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IMPACT



A Performance Review of Kenya's
Water Services Sector - 2010/11

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Water Services Regulatory Board

Ensuring Access to Quality Water Services for All

Issue No. 5
2012

IMPACT

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Water Services Sector - 2010/11

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Abbreviations

BOD	Board of Directors
CoK	Constitution of Kenya
CWSB	Coast Water Services Board
DPP	Director of Public Prosecutions
DWO	District Water Officer
DWQ	Drinking Water Quality
ETA	Extraordinary Tariff Adjustment
ISO	International Standards Organization
KEBS	Kenya Bureau of Standards
KPIs	Key Performance Indicators
KPLC	Kenya Power and Lighting Company
KSh	Kenyan Shilling
L/c/d	Litres per capita per day
LVNWSB	Lake Victoria North Water Services Board
LVSWSB	Lake Victoria South Water Services Board
MDGs	Millennium Development Goals
MoU	Memorandum of Understanding
MSLs	Minimum Service Levels
MWI	Ministry of Water and Irrigation
NGOs	Non Governmental Organizations
NRW	Non-Revenue Water
NWSB	Northern Water Services Board
NWSS	National Water Services Strategy
O+M	Operation and Maintenance
QMS	Quality Management System
RTA	Regular Tariff Adjustment
RVWSB	Rift Valley Water Services Board
SPA	Service Provision Agreement
TaWSB	Tanathi Water Services Board
TWSB	Tana Water Services Board
WAGs	Water Action Groups
WARIS	Water Regulation Information System
WaSBIT	Water Services Board Investment Tool
Wasreb	Water Services Regulatory Board
WaSSIP	Water and Sanitation Service Improvement Project
WSB	Water Services Board
WSP	Water Service Provider
WSS	Water Supply and Sanitation
WSTF	Water Services Trust Fund
WSTF UPC	Water Services Trust Fund Urban Projects Concept



Foreword

Behavioural Change Key to Realising Sector Growth

The past that is dead remains present in the future that has still to be born - Lewis Mumford

It is now over eight years since the operationalisation of the Water Act 2002. Undoubtedly, the sector has made tremendous strides in the management and delivery of water services. However, huge challenges remain. They include persistently high levels of Non-Revenue Water, slow progress in coverage, financing gaps (despite the financing levels reaching over two (2) per cent of GDP), low efficiency and effectiveness of investments, and resistance to compliance. To these has been added the challenge of ensuring a seamless transition to a devolved system of governance with no disruption to service provision.

If there is one lesson to be learnt over the past eight years, it must be that reform efforts envisaged in the water sector must be supported by a change in attitudes, managerial practices and organizational capacities. Changing and creating institutions is easy but are the objectives of policy makers and sector players in general in line with the needs and aspirations of the sector?

Access to water services is driven by the quality of leadership and well targeted investments. From Wasreb's perspective, behavioural change is the real challenge in the sector. This has a bearing on the utilization of resources and forms the foundation of a sustainable financing model for the water services sector.

This issue of *Impact* covers the period 2010/11. It shows that urban water and sanitation coverage have steadily increased over recent years, now reaching levels of 52% and 69% respectively. However, a gap of almost 30 percentage points needs to be closed to reach the sector target of 80% for urban water coverage by 2015. Coverage levels in urban low-income and rural areas remain unsatisfactory. This means that efforts to increase access have to be reinforced by translating investments into



Eng Robert Gakubia
CEO, Wasreb

outcomes, ensuring value for money. Water Services Boards (WSBs) have to take responsibility and move towards professional investment planning.

Looking at Water Service Providers (WSPs), it emerges that lack of commercial viability and poor corporate governance present challenges to the sustainability of the water services sector.

These issues provide a critical insight on how to move forward in improving the provision of water services. The signing of the water services rules by the Minister for Water and Irrigation, Hon Charity Ngilu, is a step in the right direction. The sector now awaits their gazettelement.

The analysis carried herein shows that the water services sector has managed to build a critical mass of WSPs who are eager to change the status quo. I would like to congratulate those WSPs who, through sustained commitment, have shown good performance. Nevertheless, they should not become complacent because expectations from Kenyans are still huge.

I hope respective Boards of Directors, politicians and the public will use the information provided in this report to scrutinise the performance of their WSPs and WSBs and put pressure on them to achieve even better results in future.

Eng Robert Gakubia
CEO, Wasreb

Chapter ONE



Sector Performance Overview

More People Getting Access to Water and Sanitation Services

1.0 Introduction

Since the beginning of reforms in the water sector in the year 2002, a positive trend has been registered in overall sector funding, with budgetary allocation increasing by over 300% since 2004/2005. Budgetary allocation to the sector increased by 39%, from KSh 27.8 billion in 2009/10 to KSh 38.6 billion in 2010/11. The development budget increased by 41%, from KSh 23.3 billion in 2009/10 to KSh 32.8 billion in 2010/11, accounting for 85% of the total approved sector budget. Of the total development budget, KSh 25.4 billion was allocated to water supply and sanitation (77%) up from 17.7 in 2009/10. This represents an increase of 44 percent (Ministry of Water and Irrigation, *Annual Water Sector Review Report 2010-2011*).

At the same time, rapid population growth (estimated 2.46% p.a in 2011) and accelerating urbanization (estimated at 4.2% p.a between 2010 and 2015) present growing challenges to the water sector in meeting national and international development targets. While urban water and sanitation coverage have steadily increased over the recent years, reaching a level of 52% and 69% respectively, a gap of almost 30 percentage points needs to be closed to reach the sector target of 80% for urban water coverage by 2015.

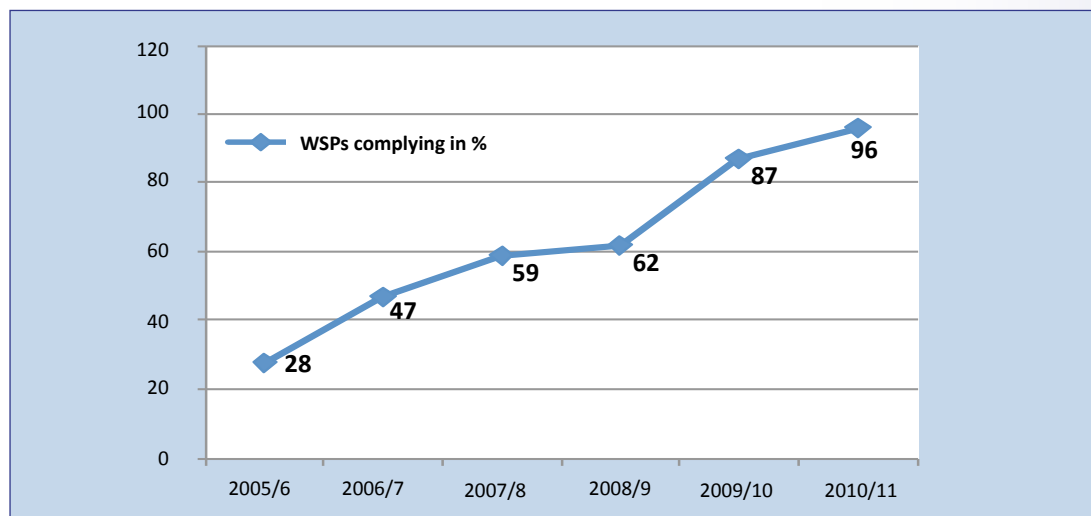
Efforts to increase access have to be reinforced by effectively translating the growing investments into impact and value for money. This can only be achieved on the basis of elaborate investment and financing plans which guide the planning and implementation of investments and target investments to underserved areas. Unfortunately, Water Services Boards (WSBs), who have the responsibility to extend coverage through professional planning, implementation and monitoring of investments under the Water Act 2002, have not been able to discharge their mandate effectively. Their reporting on investments is inadequate. One of the main concerns has been the impact of investments they make; i.e. how their investments translate into increased access in line with the human right to water and sanitation.

This report covers the period 2010/11 and analyses the performance of a total of 100 Water Service Providers (WSPs), comprising 65 urban and 35 rural providers, with a population of 16.5 million living in the service areas of urban WSPs and 4.1 million in the service areas of rural WSPs.

1.1 Data Submission

Compliance with data submission has continued to show a positive trend, rising to 96% (100/104 WSPs) in 2010/11, compared to 87% (90/104 WSPs) in 2009/10 and 28% (25/91 WSPs) in 2005/06 (Figure 1.1).

Fig 1.1: Compliance of WSPs with WARIS Data Submission Requirements



The increasing number of WSPs who submit data indicates a growing appreciation of the importance of accurate information in the planning and operation of water services. Challenges, however, remain in terms of data quality and the timeliness of data submission.

Reporting on water and sanitation coverage in urban underserved/low income areas (LIAS), which is crucial for the improvement of coverage levels, has proven to be a major challenge. Only five (5) WSPs submitted information on this. They are Oololaiser, Kericho, Nyanas, Mikutra, and Nol Turesh. This is despite the fact that the MajiData pro-poor baseline survey is available to every WSP and provides information on all urban LIAS in Kenya and more specifically on all WSP service areas. For the coming reporting period, Wasreb will make reporting on LIAS obligatory to WSPs.

1.2 Performance Summary

Table 1.1 summarizes the performance of urban and rural Providers for the years 2010/11 and 2009/10 looking at nine (9) Key Performance Indicators (KPIs).

Table 1.1: Sector Performance Summary

Key Performance Indicators	Urban WSPs		Trend	Rural WSPs		Trend
	2010/11	2009/10		2010/11	2009/10	
Water Coverage (%)	52	48	↑	45	37	↑
Sanitation Coverage (%)	69	55	↑	82	80	↑
Non- Revenue Water	45	45	→	63	61	↓
Water Quality (Residual Chlorine)	91	88	↑	86	91	↓
Water Quality (Bacteriological)	81	71	↑	80	61	↑
Hours of Supply	13	14	↓	12	15	↓
Metering Ratio	87	82	↑	72	58	↑
Revenue Collection Efficiency	84	82	↑	87	82	↑
Staff Productivity (Staff per 1000 Connections)	7	8	↑	10	11	↑
Operations & Maintenance Cost Coverage	131	133	↓	120	113	↑

Sector Benchmarks: ● good ● acceptable ● not acceptable ● benchmark varies

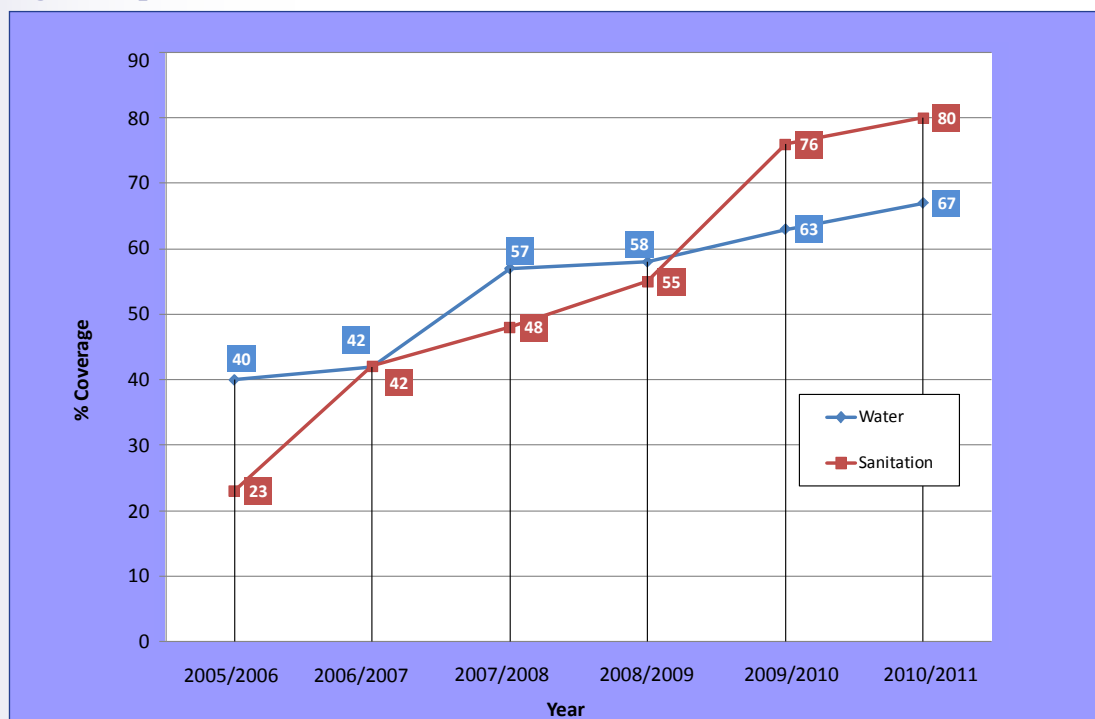
The fact that water and sanitation coverage has improved for both urban and rural Providers shows that Kenya's water services sector is making progress; more and more people are getting access to water and sanitation services in line with the human right to water and sanitation. For both categories of Providers, performance has improved on most of the KPIs. However, there is still a long way to go considering that the national sector coverage target for urban water services is 80% by 2015.

Two notable exceptions to progress in urban and rural contexts are Non-Revenue Water and Hours of Supply, which are key in ensuring quality services. Low Hours of Supply are reflected in very low per capita consumption figures: in the period under review, average per capita consumption per day for urban providers was 44 litres and for rural providers only 24 litres. High levels of Non-Revenue Water have huge financial implications. At a total billing of KSh 541 million for rural WSPs and KSh 11.6 billion for urban WSPs and considering their average NRW is 63% and 45% respectively, the total amount lost in 2010/11 can be estimated at KSh 10.4 billion. This is roughly one third of the development budget for water supply and sanitation for the same year!

The fact that urban WSPs have not been able to increase their Operation and Maintenance Cost Coverage shows that too many urban WSPs are still operating under unjustified and unsustainable tariffs.

Figure 1.2 shows a positive trend in water and sanitation coverage for the 24 WSPs who have submitted data since 2005/06, and who in 2010/11 produced 268,144,564m³ of drinking-water (about 70% of the sector total), serving 5.5 out of 10.4 million people (53% of the sector total). This is a good indication that overall, the urban water services sector is recording growth.

Fig 1.2: Improvement Over Time (24 WSPs)



1.2.1. Performance Summary of WSPs

In the year 2010/11, the performance of WSPs was analysed on the basis of nine (9) Key Performance Indicators (KPIs). These are Water Coverage, Sanitation Coverage, Non-Revenue Water, Water Quality (Residual Chlorine and Bacteriological), Hours of Supply, Metering Ratio, Revenue Collection Efficiency, Staff Productivity and Operation and Maintenance Cost Coverage.

Corporate governance has proven to be one of the main constraints to sector performance, translating into poor management and underperformance. Refusal to comply with Wasreb's Corporate Governance Guideline therefore renders WSPs ineligible for ranking, irrespective of their performance.

As of May 2012, a majority of urban WSPs were either compliant or in the process of complying with the Guideline but seven Providers persistently refused to comply, de facto being in breach with conditions of the licence and the Water Act 2002 and, from a wider perspective, the aspirations of Vision 2030. These Providers are Nairobi, Thika, Eldoret, Kisumu, Nanyuki, Embu and Nakuru.

Tables 1.2 and 1.3 show the best and worst performing WSPs for the urban and rural categories respectively.

Table 1.2: Top and Worst Performing Urban WSPs

URBAN WSPs			
TOP TEN PERFORMERS		TEN WORST PERFORMERS	
WSP	Ranking	WSP	Ranking
Nyeri	1	Mikutra	65
Meru	2	Kapsabet Nandi	64
Ruiru Juja	3	Kwale	63
Malindi	4	Gulf	62
Kericho	5	Nyanas	61
Murang'a	6	Amatsi	60
Kiambu	7	Loitoktok	59
Nyahururu	8	Chemosit	58
Nzoia	9	Olkejuado	57
Lamu	10	Moyale	56

Table 1.3: Top and Worst Performing Rural WSPs

RURAL WSPs			
TOP TEN PERFORMERS		TEN WORST PERFORMERS	
WSP	Ranking	WSP	Ranking
Githunguri	1	Nyandarua	35
Muthambi 4K	2	Gitei	33
Kathita Kiirua	3	Gichugu	32
Nithi	4	Nyankanja	31
Ngagaka	5	Embe	30
Tetu Aberdare	6	Nyasare	29
Ngandori Nginda	7	Kinja	28
Tuuru	8	Ruiru Thau	27
Othaya Mukurweini	9	Matungulu Kangundo	26
Tia Wira	10	Imetha	25

Wasreb congratulates the best performing WSPs for their efforts to spearhead the progressive realization of the human right to water and sanitation. Wasreb also recognizes the very good performance of Runda Water Ltd. (reaching a total of 174 out of 200 scores), which, as a privately owned company, has been ranked separately from the publicly owned WSPs. The worst performers,

**Runda Water Ltd.
ranked separately as
top performing
privately owned WSP**

as well as WSPs who failed to submit complete information, are cautioned that this amounts to resistance to embrace transparency and accountability, undermines the goals of Vision 2030 and could lead to the revoking Service Provision Agreements (SPAs).

Besides the annual reporting on performance, Wasreb also assesses WSP performance over time. The latter has been calculated based on the total performance scores achieved in 2009/10 and 2010/11. Tables 1.4 and 1.5 indicate the top improvers as well as the bottom losers for urban (including privately owned) and rural categories respectively.

Table 1.4: Top Improvers and Bottom Losers (Urban WSPs)

TOP 10 IMPROVERS				BOTTOM 10 LOSERS			
WSP	Score 2010/11	Score 2009/10	Change in Score	WSP	Score 2010/11	Score 2009/10	Change in Score
Tavevo	66	7	59	Kiambere Mwingi	65	106	-41
Runda	174	124	50	Nanyuki	111	137	-26
Western	79	35	44	Kikuyu	60	85	-25
Karuri	91	49	42	Kibwezi	72	97	-25
Mandera	65	35	30	Narok	54	76	-22
Nol Turesh	47	18	29	Iten Tambach	68	90	-22
Ruiru Juja	129	100	29	Wote	67	87	-20
Kiambu	112	90	22	Mombasa	56	76	-20
Nyahururu	105	85	20	Eldoret	124	142	-18
Kilifi	75	57	18	Gusii	42	60	-18

Table 1.5: Top Improvers and Bottom Losers (Rural WSPs)

TOP 10 IMPROVERS				BOTTOM 10 LOSERS			
WSP	Score 2010/11	Score 2009/10	Change in Score	WSP	Score 2010/11	Score 2009/10	Change in Score
Kathita Kiirua	131	66	65	Gichugu	22	57	-35
Nithi	119	59	60	Ngandori Nginda	103	128	-25
Githunguri	132	81	51	Embe	45	60	-15
Gatanga	92	52	40	Gatamathi	85	98	-13
Upper Chania	67	29	38	Kyeni	67	74	-7
Mawingo	62	26	36	Nyandarua	8	11	-3
Gatundu South	92	57	35	Tetu Aberdare	114	116	-2
Tuuru	101	66	35	Imetha	58	59	-1
Muthambi 4K	132	101	31	*) only 8 rural WSPs recorded a negative performance over time.			
Engineer Town	83	57	26				

Wasreb commends the 10 urban and rural WSPs that have impressively improved their performance over the one year and encourages them to keep up their endeavours for the benefit of the consumer. On the other hand, the 10 urban and 8 rural WSPs who lost so much ground at the expense of their consumers are urged to swiftly put in place strategies to reverse this negative trend.

The ultimate responsibility for WSP performance lies with their Boards of Directors (BoDs). Respective BoDs need to ensure that strategies are put in place to improve corporate governance and enhance professionalism in underperforming WSPs.

1.2.2. Sustainability of WSPs

Cost-reflective tariffs form the basis for the sustainability of the water services sector, allowing WSPs to effectively operate and maintain their assets and enabling WSBs to do asset development. While the sustainability of WSPs hinges on cost-reflective tariffs, it is also related to their size. Size is a critical factor since small WSPs have difficulties attracting qualified staff. They also tend to have higher operating costs per cubic metre produced than larger WSPs which benefit from economies of scale.

While most of the very large and large WSPs operate on regulated tariffs, many small WSPs continue to operate on non-approved, non-cost reflective tariffs, relying on non-sustainable subsidies to finance their operations. This problem is particularly prevalent in Rift Valley, Coast, Lake Victoria North, Athi and Lake Victoria South Water Services Boards, where less than 50% of the WSPs are operating on Wasreb-approved tariffs. However, even where RTAs have been approved, instances of non-compliance to tariff conditions, stipulated in Wasreb's Tariff Guidelines exist. Failure to implement regulated tariffs, or faulty implementation of the same, puts the sustainability of WSPs to risk.

For 2011/12, the average approved tariff was KSh 94.00/m³ while the average tariff for the social block was KSh 48.00/m³. However, as shown by Figure 1.3, both the average and social tariff, and therefore the affordability of water, is affected by size. A typical small WSP charges its customer an average of 160% of the amount the large to very large WSP would charge. For the social tariff, the average amount charged is almost double.

Fig 1.3: Average Tariff and Lowest Block Tariff per WSP Category

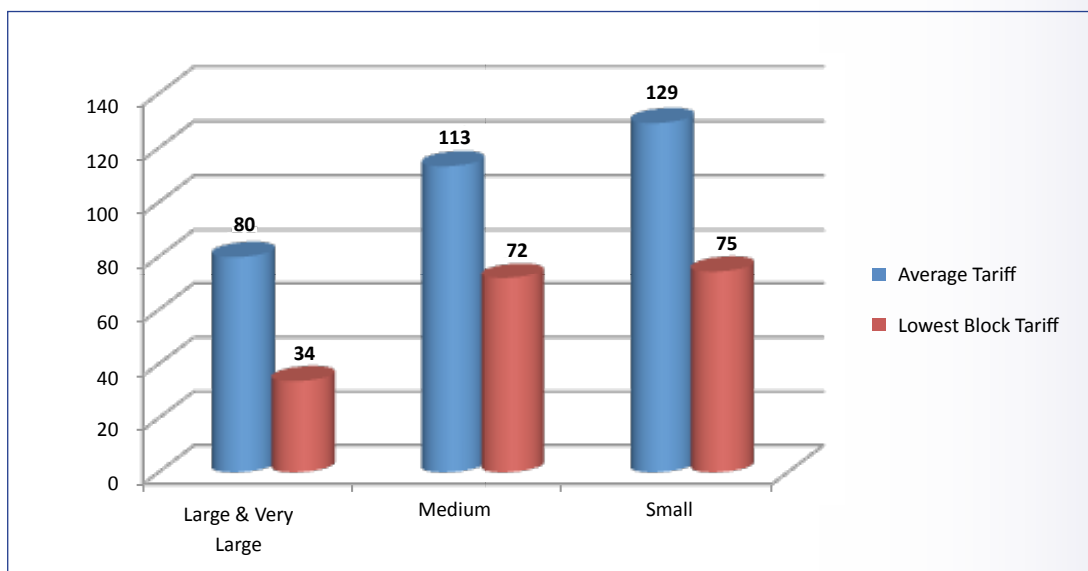


Figure 1.4 and Figure 1.5 respectively show the market share of reporting WSPs and the percentage of viable WSPs per size category. Very large and large WSPs only represent 30% of WSPs but account for 88% of the total WSP turnover, 82% of the total water produced and cover 74% of the people served. Apart from having the largest share of business, very large and large WSPs are much more likely to be viable (100% and 67% respectively) than WSPs with fewer connections (only 39% of medium and small WSPs are viable).

Fig 1.4: Combined Share of Business of Urban and Rural WSPs by Categories

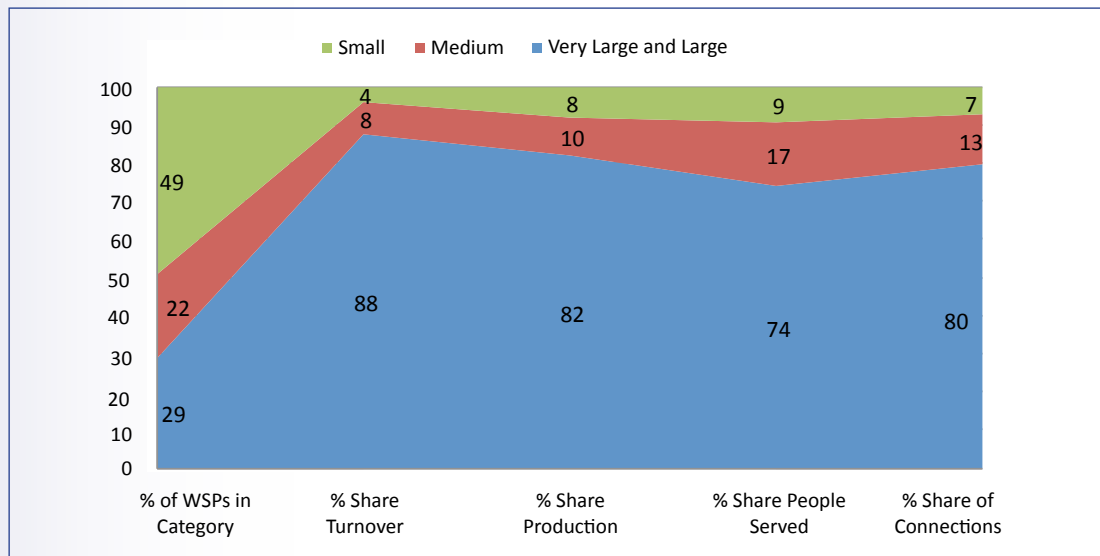
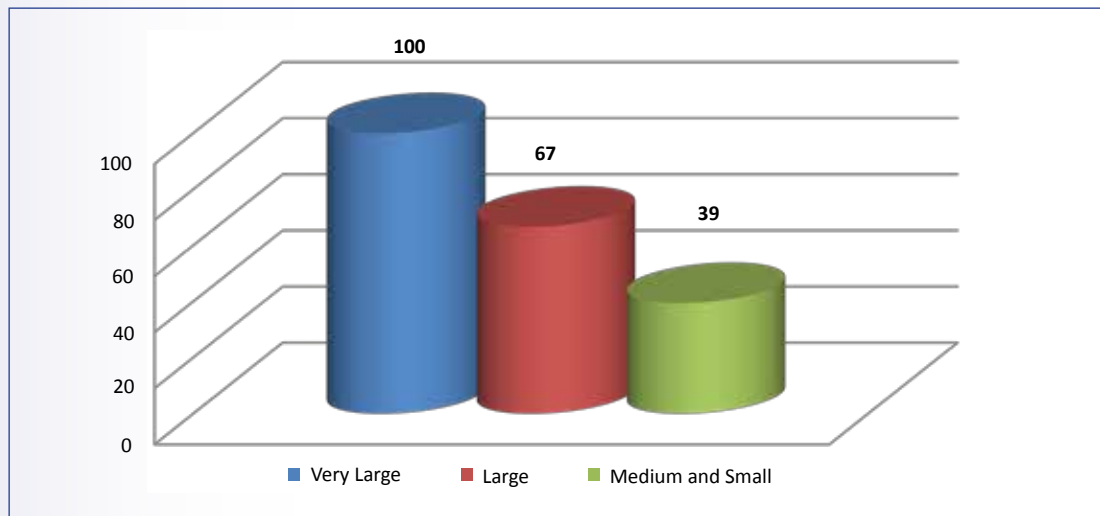


Fig 1.5: Percentage of WSPs with Over 100% O+M Cost Recovery



The above results provide useful insights on the way forward in water services provision under devolved government. The aggregation of WSPs, with a minimum threshold of 20,000 connections, is crucial to ensure commercial viability and affordability of water services and to make headway in the progressive realisation of the right to water and sanitation as enshrined in the Constitution of Kenya (2010).

1.3. Performance Summary of WSBs

Water Services Boards (WSBs) have been assessed and ranked on the basis of investment indicators, financial indicators and qualitative indicators relating to the WSBs’ performance in respect to their mandate as licensed asset holders and principals of WSPs (for detailed indicators see Table 4.5 “Performance Analysis and Ranking of WSBs”).

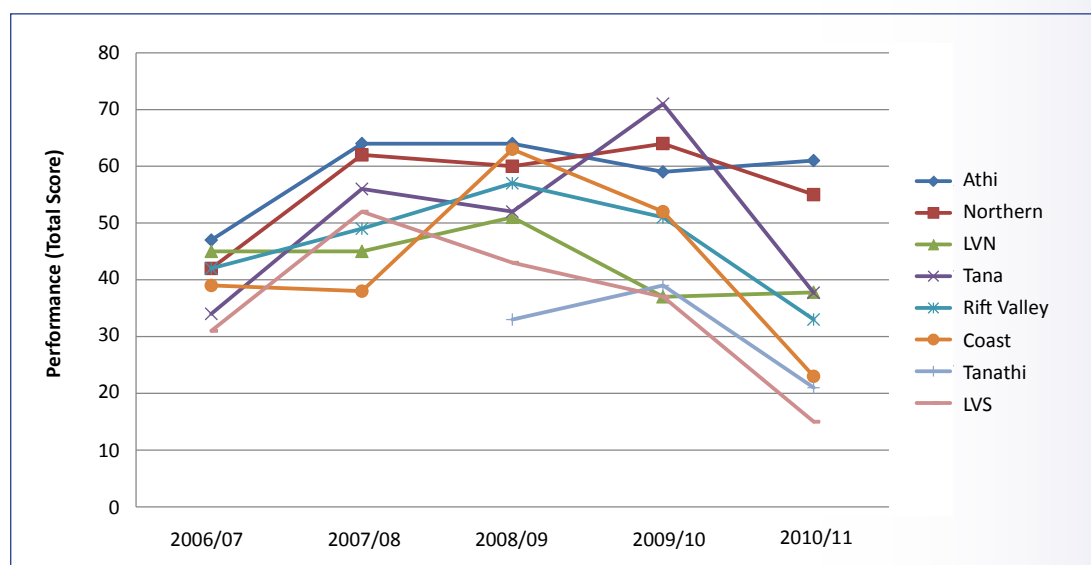
Table 1.6 shows the ranking of WSBs for 2010/11 and contrasts it with the ranking in 2009/10. Athi WSB emerges top. The performance of all WSBs, except Athi and LVN, has declined compared to 2009/10. Tana WSB has lost most ground with 33 points less in 2010/11. Meanwhile, LVS continues to record dismal performance, sustaining the bottom position at eight (8).

Table 1.6: WSB Performance Ranking

WSBs	Ranking 2010/11	Ranking 2009/10	Change in Ranking	Score 2010/11	Score 2009/10	Change in Scores
Athi	1	3	2	61	59	2
Northern	2	2	0	55	64	-9
LVN	3	7	4	37.8	37	1
Tana	4	1	-3	37.7	71	-33
RV	5	5	0	33	51	-18
Coast	6	4	-2	23	52	-29
Tanathi	7	6	-1	21	39	-18
LVS	8	8	0	15	37	-22

Figure 1.6 shows the performance of WSBs over time on basis of their aggregate scores collected for each reporting period since 2005/06. A negative overall performance trend can be observed since 2007/08.

Fig 1.6: WSBs Performance Over Time



The negative performance trend can be explained by inadequate execution of core activities such as professional investment planning and monitoring as well as the delegation of infrastructure operations to WSPs or local communities (in the rural setting). In fact, the biggest weakness of WSBs is the absence of investment plans sufficiently detailed (to pre-feasibility quality), for further development through feasibility studies and financing plans. The consequences are low value for money in investments or poor impact of investments and unacceptably low investment realizations despite continuously rising budget levels.

