prevents the ministries from communicating their true needs. As a result, line ministries are not interested in budget preparation work, which they view as an exercise involving the ministry of finance only.

Spending limitations may also be due to cash constraints where the ministry of finance is unable to release the full amounts budgeted. There are no data comparing spending releases with

Box 5.1: Addressing Systemic and Sector-Specific Problems in the Budget Execution Chain in Benin

In 2001 Benin began to transition from sector projects to a programmatic approach for the WSS sector. Public expenditure management reforms to overcome systemic problems in the budget execution chain included a transition from a line-item-based budget to a program-based budget. Sector-level analytical and advisory work—including sector PERs—helped sectors to develop programs with supporting program-based budgets, laying the groundwork for shifting spending authority from the ministry of finance to line ministries and progressive decentralization of service delivery.

Analytical sector work, including a water PER, facilitated the inclusion of rural water supply in a series of Poverty Reduction Support Credits (PRSC) aligned with budget cycles. The PRSCs helped the government make considerable progress in addressing structural public sector management issues, increasing public sector implementation capacity, and increasing execution rates. Program budgets are now produced for most sectors, and details are integrated into the annual budget submitted to Parliament. The Ministry of Finance's budget execution software has been extended to all line ministries and includes comprehensive coverage of donor-financed expenditures. Ministries monitor their programs and produce annual performance reports. This in turn facilitates performance-based contracts between the minister of finance and line ministers responsible for subprograms.

The 2006 and 2007 budgets were prepared in terms of program authorizations and payment appropriations, which enabled multiyear contracts. Ministries regularly produce sector performance reports. The increased execution rates as well as better transparency in public financing convinced several donors to increase their financing to Benin.

Benin has shown impressive progress and is on track to meet its rural water supply Millennium Development Objective (MDG). Between 2001 and 2008, physical sector output—as measured in the number of water points planned and constructed per year—has increased more than fourfold.

Source: Benin PER and AMCOW 2011.

actual expenditure, but some country evidence indicates that the operating constraint is capacity to spend rather than availability of funds. In Tanzania, for instance, steep increases in budget allocations to the water sector, following its identification as a priority, were not matched by corresponding increases in spending (nor in outcomes). Spending increased at a much slower pace (Foster and Cecilia Briceño-Garmendia, 2009).

Donor support is still mainly provided on a project basis. The development of national policies and strategic frameworks for WSS delivery has paved the way for a programmatic sector approach based on a single national WSS vision and a modus operandi common to all funding sources. In the survey period, however, the WSS sector in most countries was still characterized by a large number of donors operating on terms and conditions specific to individual projects related to issues like geographic intervention zones, routing of funds, procurement, monitoring, and project management. Transaction costs have thus been quite important in all countries surveyed.

The Medium-Term Expenditure Framework (MTEF) planning tool has not necessarily led to a greater coherence between resource allocation and overall sector targets set out by governments. This is likely due to difficulties achieving a macroeconomic balance as well as to the unpredictability of external funding (largely off budget) and weak planning and budgeting capacity in technical ministries. Ministries of finance are understandably reluctant to allocate more resources to ministries that have difficulty consuming already allocated funds.

The current budget structure, especially in francophone countries, limits the potential to link budgets to objectives and outcomes set out in longer-term sector plans. In most countries, the national budget is still based on a "classical" budget—that is, expenditure monitoring on the basis of budgetary classification (salaries, operational costs, and investment costs). This weakens the relevance of budget programs based on longer-term sector development plans, as "classical" budgets are poorly suited to planning and monitoring objectives and results for growth and poverty reduction set out in the overall national strategy.

5.2.2 *Volatility of Budgets*

The volatility of WSS budgets forms a major obstacle for efficient budget execution because the unspent budget of one year typically cannot be carried over into the next year. Uncertain timing and amounts of resources undermines plans and budgets and reduces the efficiency of parastatals, local authorities, and central ministerial departments and agencies in the WSS sector. The planning horizon is foreshortened, projects are scrambled, contracts are split to keep within cash limits, and economies of scale are lost. Costs rise with delays, inflation, and stop-start resource management. Where controls don't work, arrears build up and suppliers have to wait for payment, obtain additional working capital, or reducing the scale of their operations. They raise their prices and become less willing to bid on government contracts.

Predictability of funds depends on timely budget approval, stable cash flow budgets, and administrative efficiency. Procedures for the release of cash (or spending authority where payments are centralized) tend to get longer and more cumbersome as "gatekeepers" continue to be added in the name of control. In Sierra Leone spending authority to water parastatals and ministerial departments and agencies is supposed to be granted quarterly, but is sometimes piecemeal or late. Transfers to local councils have also been unpredictable. In 2006 hundreds of signatures were required to disburse each quarterly transfer to each of 19 local councils. The procedure has since been radically streamlined.

Donor funding is even less predictable. Budget execution rates are lowest and most erratic for donor-funded development expenditures. This is partly due to poor information. Donor planning and monitoring is not necessarily linked to the government budget calendar, while parallel donor systems make it difficult to obtain full information on aid flows. Disbursement applications typically go through a dozen signatures and can take over a month to get approved. If the government counterpart contribution is delayed, donor disbursements are further delayed. This has a negative multiplier effect on progress—although the counterpart contributions are generally only a small part of project financing, they can delay the bulk of the financing from donors as well.

Some countries, such as Ethiopia and Sierra Leone, have a donor-funded basic services delivery program to augments central transfers to local authorities for the recurrent costs of water and other basic services. The program uses national allocation criteria and administrative arrangements, but with total transparency and predictability of amounts and timing of releases. The impact of the program has not yet been evaluated. Donors may channel their funds directly to regional and district authorities, as in Ethiopia and Sierra Leone to avoid delays while funds are cascaded down from one special account

to another. This reduces the risk of diversion of funds from their intended purposes. But it is difficult to ensure that central governments keep informed on progress on the ground, and standards of accounting and reporting at the local level are still weak. Execution rates are understated. In Ethiopia, sector project management units and regional bureaus of finance constantly have to follow up with *woredas* (districts) for statements of expenditure and interim financial reports.

5.2.3 *Low Project Management and Contracting Capacity*

Further down the budget chain, the poor state of project management in all the sample countries is a major constraint on spending and results. Lack of technical capacity in line ministries, parastatals, and local authorities limits ex-ante project appraisal and ex-post project evaluation.

Procurement procedures are cumbersome in all the sample countries and are exacerbated by the multiplicity of donor agencies, each of which has their own procurement rules and procedures. One water utility in Mozambique, for example, had 19 donors in 2008. This places great demands on the limited capacity of the host government. Another problem is that procurement is not planned as part of the planning and budgeting process. Despite a legal requirement for annual procurement plans in Sierra Leone, 51 percent of procurement expenditure in 2007 was for unplanned items.

Box 5.2: Overcoming Procurement Bottlenecks in Ethiopia

In Oromiya, the largest region of Ethiopia, though the procurement process involves only three agencies—the regional water bureau, Federal Ministry of Water Resources, and World Bank— a handpump purchase took 12 months from raising the bid documents to signing a contract, plus the delivery period. According to the 2009 Ethiopia Public Finance Review, the delay arose from debate on the final version of the bidding documents. The United Nations Children's Fund (UNICEF) attempted to get around this problem by procuring handpumps itself and delivering them to the regional water bureaus, but government staff still reported long delays. One good practice was *woreda* (district)-level procurement under the Finnish-supported Community Development Fund project. *Woredas* posted current prices of goods outside the *woreda* office and facilitated market days, bringing a number of communities together on one day to purchase from invited wholesalers.

Ethiopia's federal government has recruited procurement specialists to regional project management units to strengthen procurement at the regional and *woreda* level. With over 700 *woredas* in Ethiopia, there is a tremendous need for capacity building.

Source: Lockwood and Smits. 2011.

Long delays in the approval of contracts add to costs and delay benefits. In some countries, such as Mozambique, approval of contracts even involves an external audit body. Slow procurement has a high impact on the expenditure and performance of sector agencies. Some costs are explicit in the form of increased penalties and arrears due to the modification and renegotiation of contracts. Procurement delays also result in inefficiencies, lack of transparency and accountability, and poor procurement management, which together increase the cost of procurement and, in turn, of the services delivered. The opportunity costs (forgone returns on investment) of delayed completion of projects can also be substantial.

Annual spending cycles are an obstacle to efficient spending. Typically, the unspent budget of one year cannot be carried over into the next year. The first invitations to bid for contracts might not be issued until the budget is approved and warrants or spending authorities are issued, which may be months into the financial year. Contracts are managed individually rather than as elements of a strategic plan, and expenditure is monitored separately from physical progress. As a consequence, there is a disconnect between expenditure and outputs.

5.3 Sector Specific Reasons for Low Rates of Budget Execution

5.3.1 *Incomplete Sector Reforms*

All countries surveyed, except the Democratic Republic of Congo, have elaborated a comprehensive set of water sector policies and subsector strategies. Many countries have also passed a regulatory framework comprised of a water law and complementary regulatory instruments.

But implementation and enforcement of sector reform strategies remain incomplete in many cases. Several factors hamper the full implementation of these reforms. First, human resources, especially at the ground level, are often inadequate. For example, Burkina Faso has passed a comprehensive set of laws and regulations related to water supply and water resources management over the last decade, but authorities face problems in enforcement due to inadequate human and financial resources. Second, the institutional reform process has led to the creation of new institutions with mandates that overlap those of existing institutions. For instance, in the Republic of Congo, a newly established implementing agency for rural water supply was given a mandate very similar to that of the Ministry of Water, leaving the ministry with an unchanged

mandate but drained of scarce human and financial resources. Third, sanctions are often difficult to implement due to a lack of bylaws and other implementation-related legal tools. Fourth, the reform processes have to some extent been donor driven with limited commitment from national stakeholders.

The creation of new sanitation-specific sector agencies may have failed to boost sanitation investments. In recognition of the importance of promoting sanitation as a means to achieving better health conditions, several countries (for example, Mali and Ghana) have taken steps since the mid-1990s to establish lead agencies for the sanitation sector, separating the institutional efforts for sanitation from those of water supply. Promotion of household sanitation had to a large extent been considered merely an appendix to water supply infrastructure construction in the past. But it is questionable to what extent disconnecting sanitation from water supply has led to a boost in sanitation investments and more effective promotional activities.

Some countries developed comprehensive longer-term sector development plans during the study period.[14] The plans are linked to overall growth and poverty reduction frameworks, translating national investments into the projects needed to achieve the MDGs by 2015. In a few countries (mainly the anglophone countries such as Tanzania, Mozambique, and Sierra Leone), sector resource allocation models have been developed as part of the decentralization process. These plans have contributed to strengthening sector dialogue, especially between governments and development partners. During the study period most countries had started organizing regular joint sector reviews.

5.3.2 *The Limbo of WSS Delivery Decentralization*

Little or no progress has been made in devolving financial resources to local government in most of the countries studied. In the past decade, most countries have adopted a legal framework for decentralized delivery of WSS facilities, implying an anticipated devolution of government resources to local government authorities and a reorientation of central government institutional mandates toward overall sector policy planning, monitoring, and preparation and enforcement of the regulatory framework. Frequently, however, responsibilities have been devolved to local authorities without the corresponding human and financial resources needed to implement them.

The slow transfer of personnel and budgets to local councils has obstructed progress in WSS decentralization. A high proportion of WSS expenditures are still made by the central ministries and water parastatals, which have resisted the devolution of power and the reduction of budgetary resources and staff numbers. This is true in the francophone countries (in particular Madagascar and West and Central African countries), in which the investment budget was still mostly managed by central government institutions during the review period. Tanzania is a notable exception: it has to some extent implemented a decentralized WSS approach, somewhat changing the role of central government institutions. Transfers to Tanzanian local governments reached nearly 40 percent of the sector budget in 2008 from 0 percent in 2005 (box 5.3). Sector ministries are increasingly becoming facilitators instead of implementers. In Mozambique decentralization has mainly been an exercise of deconcentration of expenditure, whereby deconcentrated government institutions and districts absorb a small portion of the flow of sector funds through the central sector ministry to which resources are allocated.

The share of the domestic WSS budget actually transferred to subnational governments is small and unpredictable. Only a few countries' PERs had data on both domestic sector budgets and actual transfers to local governments. What data there were are summarized in table 5.2.

Tied central government grants are typically the principal source of WSS funds for rural local authorities. The grants may be supplemented by local revenues, but these are typically not more than 5 percent of total resources. Some local authorities receive significant external resources, but the main source of WSS financing remains the central government grants for recurrent and development expenditures. Funding from the central government is not always sufficient, however. In Sierra Leone, for example, though the law establishes a basis for equitable annual water grants to rural local councils that are budgeted as a "protected expenditure," actual transfers fall short. These statutory transfers should be pegged to a share of revenue (World Bank 2010).

Incomplete decentralization has created an institutional vacuum in some countries, with neither national nor local governments fully taking responsibility for the provision of rural water supply. Examples of this include Mali, the Democratic Repub-

[14] That is, during the study period, countries detailing sector investment plans in a 10 to 20 year perspective (identifying needs in terms of investment, recurrent budgets, and maintenance/renewal) included Madagascar (2005), Burkina Faso (2005), Cameroon (2007), Tanzania, Mozambique, and Ghana (2004).

Table 5.2: Domestic WSS Budget Transfers to Subnational Governments, 2002–09

	Domestic WSS budget ($)	Actual transfers to subnational governments ($)	% transferred
Central African Republic, 2002–08	3,200,154	0	0.0
Côte d'Ivoire, 2002–07	20,690,296	266,830	1.3
Madagascar, 2006	7,001,815	11,203	0.2
Mali, 2000–06	18,442,035	255,502	0.1
Sierra Leone, 2006–09	12,488,031	733,523	5.9
Tanzania, 2005–08	768,366,327	73,877,723	9.6

Source: Country WSS PERs.

lic of Congo, and the Republic of Congo, where the absence of leadership is highly detrimental, especially to the operation and maintenance (O&M) of supply facilities. To address poor performance of water facilities in particular, a fundamental rethinking of current O&M arrangements needs to build on the decentralization process. The legal ownership of rural water facilities has in most cases been transferred to the local government, which, depending on the technology model, has delegated O&M to water boards, private operators, or beneficiary communities through formal or informal agreements. But the low levels of control, supervision, and support to the rural operators and managers put the sustainability of the facilities at risk.

National utilities provide urban water supply services in two-thirds of the reviewed countries. Ten of the 15 countries reviewed have national utilities; only two countries (Tanzania and Ethiopia) have fully decentralized their urban water supply services to local authorities. The other three countries have a mixed picture: in Sierra Leone, one utility provides water to the capital, while a second national utility is responsible for water supply in secondary cities. Decentralization is ongoing in Mozambique and Madagascar, which have a mixture of one national and multiple municipal utilities. The rate of decentralization of urban water supply is somewhat lower than the overall rate across Africa. Overall, national utilities still serve just over half of the countries in Africa, with municipal service provision in only 15 percent of countries.

Hygiene education is formally decentralized, but local authorities do not have the means to carry out their responsibilities. While sewerage in urban areas is often the responsibility of national utilities, responsibility for on-site sanitation and hygiene education has mostly been decentralized. But local governments do not have adequate financial and human resources to carry out his mandate.

Box 5.3: Matching Decentralization with Increased Financing to Local Governments in Tanzania

Tanzania's 2002 National Water Policy put in place a new institutional framework for the water sector that devolved service provision to the lowest appropriate level. Fiscal decentralization has followed suit. In fiscal year (FY) 2003, none of the water sector budget in Tanzania was allocated to local and regional governments. By FY08, 22 percent of the total budget allocation was going to local governments and another 15 percent to regional governments. But while budget allocations have increased rapidly, actual expenditures have lagged behind as execution rates at subnational levels were lower than at the central level.

The local governments' development budget is essentially for the delivery of rural water supply services, while the largest part of the ministry's budget is allocated to urban water supply, with the water resource management subsectors making up a smaller portion. Regional authorities undertake supporting services; the largest part of their budget is linked to feasibility studies. The increasing share of funding available from regional and local governments tends to result in an overall larger part of the development budget allocated for rural areas.

Regional government spending has increased rapidly due to one foreign-funded rural water project. It is not clear whether this regional allocation is structural or temporary. Regional budget execution in FY07/08 was 63 percent, with large variations between regions.

Local government expenditure doubled between FY04/05 and FY07/08, but budget allocations increased fivefold over the same period. Local governments' water sector budgets are almost entirely funded through central government transfers. In FY07/08, only half of local government budget allocations were actually spent because of significant delays in the release of budget funds.

A system of WSS budget transfers was introduced in FY05/06 using a formula based on a combination of indicators including coverage rates, technologies used in the district, and poverty incidence. The actual calculation of the formulas is hindered by poor data quality and lack of disaggregation. The difference between budget allocations and actual allocated budgets at the regional and the district level shows that the water formula is not consistently implemented. Some regions and districts get significantly more funds than the water formula calculation would allow for, while in others the opposite holds true.

Source: Tanzania PER.

The pace of decentralization of the WSS sector is slowed by resistance from central-level government institutions claiming insufficient capacity at local government level. This is a valid argument to the extent that local governments have generally not been provided with the human or financial resources to take up their new responsibilities. But in addition to the obvious unwillingness to lose control of funds, this resistance also reflects the inability of central ministries to adapt to their new roles. Central government WSS staff are still mainly engineers and technicians, with limited skills and experience in planning, monitoring, and sector coordination.

Capacity building at provincial or district levels was supposed to be supported by the deconcentrated staff of central government bodies. But in reality the political decision to decentralize WSS has not led to a substantial transfer of central government staff to lower levels (provinces/regions/districts), and deconcentrated staff numbers remain modest. At the extreme, in the Central African Republic, only 4 out of 81 officials of the directorate responsible for water are posted outside the capital.

Additionally, very limited financial resources have been allocated for operating purposes at the deconcentrated ministry level. Mali reflects a general trend in surveyed countries in this respect (box 5.4). The functionality of the regional representations of the water ministry during the study period is very dependent on external funding (WSS investment projects), but the provided support has mainly been targeted on areas likely to facilitate the investment program. Obviously this adversely affects the possibility of the regional water offices to provide adequate support to local governments in carrying out their statutory roles and to ensure that monitoring and control functions are carried out. Capacity building at provincial or district levels was supposed to be supported by the deconcentrated staff of central government bodies. The political decision to decentralize WSS has not led to a substantial transfer of central government staff to lower levels (province/regions/districts) and deconcentrated staff numbers remain modest.

Box 5.4: Decentralization of Budgets in Mali

At the subnational level, WSS in Mali is the responsibility of nine regional offices of the Ministry of Water. Each office covers an average area of approximately 137,000 square kilometers. From 2001–06, the allocated recurrent budget (excluding salaries) of the regional offices amounted to $4,800 per office per year. This constituted only 22 percent of the total recurrent budget (excluding salaries) of the WSS sector and only 0.2 percent on average of the total public WSS budget. The offices were only able to function with support from externally funded projects operating in the regions.

Source: Mali PER.

6. Exploring the Link between Public Expenditure and Improved Access

We found no overall relationship between levels of spending and levels of water supply and sanitation (WSS) access. In figure 6.1, which plots the per capita expenditure against water supply access rates, no trend between access and expenditure can be distinguished. Likewise, we found no relationship between expenditures and increases to access, or between capital expenditure and additional population served.

