

IMPACT



A Performance Report of Kenya's **Water Services Sector**

Issue No 4



Water Services Regulatory Board

Ensuring Access to Quality Water Services for All

A dynamic splash of water in shades of blue and white, filling the background of the page. The water appears to be falling from the top, creating a sense of movement and freshness. The splash is centered and extends towards the bottom corners.

IMPACT

A Performance Report of Kenya's
Water Services Sector

Issue No 4



© WASREB 2011
Water Services Regulatory Board

P.O. Box 41621, 00100 - GPO,
Nairobi, Kenya
Tel: +254 (0) 20 273 3559/61
Fax: +254 (0) 20 273 3558
Email: info@wasreb.go.ke
Website: www.wasreb.go.ke

All rights reserved.

Supported by



Design & Production: RealONE Concepts Ltd
Email: info@realoneconcepts.co.ke



Table of Contents

Abbreviations	viii
Foreword	ix
Chapter 1: SECTOR PERFORMANCE OVERVIEW	1
Promising Trend in Sector Performance	2
1.0 Preamble	2
1.1 Introduction	3
1.2 Sector Performance Summary and Trends	3
1.2.1 Performance Summary of WSPs	4
1.2.2 Performance Summary of WSBs	7
Chapter 2 : THE REGULATORY ENVIRONMENT	10
Responding to Challenges of Service Provision	10
2.1 Introduction	10
2.2 Water Now a Human Right	11
2.3 Implication of the New Constitution to Service Provision	12
2.4 Investment in the Sector	12
2.5 Licensing of Water Services Boards	12
2.6 Approval of Service Provision Agreements	13
2.7 Regulation of Small Scale Operators	13
2.8 Enforcement Actions	13
2.9 Litigation	13
2.10 Addressing Governance Challenges	14
2.11 Tariff Setting	14
2.12 Clustering	15
2.13 Consumer Engagement	15
2.14 The Inspection Programme	16
2.15 Building Networks	16
Chapter 3: PERFORMANCE OF WATER SERVICE PROVIDERS	17
SECTION A	
3.0 Methodology	18
Improvement Realised in Information Submission	18
3.1 Categorization of WSPs	20
3.2 Sector Benchmarks and Scoring Criteria	20
SECTION B	
3.3 Urban Water Service Providers	22
Smaller WSPs to Blame for Stagnating Growth	22
3.3.1 Ranking Analysis	25
3.3.2 Performance Over time	27
3.3.3 Performance of WSPs by Indicators	28
SECTION C	
3.4 Rural Water Service Providers	54
Commendable Improvement Realised in Rural Areas	54
3.4.1 Ranking Analysis	55
3.4.2 Performance Over time	57
3.4.3 Performance of WSPs by Indicators	58
Chapter 4: PERFORMANCE ANALYSIS OF WATER SERVICES BOARDS (WSBs)	75
Low Investment Levels Despite Enhanced Sector Funding	76
4.1 Data Coverage	76
4.2 Ranking of WSBs	79
4.3 Detailed Performance Analysis of WSBs	81

4.3.1	Coverage of Operational Costs	81
4.3.2	Expenditure of WSBs as Percentage of Turn-over in WSB Area	83
4.3.3	Personnel Cost as Percentage of Operational Costs	84
4.3.4	Average Gross Monthly Salary per Staff	84
4.3.5	Board of Directors' (BoD) Expenditure as Percentage of Administrative Costs	85
4.3.6	Investments	85
4.3.7	Other Performance Indicators for WSBs	86
4.4	The Rural 'Knowledge' Gap	88
Chapter 5: CONCLUSION		89
Some Strings to Tie but Sector Largely on Right Track		90
5.1	Corporate Governance	90
5.2	Improved Reporting by WSPs and WSBs	90
5.3	Non-Revenue Water	91
5.4	Sustainability and Viability of WSPs	91
5.5	Sector Investments	91
5.6	Rural Data Gap	92
5.7	Water Quality	92
5.8	Sanitation	92
5.9	Services in Urban Low Income Areas (LIAs)	92