WSBs need to improve compliance with their reporting requirements especially on investments, subsidies and rural water supply and sanitation. WSBs today are not in a position to give reliable information on the additional number of people they have reached, including indicative costs, with the investments they have realized. This is despite the fact that the Water Services Board Investment Tool (WaSBIT), which has been piloted in four WSBs (AWSB, RV, LVS & LVN), provides the means of capturing information for investment planning and project monitoring. So far, it has not been put to proper use by respective WSBs.

The only area where most WSBs have shown some improvement in 2010/11 is in data submission by their agents (Table 1.7). Northern and Athi WSBs have joined Tana WSB in achieving a good level of data submission. Only Coast WSB falls below the average rating in terms of ensuring disclosure of performance information by its agents.

Table 1.7: Rating of WSBs According to Data Submission by the WSPs

WSB Data Submission Rating	2010/11	2009/10
Excellent (>80%)	-	-
Good (>65 - 79%)	Tana, Northern, Athi	Tana
Average (50 - 64%)	RV, LVS, LVN, Athi, Tanathi	Northern, Athi, LVS
Poor (40 – 49%)	Coast	Rift Valley, LVN,
Worst (<40%)		Coast, Tanathi

Chapter TWO



The Regulatory Environment

Making Water a Priority Development Agenda

2.0 Pre-amble

Kenya's enactment of a new constitution in the year 2010 was a landmark development with far reaching implications for the development of the water services sector. The recognition of water and sanitation as a human right underscores Kenya's commitment to gradually realizing sustainable access to safe, reliable and affordable water supply and sanitation services for its population. In fact, the provision of water supply and sanitation services is generally a precondition for a cleaner environment, improved public health, and the attainment of economic and social development.

The recognition of the right to water and sanitation therefore reinforces Kenya's commitment to improving standards of living and the quality of life for her people. This is useful in steering the country towards becoming a middle income country by 2030, as envisaged in Vision 2030, Kenya's development blue print.

The introduction of devolved government and the vesting of the responsibility for the provision of water supply and sanitation in the 47 county governments sets the stage for a considerable restructuring of the water services sector.

To achieve the progressive realization of the human right to water and sanitation, county governments will have to ensure that services are provided cost-effectively and are affordable. It will be their responsibility to ensure commercial viability, create possibilities for cross-subsidization to benefit vulnerable and marginalized people, and avoid unjustified costs to consumers. The issue of sustainability will thus be paramount, as this can only be achieved by making use of economies of scale.

2.1 Monitoring and Reporting on Access

The recognition of the human right to water means progress in the sector can no longer be measured by investments only (kilometres of pipeline laid, number of boreholes and wells drilled, treatment plants constructed etc). Rather, there is need to look at the impact these investments create in realizing access especially in underserved urban and rural areas. The human rights criteria (quality, availability, affordability) therefore has direct implications to monitoring and public reporting in the water services sector.

Wasreb has begun to align its performance monitoring system accordingly and has introduced a pro-poor performance monitoring module in the Water Regulation Information System (WARIS). This will make it possible to assess the extent to which WSPs are making progress in extending and improving formal water services in underserved urban Low-Income Areas (LIAs). It will also prompt WSPs to re-examine their pro-poor strategies and reinforce their pro-poor interventions.

Since 2011, the results of the pro-poor baseline survey MajiData, which was conducted to collect information on water and sanitation in urban LIAs, have been accessible to WSPs. During the reporting period, WSPs were asked to submit data on the existing water and sanitation situation in their LIAs, using MajiData. However, few of the WSPs submitted this information, making analysis of the performance of WSPs in LIAs impossible.

2.2 Planning and Monitoring of Investments

It is noteworthy that a number of landmark investment projects have been implemented under the umbrella of Vision 2030 (Kisumu Water Supply and Sanitation Project, Nzoia Cluster Project Phase I and II, Kapsabet Water Supply Project, Rift Valley Water Supply and Sanitation Project, Baricho Intake Works, Rehabilitation of Sasumua Dam etc.). They reflect the growing development budget for water services.

However, there has been no structured reporting on the impact of these projects by WSBs. One of the concerns on the development of the water services sector is the absence of a clear positive correlation between a continually growing development budget and the impact on the ground. The main reason for this is inadequate investment planning and monitoring.

While WSBs have been implementing projects with various actors, they have not been able to produce up-to-standard investment and financing plans. Ideally, these plans should be based on reliable baseline information to allow for appropriate targeting of investments. Thus, the monitoring of investment implementation and outcomes, and the measurement of impact and value for money continue to be inadequate.

A telling example in this respect is the hitherto futile effort by the Ministry of Water and Irrigation (MWD) to streamline WSBs' investment planning and monitoring through the Water Services Board Investment Tool (WaSBIT). The latter was specifically designed to help WSBs to direct investments towards progressively increasing water and sanitation coverage. Out of the four pilot WSBs (Athi, RV, LVN and LVS), only Athi and LVS WSBs have shown ownership and taken significant steps towards implementing the system.



Dunga treatment plant: one of the projects in Kisumu

2.3 Credit Rating of Utilities

The growing demand for water services requires increased financial investment in infrastructure. Given limited public funds, possibilities for commercial financing need to be explored. It is against this background that Wasreb undertook a 'shadow' credit rating exercise for all major urban WSPs aimed at supporting access to finance from the domestic financial market. The exercise sought to explore WSPs' potential (creditworthiness) to access medium-term finance from commercial lenders.

Out of the 43 WSPs assessed, 13 were found to be creditworthy. Sixteen (16) showed potential to improve their credit ratings through relatively small improvements in financial and operating efficiency. It was also established that improvement in the Key Performance Indicators covered by the *Impact* report would go a long way in increasing the creditworthiness of WSPs.



Wasreb CEO, Eng Robert Gakubia (left), Nyeri MD, Eng Joseph Nguiguti (right) and stakeholders during the launch of the credit rating report

2.4 Tariff Setting

The tariff setting process aims at ensuring financial sustainability (through recovery of justified costs), promoting effective and efficient utilization of resources and ensuring affordability of water services for all categories of consumers.

While a majority of the very large and large providers operates under a regulated tariff, many WSPs continue to operate under non-approved tariffs, most of which may not be cost-reflective. Operating on

Main Issues in the Regular Tariff Adjustment Process

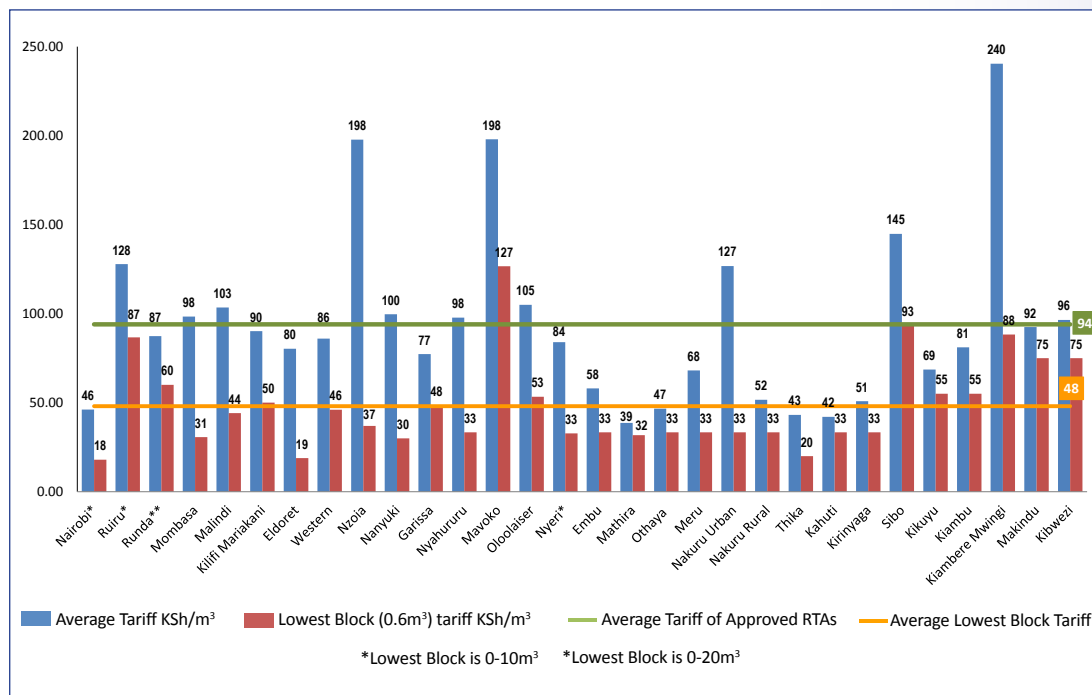
- Inadequate coordination between WSPs and WSBs in the RTA process
- Partial lack of correct data and forecasting
- Incorrect information/inconsistencies in WSBs operational costs
- Late and incomplete submission of tariff applications
- Non-adherence to stakeholder consultation requirements
- Non-adherence to tariff conditions
- Misapplication of funds and payment of arbitrary lease and administrative fees to Local Authorities and WSBs respectively

a tariff that is not approved is a breach of licence conditions and attracts a penalty payable daily until the tariff application is received. By the end of June 2012, fifteen (15) WSPs were subjected to penalties for this breach.

The process of tariff approval has been hampered by the fact that a majority of tariff applications submitted to Wasreb do not comply with desired requirements, particularly that of public consultation.

Figure 2.1 below shows the average regulated tariff and the average tariff for the social block for all WSPs who are operating under approved RTAs.

Fig 2.1: Summary of Approved Tariffs



2.5 Inspections

Wasreb's Inspection Programme serves to monitor compliance with the regulatory framework, notably Service Provision Agreement and Licence conditions.

Inspections carried out during the period under review revealed a large extent of non compliance. Notable areas of non-compliance included the conditions attached to the RTA, such as reduction of NRW; payment of administrative fees to WSBs and the regulatory levy, and adherence to the approved expenditure levels. Significant gaps were noted between projected and actual revenues, with the main reasons being overstated projections, decreases in water production and lack of control of NRW.

Non-compliance could also be observed with respect to sector benchmarks on personnel expenditure and expenditure on Boards of Directors.



2.6 Corporate Governance

Poor Corporate Governance has proved to be one of the main constraints to sector development, translating to poor management and underperformance (high water losses, poor response time to consumer complaints, technical emergencies, low cost coverage etc).

In 2009, Wasreb issued a Corporate Governance Guideline to set standards for leadership, accountability and professionalism in the management of WSBs and WSPs. This is meant to protect consumer interests by ensuring accountability and professionalism in WSP management. Some of the issues which the Guideline prescribes include the requirement for embedding the agency relationship between WSBs and WSPs in the memorandum and articles of association of WSPs, the composition and appointment of the WSP's Boards of Directors (BoD), shareholder functions, audit and reporting requirements, and the earmarking of WSP revenues.

While some companies have embraced the stipulations of the Guideline, there has been resistance from others, mostly attributable to particular interests of Councillors currently sitting on their Boards of Directors. Companies which have refused or delayed implementing the Guideline have exhibited similar trends including:

- ❑ poor financial management (including non-adherence to procurement regulations)
- ❑ poor compliance to the SPA
- ❑ attempts to appease Councils through increased lease fees
- ❑ inflated and unsustainable salaries
- ❑ unjustified expenditures (such as excessive foreign and local travel by BoD and management and non-performance linked bonus payments to Directors)
- ❑ poor relations with WSBs as their Principals.

By May 2012, a majority of urban WSPs were either compliant or in the process of complying. Some Providers have persistently refused to comply, which is a breach of the license conditions and the Water Act. Table 2.1 shows the compliance status of WSPs to the Corporate Governance Guideline.

Table 2.1: Corporate Governance Compliance Status

WSB	Compliant	In Process of Compliance	Refusal to Comply	Status Not Reported
Athi	Kikuyu Runda Ruiru Juja	Kiambu	Nairobi Thika	Limuru Gatanga Karimenu Kiamumbi Githunguri Karuri Gatundu
Coast	Mombasa Malindi Kilifi-Mariakani Tavevo Kwale	Lamu Tana River		
LVN	Nzoia Amatsi Kapsabet Nandi		Eldoret	Western
LVS	Gusii – partially implemented Chemosit	Sibo Mikutra South Nyanza Gulf Nyanas Kericho	Kisumu	Nyasare Tachasis Boya Ahono Sinaga
Northern	Nyahururu Garissa Isiolo	Rumuruti Maralal Mandera Moyale	Nanyuki	
Rift Valley	Nakuru Rural Narok Eldama Ravine Iten Tambach Nyandarua Lodwar	Naivasha	Nakuru	Ndaragwa Nyakanja Kikanamku Engineer town Mawingo Kinja Tia Wira Upper Chania Gitei Kapenguria Olkalou
Tana	Nyeri Mathira Meru Othaya Gatamathi Murang'a Murang'a South Kirinyaga Embe Imetha Kahuti		Embu	Tetu Aberdare Gichugu Ngandori Nginda Ngagaka Tuuru Nithi Kyeni Murugi Mungumango Muthambi 4K Kathita Kiirua Ruiro Thau Kathita Katunga
Tanathi	Mavoko Kibwezi Makindu Nol Turesh Loitoktok	Machakos Oloolaiser Matungulu - Kangundo Kiambere - Mwingi Olkejuado Kitui		Yata Makindu Namanga Mwala

It is crucial that WSBs and WSPs are managed with integrity, transparency, accountability and involvement of all stakeholders. Failure to do so results in a breach of contract and may lead to their dissolution.

For those WSPs who have persistently refused to comply with the Corporate Governance Guideline, Wasreb, as a measure of last resort, has sought consent to prosecute with the Director of Public Prosecutions.

2.7 Consumer Affairs

With the recognition of the human right to water and sanitation in the Bill of Rights (Article 43) of the Constitution of Kenya 2010, it has become a constitutional duty for state actors to act and report on the respect, fulfilment and protection of this right. Acknowledging this obligation and realizing the need to strengthen the participation and empowerment of consumers in realizing their rights, Wasreb initiated measures that will see consumer issues receive more priority in the water services sector.

One of these measures is the up-scaling of the Water Action Groups (WAGs) initiative which had been successfully piloted in the years 2010/11. The initiative aims at improving water services delivery by enabling the representation of consumer interests in the sector.

In this context, Wasreb has developed a Consumer Engagement Guideline which provides a framework for the institutionalization of the WAGs initiative by expounding on the mode of interaction and range of activities to be implemented. More generally, it guides the aspects of information dissemination, consultation, and participation of consumers in water services. It also establishes a consumer complaints and redress mechanism of which WAGs form the backbone.

2.7.1 MajiVoice

One recommendation of the WAGs pilot was the need for establishing a more efficient way of handling consumer complaints. In response to this, Wasreb embarked on a process of developing an electronic system that will provide a two-way communication platform between consumers and WSPs using affordable, accessible and user-friendly technologies. The system, branded MajiVoice, enables consumers to use a mobile phone or website to share their concerns and complaints with Providers about the quality of services supplied and receive timely feedback on how the issues they have raised are being addressed. Complementing existing modes of lodging complaints, MajiVoice allows Wasreb to monitor the performance of WSPs and WSBs with respect to addressing consumer complaints and feedback. It complements and facilitates the work of WAGs, who will ultimately use it as their main monitoring and reporting tool. The system is currently being piloted before it is launched throughout the country.



Chapter THREE



Performance of Water Service Providers

Strict Penalties Imposed on Non-Complying Providers

3.0 Introduction

This chapter analyses the performance of 65 urban and 35 rural WSPs for the reporting period 2010/11. It looks at performance trends with respect to individual indicators and ranks WSPs on the basis of their performance (improvement/decrease) since the last reporting period. Analysis is separate for urban (Section 3 A) and rural WSPs (Section 3 B).

The analysis is based on nine Key Performance Indicators (KPIs) which provide a good picture of a WSP's performance. These are Water Coverage, Sanitation Coverage, Non-Revenue Water (NRW), Water Quality, Hours of Supply, Metering Ratio, (Revenue) Collection Efficiency, Operation and Maintenance (O+M) Cost Coverage, and Staff Productivity (Staff per 1000 Connections). Additional indicators which are considered but do not feed into the scoring are Sewerage Coverage, Dormant Connections, O+M Cost Coverage at 85 Percent Collection Efficiency and Personnel Expenditure as Percentage of O+M Costs.

For every indicator, the performance of each individual urban/rural WSP is indicated for the current and previous reporting period. In addition, the weighted average of all urban/rural WSPs for the current reporting period as well as for the preceding reporting period is calculated, showing whether overall performance on that indicator has improved or declined. Where necessary (significant change in the number of analysed WSPs from one reporting period to the other), the performance trend for an individual indicator is analysed through a baseline comparison. This contrasts the aggregate performance of those WSPs who reported in the previous reporting period with their aggregate performance in the current reporting period.

3.1 Categorization of WSPs

To ensure a level playing field in analysing performance, WSPs have been categorized first, by size and second, by the operating environment (urban or rural). For ranking purposes, a further distinction has been made between public and private owned WSPs.

(a) Categorization by Size

Based on the total number of water and sewerage connections, WSPs have been classified either as Small, Medium, Large or Very Large (Table 3.1). This is taken into account in the performance ranking.

Table 3.1: Categorization of WSPs Based on Registered Connections

Total Registered Water and Sewerage Connections	< 5,000	5,000 – 9,999	10,000 – 35,000	> 35,000
Category of WSP	Small	Medium	Large	Very Large

(b) Categorization by Operating Environment

To account for significantly different operating environments in urban and rural settings (population density/geographic spread, state of infrastructure, level of economic activity, availability of external support), performance has been analysed separately for urban and rural WSPs. While the same performance indicators have been applied, different benchmarks have been set where considered appropriate (Table 3.2).

WSPs are categorized as 'urban' when they obtain at least 50% of their revenue from urban areas and as 'rural' when they earn over 50% of their revenue from rural areas.

(c) Categorization by Ownership

While public and private owned Providers have been analysed together, performance ranking has been done separately, accounting for significant differences in their consumer bases. For the time being, this only applies to the urban WSP category, where two WSPs are affected: Runda Water Ltd and Kiamumbi Water Project.

3.2 Key Performance Indicators, Sector Benchmarks and Scoring Criteria

Different scoring criteria and different weights have been adopted for each of the nine Key Performance Indicators, as shown in Table 3.2. The scoring criteria largely correspond to the set Sector Benchmarks. However, scoring limits for some indicators have been defined more leniently than the set benchmarks to account for the current development stage of the sector. Different scoring limits for urban and rural WSPs have been adopted for the following indicators: NRW, Staff Productivity, Water and Sanitation Coverage. As the sector continues to develop, the scoring criteria will be reviewed to eventually match the sector benchmarks.

Performance on or above the upper limit was awarded the maximum score while performance on or below the lower limit was awarded the minimum score of zero. Performance between the upper and lower limits was interpolated to determine the individual score. The aggregation of scores for all the nine indicators was then used to rank the WSPs. The maximum score under these criteria is 200 points.

Table 3.2: Performance Indicators, Sector Benchmarks and Adopted Scoring Regime

Indicators			Sector Benchmarks			Adopted Scoring Regime				
			Good	Acceptable	Not Acceptable	Urban		Rural		
						Performance	Score	Performance	Score	
1	Collection Efficiency		>90%	85- 90%	<85%	>90%	30	>90%	30	
						<75%	0	<75%	0	
2	NRW		<20%	25-20%	>25%	<20%	30	<20%	30	
						>40%	0	>50%	0	
3	Water Quality	No of Tests- Chlorine	>95%	90-95%	<90%	>95%	10	>95%	10	
		Compliance- Residual Chlorine	>95%	90-95%	<90	>95%	5	>95%	5	
		No of Tests Bacteriological	>95%	90-95%	<90%	>95%	10	>95%	10	
		Compliance- Bacteriological	>95%	90-95%	<90%	>95%	5	>95%	5	
4	Hours Of Supply	Population >100,000	21-24	16-20	<16	>20	20	>20	20	
		Population <100,000	17-24	12-16	<12	<10	0	<10	0	
						>16	20	>16	20	
						<6	0	<6	0	
5	O+M Cost Coverage		≥150%	100-149%	<100%	>149%	20	>149%	20	
						<90	0			
6	Metering Ratio		100%	95-99%	<95%0	>99%	20	>99%	20	
						<80%	0	<80%	0	
7	Staff Per 1000 Connections	Large & Very Large Companies	<5	8-5	>8	<5	20	<7	20	
		Medium & Small Less Than 3 Towns	<7	11-7	>11	>8	0	>11	0	
		Medium & Small More Than 3 Towns	<9	14-9	>14	<7	20	<9	20	
						>11	0	>14	0	
8	Water Coverage		>90%	80- 90%	<80%	>90%	20	>90%	20	
						<50%	0	<40%	0	
9	Sanitation Coverage		>90%	80- 90%	<80%	>90%	10	>90%	20	
						<50%	0	<40%	0	
Total Maximum Score								200		200
10	Personnel Cost as a % Of O+M Costs	Large and Very Large Companies	<20%	30-20%	>30%	N/A	N/A	N/A	N/A	
		Medium Companies	<30	40-30%	>40%					
		Small Companies	<40%	45-40%	>45%					

3.3 Data Collection and Validation

Data used in the performance analysis was generated mainly from the Water Regulation Information System (WARIS). To guarantee a higher level of data reliability, the data was validated through inspection reports, the RTA process where available, and annual licence reports. Cross checks were conducted to minimize unrealistic figures. Where considered necessary, WSPs were contacted directly to confirm the accuracy of data.

Out of 104 WSPs, 100 WSPs submitted fairly complete information. WSBs contract WSPs through SPAs and therefore have a responsibility to ensure WSPs fulfil reporting requirements. Four (4) WSPs did not comply with these reporting requirements. It is the obligation of WSBs holding SPAs with these non-compliant WSPs to ensure they adhere to regulatory reporting requirements. Table 3.3 shows the number of compliant and non-compliant WSPs under their respective WSBs.

Table 3.3: Compliance with Data Submission

WSB Status	RVWSB	CWSB	TWSB	LVWSB	LVNWSB	TaWSB	NWSB	AWSB
Incomplete	0	0	0	0	0	0	0	0
Non submission	0	Hola Tana River	D.O.M Kathita Katunga	Ahono Sinaga, Boya	0	0	0	0
Number compliant	19	6	23	11	5	15	8	13
Number not compliant	0	1	1	2	0	0	0	0
Number of WSPs	19	7	24	13	5	15	8	13

There has been significant improvement in information submission as compared to the previous issue of *Impact* report (Table 3.4). In absolute terms, the number of reporting WSPs increased from 90 to 100. In relative terms, 96% of registered WSPs reported in 2010/2011 as compared to 87% in 2009/2010. This shows that the sector is beginning to appreciate the importance of information in the planning, management, and monitoring of water services.

Table 3.4: Trend in Data Submission by WSPs

Status of Data Submission	Impact 1		Impact 2		Impact 3		Impact 4		Impact 5			
	2005/6		2006/7		2007/8		2008/9		2009/10		2010/11	
	No. of WSPs	%	No. of WSPs	%	No. of WSPs	%	No. of WSPs	%	No. of WSPs	%	No. of WSPs	%
Complete	25	28	55	47	72	59	77	62	90	87	100	96
Incomplete	33	36	13	11	12	10	13	11	6	6	0	0
Non-Submission	33	36	50	42	38	31	34	27	8	7	4	1
Total	91		118		122		124		104		104	

Nevertheless, significant challenges on quality, completeness and the timeliness of reporting still remain. This can be attributed to various factors:

- ❑ Some WSPs have not appreciated that having proper data on their performance is useful in facilitating good management. As a result, the task of collecting and capturing data on performance is left to IT personnel, with little supervision from Managing Directors who end up giving approval without interrogating the data. In turn, data submitted lacks institutional ownership.
- ❑ There is deliberate tampering with the data provided to suit different purposes. When it is being presented for purposes of *Impact* report, there is a tendency to over-report. When it is being submitted for tariff negotiations, there is a tendency to under-report.
- ❑ WSBs do not validate data from WSPs, which is a systemic non-performance on their oversight role given that WSPs are their agents.
- ❑ The mechanisms for checking the reliability and completeness of data submitted, and for ensuring timely reporting, are weak.

SECTION A: Urban Water Service Providers

Positive Trend Confirmed in Urban Water Service Provision

The performance of urban Water Service Providers recorded an improvement in most indicators, most remarkably in Water Coverage. Stagnation can be observed, however, with respect to Non-Revenue Water, which remained high at an average of 45%. Also, it has to be noted that performance in key indicators such as O+M Cost Coverage and Hours of Supply actually declined since the last reporting period.

3.4 General Information

Table 3.5 below summarizes the basic data for the 65 urban WSPs analysed for the year 2010/11. They are placed in the four categories depending on the total number of registered water and sewerage connections.

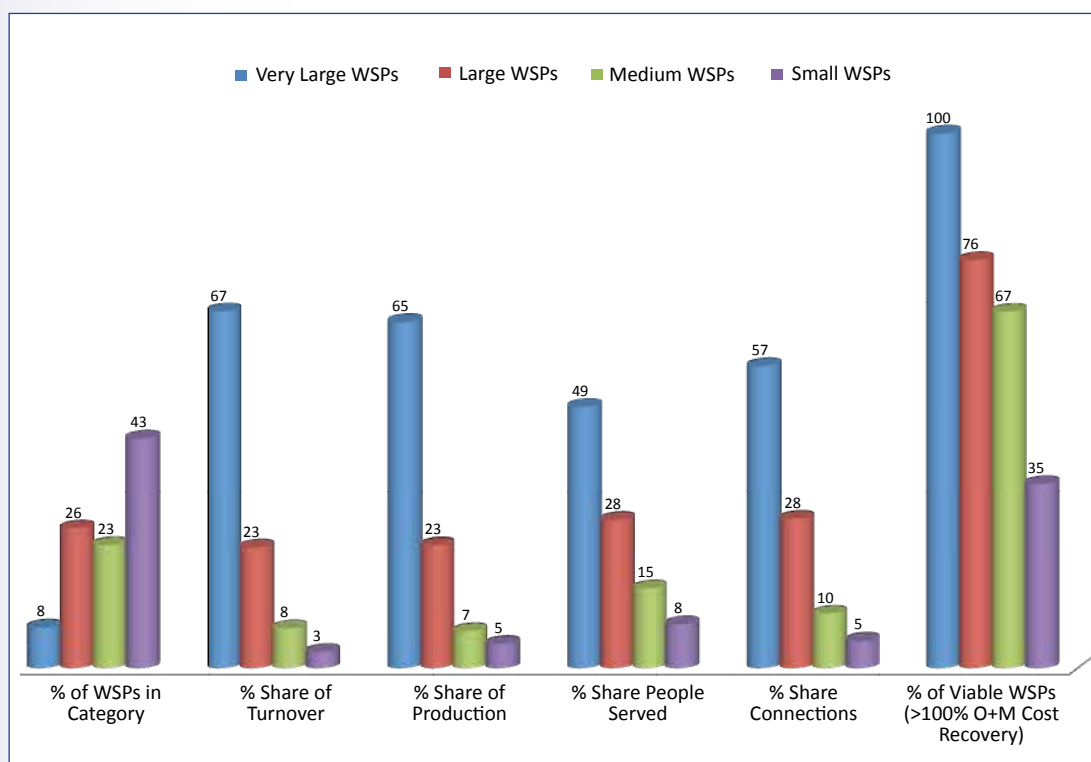
A summary of the respective categories with respect to turnover, production, number of people served, number of connections and staffing is presented in Table 3.6.

Table 3.6: Market Share of Urban WSPs by Categories

WSP Category	No. of WSPs	Turnover in KSh Billion	Production in Million m ³	People Served in Millions	No. of Connections	No. of Staff
Very large	5	7.76	215.38	4.21	607,676	3,155
Large	17	2.63	76.56	2.39	300,438	1,923
Medium	15	0.87	25.19	1.29	110,125	879
Small	28	0.36	15.39	0.71	56,296	740
Total	65	11.62	332.52	8.61	1,074,535	6,697

Figure 3.1 presents an analysis of the market share of WSPs by category:

Fig 3.1: Market Share – Urban WSPs by Category



From the above analysis, it can be observed that whereas there are only 5 WSPs (8%) within the very large category, their combined turnover accounts for 67% of the total reported turnover, 65% of production, almost 50% of the urban population served and 57% of all urban water and sewerage connections. Further, all (100%) of the WSPs in the Very Large Category fulfil the criteria for O+M cost recovery, compared to 76% , 67% and 35% in the Large, Medium and Small Category respectively. This firmly establishes the case for aggregation of WSPs for commercial viability, efficiency in service delivery, lower tariffs and sector sustainability.

3.5 Overall Ranking

The publishing and dissemination of information on the performance of the water services sector is a State obligation under the Bill of Rights (CoK 2010) and is crucial for the sustainability of the sector. It helps the Regulator to spur competition between WSPs for the benefit of the consumer. It also enables utility managers to identify areas of improvement and helps consumers to voice their demands in an informed way. Lastly, it also informs sector policy making, planning and implementation.

The ranking analysis in Table 3.7 (a and b) presents a performance overview for all 65 reporting urban WSPs with respect to the nine Key Performance Indicators. WSPs are ranked together as well as separately for the different size categories, both on the basis of their aggregate performance scores. Scoring is based on the scoring regime in Table 3.2.

Two changes have been made in ranking performance for the reporting period 2010/11:

1. Runda and Kiamumbi, as privately owned WSPs with a different operating environment from the publicly owned providers, have been ranked separately to ensure a level playing field.
2. WSPs who have refused to comply to Wasreb's Corporate Governance Guideline (Nairobi, Eldoret, Nakuru, Thika, Kisumu, Embu, Nanyuki) have not been ranked. They are therefore not eligible for recognition as performers even where their technical performance would suggest so. This is to avoid a situation where WSPs, who benefit from a favourable operating environment, are rewarded despite refusal to conform to regulation.

In the overall ranking for the year 2010/11, Nyeri again emerges as the best performing WSP, attaining impressive 169 points, followed by Meru and Ruiru Juja in second and third positions respectively.

The three least performing WSPs for the period 2010/11 were Mikutra, Kapsabet Nandi and Kwale. The worst performers in the Very Large, Large, Medium and Small Categories are Mombasa (with only 56 points), Kwale, Amatsi and Mikutra respectively.