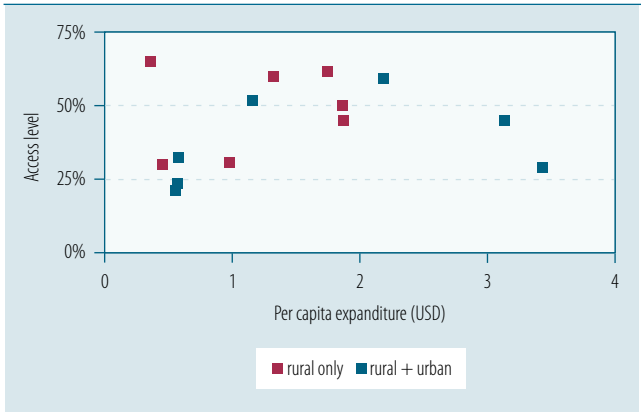
This missing link between levels of spending and levels of WSS access is probably due to underlying methodological difficulties. Firstly, we are comparing access rates and spending data that are both aggregate at a country level. This means that the analysis does not pick up on local increased spending contributing to localized service improvements. Secondly, the analysis does not take into account different unit costs for different types of service provided. The review period might also be too short to see impacts from increases in expenditure. For instance, Tanzania's public expenditure review (PER) found an increase in expenditure starting in 2000 and an increase in access from 2004 onwards (box 6.1). PERs are an instrument that has been mainly used for sectors in which an increase in recurrent expenditure can lead to improved services in a short time period, such as health and education. The water supply and sanitation is capital intensive and assets have a long asset life. The analysis did not take into account the inherited asset stock prior to the study period. The high level of expenditure on rehabilitation of infrastructure suggests that a considerable part of capital spending is used for deferred maintenance to maintain current access and service levels. But the lack of correlation could also be an indication that spending is not the key determinant in increasing access to water supply.

No countries have managed to increase access without a substantial increase in public expenditures. In other words, increasing public WSS expenditure is a necessary but insufficient tool for improving services. For instance, the successful programs to improve access to urban water supply in Senegal, Burkina Faso, and Niger all included large public investment programs. Similarly, progress in rural water supply access in Benin and Mali has followed increases in public expenditure.

In rural areas, access to drinking water increased alongside per capita spending. The Sahelian countries have substantially better rural water supply coverage than other African countries and a higher percentage of sector expenditure as a share of gross domestic product (GDP). But the causality of more spending resulting in better access is hard to establish; it could be that higher levels of access leads to more spending (see figure 6.2).

The cost of increased rural access to water varied, often due to technology choices. As mentioned above, comparisons

Figure 6.1: Per Capita Spending and Access Rates to Drinking Water for All Reviewed Countries



Source: PER reports.

Box 6.1: Linking Public Spending to Increased Access in Tanzania

The PER for Tanzania's water sector found that a sharp increase in funding started to have an impact on access to improved water sources between 2004 and 2008. The WSS sector's share of the total priority sector budget increased from 3.7 percent in FY00/01 to 9.8 percent in FY07/08. The budget allocations for the sector are relatively high compared to other countries in the region. Nevertheless, the PER notes that the progress has been slower than expected and that increasing resources alone is not enough. Even though budget allocations increased rapidly, budget releases lagged significantly behind. Water utilities are still heavily dependent on budgetary support with a significant part of the budget allocated for operations, maintenance, and rehabilitation.

The PER lists a number of issues that explain why the goal of improving access to WSS services is moving slower than expected. Some of these issues are systemic in nature, that is, they are mostly outside the control of the water sector, but still influence progress in the sector. Other issues are within the direct control of the water sector and need to be addressed to ensure that the sector can move more quickly to achieve its goals.

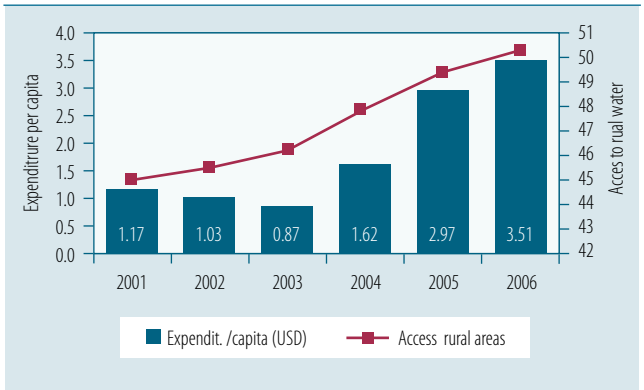
The following sector measures need to be taken to ensure that spending translates to better access to services: (i) improve sector investment planning, (ii) improve the capacity in the sector to conduct procurement and disbursement, (iii) focus on including incentives in the allocation of funding, (iv) improve efficiency to lower operating and capital costs, and (v) promote sustainable tariffs while guarding the affordability of access.

At the same time, the PER also lists a number of systemic measures to be taken mainly related to (i) improving budget procedures; (ii) harmonizing procurement, disbursement, and monitoring procedures, and (iii) improving the predictability and reliability of donor funding to the sector.

Source: Tanzania PER.

between countries are difficult. But spending efficiency in the Sahelian countries of Mali and Niger seems to be lower than in Cameroon and Madagascar (table 6.1). Obviously, natural conditions in the Sahel region adversely impact unit costs (for example, lower success rates on borehole drilling, pumping as the only feasible technology, low density of population, and so on). Additionally, service-level definitions differ among countries, and it would thus be hazardous to draw conclusions on spending efficiency in one country compared to another. The 2010 Country Status Overview reports that technology choice has been the key determinant for aid per beneficiary. Aid per beneficiary was higher in countries opting for rural piped water schemes (Mauritania, Senegal, Côte d'Ivoire, the Gambia, and South Africa). By contrast, countries that have had a policy of low cost solutions such as Burkina Faso, Ethiopia, Uganda, and Malawi have considerably lower aid per beneficiary costs. A similar argument can be made for public financing in general.[15]

Figure 6.2: Example of Relationship between Spending and Access (Mali 2001–06)



Source: Country WSS PER papers and authors calculations.

The relationship between expenditures and access is less clear in urban water supply. Public expenditures on urban water supply mostly concern water utilities. The fact that urban water supply coverage has not increased in the past years means that much of the investment has gone to maintaining the current coverage of water utilities rather than expanding access. Eighty percent of urban households with piped water connections are in the top two quintiles of income distribution, while only 10 percent of poor households have piped water. As this subsidy mainly benefits the relatively rich, subsidies to urban utilities are effectively consumer subsidies to the rich. Few countries have specific public expenditure programs for those that are not connected to the network. In

Table 6.1: Comparison between Annual Expenditure and Increase of Water Access Rate in Selected Countries during Study Period

	Average annual expenditure per capita in US$	Average yearly increase of water access rate
Cameroon	1.9	2.2
Madagascar	0.5	1.3
Mali	1.9	0.9
Niger	1.8	1.2

Source: Country WSS PER papers and authors calculations.

[15] An ongoing project called WASHCOST is looking into the true life-cycle costs of sustainable services (www.washcost.info).

some countries, donors finance programs focused on small-scale providers, but these are often only at pilot scale. As a result, poorer segments of the urban population pay a much higher price for a service level that is lower than the segment of the population with access to a private water connection.

It is worth noting that some of the largest increases in urban water supply access in Sub-Saharan Africa have been made through programs focused on subsidized house connections at a relatively high unit cost. Unsubsidized house connections, at a cost of $250–$300, are financially beyond the reach of many urban dwellers. In countries with a focus on house connections but without subsidized social connection programs, this has meant that access figures have been stagnant. For instance, in the Democratic Republic of Congo's Katanga Province, only 0.38 percent of total urban water consumption is sold through public standpipes. And in the Republic of Congo, no public standpipes have been constructed in the area served by the national urban water company. On the other hand, some of the most successful urban water supply programs have been through social connection programs, in which (often small diameter) household connections are made available for poor households at much reduced costs. For instance, in Senegal over 2.5 million people got access to water supply, nearly exclusively through house connections, most of which were subsidized social connections. Burkina Faso also relied heavily on household connections to expand access to 95 percent of urban households. Both Burkina Faso and Senegal depended heavily on donor financing to increase access, with aid of $189 per beneficiary in Burkina Faso and $141 per beneficiary in Senegal (AMCOW 2011).

For sanitation, data availability is too limited to establish a relationship between expenditure and access levels.

7. Underlying Public Economy Dynamics

This chapter explores the political economy of water supply and sanitation (WSS) spending patterns. After further developing the WSS public spending rationale first introduced in chapter 1, we test whether actual patterns match the rationale. We then explore the reasons behind the misallocation and poor implementation of public WSS resources, including a discussion on political economy factors. Unlike the bulk of the overview paper which was based almost exclusively on the findings of the 15 public expenditure reviews (PERs), this chapter broadens the scope to draw on other sources as well.

7.1 What Is the Rationale for Public Spending in the WSS Sector?

Two justifications for WSS public spending are correcting market failures and reducing disparities in service delivery. Without public spending, the market could fail to provide a socially optimal level of WSS services. Reducing disparities in access to basic WSS services is a government responsibility (WDR 2004).

Individuals have little incentive to build and maintain WSS networks, but communities and societies do. Individuals might invest in on-site facilities, such as wells or latrines. But the expense and complexity of piped networks requires collective action. Markets, therefore, fail to provide adequate WSS services on their own. Reasons for this include:

WSS are a mixed public and private good. Water can be considered a private good as benefits accrue to individuals. In theory, consumers could be excluded by cutting off service provisions. In practice, however, it is often culturally or politically unacceptable to exclude people from at least a minimum level of WSS access. The considerable public health and environmental benefits of WSS services also make WSS services a public good. Lack of WSS services accounts for 5.5 percent of death and illness in high-mortality developing countries (WHO 2002). For example, the costs of environmental and health degradation due to inadequate WSS services has been estimated at more than 1 percent of gross domestic product (GDP) in Colombia, 0.6 percent in Tunisia, and 1.4 percent in Bangladesh.[16]

WSS service provision is a good example of a natural monopoly, as the necessary network infrastructure cannot practically be duplicated. WSS can be considered nonrival (nonsubtractable), as the sector is subject to large economies of density. For a given distribution network, increasing the number of households connected reduces the network's average and marginal costs. Similarly, maintenance of nonnetwork rural water supply facilities, such as handpumps, is most efficiently provided through a monopolistic service provider.

The WSS sector is characterized by a high degree of sunk costs. Capital costs generally make up 66–80 percent of the costs of supplying services. Infrastructure investments are substantial and very long term—many water pipes, if well maintained, can last for decades, or even centuries.

The sector suffers from imperfect information. For instance, lack of knowledge of the benefits of hand washing or proper use of latrines can lead to less than desirable investment and consumption.

Reducing disparities in access to basic WSS services is a government responsibility. The poor face huge barriers to being connected to WSS networks (a form of "market participation") in-

[16] World Bank, Country Environmental Analyses—Colombia (2006), Bangladesh (2006), Tunisia (2004).

cluding establishing legal tenure on the necessary land. One mechanism for closing the gap in service delivery is therefore to target public spending at households that otherwise would be unable to afford those services. In addition, water supply subsidies can be presented as a component of a broader social policy agenda to redistribute resources toward the poor. Particularly in countries where means tested cash transfers are hard to implement, consumer utility subsidies can offer an alternative for delivering transfers to the poor. More equitable service delivery in turn can contribute to social cohesion, particularly important in fractionalized societies.

The rationale for public spending on WSS is often not purely economic; many consider water access to be a political, emotional, or religious matter. Governments—and the societies they represent—often see WSS services as a human right.[17] They are galvanized in this by international endorsement of the Millennium Development Goals (MDGs). The human rights argument, however, is often mistranslated as a rallying cry for free water. Water tariffs and privatization of water supply systems were at the core of the heated globalization debate of the 1990s, and WSS services are at a crossroads of capital-intensive infrastructure and value-loaded social services. The politics of water services are thus a reflection of much larger politics of welfare.

7.2 Do Actual Public Spending Patterns Match their Rationale?

We found that patterns of public spending stand in stark contrast to the public spending rationale outlined above. Spending is often not properly targeted at extending services to the poor or addressing health and environmental externalities. The rationale is also undermined by the low efficiency of spending—in other words, spending does not provide a very high "bang for the buck" toward public policy objectives.

7.2.1 *Does Public Spending Help Overcome Market Failures?*

Current public spending is not in line with stated public health objectives. Public spending is mostly focused on higher-level services, such as household water supply connections, at the expense of channeling money into cheaper levels of service, such as standposts, that would have considerably higher health returns per dollar invested. Utilities could therefore double the rate of service expansion in Africa by shifting their investment budgets from piped-water connections to standposts (Banerjee and Morella 2011). But this would require changing the institutional arrangements associated with standposts in African cities. At present, because standposts contribute a negligible portion of revenue for most utilities, they have no financial incentive to expand the service. Although operating costs are considerably higher for standposts than for piped connections, a recent survey found that the official consumer standpost tariffs of half of Africa's water utilities were lower than those for consumers of small volumes of piped water (Banerjee and others 2010). In practice, retail standpost prices are several orders of magnitude higher than the utility-imposed price in most African countries because of high rent-seeking behavior on the part of operators and reselling through informal channels.

Only a small part of public expenditure goes to sanitation, a cheap life saver. As the sanitation sector is dominated by household on-site facilities, limiting public expenditure in this area might be partly justified. But one rationale for public spending—health externalities and overcoming information imperfection—would argue for increasing spending on hygiene education and sanitation marketing as well as subsidies for latrines. Going forward, it should be noted that environmental public good reasons can have a perverse incentive to prioritize investments in expensive wastewater collection and treatment systems for the rich few above investments in more latrines and septic tanks for the many unserved poor, which are considered a private good despite their higher health impacts.

Public spending patterns do not fully reflect the long asset life of WSS infrastructure. While the rationale for public spending outlined above calls for prioritizing public spending on operations and maintenance (O&M), the reality is the opposite, with upkeep of existing WSS facilities appearing to be underfunded. Under maintenance of infrastructure leads to higher life-cycle costs, because the present value of rehabilitating infrastructure is substantially higher than that associated with a sound preventive maintenance regime (Briceño-Garmendia, Smits, and Foster 2008). About half of recurrent spending in the sector is on salaries, which crowds out other essential recurrent expenditure, especially maintenance. As a result, infrastructure dilapidates rapidly, leading to an expensive cycle of neglect and rehabilitation. We found break-

[17] See, for instance, UNDP (2006) and the General Comment 15 to the UN's International Covenant on Economic, Social and Cultural Rights. There is a heated international debate on the significance of declaring water a human right, including its implications for cost recovery.

down rates of rural water supply facilities: at least 25–30 percent in most of the countries surveyed, and more than 50 percent in postconflict countries.[18] Urban areas are locked in a vicious spiral of weak performance, low willingness to pay by consumers, and insufficient maintenance funding leading to deterioration of assets. The result is that a considerable share of public spending goes to rehabilitation (that is, deferred maintenance).

Low water tariffs undermine the rationale that governments can prefinance capital investments to be recovered from consumers over time. A recent World Bank study found that less than 25 percent of utilities in middle- and low-income countries charge tariffs that are sufficient to cover efficient O&M while making some contribution to cover investment costs (Komives and others 2005). Our review found that in most countries tariffs have not been adjusted for many years.

7.2.2 Does Public Spending Help Close the Gap between the Served and the Unserved?

Though the gap between rural and urban WSS access is closing, current spending leads to more inequality and could potentially erode social cohesion. We found that poor people do not get their fair share of public spending on services, let alone the larger share that might be justified on equity grounds. Spending is skewed to services disproportionately used by richer people in capital cities at the expense of people in slums, secondary cities, and rural areas. Within the countries we surveyed, important and persistent regional disparities remain between rural and urban WSS access. The unevenness in spending we found was not so much between urban and rural, but rather between capital cities and the hinterland. And even within capitals, most spending benefits only those who are connected to the network, inevitably the rich.

Water utility tariff subsidies are starkly regressive. About 80 percent of utilities use an increased block tariff (IBT) in which the price charged per unit increases at higher volumes of consumption in an attempt to subsidize those consuming small volumes. Poor households, however, capture only half as much of the value of IBT subsidies as they would if the subsidies were distributed randomly across the entire population because of low levels of connection among the poor and IBT subsidy design issues (Komives and others 2005). Quantity-based subsidy programs are similarly ineffective if access to the network is low (this is true of all countries in our PER sample); most poor households are excluded from subsidy programs altogether because they are not connected to the network. A recent review of African water utilities found that in almost three-fourths of cases, even consumers connected to the piped network with water intake at the survival level pay the same or more per unit than average consumers because of the fixed and minimum consumption charges and the definition of the IBT blocks (Banerjee and others 2010).

Public subsidies to reduce the costs of connecting to the network are a progressive alternative to consumption subsidies. The majority of African water utilities levy piped-water connection charges in excess of $100, an insurmountable barrier for low-income households (Banjeree and Morella 2011). Several countries have started social connection programs to subsidize connections, often using smaller diameter pipes to target low consumption households (for example, Burkina Faso, Côte d'Ivoire, Senegal). These programs often also allow utilities for the first time to connect households without legal land tenure. In other countries, governments remain reluctant to provide services in unauthorized settlements because they fear services imply a permanent right to occupy land.

7.2.3 Weak Utilities Act as a Buffer between Public Spending and Public Policy Outcomes

A large part of public spending on urban WSS is absorbed by utilities to cover recurring losses caused by revenues that are well below operation and maintenance costs. Just 36 percent of the utilities in Africa have tariff levels that meet their full operation and maintenance costs, and only 9 percent have some money left over to go toward their capital costs.[19] Inefficiencies include underutilization of existing capacity in water treatment plants, poorly designed plants, excessively high losses in distribution networks, low billing and collections rates, and overstaffing. But it should be recognized that, given the capital intensity of water services, even large gains in operating efficiency have relatively small impacts on the total cost of service. Operating costs account for about one-third of water supply costs. Thus, achieving a challenging 25 percent reduction in operating costs would reduce the total cost of service provision by only about 10 percent (Komives and others 2005).

[18] Lockwood and Smits (2011) estimate that 20–40 percent of water points are not functional. A recent United Children's Fund (UNICEF) study (cited in RWSN 2009) showed an average level of nonfunctioning handpumps of approximately 36 percent in 20 countries in Africa). Other studies and sources reveal similar levels.

[19] Banerjee and others 2010. The paper assumes a threshold of $0.4/$m^3$ for O&M cost recovery and is limited to analyzing the possibility of tariffs to cover costs, and not whether the utilities are actually raising the revenues to meet the costs (assuming 100 percent collection ratio).

Reductions in capital costs have a much greater potential for improving the efficiency of public spending. It is striking, therefore, that alternative technologies with the potential for major cost reductions are only pursued in a few countries. Most countries in our review still strive to provide a single standard of service, often following engineering standards lifted directly from industrialized countries. Similarly, demand-side management to reduce network losses is strikingly absent given their potential to increase the efficiency of public spending. Reducing capital costs will also require improvements in the planning, design, and execution of capital projects, which could result in significant savings.

7.3 What are the Reasons behind the Misallocation and Poor Implementation of Public Resources in WSS?

This review has revealed large variations in the effectiveness of spending. Previous chapters have identified the various technical and managerial challenges of translating political statements into sector expenditures, and in turn into better WSS services. But what are the political economy factors that might explain the gap between WSS as an expressed priority and actual changes in budget allocation and disbursement? This section explores underlying factors influencing observed spending patterns, recognizing that the global water crisis is rooted in power, poverty, and inequality (UNDP 2006).

7.3.1 *Political Factors Drive Spending Patterns*

Spending patterns in WSS are in line with international evidence that clientelism significantly influences the provision of public services (World Bank 2003). The tendency for political patrons to provide private rewards to clients can help explain the disproportional spending in capital cities. Public money is often spent where the politically powerful reside; this is where elections are won, or at least where potential social discontent has to be controlled.

Political patronage might also explain low revenue collection caused by uncollected bills and malfunctioning meters. Increasing collection is normally seen as a technocratic "quick win," as it has an immediate impact on the financial position of the utility without requiring much investment. We found anecdotal evidence suggesting that nonpayment is sometimes indirectly encouraged by government agencies and political leaders. In the PER countries, government departments were often the worst nonpayers, building up extensive arrears and considering themselves exempt from bills and immune from cutoffs. Elites receiving better services at a low cost can provoke others to access services illegally. This could help explain the large numbers of "illegal" or "informal" connections reported in sample countries. Other expressions of discontent include vandalism. In turn, governments might respond by reducing or avoiding investment in the expansion of services to "difficult" communities, blaming users for the problems that arise (Muller, Simpson, and Van Ginneken 2008). Notably the public spending bias toward capital cities was particularly stark in postconflict states (for example, the Democratic Republic of Congo and Central African Republic). This might be partly due to practical obstacles to improving services in the hinterland. But it might also point to politics based on identities and patronage.