List of Tables

Table 1.1:	Performance of Urban WSPs	4
Table 1.2:	Performance of Rural WSPs	4
Table 1.3:	Urban WSPs: Top 5 Improvers and Bottom 5 Losers	5
Table 1.4:	Rural WSPs: Top Improvers and Bottom 5 Losers	5
Table 1.5:	Comparative Ranking of WSBs	8
Table 1.6:	Rating of WSBs According to Data Submission by the WSPs	8
Table 3.1:	Compliance with Data Submission	19
Table 3.2:	Trend in Data Submission by WSPs	20
Table 3.3:	Categorization of WSPs Based on Registered Connections	20
Table 3.4:	Performance Indicators, Sector Benchmarks and Adopted Scoring Regime	21
Table 3.5:	General Data on Urban WSPs	23
Table 3.6:	Summary of WSP Categories	24
Table 3.7:	Overall Ranking and Ranking by Category for Urban WSPs 2009/10	26
Table 3.8:	Performance Over time of Urban WSPs	27
Table 3.9:	Water Coverage by Segmentation	29
Table 3.10:	Baseline Comparison for Water Coverage	29
Table 3.11:	Baseline Comparison for Sanitation Coverage	33
Table 3.12:	Baseline Comparison for Non-Revenue Water	35
Table 3.13:	Baseline Comparison for Dormant Connections	37
Table 3.14(a):	Baseline Comparison for Drinking Water Quality-residual Chlorine	38
Table 3.14(b):	Baseline Comparison for Compliance to Residual Chlorine Standards	40
Table 3.15:	Baseline Comparison for Hours of Supply	44
Table 3.16:	Baseline Comparison for Metering Ratio	45
Table 3.17:	Baseline Comparison for Revenue Collection Efficiency	47
Table 3.18:	Baseline Comparison for Staff per one Thousand Connections	48
Table 3.19:	Baseline Comparison for O&M Cost Coverage	50
Table 3.20:	Baseline Comparison for O&M Cost Coverage at 85% Collection Efficiency	51
Table 3.21:	Baseline Comparison for Personnel Expenditure	53
Table 3.22:	Average Tariff Comparison	53
Table 3.23:	Rural WSPs	54
Table 3.24:	Summary of WSP Categories – Rural	55
Table 3.25:	Overall Ranking and Ranking by Category for Rural WSPs 2009/10	56
Table 3.26:	Performance Over time of Rural WSPs	57
Table 3.27:	Baseline Comparison for Water Coverage	59
Table 3.28:	Baseline Comparison for Sanitation Coverage	60
Table 3.29:	Baseline Comparison for Non-Revenue Water	60
Table 3.30:	Baseline Comparison for Dormant Connections	61



Table 3.31(a):	Baseline Comparison for Drinking Water Quality-residual Chlorine	62
Table 3.31(b):	Baseline Comparison for Compliance to Residual Chlorine Standards	63
Table 3.32:	Baseline Comparison for Water Hours of Supply	66
Table 3.33:	Baseline Comparison for Metering Ratio	67
Table 3.34:	Baseline Comparison for Revenue Collection Efficiency	68
Table 3.35:	Baseline Comparison for Staff per one Thousand Connections	69
Table 3.36:	Baseline Comparison for O&M Cost Coverage	70
Table 3.37:	Baseline Comparison for O&M Cost Coverage at 85% Collection Efficiency	71
Table 3.38:	Comparison for Personnel Expenditure	73
Table 3.39:	Average Tariff Comparison	73
Table 4.1:	Ranking of WSBs According to Data Submission by the WSPs	77
Table 4.2:	General Information on the WSBs for the Period 2009/10	78
Table 4.3:	Performance Indicators and Scoring Criteria	80
Table 4.4:	Ranking of WSBs	81
Table 4.5:	Coverage of WSBs Operational Costs	82
Table 4.6:	Relationship Between Cost Coverage of Operational Costs and Number of RTAs	82
Table 4.7:	Expenditure of WSBs as Percentage of Turn-over in WSB Area	83
Table 4.8:	Personnel Cost as Percentage of Operational Cost	84
Table 4.9:	Average Gross Monthly Salary per Staff	84
Table 4.10:	Board of Directors' (BoD) Expenditure as Percentage of Administrative Costs	85
Table 4.11:	Investment Realization by the WSBs	85
Table 4.12:	Efficiency of Capital Utilization	86