Trophies awarded to best ranked WSPs

Table 3.7 (a): Overall Ranking and Ranking by Category for Urban WSPs in 2010/11

	Water Quality - Residual Chlorine	Water Quality - Bacteriological	Non-Revenue Water	Water Coverage in %	Sanitation Coverage in %	Hours of Supply	Staff Productivity	Collection Efficiency in %	O + M Cost Coverage in %	Metering Ratio in %	Total Score	Ranking by Category	Overall Ranking
Very Large (35,000 or more Connections)													
Eldoret	99	96	27	65	48	16	4	102	No data	100	124	X	X
Thika	94	43	36	93	94	24	5	92	111	79	122	X	X
Nakuru	94	89	47	91	91	18	7	88	127	86	116	X	X
Nairobi	89	92	44	72	78	16	5	76	157	97	99	X	X
Mombasa	66	75	42	82	97	8	10	88	101	70	56	5	39
Large (10,000- 34,999)													
Nyeri	100	98	26	72	88	16	5	100	163	100	169	1	1
Malindi	87	59	26	92	60	18	8	94	99	90	120	2	6
Kericho	94	52	36	67	92	23	11	96	132	100	119	3	7
Nanyuki	94	42	36	83	98	23	6	74	252	98	111	X	X
Embu	94	54	41	52	98	24	5	80	160	100	107	X	X
Kisumu	91	86	49	48	55	24	7	94	130	100	105	X	X
Nyahururu	94	100	53	45	92	21	13	94	110	99	105	6	13
Nzoia	94	43	52	55	62	22	7	100	109	72	95	8	16
Kirinyaga	94	89	78	32	43	21	13	95	108	91	91	9	19
Garissa	94	61	54	92	95	19	8	80	131	72	84	10	21
Western	89	97	77	63	29	14	6	85	128	83	79	11	23
Mathira	94	81	65	25	100	21	7	80	157	67	77	12	24
Kilifi	87	73	38	53	71	18	15	95	129	62	75	13	26
Nakuru Rural	75	83	59	43	42	7	12	94	136	23	56	14	40
Gusii	90	43	44	41	87	9	16	95	82	72	42	15	51
Chemosit	99	53	56	36	32	2	11	84	63	55	28	16	56
Kwale	88	76	42	17	32	12	10	70	80	61	9	17	61
Medium (5000- 9,999)													
Meru	99	100	23	62	100	24	9	82	150	100	146	1	2
Ruiru Juja	95	61	31	44	95	17	5	98	145	100	129	2	3
Murang'a	100	39	44	61	100	22	7	99	99	100	113	3	9
Kiambu	94	98	37	33	90	9	9	101	100	100	112	4	10
Isiolo	94	100	48	37	98	18	10	104	116	77	88	5	20
Tavevo	71	No data	48	30	73	11	17	90	200	66	66	6	31
Limuru	94	39	30	25	70	6	9	113	102	76	64	7	34
Kikuyu	17	37	54	20	85	16	8	87	85	94	60	8	37
Mavoko	68	66	39	51	87	8	11	80	181	88	55	9	41
Oloolaiser	78	47	43	31	77	9	13	85	108	96	51	10	43
Sibo	94	94	60	26	No data	11	22	89	70	82	50	11	44
South Nyanza	88	82	46	42	43	9	8	96	51	71	48	12	47
Machakos	88	63	48	36	15	2	8	100	109	80	46	13	50
Kitui	92	No data	68	39	No data	8	20	95	62	80	38	14	52
Amatsi	93	61	46	12	60	11	17	59	111	39	23	15	58
Small (Less than 5,000 Connections)													
Lamu	100	39	45	53	100	16	16	84	134	100	93	1	17
Karuri	No data	54	30	12	70	12	8	92	101	99	91	2	18
Olkalou	No data	17	30	32	90	15	9	111	28	0	80	3	22
Lodwar	95	100	41	33	45	6	10	86	154	81	76	4	25
Makindu	42	40	33	53	85	15	14	89	76	86	75	5	27
Kibwezi	94	44	42	50	96	10	20	105	90	100	72	6	28
Iten Tambach	94	61	36	14	92	12	14	99	66	55	68	7	29
Wote	93	78	30	21	13	6	43	95	64	90	67	8	30
Mandera	61	69	37	16	46	16	7	68	191	0	65	9	32
Kiambere Mwingi	90	44	52	78	73	12	15	100	54	80	65	10	33
Maralal	94	100	42	61	33	8	24	99	61	82	63	11	35
Rumuruti	53	61	31	51	97	8	16	106	53	65	60	12	36
Namanga	No data	No data	No data	No data	No data	16	No data	102	121	No data	59	13	38
Narok	86	39	54	34	89	12	12	92	79	80	54	14	42
Eldama Ravive	89	40	69	49	40	9	11	97	112	22	50	15	45
Yatta	76	52	30	22	28	12	17	85	26	56	49	16	46
Nol Turesh	94	39	62	13	91	12	33	87	60	55	47	17	48
Kapenguria	88	No data	42	31	67	12	30	102	53	52	47	18	49
Naivasha	47	5	50	26	75	2	6	78	70	16	33	19	53
Moyale	No data	No data	30	32	74	2	50	79	14	24	30	20	54
Olkejuado	No data	44	40	35	70	7	17	85	55	13	30	21	55
Loitoktok	94	No data	40	60	70	8	No data	No data	No data	0	26	22	57
Nyanas	40	39	59	39	52	5	20	84	42	53	21	23	59
Gulf	77	No data	37	No data	No data	1	No data	52	102	No data	16	24	60
Kapsabet Nandi	83	No data	63	5	60	6	23	68	69	26	7	25	62
Mikutra	90	43	55	11	12	1	44	85	13	52	6	26	63

Among the privately owned WSPs, Runda shows an impressive performance scoring 174 out of 200 possible points, with only NRW and Staff Productivity (Staff per 1000 Connections) below the acceptable sector benchmark. Kiamumbi, a new entrant, scores 98, which is above the average sector performance.

Table 3.7 (b): Overall Ranking and Ranking by Category for urban WSPs in 2010/11- Privately Owned WSPs

Private Operators	Water Quality - Residual Chlorine	Water Quality - Bacteriological	Non-Revenue Water	Water Coverage in %	Sanitation Coverage in %	Hours of Supply	Staff Productivity	Collection Efficiency in %	O + M Cost Coverage in %	Metering Ratio in %	Total Score	Ranking	Overall Ranking
Runda	99	97	31	100	100	20	43	107	144	100	174	1	1
Kiamumbi	100	No data	28	51	No data	16	10	96	134	100	98	2	2

3.6 Performance Over Time

The ranking of WSPs performance over time (from one reporting period to the other) is meant to serve two main purposes:

1. To recognize WSPs whose performance has shown progress though not to a level that can put them at the top in the short or medium term, due to factors beyond their control (especially differing starting position with respect to condition of infrastructure).
2. To penalize those WSPs whose performance has declined despite operating in a favourable environment that cushions them from sinking to the bottom.

Considering changes in the overall score of WSPs, Table 3.8 below shows the performance improvements/declines of WSPs between the last reporting period (2009/10) and the current reporting period (2010/11).

Table 3.8 (a): Performance Over Time of Urban WSPs

	WSP	Score 2010/11	Score 2009/10	Scores Gained(+)/Dropped(-) from 2009/10 to 2010/11
1	Nyeri	169	165	4
2	Meru	146	142	4
3	Ruiru Juja	129	100	29
6	Malindi	120	125	-5
7	Kericho	119	120	-1
9	Murang'a	113	125	-12
10	Kiambu	112	90	22
13	Nyahururu	105	85	20
16	Nzoia	95	85	10
17	Lamu	93	81	12
18	Karuri	91	49	42
19	Kirinyaga	91	87	4
20	Isiolo	88	81	7
21	Garissa	84	88	-4
22	Olkalou	80	71	9
23	Western	79	35	44
24	Mathira	77	69	8
25	Lodwar	76	61	15

26	Kilifi	75	57	18
27	Makindu	75	73	2
28	Kibwezi	72	97	-25
29	Iten Tambach	68	90	-22
30	Wote	67	87	-20
31	Tavevo	66	7	59
32	Mandera	65	35	30
33	Kiambere Mwingi	65	106	-41
34	Limuru	64	65	-1
35	Maralal	63	58	5
36	Rumuruti	60	45	15
37	Kikuyu	60	85	-25
38	Namanga	59	n/a	n/a
39	Mombasa	56	76	-20
40	Nakuru Rural	56	39	17
41	Mavoko	55	41	14
42	Narok	54	76	-22
43	Oloolaiser	51	39	12
44	Sibo	50	33	17
45	Eldama Ravive	50	48	2
46	Yatta	49	58	-9
47	South Nyanza	48	56	-8
48	Nol Turesh	47	18	29
49	Kapenguria	47	57	-10
50	Machakos	46	32	14
51	Gusii	42	60	-18
52	Kitui	38	37	1
53	Naivasha	33	22	11
54	Moyale	30	20	10
55	Olkejuado	30	36	-6
56	Chemosit	28	34	-6
57	Loitoktok	26	n/a	n/a
58	Amatsi	23	22	1
59	Nyanas	21	10	11
60	Gulf	16	0	16
61	Kwale	9	7	2
62	Kapsabet Nandi	7	7	0
63	Mikutra	6	17	-11
	Eldoret	124	142	-18
	Thika	122	86	36
	Nakuru	116	79	37
	Nanyuki	111	137	-26
	Embu	107	121	-14
	Kisumu	105	108	-3
	Nairobi	99	65	34

Table 3.8 (b): Performance Over Time of Urban WSPs – Privately Owned WSPs

Overall Ranking Position	Privately Owned WSPs	Total Score 2009/11	Total Score 2010/11	Scores Gained/Dropped from 2009/10 to 2010/11
1	Runda	124	174	50
2	Kiamumbi	n/a	98	n/a

It can be observed that more urban WSPs improved their scores in the year 2010/11 compared to the previous year of 2009/10 (Table 3.9). This confirms an overall positive trend in the urban water services sector.

Table 3.9: WSPs Performance Improvement Over Time

Year	Reporting WSPs - Urban	Number of WSPs Recording Improvement	% of WSPs Recording Improvement
2009/10	62	5	8
2010/11	65	38	58

3.7 Comparative Performance of WSPs by Indicators

This section is structured according to the nine (9) Key Performance Indicators. It looks at the average performance of the urban water services sector for each of these indicators as well as the comparative performance of the different urban WSPs for the reporting period 2010/11. It also contrasts 2010/11 performance levels with those for the previous reporting period.

Since the number of reporting urban WSPs has remained largely constant between the reporting periods 2009/10 and 2010/11, a comparison of the weighted averages for both periods indicates a valid trend in urban water services, which removes the need for making baseline comparisons for individual indicators.

(a) Water Coverage

Water Coverage is defined as the percentage of people served with water by a WSP compared to the total population within the service area of the WSP. It assesses the performance of WSPs in supplying potable water to people living within their service areas.

Fig 3.2: Trend in Urban Water Access in Percentage

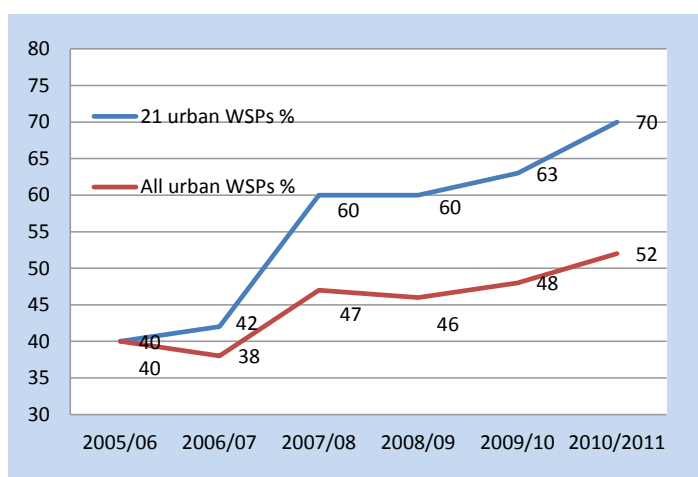


Figure 3.2 shows the water coverage trend for all urban WSPs as well as the 21 urban WSPs who have reported continuously since 2005/06. While average urban coverage remains below the acceptable benchmark of 80%, a clear positive trend can be observed, with coverage improving by 12 percentage points (from 40% to 52 %) between 2005/06 and 2010/11 and by 4 percentage points (from 48%) since the last reporting period (the

figure for urban water coverage for 2009/10 has been revised from 39% to 48% because of a downward adjustment of overstated population figures provided by Sibbo, Chemosit and Mikutra). The improvement in coverage is even more pronounced for the 21 established WSPs, which have been reporting continuously since 2005/6. With an increase of 30 percentage points (from 40% to 70%) between 2005/06 and 2010/11, they are not far from reaching the acceptable benchmark. Nevertheless, as can be seen from Figure 3.3, showing the water coverage for each urban WSP, only 7 WSPs are currently reaching coverage levels above 80 % (acceptable benchmark).

Interventions to improve formalized services, especially in underserved urban low-income areas, are clearly bearing fruit, but more needs to be done to sustain the positive trend. This is especially in light of the growing population pressure in Kenya's urban centres. NRW remains at 45% (Figure 3.7a and b). WSBs are still not complying with their obligation to ensure the progressive realization of the human right to water and sanitation by developing realistic investment plans which target the underserved. WSPs need to reinforce their efforts to extend coverage in underserved urban areas through low-cost technologies such as water kiosks and yard taps.

Fig 3.3(a): Water Coverage in %

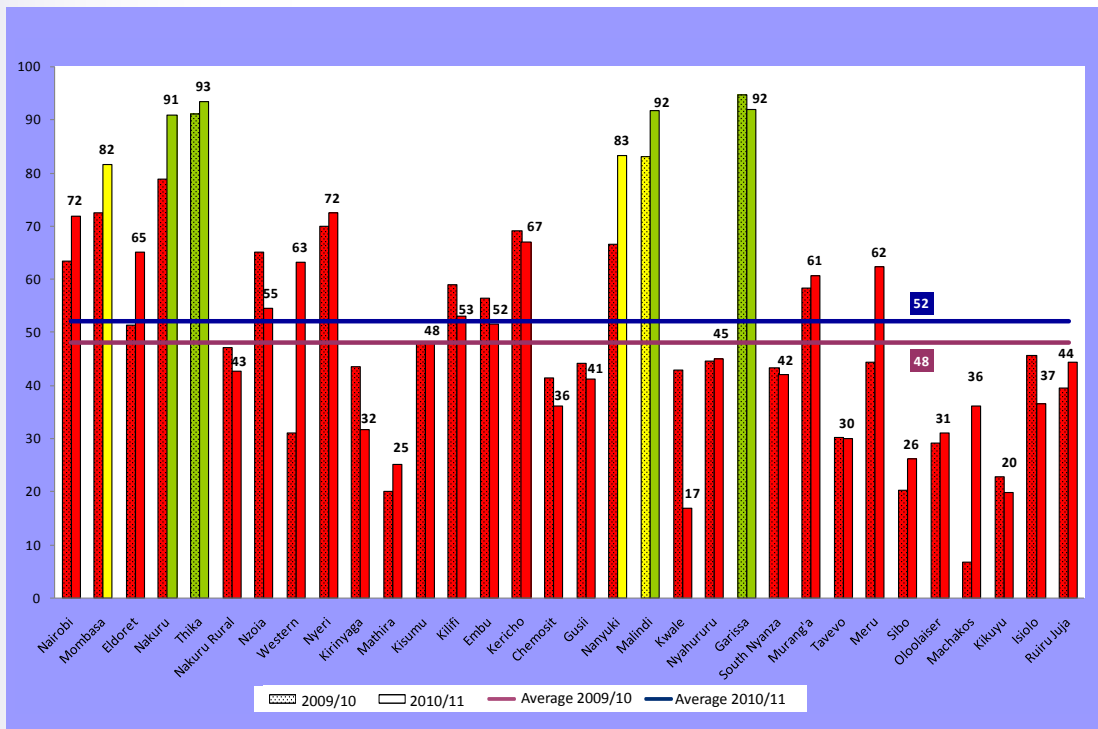
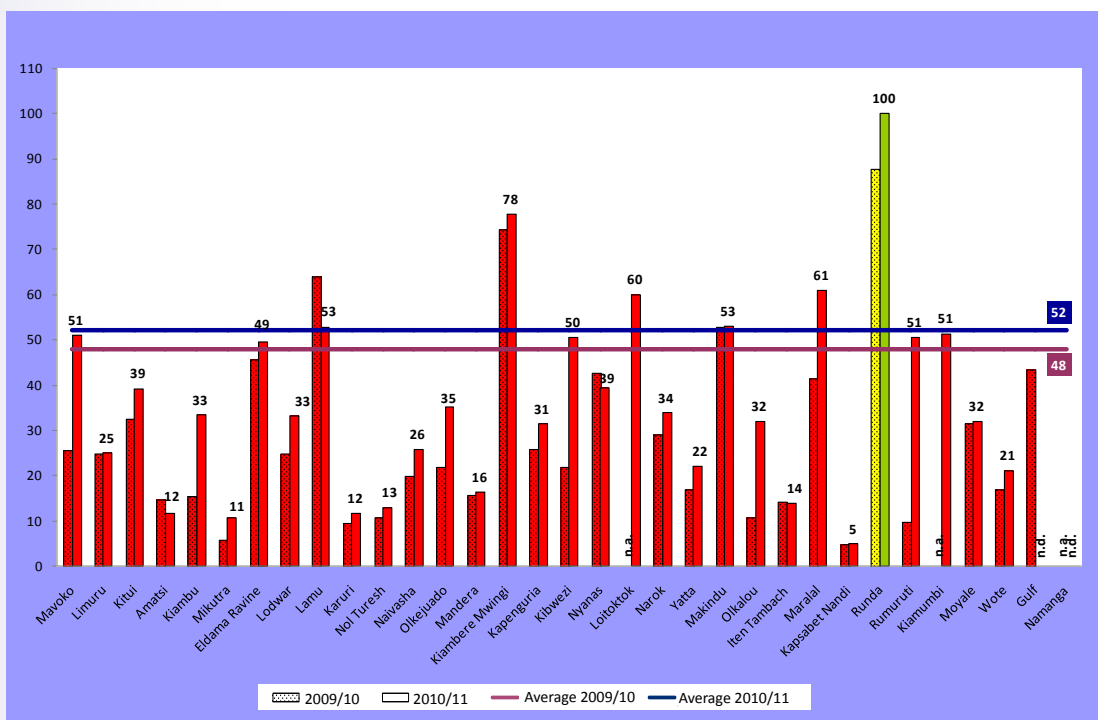


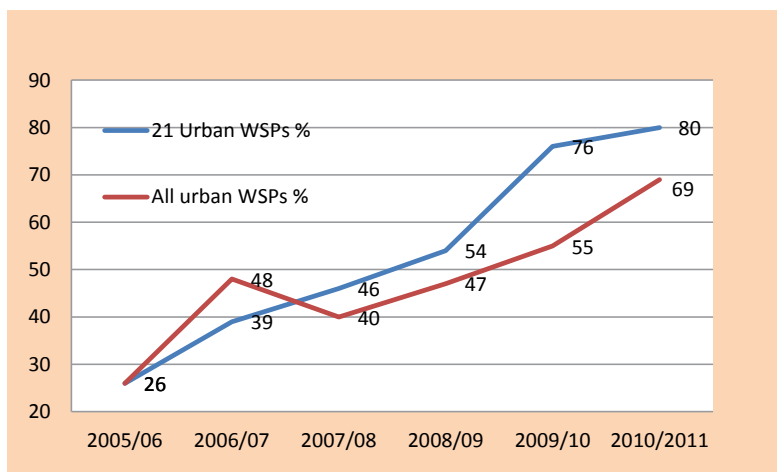
Fig 3.3(b): Water Coverage in %



(b) Sanitation Coverage

Sanitation Coverage is defined as the percentage of people with access to improved sanitation facilities compared to the total population within the service area of a WSP. Improved facilities include flush or pour-flush to water born systems, septic tanks, ventilated improved pit latrines and traditional pit latrines.

Fig 3.4: Trend in Urban Sanitation Access %



A positive trend in sanitation coverage can be observed with respect to the average performance of urban WSPs as well as for the 21 WSPs who have been reporting since 2005/06 (Figure 3.4).

While overall sanitation coverage improved by more than 10 percentage points since the last reporting period, the coverage level of 69%

remains below the acceptable sector benchmark of 80% (average sanitation coverage for the reporting period 2009/10 has been revised from 59% to 55% due to changes in the total number of people served with sanitation for Chemosit and Mikutra).

One challenge in this respect has been that WSPs so far have not been involved in the development of onsite sanitation systems, which represent the only way to rapidly scale up sanitation coverage, especially in low income urban areas. To address this, Wasreb is planning to work out a tariff incentive to get WSPs more involved.

At the same time, a number of WSPs have been able to develop and operate public toilets with support from the Water Services Trust Fund Urban Projects Concept (WSTF UPC). In this respect, there has been notable progress since 2010.

The fact that WSPs currently do not manage on-site sanitation facilities and mostly depend on information from the Department of Public Health negatively impacts on the quality of data submitted. This can, for example, be seen from the significant spread in Figure 3.6(a) and (b).

Detailed information on the water and sanitation situation in Kenya's urban low income and underserved areas can be obtained from the online database www.majidata.org.ke

Fig 3.5(a): Sanitation Coverage in %

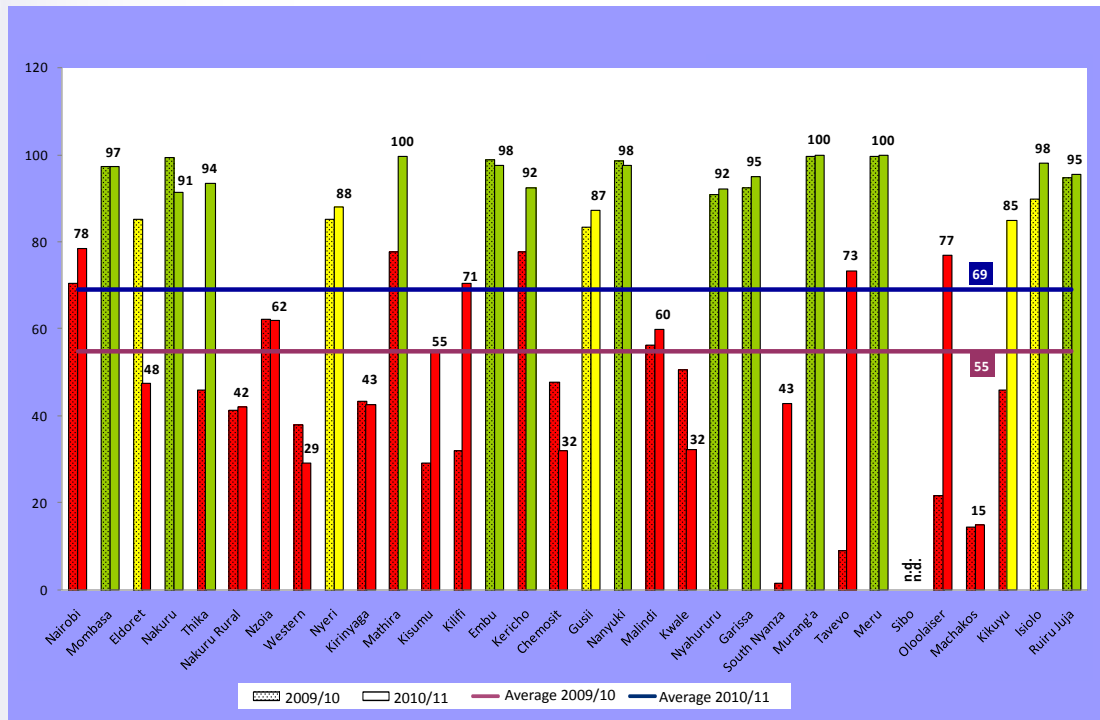
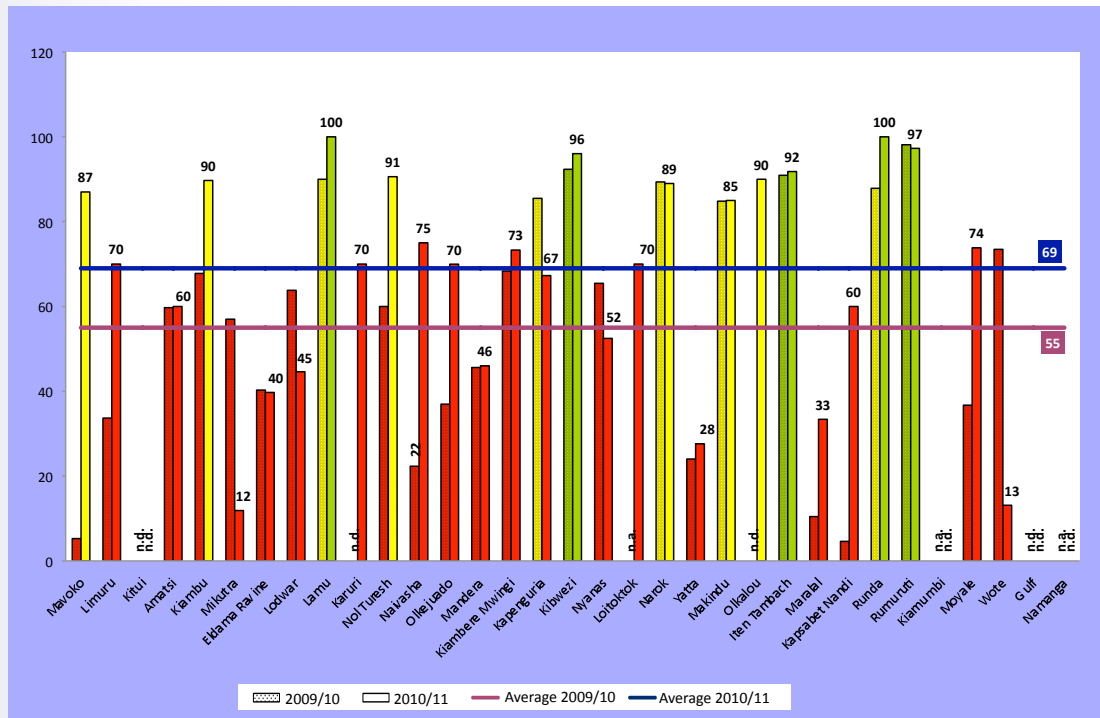


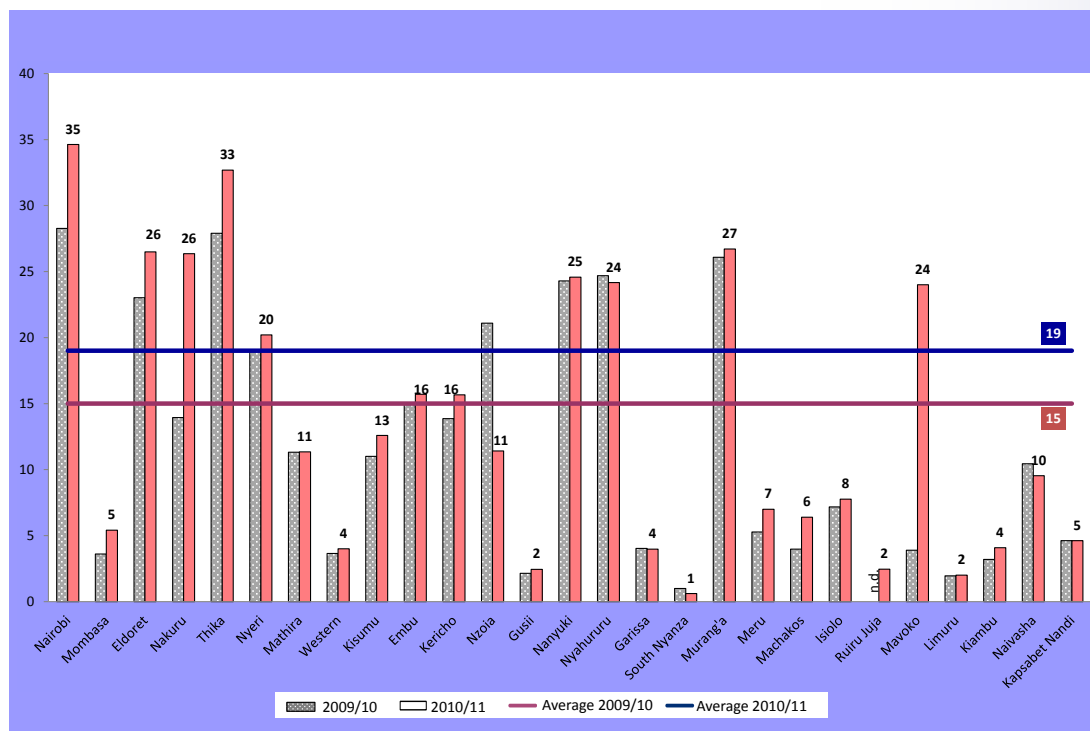
Fig 3.5(b): Sanitation Coverage in %



Considering the 27 WSPs who have sewerage systems in their areas, sewerage coverage increased from 15% to 19%. Nevertheless, the coverage level remains low, pointing at the need to allocate resources to low-cost onsite systems which can fill the sanitation gap in the short- to medium term. This particularly applies to high density low income areas, where public health risks are most significant.

Even where sewerage and wastewater treatment systems are available, effluent treatment remains largely inadequate. Non-compliance to effluent standards poses a major threat to water quality and public health. Mombasa Water and Sewerage Company is an infamous example in this respect. For years, the company has only been operating one out of its two wastewater treatment plants, putting the health of Mombasa residents at risk and contributing to the pollution of the coastline.

Fig 3.6: Sewerage Coverage in %



(c) Non-Revenue Water

Non-Revenue Water (NRW) is defined as the difference between the amount of water produced for distribution and the amount of water billed to consumers. The measure captures both physical losses (leakage) and commercial losses (illegal connections/water theft, unmetered public consumption, metering errors, unbilled metered consumption and water use for which payment is not collected).

High NRW levels indicate poor management, in form of either poor commercial practices or poor infrastructure maintenance, and are detrimental to the commercial viability of water utilities as well the quality of the water itself. Average NRW has stagnated at 45% since 2009/10, remaining at a level almost double the minimum acceptable level of 25%. In fact, only Meru has been able to keep NRW at an acceptable level.

Current NRW levels translate to financial losses of KSh 9.5 billion annually, which is about a quarter of the annual sector budget. The continuously high NRW levels threaten the financial sustainability of the water services sector.

In order to effectively address NRW, utilities have to put monitoring systems at production, distribution and consumer levels. Far too many WSPs still rely on estimates as they lack master and consumer meters. Moreover, WSPs should focus on reduction of commercial losses. These generally represent about 40% of total NRW yet their mitigation does not require major capital investments.