A political economy perspective on public service delivery suggests that choices in capital spending may be driven by the corruption, employment, and profit opportunities that construction provides. There are, in contrast, few systemic political incentives to ensure that systems are kept running over time. Regularly monitoring services and attributing breakdown or continued operation is difficult. In turn, it is harder for politicians to claim credit for these services.

The impact of corrupt practices within organizations with control over investment projects is hard to quantify. The review noted large—and often unexplained—differences between unit costs. Procurement costs for capital works may often be unnecessarily high because of a lack of competition and the prevalence of kickbacks to corrupt officials. A recent study on the political economy of sanitation found some evidence of rent seeking and corruption in all case studies, though it was not identified as the predominant feature distorting pro-poor sanitation investments (WSP Sanitation Global Practice Team 2010).

7.3.2 *Middle and Upper Class Voters Resist Tariff Reforms*

Politicians' refusal to raising tariffs makes for good political pro-poor rhetoric but in practice mainly benefits the middle and upper class that are connected to the public water network. It has been estimated that achievement of full-cost recovery would require manifold tariff increases for residential consumers. But in most of the countries in our sample, only the rich are connected to the network, which might render this affordability argument politically convenient. Tariffs that fully

recover capital costs would be affordable for only half of the population in Africa (Banerjee and Morella 2011). Poor people currently pay many times the official water tariffs, as they buy their water from private providers. This leads to the conclusion that recovering full costs from existing customers and using the resulting cash flow to accelerate access expansion for the poor would substantially increase equity, although it is a hard political sell.

7.3.3 *Resistance to Decentralization*

The political dynamics in rural WSS seem to be slightly different than in the urban water supply sector dominated by utilities. Here, the most striking finding is how little or no progress has been achieved in devolving financial resources to local governments despite official policies—often embedded in the constitution—to decentralize WSS services. Instead, politicians and central bureaucrats have been allowed to keep public budgets concentrated in state administrations. The resulting dangerous institutional vacuum in the rural provision of water supply, with neither national nor local governments fully taking responsibility, might be convenient for all—except for rural people without water. In interviews for the PERs in our sample, local decision makers consistently blamed the lack of progress on the slow transfer of personnel and budgets to local councils. Central government representatives, meanwhile, claimed insufficient capacity at the local government level. A telling example of this negative dynamic is found in South Africa. Here, after municipalities complained about the central government "hanging on" to water-service functions, a date was set for the transfer of responsibility. But the same municipalities then called for the process to be delayed because of inadequate preparation (Muller 2007).

As rural water supply systems are less technically complicated, services are often directly managed by local authorities rather than special-purpose utilities. As a result, the politics of rural WSS can rarely be isolated from the broader issues of public management. Cash from tariffs will often be used to fund other functions of local government that lack a ready source of revenue, even if this is formally prohibited. At an even more localized level, the choice of where water pumps are located often reflects local power and social relations.

7.3.4 *The Self-interest of Utilities*

The interests of employees or organized labor often drive utility management decisions. Key posts in utilities and ministries are often filled by politically trusted people. Personnel are also hired less on merit and more on how best to apportion patronage, and absenteeism is not penalized in several countries. This patronage system often leads to a status quo in which services do not improve. In some cases, particular interest groups take control of public resources for private benefit, including reported cases of utility staff involved in the informal resale of water at exorbitant prices.

7.3.5 *Professional Resistance to Change*

Professional resistance to change, in the form of mistrust of cheaper (and sometimes unproven) service levels and other norms of the professional engineering culture, creates a barrier to technological innovation. Service quality standards and technology choice are often also restricted by outdated and complex laws, regulations, and construction codes. Revising such technical standards would be an easy and cost-effective way of improving access for the poor. But the politically well-connected construction industry might object as a change in standards would allow new (smaller) enterprises to enter the market.

7.3.6 *Low Political Interest in Sanitation*

Looking at political dynamics also helps explain why sanitation is an orphan sector. The low demand from communities and households for sanitation investment is well documented. As a result, politicians do not perceive sanitation as a vote winner and allocate scarce resources to sectors with higher perceived political rewards. But sanitation is a cheap lifesaver, and as such might merit higher public spending. A recent study on the political economy of sanitation found that a strong civil-society push focused on health benefits and dignity increased political incentives (in the shape of career advancement or electoral support) for extending sanitation coverage to the poor in Brazil and India. The need to target such campaigns is evident from a case study in Senegal. Many technocrats there support a shift towards lower-cost technologies after seeing the successful use of on-site sanitation and condominial systems in semi-urban areas of Dakar. But many politicians still support investments in traditional sewage treatment plants (WSP Sanitation Global Practice Team 2010).

7.3.7 *Global Debates Influence Local Decision Making*

Local debates on WSS often reflect global political processes rather than local concerns. During the 1990s, the Washington Consensus included a strong push for full cost-recovery, trig-

gering a campaign against the commoditization of water that became a spearhead of the antiglobalization movement. This global debate trickled down into many national and local decision-making processes. It pushed many politicians and local civil society leaders to rally against cost-recovery in absolute terms—even from rich consumers. At the same time, willingness-to-pay studies often showed that even the poor were willing to pay for a connection or standpipe to the public grid as a cheaper alternative to other more expensive water sources. Political decision-making processes thus became paralyzed, missing the opportunity for a discussion on how to make the rich pay for services while freeing up public funds to benefit the poor.

For a long time, the global environmental debate drove a push for higher levels of sanitation services, but the recent global movement for basic sanitation has rebalanced the debate. The environmental debate often mixes the issues of water resources management and basic service delivery. While higher levels of sanitation services, such as sewerage wastewater treatment, benefit downstream environments, local populations would mainly benefit—especially in public health terms—from receiving basic services such as improved latrines. The rise of the basic sanitation lobby was marked by the adoption of a new MDG sanitation target to complement the existing water target, still the only target to be added to the MDGs since their adoption. Again, much of the discourse is not indigenous to the countries that need the most work.

The gaps between policy and practice can partly be traced back to donor policy prescriptions that have been superficially adopted but have not been followed through due to local political resistance. The international community's advocacy has contributed to service delivery decentralization in some countries. But budgets have not followed suit. Donor advocacy to fix sector frameworks, suffering from insufficient attention to customization or implementation, may similarly have contributed to the unfinished sector reforms and multiple institutions with overlapping mandates.

The call to increase customer power and make service providers more directly accountable has not really taken hold in the sample of countries yet. This idea was presented as a short route to accountability as opposed to the long route of accountability in which poor people contact the policy maker, who in turn ensures that the service provider delivers services to its customers (World Bank 2003). For now, neither accountability route provides citizens a voice to ensure that the WSS budget is allocated and implemented effectively and efficiently in a way that matches the public spending rationale, which would lead to increased WSS access.

If the drivers of current WSS spending patterns are not addressed, any changes that are achieved risk being marginal or temporary. But this should not be an excuse to stop pursuing technical improvements in the targeting and execution of WSS public spending. It should merely lead to recognition of the limitation of short-term technocratic measures without exposing and addressing the longer-term drivers that are the cause of the status quo. One way to begin to address the spending patterns is through the PERs. Clientelism and patronage curve spending to benefit the few and obstruct institutional and technical renewal. The PERs can help to open the debate by showing this lack of efficiency in public spending. Advocates for better WSS services can use the PERs' findings, as well as this regional review, to expose the misallocation or misuse of public resources and lobby for different and better spending in the sector. As the quality of spending improves, the emotional argument for more spending will be strengthened by proving that public spending contributes to better and more equitable WSS services for all.

8. Concluding Remarks

8.1 PERs are a Useful Tool for Policy Makers

Reviewing and tracking public expenditure are not new concepts, but public expenditure reviews (PERs) for the water supply and sanitation (WSS) sector are relatively recent innovations. This review demonstrates that thoughtful application of PERs can contribute substantially to an understanding of what is happening in the sector. Knowledge of the quantity and quality of public spending is a prerequisite for governments and donors adjusting their policies and practices. This, in turn, will be required to improve WSS access.

The focus of this review has been to describe and assess the findings of PERs of 15 Sub-Saharan counties. We hope it will enable the authors of future PERs to benchmark their findings against other countries in the region with more comparative data. This will provide decision makers with a better sense of where they are relative to other countries. In fact, data from this review were already being used in five recent country PERs.

But there is much more work to be done to improve the quality of WSS information systems, including data definitions. All the PERs we reviewed faced serious data limitations. There is a critical need to give more attention and resources to monitoring and evaluation—quality data is a prerequisite for ensuring both equity in distribution of investment resources and sustainability of investments. Another major obstacle to expenditure tracking is that a large part of donor resources are still off budget. The parallel donor databases in many countries are only a second-best solution to moving donor resources on budget and into the bigger picture.

Standardizing the methodology for PERs in the WSS sector is neither feasible nor desirable, but the development of a core set of analytical tools could help authors of future PERs. While standardization would serve global officials, it might limit the use of the PERs for their main audience—in-country stakeholders, including politicians, government officials, donor representatives, and representatives of civil society. The WSS sector is defined differently in different countries (for example, it might include rainwater drainage, solid waste management, or water resources management), and countries organize their sector differently. International actors will have to adjust to each country's specific system. The findings of this review endorse the ongoing World Bank effort to develop a set of tools and resources to evaluate the allocation of fiscal resources in a more consistent manner.

8.2 More, Better, or Different Spending?

Successful advocacy for more spending in the WSS sector depends on improving the quality of spending. This in turn will require recognizing and changing the underlying power dynamic.

8.2.1 *More Spending?*

There are compelling arguments to increasing public spending for WSS. Redistributive arguments and market failures call for public intervention. The investment needs are huge. The overall price tag for reaching the Millennium Development Objective (MDG) target for access to WSS is estimated at $22.6 billion per year for Sub-Saharan Africa, or 3.5 percent of Africa's gross domestic product (Banjeree and Morella 2011). But this review also found that current spending patterns are both inefficient and ineffective and do not match that public spending rationale. Increasing the volume of public expenditure without changing its targeting and execution will not have a large impact.

8.2.2 *Better Spending—Improving Budget Execution*

Budgets need to be better executed. A major focus should be on solving institutional bottlenecks in WSS public expenditure, both within and outside the control of sector professionals. Poor execution of budgets is caused by a variety of obstacles, such as overambitious plans and budgets, unpredictability and late receipt of resources, cumbersome procurement procedures, and lack of capacity, mainly project management and contracting capacity of the government and its partners. Typically, the unspent budget of one year cannot be carried over into the next year, so the first invitations to bid for contracts may not be issued until the budget is approved and warrants or spending authorities are issued, which may be months into the financial year. Better budget execution will require capacity building.

Sector professionals, including international actors, should broaden their scope from designing sector policies to implementing them, while working with others to address the bottlenecks along the whole of the budget execution chain. The challenge for practitioners is not to identify the perfect "magic bullet," but more subtly to build capacity, instilling and maintaining appropriate management cultures. The choice of budget execution tools must be appropriate to the current and evolving state of the country and sector. Many of those tools are not defined by sector ministries but by ministries of finance and others. Water sector professionals should take an active interest in addressing all parts of the budget execution chain, including participating more actively in upstream planning exercises and in the definition of the regulations relevant to their work, such as budgeting and procurement legislation.

8.2.3 *Different Spending—Enhancing Targeting*

The need for better targeting is a strong conclusion of this review. In general, areas outside of the capital, the sanitation subsector, and funds for the upkeep of existing WSS facilities appear to be underfunded. Within the countries we surveyed, important and persistent regional disparities remain in access to water in rural and urban areas. Sector investment planning and allocation policies have contributed to disparities in access and distribution of WSS services. Overall, there seems to be a slight bias in public expenditure toward urban areas, which is at least partly caused by paralysis in rural WSS following incomplete decentralization of capacity, funds, and control. Only a small part of public expenditure goes to sanitation. As the sanitation sector is dominated by household on-site facilities and is generally financed from household expenditure, this might be partly justified. But huge public investments will soon be required as countries get richer and people move up the sanitation ladder. About half of recurrent spending in the sector is on salaries, which crowds out other essential recurrent expenditure. The distinction between "development" expenditure and "recurrent" expenditure is becoming less clear, however, as donor funding seem to include considerable rehabilitation expenditures that could be classified as either capital or current.

8.2.4 *Changing the Game to Close the Implementation Gap*

There are huge gaps between policy and practice. The PERs can therefore be a useful tool to hold governments accountable for the implementation of their own policies and promises. At the sector level, we found that while nearly all countries have elaborated comprehensive water sector policies and strategies, implementation and enforcement of sector reform strategies remain incomplete, and efforts are needed in terms of capacity building, general public awareness campaigns, and further development of a legal framework that can facilitate implementation of policies and strategies. We also found that, rather than streamline the process, reforms had, in many cases, led to the creation of new institutions with overlapping mandates. Furthermore, decentralization has stalled with little or no progress in devolving financial resources to local government. This has created a dangerous institutional vacuum in the provision of water supply, particularly in rural areas, as neither national nor local governments are fully taking responsibility.

A second implementation gap is seen in donor financing, which is often badly targeted and unpredictable, resulting in execution rates that are lower than those of internal resources. A significant opportunity is available to increase pro-poor targeted donor financing by shifting resources to areas with the largest WSS needs. In the survey period, the WSS sector in most countries was characterized by a large number of donors operating on terms and conditions specific to their individual projects. Donor funding is unpredictable and donor planning and monitoring is not necessarily linked to the government budget calendar. Transaction costs for governments are high. Solving these problems should be given high priority to enable governments to take more responsibility in line with the Paris Declaration and the Accra High Level Forum on Aid Effectiveness. Donors should consider rethinking their current policy of financing only "development" expen-

ditures to include recurrent expenditures. At present, a substantial share of donor funding is spent on the rehabilitation of badly maintained infrastructure. Preventive maintenance is cheaper than periodic rehabilitation.

Closing the implementation gap and improving the efficiency of public spending will require addressing underlying power patterns. This review exposed various drivers that explain the current spending patterns in the WSS sector. Changes in spending patterns risk being marginal or temporary if these issues are not properly addressed. This should not be an excuse to pursue a technocratic approach to improving the targeting and execution of WSS public spending. Instead, technocratic short-term measures should be complemented by exploring, exposing, and addressing longer-term drivers that are maintaining the current status quo. The PERs can help to open a debate by showing the lack of efficiency in public spending. Advocates for better WSS services can use the outcomes of the PERs, as well as this regional review, to lobby for different and better spending patterns. As the quality of spending improves, the argument for more spending will not only be based on the human needs in the sector but will also be grounded in a compelling economic rationale for public spending.

Annexes

Annex 1

PERs in African Countries with Chapters on Water Supply and Sanitation

FY	Country	Region	Type of PER
FY03	Mozambique	AFR	National PER with chapter/volume on water
FY03	Tanzania	AFR	National PER with chapter/volume on water
FY03	Uganda	AFR	National PER with chapter/volume on water
FY04	Benin	AFR	National PER with chapter/volume on water
FY04	Ethiopia	AFR	National PER with chapter/volume on water
FY04	Tanzania	AFR	National PER with chapter/volume on water
FY06	Cape Verde	AFR	National PER with chapter/volume on water
FY06	Egypt	MNA	National PER with chapter/volume on water
FY07	Madagascar	AFR	National PER with chapter/volume on water
FY07	Algeria	MNA	National PER with chapter/volume on water
FY08	Cape Verde	AFR	National PER with chapter/volume on water
FY08	Ethiopia	AFR	National PER with chapter/volume on water
FY08	Burkina Faso	AFR	RWSS PER
FY08	Ghana	AFR	RWSS PER
FY08	Mali	AFR	RWSS PER
FY09	Ethiopia	AFR	RWSS PER
FY09	Tanzania	AFR	Water PER
FY09	Mozambique	AFR	Water PER
FY09	Cameron	AFR	RWSS PER
FY09	Côte d'Ivoire	AFR	RWSS PER
FY09	Cross River	AFR	RWSS PER
FY09	Niger	AFR	RWSS PER
FY09	Libya	MNA	National PER with chapter/volume on water
FY10	Central African Republic	AFR	WSS PER
FY10	Congo, Dem. Rep. of	AFR	WSS PER
FY10	Congo, Rep. of	AFR	WSS PER
FY10	Togo	AFR	WSS PER
FY10	Sierra Leone	AFR	WSS PER

Annex 2

Remarks on Data Limitations

Growth of WSS access over time has, for most countries surveyed,[20] *proven difficult to determine in the PERs.* There are three main reasons for this difficulty:

1. No regular monitoring of access to water in rural areas has been carried out by government institutions. This limitation is most pronounced in countries in which the bulk of WSS expenditure is off-budget (NGO funding, some bi- and multilateral funding).
2. Different data classifications and norms make comparison difficult. Regular national household surveys are conducted by different ministries using different, non-conforming sets of classifications and norms for access to drinking water (e.g., potable versus non-potable water sources, improved versus traditional latrines, distance and functionality criteria). Classifications used by ministries of health, for instance, are different from the internationally adopted classifications used by WSS-sector ministries. As a result, there are huge differences from one source to another with respect to estimates of access rates, especially in urban areas.
3. Comparisons between countries should be treated cautiously, as basic service levels differ from one country to another. The basic service level for rural water supply in Burkina Faso is, for instance, 500 persons per public standpipe, while the norm in Madagascar is 250 persons per standpipe.

Most PERs apply estimates for access to water supply based on an inventory of existing infrastructure, while for sanitation, access figures are normally derived from household surveys. Methodologies based on household surveys (e.g. the UNICEF-WHO Joint Monitoring Programme) normally result in higher access rates in urban areas. The main reason for these disparities is that the household surveys include in their calculations water fetched from private wells and water resold by households with a water connection to neighbors.

Data limitations also apply to expenditure data. "Water and sanitation" is not a distinct and separate sector according to the UN standard Common Functions of Government (COFOG). Moreover, governments in the sample countries are unable to classify their expenditure according to COFOG and only use the IMF-GFS system for the international comparison of government finance.[21]

WSS is more often a sector in country-specific poverty reduction strategy papers (PRSPs), but most of the sample countries had problems in preparing budgets and reporting expenditures in their own PRSP classifications. Typical omissions in reporting are expenditures on WSS facilities in schools, clinics, and hospitals that are classified to other functions. WSS may include wider expenditures on water resource management, environmental protection, and community development. Sanitation may or may not include solid waste removal.

Most of the PERs included in this review deal primarily with projects and expenditure channeled through central public institutions that have WSS as their prime mandate. The sector is served by multiple institutions, both government and non-governmental, at all levels. It has proven impossible, however, to gain access to data from all institutions and to separate WSS sector expenditure from other expenditure in multi-sector projects implemented by other sector ministries (e.g. ministries of health). Yet, the case of Burkina Faso shows that WSS expenditure incurred by other public institutions can be quite important.[22] In the Ghana PER, the government budget estimate is based on discretionary budget, donor aid, and HIPC resources, excluding other statutory funds and the spending of internally generated revenues, though these latter funds and revenues accounted for 17 percent of Ghana's total budget in 2006. In Mozambique, provincial, municipal, and district allocations that served multiple purposes had to be excluded from the analysis, as there was insufficient information to determine how much of their allocations was actually spent on water.

The review takes into account donor databases, now government-maintained in many countries, with the help of the UN, in parallel to the budget processes. These databases include off-budget funding, which bypasses sector agencies, and includes services funded by many NGOs active in the water sector. Data from donor databases and budgets are often inconsistent. Off-budget donor-financing expenditure data

[20] With the exception of Mali, Cameroon, Madagascar, and Niger.