List of Figures

Fig 1.1:	Compliance of WSPs with WARIS Data Submission Requirements	2
Fig 1.2:	Improvements Over time (24 WSPs)	3
Fig 1.3:	Average Tariff and Lowest Block Tariff per WSP Category	6
Fig 1.4:	Share of Business among WSP Categories in %	7
Fig 1.5:	Percentage of Viable WSPs (>100% O&M Cost Recovery)	7
Fig 1.6:	WSB Performance Over time	8
Fig 2.1a:	Urban Households by Main Source of Water (Census 2009)	10
Fig 2.1b:	Rural Households by Main Source of Water (Census 2009)	10
Fig 2.2:	Summary of Approved Tarriffs	14
Fig 3.1(a):	Percentage Share of Turnover	24
Fig 3.1(b):	Percentage share of Production	24
Fig 3.1(c):	Percentage share of People Served	24
Fig 3.2:	Analysis of WSPs by Category	25
Fig 3.3:	Trend in Urban Water Access (Percentage)	29
Fig 3.4(a):	Water Coverage in Percentage	30
Fig 3.4(b):	Water Coverage in Percentage	31
Fig 3.5:	Trend in Urban Sanitation Access Percentage	31
Fig 3.6(a):	Sanitation Coverage in Percentage	32
Fig 3.6(b):	Sanitation Coverage in Percentage	32
Fig 3.7:	Sewerage Coverage in Percentage	33
Fig 3.8(a):	Non-Revenue Water in Percentage	34
Fig 3.8(b):	Non-Revenue Water in Percentage	35
Fig 3.9(a):	Dormant Connections in Percentage	36
Fig 3.9(b):	Dormant Connections in Percentage	36
Fig 3.10(a):	Drinking Water Quality - Residual Chlorine Percentage	37
Fig 3.10(b):	Drinking Water Quality - Residual Chlorine Percentage	38
Fig 3.11(a):	Compliance with Residual Chlorine Standards Percentage	39
Fig 3.11(b):	Compliance with Residual Chlorine Standards Percentage	39
Fig 3.12(a):	Drinking Water Quality - Bacteriological in Percentage	40
Fig 3.12(b):	Drinking Water Quality - Bacteriological in Percentage	41
Fig 3.13(a):	Compliance with Bacteriological Standards	41
Fig 3.13(b):	Compliance with Bacteriological Standards	42
Fig 3.14(a):	Hours of Supply	43
Fig 3.14(b):	Hours of Supply	43
Fig 3.15(b):	Metering Ratio	44
Fig 3.15(c):	Metering Ratio	45

Fig 3.16(a):	Revenue Collection Efficiency _____	46
Fig 3.16(b):	Revenue Collection Efficiency _____	46
Fig 3.17(a):	Staff per Thousand Connections _____	47
Fig 3.17(b):	Staff per Thousand Connections _____	48
Fig 3.18(a):	O&M Cost Coverage _____	49
Fig 3.18(b):	O&M Cost Coverage _____	49
Fig 3.19(a):	O&M Cost Coverage by Billing at 85% Collection Efficiency _____	50
Fig 3.19(b):	O&M cost Coverage by Billing at 85% Collection Efficiency _____	51
Fig 3.20:	O&M Cost Breakdown _____	51
Fig 3.21(a):	Personnel Expenditure as a Percentage of O&M Costs _____	52
Fig 3.21(b):	Personnel Expenditure as a Percentage of O&M Costs _____	52
Fig 3.22:	Analysis of WSPs by Categories _____	55
Fig 3.23:	Water Coverage in Percentage _____	58
Fig 3.24:	Sanitation Coverage in Percentage _____	59
Fig 3.25:	Non-Revenue Water in Percentage _____	60
Fig 3.26:	Dormant Connections in Percentage _____	61
Fig 3.27:	Drinking Water Quality – Residual Chlorine Tests _____	62
Fig 3.28:	Compliance with Residual Chlorine Standards in Percentage _____	63
Fig 3.29:	Drinking Water Quality – Bacteriological in Percentage _____	64
Fig 3.30:	Compliance to Bacteriological Standards in Percentage _____	65
Fig 3.31:	Hours of Supply _____	66
Fig 3.32:	Metering Ratio _____	67
Fig 3.33:	Collection Efficiency in Percentage _____	68
Fig 3.34:	Staff per Thousand Connections _____	69
Fig 3.35:	O&M Cost Coverage in Percentage _____	70
Fig 3.36:	O&M Cost Coverage by Billing at 85% Collection Efficiency _____	71
Fig 3.37:	O&M Cost Breakdown _____	72
Fig 3.38:	Personnel expenditure as a Percentage of O&M Costs _____	73
Fig 4.1:	Turnover of WSBs in the Year 2009/10 _____	79