Fig 3.7(a): Non-Revenue Water in %

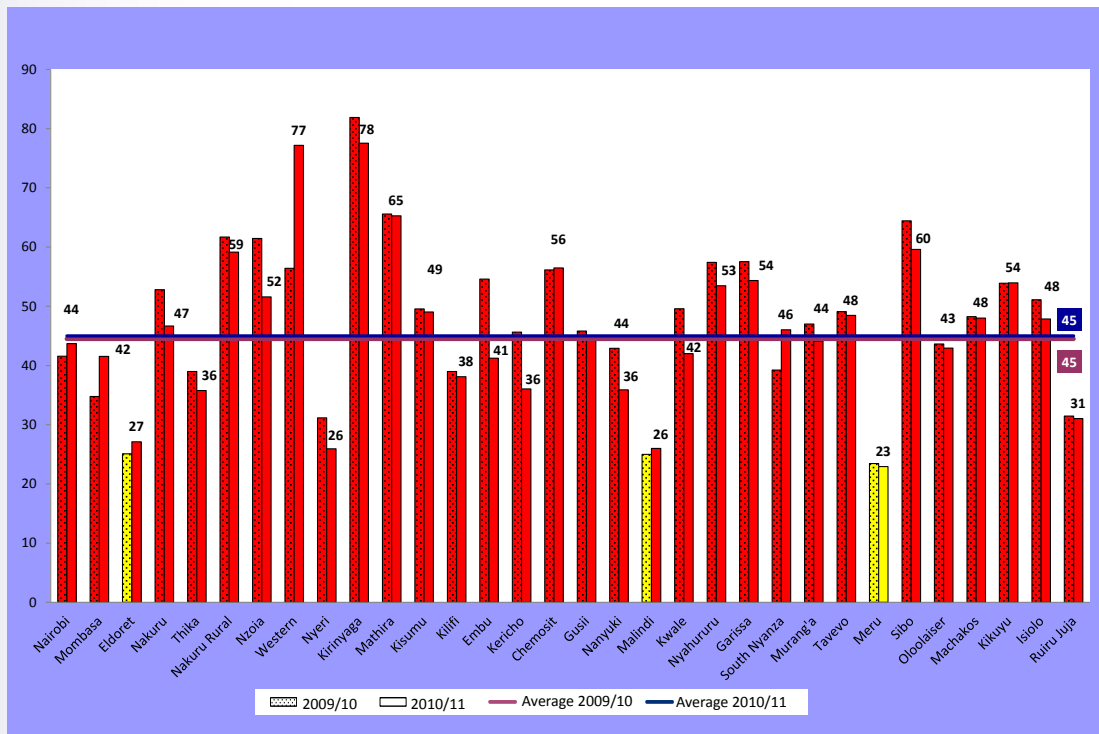
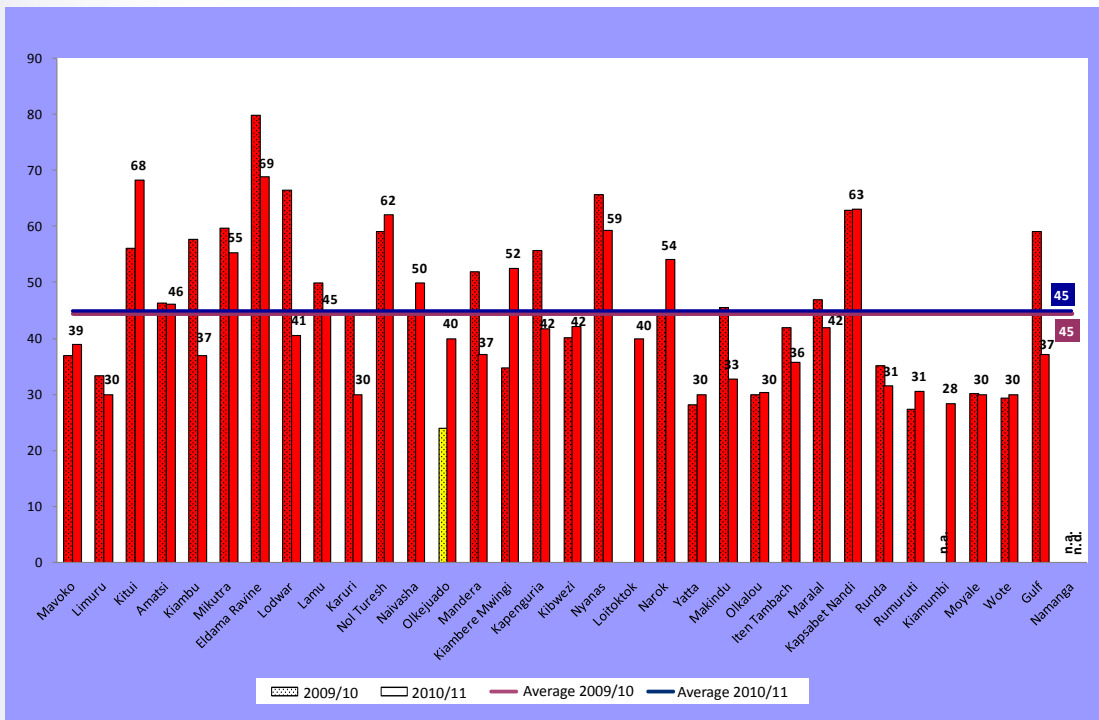


Fig 3.7(b): Non-Revenue Water in %



(d) Dormant Connections

Dormant Connections is defined as the ratio of dormant connections (connections that have had no water supply continuously for more than three months) to total connections. It is an indicator of WSP efficiency and ability to deliver reliable services. A score above 20% is totally unacceptable

as it implies lack of investments and capacity to provide reliable and sustainable services. The national average on this indicator remained at 31% for the current reporting period.

The fact alone that a WSP is not able to report on dormant connections hints at poor management (you can't manage what you don't measure!). Notably, out of the very large and large WSPs, Nairobi, Eldoret, Nakuru, Malindi and Kirinyaga did not report on dormant connections.

Fig 3.8(a): Dormant Connections in %

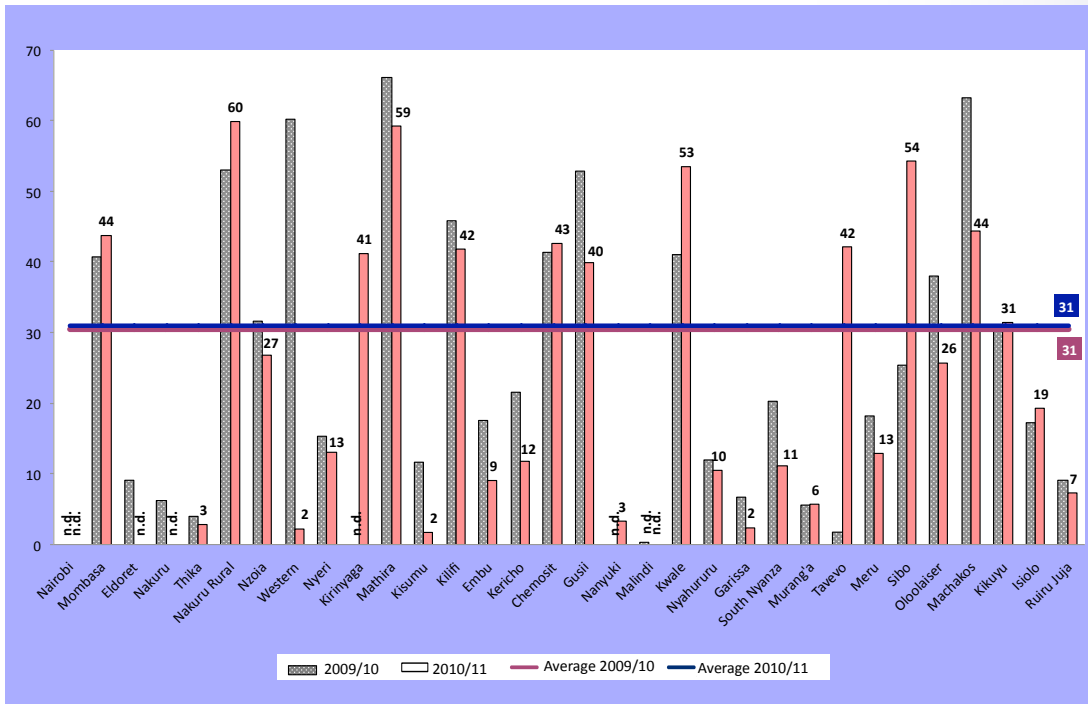
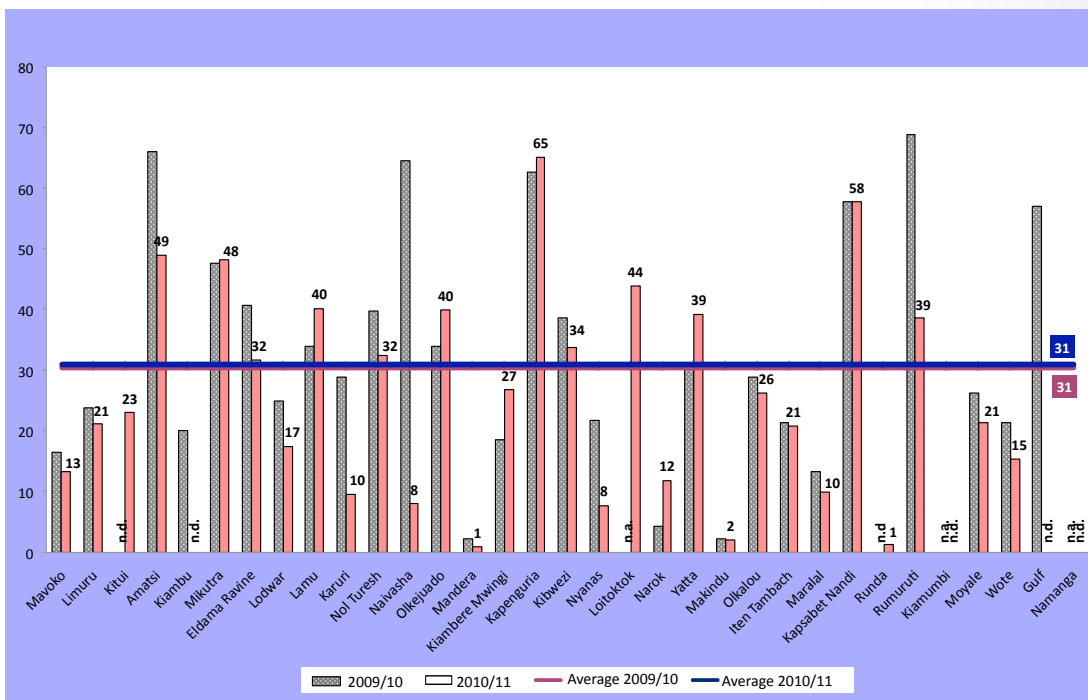


Fig 3.8(b): Dormant Connections in %



(e) Drinking Water Quality

Drinking Water Quality (DWQ) measures the potability of the water supplied by a WSP. It is a key indicator because it has direct impact on the health of consumers. The performance analysis of WSPs takes into account the number of samples conducted and the percentage of samples that meets the required standards for both Residual Chlorine and Bacteriological Standards. A low compliance level might therefore either imply a low number of samples taken and/or deficiency in meeting the required quality standards.

WSPs are obliged to adhere to the Guidelines on Water Quality and Effluent Monitoring. This entails developing elaborate sampling programmes and submitting reports on water quality monitoring on time. The fact that most WSPs do not submit reports has been considered in the performance analysis of the concerned WSPs by capping their maximum score at 70% of the total achievable score.

WSBs have to ensure that water companies have the right skills and facilities for water quality monitoring and should assist WSPs in carrying out regular tests by investing in the establishment of well equipped laboratories. Tana WSB has made commendable efforts in supporting their WSPs in complying with the Guideline.

(i) Residual Chlorine

The overall performance on this indicator improved from 88% in 2009/10 to 91% in 2010/11. Specifically, the number of tests improved from 84% to 90%. During the same period, however, compliance rates slightly reduced from 95% to 94%.

Fig 3.9(a): Water Quality - Residual Chlorine in %

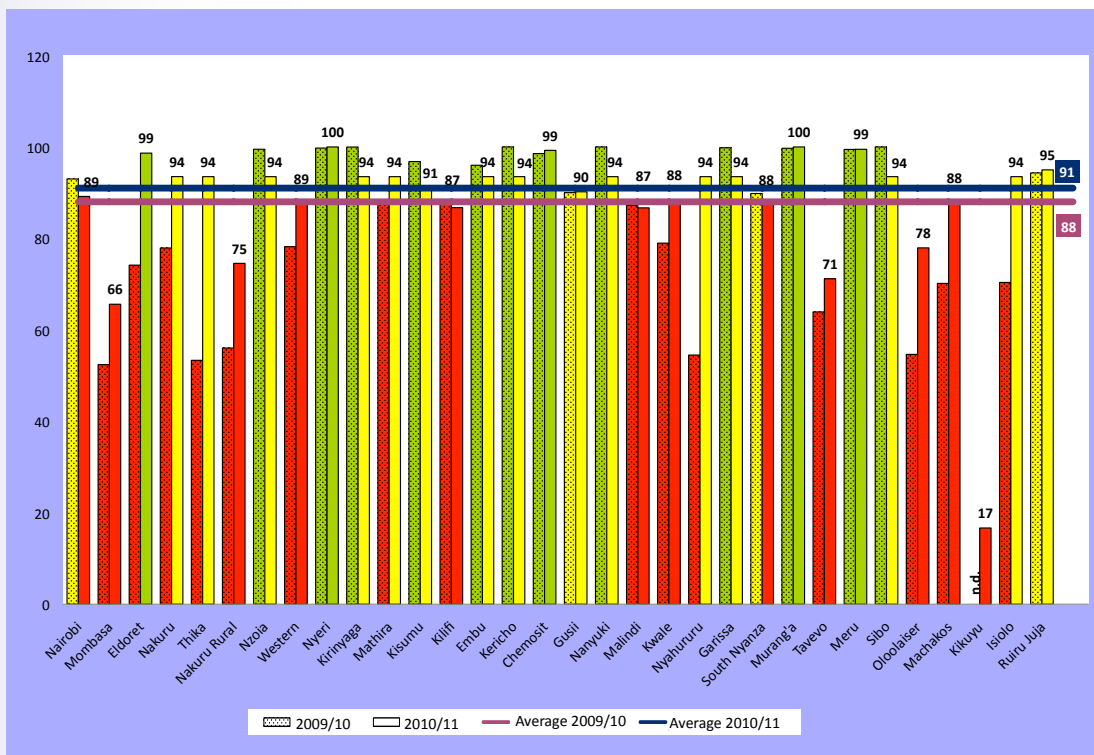
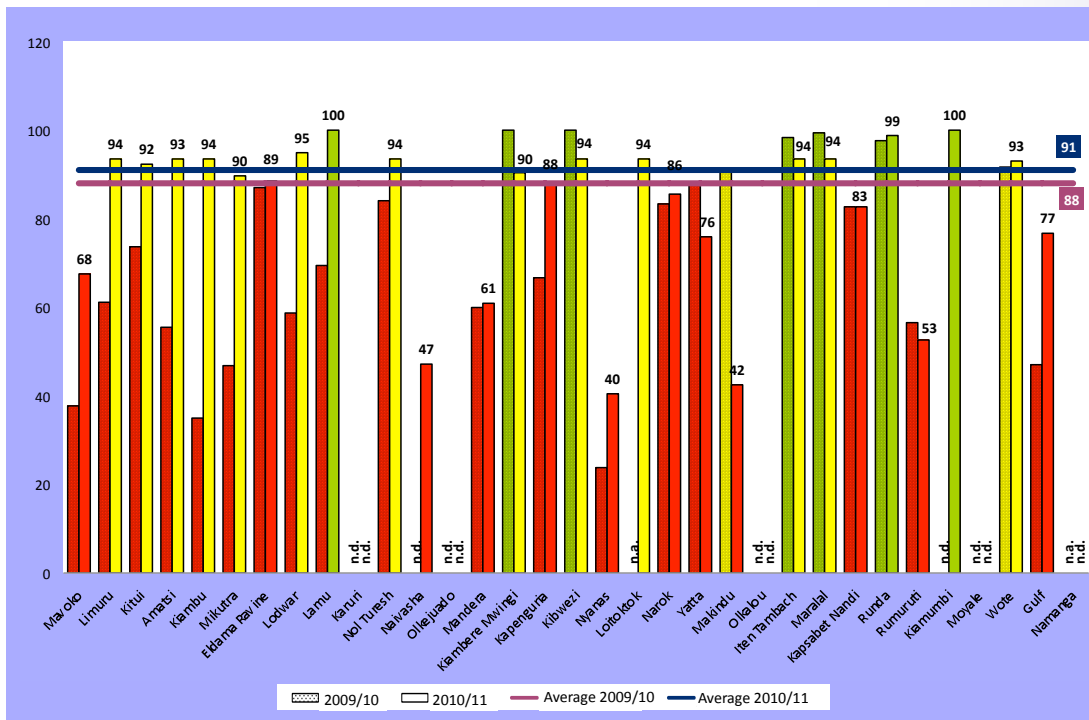


Fig 3.9(b): Water Quality - Residual Chlorine in %



(ii) Bacteriological Standards

The overall performance on this indicator improved from 71% in 2009/10 to 81% in 2010/11.

The number of tests improved from 62% to 76% in 2010/11. However, the rate of compliance reduced from 94% to 87%. For the period under review, 15 WSPs (23%) were within the acceptable sector benchmark.

Fig 3.10(a): Water Quality – Bacteriological Standards in %

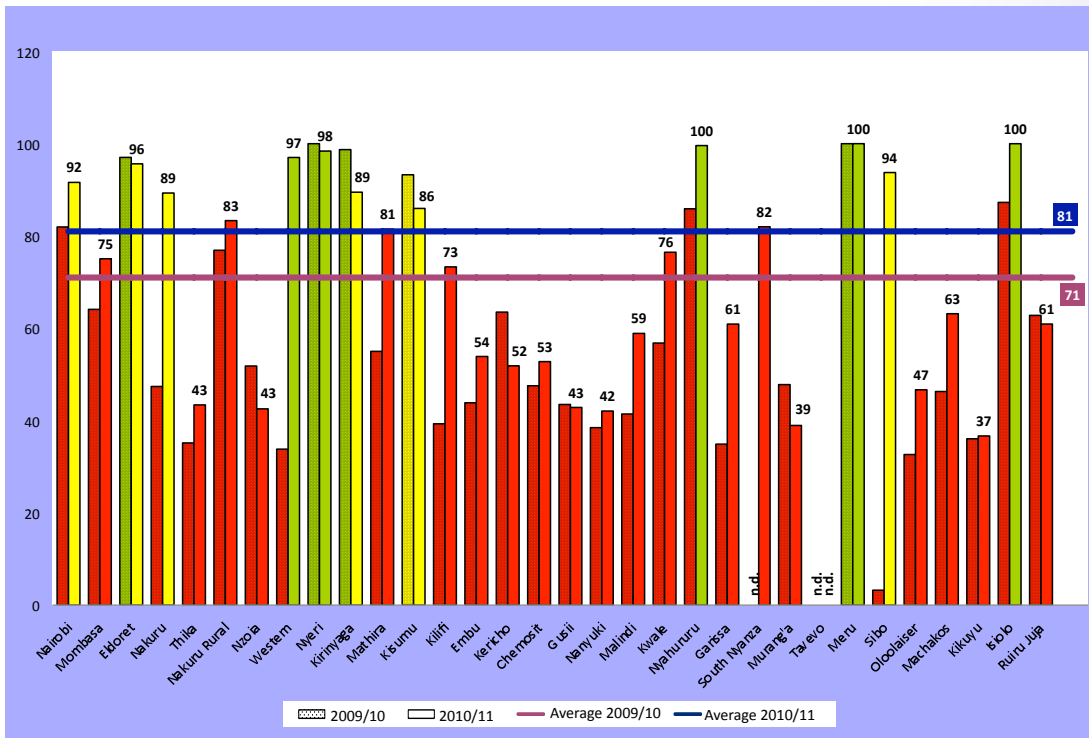
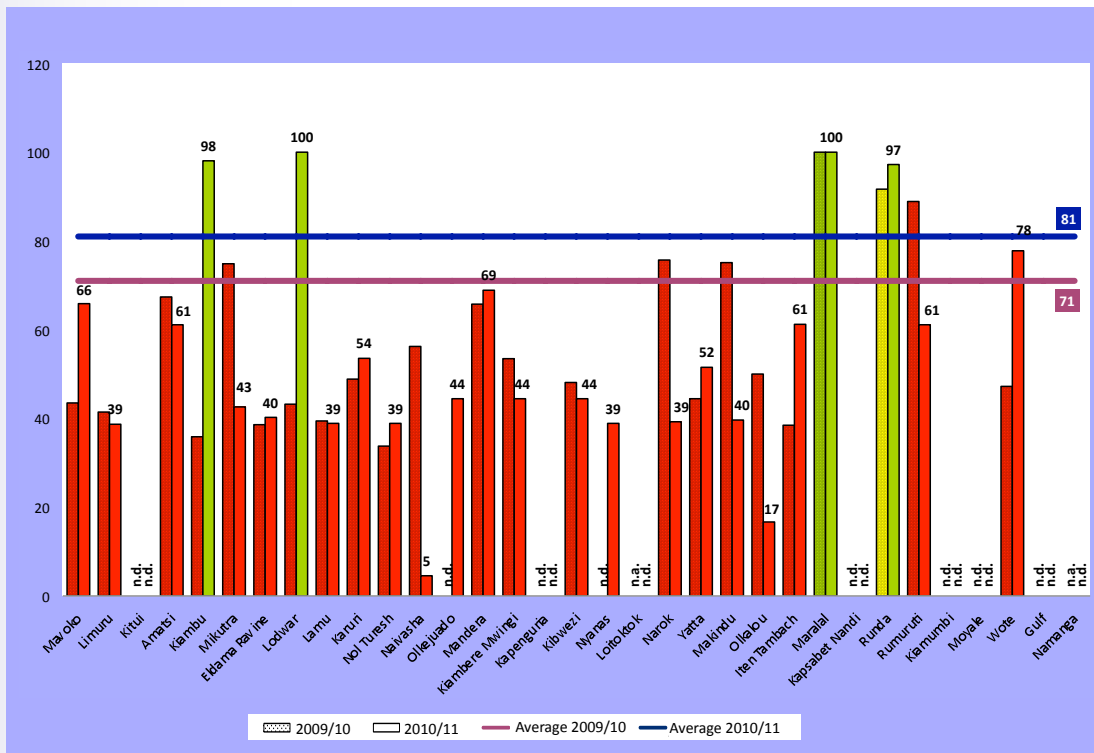


Fig 3.10(b): Water Quality – Bacteriological Standards in %



Case study

Quality begins from the inside... working its way to the outside

This is the quality statement embraced by the Nyeri Water and Sewerage Co. Ltd (Nyewasco), a statement they believe in and which they have sought to live, enabling them to earn the coveted Laboratories Accreditation to ISO/IEC 17025:2005 from Kenya Accreditation Service (KENAS) in November 2011.

Nyewasco has effectively become the first water company in Kenya to receive this accreditation, proving that the company is in a position to provide authentic and traceable water quality and meter calibration reports. The accreditation is a statement of Nyewasco's commitment to ensuring that it provides quality drinking water that complies with the stipulated international standards in order to satisfy consumer expectations. This commitment is also extended to the quality of wastewater effluent discharged into the natural water systems from its sewage treatment works.

A comprehensive water quality monitoring programme has been established which incorporates quality control from source, treatment, distribution and disposal of the water at frequent intervals. Influent into the sewage works are monitored to ensure that the strength of the sewage is within the design capacity of the plants. In its efforts to achieve this, Nyewasco has an established fully equipped water testing laboratory which is capable of testing both water and wastewater.

(f) Hours of Supply

Hours of Supply measures the average number of hours per day that a utility is able to provide water to consumers. The benchmark for this indicator depends on the population in the service area of a WSP (Table 3.2 and 3.5).

Customer satisfaction and willingness to pay are directly related to hours of supply. Accordingly, the drop from 14 hours/day on average in 2009/10 to 13 hours /day in 2010/11 (In 2008/09, the level for this indicator was 15 hours/day) and the fact that only 33 out of 65 WSPs were able to meet the acceptable sector benchmark is a point of concern.

WSPs need to reinforce efforts in curbing high levels of NRW as a way of increasing the amount of water available for distribution. They should strive to optimise their production capacities and ensure that network expansions correspond with increases in production.

Fig 3.11(a): Hours of Supply

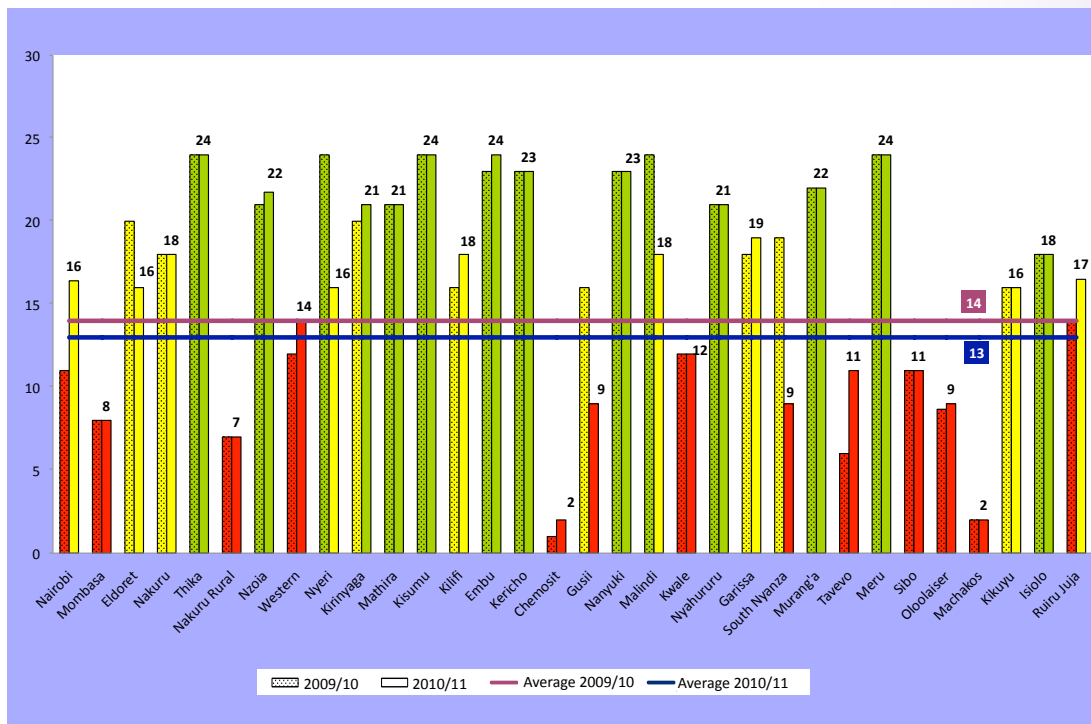
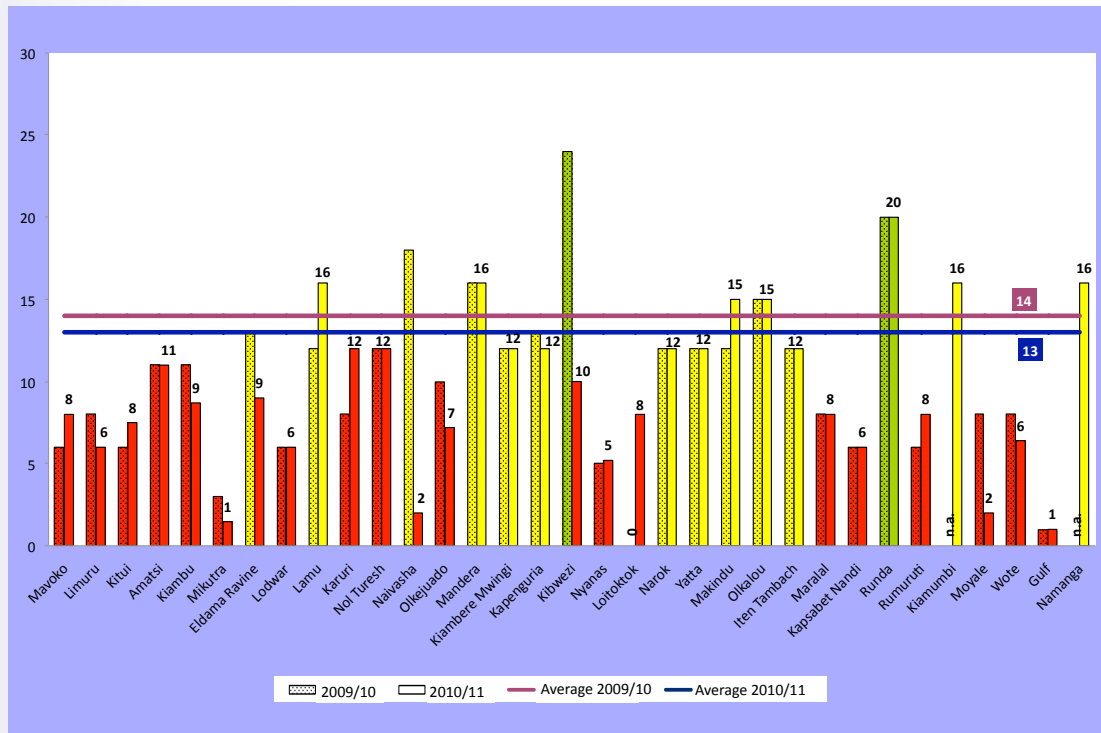


Fig 3.11(b): Hours of Supply



(g) Metering Ratio

Metering enables a WSP to charge consumers according to what they have actually consumed. It is also a critical tool for controlling NRW (commercial losses) and for managing per capita water consumption.

Metering Ratio is defined as the number of connections with operational meters compared to the total number of connections. The average metering improved from 82% in 2009/10 to 87% in 2010/11, but it still remains below the sector benchmark of 100%. Only 18 WSPs (28%) were within the acceptable sector benchmark of 95% during the reporting period. The reported average performance is, however, likely to be overstated since, generally, a certain portion of reported metered connections has non-functional meters.

WSPs need to reinforce efforts towards 100% metering by making use of available funding, e.g. earmarked funds in the Regular Tariff Approvals or financing under the WSTF’s Urban Projects Concept.

Fig 3.12(a): Metering Ratio

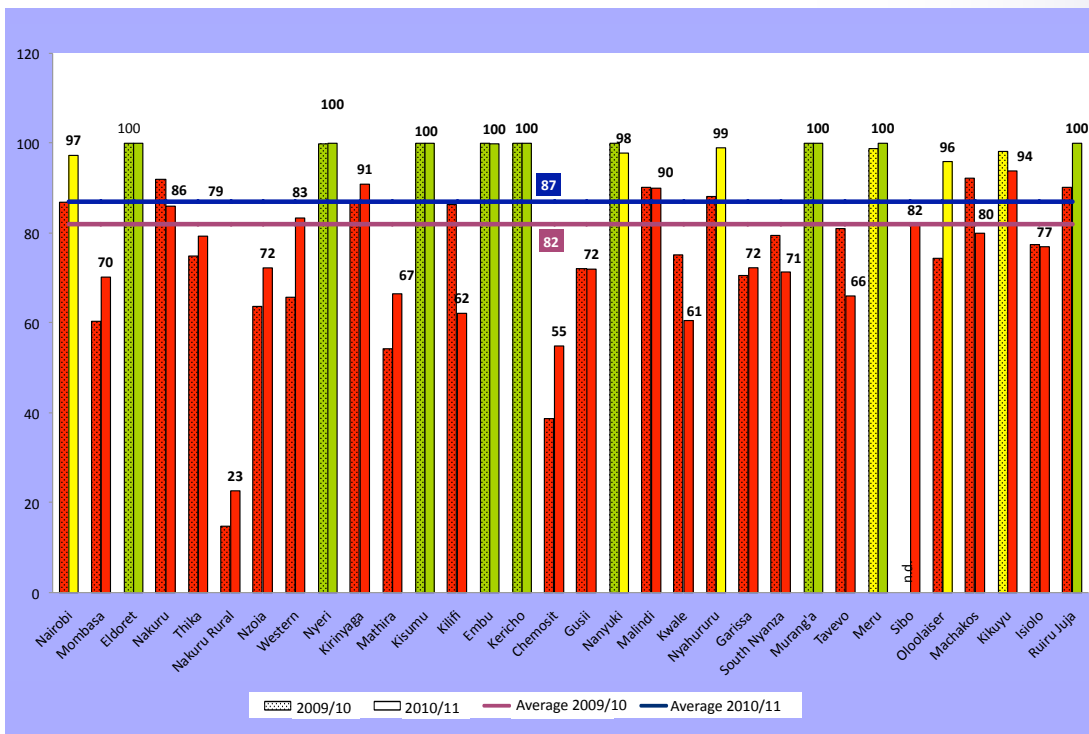
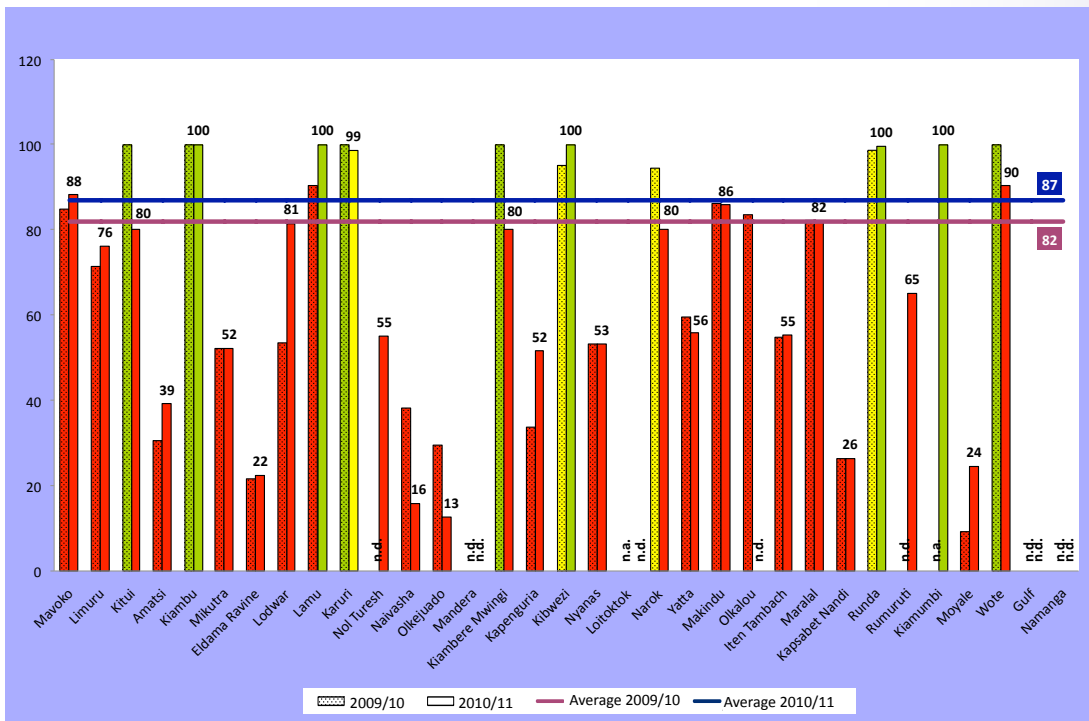


Fig 3.12(b): Metering Ratio



(h) Revenue Collection Efficiency

Revenue Collection Efficiency is defined as the total amount collected by a WSP compared to the total amount billed in a given period. It is a critical performance indicator of a WSP as it gives an indication on the effectiveness of the revenue management system in place and consequently the amount of resources available to the WSP. It also reflects customers' willingness to pay, which is closely related to customer satisfaction.