[21] While WSS is not a distinct sector in COFOG functional expenditure classification it could easily be picked out of the COFOG classification. The problem rather is that no governments in SSA other than SA report on COFOG. The IMF-GFS standard is an economic classification and does not allow distinguishing water and sanitation expenditure. Even where there is a start at COFOG classification this is done by retrospectively mapping agencies to the classification system.

[22] The PER for Burkina Faso estimates that 26% of all WSS expenditure between 1997 and 2007 was channeled through public institutions other than the sector ministry.

are not consistently available, so actual water sector spending is likely to be underestimated. Actual WSS expenditures are under-stated more than budgeted expenditures, however, so execution rates are also under-stated.

After estimating total WSS expenditure from available sources, the next hurdle is the distribution of expenditure by sub-sector, by geographical area, by capital or current nature, and by source of funds.

Two sub-sectors, water and sanitation, combine with a rural and urban geographical split to comprise four quadrants for expenditure analysis: urban water, rural water, urban sanitation, and rural sanitation. The finer the subdivision, the more expenditure is common to more than one category. Even the primary breakdown between water and sanitation is not always easy to ascertain, as in Sierra Leone, where project expenditure data are very poor, especially for donor projects. The rural/urban split is sometimes complicated by the use of a third "peri-urban" category and the varying definitions, even within a single country, of what constitutes a city and what constitutes a rural area.

The capital/current split divides expenditures whose benefits last more than a year from those whose benefits are received during the year. All the sample countries maintain separate budgets and accounts for capital (development) expenditure and current (recurrent) expenditure. These categories should be used with some caution, however, as development expenditure might include donor-funded operating costs (current expenditure), while a significant portion of recurrent expenditure may be spent on capacity building, community sensitization, and other expenditures that carry long-term benefits. Rehabilitation expenditures are classified as capital or current, depending on the accounting manual of the funding agency. Where governments adopt a fiscal policy of funding all current costs from domestic resources, thereby reducing dependence on foreign aid, they increase misreporting on the actual use of donor fund. This failure to account for all current costs makes the policy impossible to monitor.

The source of funds can be classified as domestic or external, with external sources further divided by loan or grant, and by donor partner. Tracking donor funds is a problem in all the sample countries, because funds often bypass the ministry of finance and move directly to the beneficiary institutions. This practice has reduced over time but is still a major issue. Where donors will not disburse to a single treasury account, a second-best solution is to ensure the reporting of all such flows to the center. In some countries, as in Ethiopia, an offset policy applies where government transfers to a district are reduced by expected aid flows to that district. The offset policy prompts districts (and donors) to be less transparent in their transactions. This, in turn, makes expenditure data at the center less complete.

An attempt to compare the public spending patterns of Sub-Saharan African countries with their peers in other regions but at a similar level of GDP was abolished because of lack of data. The current data set of 15 PERs in Sub-Saharan Africa, which have been conducted in a relatively short period of time, is unique. Twenty WSS PERs were conducted in other parts of the world over the same time period, often in countries that were not comparable to Sub-Saharan Africa. Eight of the 20 were from in Latin America, five were in the Middle East and North Africa, five were in Europe and Central Asia region, three were in the East Asia–Pacific region, and one was in South Asia. However, many of these reviews comprised only a short chapter or section on water in broader national PERs, often including irrigation, drainage, and water resources management. We found only three standalone WSS PERs—Mexico, Egypt, and Lebanon. All three are from middle-income countries that differ considerably from those included in the current review.

Annex 3

WSS Budget Execution Rates — 2000–2008

(in percent)

		2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Burkina Faso	Total	0.0	64.1	24.2	49.1	54.5	53.3	62.5	0.0	0.0	51.3
	Recurrent	0.0	82.5	66.3	61.9	95.3	91.4	97.6	0.0	0.0	82.5
	Development	0.0	60.4	20.6	46.4	48.6	46.0	55.7	0.0	0.0	46.3
Cameroon	Total	0.0	0.0	98.5	99.3	100.0	100.0	100.0	93.5	0.0	98.6
	Recurrent	0.0	0.0	98.1	99.2	100.0	100.0	100.0	95.8	0.0	98.8
	Development	0.0	0.0	100.0	99.6	100.0	100.0	0.0	79.2	0.0	95.8
Central African Republic	Total	0.0	0.0	51.6	78.5	99.9	76.0	65.2	113.2	59.5	77.7
	Recurrent	0.0	0.0	51.6	57.7	99.0	60.8	93.8	91.3	39.8	70.6
	Development	0.0	0.0	0.0	100.0	100.0	100.0	62.2	118.0	61.0	77.3
Congo, Dem. Rep. of	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Recurrent	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Development	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Congo, Rep. of	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Recurrent	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Development	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Côte d'Ivoire	Total	0.0	0.0	42.4	25.2	31.2	5.8	46.0	119.9	0.0	45.1
	Recurrent	0.0	0.0	60.1	3.1	4.7	4.5	35.0	125.8	0.0	38.9
	Development	0.0	0.0	32.4	33.1	39.5	6.1	100.0	99.4	0.0	51.8
Ethiopia	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.7	63.7
	Recurrent	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Development	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ghana	Total	0.0	145.4	49.0	123.4	185.3	42.7	47.0	0.0	0.0	98.8
	Recurrent	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Development	0.0	128.3	32.9	116.9	126.2	25.4	44.2	0.0	0.0	79.0
Madagascar	Total	58.9	43.1	31.9	26.6	45.7	83.6	0.0	0.0	0.0	48.3
	Recurrent	64.7	85.7	55.9	75.0	61.6	69.0	0.0	0.0	0.0	68.7
	Development	56.3	16.9	19.1	13.2	35.6	94.7	0.0	0.0	0.0	39.3
Mali	Total	0.0	67.0	65.3	44.1	63.3	74.8	63.5	0.0	0.0	63.0
	Recurrent	0.0	74.5	81.0	75.0	81.7	97.1	98.1	0.0	0.0	84.6
	Development	0.0	65.8	63.3	38.3	60.3	72.9	59.5	0.0	0.0	60.0
Mozambique	Total			78.2	244.1	145.3	147.9	93.7	183.4	127.6	145.8
	Recurrent	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Development	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Niger	Total	0.0	0.0	81.4	30.5	55.7	71.7	63.3	72.9	0.0	62.6
	Recurrent	0.0	0.0	81.0	42.5	55.5	68.6	58.7	63.4	0.0	61.6
	Development	0.0	0.0	81.5	28.3	55.8	72.5	66.0	77.2	0.0	63.6
Sierra Leone	Total			20.6	60.9	80.1	17.6	56.1	28.3	50.8	44.9
	Recurrent	0.0	0.0	20.6	54.4	62.2	12.8	39.8	19.9	35.8	35.1
	Development	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(Continued on next page)

WSS Budget Execution Rates — 2000–2008 (*Continued*)
(in percent)

		2000	2001	2002	2003	2004	2005	2006	2007	2008	Mean
Tanzania	Total	0.0	82.9	88.5	18.8	63.4	86.0	73.4	85.4	55.4	69.2
	Recurrent	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Development	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Togo	Total	0.0	0.0	9.7	22.9	17.6	71.1	101.9	28.5	54.9	43.8
	Recurrent	0.0	0.0	73.4	75.0	83.0	107.8	94.3	80.3	92.4	86.6
	Development	0.0	0.0	4.7	18.9	14.7	63.3	116.0	0.0	45.7	43.9
Total		*58.9*	*80.5*	*50.0*	*50.5*	*66.6*	*62.0*	*68.2*	*80.8*	*56.6*	*62.8*
	Recurrent	*64.7*	*80.9*	*65.3*	*60.4*	*71.5*	*68.0*	*77.2*	*79.4*	*56.0*	*69.7*
	Development	*56.3*	*67.8*	*44.3*	*55.0*	*64.5*	*64.5*	*71.9*	*74.8*	*53.3*	*61.9*

Source: Country WS&S PERs and authors calculations

Annex 4

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Annex 5

Detailed Data sheets for Countries included in the Review

Burkina Faso

No.	Indicators	Unit	2000	2001
	WS&S Public Overall Trends			
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	2.9
2	Sector Budget Allocation (share of GDP)	%	0.0	0.7
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	16.9
4	External allocations (share of total sector public allocations)	%	0.0	83.1
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0
6	WS&S spending per capita	US$	0.0	1.3
	Access to WS&S Services			
7	Overall access to water	%		
8	Access to water – Urban areas	%		
9	Access to water – Rural areas	%		46.0
10	Overall access to sanitation	%		
11	Access to sanitation – Urban areas	%		
12	Access to sanitation – Rural areas	%		
13	Gap between province/region with highest & lowest access rate to water	% point		
	WS&S Sector Spending Performance			
14	WSS Sector Budget Execution Rate	%	0.0	64.1
15	Execution of WS&S sector domestic resources	%	0.0	82.5
16	Execution of WS&S sector external resources	%	0.0	60.4
17	Recurrent spending (share of total sector spending)	%	0.0	1.9
18	Investment spending (share of total sector spending)	%	0.0	98.1
19	Salary costs (share of total recurrent spending)	%	0.0	73.1
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	100.0
21	Urban investment Spending (share of total WS&S investment spending)	%	0.0	0.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
20+21		Rural Sector only

2002	2003	2004	2005	2006	2007	2008	2009
2.5	1.7	1.1	1.8	2.9	3.1	0.0	0.0
0.6	0.4	0.3	0.5	0.8	0.9	0.0	0.0
8.0	17.8	12.7	16.1	16.3	12.6	0.0	0.0
92.0	82.2	87.3	83.9	83.7	87.4	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.5	0.9	0.8	1.5	3.0	0.0	0.0	0.0
	69.2						
	64.2		60.0				
	20.3						
			38.0				
24.2	49.1	54.5	53.3	62.5	0.0	0.0	0.0
66.3	61.9	95.3	91.4	97.6	0.0	0.0	0.0
20.6	46.4	48.6	46.0	55.7	0.0	0.0	0.0
4.7	4.8	3.6	2.4	1.3	0.0	0.0	0.0
95.3	95.2	96.4	97.6	98.7	0.0	0.0	0.0
86.8	64.0	81.2	86.9	72.3	0.0	0.0	0.0
100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Memo

	Unit	2000	2001
Total population	inhbt		9,085,326
GDP	Loc. Curr.		2,062,000,000,000
GDP	US$	0	2,812,949,088
General gvt. budget	Loc. Curr.		461300000000
General gvt. budget	US$	0	629,298,455
Total sector budget allocations	Loc. Curr.	0	13,466,000,000
Total sector budget allocations	US$	0	18,370,113
Domestic sector budget allocations	Loc. Curr.		2,270,000,000
Domestic sector budget allocations	US$	0	3,096,700
External sector budget allocations	Loc. Curr.		11,196,000,000
External sector budget allocations	US$	0	15,273,413
WS&S transfers to sub-national levels	Loc. Curr.		0
WS&S transfers to sub-national levels	US$	0	0
Executed sector budget	Loc. Curr.	0	8,631,149,000
Executed sector budget	US$	0	11,774,482
Executed domestic sector budget	Loc. Curr.		1,872,789,000
Executed domestic sector budget	US$	0	2,554,830
Executed external sector budget	Loc. Curr.		6,758,360,000
Executed external sector budget	US$	0	9,219,652
Executed recurrent budget	Loc. Curr.		161,164,000
Executed recurrent budget	US$	0	219,857
Executed investment budget	Loc. Curr.		8,469,985,000
Executed investment budget	US$	0	11,554,625
Executed salary costs	Loc. Curr.		117,822,000
Executed salary costs	US$	0	160,731
Rural Investments	Loc. Curr.		8,469,985,000
Rural Investments	US$	0	11,554,625
Actual WSS expenditure/GDP	%	0.0%	0.42
Share of exp that is externally funded	%	0.0%	78.3%
Recurrent exp per capita	$		0.02
Domestic-funded sector budget execution	%	0	0.83
External-funded budget execution	%		0.60

2002	2003	2004	2005	2006	2007	2008	2009
9,270,741	9,459,940	9,653,000	9,850,000	10,047,000	10,247,940		
2,293,000,000,000	2,482,000,000,000	2,698,000,000,000	2,961,000,000,000	3,162,000,000,000	3,451,000,000,000		
3,289,869,166	4,270,472,573	5,107,093,659	5,613,609,163	6,047,159,703	7,200,582,484	0	0
528200000000	581100000000	673800000000	806800000000	864100000000	960700000000		
757,832,051	999,827,402	1,275,448,372	1,529,571,048	1,652,546,078	2,004,520,311	0	0
13,125,000,000	9,611,000,000	7,672,000,000	14,431,000,000	24,886,000,000	30,256,000,000	0	0
18,831,022	16,536,467	14,522,469	27,358,998	47,593,174	63,129,766	0	0
1,045,000,000	1,711,000,000	974,000,000	2,327,000,000	4,053,000,000	3,799,000,000		
1,499,308	2,943,908	1,843,702	4,411,641	7,751,151	7,926,692	0	0
12,080,000,000	7,900,000,000	6,698,000,000	12,104,000,000	20,833,000,000	26,457,000,000		
17,331,714	13,592,560	12,678,767	22,947,357	39,842,023	55,203,075	0	0
0	0	0	0	0	0		
0	0	0	0	0	0	0	0
3,180,781,000	4,721,307,000	4,180,798,000	7,696,987,000	15,554,367,000	0	0	0
4,563,608	8,123,373	7,913,909	14,592,326	29,746,914	0	0	0
693,120,000	1,059,467,000	928,028,000	2,127,572,000	3,956,500,000			
994,450	1,822,895	1,756,681	4,033,555	7,566,599	0	0	0
2,487,661,000	3,661,840,000	3,252,770,000	5,569,415,000	11,597,867,000			
3,569,158	6,300,478	6,157,228	10,558,770	22,180,314	0	0	0
150,788,000	227,457,000	151,338,000	187,762,000	198,410,000			
216,342	391,357	286,470	355,968	379,449	0	0	0
3,029,993,000	4,493,850,000	4,029,460,000	7,509,225,000	15,355,957,000			
4,347,266	7,732,016	7,627,439	14,236,357	29,367,465	0	0	0
130,914,000	145,460,000	122,880,000	163,248,000	143,480,000			
187,828	250,275	232,602	309,494	274,398	0	0	0
3,029,993,000	4,493,850,000	4,029,460,000	7,509,225,000	15,355,957,000			
4,347,266	7,732,016	7,627,439	14,236,357	29,367,465	0	0	0
0.14	0.19	0.15	0.26	0.49	0.00	0.00	0.00
78.2%	77.6%	77.8%	72.4%	74.6%	0.0%	0.0%	0.0%
0.02	0.04	0.03	0.04	0.04			
0.66	0.62	0.95	0.91	0.98	0.00		
0.21	0.46	0.49	0.46	0.56	0.00		

Cameroun

No.	Indicators	Unit	2000	2001
	WS&S Public Overall Trends			
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	0.0
2	Sector Budget Allocation (share of GDP)	%	0.0	0.0
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	0.0
4	External allocations (share of total sector public allocations)	%	0.0	0.0
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0
6	WS&S spending per capita	US$	0.0	0.0
	Access to WS&S Services			
7	Overall access to water	%		
8	Access to water – Urban areas	%		
9	Access to water – Rural areas	%		
10	Overall access to sanitation	%		
11	Access to sanitation – Urban areas	%		
12	Access to sanitation – Rural areas	%		
13	Gap between province/region with highest & lowest access rate to water	% point		
	WS&S Sector Spending Performance			
14	WSS Sector Budget Execution Rate	%	0.0	0.0
15	Execution of WS&S sector domestic resources	%	0.0	0.0
16	Execution of WS&S sector external resources	%	0.0	0.0
17	Recurrent spending (share of total sector spending)	%	0.0	0.0
18	Investment spending (share of total sector spending)	%	0.0	0.0
19	Salary costs (share of total recurrent spending)	%	0.0	0.0
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	0.0
21	Urban investment Spending (share of total WS&S investment spending)	%	0.0	0.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
20+21		Rural Sector only

2002	2003	2004	2005	2006	2007	2008	2009
1.3	0.7	0.4	0.7	0.3	0.5	0.0	0.0
0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.0
78.4	60.3	51.5	49.1	100.0	86.4	0.0	0.0
21.6	39.7	48.5	50.9	0.0	13.6	0.0	0.0
1.2	1.9	2.5	1.4	2.9	1.2	0.0	0.0
2.2	1.6	1.3	2.3	1.1	2.7	0.0	0.0
32.0	34.0	36.0	39.0	40.0	45.0		
		13.5					
30.0					71.0		
98.5	99.3	100.0	100.0	100.0	93.5	0.0	0.0
98.1	99.2	100.0	100.0	100.0	95.8	0.0	0.0
100.0	99.6	100.0	100.0	0.0	79.2	0.0	0.0
5.1	8.3	9.8	4.4	12.6	4.4	0.0	0.0
94.9	91.7	90.2	95.6	87.4	95.6	0.0	0.0
66.6	65.2	57.7	69.5	63.6	74.4	0.0	0.0
100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Memo

	Unit	2000	2001
Total population	inhbt		
GDP	Loc. Curr.		
GDP	US$	0	0
General gvt. budget	Loc. Curr.		
General gvt. budget	US$	0	0
Total sector budget allocations	Loc. Curr.	0	0
Total sector budget allocations	US$	0	0
Domestic sector budget allocations	Loc. Curr.		
Domestic sector budget allocations	US$	0	0
External sector budget allocations	Loc. Curr.		
External sector budget allocations	US$	0	0
WS&S transfers to sub-national levels	Loc. Curr.		
WS&S transfers to sub-national levels	US$	0	0
Executed sector budget	Loc. Curr.	0	0
Executed sector budget	US$	0	0
Executed domestic sector budget	Loc. Curr.		
Executed domestic sector budget	US$	0	0
Executed external sector budget	Loc. Curr.		
Executed external sector budget	US$	0	0
Executed recurrent budget	Loc. Curr.		
Executed recurrent budget	US$	0	0
Executed investment budget	Loc. Curr.		
Executed investment budget	US$	0	0
Executed salary costs	Loc. Curr.		
Executed salary costs	US$	0	0
Rural Investments	Loc. Curr.		
Rural Investments	US$	0	0
Actual WSS expenditure/GDP	%	0.00	0.00
Share of exp that is externally funded	%	0.0%	0.0%
Recurrent exp per capita	$		
Domestic-funded sector budget execution	%	0	0.00
External-funded budget execution	%		0.00