Abbreviations

AfDB	African Development Bank	MWI	Ministry of Water and Irrigation
AFD	French Development Agency	NGOs	Non Governmental Organizations
BOD	Board of Directors	NRW	Non-Revenue Water
DWO	District Water Officer	NWSS	National Water Services Strategy
ESAWAS	Eastern and Southern African Water Utility and Sanitation Regulators	NWSB	Northern Water Services Board
ETA	Extra-ordinary Tariff Adjustment	O&M	Operation and Maintenance
ISO	International Standards Organization	QMS	Quality Management System
KeBS	Kenya Bureau of Standards	RTA	Regular Tariff Adjustment
KPIs	Key Performance Indicators	RV	Rift Valley
KPLC	Kenya Power and Lighting Company	SPA	Service Provision Agreement
Kshs	Kenya Shillings	UfW	Unaccounted-for Water
KfW	Kreditanstalt für Wiederaufbau (German Development Bank)	UPC	Urban Projects Concept
L/c/d	Litres per capita per day	WAGs	Water Action Groups
LVN	Lake Victoria North	WARIS	Water Regulation Information System
LVS	Lake Victoria South	WaSBIT	Water Services Board Investment
MDGs	Millennium Development Goals	Wasreb	Water Services Regulatory Board
MoU	Memorandum of Understanding	WSB	Water Services Board
MSLs	Minimum Service Levels	WSP	Water Service Provider
		WSS	Water Supply and Sanitation
		WSTF	Water Services Trust Fund

FOREWORD

Demystifying the Human Right to Water

"Far more has been accomplished for the welfare and progress of mankind by preventing bad actions than by doing good ones" – William Lyon Mackenzie King (1874-1950).

The release of the fourth issue of *Impact* comes at a critical time for the water services sector. The Constitution of Kenya, promulgated in 2010, not only challenges the sector to effectively respond to the responsibilities it entails but also take advantage of the opportunities it presents in achieving sector targets.

In the Bill of Rights, the Constitution recognizes the human right to water and sanitation. This recognition has direct implications on policy making, regulation and ultimately service provision. While sector reforms have largely been aligned to human rights principles, some behavioural patterns as well as (informal) structures have continued to prevail. It has now become a constitutional duty at all levels to act and report on the respect, fulfilment and protection of rights. Legally and morally, there is no place to hide anymore; neither behind the remnants of the past falling out from the chain of accountability nor behind informal structures that fulfil interests that do not advance the right of Kenyan people to safe water and sanitation.

This also implies that Water Services Boards (WSBs) have an obligation to report about investments in respect to infrastructure. They also need to show how the money they spent contributes to improving citizens' enjoyment of their right to water and sanitation. For Water Service Providers (WSPs), the human right to water implies that they need to operate efficiently and viably as doing otherwise would undermine consumer aspirations. Responsiveness to consumers is an integral part of this process. In a nutshell, WSBs and WSPs are challenged to embrace efficiency, transparency, and accountability. They need, also, to have in place an effective mechanism for engaging stakeholders towards the attainment of these tenets.

The two-tier governance framework – National Government and County Government – introduced by the Constitution, presents clear opportunities in terms of reviewing sector structures for efficiency and effectiveness. One way of doing so would be to explore the option of clustering WSPs.

Since the enactment of the Water Act in 2002, the water services sector has seen growth in investments yet progress in extending formal water and sanitation services to an increasing population has been rather weak. From the analysis carried out in this report, this can be attributed to the prevalence of a large number of small urban WSPs that do not have the capacity to ad-



Eng Robert Gakubia

equately serve the population in their area. On the one hand, the well-established 21 urban Water Service Providers that have been reporting since 2005/06 and the Very large and Large urban WSPs reporting in 2009/10 have been able to improve water coverage to 63% and 53% respectively. Thus, the inclusion of additional small urban WSPs, facing viability and capacity issues, has dragged the overall water coverage in urban areas down to 39%.

The report establishes other compounding factors that, if effectively addressed, could lead to more pronounced progress in terms of water coverage: the absence of sophisticated investment and financing plans by WSBs, high levels of Non-Revenue Water (NRW) that continue to prevail, lack of information particularly on the water and sanitation situation in urban low income areas and the rural setting and failure to tap into existing potential to extend formal services to urban low income areas.

For better representation of data, we have, for the first time, drawn a separation between urban and rural WSPs and applied different scoring ranges to reflect the different operating environments of urban and rural providers. This, we think, improves the accuracy in capturing sector performance. We congratulate the best performers and those that have improved. We, however, caution that the real challenge is to sustain and build on the gains realised.