Since WSPs have not been able to separate between payments for current billing and arrears collected, some WSPs record revenue collection efficiencies of over 100%. Average collection efficiency marginally improved from 82% in 2009/10 to 84% in 2010/11. Forty seven (47) WSPs (72%) achieved the sector benchmark of 85%.

Fig 3.13(a): Revenue Collection Efficiency

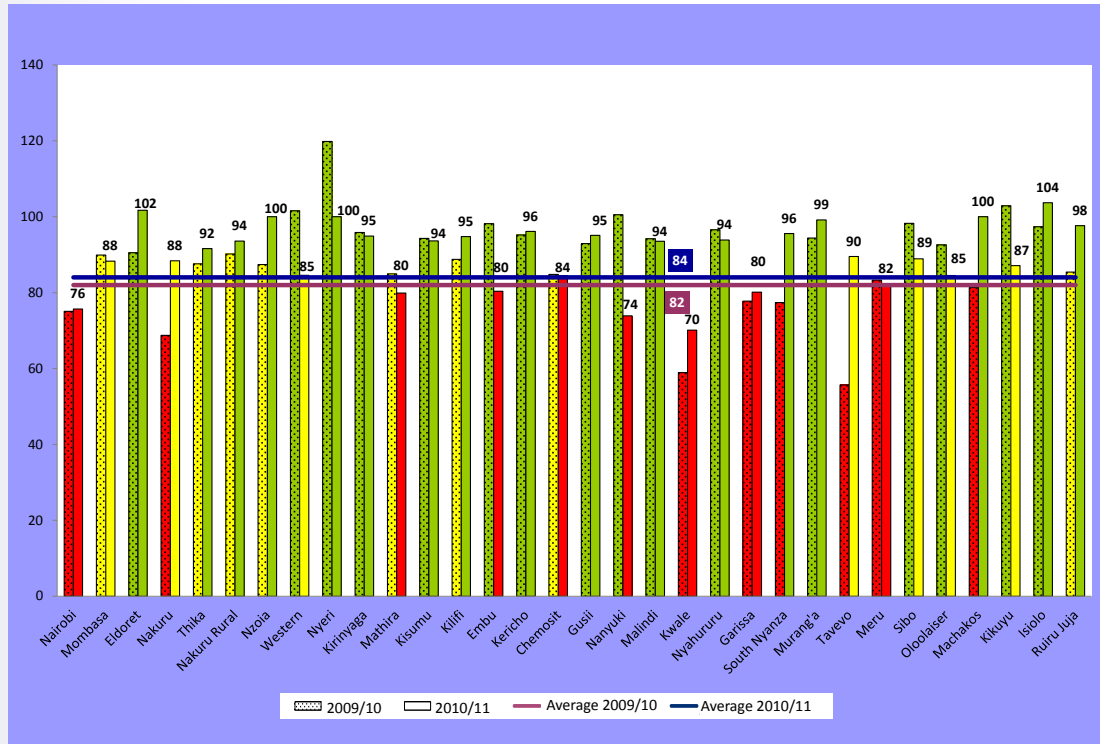
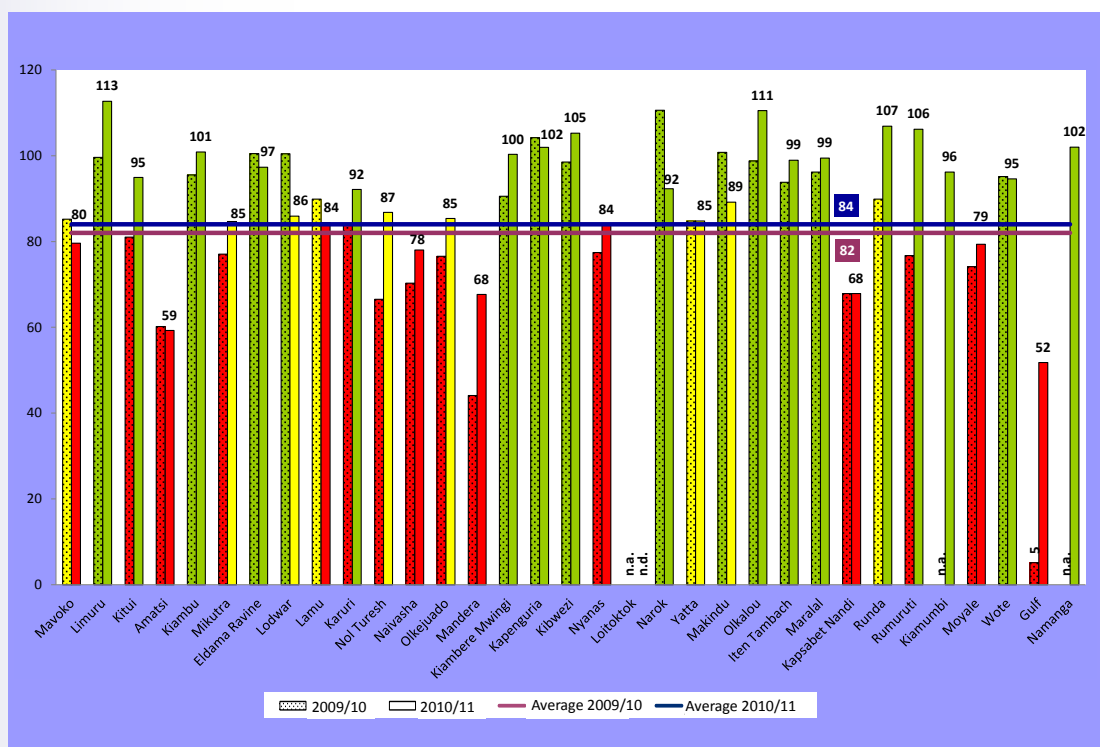


Fig 3.13(b): Revenue Collection Efficiency



(i) Staff Productivity (Staff per 1000 Connections)

Staff Productivity measures the number of staff a WSP utilizes for every 1000 connections. A low ratio indicates high efficiency in the utilization of staff and is therefore desirable. Different sector benchmarks depending on the category of a WSP (Table 3.1) and the number of towns covered (Table 3.2 and 3.5) have been applied in analyzing the staff productivity of the WSPs.

Staff productivity is affected in part by connection practices (single or shared), skills mix, outsourcing of staff functions, and the number of water supply schemes. It also depends on whether a utility provides both water and sewerage services.

The average performance on this indicator slightly improved from 8 to 7 staff per 1000 connections from the previous period. Twenty eight (28) out of 65 WSPs (43%) achieved the acceptable sector benchmark on this indicator. With 10 staff per 1000 connections, the staff productivity of Mombasa Water and Sewerage Company is half that of the other very large WSPs, such as Nairobi Water (5/1000).

Fig 3.14(a): Staff Productivity

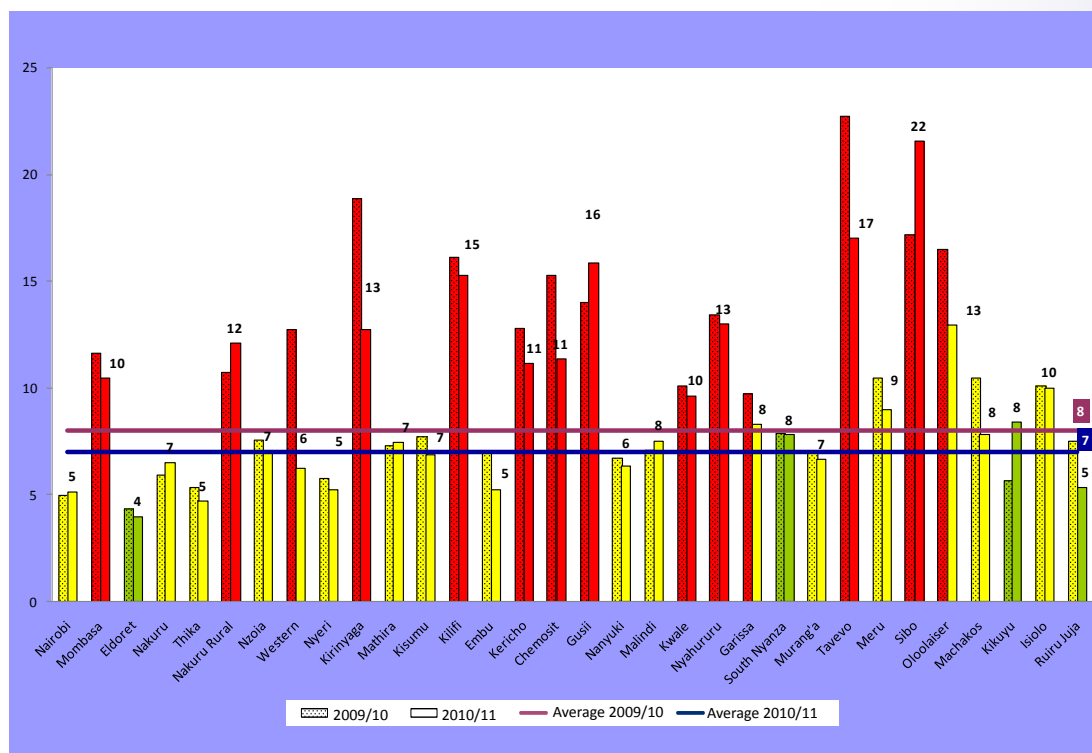
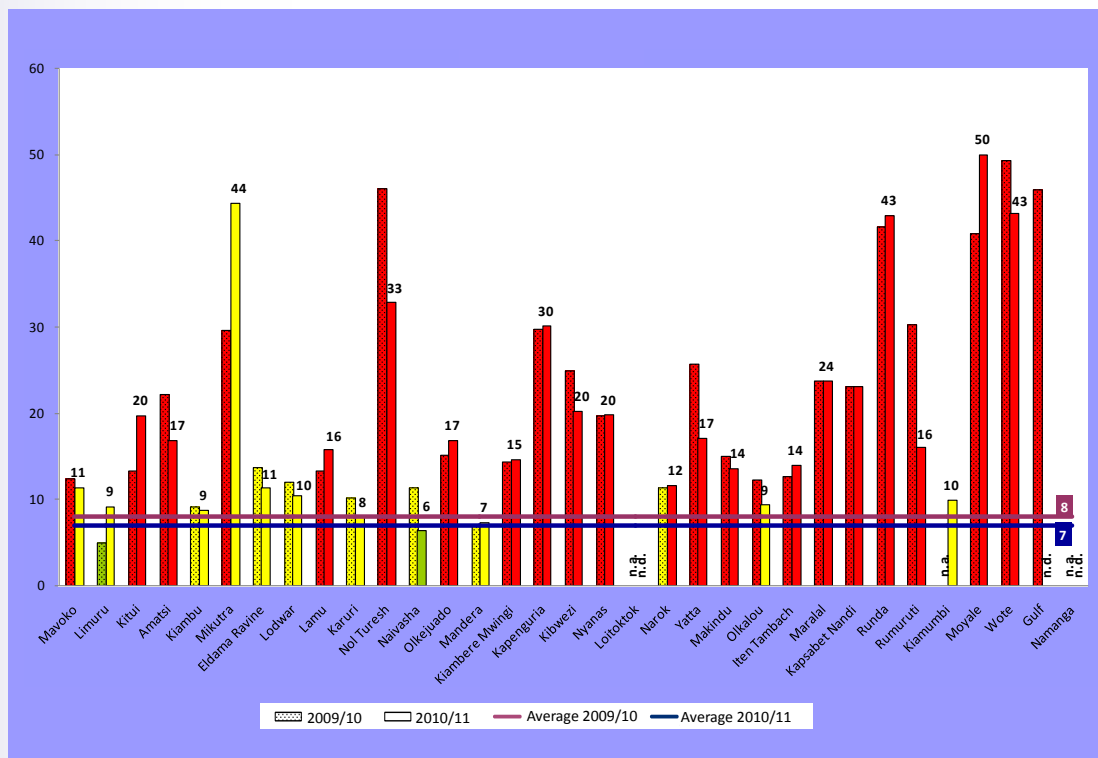


Fig 3.14(b): Staff Productivity



(j) Operation and Maintenance Cost Coverage

Operation and Maintenance (O+M) Cost Coverage measures the extent to which a WSP’s total operating revenues cover its O+M costs. It is the first step towards total cost recovery which would enable a WSP to cover investment costs as well. It is affected, inter alia, by the tariff, water consumption/sales, cost of inputs and efficiency in their application.

Average O+M Cost Coverage slightly declined from 133% in 2009/10 to 131% in 2010/11. At the same time, the proportion of WSPs able to cover their O+M costs increased from 25 (40%) in 2009/10 to 37 (57%) in 2010/11. Generally, it has to be noted that of the total amount billed in 2010/11, only 84% was actually collected, reducing the actual O+M Cost Coverage for that period.

The sustainability of a WSP is assured if it attains the benchmark O+M Cost Coverage of more than 150%. Through its regular tariff reviews, Wasreb ensures that WSPs gradually move to financial sustainability and on the other hand seeks to make sure that tariff increases are based on justified and affordable costs.

For the current reporting period, excessive cost coverage levels have been reported by Nanyuki (252%), Tavevo (200%), Mandera (191%) and Mavoko (181%). While for the latter three this can be explained by unaccounted for subsidies, for Nanyuki this hints at an inflated tariff. Wasreb has taken action on this.

Fig 3.15(a): O+M Cost Coverage

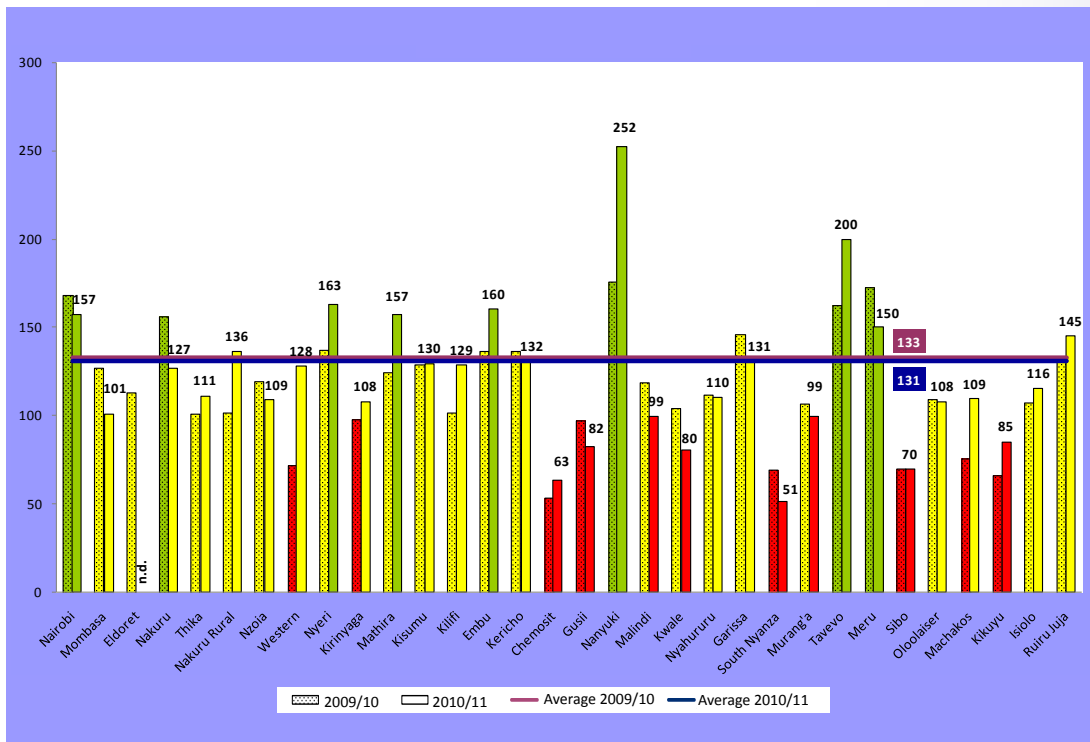
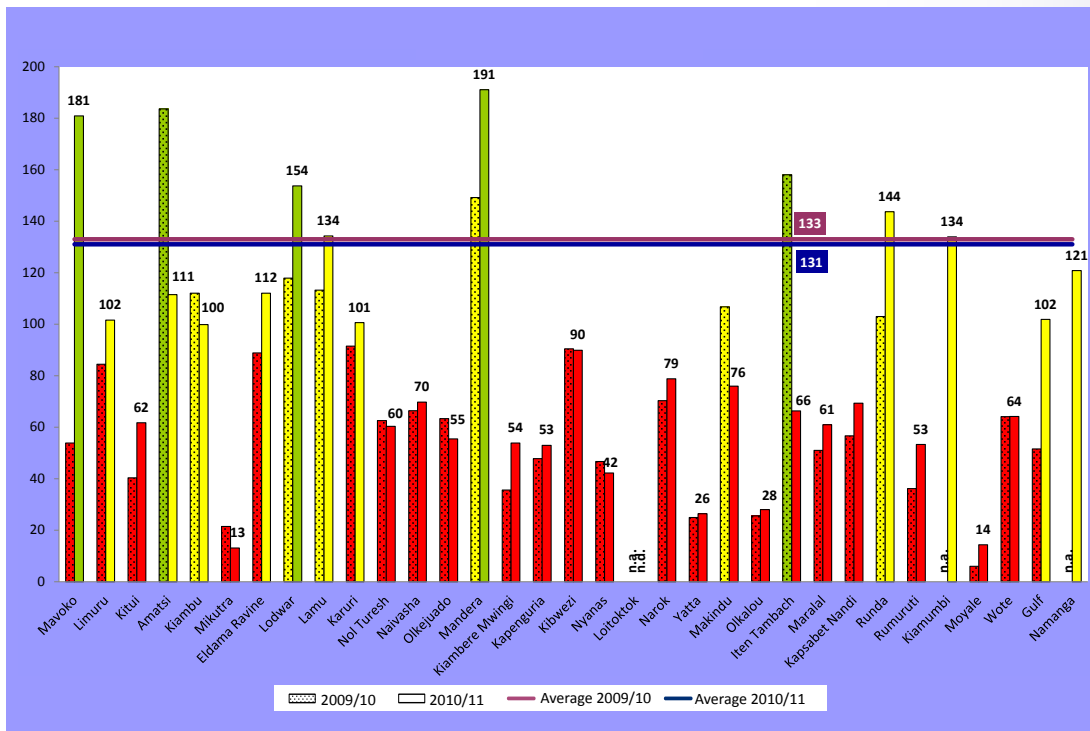


Fig 3.15(b): O+M Cost Coverage



(k) O+M Cost Coverage at 85% Collection Efficiency

Since O+M Cost Coverage does not consider how much of billed revenue utilities actually collect, this indicator measures the level of O+M cost coverage at the acceptable benchmark of 85% collection efficiency. WSPs who fail to meet 100% O+M Cost Coverage for this indicator are likely to be unsustainable. They are not in a position to meet all their financial obligations.

During the reporting period the average performance on this indicator dropped from 113% in 2009/10 to 109% in 2010/11.

Fig 3.16(a): O+M Cost Coverage at 85% Collection Efficiency

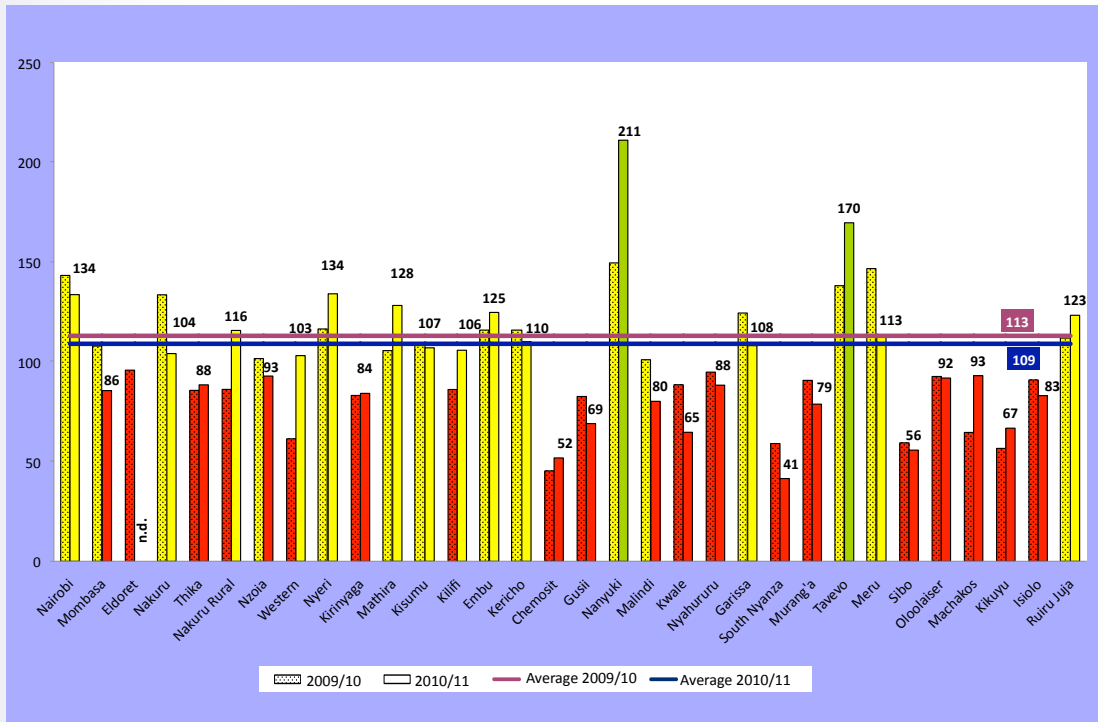


Fig 3.16(b): O+M Cost Coverage at 85% Collection Efficiency

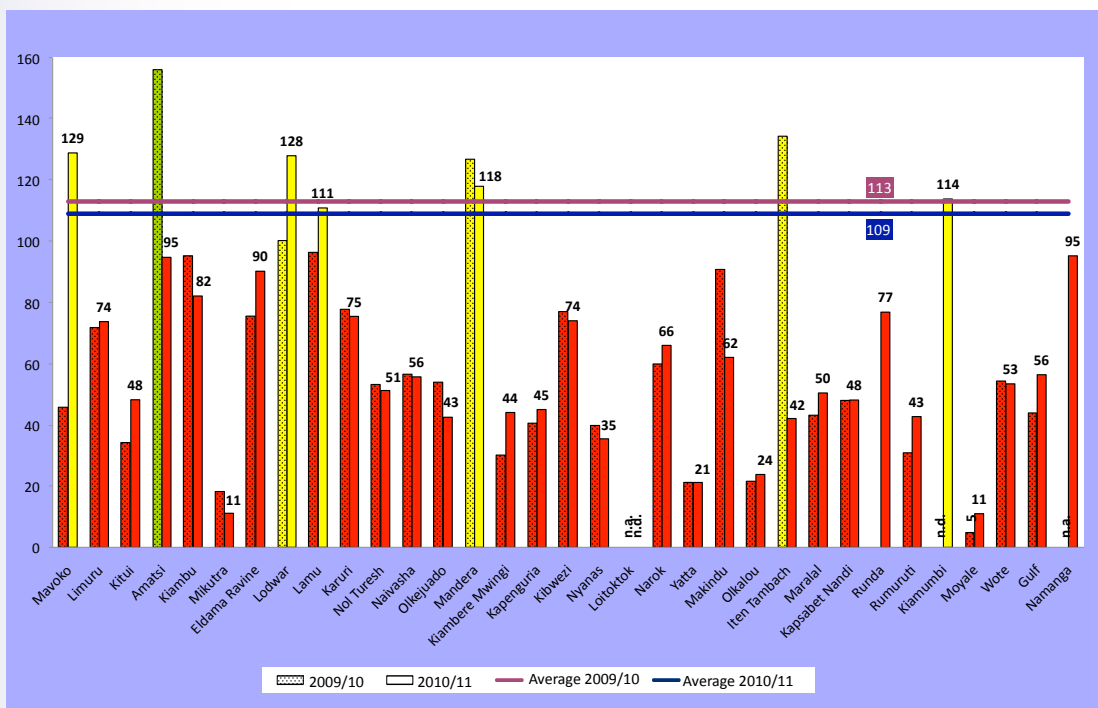
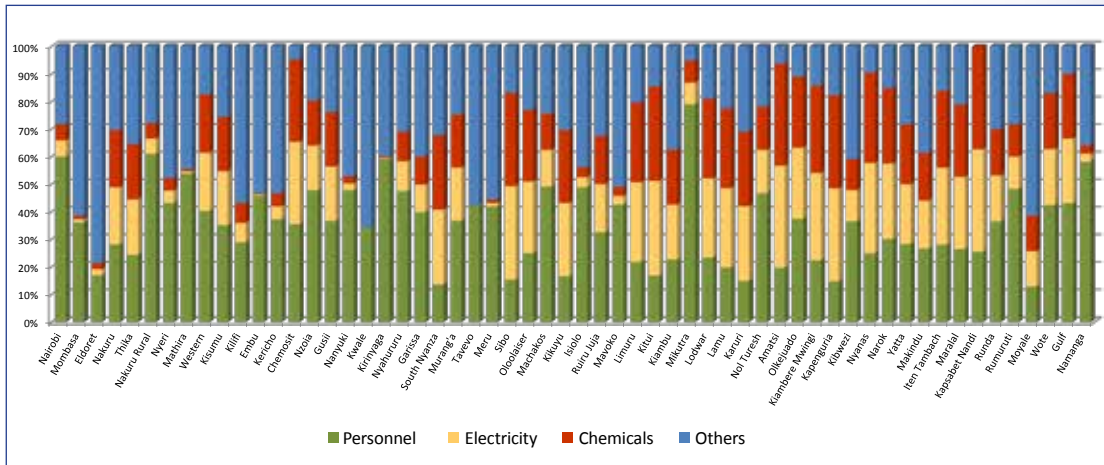


Fig 3.17: O+M Cost Breakdown



In the period under review, personnel expenditure accounted for 47%, electricity 11%, chemicals 5% and other expenses 37% of total operations and maintenance expenditure.

(I) Personnel Expenditure as a % of O+M costs

Personnel costs are incurred by a WSP in hiring and maintaining staff. The benchmarks applied vary according to the size and category of a WSP (Table 3.1). Average personnel expenditure as a percentage O+M costs slightly increased from 46% in 2009/10 to 47% for 2010/11, falling below the acceptable benchmarks for the different categories (Table 3.2). The high expenditure on personnel by many WSPs can be explained by having too many staff who do not have the right skills mix.