2002	2003	2004	2005	2006	2007	2008	2009
7,778,000	7,847,000	7,914,000	8,026,560	8,137,910	8,247,843		
7,383,000,000,000	7,917,000,000,000	8,334,000,000,000	8,901,000,000,000	9,581,000,000,000	9,894,000,000,000		
10,592,718,731	13,621,809,574	15,775,581,378	16,874,952,774	18,323,161,643	20,644,034,512	0	0
933,000,000,000	1,098,000,000,000	1,277,000,000,000	1,424,000,000,000	1,861,000,000,000	2,251,000,000,000		
1,338,616,630	1,889,193,749	2,417,256,710	2,699,689,108	3,559,065,214	4,696,757,801	0	0
11,839,000,000	7,244,000,000	5,520,000,000	9,771,000,000	4,747,000,000	11,522,000,000	0	0
16,985,940	12,463,861	10,448,909	18,524,341	9,078,389	24,040,890	0	0
9,276,000,000	4,371,000,000	2,842,000,000	4,798,000,000	4,747,000,000	9,958,000,000		
13,308,690	7,520,643	5,379,674	9,096,284	9,078,389	20,777,572	0	0
2,563,000,000	2,873,000,000	2,678,000,000	4,973,000,000	0	1,564,000,000		
3,677,250	4,943,218	5,069,235	9,428,058	0	3,263,318	0	0
137,000,000	137,000,000	137,000,000	137,000,000	137,000,000	137,000,000		
196,560	235,719	259,330	259,731	262,005	285,853	0	0
11,665,000,000	7,196,000,000	5,520,000,000	9,771,000,000	4,747,000,000	10,775,000,000	0	0
16,736,295	12,381,273	10,448,909	18,524,341	9,078,389	22,482,259	0	0
9,102,000,000	4,335,000,000	2,842,000,000	4,798,000,000	4,747,000,000	9,536,000,000		
13,059,045	7,458,702	5,379,674	9,096,284	9,078,389	19,897,060	0	0
2,563,000,000	2,861,000,000	2,678,000,000	4,973,000,000	0	1,239,000,000		
3,677,250	4,922,571	5,069,235	9,428,058		2,585,199	0	0
593,000,000	597,000,000	539,000,000	429,000,000	599,000,000	472,000,000		
850,803	1,027,185	1,020,283	813,319	1,145,556	984,838	0	0
11,072,000,000	6,599,000,000	4,981,000,000	9,342,000,000	4,148,000,000	10,303,000,000		
15,885,491	11,354,089	9,428,626	17,711,022	7,932,833	21,497,421	0	0
395,000,000	389,000,000	311,000,000	298,000,000	381,000,000	351,000,000		
566,724	669,305	588,698	564,963	728,643	732,369	0	0
11,072,000,000	6,599,000,000	4,981,000,000	9,342,000,000	4,148,000,000	10,303,000,000		
15,885,491	11,354,089	9,428,626	17,711,022	7,932,833	21,497,421	0	0
0.16	0.09	0.07	0.11	0.05	0.11	0.00	0.00
22.0%	39.8%	48.5%	50.9%	0.0%	11.5%	0.0%	0.0%
0.11	0.13	0.13	0.10	0.14	0.12		
0.98	0.99	1.00	1.00	1.00	0.96		
1.00	1.00	1.00	1.00		0.79		

Central African Republic

No.	Indicators	Unit	2000	2001	2002
	WS&S Public Overall Trends				
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	0.0	0.2
2	Sector Budget Allocation (share of GDP)	%	0.0	0.0	0.0
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	0.0	100.0
4	External allocations (share of total sector public allocations)	%	0.0	0.0	0.0
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0	0.0
6	WS&S spending per capita	US$	0.0	0.0	0.1
	Access to WS&S Services				
7	Overall access to water	%			
8	Access to water – Urban areas	%			
9	Access to water – Rural areas	%			17.7
10	Overall access to sanitation	%			
11	Access to sanitation – Urban areas	%			
12	Access to sanitation – Rural areas	%			
13	Gap between province/region with highest & lowest access rate to water	% point			
	WS&S Sector Spending Performance				
14	WSS Sector Budget Execution Rate	%	0.0	0.0	51.6
15	Execution of WS&S sector domestic resources	%	0.0	0.0	51.6
16	Execution of WS&S sector external resources	%	0.0	0.0	0.0
17	Recurrent spending (share of total sector spending)	%	0.0	0.0	48.6
18	Investment spending (share of total sector spending)	%	0.0	0.0	51.4
19	Salary costs (share of total recurrent spending)	%	0.0	0.0	97.8
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	0.0	0.0
21	Urban investment Spending (share of total WS&S investment spending)	%	0.0	0.0	100.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
		No details on per capita cost per year

2003	2004	2005	2006	2007	2008	2009
0.4	0.7	0.3	1.2	1.0	4.3	0.0
0.1	0.1	0.0	0.2	0.2	0.7	0.0
50.9	13.7	61.1	9.3	17.9	6.9	0.0
49.1	86.3	38.9	90.7	82.1	93.1	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	0.4	0.1	0.5	0.7	2.0	0.0
					25.0	
					28.0	
17.6	17.3	17.0	16.8	16.9	32.0	
			66.0			
			43.0			
78.5	99.9	76.0	65.2	113.2	59.5	0.0
57.7	99.0	60.8	93.8	91.3	39.8	0.0
100.0	100.0	100.0	62.2	118.0	61.0	0.0
21.4	9.7	28.5	7.7	5.3	2.3	0.0
78.6	90.3	86.1	92.3	98.6	112.4	0.0
98.7	98.2	98.8	98.5	98.5	88.2	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	100.0	100.0	100.0	100.0	100.0	0.0

Memo

	Unit	2000	2001	2002
Total population	inhbt	3,745,000	3,820,000	3,890,000
GDP	Loc. Curr.			612,295,517,000
GDP	US$			878,487,633
General gvt. budget	Loc. Curr.			146,344,917,000
General gvt. budget	US$			209,967,567
Total sector budget allocations	Loc. Curr.			277,528,000
Total sector budget allocations	US$			398,182
Domestic sector budget allocations	Loc. Curr.			277,528,000
Domestic sector budget allocations	US$			398,182
External sector budget allocations	Loc. Curr.			0
External sector budget allocations	US$			0
WS&S transfers to sub-national levels	Loc. Curr.			
WS&S transfers to sub-national levels	US$			0
Executed sector budget	Loc. Curr.	0	0	143,173,000
Executed sector budget	US$			205,417
Executed domestic sector budget	Loc. Curr.			143,173,000
Executed domestic sector budget	US$			205,417
Executed external sector budget	Loc. Curr.			0
Executed external sector budget	US$			0
Executed recurrent budget	Loc. Curr.			69,528,000
Executed recurrent budget	US$			99,755
Executed investment budget	Loc. Curr.			73,645,000
Executed investment budget	US$			105,662
Executed salary costs	Loc. Curr.			68,028,000
Executed salary costs	US$			97,603
Rural Investments	Loc. Curr.			
Rural Investments	US$			0
Actual WSS expenditure/GDP	%	0.00	0.00	0.02
Share of exp that is externally funded	%	0.0%	0.0%	0.0%
Recurrent exp per capita	$			0.03
Domestic-funded sector budget execution	%	0	0.00	0.52
External-funded budget execution	%		0.00	0.00

2003	2004	2005	2006	2007	2008	2009
3,959,000	4,029,000	4,101,000	4,178,000	4,257,000	4,339,000	
651,378,210,000	669,745,370,000	711,727,450,000	772,076,690,000	821,274,440,000	877,687,860,000	
1,120,746,487	1,267,773,289	1,349,327,840	1,476,556,309	1,713,606,012	1,959,976,684	
113,654,731,000	105,458,540,000	110,571,150,000	129,345,865,000	136,818,300,000	150,949,146,000	
195,551,737	199,624,404	209,626,214	247,367,205	285,474,197	337,086,589	
471,704,000	753,061,000	352,288,000	1,612,977,000	1,341,092,000	6,501,214,000	
811,603	1,425,483	667,885	3,084,734	2,798,216	14,517,949	
240,204,000	103,061,000	215,288,000	150,654,000	240,654,000	445,654,000	
413,290	195,086	408,154	288,118	502,130	995,196	
231,500,000	650,000,000	137,000,000	1,462,323,000	1,100,438,000	6,055,560,000	
398,314	1,230,397	259,731	2,796,616	2,296,087	13,522,753	
0	0	0	0	0	0	
370,104,000	752,061,000	267,801,000	1,051,232,000	1,517,984,000	3,869,520,000	
636,792	1,423,590	507,710	2,010,426	3,167,305	8,641,078	
138,604,000	102,061,000	130,801,000	141,287,000	219,757,000	177,395,000	
238,479	193,193	247,979	270,204	458,528	396,143	
231,500,000	650,000,000	137,000,000	909,945,000	1,298,227,000	3,692,125,000	
398,314	1,230,397	259,731	1,740,222	2,708,777	8,244,934	
79,204,000	73,061,000	76,288,000	80,654,000	80,654,000	90,129,000	
136,277	138,299	144,631	154,247	168,286	201,268	
290,900,000	679,000,000	230,511,000	970,578,000	1,496,763,000	4,350,523,000	
500,516	1,285,292	437,014	1,856,180	3,123,027	9,715,212	
78,154,000	71,768,000	75,388,000	79,454,000	79,454,000	79,454,000	
134,470	135,851	142,924	151,952	165,782	177,430	
0	0	0	0	0	0	
0.06	0.11	0.04	0.14	0.18	0.44	0.00
62.5%	86.4%	51.2%	86.6%	85.5%	95.4%	0.0%
0.03	0.03	0.04	0.04	0.04	0.05	
0.58	0.99	0.61	0.94	0.91		
1.00	1.00	1.00		1.18		

Cote d'Ivoire

No.	Indicators	Unit	2000	2001	2002
	WS&S Public Overall Trends				
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	0.0	0.5
2	Sector Budget Allocation (share of GDP)	%	0.0	0.0	0.1
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	0.0	33.8
4	External allocations (share of total sector public allocations)	%	0.0	0.0	66.2
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0	0.2
6	WS&S spending per capita	US$	0.00	0.00	0.68
	Access to WS&S Services				
7	Overall access to water	%			
8	Access to water – Urban areas	%			
9	Access to water – Rural areas	%			
10	Overall access to sanitation	%			
11	Access to sanitation – Urban areas	%			
12	Access to sanitation – Rural areas	%			
13	Gap between province/region with highest & lowest access rate to water	% point			
	WS&S Sector Spending Performance				
14	WSS Sector Budget Execution Rate	%	0.0	0.0	42.4
15	Execution of WS&S sector domestic resources	%	0.0	0.0	60.1
16	Execution of WS&S sector external resources	%	0.0	0.0	33.4
17	Recurrent spending (share of total sector spending)	%	0.0	0.0	1.2
18	Investment spending (share of total sector spending)	%	0.0	0.0	98.8
19	Salary costs (share of total recurrent spending)	%	0.0	0.0	38.3
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	0.0	100.0
21	Urban investment Spending (share of total WS&S investment spending)	%	0.0	0.0	0.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
3		Inconsistency in figures given in different tables on sector allocations
20+21		Rural Sector only

2003	2004	2005	2006	2007	2008	2009
0.4	0.3	0.5	0.1	0.1	0.4	0.0
0.1	0.1	0.1	0.0	0.0	0.1	0.0
26.2	23.8	20.5	83.0	77.6	23.8	0.0
73.8	76.2	79.5	17.0	22.4	76.2	0.0
0.5	0.6	0.3	1.0	0.9	0.0	0.0
0.31	0.31	0.08	0.18	0.53	0.00	0.00
			76.0			
			90.0			
			65.0			
			37.0			
			26.0			
25.2	31.2	5.7	46.0	119.9	0.0	0.0
3.1	4.7	4.2	35.0	125.8	0.0	0.0
33.1	39.5	6.1	100.0	99.4	0.0	0.0
3.2	3.5	12.2	5.6	2.5	0.0	0.0
96.8	96.5	87.8	94.4	97.5	0.0	0.0
37.8	39.4	43.7	46.4	39.3	0.0	0.0
100.0	100.0	100.0	100.0	100.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Memo

	Unit	2000	2001	2002
Total population	inhbt			9,491,168
GDP	Loc. Curr.			8,006,000,000,000
GDP	US$	0	0	11,486,564,562
General gvt. budget	Loc. Curr.			1,942,000,000,000
General gvt. budget	US$	0	0	2,786,273,842
Total sector budget allocations	Loc. Curr.	0	0	10,558,122,000
Total sector budget allocations	US$	0	0	15,148,208
Domestic sector budget allocations	Loc. Curr.			3,567,677,000
Domestic sector budget allocations	US$	0	0	5,118,705
External sector budget allocations	Loc. Curr.			6,990,445,000
External sector budget allocations	US$	0	0	10,029,503
WS&S transfers to sub-national levels	Loc. Curr.			19,600,000
WS&S transfers to sub-national levels	US$	0	0	28,121
Executed sector budget	Loc. Curr.	0	0	4,478,128,000
Executed sector budget	US$	0	0	6,424,970
Executed domestic sector budget	Loc. Curr.			2,145,438,000
Executed domestic sector budget	US$	0	0	3,078,155
Executed external sector budget	Loc. Curr.			2,332,690,000
Executed external sector budget	US$	0	0	3,346,814
Executed recurrent budget	Loc. Curr.			52,633,000
Executed recurrent budget	US$	0	0	75,515
Executed investment budget	Loc. Curr.			4,425,495,000
Executed investment budget	US$	0	0	6,349,455
Executed salary costs	Loc. Curr.			20,160,000
Executed salary costs	US$	0	0	28,924
Rural Investments	Loc. Curr.			4,425,495,000
Rural Investments	US$	0	0	6,349,455
Actual WSS expenditure/GDP	%	0.00	0.00	0.06
Share of exp that is externally funded	%	0.0%	0.0%	52.1%
Recurrent exp per capita	$			0.01
Domestic-funded sector budget execution	%	0	0.00	0.60
External-funded budget execution	%		0.00	0.33

2003	2004	2005	2006	2007	2008	2009
9,684,866	9,882,516	10,084,200	10,290,000	10,500,000		
7,984,000,000,000	8,179,000,000,000	8,631,000,000,000	9,081,000,000,000	9,487,000,000,000	10,238,000,000,000	
13,737,088,246	15,482,179,037	16,363,073,519	17,366,937,781	19,794,820,640	22,862,616,892	0
2,002,000,000,000	1,986,000,000,000	1,734,000,000,000	1,948,000,000,000	1,920,000,000,000	2,129,000,000,000	
3,444,595,525	3,759,335,807	3,287,402,327	3,725,448,166	4,006,119,493	4,754,298,824	0
7,029,311,000	5,208,315,000	7,860,958,000	2,117,601,000	2,242,077,000	8,013,434,000	0
12,094,472	9,858,915	14,903,190	4,049,801	4,678,140	17,894,908	0
1,844,380,000	1,239,774,000	1,613,263,000	1,758,103,000	1,740,035,000	1,905,736,000	
3,173,398	2,346,791	3,058,503	3,362,280	3,630,619	4,255,725	0
5,184,931,000	3,968,541,000	6,247,695,000	359,498,000	502,042,000	6,107,698,000	
8,921,074	7,512,124	11,844,687	687,521	1,047,521	13,639,183	0
33,100,000	30,000,000	21,200,000	21,200,000	21,200,000	0	
56,951	56,788	40,192	40,544	44,234	0	0
1,772,960,000	1,626,874,000	448,393,000	973,991,000	2,688,454,000	0	0
3,050,515	3,079,540	850,085	1,862,707	5,609,515	0	0
57,051,000	57,922,000	67,864,000	614,493,000	2,189,309,000		
98,161	109,642	128,660	1,175,186	4,568,038	0	0
1,715,909,000	1,568,952,000	380,529,000	359,498,000	499,145,000		
2,952,354	2,969,898	721,426	687,521	1,041,476	0	0
56,488,000	57,576,000	54,875,000	54,825,000	68,134,000		
97,192	108,987	104,035	104,850	142,163	0	0
1,716,472,000	1,569,298,000	393,518,000	919,166,000	2,620,320,000		
2,953,323	2,970,553	746,051	1,757,857	5,467,352	0	0
21,360,000	22,680,000	24,000,000	25,440,000	26,760,000		
36,752	42,931	45,500	48,653	55,835	0	0
1,716,472,000	1,569,298,000	393,518,000	919,166,000	2,620,320,000		
2,953,323	2,970,553	746,051	1,757,857	5,467,352	0	0
0.02	0.02	0.01	0.01	0.03	0.00	0.00
96.8%	96.4%	84.9%	36.9%	18.6%	0.0%	0.0%
0.01	0.01	0.01	0.01	0.01	0.00	
0.03	0.05	0.04	0.35	1.26		
0.33	0.40	0.06	1.00	0.99		

Ethiopia

No.	Indicators	Unit	2000	2001
	WS&S Public Overall Trends			
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	0.0
2	Sector Budget Allocation (share of GDP)	%	0.0	0.0
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	0.0
4	External allocations (share of total sector public allocations)	%	0.0	0.0
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0
6	WS&S spending per capita	US$	0.0	0.0
	Access to WS&S Services			
7	Overall access to water	%		
8	Access to water – Urban areas	%		
9	Access to water – Rural areas	%		
10	Overall access to sanitation	%		
11	Access to sanitation – Urban areas	%		
12	Access to sanitation – Rural areas	%		
13	Gap between province/region with highest & lowest access to water	% point		
	WS&S Sector Spending Performance			
14	WSS Sector Budget Execution Rate	%	0.0	0.0
15	Execution of WS&S sector domestic resources	%	0.0	0.0
16	Execution of WS&S sector external resources	%	0.0	0.0
17	Recurrent spending (share of total sector spending)	%	0.0	0.0
18	Investment spending (share of total sector spending)	%	0.0	0.0
19	Salary costs (share of total recurrent spending)	%	0.0	0.0
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	0.0
21	Urban investment Spending (share of total WS&S investment spending)	%	0.0	0.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
7	2008	Per JMP 2008. Sector adm data say 53.9% (PASDEP 2008)

2002	2003	2004	2005	2006	2007	2008	2009
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
						31.9	
						28.0	
0.0	0.0	0.0	0.0	0.0	0.0	63.7	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	35.0	41.0	46.0	48.0	52.0	51.0	53.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Memo

	Unit	2000	2001
Total population	inhbt		
GDP	Loc. Curr.		
GDP	US$	0	7,887,600,000
General gvt. budget	Loc. Curr.		
General gvt. budget	US$	0	0
Total sector budget allocations	Loc. Curr.	0	0
Total sector budget allocations	US$	0	0
Domestic sector budget allocations	Loc. Curr.		
Domestic sector budget allocations	US$	0	0
External sector budget allocations	Loc. Curr.		
External sector budget allocations	US$	0	0
WS&S transfers to sub-national levels	Loc. Curr.		
WS&S transfers to sub-national levels	US$	0	0
Executed sector budget	Loc. Curr.	0	0
Executed sector budget	US$	0	0
Executed domestic sector budget	Loc. Curr.		
Executed domestic sector budget	US$	0	0
Executed external sector budget	Loc. Curr.		
Executed external sector budget	US$	0	0
Executed recurrent budget	Loc. Curr.		
Executed recurrent budget	US$	0	0
Executed investment budget	Loc. Curr.		
Executed investment budget	US$	0	0
Executed salary costs	Loc. Curr.		
Executed salary costs	US$	0	0
Rural Investments	Loc. Curr.		
Rural Investments	US$	0	0
Actual WSS expenditure/GDP	%	0.00	0.00
Share of exp that is externally funded	%	0.0%	0.0%
Recurrent exp per capita	$		
Domestic-funded sector budget execution	%	0	0
External-funded budget execution	%		0

2002	2003	2004	2005	2006	2007	2008	2009
						70,557,000	
7,428,800,000	8,029,600,000	9,484,700,000	11,373,300,000	13,315,400,000	19,182,000,000	25,899,000,000	
0	0	0	0	0	0	0	
0	0	0	0	0	0	1,032,000,000	0
0	0	0	0	0	0	107,502,893	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	657,000,000	
0	0	0	0	0	0	68,439,342	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0	0	0	0	0		
0	0	0	0	0	0		

Ghana

No.	Indicators	Unit	2000	2001
	WS&S Public Overall Trends			
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	0.9
2	Sector Budget Allocation (share of GDP)	%	0.0	0.1
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	9.9
4	External allocations (share of total sector public allocations)	%	0.0	90.1
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0
6	WS&S spending per capita	US$	0.00	0.00
	Access to WS&S Services			
7	Overall access to water	%		
8	Access to water – Urban areas	%		
9	Access to water – Rural areas	%		41.0
10	Overall access to sanitation	%		
11	Access to sanitation – Urban areas	%		
12	Access to sanitation – Rural areas	%		
13	Gap between province/region with highest & lowest access rate to water	% point		
	WS&S Sector Spending Performance			
14	WSS Sector Budget Execution Rate	%	0.0	145.4
15	Execution of WS&S sector domestic resources	%	0.0	301.2
16	Execution of WS&S sector external resources	%	0.0	128.3
17	Recurrent spending (share of total sector spending)	%	0.0	10.6
18	Investment spending (share of total sector spending)	%	0.0	89.4
19	Salary costs (share of total recurrent spending)	%	0.0	33.9
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	0.0
21	Urban investment Spending (share of total WS&S investment spending)	%	0.0	100.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
10	2006	This is the % using flush toilet, pit latrine, pan/bucket (37.4%) or KVIP. No rural/urban breakdown.
Rural population		The 2002 figure includes semi-urban population
14 and 16	2001–06	These are based on the main executing agency ((the CWSA) only
Executed salary costs		These are in fact budgeted salary costs in the main executing agency (CWSA)
6	2001–06	This is average annual investment spending only, $133.8 mn over 12.6 mn rural people over 6 years (2.6 mn people served)
		Executed sector budget = budget per table 6 * Execution rate for CWSA per Table 8

2002	2003	2004	2005	2006	2007	2008	2009
2.5	2.3	1.1	2.1	2.6	0.0	0.0	0.0
0.4	0.4	0.2	0.4	0.5	0.0	0.0	0.0
3.9	4.8	10.3	4.2	3.8	0.0	0.0	0.0
96.1	84.3	82.5	91.6	93.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.57	1.63	1.34	0.85	1.31	0.00	0.00	['///////
				52.9			
				53.0			
				80.4			
				25.7			
49.0	123.4	185.3	42.7	47.0	0.0	0.0	0.0
447.1	513.4	785.7	468.3	153.9	0.0	0.0	0.0
32.9	116.9	126.2	25.4	44.2	0.0	0.0	0.0
13.3	5.0	6.3	13.8	10.9	0.0	0.0	0.0
86.8	95.1	93.8	86.2	89.1	0.0	0.0	0.0
46.6	45.7	42.7	37.9	37.7	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	100.0	100.0	100.0	100.0	0.0	0.0	0.0

Memo

	Unit	2000	2001
Total population	inhbt	18,900,000	
GDP	Loc. Curr.		38,071,000,000,000
GDP	US$	0	5,314,913,565
General gvt. budget	Loc. Curr.		6,329,000,000,000
General gvt. budget	US$	0	883,561,975
Total sector budget allocations	Loc. Curr.	0	56,700,000,000
Total sector budget allocations	US$	0	7,915,621
Domestic sector budget allocations	Loc. Curr.		5,600,000,000
Domestic sector budget allocations	US$	0	781,790
External sector budget allocations	Loc. Curr.		51,100,000,000
External sector budget allocations	US$	0	7,133,831
WS&S transfers to sub-national levels	Loc. Curr.		
WS&S transfers to sub-national levels	US$	0	0
Executed sector budget	Loc. Curr.	0	82,467,000,000
Executed sector budget	US$	0	11,512,831
Executed domestic sector budget	Loc. Curr.		16,866,000,000
Executed domestic sector budget	US$	0	2,354,583
Executed external sector budget	Loc. Curr.		65,601,000,000
Executed external sector budget	US$	0	9,158,248
Executed recurrent budget	Loc. Curr.		8,762,000,000
Executed recurrent budget	US$	0	1,223,222
Executed investment budget	Loc. Curr.		73,705,000,000
Executed investment budget	US$	0	10,289,609
Executed salary costs	Loc. Curr.		3,286,000,000
Executed salary costs	US$	0	414,681
Rural Investments	Loc. Curr.		
Rural Investments	US$	0	0
Rural population			
Actual WSS expenditure/GDP	%	0.00	0.22
Share of exp that is externally funded	%	0.0%	79.5%
Recurrent exp per capita	$		

2002	2003	2004	2005	2006	2007	2008	2009
20,475,000	20,955,000	21,435,000	21,915,000	22,393,000	22,871,000	23,351,000	23,837,000
48,862,000,000,000	66,158,000,000,000	79,888,000,000,000	97,261,000,000,000	118,404,000,000,000			
6,166,197,192	7,632,755,292	8,881,429,354	10,731,905,210	12,919,828,792	0	0	
7,456,000,000,000	10,442,000,000,000	13,005,000,000,000	18,528,000,000,000	22,359,000,000,000			
940,918,633	1,204,710,402	1,445,811,495	2,044,403,612	2,439,735,583	0	0	
187,600,000,000	239,800,000,000	139,400,000,000	396,600,000,000	571,800,000,000	0	0	0
23,674,401	27,666,113	15,497,587	43,761,360	62,392,809	0	0	
7,300,000,000	11,600,000,000	14,400,000,000	16,500,000,000	21,800,000,000			
921,232	1,338,311	1,600,899	1,820,631	2,378,739	0	0	
180,300,000,000	228,200,000,000	125,000,000,000	380,100,000,000	550,000,000,000			
22,753,169	26,327,802	13,896,689	41,940,728	60,014,069	0	0	
0	0	0	0	0	0	0	
92,009,400,000	295,968,000,000	258,365,000,000	169,370,000,000	268,755,000,000	0	0	0
11,600,457	34,139,984	28,717,029	18,686,101	29,324,620	0	0	
32,641,400,000	59,549,000,000	113,139,000,000	77,264,000,000	33,548,000,000			
4,119,220	6,870,264	12,578,060	8,525,410	3,660,640	0	0	
59,368,000,000	236,419,000,000	145,226,000,000	92,106,000,000	235,207,000,000			
7,492,014	27,276,042	16,145,284	10,163,096	25,664,962	0	0	
12,226,000,000	14,702,000,000	16,156,000,000	23,415,000,000	29,300,000,000			
1,542,874	1,696,193	1,796,119	2,583,642	3,197,113	0	0	
79,783,000,000	281,266,000,000	242,208,000,000	145,954,000,000	239,455,000,000			
10,068,309	32,450,113	26,927,113	16,104,754	26,128,489	0	0	
5,703,000,000	6,712,000,000	6,895,000,000	8,880,000,000	11,053,000,000			
719,697	774,374	766,541	979,831	1,206,065	0	0	
0	0	0	0	0	0	0	
15,400,000				11,600,000			
0.19	0.45	0.32	0.17	0.23	0.00	0.00	0.00
64.6%	79.9%	56.2%	54.4%	87.5%	0.0%	0.0%	0.0%
0.08	0.08	0.08	0.12	0.14	0.00	0.00	

Madagascar

No.	Indicators	Unit	2000	2001	2002
	WS&S Public Overall Trends				
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.6	1.2	0.7
2	Sector Budget Allocation (share of GDP)	%	0.1	0.3	0.2
3	Domestic sector allocations (share of total sector public allocations)	%	31.5	38.1	34.8
4	External allocations (share of total sector public allocations)	%	68.5	61.9	65.2
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0	0.0
6	WS&S spending per capita	US$	0.3	0.5	0.2
	Access to WS&S Services				
7	Overall access to water	%			
8	Access to water – Urban areas	%			
9	Access to water – Rural areas	%	22.2	24.0	25.3
10	Overall access to sanitation	%			
11	Access to sanitation – Urban areas	%			
12	Access to sanitation – Rural areas	%			
13	Gap between province/region with highest & lowest access rate to water	% point			
	WS&S Sector Spending Performance				
14	WSS Sector Budget Execution Rate	%	58.9	43.1	31.9
15	Execution of WS&S sector domestic resources	%	64.7	85.7	55.9
16	Execution of WS&S sector external resources	%	56.3	16.9	19.1
17	Recurrent spending (share of total sector spending)	%	9.1	5.2	12.1
18	Investment spending (share of total sector spending)	%	90.9	94.8	87.9
19	Salary costs (share of total recurrent spending)	%	16.8	18.9	18.7
20	Rural investment Spending (share of total WS&S investment spending)	%	100.0	100.0	100.0
21	Urban investment Spending (share of total WS&S investment spending)	%	0.0	0.0	0.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
20+21		Rural Sector only

2003	2004	2005	2006	2007	2008	2009
1.6	1.3	1.3	1.4	0.0	0.0	0.0
0.3	0.3	0.3	0.3	0.0	0.0	0.0
21.6	39.0	43.4	38.5	0.0	0.0	0.0
78.4	61.0	56.6	61.5	0.0	0.0	0.0
0.0	0.0	0.0	0.1	0.0	0.0	0.0
0.4	0.4	1.0	0.0	0.0	0.0	0.0
27.2	29.5	30.1				
	44.0					
		29.0				
26.6	45.7	83.6	0.0	0.0	0.0	0.0
75.0	61.6	69.0	0.0	0.0	0.0	0.0
13.2	35.6	94.7	0.0	0.0	0.0	0.0
6.5	3.8	1.5	0.0	0.0	0.0	0.0
93.5	96.2	98.5	0.0	0.0	0.0	0.0
21.4	25.3	25.9	0.0	0.0	0.0	0.0
100.0	100.0	100.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Memo

	Unit	2000	2001	2002
Total population	inhbt	12,236,820	12,486,551	12,741,379
GDP	Loc. Curr.	5,248,400,000,000	5,968,600,000,000	6,008,400,000,000
GDP	US$	3,877,661,518	4,529,563,091	4,397,276,671
General gvt. budget	Loc. Curr.	1,299,700,000,000	1,459,800,000,000	1,595,500,000,000
General gvt. budget	US$	960,253,920	1,107,840,398	1,167,674,410
Total sector budget allocations	Loc. Curr.	7,300,000,000	18,100,000,000	11,200,000,000
Total sector budget allocations	US$	5,393,440	13,736,067	8,196,774
Domestic sector budget allocations	Loc. Curr.	2,300,000,000	6,900,000,000	3,900,000,000
Domestic sector budget allocations	US$	1,699,303	5,236,401	2,854,234
External sector budget allocations	Loc. Curr.	5,000,000,000	11,200,000,000	7,300,000,000
External sector budget allocations	US$	3,694,137	8,499,666	5,342,540
WS&S transfers to sub-national levels	Loc. Curr.	0	0	0
WS&S transfers to sub-national levels	US$	0	0	0
Executed sector budget	Loc. Curr.	4,301,100,000	7,801,400,000	3,572,300,000
Executed sector budget	US$	3,177,770	5,920,473	2,614,405
Executed domestic sector budget	Loc. Curr.	1,487,800,000	5,911,000,000	2,180,800,000
Executed domestic sector budget	US$	1,099,227	4,485,851	1,596,029
Executed external sector budget	Loc. Curr.	2,813,300,000	1,890,400,000	1,391,500,000
Executed external sector budget	US$	2,078,543	1,434,622	1,018,376
Executed recurrent budget	Loc. Curr.	391,500,000	408,800,000	431,100,000
Executed recurrent budget	US$	289,251	310,238	315,503
Executed investment budget	Loc. Curr.	3,909,600,000	7,392,600,000	3,141,200,000
Executed investment budget	US$	2,888,519	5,610,235	2,298,902
Executed salary costs	Loc. Curr.	65,800,000	77,200,000	80,800,000
Executed salary costs	US$	48,615	58,587	59,134
Rural Investments	Loc. Curr.	3,909,600,000	7,392,600,000	3,141,200,000
Rural Investments	US$	2,888,519	5,610,235	2,298,902
Actual WSS expenditure/GDP	%	0.08	0.13	0.06
Share of exp that is externally funded	%	65.4%	24.2%	39.0%
Recurrent exp per capita	$			0.02
Domestic-funded sector budget execution	%	0.65	0.86	0.56
External-funded budget execution	%	0.56	0.17	0.19

2003	2004	2005	2006	2007	2008	2009
13,001,407	13,266,742	13,537,492	13,813,767			
6,778,600,000,000	8,155,600,000,000	10,095,100,000,000	11,794,600,000,000			
5,473,995,440	4,363,948,854	5,039,925,013	5,505,573,834	0	0	
1,444,000,000,000	1,699,100,000,000	2,386,400,000,000	2,792,500,000,000			
1,166,088,782	909,164,929	1,191,397,515	1,303,504,564	0	0	
23,100,000,000	21,800,000,000	31,800,000,000	39,000,000,000	0	0	0
18,654,190	11,664,879	15,875,981	18,204,719	0	0	
5,000,000,000	8,500,000,000	13,800,000,000	15,000,000,000			
4,037,704	4,548,233	6,889,577	7,001,815	0	0	
18,100,000,000	13,300,000,000	18,000,000,000	24,000,000,000			
14,616,487	7,116,646	8,986,404	11,202,904	0	0	
0	0	0	24,000,000			
0	0	0	11,203	0	0	
6,149,100,000	9,966,900,000	26,574,200,000	0	0	0	0
4,965,649	5,333,150	13,267,028	0	0	0	
3,752,000,000	5,236,300,000	9,527,000,000				
3,029,893	2,801,872	4,756,304	0	0	0	
2,397,100,000	4,730,600,000	17,047,200,000				
1,935,756	2,531,279	8,510,724	0	0	0	
400,200,000	383,400,000	398,800,000				
323,178	205,152	199,099	0	0	0	
5,748,900,000	9,583,500,000	26,175,400,000				
4,642,471	5,127,998	13,067,929	0	0	0	
85,700,000	97,100,000	103,300,000				
69,206	51,957	51,572	0	0	0	
5,748,900,000	9,583,500,000	26,175,400,000				
4,642,471	5,127,998	13,067,929	0	0	0	
0.09	0.12	0.26	0.00	0.00	0.00	0.00
39.0%	47.5%	64.1%	0.0%	0.0%	0.0%	0.0%
0.02	0.02	0.01	0.00	0.00	0.00	
0.75	0.62	0.69				
0.13	0.36	0.95				

Mali

No.	Indicators	Unit	2000	2001	2002
	WS&S Public Overall Trends				
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	1.9	1.4
2	Sector Budget Allocation (share of GDP)	%	0.0	0.6	0.4
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	14.0	11.2
4	External allocations (share of total sector public allocations)	%	0.0	86.0	88.8
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.2	0.2
6	WS&S spending per capita	US$	0.0	1.2	1.0
	Access to WS&S Services				
7	Overall access to water	%			
8	Access to water – Urban areas	%			
9	Access to water – Rural areas	%		45.0	45.5
10	Overall access to sanitation	%		0.5	0.5
11	Access to sanitation – Urban areas	%			
12	Access to sanitation – Rural areas	%			
13	Gap between province/region with highest & lowest access rate to water	% point			
	WS&S Sector Spending Performance				
14	WSS Sector Budget Execution Rate	%	0.0	67.0	65.3
15	Execution of WS&S sector domestic resources	%	0.0	74.5	81.0
16	Execution of WS&S sector external resources	%	0.0	65.8	63.3
17	Recurrent spending (share of total sector spending)	%	0.0	4.9	6.6
18	Investment spending (share of total sector spending)	%	0.0	95.1	93.4
19	Salary costs (share of total recurrent spending)	%	0.0	79.3	76.4
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	100.0	100.0
21	Urban investment Spending (share of total WS&S investment spending)	%	0.0	0.0	0.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
20+21		Rural Sector only

2003	2004	2005	2006	2007	2008	2009
1.4	1.6	2.3	2.1	0.0	0.0	0.0
0.4	0.5	0.7	1.0	0.0	0.0	0.0
16.0	14.3	8.0	10.6	0.0	0.0	0.0
84.0	85.7	92.0	89.4	0.0	0.0	0.0
0.2	0.2	0.1	0.1	0.0	0.0	0.0
0.9	1.6	3.0	3.5	0.0	0.0	0.0
46.2	47.9	49.4	50.3			
0.5	0.5	0.5	0.5			
			9.0			
			30.0			
44.1	63.3	74.8	63.5	0.0	0.0	0.0
75.0	81.7	97.1	98.1	0.0	0.0	0.0
38.3	60.3	72.9	59.5	0.0	0.0	0.0
10.0	6.7	3.8	3.5	0.0	0.0	0.0
90.0	93.3	96.2	96.5	0.0	0.0	0.0
77.9	79.8	77.2	73.0	0.0	0.0	0.0
100.0	100.0	100.0	100.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Memo

	Unit	2000	2001	2002
Total population	inhbt		8,622,251	8,798,215
GDP	Loc. Curr.		1,928,000,000,000	2,330,000,000,000
GDP	US$	0	2,630,148,323	3,342,954,713
General gvt. budget	Loc. Curr.		587,899,111,000	679,330,540,000
General gvt. budget	US$	0	802,003,040	974,665,764
Total sector budget allocations	Loc. Curr.	0	11,082,000,000	9,690,000,000
Total sector budget allocations	US$	0	15,117,896	13,902,674
Domestic sector budget allocations	Loc. Curr.		1,554,000,000	1,087,000,000
Domestic sector budget allocations	US$	0	2,119,943	1,559,567
External sector budget allocations	Loc. Curr.		9,528,000,000	8,603,000,000
External sector budget allocations	US$	0	12,997,953	12,343,107
WS&S transfers to sub-national levels	Loc. Curr.		21,800,000	22,000,000
WS&S transfers to sub-national levels	US$	0	29,739	31,564
Executed sector budget	Loc. Curr.	0	7,422,000,000	6,329,000,000
Executed sector budget	US$	0	10,124,980	9,080,498
Executed domestic sector budget	Loc. Curr.		1,157,000,000	881,000,000
Executed domestic sector budget	US$	0	1,578,362	1,264,010
Executed external sector budget	Loc. Curr.		6,265,000,000	5,448,000,000
Executed external sector budget	US$	0	8,546,618	7,816,488
Executed recurrent budget	Loc. Curr.		362,000,000	415,000,000
Executed recurrent budget	US$	0	493,835	595,419
Executed investment budget	Loc. Curr.		7,060,000,000	5,914,000,000
Executed investment budget	US$	0	9,631,145	8,485,079
Executed salary costs	Loc. Curr.		287,000,000	317,000,000
Executed salary costs	US$	0	391,521	454,814
Rural Investments	Loc. Curr.		7,060,000,000	5,914,000,000
Rural Investments	US$	0	9,631,145	8,485,079
Actual WSS expenditure/GDP	%	0.00	0.38	0.27
Share of exp that is externally funded	%	0.0%	84.4%	86.1%
Recurrent exp per capita	$			0.07
Domestic-funded sector budget execution	%	0.00	0.74	0.81
External-funded budget execution	%	0.00	0.66	0.63

2003	2004	2005	2006	2007	2008	2009
8,982,579	9,171,745	9,365,836	9,564,978			
2,568,000,000,000	2,610,000,000,000	2,753,000,000,000	2,905,000,000,000			
4,418,442,211	4,940,516,846	5,219,272,552	5,555,660,638	0	0	0
737,552,452,000	787,198,778,000	850,631,194,000	1,307,152,654,000			
1,269,015,922	1,490,102,998	1,612,668,377	2,499,861,118	0	0	0
10,306,000,000	12,360,000,000	19,637,000,000	27,599,000,000	0	0	0
17,732,268	23,396,471	37,228,789	52,781,645	0	0	0
1,645,000,000	1,773,000,000	1,576,000,000	2,922,000,000			
2,830,349	3,356,144	2,987,858	5,588,172	0	0	0
8,661,000,000	10,587,000,000	18,061,000,000	24,677,000,000			
14,901,919	20,040,326	34,240,930	47,193,472	0	0	0
22,600,000	23,300,000	25,800,000	32,600,000			
38,885	44,105	48,913	62,346	0	0	0
4,548,000,000	7,830,000,000	14,689,000,000	17,537,000,000	0	0	0
7,825,185	14,821,551	27,848,127	33,538,596	0	0	0
1,233,000,000	1,449,000,000	1,531,000,000	2,866,000,000			
2,121,472	2,742,839	2,902,545	5,481,075	0	0	0
3,315,000,000	6,381,000,000	13,158,000,000	14,671,000,000			
5,703,713	12,078,712	24,945,582	28,057,521	0	0	0
457,000,000	521,000,000	552,000,000	618,000,000			
786,304	986,210	1,046,509	1,181,893	0	0	0
4,092,000,000	7,309,000,000	14,137,000,000	16,918,000,000			
7,040,602	13,835,340	26,801,619	32,354,791	0	0	0
356,000,000	416,000,000	426,000,000	451,000,000			
612,525	787,454	807,632	862,514	0	0	0
4,092,000,000	7,309,000,000	14,137,000,000	16,918,000,000			
7,040,602	13,835,340	26,801,619	32,354,791	0	0	0
0.18	0.30	0.53	0.60	0.00	0.00	0.00
72.9%	81.5%	89.6%	83.7%	0.0%	0.0%	0.0%
0.09	0.11	0.11	0.12	0.00	0.00	
0.75	0.82	0.97				
0.38	0.60	0.73				