Fig 3.18(a): Personnel Expenditure as a % of O+M Costs

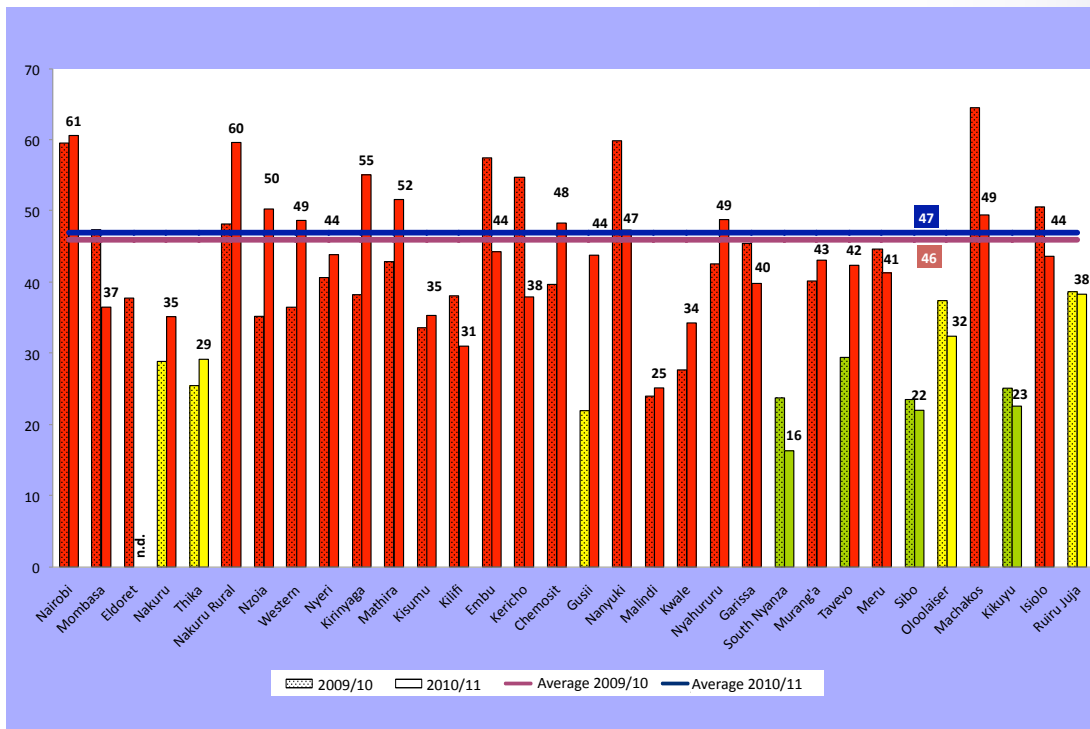
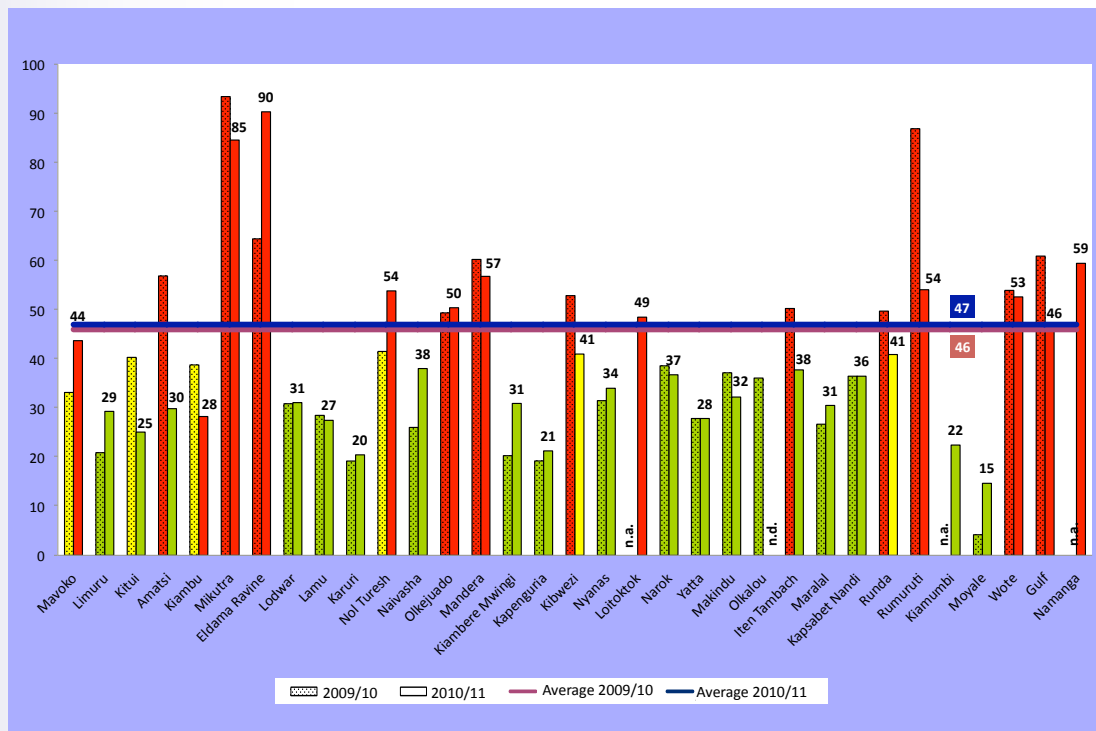


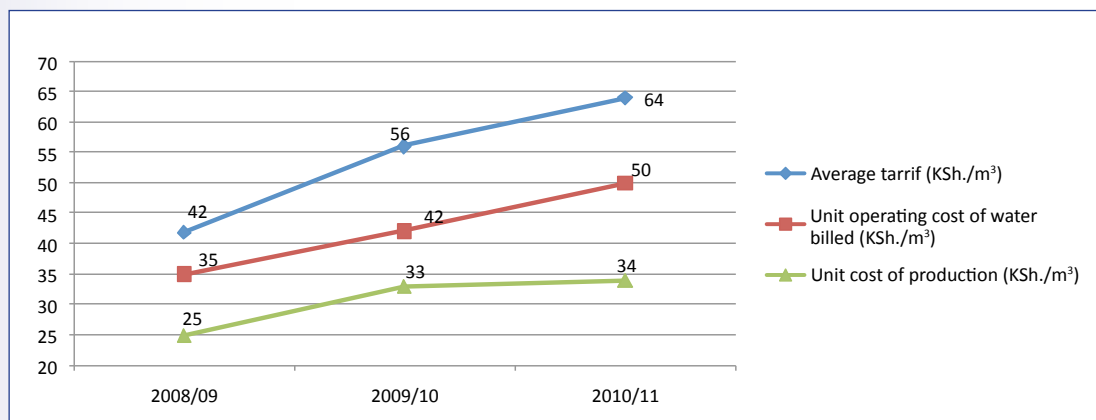
Fig 3.18(b): Personnel Expenditure as a % of O+M Costs



(m) Comparison of Average Tariff, Unit Cost of Production and Unit Cost of Water Billed

The average tariff for Urban WSPs is higher than their unit operation cost. The ‘surplus’ arising from this difference is meant to cater for collection and operation efficiency and the financing of investments.

Fig 3.19: Comparison of Average Tariff, Unit Cost of Production and Unit Cost of Water Billed





SECTION B: Performance of Rural Water Service Providers

Too Many WSPs, Too Much Waste, Too Little in Performance

3.8 Introduction

This section presents an overview of the performance of 35 rural Water Service Providers (WSPs) for the period 2010/11. Taken together, their service areas cover a total population of slightly more than 4 million, which represents roughly 15% of Kenya's rural population. Considering that they cover a total of 67 towns, the actual percentage is likely to be even lower. A majority of people living in rural Kenya rely on point sources or small scale piped systems, which are often community managed. Accordingly, the performance figures presented in this section are not representative of the entire rural Kenya. Unfortunately, information on other rural services, which is the responsibility of the Water Services Boards (WSBs), remains poor, making it impossible to present a complete picture on the water services situation in rural Kenya.

Table 3.10 below summarizes the basic data from the 35 rural WSPs analysed for the year 2010/11. They are placed in three categories depending on the total number of registered water connections.

Table 3.10: General Data on Rural WSPs

WSP	Total Population in Service Area	Population Served	No. of Connections	No. of Active Connections	No. of Towns	Turnover/Billing (KSh Million)	Production in m ³ (000)	Domestic + Kiosks Billed Volume (000)	NRW	Ø Consumption incl NRW (l/c/d)	Ø Consumption without NRW (l/c/d)	No. of Staff	
Large WSPs (10,000-35,000 Connections)													
1	Othaya Mukurweini	171,306	123,662	21898	14240	2	75	5,982	3559	55	133	79	92
2	Kahuti	167,318	82345	15005	7376	1	43	3,135	722	65	104	24	73
3	Gatundu South	139,643	94798	14651	8422	3	41	2,883	1088	62	83	31	74
4	Tetu Aberdare	89,827	78735	13963	9932	3	39	2,498	900	54	87	31	60
5	Murang'a South	347,623	99525	13870	8497	4	32	5,214	1133	70	144	31	98
6	Gichugu	1,366,140	607,851	10842	5,800	1	19	4,928	878	82	22	4	74
7	Imetha	135,360	29304	10640	4884	7	31	1,947	506	65	182	47	66
Medium WSPs (5,000-9,999 Connections)													
8	Karimenu	109,957	53198	9708	6816	1	17	1,118	425	60	58	22	58
9	Gatamathi	113,974	42,045	9529	4,674	2	26	3,016	531	79	197	35	41
10	Githunguri	194,026	28048	9108	4573	2	28	689	143	32	67	14	23
11	Ngandori Nginda	83,200	37116	7951	6371	4	17	3,650	907	72	269	67	50
12	Ngagaka	76,133	23592	7024	3988	1	19	2,291	415	75	266	48	37
13	Turu	335,912	224090	6319	4967	1	20	1,309	287	73	16	4	43
14	Nithi	70,483	35784	5934	3980	3	26	1,217	226	61	93	17	23
Small WSPs (<5,000 Connections)													
15	Kyeni	58,242	10,600	4926	1,178	2	4	190	85	No data	No data	22	17
16	Gatanga	39,559	16757	3793	3211	1	27	1,567	533	38	256	87	34
17	Nyandarua	51,802	26938	3468	982	4	6	272	106	49	28	11	29
18	Murugi Mugumango	27,998	18030	3187	3093	1	7	2,220	1239	40	337	188	25
19	Embe	47,067	11115	2759	1322	3	13	1,068	199	80	263	49	27
20	Mwala	122,286	27174	1862	1605	4	14	258	101	46	26	10	31
21	Muthambi 4K	19,373	13014	1661	1494	1	3	649	304	40	137	64	13
22	Ndaragwa	72,384	0	1474	819	1	2	1,380	704	49	No data	No data	9
23	Nyakanja	18,000	17368	1449	1349	1	0.4	13	5	55	2	1	26
24	Kikanamku	35,017	0	1308	1002	1	3	468	100	51	No data	No data	8
25	Engineer Town	6,660	5694	1037	938	1	1	432	71	50	208	34	5
26	Nyasare	77,376	9570	969	771	1	3	156	27	40	45	8	11
27	Tachasis	22,886	7779	908	534	3	0.8	292	82	40	103	29	4
28	Mawingo	20,000	10000	807	705	1	0.7	50	0	95	14	0	5
29	Kinja	11,000	3084	659	539	1	0.8	24	9	52	21	8	3
30	Matungulu Kangundo	21,780	1922	601	392	1	8	102	5	50	146	8	14
31	Tia Wira	6,500	2896	537	471	1	0.7	123	47	57	116	45	3
32	Upper Chania	21,065	13270	499	495	1	2	2,444	101	52	505	21	6
33	Ruiru Thau	29,000	21,800	447	422	1	No data	389	78	80	49	10	4
34	Kathita Kiirua	30,000	25092	352	346	1	10	389	197	37	43	22	32
35	Gitei	19,700	1920	350	320	1	No data	No data	No data	No data	No data	No data	3
TOTALS		4,158,597	1,804,116	189,495	116,508	67	541	52,362	15,717	63*	80*	24*	1,121

* Averages values

Table 3.11 provides a summary of the respective categories with respect to the number of WSPs, turnover, production, people served, number of connections and staffing levels.

Table 3.11: Summary of WSP Categories – Rural

WSP Category	No. of WSPs	Turnover in KSh Million	Production (000) m ³	People Served in Million	No. of Connections	No. of Staff
Large	7	280.15	26,586.57	1.12	100,869	537
Medium	7	151.96	13,289.94	0.44	55,573	275
Small	21	108.46	12,485.88	0.24	33,053	309
Total	35	540.57	52,362.39	1.80	189,495	1,121

3.9 Ranking

The overall ranking for the year 2010/11 places Githunguri in the first position and Muthambi 4K and Kathiita Kiirua in position two and three respectively. The least performing WSPs were Nyandarua, Gitei and Gichugu. Looking at the overall scores achieved, the performance of rural WSPs trails their urban counterparts.

Table 3.12: Overall Ranking and Ranking by Category

INDICATORS	Water Quality - Residual Chlorine	Water Quality - Bacteriological	Non-Revenue Water in %	Water Coverage in %	Sanitation Coverage in %	Hours of Supply	Staff Productivity	Collection Efficiency in %	Cost Recovery O+M Cost Coverage in %	Metering Ratio in %	Total Score	Ranking by Category	Overall Ranking
Large (10,000- 34,999)													
Tetu Aberdare	77	98	54	88	98	21	6	98	95	76	114	1	6
Othaya Mukurweini	71	85	55	72	91	20	6	79	141	67	98	2	9
Gatundu South	76	67	62	68	95	20	9	80	154	0	92	3	13
Kahuti	81	85	65	49	94	21	10	91	137	69	90	4	14
Murang'a South	99	97	70	29	91	10	12	98	91	52	63	5	23
Imetha	95	96	65	22	75	20	14	79	84	61	58	6	26
Gichugu	No data	No data	82	44	No data	No data	13	85	No data	No data	22	7	33
Medium (5000- 9,999)													
Githunguri	100	94	32	14	92	8	5	89	153	98	132	1	1
Nithi	100	94	61	51	90	20	6	80	135	100	119	2	4
Ngagaka	93	75	75	31	85	20	9	92	146	92	118	3	5
Ngandori Nginda	93	91	72	45	85	20	8	107	113	7	103	4	7
Tuuru	No data	97	73	67	87	6	9	103	105	98	101	5	8
Gatamathi	100	43	79	37	91	18	9	106	76	54	85	6	15
Karimenu	34	67	60	48	90	5	9	81	128	84	65	7	22
Small (Less than 5,000 Connections)													
Muthambi 4K	No data	No data	40	67	90	20	9	90	194	94	132	1	2
Kathiita Kiirua	99	100	37	84	84	24	92	89	127	100	131	2	3
Tia Wira	No data	No data	57	45	98	24	6	97	123	0	95	3	10
Tachasis	No data	No data	40	34	70	24	7	99	111	57	93	4	11
Gatanga	No data	83	38	42	75	8	11	67	162	100	92	5	12
Engineer Town	No data	No data	50	85	63	8	5	82	156	0	83	6	16
Murugi Mugumango	No data	No data	40	64	70	18	8	80	102	75	82	7	17
Kikanamku	No data	61	51	No data	98	21	8	70	138	0	69	8	18
Ndaragwa	No data	No data	49	No data	No data	21	11	106	107	0	69	9	19
Kyeni	92	No data	No data	18	86	24	14	116	64	6	67	10	20
Upper Chania	No data	94	52	63	89	12	12	84	88	79	67	11	21
Mawingo	100	No data	95	50	91	6	7	No data	110	0	62	12	24
Mwala	100	58	46	22	32	8	19	91	70	97	61	13	25
Matungulu Kangundo	83	56	50	9	No data	15	36	77	162	88	51	14	27
Ruiri Thau	No data	No data	80	75	7	No data	9	No data	No data	100	50	15	28
Kinja	No data	No data	52	28	60	12	6	80	95	2	48	16	29
Nyasare	78	68	40	12	7	1	14	88	122	60	47	17	30
Embe	92	43	80	24	85	17	20	78	100	70	45	18	31
Nyankanja	No data	No data	55	96	20	2	19	No data	27	100	42	19	32
Gitei	No data	No data	No data	10	62	No data	9	No data	No data	0	21	20	34
Nyandarua	73	44	49	52	90	20	30	49	36	86	8	21	35

3.10 Performance Over Time

Table 3.13 compares the overall score of each rural WSP for 2010/11 with the one for 2009/10. Nineteen (19) out of 65 WSPs (54%) recorded improvement for the year 2010/11 compared to only six (11%) for the previous reporting period.

Table 3.13: Overall Ranking and Performance Over Time of Rural WSPs

Overall Ranking Position	WSP	Score 2010/11	Score 2009/10	Scores Gained(+)/Dropped(-) from 2009/10 to 2010/11
1	Githunguri	132	81	51
2	Muthambi 4K	132	101	31
3	Kathita Kiirua	131	66	65
4	Nithi	119	59	60
5	Ngagaka	118	96	22
6	Tetu Aberdare	114	116	-2
7	Ngandori Nginda	103	128	-25
8	Tuuru	101	66	35
9	Othaya Mukurweini	98	80	18
10	Tia Wira	95	n/a	n/a
11	Tachasis	93	79	14
12	Gatanga	92	52	40
13	Gatundu South	92	57	35
14	Kahuti	90	83	7
15	Gatamathi	85	98	-13
16	Engineer Town	83	57	26
17	Murugi Mugumango	82	76	6
18	Kikanamku	69	69	0
19	Ndaragwa	69	n/a	n/a
20	Kyeni	67	74	-7
21	Upper Chania	67	29	38
22	Karimenu	65	50	15
23	Murang'a South	63	44	19
24	Mawingo	62	26	36
25	Mwala	61	n/a	n/a
26	Imetha	58	59	-1
27	Matungulu Kangundo	51	n/a	n/a
28	Ruri Thau	50	40	10
29	Kinja	48	37	11
30	Nyasare	47	n/a	n/a
31	Embe	45	60	-15
32	Nyankanja	42	n/a	n/a
33	Gichugu	22	57	-35
34	Gitei	21	n/a	n/a
35	Nyandarua	8	11	-3

3.11 Comparative Performance of WSPs by Indicators

(a) Water Coverage

Since the last reporting period, rural WSPs have been able to provide an additional number of almost 800,000 consumers with water services, improving overall rural water coverage by 8 percentage points, to 45%. The increase in water coverage is even more pronounced, making the baseline comparison (considering only those WSPs who had already reported in 2009/10 and reported for this reporting period as well), which shows an increment of 9 percentage points, to 46%.

Fig 3.20: Water Coverage in %

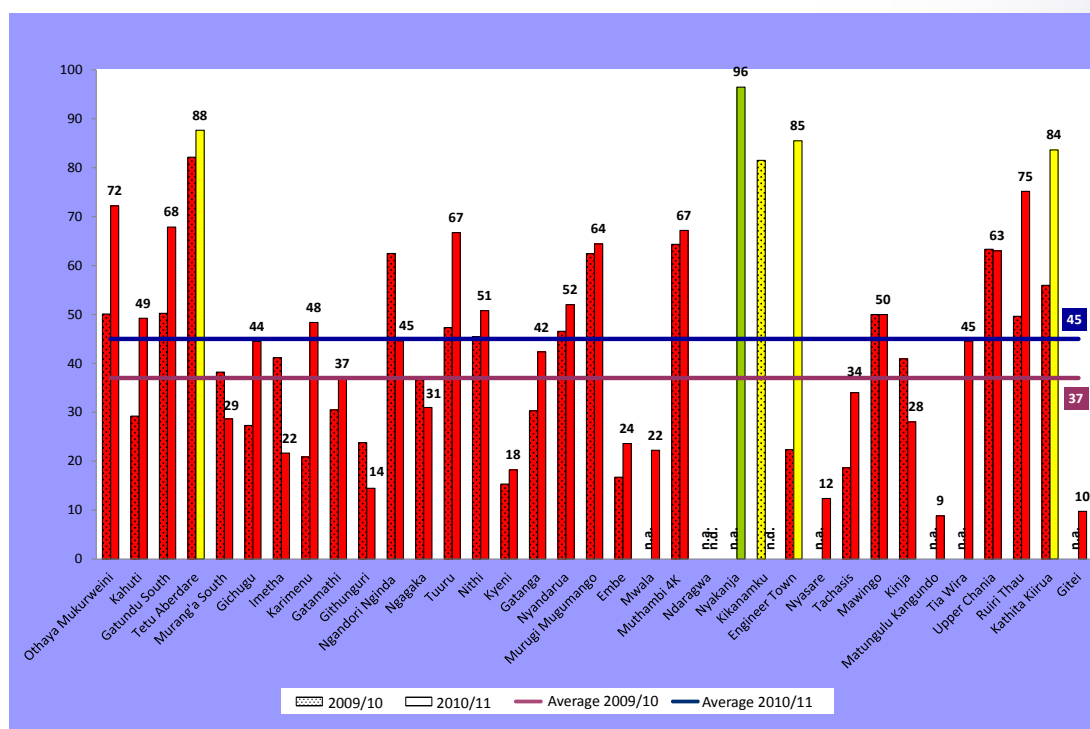


Table 3.14: Baseline Comparison for Water Coverage

Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2010/2011 - Including New WSPs
Water Coverage in %	40	46	6	45

(b) Sanitation Coverage

Looking at the weighted average, sanitation coverage has improved slightly since the last reporting period. At an average of 82%, it is within the acceptable sector benchmark. The baseline comparison indicates a more significant increase. It is interesting to note that this is one of the few indicators where rural WSPs do better than urban WSPs.

However, as is the case for urban WSPs, data reliability presents a challenge on this indicator, as reflected in the significantly different figures presented by some WSPs between the last and the current reporting period.

Fig 3.21: Sanitation Coverage in %

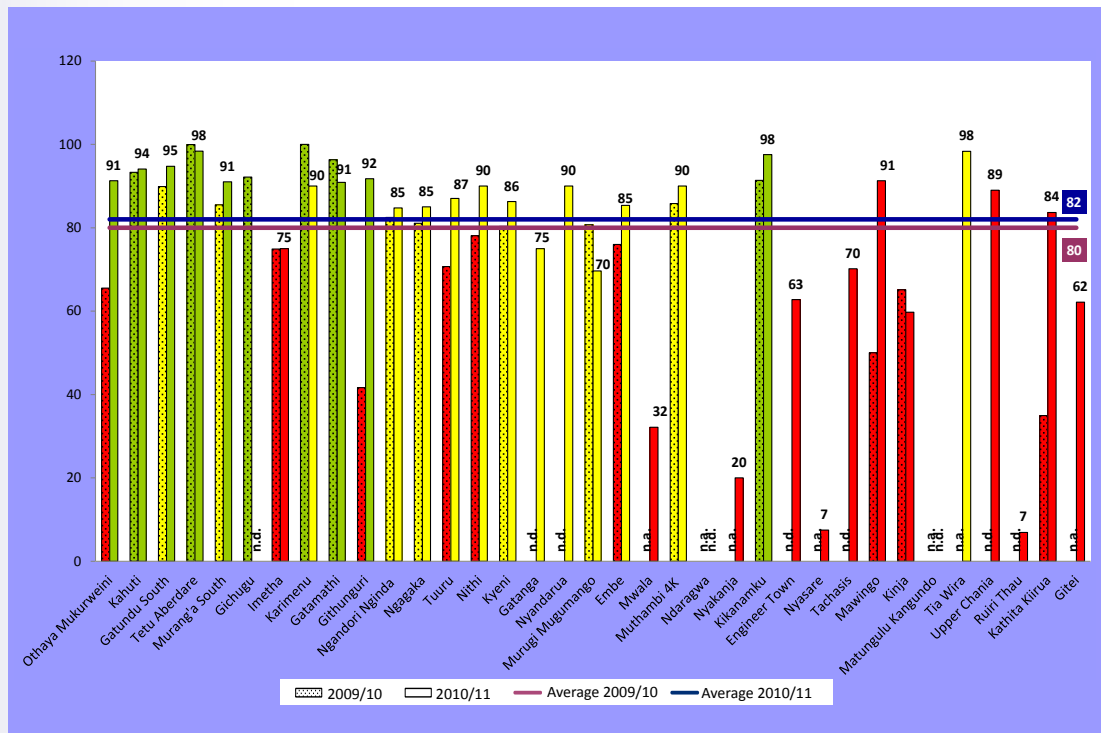


Table 3.15: Baseline Comparison for Sanitation Coverage

Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2010/2011 - Including New WSPs
Sanitation Coverage in %	81	89	8	82

(c) Non-Revenue Water

Non-Revenue Water increased from 61% in 2009/10 to 63% in 2010/11. This negative trend is confirmed by the baseline comparison.

Currently, NRW levels translate to a financial loss of KSh 0.9 billion annually. These losses occur at the expense of the consumer – who will have to pay for increased costs. They directly relate to poor corporate governance and poor management practices within these WSPs.

Fig 3.22: Non-Revenue Water in %

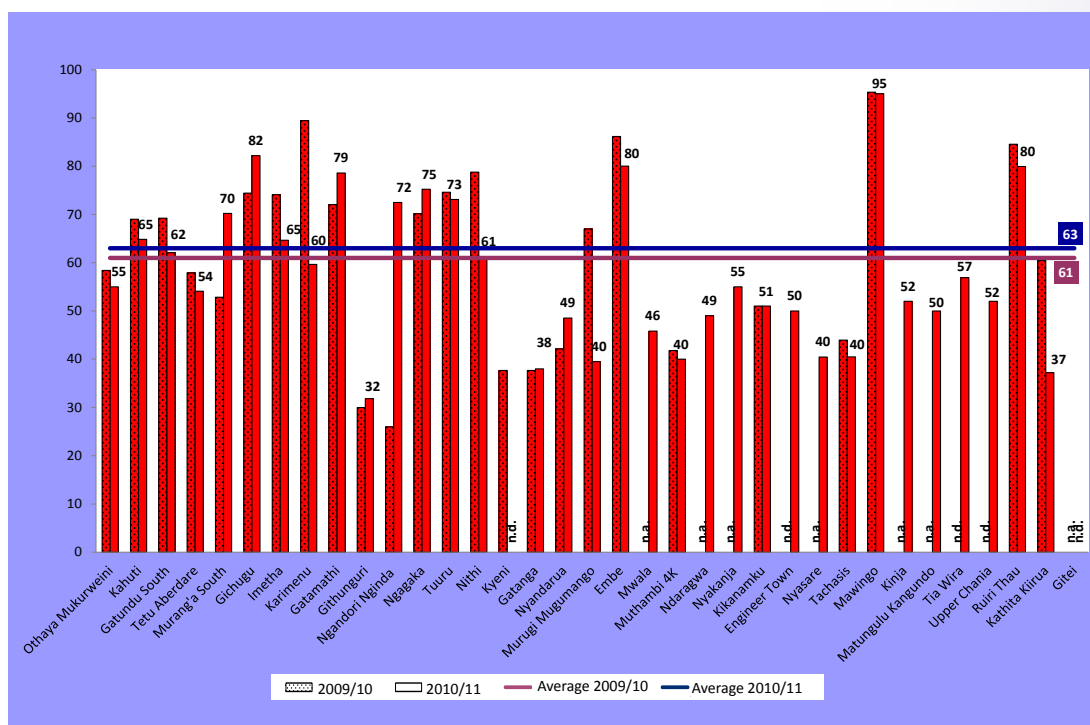


Table 3.16: Baseline Comparison for Non-Revenue Water

Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2010/2011 - Including New WSPs
Non-Revenue Water in %	61	64	3	63

(d) Dormant Connections

While the average performance on this indicator slightly improved from 43% in 2009/10 to 39% in the current reporting period, the ratio of dormant connections remains rather high. WSPs have to reinforce their efforts to increase the volume of water available for sale and grant reliable services to their customers. The current average consumption of 10 l/c/day for rural WSPs is far below the acceptable benchmark of 20l/c/day for rural Providers.

Fig 3.23: Dormant Connections in %

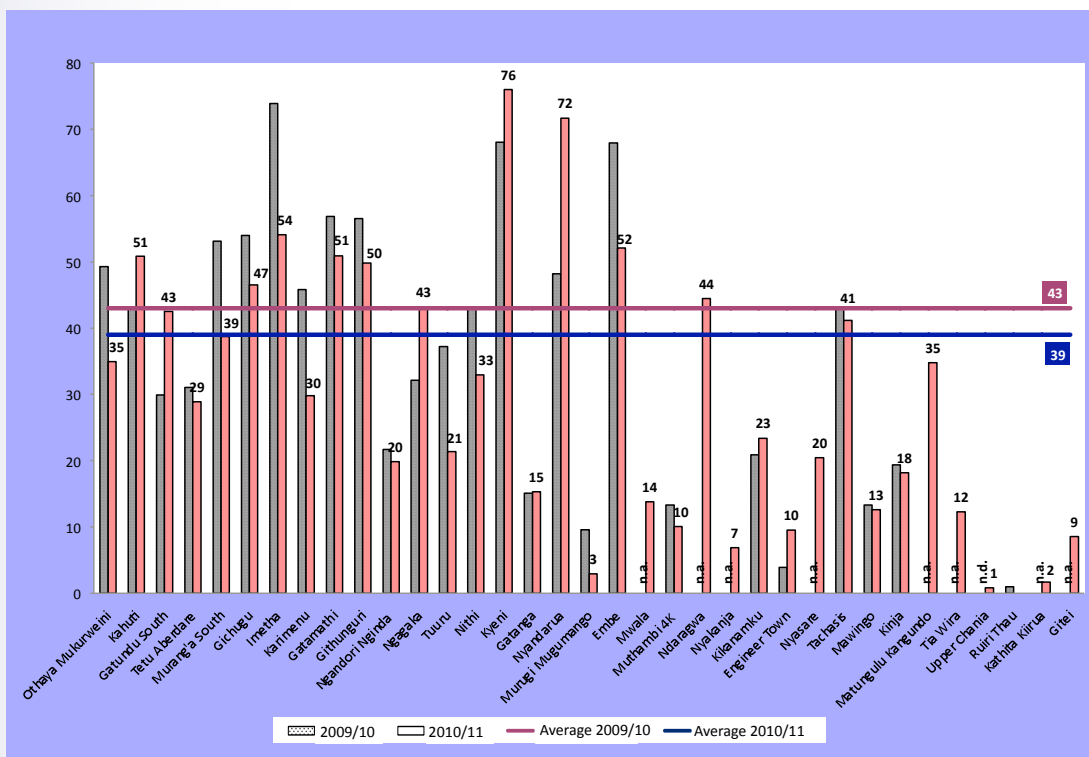


Table 3.17: Baseline Comparison for Dormant Connections

Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2010/2011 - Including New WSPs
Dormant Connections in %	43	39	-4	39

(e) Water Quality

i. Residual Chlorine

The overall performance on this indicator declined from 91% in 2009/10 to 86% in 2010/11. While the compliance rate of the conducted tests improved from 96% to 97%, the number of tests conducted declined from 87% to 80%.

Fig 3.24: Water Quality - Residual Chlorine in %

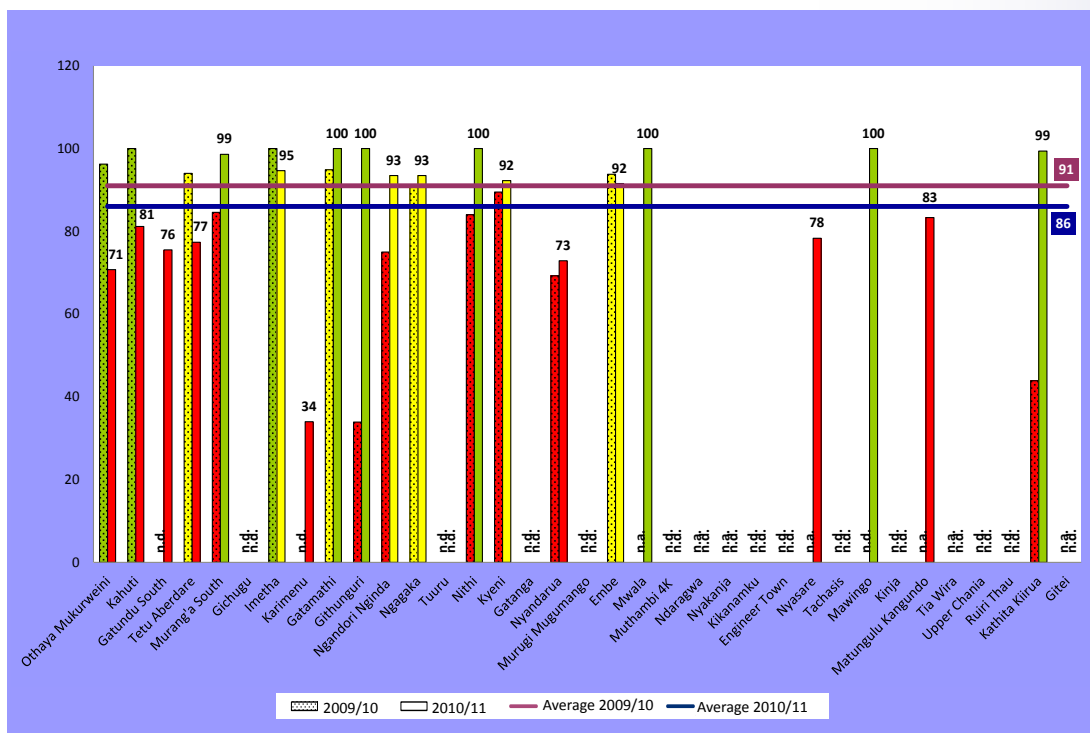


Table 3.18: Baseline Comparison for Residual Chlorine

Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2010/2011 - Including New WSPs
Water Quality – Residual Chlorine in %	91	87	-4	86

ii. Bacteriological Standards

The overall performance on this indicator improved from 61% in 2009/10 to 80% in 2010/11 but it remains below the acceptable sector benchmark. The positive trend is confirmed by the baseline figure of 83% for the period under review. The most significant improvement was in the number of tests conducted, which improved from 45% to 71% in 2010/11.