Mozambique

No.	Indicators	Unit	2000	2001	2002
	WS&S Public Overall Trends				
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	0.0	2.6
2	Sector Budget Allocation (share of GDP)	%	0.0	0.0	0.7
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	0.0	0.0
4	External allocations (share of total sector public allocations)	%	0.0	0.0	100.0
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0	0.0
6	WS&S spending per capita	US$	0.0	0.0	1.1
	Access to WS&S Services				
7	Overall access to water	%	38.0		
8	Access to water – Urban areas	%	83.0		
9	Access to water – Rural areas	%	24.0		
10	Overall access to sanitation	%	10.0		
11	Access to sanitation – Urban areas	%	32.0		
12	Access to sanitation – Rural areas	%	2.0		
13	Gap between province/region with highest & lowest access rate to water	% point	>80		
	WS&S Sector Spending Performance				
14	WSS Sector Budget Execution Rate	%	0.0	0.0	78.2
15	Execution of WS&S sector domestic resources	%	0.0	0.0	0.0
16	Execution of WS&S sector external resources	%	0.0	0.0	0.0
17	Recurrent spending (share of total sector spending)	%	67.2	61.2	56.0
18	Investment spending (share of total sector spending)	%	32.8	38.8	44.0
19	Salary costs (share of total recurrent spending)	%	0.0	0.0	0.0
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	0.0	0.0
21	Urban investment Spending (share of total WS&S investment spending)	%	100.0	100.0	100.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
Ex'd sector budget	2002–2008	Per Ministry of Finance
Ex'd recurrent	2000–2008	Expenditure as reported by sector (varies from exp reported by Min of Finance , mostly above, up to 2x)

2003	2004	2005	2006	2007	2008	2009
1.6	2.1	3.6	3.5	2.3	3.5	0.0
0.4	0.5	0.8	0.9	0.7	0.9	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	100.0	100.0	100.0	100.0	100.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.1	2.0	4.1	2.9	4.4	5.3	0.0
					43.0	
			71.0		70.0	
			26.0		30.0	
					19.0	
					48.0	
					7.0	
					60.0	
244.1	145.3	147.9	93.7	183.4	127.6	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
33.6	25.1	17.9	26.8	19.4	13.7	0.0
66.0	74.9	82.1	73.2	80.6	86.3	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	100.0	100.0	100.0	100.0	100.0	0.0

Memo

	Unit	2000	2001	2002
Total population	inhbt			19,259,465
GDP	Loc. Curr.			
GDP	US$	0	3,697,200,000	4,091,700,000
General gvt. budget	Loc. Curr.			24,871,000,000
General gvt. budget	US$	0	0	1,050,386,245
Total sector budget allocations	Loc. Curr.	0	0	636,000,000
Total sector budget allocations	US$	0	0	26,860,426
Domestic sector budget allocations	Loc. Curr.			
Domestic sector budget allocations	US$	0	0	0
External sector budget allocations	Loc. Curr.			
External sector budget allocations	US$	0	0	0
WS&S transfers to sub-national levels	Loc. Curr.			
WS&S transfers to sub-national levels	US$	0	0	0
Executed sector budget	Loc. Curr.	72,917,000	229,051,000	497,356,000
Executed sector budget	US$	4,788,586	11,063,320	21,005,022
Executed domestic sector budget	Loc. Curr.	58,376,000	155,532,000	296,763,000
Executed domestic sector budget	US$	3,833,653	7,512,302	12,533,303
Executed external sector budget	Loc. Curr.	14,541,000	73,519,000	200,593,000
Executed external sector budget	US$	954,933	3,551,018	8,471,719
Executed recurrent budget	Loc. Curr.	49,011,000	140,116,000	278,300,000
Executed recurrent budget	US$	3,218,638	6,767,699	11,753,548
Executed investment budget	Loc. Curr.	23,906,000	88,935,000	219,056,000
Executed investment budget	US$	1,569,949	4,295,621	9,251,474
Executed salary costs	Loc. Curr.			
Executed salary costs	US$	0	0	0
Rural Investments	Loc. Curr.			
Rural Investments	US$	0	0	0
Actual WSS expenditure/GDP	%	0.00	0.30	0.51
Share of exp that is externally funded	%	19.9%	32.1%	40.3%
Urban population				6205400
Domestic-funded sector budget execution	%	0	0	0
External-funded budget execution	%	0	0	0
GDP deflator				95.04
External funding	%	19.9	32.1	40.3
Recurrent exp per capita	$			0.61

2003	2004	2005	2006	2007	2008	2009
19,783,627	20,310,610	20,834,379	21,352,466	21,869,362	22,382,533	
4,789,400,000	5,903,900,000	6,823,000,000	7,608,200,000	8,030,000,000	9,867,000,000	
25,044,000,000	29,503,000,000	36,912,000,000	48,569,000,000	58,256,000,000	64,067,000,000	
1,053,053,499	1,306,521,080	1,600,626,860	1,912,106,699	2,254,459,374	2,636,432,352	
410,000,000	618,000,000	1,320,000,000	1,694,000,000	1,366,000,000	2,261,000,000	0
17,239,735	27,367,726	57,239,582	66,690,868	52,863,079	93,042,808	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
996,564,000	897,773,000	1,952,701,000	1,586,463,000	2,505,818,000	2,885,946,000	0
42,088,260	39,757,291	84,675,598	62,457,257	96,973,099	118,760,070	
377,798,000	322,561,000	455,299,000	554,236,000	750,024,000	677,055,000	
15,885,701	14,284,403	19,743,276	21,819,646	29,025,313	27,861,609	
618,766,000	575,212,000	1,497,402,000	1,032,227,000	1,755,794,000	2,208,891,000	
26,017,956	25,472,888	64,932,322	40,637,612	67,947,786	90,898,461	
336,119,000	225,169,000	350,332,000	424,642,000	486,474,000	395,896,000	
14,133,177	9,971,462	15,191,559	16,717,676	18,826,144	16,291,586	
660,445,000	672,604,000	1,602,369,000	1,161,821,000	2,019,344,000	2,490,050,000	
27,770,481	29,785,829	69,484,039	45,739,581	78,146,955	102,468,484	
0	0	0	0	0	0	
0	0	0	0	0	0	
0.88	0.67	1.24	0.82	1.21	1.20	0.00
61.8%	64.1%	76.7%	65.1%	70.1%	76.5%	0.0%
6524640	6852800	7187861	7533503	7886092	8245725	
0	0	0				
0	0	0				
100	107.47	116.91	127.78	137.38	147.98	
62.1	64.1	76.7	65.1	70.1	76.5	
0.71	0.49	0.73	0.78	0.86	0.73	

Niger

No.	Indicators	Unit	2000	2001	2002
	WS&S Public Overall Trends				
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	0.0	0.0
2	Sector Budget Allocation (share of GDP)	%	0.0	0.0	0.3
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	0.0	13.1
4	External allocations (share of total sector public allocations)	%	0.0	0.0	86.9
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0	0.0
6	WS&S spending per capita	US$	0.0	0.0	0.6
	Access to WS&S Services				
7	Overall access to water	%			
8	Access to water – Urban areas	%			
9	Access to water – Rural areas	%			55.0
10	Overall access to sanitation	%			
11	Access to sanitation – Urban areas	%			
12	Access to sanitation – Rural areas	%			
13	Gap between province/region with highest & lowest access rate to water	% point			
	WS&S Sector Spending Performance				
14	WSS Sector Budget Execution Rate	%	0.0	0.0	81.4
15	Execution of WS&S sector domestic resources	%	0.0	0.0	81.0
16	Execution of WS&S sector external resources	%	0.0	0.0	81.5
17	Recurrent spending (share of total sector spending)	%	0.0	0.0	13.0
18	Investment spending (share of total sector spending)	%	0.0	0.0	87.0
19	Salary costs (share of total recurrent spending)	%	0.0	0.0	82.5
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	0.0	100.0
21	Urban investment Spending (share of total WS&S investment spending)	%	0.0	0.0	0.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
20+21		Rural Sector only
		Heavy inconsistency in financial figures

2003	2004	2005	2006	2007	2008	2009
0.0	0.0	4.2	3.2	5.4	0.0	0.0
1.2	1.4	0.9	0.6	1.3	0.0	0.0
15.1	24.0	19.2	37.5	31.2	0.0	0.0
84.9	76.0	80.8	62.5	68.8	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0	2.1	1.9	1.3	3.6	0.0	0.0
57.0	59.0	59.0	58.0	62.0		
			6.0			
30.5	55.7	71.7	63.3	72.9	0.0	0.0
42.5	55.5	68.6	58.7	63.4	0.0	0.0
28.3	55.8	72.5	66.0	77.2	0.0	0.0
10.2	5.9	6.4	11.5	4.3	0.0	0.0
89.8	94.1	93.6	88.5	95.7	0.0	0.0
83.1	69.9	72.6	70.6	73.0	0.0	0.0
100.0	100.0	100.0	100.0	100.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Memo

	Unit	2000	2001	2002
Total population	inhbt			9,715,571
GDP	Loc. Curr.			1,499,100,000,000
GDP	US$	0	0	2,150,825,498
General gvt. budget	Loc. Curr.			
General gvt. budget	US$	0	0	0
Total sector budget allocations	Loc. Curr.	0	0	5,190,000,000
Total sector budget allocations	US$	0	0	7,446,324
Domestic sector budget allocations	Loc. Curr.			680,000,000
Domestic sector budget allocations	US$	0	0	975,626
External sector budget allocations	Loc. Curr.			4,510,000,000
External sector budget allocations	US$	0	0	6,470,698
WS&S transfers to sub-national levels	Loc. Curr.			
WS&S transfers to sub-national levels	US$	0	0	0
Executed sector budget	Loc. Curr.	0	0	4,226,000,000
Executed sector budget	US$	0	0	6,063,230
Executed domestic sector budget	Loc. Curr.			551,000,000
Executed domestic sector budget	US$	0	0	790,544
Executed external sector budget	Loc. Curr.			3,675,000,000
Executed external sector budget	US$	0	0	5,272,686
Executed recurrent budget	Loc. Curr.			550,000,000
Executed recurrent budget	US$	0	0	789,109
Executed investment budget	Loc. Curr.			3,676,000,000
Executed investment budget	US$	0	0	5,274,121
Executed salary costs	Loc. Curr.			454,000,000
Executed salary costs	US$	0	0	651,374
Rural Investments	Loc. Curr.			3,676,000,000
Rural Investments	US$	0	0	5,274,121
Actual WSS expenditure/GDP	%	0.00	0.00	0.28
Share of exp that is externally funded	%	0.0%	0.0%	87.0%
Recurrent exp per capita	$			0.08
Domestic-funded sector budget execution	%	0.00	0.00	0.81
External-funded budget execution	%	0.00	0.00	0.81

2003	2004	2005	2006	2007	2008	2009
10,029,158	10,353,053	10,687,602	11,033,163	11,388,099		
1,534,300,000,000	1,539,400,000,000	1,755,200,000,000	1,872,200,000,000	2,004,200,000,000		
2,639,881,575	2,913,958,480	3,327,594,327	3,580,484,629	4,181,804,525	0	0
		358,400,000,000	376,600,000,000	491,600,000,000		
0	0	679,472,315	720,227,813	1,025,733,512	0	0
18,231,000,000	20,796,000,000	15,189,000,000	11,951,000,000	26,739,000,000	0	0
31,367,843	39,365,130	28,796,052	22,855,663	55,791,473	0	0
2,751,000,000	4,987,000,000	2,915,000,000	4,481,000,000	8,339,000,000		
4,733,308	9,439,984	5,526,400	8,569,678	17,399,495	0	0
15,480,000,000	15,809,000,000	12,274,000,000	7,470,000,000	18,400,000,000		
26,634,535	29,925,146	23,269,652	14,285,984	38,391,978	0	0
0	0	0	0	0	0	0
5,554,000,000	11,589,000,000	10,895,000,000	7,560,000,000	19,500,000,000	0	0
9,556,086	21,937,031	20,655,276	14,458,105	40,687,151	0	0
1,169,000,000	2,768,000,000	2,001,000,000	2,629,000,000	5,287,000,000		
2,011,355	5,239,598	3,793,594	5,027,825	11,031,434	0	0
4,385,000,000	8,821,000,000	8,894,000,000	4,931,000,000	14,213,000,000		
7,544,731	16,697,433	16,861,682	9,430,280	29,655,717	0	0
567,000,000	684,000,000	700,000,000	867,000,000	848,000,000		
975,567	1,294,756	1,327,094	1,658,092	1,769,369	0	0
4,987,000,000	10,905,000,000	10,195,000,000	6,693,000,000	18,652,000,000		
8,580,518	20,642,274	19,328,181	12,800,013	38,917,782	0	0
471,000,000	478,000,000	508,000,000	612,000,000	619,000,000		
810,392	904,815	963,091	1,170,418	1,291,556	0	0
4,987,000,000	10,905,000,000	10,195,000,000	6,693,000,000	18,652,000,000		
8,580,518	20,642,274	19,328,181	12,800,013	38,917,782	0	0
0.36	0.75	0.62	0.40	0.97	0.00	0.00
79.0%	76.1%	81.6%	65.2%	72.9%	0.0%	0.0%
0.10	0.13	0.12	0.15	0.16	0.00	
0.42	0.56	0.69	0.59	0.63		
0.28	0.56	0.72	0.66	0.77		

Republic of Congo

No.	Indicators	Unit	2000	2001	2002
	WS&S Public Overall Trends				
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	0.0	0.6
2	Sector Budget Allocation (share of GDP)	%	0.0	0.0	0.17
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	0.0	0.0
4	External allocations (share of total sector public allocations)	%	0.0	0.0	100.0
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0	0.0
6	WS&S spending per capita	US$	0.0	0.0	1.1
	Access to WS&S Services				
7	Overall access to water	%			
8	Access to water – Urban areas	%			54.0
9	Access to water – Rural areas	%			
10	Overall access to sanitation	%			
11	Access to sanitation – Urban areas	%			
12	Access to sanitation – Rural areas	%			
13	Gap between province/region with highest & lowest access rate to water	% point			
	WS&S Sector Spending Performance				
14	WSS Sector Budget Execution Rate	%	0.0	0.0	69.9
15	Execution of WS&S sector domestic resources	%	0.0	0.0	0.0
16	Execution of WS&S sector external resources	%	0.0	0.0	0.0
17	Recurrent spending (share of total sector spending)	%	0.0	0.0	4.4
18	Investment spending (share of total sector spending)	%	0.0	0.0	95.6
19	Salary costs (share of total recurrent spending)	%	0.0	0.0	0.0
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	0.0	10.0
21	Urban investment Spending (share of total WS&S investment spending)	%	0.0	0.0	90.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
20+21		Share of rural investments estimated at 10% of total investments

2003	2004	2005	2006	2007	2008	2009
0.1	0.3	0.5	0.9	1.4	2.3	0.0
0.0	0.1	0.1	0.2	0.4	0.6	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	100.0	100.0	100.0	100.0	100.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.7	2.2	1.5	8.9	3.9	4.5	0.0
52.0	52.0	46.0	45.0	46.0	45.0	
					15.0	
					27.1	
					5.0	
402.0	231.3	68.8	170.7	42.9	27.3	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.1	3.4	5.6	1.7	3.8	7.5	0.0
95.9	96.6	94.4	98.3	96.2	92.5	0.0
0.0	0.0	10.1	5.5	7.2	4.2	0.0
10.0	10.0	10.0	10.0	10.0	10.0	0.0
90.0	90.0	90.0	90.0	90.0	90.0	0.0

Memo

	Unit	2000	2001	2002
Total population	inhbt			3,228,600
GDP	Loc. Curr.			2,104,900,000,000
GDP	US$	0	0	3,019,993,723
General gvt. budget	Loc. Curr.			584,100,000,000
General gvt. budget	US$	0	0	838,034,269
Total sector budget allocations	Loc. Curr.	0	0	3,635,000,000
Total sector budget allocations	US$	0	0	5,215,296
Domestic sector budget allocations	Loc. Curr.			
Domestic sector budget allocations	US$	0	0	0
External sector budget allocations	Loc. Curr.			
External sector budget allocations	US$	0	0	0
WS&S transfers to sub-national levels	Loc. Curr.			
WS&S transfers to sub-national levels	US$	0	0	0
Executed sector budget	Loc. Curr.	0	0	2,540,800,000
Executed sector budget	US$	0	0	3,645,399
Executed domestic sector budget	Loc. Curr.			905,700,000
Executed domestic sector budget	US$	0	0	1,299,448
Executed external sector budget	Loc. Curr.			1,635,100,000
Executed external sector budget	US$	0	0	2,345,951
Executed recurrent budget	Loc. Curr.			110,700,000
Executed recurrent budget	US$	0	0	158,826
Executed investment budget	Loc. Curr.			2,430,100,000
Executed investment budget	US$	0	0	3,486,573
Executed salary costs	Loc. Curr.			
Executed salary costs	US$	0	0	0
Rural Investments	Loc. Curr.			243,010,000
Rural Investments	US$	0	0	348,657
Actual WSS expenditure/GDP	%	0.0%	0.00	0.12
Share of exp that is externally funded	%	0.0%	0.0%	64.4%
Recurrent exp per capita	$			0.05
Domestic-funded sector budget execution	%	0	0	0
External-funded budget execution	%	0	0	0

2003	2004	2005	2006	2007	2008	2009
3,317,300	3,408,600	3,502,300	3,598,600	3,697,600	3,799,300	
2,031,800,000,000	2,455,800,000,000	3,210,700,000,000	4,042,600,000,000	3,664,400,000,000	4,801,900,000,000	
3,495,868,725	4,648,628,839	6,087,002,682	7,731,261,169	7,645,845,974	10,723,188,128	0
606,100,000,000	656,300,000,000	775,800,000,000	1,127,100,000,000	1,201,400,000,000	1,237,900,000,000	
1,042,841,832	1,242,322,301	1,470,799,726	2,155,519,830	2,506,745,812	2,764,371,308	0
794,000,000	1,750,000,000	4,137,900,000	9,836,900,000	16,293,400,000	28,325,900,000	0
1,366,138	3,312,607	7,844,834	18,812,557	33,996,514	63,254,952	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
3,191,700,000	4,048,000,000	2,848,800,000	16,794,000,000	6,989,600,000	7,727,700,000	0
5,491,566	7,662,533	5,400,895	32,117,647	14,583,944	17,256,832	0
794,400,000	3,872,000,000	2,585,200,000	16,539,900,000	6,668,100,000	7,571,000,000	
1,366,827	7,329,380	4,901,149	31,631,694	13,913,128	16,906,903	0
2,397,300,000	176,000,000	263,600,000	254,100,000	321,500,000	156,700,000	
4,124,740	333,154	499,746	485,953	670,816	349,929	0
129,900,000	136,900,000	158,800,000	291,400,000	267,000,000	583,200,000	
223,503	259,141	301,061	557,287	557,101	1,302,352	0
3,061,800,000	3,911,100,000	2,690,000,000	16,502,600,000	6,722,600,000	7,144,500,000	
5,268,063	7,403,393	5,099,834	31,560,360	14,026,843	15,954,480	0
		16,000,000	16,000,000	19,200,000	24,600,000	
0	0	30,334	30,599	40,061	54,935	0
306,180,000	391,110,000	269,000,000	1,650,260,000	672,260,000	714,450,000	
526,806	740,339	509,983	3,156,036	1,402,684	1,595,448	0
0.16	0.16	0.09	0.42	0.19	0.16	0.00
75.1%	4.3%	9.3%	1.5%	4.6%	2.0%	0.0%
0.07	0.08	0.09	0.15	0.15	0.34	
0	0	0				
0	0	0				

Sierra Leone

No.	Indicators	Unit	2000	2001	2002
	WS&S Public Overall Trends				
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	0.0	0.0
2	Sector Budget Allocation (share of GDP)	%	0.0	0.0	0.9
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	0.0	100.0
4	External allocations (share of total sector public allocations)	%	0.0	0.0	0.0
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0	0.0
6	WS&S spending per capita	US$	0.00	0.00	0.38
	Access to WS&S Services				
7	Overall access to water	%	54.0	57.0	
8	Access to water – Urban areas	%			
9	Access to water – Rural areas	%			
10	Overall access to sanitation	%	63.0		39.0
11	Access to sanitation – Urban areas	%			
12	Access to sanitation – Rural areas	%			
13	Gap between province/region with highest & lowest access rate to water	% point			
	WS&S Sector Spending Performance				
14	WSS Sector Budget Execution Rate	%	0.0	0.0	20.6
15	Execution of WS&S sector domestic resources	%	0.0	0.0	20.6
16	Execution of WS&S sector external resources	%	0.0	0.0	0.0
17	Recurrent spending (share of total sector spending)	%	0.0	0.0	0.0
18	Investment spending (share of total sector spending)	%	0.0	0.0	100.0
19	Salary costs (share of total recurrent spending)	%	0.0	0.0	0.0
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	0.0	0.0
21	Urban investment Spending (share of total WS&S investment spending)	%	0.0	0.0	100.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
10	2000–08	The definition of improved sanitation changes from one M&E program to another, and from year to year.
14–16	2002–09	No budget data for WSS externally funded expenditure. Execution rates are solely for government expenditure, which is almost entirely recurrent..