Fig 3.25: Water Quality - Bacteriological Standards in %

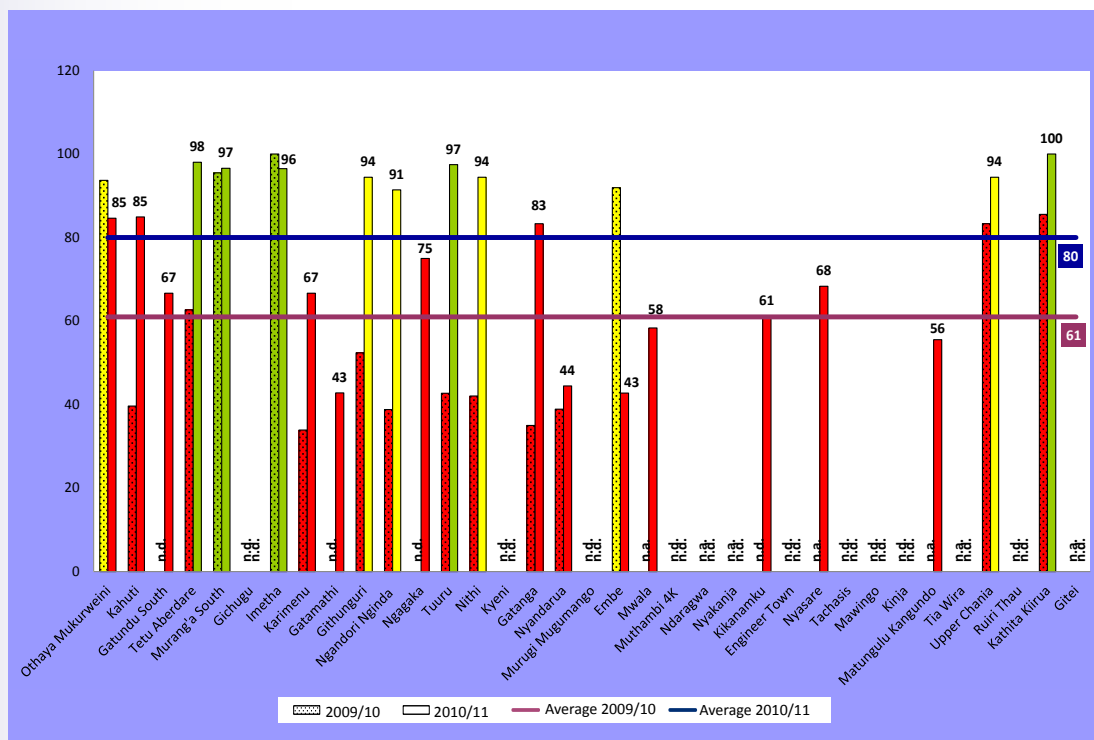


Table 3.19: Baseline Comparison for Bacteriological Standards

Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2010/2011 - Including New WSPs
Water Quality – Bacteriological in %	61	83	22	80

(f) Hours of Supply

Performance in this indicator dropped from an average of 15 hours in 2009/10 to an average of 12 hours per day in 2010/11, with only 22 WSPs reaching the acceptable sector benchmark. The negative trend is confirmed by the baseline comparison, which records a drop from 15 to 12 hours per day. Coupled with soaring Non-Revenue Water levels, this clearly hints at significant capacity and management constraints within many rural WSPs in providing quality services to their increasing number of consumers.

Fig 3.26: Hours of Supply

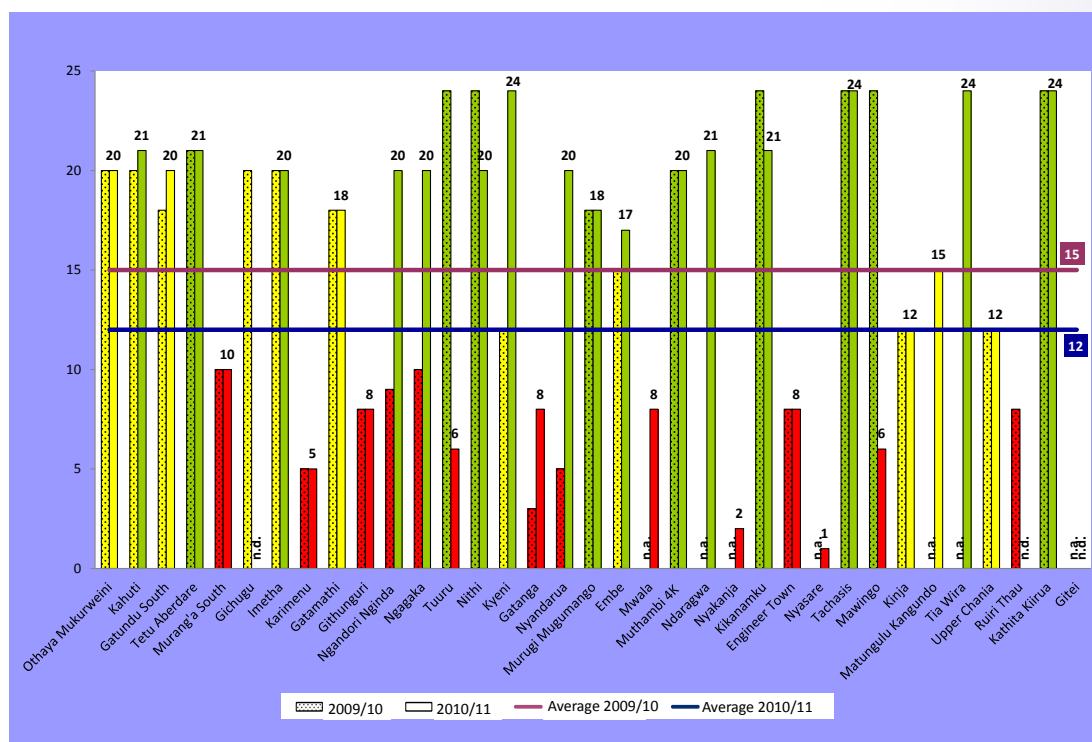


Table 3.20: Baseline Comparison for Hours of Supply

Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2009/2010 - Including New WSPs
Hours of Supply	17	15	-2	12

(g) Metering Ratio

The average Metering Ratio improved remarkably from 58% in 2009/10 to 72% in the current reporting period (the positive trend is confirmed by the baseline comparison). This is good news, since more customers are charged in accordance with their actual consumption. However, considering that 72% remains clearly below the acceptable sector benchmark of 95% and that NRW levels are unacceptably high, WSPs need to put more priority on metering.

Fig 3.27: Metering Ratio

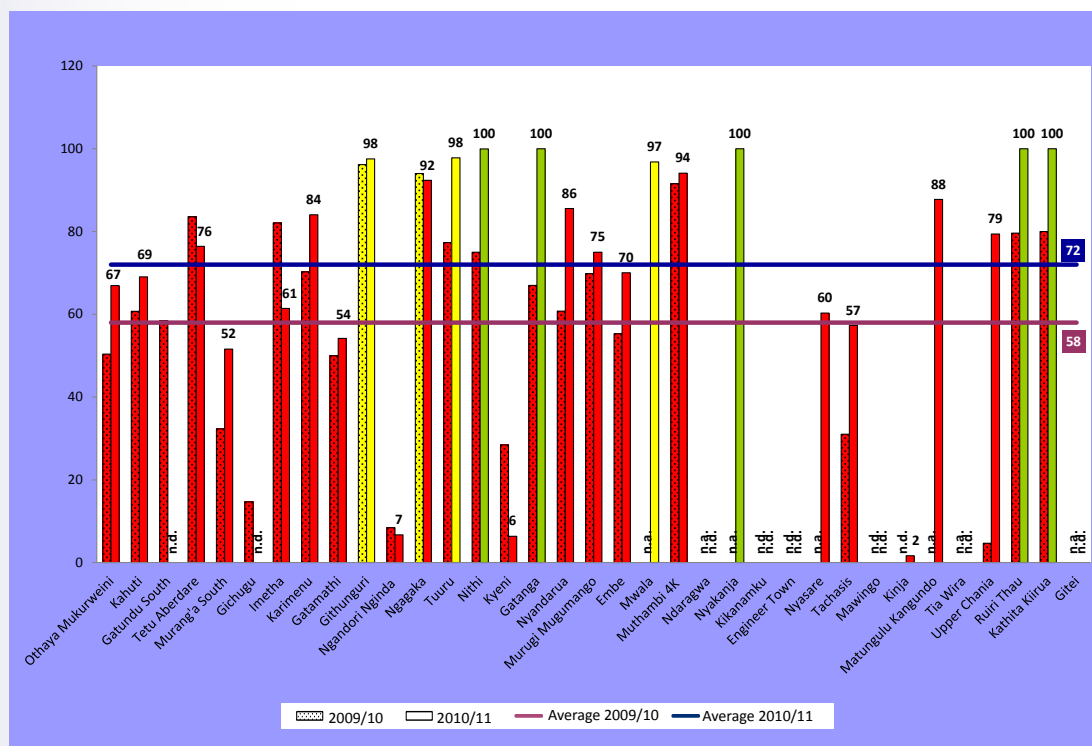


Table 3.21: Baseline Comparison for Metering Ratio

Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2010/2011 - Including New WSPs
Metering Ratio in %	60	71	11	72

(h) Revenue Collection Efficiency

The average collection efficiency for 2010/11 is at 87%, which represents an improvement of five percentage points, compared to the last reporting period, and is within the acceptable sector benchmark of 85%. Five (5) out of 35 WSPs reported collection efficiencies above 100%, which implies the inclusion of arrears.

Fig 3.28: Collection Efficiency in %

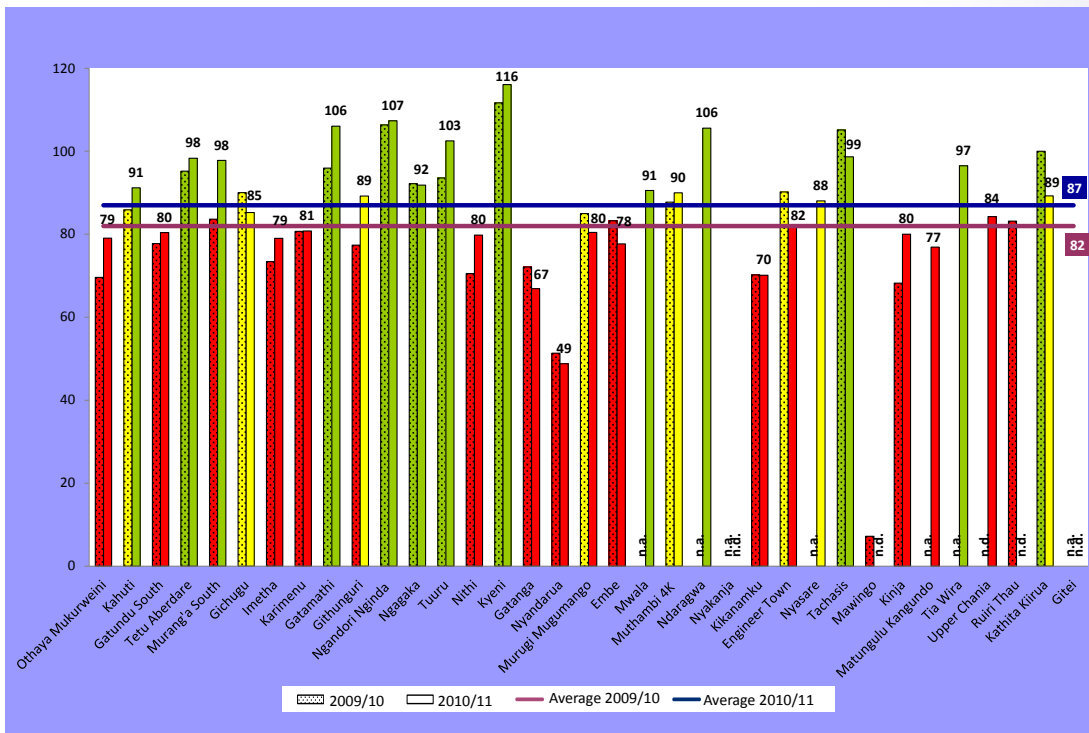


Table 3.22: Baseline Comparison for Revenue Collection Efficiency

Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2010/2011 - Including New WSPs
Collection Efficiency in %	82	87	5	87

(i) Staff Productivity (Staff per Thousand Connections)

This indicator improved marginally from 11 staff per 1000 connections in 2009/10 to 10 staff per 1000 connections in 2010/11, with a large proportion of Providers reporting staff productivities within the acceptable sector benchmark.

Fig 3.29: Staff Productivity

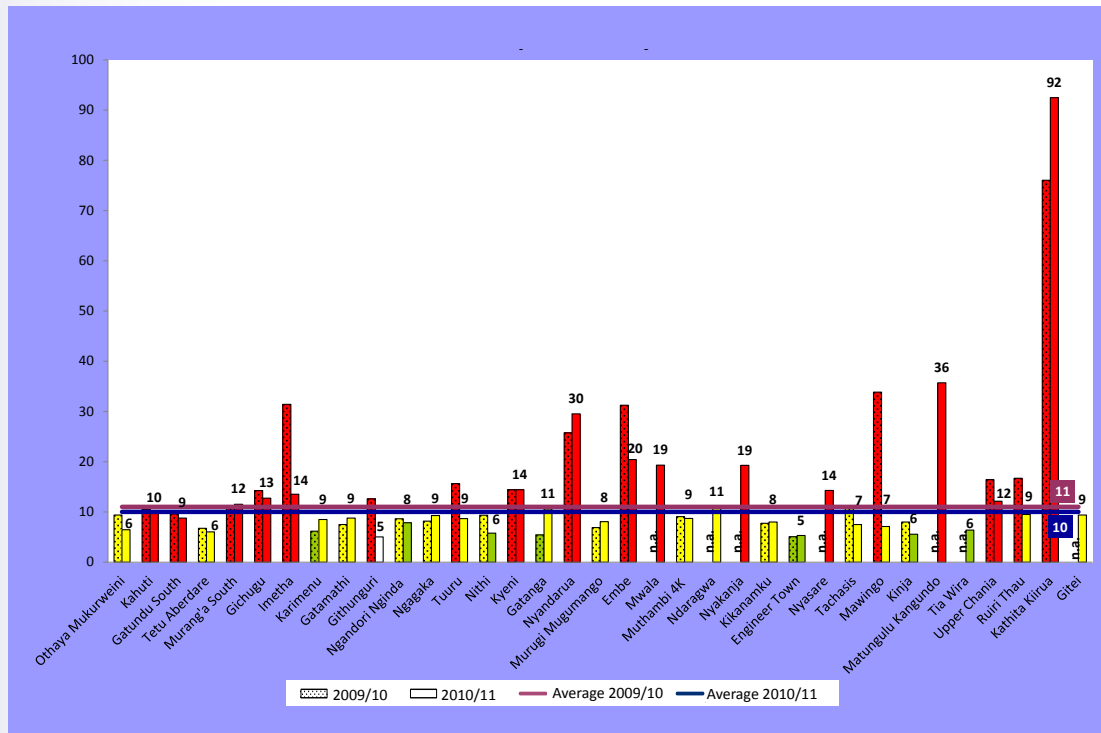


Table 3.23: Baseline Comparison for Staff Productivity

Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2010/2011 - Including New WSPs
Staff Productivity	11	9	-2	10

(j) O+M Cost Coverage

The average performance improved by seven (7) percentage points from the previous reporting period, to attain an average of 120% O+M Cost Coverage. However, the baseline comparison indicates a negative trend, with the performance on this indicator actually declining by four (4) percentage points. While the sector average is within the acceptable benchmark, only six (6) WSPs attained an O+M cost coverage of more than 150%, which indicates the long term sustainability of a WSP. Another point to consider is that on average, only 87% of the billed amount was collected by the WSPs in 2010/11.

Fig 3.30: O+M Cost Coverage in %

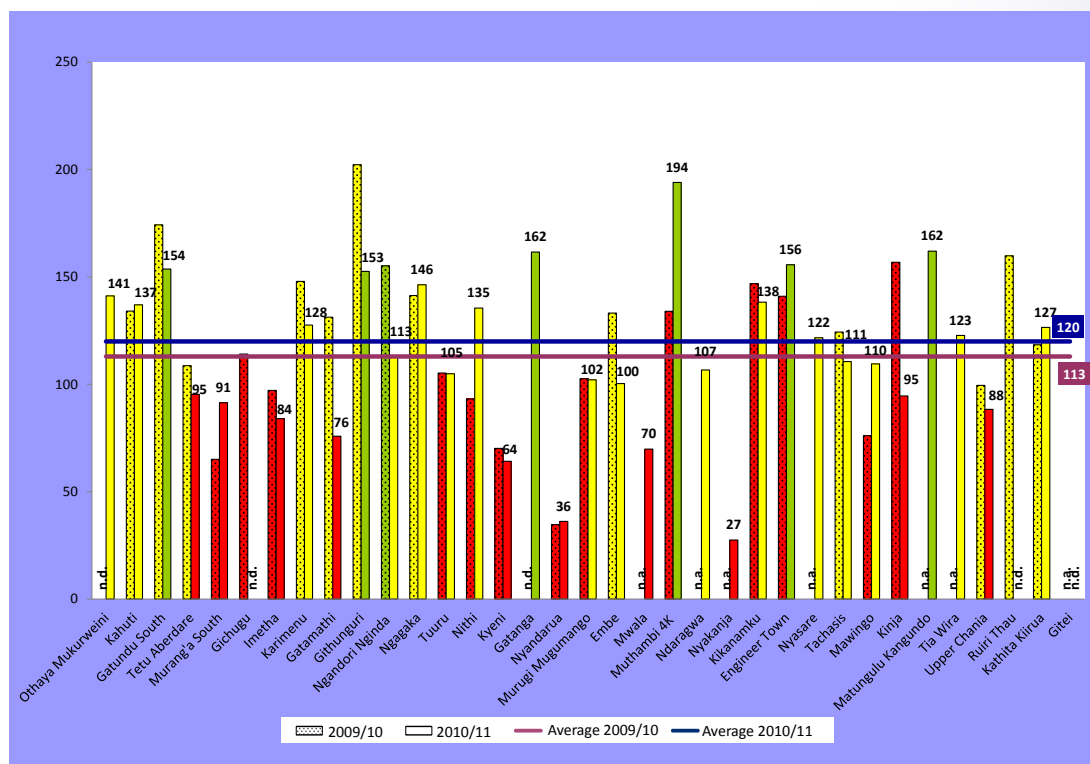


Table 3.24: Baseline Comparison for O+M Cost Coverage

Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2010/2011 - Including New WSPs
O+M Cost Coverage in %	113	109	-4	120

(k) O+M Cost Coverage at 85% Collection Efficiency

During the reporting period, the average performance on this indicator slightly increased from 92% in 2009/10 to 96% in 2010/11. This increase is, however, not sufficient for the average rural WSP to be able to meet its O+M costs at the acceptable collection efficiency level. The benchmark comparison indicates a negative trend, showing a decline in performance by 6 percentage points.

Fig 3.31: O+M Cost Coverage at 85% Collection Efficiency

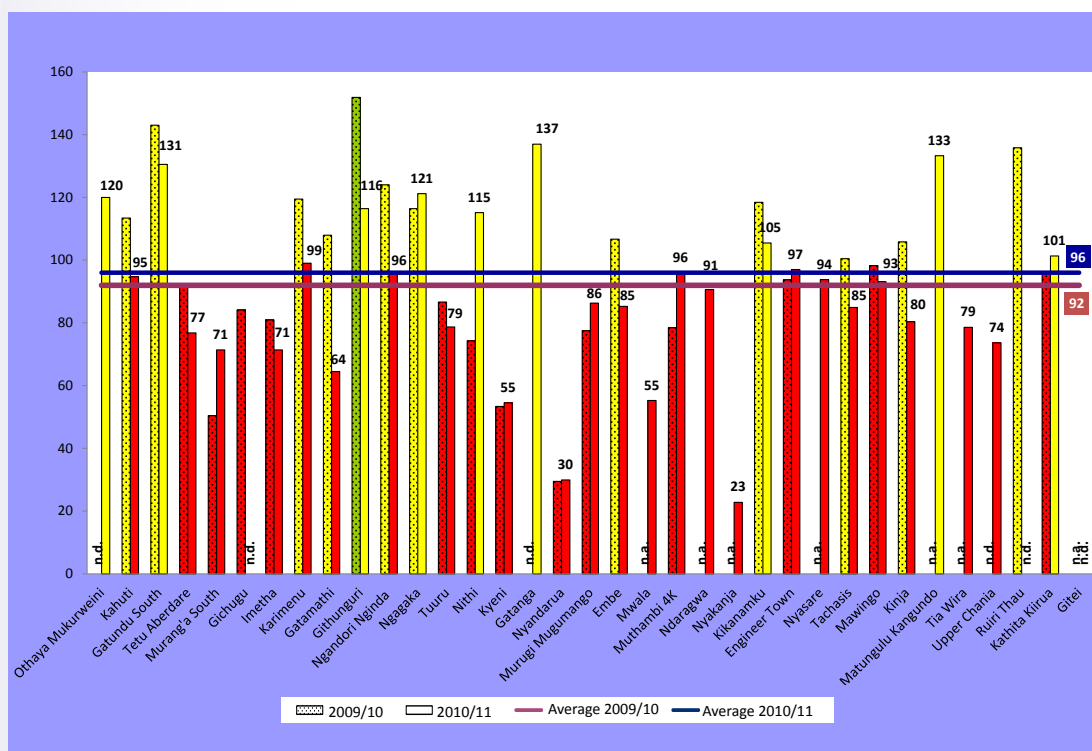
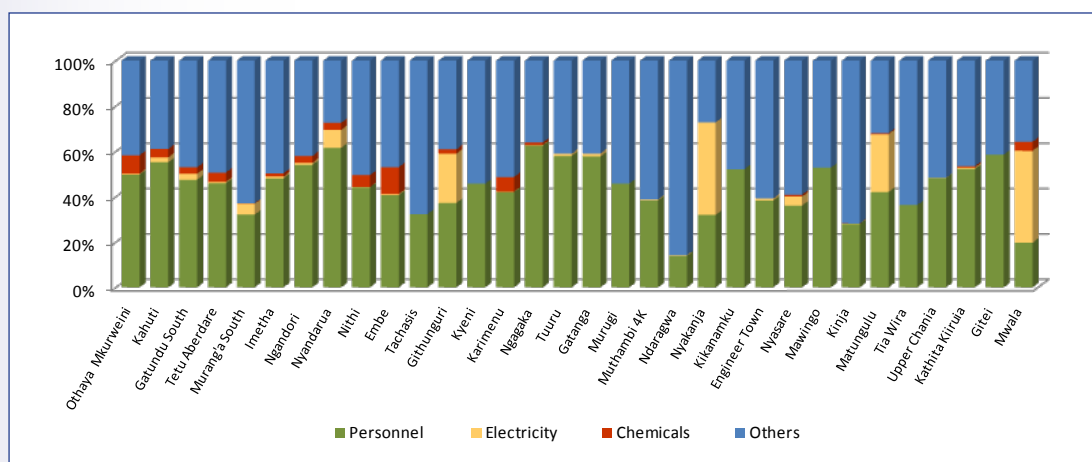


Table 3.25: Baseline Comparison for O+M Cost Coverage at 85% Collection Efficiency

Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2010/2011 - Including New WSPs
O+M Cost Coverage at 85% Collection Efficiency	92	86	-6	96

Fig 3.32: O+M Cost Breakdown



(l) Personnel Expenditure as a % of O+M Costs

The average performance on this indicator remains a challenge for rural WSPs. Despite an improvement from 57% in 2009/10 to 46% in 2010/11, a majority of the WSPs are clearly not meeting the sector benchmark.

Fig 3.33: Personnel Expenditure as a % of O+M Costs

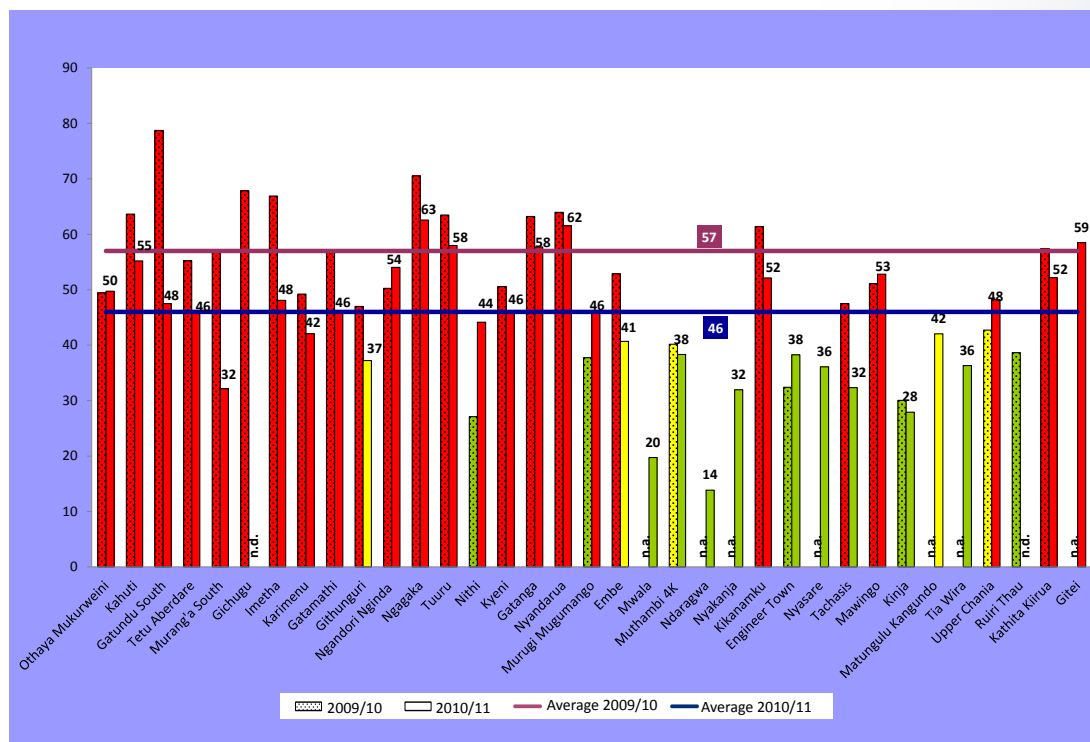


Table 3.26: Baseline Comparison for Personnel Expenditure as a % of O+M Costs

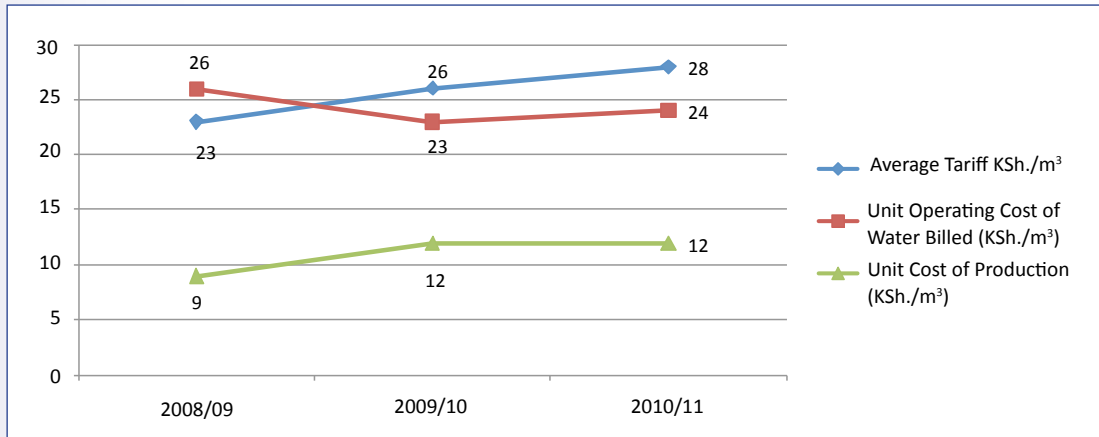
Indicators	2009/2010 - Same Baseline	2010/2011 - Same Baseline	Increase / Decrease	2009/2010 - Including New WSPs
Personnel Expenditure as a % of O+M Costs	57	53	-4	46

(m) Comparison of Average Tariff, Unit Cost of Production and Unit Cost of Water Billed

The trend shown in Fig 3.34 indicates that rural WSPs have maintained the turn-around from the reporting period 2009/10 when the unit tariff for the first time exceeded the unit operating costs. This gap is essential for the sustainability of a WSP since it allows for asset renewal and development.

The large gap between the unit cost of production and unit operating cost hints at the high water losses of rural WSPs (63%).

Fig 3-34: Comparison of Average Tariff, Unit Cost of Production and Unit Cost of Water Billed



Chapter FOUR



Performance of Water Services Boards

Investment Planning is a Key Challenge

4.0 Introduction

Water Services Boards (WSBs) are mandated to ensure the provision of sustainable, efficient and affordable water services in their areas of jurisdiction. They are directly responsible for infrastructure/asset development in order to progressively increase water and sanitation coverage. This involves professional investment planning and monitoring as well as structured reporting on planned, ongoing and realized investments. The operation and maintenance of assets and provision of water supply and sanitation services is performed by their contracted agents – the Water Service Providers (WSPs) – and is regulated by a Service Provision Agreement (SPA). As principals, WSBs are required to monitor the performance of WSPs in order to ensure that they comply with their obligations under the SPA. As licensees, WSBs have to regularly monitor and report on the performance of their WSPs. This includes ensuring the regular submission of information by WSPs on their operations to the Regulator.

This chapter analyses, compares and ranks the performance of the eight (8) WSBs for the reporting period 2010/11. It looks at performance trends with respect to individual indicators and ranks WSPs on basis of their performance with respect to key investment, financial and qualitative indicators in line with their mandate under the Licence and the Water Act 2002.

4.1 Data Coverage and Submission

The total population in service areas covered by the 100 WSPs who submitted information in 2010/11 is 20.6 million, representing an estimated 50% of the total population of Kenya. Out of these, 16.5 million (80%) live in service areas of the 65 urban WSPs. The performance data reported for the urban WSPs can therefore be said to be representative for urban settings in Kenya.

For rural areas, challenges of data collection persist. While reliable information is available for the 4.1 million people living in areas served by rural WSPs, no reliable information is available for a majority of the rural population which relies on water points and small piped schemes.

All the eight WSBs submitted information for the year 2010/11. Compared to the previous reporting period, data submission and content slightly improved. However, there are still substantive challenges with respect to the manner and quality of reporting as illustrated below:

- There was no data submission by WSBs on rural water points and small piped schemes, including DWO operated schemes, making it impossible to accurately assess rural water and sanitation coverage levels.
- WSB reporting on realized investments in their respective areas was still inadequate, making it impossible to establish the impact of WSB investments in terms of additional people served. This particularly applies to Coast WSB.
- Coast, LVN, RV and Northern WSBs did not separate administrative costs (for WSBs) from the operating costs arising from schemes still under WSB management (technically costs for WSPs), which implies poor financial transparency.

Collection and submission of complete and accurate data is a key responsibility of WSBs and should help create confidence that decision, with respect to the planning of investments, are of an informed nature. Yet WSBs do not seem to take this responsibility seriously.

Table 4.1 below rates WSBs according to data submission by their WSPs and compares performance for the current reporting period to the last reporting period.

Table 4.1: Rating of WSBs According to Data Submission by WSPs

WSB Data Submission Rating	2010/11	2009/10
Excellent (>80%)	-	-
Good (>65 - 79%)	Tana, Northern, Athi	Tana
Average (50 - 64%)	RV, LVS, LVN, Tanathi	Northern, Athi, LVS
Poor (40 – 49%)	Coast	Rift Valley, LVN,
Worst (<40%)		Coast, Tanathi

The fact that 100 out of 104 WSPs submitted data for the period 2010/11 is reflected in the positive performance trend in the data submission rating of WSBs, with 3 out of 8 WSBs reaching a good rating. At the same time, however, data from several WSPs was incomplete, of poor quality or submitted late. This indicates that WSBs still do not do enough to verify data and follow up on timely submission by their agents, even though this is part of their monitoring obligation as licensees.

Table 4.2 gives general information on the eight (8) WSBs for the year 2010/11. Their combined turnover, referring to the total revenue collection of the regulated WSPs under the WSB area, increased by 23% from 2009/10 to 2010/11, from KSh 9.85 billion to KSh 12.17 billion, and is estimated to represent more than 90% of the total water services sector turnover. The total number of viable WSPs ($\geq 100\%$ O+M Cost Coverage) increased from 45/90 (50%) in 2009/10 to 59/100 (59%) in 2010/11, with Athi WSB having the highest proportion of viable WSPs (92%) and Tanathi WSB having the lowest (22%). WSBs need to urgently submit tariff applications for all their Providers to ensure coverage of O+M costs as a minimum condition for commercial viability and financial sustainability.



Submission of quality data still wanting

Table 4.2: General WSB Information for the Period 2010/11

WSB	Area in Square km	Population in Service Area	Population Served	No. and Classification of WSPs		Viability of WSPs (O+M Coverage ≥ 100%)	Turnover in KSh Million	O+M Cost Coverage %	Counties Covered
				S	M				
AWSB	3,239	4,761,000	3,221,682	S	5	12 out of 13 (92%)	6,264	151	Nairobi City, Kiambu and Gatanga district in Muranga county
				M	6				
				L	0				
				VL	2				
CWSB	82,816	3,325,000	1,566,483	S	1	4 out of 6 (67%)	1,570	105	Kwale, Taita Taveta, Kilifi, Malindi, Mombasa, Lamu and Tana River Districts
				M	1				
				L	3				
				VL	1				
LVNWSB	16,977	6,700,000	708,669	S	2	4 out of 5 (80%)	797	115	Kakamega, Vihiga, Busia, Bungoma, Trans Nzoia, Uasin Gishu, Elgeyo Marakwet and Nandi
				M	0				
				L	2				
				VL	1				
LVSWBS	20,340	7,326,000	1,184,783	S	5	5 out of 11 (45%)	644	95	Siaya, Kisumu, Migori, Homabay, Kisii, Nyamira, Bomet and Kericho
				M	2				
				L	4				
				VL	0				
NWSB	232,737	3,368,000	330,526	S	4	5 out of 8 (63%)	491	149	Isiolo, Laikipia, Samburu, Masabit, Garissa, Wajir and Mandera
				M	1				
				L	3				
				VL	0				
RVWSB	113,771	5,144,000	750,271	S	17	9 out of 19 (47%)	842	119	Nakuru, Baringo, Narok, West Pokot, Turkana and Nyandarua
				M	0				
				L	1				
				VL	1				
TWSB	14,272	4,401,000	1,929,430	S	11	15 out of 23 (65%)	1,115	131	Nyeri, Muranga, Kirinyaga, Embu, Meru and Tharaka Nithi
				M	7				
				L	5				
				VL	0				
TaWSB	66,614	3,684,000	720,529	S	11	5 out of 15 (33%)	442	90	Kitui, Machakos, Makeni and Kajiado
				M	4				
				L	0				
				VL	0				
TOTAL		38,709,000	10,412,373		100		12,165		

NOTE: S=small, M=medium, L=large, VL=very large

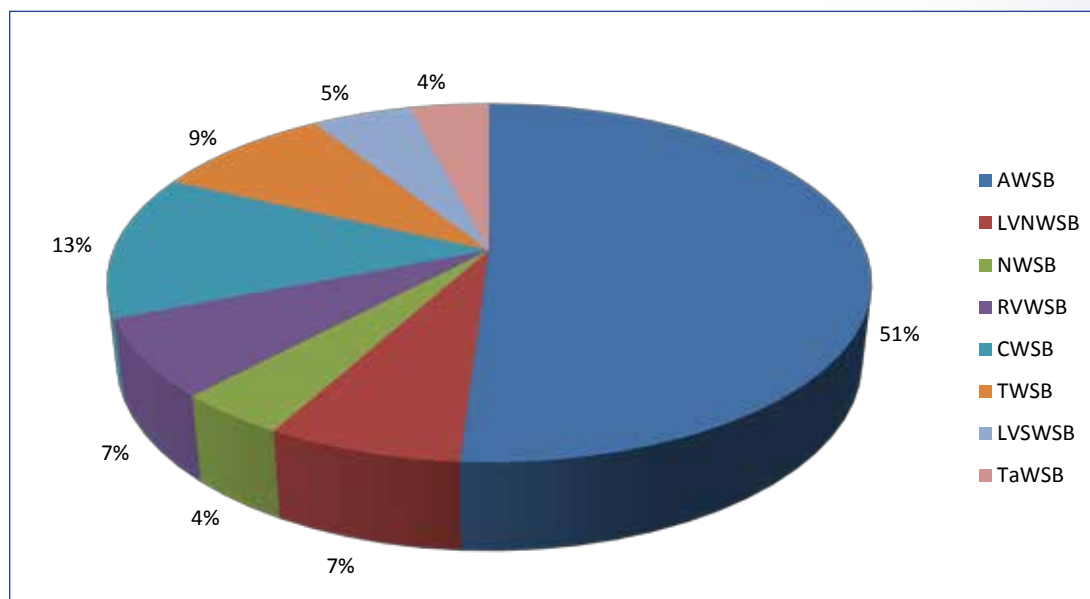
As shown in Table 4.3 below, the sector turnover grew by 24% from KSh 9.85 billion in 2009/10 to KSh 12.13 billion in 2010/11. This can largely be attributed to the continued approval of Regular Tariff Adjustments (RTAs), infrastructure rehabilitation and completion of new infrastructure projects. Tanathi WSB recorded the highest increase in turnover at 73%.

Table 4.3: Sector Turnover

WSBs	Turnover in KSh Million				
	2010/11	%	2009/11	%	% Change
AWSB	6264	51	4999	51	25
LVNWSB	797	7	526	5	52
NWSB	491	4	366	4	34
RVWSB	842	7	837	8	1
CWSB	1570	13	1314	13	20
TWSB	1115	9	980	10	14
LVSWSB	644	5	572	6	13
TaWSB	442	4	256	3	73
TOTAL	12165	100	9850	100	24

Figure 4.1 below depicts the turnover of the 8 WSBs for the period under review. No major changes in the relative shares have occurred compared to 2009/10.

Fig 4.1: 2010/11 Turnover of WSBs in %



4.2 Sector Benchmarks, Performance Indicators and Scoring Criteria

The scoring regime for WSBs is based on a cluster of investment, financial and qualitative indicators and corresponding scoring criteria, outlined in Table 4.4 below. The performance indicators adopted reflect the core mandate of the WSBs in monitoring the operations of WSPs and in the planning, development and expansion of water and sanitation infrastructure.

Table 4.4: WSB Performance Indicators and Scoring Criteria

Indicator			Sector Benchmarks			Adopted Scoring Regime					
			Good	Acceptable	Not Acceptable	Performance	Score	Performance	Score		
a) Investment Indicators	Water Coverage	Urban	>90%	80-90%	<80%	>90%	15	<50%	0		
		Rural				>90%		<50%			
	Non-Revenue Water	Urban				<20%	15	>40%	0		
		Rural	<20%	25-20%	>25%	<20%		>50%			
	Sanitation Coverage	Urban	>90%	80-90%	<80%	>90%	10	<50%	0		
		Rural				>90%		<40%			
Hours of Supply		Population > 100,000	21-24	16-20	<16	>20	10	<10	0		
		Population < 100,000	17-24	12-16	<12						
b) Financial Indicators	Cost Coverage of operating expenditures through fees from WSPs		≥100%	50-99%	<50	≥100	5	<50	0		
	Personnel expenditures as a % of operating costs		<20%	70-20%	>70%	<20%	5	>70%	0		
	BoD expenditures as a % of total operating expenditures		<2%	5-2	>5%	<2%	5	>5%	0		
	Operating expenditure of WSBs as percentage of turnover in WSB area	> 1.5 Billion KSh turnover	< 3.5%	10-3.5%	> 10%	< 3.5%	5	> 10%	0		
		≥ 0.75 < 1.5 Billion KSh turnover	<10 %	20-10%	>20 %	<10 %	5	>20 %	0		
	< 0.75 Billion KSh turnover	< 15 %	25-15%	> 25 %	< 15 %	5	> 25 %	0			
c) Qualitative Indicators*	Adequacy of monitoring of WSPs	Percentage of WSPs with regulated tariffs	100%	50-99%	<50%	100%	10	0%	0		
								Good	Satisfactory	Fair	Poor
		Enforcement and Compliance Strategy applied?						3	2	1	0
		Reporting and compliance of WSPs with the regulatory regime						3	2	1	0
	Driving efficient investments in WSB area	Facility Management System (and register)						2	1	0.5	0
		Five year Business and Capital Works Plan for the WSB area						2	1	0.5	0
		Implementation of the five year Business Plan for the WSB area						5	3	1	0
		Pro-poor efforts and strategies						3	2	1	0
		Discerned issues in procurement and management of capital projects						5	3	1	0
	Improving customer service of WSPs	Use of customer complaints procedure						3	2	1	0
		Transparency and adherence to Regulation	WARIS data submitted (timely, accurate)						9	6	3
	WSB duties derived from License (Public information officer in place, information available on website etc.)						2	1	0.5	0	
	Provision of Performance Guarantee						3			0	
	Total Maximum Score							120			

* Scores for the qualitative indicators derived from the Licence achievement report and inspection findings

4.3 Performance Analysis and Ranking of WSBs

The WSB performance analysis and ranking in Table 4.5 is based on the scoring regime outlined in Table 4.4 and considers the aggregate performance of WSBs for 2010/11. Athi WSB emerges as the best performing WSB with 61/120 scores, closely followed by Northern WSB with 55 scores. LVS WSB emerges as the worst performing WSB, with a meagre 15 scores.

Table 4.5: Performance Analysis and Ranking of WSBs

INDICATORS		WSB								
		ATHI	NORTHERN	LVN	TANA	RIFT VALLEY	COAST	TANATHI	LVS	
a) Investment Indicators	Water Coverage %	63	57	51	46	46	57	38	39	
	Non-Revenue Water (NRW)	43	46	47	61	52	39	53	49	
	Sanitation Coverage %	81	82	48	82	63	70	65	48	
	Hours of Supply	16	18	16	17	12	12	9	12	
b) Financial Indicators	Cost coverage of operating costs through fees from WSPs	291	5	49	64	52	No data	27	14	
	Personnel expenditure as a % of operating costs	46	7	45	29	22	No data	45	34	
	BoD expenditure as a % of total operating costs	5.1	1.4	6.2	4.4	3.9	No data	3.0	5.2	
	Operating costs of WSBs as percentage of turnover in WSB area	4	66	12	12	31	No data	25	39	
c) Qualitative Indicators	Adequacy of monitoring of WSPs	Enforcement and Compliance Strategy applied?*	Fair	Fair	Fair	Satisfactory	Fair	Poor	Fair	Poor
		Reporting and compliance of WSPs with the regulatory regime	Fair	Satisfactory	Fair	Satisfactory	Fair	Poor	Satisfactory	Poor
		Percentage of WSPs with regulated tariff	50	40	60	30	10	50	50	10
	Driving efficient investments in WSB area	Facility Management System (and Register)	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Fair	Satisfactory	Fair
		Five year Business and Capital Works Plan for the WSB area	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory
		Implementation of the five year Business Plan for the WSB area	Fair	Fair	Satisfactory	Fair	Satisfactory	Poor	Fair	Fair
		Pro-poor efforts and strategies	Satisfactory	Fair	Fair	Fair	Fair	Fair	Fair	Fair
		Discerned issues in procurement and management of capital	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Fair	Fair	Fair
	Improving customer service of WSPs	Use of customer complaints procedure	Good	Good	Satisfactory	Good	Satisfactory	Fair	Fair	Good
	Transparency and adherence to Regulation	WARIS data submitted (timely, accurate)	Satisfactory	Satisfactory	Fair	Satisfactory	Fair	Fair	Fair	Fair
		WSB duties derived from License	Satisfactory	Fair	Fair	Satisfactory	Fair	Fair	Satisfactory	Satisfactory
		Provision of Performance Guarantee	Good	Good	Poor	Good	Good	Poor	Poor	Poor
	SCORES		61	55	37.8	37.7	33	23	21	15
RANKING		1	2	3	4	5	6	7	8	

Note 1: Performance for the qualitative indicators has been evaluated on the basis of the Licence Achievement Reports and findings from inspections.

Note 2: As per the Scoring Regime in Table 4.4, both 'satisfactory' and 'fair' performance have been classified as acceptable and are therefore marked in yellow. Since 'satisfactory' performance is considered to be closer to 'good' performance and 'fair' performance closer to 'poor' performance, the latter has been allocated fewer points than the former.

The performance indicators and the scoring criteria are continuously reviewed by Wasreb to take into account the changing operating environment and to ensure there is efficiency and effective utilization of available resources to create maximum impact in service delivery.

Table 4.6 below shows the performance of WSBs over time. Athi and LVN WSBs are the only WSBs, who managed to improve their score by two (2) and one (1) points respectively. Tana WSB shows the biggest decline in performance, having lost 33 points since the last reporting period.

Table 4.6: Performance Ranking of WSBs Over Time

WSBs	Ranking 2010/11	Ranking 2009/10	Change in Ranking	Score 2010/11	Score 2009/10	Change in Scores
Athi	1	3	2	61	59	2
Northern	2	2	0	55	64	-9
LVN	3	7	4	37.8	37	1
Tana	4	1	-3	37.7	71	-33
RV	5	5	0	33	51	-18
Coast	6	4	-2	23	52	-29
Tanathi	7	6	-1	21	39	-18
LVS	8	8	0	15	37	-22

4.4 Detailed Performance Analysis of WSBs

The following section provides a detailed analysis of the performance of the WSBs, looking at investment realization, sector turnover as well as the financial and qualitative indicators used for the scoring of WSBs.

4.4.1 Investment Indicators

WSBs are mandated to ensure the provision of efficient and economical services by developing water and sanitation infrastructure on the basis of comprehensive investment and financing plans, in line with their license conditions. This is in order to progressively expand water and sanitation coverage.

To assist Wasreb in monitoring the fulfilment of licence conditions, WSBs are obliged to regularly submit reports on license achievements. However, information submission on investments continues to be poor as reflected in Table 4.7 below. While LVN and Tanathi WSBs have shown some improvement in data submission, Coast WSB shows a particularly bad performance.

Table 4.7: Investment Realization by WSBs for Water and Sewer Systems and Rural Infrastructure

WSB	Investments in WSPs 2010/11 in KSh Million	Investments Rural Networks 2010/11 in KSh Million	Investments Rural Point Sources 2010/11 in KSh Million	Total Investments 2010/11 in KSh Million	Total Investments Planned 2010/11 in KSh Million	Investment Realisation %	Investments in WSPs 2009/10 in KSh Million	Investments Rural Networks 2009/10 in KSh Million	Investments Rural Point Sources 2009/10 in KSh Million	Total Investments 2009/10 in KSh Million
Athi	No data	77		77	No data	No data	6	34		40
LVN	1,825	37	36	1,898	1,862	1	1,357	20	19	1,377
Northern	30	45	30	105	1,199	9	109.76	No data	No data	109.76
RV	502	No data	176	678	579	117	787	78	94	865
Coast	108	No data	No data	108	No data	No data	No data	No data	No data	No data
Tana	468	38	63	569	2,578	22	306	No data	No data	306
LVS	337	169	167	673	1,974	34	1,058	No data	No data	1,058
Tanathi	100	41	26	167	166	1	301	32	6	333
TOTAL	3,370	407	498	4,275	8,358	184	3,925	164	119	4,089

Total reported investments for the period 2010/11 add up to KSh 4.3 billion which represents only 17% of the total development budget for the water supply and sanitation sector. This shows that the data reported by WSBs is highly unreliable. A case in point is Athi WSB, which reported investments of only KSh 77 million, while development support from the Water and Sanitation Service Improvement Project (WaSSIP) I alone for 2010/11 can be estimated at KSh 1.5 to 2 billion.

The inadequate information on investments from WSBs made it difficult to assess the impact created by the said investments in terms of the number of additional people served. Analysis of investment per capita could therefore not be objectively determined.

Apart from the fact that investment realization of all WSBs remains far below the commitments in the investment plans submitted in their licence, the plans are inadequate for further development through feasibility studies and financing plans and are not linked to the Minimum Service Levels (MSLs) agreed with Wasreb. This significantly limits the effectiveness of WSB investments.

4.4.2 Financial Indicators

(a) Coverage of Operating Costs

Coverage of operating costs measures the extent to which a WSB is able to cover its total operating costs from the administrative fees collected from its agents (WSPs). WSB operating costs mainly relate to administrative expenses arising from their role as Principals of WSPs. A cost coverage of at least 100% is therefore key to the sustainability of a WSB. Table 4.8 shows the performance of WSBs on this indicator.

Table 4.8: Coverage of WSBs Operating Costs

WSB	Operating Costs 2010/11 in KSh Million	Coverage of Operating Costs 2010/11 in %	Operating costs 2009/10 in KSh Million	Coverage of Operating Costs 2009/10 in %
Athi	259	291	152	484
LVN	97	49	58	11
Northern	322	5	94	24
Rift Valley	261	52	121	87
Coast	No data	No data	179	60
Tana	129	64	101	75
LVS	250	14	112	28
Tanathi	110	27	138	16

Out of seven WSBs who reported, only two were able to increase their operating cost coverage. While Tanathi had a genuine decrease in its operating costs. LVN benefitted from an increase in administrative fees paid by its agents. Athi WSB continues to be the only WSB which is able to fully cover its operating costs from fees paid by its WSPs. The rest of the WSBs still rely heavily on government subsidies. However, the very high coverage rate of Athi WSB shows that it does not separate between administrative fees for operating costs and fees for asset development.

Considering that there should be a correlation between the turnover of a WSB and its operating costs, a situation where Northern and Rift Valley WSBs have higher operating expenses than Athi WSB, yet their turnover is only 7% and 17% of Athi's turnover respectively, is totally unacceptable.

It hints at the problem of Northern and Rift Valley WSBs continuing to operate schemes rather than devolving this function to their respective WSPs or the local community (rural water services), as required under the Water Act 2002. This significantly raises their operating costs.

Given the constant nature of WSBs' operating expenses, the large increase in operating costs for Athi, Northern, Rift Valley and LVS between 2009/10 and 2010/11 lacks any justifiable basis.

b) Operating Expenditure of WSBs as Percentage of Turnover in WSB Area

The operating expenditure of a WSB should be proportionate to its turnover. Table 4.9 below shows the expenditure of WSBs as percentage of their turnover.

Table 4.9: Expenditure of WSBs as Percentage of Turnover in WSB Area

WSB	Operating Costs 2010/11 in KSh Million	Turnover WSB 2010/11 in KSh Million	Operating Costs as a % of Turnover 2010/11	Operating Costs 2009/10 in KSh Million	Turnover WSB 2009/10 in KSh Million	Operating Costs as a % of Turnover 2009/10
Athi	259	6264	4	152	4999	3
LVN	97	797	12	58	526	11
Northern	322	491	66	94	366	26
Rift Valley	261	842	31	121	837	14
Coast	No data	1570	No data	179	1314	14
Tana	129	1115	12	101	980	10
LVS	250	644	39	112	572	20
Tanathi	110	442	25	138	256	54

Except for Tanathi WSB, the performance of all WSBs on this indicator declined. This is despite an increase in the turnover for all the Boards between 2009/10 and 2010/11. The only WSBs which were able to reach an acceptable ratio were Athi, Lake Victoria North and Tana WSBs. All other WSBs show an unacceptable performance on this indicator, Northern WSB being the worst with operating expenses at 66% of turnover. This is against a sector benchmark of 25% for a WSB of its size.

All WSBs have to cut down their costs to stop overcharging the consumer. In addition, Northern, RV, LVN and Coast have to devolve the operation of all of their infrastructure.

(c) Personnel Cost as Percentage of Operating Costs

Table 4.10 shows the total personnel costs of WSBs for the years 2009/10 and 2010/11 as well as personnel costs as a ratio of operating costs for the two periods.

All WSBs, except Tanathi, realized a drop in personnel costs as a proportion of operating costs from 2009/10. This can mainly be attributed to a significant increase in operating costs for all WSBs except Tanathi. A good case in point is Northern, which is the only WSB with good performance on this indicator but only because its operating costs are rather high.

Generally, WSBs should ensure balanced spending on their operations so that service delivery is not compromised because of inflated staff remuneration.

Table 4.10: Personnel Cost as Percentage of Operating Cost

WSB	Personnel Costs 2010/11 in KSh Million	Personnel Costs as % of Operating Cost 2010/11	Personnel Costs 2009/10 in KSh Million	Personnel Costs as % of Operating Costs 2009/10	Increase / Decrease in Ratio
Athi	118	46	91	60	- 14
LVN	44	46	40	69	- 23
Northern	23	7	19	20	- 13
Rift Valley	58	22	53	44	- 22
Coast	No data	No data	68	38	No data
Tana	37	29	33	33	- 4
LVS	84	34	53	46	- 12
Tanathi	50	45	42	30	15

(d) Board of Directors (BoD) Expenditure as a Percentage of Operating Costs

Wasreb's Corporate Governance Guidelines sets a benchmark of 2% (good performance) on the BoD expenditure of WSBs against their total operating expenditures. The benchmark should even be lower for big WSBs like Athi and Coast.

For all WSBs except Tanathi, BoD expenditure increased since the last reporting period, with Athi and LVS WSBs recording increases of more than 100%. These two WSBs together with Rift Valley, have BoD expenses almost four times as high as Tanathi WSB and about twice as high as LVN, Northern and Tana WSBs. There is neither a justification for the increase nor for the huge variations in BoD expenditure between different WSBs. Both are clear indications of poor corporate governance at WSB level.

WSBs need to adhere to the schedules of planned Board meetings in order to contain costs.

Table 4.11: Board of Directors (BoD) Expenditure as Percentage of Operating Costs

WSB	Board Expenditure 2010/11 in KSh Million	As % of Operating Costs 2010/11	Board Expenditure 2009/10 in KSh Million	As % of Operating Costs 2009/10
Athi	13.1	5.1	5.1	3
LVN	6.0	6.2	4.0	7
Northern	4.5	1.4	2.0	2
Rift Valley	10.3	3.9	6.4	5
Coast	No data	No data	8.8	5
Tana	5.7	4.4	6.4	6
LVS	13.0	5.2	5.5	5
Tanathi	3.3	3.0	9.0	7

4.4.3 Qualitative Indicators

(a) Enforcement and Compliance

During the period under review, Wasreb continued the implementation of the Enforcement and Compliance Strategy. The latter, through a stepwise approach, aims to promote compliance to the Water Act 2002 and Wasreb guidelines, beginning with voluntary efforts and only considering legal enforcement as a measure of last resort. Some of the activities undertaken under the strategy included:

- Inspections of WSBs and WSPs
- Issuing cure notices, warnings and levying of penalties for non compliance
- Holding compliance workshops with the WSBs and WSPs.

WSBs have delegated regulatory functions and are therefore supposed to apply the Compliance and Enforcement Strategy on their WSPs. However, inspections have revealed that none of the WSBs is effectively applying the strategy, a situation that must change if the quality of service delivery and efficiency in water services provision is to improve.

(b) Submission and Implementation of Tariff Proposals

As of June 2012, Wasreb had approved a total number of 39 RTAs, covering a majority of the very large and large WSPs. Four urban very large and large WSPs (Chemosit, Gusii, Kwale and Kericho) and three large rural WSPs (Gatundu South, Imetha and Gichugu) are still operating under unjustified tariffs.

The passive role played by WSBs in the tariff application and implementation process is a matter of concern, considering that it is a key obligation under the Licence. This can be seen in Table 4.12, which shows the rating of WSBs according to their monitoring of RTA implementation.

Table 4.12: Rating of WSBs According to RTA Monitoring

WSB Tariff Implementation Rating	2010/11
Excellent (>80%)	-
Good (>65 - 79%)	
Average (50 - 64%)	Tana, Tanathi, Northern
Poor (40 – 49%)	RV, Coast, LVN, Athi
Worst (<40%)	LVS

The responsibilities of WSBs include monitoring the achievement of set performance targets and ensuring that WSPs put in place and operate revenue accounts as per the provisions of the SPA. Non-adherence to the tariff conditions is an offence and may lead to penalties for non compliance.

(c) Facility Management Systems

Most of the WSBs are yet to put in place a comprehensive Facility Management System with only six (6) out of eight (8) WSBs having a listing of their assets. Northern and Tanathi still lack a listing of their assets. In the absence of an acceptable Facility Management System, WSBs cannot effectively fulfil their responsibility of asset management and development.

(d) Five year Business and Investment Plans

Under clause 9.1 of the licence, WSBs are required to develop and maintain a five year business and capital works (investment) plan for the WSB area. Whereas all WSBs have developed these plans, they are not linked with the business plans of the WSPs. WSBs must take immediate action to ensure that the business plans of their WSPs are harmonized with the capital works plans of the WSBs and contain clear targets to attain the MSLS.

Also, the existing investment plans are not of a quality which would allow for their further development through feasibility studies and financing plans.

(e) Pro-poor Efforts and Strategies

The efforts of most urban WSPs, together with their WSBs, in submitting funding proposals to the Water Services Trust Fund (WSTF) in order to extend services to low income urban areas is commendable. Since 2009, over one hundred water and sanitation projects have been implemented within the WSB areas, translating to approximately 700,000 additional people served with formalized water supply and 50,000 with public sanitation.

However, efforts to advance the human right to water by extending access to underserved areas have so far not adequately been reported. From the next reporting period, Wasreb will oblige WSPs to report on their performance in these areas.

Other key pro-poor strategies are the cross-subsidization between the different tariff blocks under the RTA as

well as the regulated tariff at public outlets (at KSh 2 per 20 litre jerrycan). WSBs are supposed to ensure the implementation of these strategies by their agents.



(f) Discerned Issues in Procurement and Management of Capital Projects

Adherence to the Public Procurement and Disposal Act 2005 by WSBs remains a challenge. This is of great concern as non adherence is likely to lead to poor utilization of resources. Monitoring of WSPs to ensure compliance with the Act should be enforced through regular inspections by WSBs. On its part, Wasreb will continue to apply its compliance and enforcement strategy and where necessary publicize cases of non compliance with the procurement procedures.

(g) Use of Model Customer Contract

All WSBs have model customer contracts for use by their WSPs as per clause 7.1 of the licence. However, the WSBs need to ensure that the minimum requirements as per the Water Services Regulations are reflected in the customer contract.

(h) Use of Customer Complaints Procedure

The development of a complaints handling mechanism is mandatory under Clause 7.2 of the licence. This is in addition to ensuring that each WSP has an officer designated to handle complaints. None of the WSBs have submitted to Wasreb the customer complaints handling procedure for their WSPs. This leads to a situation where WSPs are applying varying standards and procedures.

The Water Action Groups (WAGs) represent a secondary/complementary complaints mechanism and form part of Wasreb's concept of consumer engagement. They had been piloted in some selected WSPs and are now set to be up-scaled to all the WSB areas. In addition, Wasreb has come up with an innovative and convenient way of handling consumer complaints (MajiVoice) which is planned to be rolled out in the near future.

(i) Performance Guarantee

During the period under review, Tana, Northern, Rift Valley and Athi WSBs had a performance guarantee with Wasreb. LVN and LVS are currently in breach with their Licence conditions as they are yet to provide performance guarantees to Wasreb.

Chapter FIVE



Conclusion

Far From Meeting Sector Target on Water

The analysis presented in this report shows that the water services sector has been recording general improvement over time. In the period under review, there was an improvement of four (4) percentage points in urban water coverage, from 48% to 52%. Urban sanitation coverage improved by 14 percentage points, from 55% to 69%. If the sector maintains this growth rate, it is projected that water coverage will be at 68 per cent by 2015, which will still be far below the sector target of 80 per cent. To mitigate this, the sector would require to grow at an average of seven (7) percentage points annually. In the rural sector, water coverage moved from 37% to 45%. The target assigned to this indicator by 2015 is 75 per cent. There is need to channel more resources to the sector and ensure efficient utilisation of the same.

While positive growth has been recorded in the sector, a number of factors continue to hamper this growth. They include poor governance, high water losses, and inadequate investment planning and reporting.

5.1 Poor Governance

Poor governance, which continues to be experienced in the water services sector, directly translates to poor management and subsequently underperformance. The sector continues to be characterised by inefficiencies in operations, poor customer service, and low cost coverage. Thus, there is need to strengthen governance with specific focus on leadership and management.

5.2 Water Losses

While efforts are made to grow investments in the sector, high levels of water losses continue to be experienced, translating to huge financial losses. Standing at 45 and 63 per cent for urban and rural areas respectively, these losses are still much higher than the sector target of 30 per cent by 2015. This points to the need to enhance sector efficiency with special focus on Non-Revenue Water.

5.3 Reporting

Sound reporting is necessary for planning and for purposes of measuring sector performance and progress. Proper reporting enables informed decision making and assures stakeholders that policy, planning and implementation is based on accurate information. Whatever cannot be measured cannot be managed.

Although the submission of data on performance continues to improve, challenges on quality, completeness and the timeliness of reporting still remain. There is need to make data submission part of the WSBs performance contracting system, with Wasreb being involved in assessing compliance to this.

5.4 Investments

Inadequate information on investments from the WSBs makes it difficult to assess the impact created by the said investments. Analysis of investment per capita can therefore not be objectively determined.

Whereas WSBs submit business and capital works plans to the Regulator, these plans are not linked with the business plans of their WSPs. There is need for WSBs to ensure harmonisation of WSP business plans with WSB capital works plans. These plans must contain clear targets towards the attainment of the MSLs.

There is also urgent need to have a comprehensive sector investment plan indicating the investment necessary to achieve the progressive realization of the right to water and sanitation, based on prioritized demands. The investment planning would guide investments in the water services sector and would be easy to sell to development partners. In this regard, WaSBIT should be up-scaled for use by all WSBs.

5.5 Sustainability

Size is a key factor with respect to the sustainability of WSPs. Larger WSPs command a large share of business, making it possible for them to charge lower tariffs and still remain viable. Small WSPs, on the other hand, have higher unit operating costs, which makes it hard for them to be viable. The onus is on WSBs to take leadership in the formation of viable economic units, which implies clustering current WSPs. It is anticipated that provisions of the new constitution, where each county will be required to provide efficient and sustainable water and sanitation services, will go a long way in facilitating this.

To remain sustainable, WSPs must embrace cost-reflective tariffs and focus on efficient utilization of resources. This will be done by ensuring that all WSPs operate on the basis of justified costs.

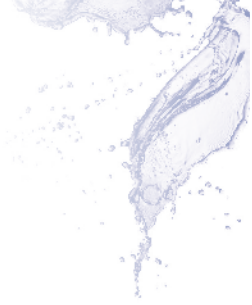
5.6 Low Income Urban Areas

A majority of the urban population lives in low income areas, yet these areas continue to experience inadequate services. It is evident that information on water and sanitation coverage in these areas remains scanty.

There is need for a sector investment plan focused on urban, rural and low income areas. This will fast track the realisation of the human right to water.

5.7 Stalled Transfer Plan

Legal Notice 101 of 2005 is yet to be implemented. This has had a negative impact on the management of water services because issues of asset transfer and ownership are still pending.



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