2003	2004	2005	2006	2007	2008	2009
0.0	0.0	0.0	0.0	0.0	0.0	2.4
0.3	0.2	0.4	0.2	0.2	0.2	0.2
100.0	100.0	100.0	100.0	100.0	100.0	100.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	9.7	1.3	6.4	6.7
0.32	0.65	1.20	2.65	1.62	1.32	1.37
	53.0	47.0			50.5	
					81.7	
					35.2	
		30.0			13.0	
					26.1	
					6.5	
54.4	62.2	12.8	39.8	19.9	35.8	30.3
54.4	62.2	12.8	39.8	19.9	35.8	30.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	10.8	5.1	6.4	12.3	0.0
100.0	100.0	89.3	95.0	93.5	88.5	0.0
0.0	0.0	0.0	23.0	42.0	27.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	100.0	100.0	100.0	100.0	100.0	0.0

Memo

	Unit	2000	2001	2002
Total population	inhbt		4,368,000	4,540,000
GDP	Loc. Curr.			1,964,695,698,342
GDP	US$	0	805,700,000	936,000,000
General gvt. budget	Loc. Curr.			
General gvt. budget	US$	0	0	0
Total sector budget allocations	Loc. Curr.	0	0	17,483,300,000
Total sector budget allocations	US$			8,329,213
Domestic sector budget allocations	Loc. Curr.			17,483,300,000
Domestic sector budget allocations	US$	0	0	8,329,213
External sector budget allocations	Loc. Curr.			
External sector budget allocations	US$	0	0	0
WS&S transfers to sub-national levels	Loc. Curr.			
WS&S transfers to sub-national levels	US$	0	0	0
Executed sector budget	Loc. Curr.	0	0	3,596,500,000
Executed sector budget	US$	0	0	1,713,407
Executed domestic sector budget	Loc. Curr.			3,596,500,000
Executed domestic sector budget	US$	0	0	1,713,407
Executed external sector budget	Loc. Curr.			
Executed external sector budget	US$	0	0	0
Executed recurrent budget	Loc. Curr.			
Executed recurrent budget	US$	0	0	0
Executed investment budget	Loc. Curr.			3,596,500,000
Executed investment budget	US$	0	0	1,713,407
Executed salary costs	Loc. Curr.			
Executed salary costs	US$	0	0	0
Rural Investments	Loc. Curr.			
Rural Investments	US$	0	0	0
Actual WSS expenditure/GDP	%	0.00	0.00	0.18
Share of exp that is externally funded	%	0.0%	0.0%	0.0%

2003	2004	2005	2006	2007	2008	2009
4,733,000	4,926,000	5,107,000	5,271,000	5,420,000	5,560,000	5,696,000
2,323,757,867,500	2,894,439,378,333	3,518,361,740,000	4,274,034,927,500	4,967,349,226,667	5,828,861,157,042	6,574,932,300,000
989,700,000	1,071,500,000	1,217,600,000	1,443,000,000	1,664,000,000	1,955,000,000	1,942,000,000
0	0	0	0	0	0	0
5,837,600,000	4,937,400,000	10,882,000,000	5,010,800,000	6,433,500,000	6,528,200,000	8,240,300,000
2,781,089	2,352,225	5,184,290	2,387,193	3,064,982	3,110,098	3,925,758
5,837,600,000	4,937,400,000	10,882,000,000	5,010,800,000	6,433,500,000	6,528,200,000	8,240,300,000
2,781,089	2,352,225	5,184,290	2,387,193	3,064,982	3,110,098	3,925,758
0	0	0	0	0	0	
			687,600,000	114,700,000	592,900,000	787,400,000
0	0	0	232,148	38,423	198,859	264,094
3,554,400,000	8,624,100,000	17,763,200,000	41,398,900,000	26,246,200,000	21,870,300,000	27,323,800,000
1,513,837	3,192,679	6,146,609	13,971,654	8,792,544	7,336,322	7,826,450
3,554,400,000	3,954,100,000	1,911,200,000	2,811,900,000	1,820,200,000	3,317,300,000	4,759,800,000
1,513,837	1,463,779	661,409	949,354	609,744	1,112,622	1,189,950
	4,670,000,000	15,852,000,000	38,587,000,000	24,426,000,000	18,553,000,000	22,564,000,000
0	1,728,900	5,485,200	13,027,300	8,182,800	6,223,700	6,636,500
		1,911,200,000	2,118,200,000	1,681,500,000	2,696,100,000	3,958,400,000
0	0	661,409	715,147	563,282	904,272	
3,554,400,000	8,624,000,000	15,852,000,000	39,293,000,000	24,531,500,000	19,366,549,700	23,365,500,000
1,513,837	3,192,541	5,485,904	13,266,106	8,217,746	6,495,541	
			487,100,000	706,100,000	729,000,000	864,800,000
0	0	0	164,455	236,535	244,507	290,054
0	0	0	0	0	0	
0.15	0.30	0.50	0.97	0.53	0.38	0.40
0.0%	54.2%	89.2%	93.2%	93.1%	84.8%	84.8%

Tanzania

No.	Indicators	Unit	2000	2001	2002
	WS&S Public Overall Trends				
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	0.0	0.0
2	Sector Budget Allocation (share of GDP)	%	0.00	0.35	0.29
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	0.0	0.0
4	External allocations (share of total sector public allocations)	%	0.0	100.0	100.0
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0	0.0
6	WS&S spending per capita	US$	0.0	0.78	0.69
	Access to WS&S Services				
7	Overall access to water	%	66.0		
8	Access to water – Urban areas	%	90.0		
9	Access to water – Rural areas	%	56.0		
10	Overall access to sanitation	%			
11	Access to sanitation – Urban areas	%		96.8	
12	Access to sanitation – Rural areas	%		91.7	
13	Gap between province/region with highest & lowest access rate to water	% point			
	WS&S Sector Spending Performance				
14	WSS Sector Budget Execution Rate	%	0.0	82.9	88.5
15	Execution of WS&S sector domestic resources	%	0.0	0.0	0.0
16	Execution of WS&S sector external resources	%	0.0	0.0	0.0
17	Recurrent spending (share of total sector spending)	%	13.6	20.8	26.0
18	Investment spending (share of total sector spending)	%	86.4	79.2	74.0
19	Salary costs (share of total recurrent spending)	%	0.0	0.0	0.0
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	0.0	0.0
21	Urban investment Spending (share of total WS&S investment spending)	%	100.0	100.0	100.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
10	all	The PER provides sanitation access in only one year, using JMP data. National HBS data are much higher (rural 91.7, urban 96.8 in FY2002, rural 90.5 and urban 97.7 in FY2007).
2	all	Actual for 2005/06 and 2006/07. Budget figures from 2007/08

2003	2004	2005	2006	2007	2008	2009
0.0	0.0	0.0	2.4	4.0	6.5	4.4
0.58	0.54	1.16	0.95	0.00	0.00	0.00
0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	100.0	100.0	100.0	100.0	100.0	0.0
0.0	0.0	11.2	12.1	10.3	7.7	0.0
0.30	1.02	2.97	2.22	3.73	4.32	0.00
				53.0		
				80.0		
				42.0		
			33.0	93.0		
				97.4		
				90.5		
18.8	63.4	86.0	73.4	85.4	55.4	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
89.4	18.4	23.6	22.4	17.5	16.7	0.0
10.6	81.6	76.4	77.6	82.5	83.3	0.0
0.0	0.0	0.0	31.9	36.6	32.4	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	100.0	100.0	100.0	100.0	100.0	0.0

Memo

	Unit	2000	2001	2002
Total population	inhbt		35,026,000	35,958,000
GDP	Loc. Curr.			
GDP	US$	0	9,440,900,000	9,758,100,000
General gvt. budget	Loc. Curr.			
General gvt. budget	US$	0	0	0
Total sector budget allocations	Loc. Curr.	0	28,715,925,500	26,914,572,800
Total sector budget allocations	US$	0	32,765,339	27,845,078
Domestic sector budget allocations	Loc. Curr.			
Domestic sector budget allocations	US$	0	0	0
External sector budget allocations	Loc. Curr.			
External sector budget allocations	US$	0	0	0
WS&S transfers to sub-national levels	Loc. Curr.	0	0	0
WS&S transfers to sub-national levels	US$	0	0	0
Executed sector budget	Loc. Curr.	24,886,471,838	23,793,604,668	23,821,237,780
Executed sector budget	US$	31,092,213	27,148,891	24,644,798
Executed domestic sector budget	Loc. Curr.			
Executed domestic sector budget	US$	0	0	0
Executed external sector budget	Loc. Curr.			
Executed external sector budget	US$	0	0	0
Executed recurrent budget	Loc. Curr.	3,377,959,838	4,939,597,668	6,194,858,780
Executed recurrent budget	US$	4,220,295	5,636,161	6,409,031
Executed investment budget	Loc. Curr.	21,508,512,000	18,854,007,000	17,626,379,000
Executed investment budget	US$	26,871,918	21,512,729	18,235,768
Executed salary costs	Loc. Curr.			
Executed salary costs	US$	0	0	0
Rural Investments	Loc. Curr.			
Rural Investments	US$	0	0	0
Actual WSS expenditure/GDP	%	0.00	0.29	0.25
Share of exp that is externally funded	%	0.0%	0.0%	0.0%
Recurrent exp per capita	$			0.18
Domestic sector budget execution rate	%			

2003	2004	2005	2006	2007	2008	2009
36,930,000	37,945,000	39,007,000	40,117,000	41,276,000	42,484,000	43,739,000
10,282,800,000	11,351,400,000	11,578,700,000	12,783,800,000	0	0	0
0	0	0	0	0	0	0
62,141,902,700	66,182,327,400	152,106,949,300	152,035,837,972	224,683,273,335	396,844,848,026	0
59,842,802	60,754,810	134,735,002	121,444,078	180,463,352	331,723,895	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	17,066,100,000	18,429,200,000	23,126,314,533	30,463,947,759	
0	0	15,117,002	14,720,984	18,574,824	25,464,913	0
11,674,499,185	41,964,946,102	130,832,912,171	111,663,849,232	191,932,002,032	219,694,921,171	0
11,242,571	38,523,461	115,890,647	89,195,504	154,157,859	183,643,697	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
10,442,472,207	7,700,793,116	30,854,986,324	25,010,163,051	33,612,905,139	36,583,285,458	
10,056,126	7,069,262	27,331,076	19,977,765	26,997,548	30,580,087	0
1,232,026,978	34,264,152,986	99,977,925,847	86,653,686,181	158,319,096,893	183,111,635,713	
1,186,445	31,454,199	88,559,570	69,217,739	127,160,311	153,063,610	0
			7,971,032,111	12,315,954,664	11,869,534,134	
0	0	0	6,367,148	9,892,051	9,921,782	0
0	0	0	0	0	0	0
0.11	0.34	1.00	0.70	0.00	0.00	0.00
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.27	0.19	0.70	0.50	0.65	0.72	

Togo

No.	Indicators	Unit	2000	2001	2002
	WS&S Public Overall Trends				
1	Sector Budget Allocation (share of total general gvt. budget)	%	0.0	0.0	3.3
2	Sector Budget Allocation (share of GDP)	%	0.0	0.0	0.6
3	Domestic sector allocations (share of total sector public allocations)	%	0.0	0.0	7.3
4	External allocations (share of total sector public allocations)	%	0.0	0.0	92.7
5	Sector allocations transferred to sub-national levels (share of total sector allocations)	%	0.0	0.0	0.0
6	WS&S spending per capita	US$	0.0	0.0	0.17
	Access to WS&S Services				
7	Overall access to water	%			
8	Access to water – Urban areas	%			
9	Access to water – Rural areas	%			
10	Overall access to sanitation	%			
11	Access to sanitation – Urban areas	%			
12	Access to sanitation – Rural areas	%			
13	Gap between province/region with highest & lowest access rate to water	% point			
	WS&S Sector Spending Performance				
14	WSS Sector Budget Execution Rate	%	0.0	0.0	9.7
15	Execution of WS&S sector domestic resources	%	0.0	0.0	73.4
16	Execution of WS&S sector external resources	%	0.0	0.0	4.7
17	Recurrent spending (share of total sector spending)	%	0.0	0.0	25.1
18	Investment spending (share of total sector spending)	%	0.0	0.0	66.2
19	Salary costs (share of total recurrent spending)	%	0.0	0.0	140.2
20	Rural investment Spending (share of total WS&S investment spending)	%	0.0	0.0	52.0
21	Urban investment Spending (share of total WS&S investment spending)	%	0.0	0.0	48.0

Notes to Indicator Data		
Ind. No.	**Year(s)**	**Comment**
		Report also includes solid waste disposal. Disaggregation on sub-sectors not feasible in all cases.
19		Salary costs are based on allocated budget
20		Based on rural/urban investment distribution in 2008 (??)

2003	2004	2005	2006	2007	2008	2009
2.8	4.9	1.2	1.9	0.8	1.0	0.0
0.5	0.9	0.2	0.4	0.2	0.2	0.0
7.0	4.4	17.4	64.9	35.5	19.7	0.0
93.0	95.6	82.6	35.1	64.5	80.3	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.39	0.61	0.61	1.44	0.18	0.58	0.00
				34.0		
				39.0		
				29.0		
22.9	17.6	71.1	101.9	28.5	54.9	0.0
75.0	83.0	107.8	94.3	80.3	92.4	0.0
18.9	14.7	63.3	116.0	0.0	45.7	0.0
9.2	10.9	10.7	6.5	48.8	13.6	0.0
82.2	84.7	80.7	89.1	0.0	84.9	0.0
175.1	96.4	94.8	91.2	67.8	74.3	0.0
52.0	52.0	52.0	52.0	0.0	52.0	0.0
48.0	48.0	48.0	48.0	0.0	48.0	0.0

Memo

	Unit	2000	2001	2002
Total population	inhbt			4,989,988
GDP	Loc. Curr.			1,026,248,000,000
GDP	US$	0	0	1,472,403,686
General gvt. budget	Loc. Curr.			183,201,877,000
General gvt. budget	US$	0	0	262,847,888
Total sector budget allocations	Loc. Curr.	0	0	5,961,943,000
Total sector budget allocations	US$	0	0	8,553,865
Domestic sector budget allocations	Loc. Curr.			436,943,000
Domestic sector budget allocations	US$	0	0	626,902
External sector budget allocations	Loc. Curr.			5,525,000,000
External sector budget allocations	US$	0	0	7,926,963
WS&S transfers to sub-national levels	Loc. Curr.			
WS&S transfers to sub-national levels	US$	0	0	0
Executed sector budget	Loc. Curr.	0	0	579,208,000
Executed sector budget	US$	0	0	831,015
Executed domestic sector budget	Loc. Curr.			320,638,000
Executed domestic sector budget	US$	0	0	460,034
Executed external sector budget	Loc. Curr.			258,570,000
Executed external sector budget	US$	0	0	370,982
Executed recurrent budget	Loc. Curr.			145,638,000
Executed recurrent budget	US$	0	0	208,953
Executed investment budget	Loc. Curr.			383,570,000
Executed investment budget	US$	0	0	550,325
Executed salary costs	Loc. Curr.			204,163,000
Executed salary costs	US$	0	0	292,922
Rural Investments	Loc. Curr.			199,456,400
Rural Investments	US$	0	0	286,169
Actual WSS expenditure/GDP	%	0.00	0.00	0.06
Share of exp that is externally funded	%	0.0%	0.0%	44.6%
Recurrent exp per capita	$			0.04
Domestic-funded sector budget execution	%	0.00	0.00	0.73
External-funded budget execution	%	0.00	0.00	0.05

2003	2004	2005	2006	2007	2008	2009
5,147,720	5,313,512	5,487,479	6,469,738	6,660,410	6,859,622	
972,643,000,000	1,023,211,000,000	1,113,072,000,000	1,160,112,000,000	1,212,824,000,000	1,427,249,000,000	
1,673,507,355	1,936,854,859	2,110,216,541	2,218,653,554	2,530,582,223	3,187,209,132	0
179,181,413,000	199,742,937,000	202,773,652,000	254,101,424,000	259,627,485,000	326,915,062,000	
308,295,451	378,097,067	384,428,244	485,955,690	541,718,088	730,038,466	0
5,080,066,000	9,709,206,000	2,469,585,000	4,770,918,000	2,009,680,000	3,233,015,000	0
8,740,646	18,378,734	4,681,960	9,124,131	4,193,239	7,219,690	0
355,066,000	423,206,000	429,585,000	3,094,918,000	713,680,000	637,015,000	
610,918	801,094	814,428	5,918,869	1,489,108	1,422,527	0
4,725,000,000	9,286,000,000	2,040,000,000	1,676,000,000	1,296,000,000	2,596,000,000	
8,129,727	17,577,640	3,867,532	3,205,262	2,704,131	5,797,163	0
0	0	0	0	0	0	0
1,161,110,000	1,712,201,000	1,754,709,000	4,863,046,000	573,035,000	1,773,743,000	0
1,997,779	3,241,057	3,326,663	9,300,321	1,195,649	3,960,970	0
266,270,000	351,421,000	462,929,000	2,918,906,000	573,035,000	588,343,000	
458,138	665,211	877,644	5,582,255	1,195,649	1,313,837	0
894,840,000	1,360,780,000	1,291,780,000	1,944,140,000	0	1,185,400,000	
1,539,641	2,575,845	2,449,020	3,718,066	0	2,647,133	0
106,673,000	186,706,000	188,023,000	314,266,000	279,511,000	241,493,000	
183,539	353,419	356,463	601,017	583,205	539,281	0
954,840,000	1,450,780,000	1,416,778,000	4,333,780,000	0	1,506,000,000	
1,642,876	2,746,208	2,685,997	8,288,128	0	3,363,069	0
186,776,000	179,916,000	178,159,000	286,568,000	189,540,000	179,320,000	
321,363	340,566	337,763	548,046	395,479	400,442	0
496,516,800	754,405,600	736,724,560	2,253,565,600	0	783,120,000	
854,295	1,428,028	1,396,719	4,309,826	0	1,748,796	0
0.12	0.17	0.16	0.42	0.05	0.12	0.00
77.1%	79.5%	73.6%	40.0%	0.0%	66.8%	0.0%
0.04	0.07	0.06	0.09	0.09	0.08	
0.75	0.83	1.08				
0.19	0.15	0.63				

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