Eng Robert Gakubia

CEO, Wasreb

CHAPTER 1



Sector Performance Overview

Promising Trend in Sector Performance

1.0 Preamble

In 2009/10, the total budgetary allocation for the water sector increased by 21.5% from ksh 22,875 billion to Ksh 27,789.1 billion. The development allocation increased by 27.7%. Of the total actual expenditure by the Ministry of Water and Irrigation (MWI), 81.6% was on development with 72.2% of the development budget being allocated to water supply and sanitation.

Despite the significant investment levels in the sector, rapid population growth (38.6 million by 2009 Census Report) and urbanization present ever bigger challenges for Kenya in meeting the Millenium Development Goal (MDG) 7c to “halve by 2015, the population without access to safe drinking water and basic sanitation”. There is therefore need to focus investments in underserved areas to have maximum impact on coverage.

Further there is need to recognize the important role that the private sector can play in increasing access, either directly in water service provision or indirectly through financing.

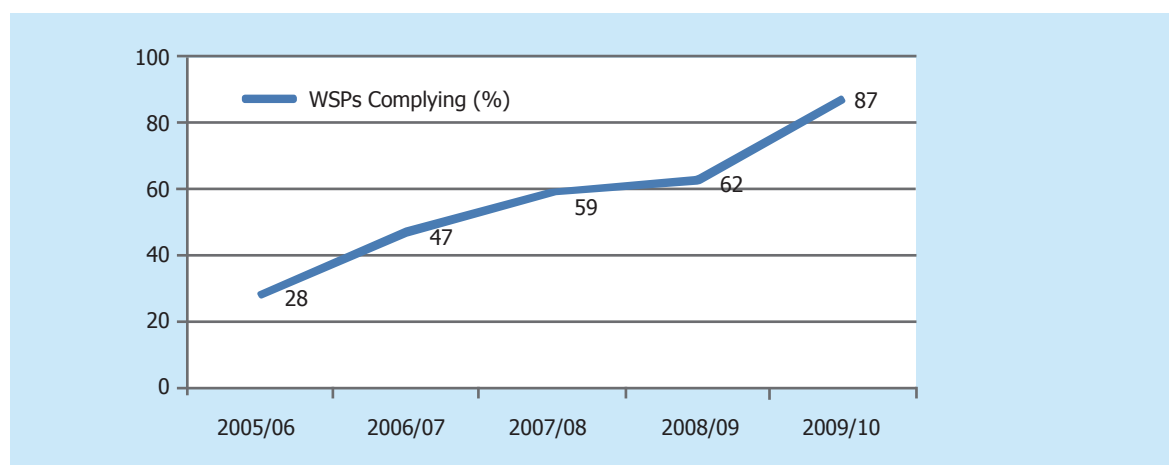
Effectiveness of investments can only be ensured if planning and disbursement of funds is based on solid investment and financing plans, a key responsibility given to the WSBs by the Water Act 2002, which they still have not been able to fulfill.

1.1 Introduction

This report draws a distinction between rural and urban Water Service Providers (WSPs) for purposes of better data representation. The classification is done on the basis of where a WSP derives most of its turnover from. The analysis in the report is based on a total of 93 WSPs, 62 urban and 31 rural, including three District Water Officer (DWO) schemes.

The analysis shows a significant improvement in information submission compared to the previous issue of *Impact* (for the period 2008/9) where 77 WSPs were covered. Compliance with data submission continues to show a positive trend, rising from 28 per cent in 2005/6 to 87 per cent in 2009/10 (Fig 1.1).

Fig 1.1 Compliance of WSPs with WARIS Data Submission Requirements



This shows that, whereas challenges in terms of data quality and consistency remain, the sector is moving in the right direction and is beginning to appreciate the importance of information in the planning, management, and delivery of water services. It is expected that when MajiData (a database covering all low income urban



areas of Kenya) is finalized, data availability on the water services sector will significantly improve to complement reporting on WSP performance in urban Low Income Areas (LIAs).

In a move towards sector sustainability, the Water Services Regulatory Board (Wasreb) approved a total of 37 RTAs, covering all major WSPs within the 8 WSBs. The implementation of RTAs is crucial in gradually achieving full cost recovery at WSP level, allowing WSPs to effectively operate and maintain their assets and WSBs to effectively fulfill their role in asset development.

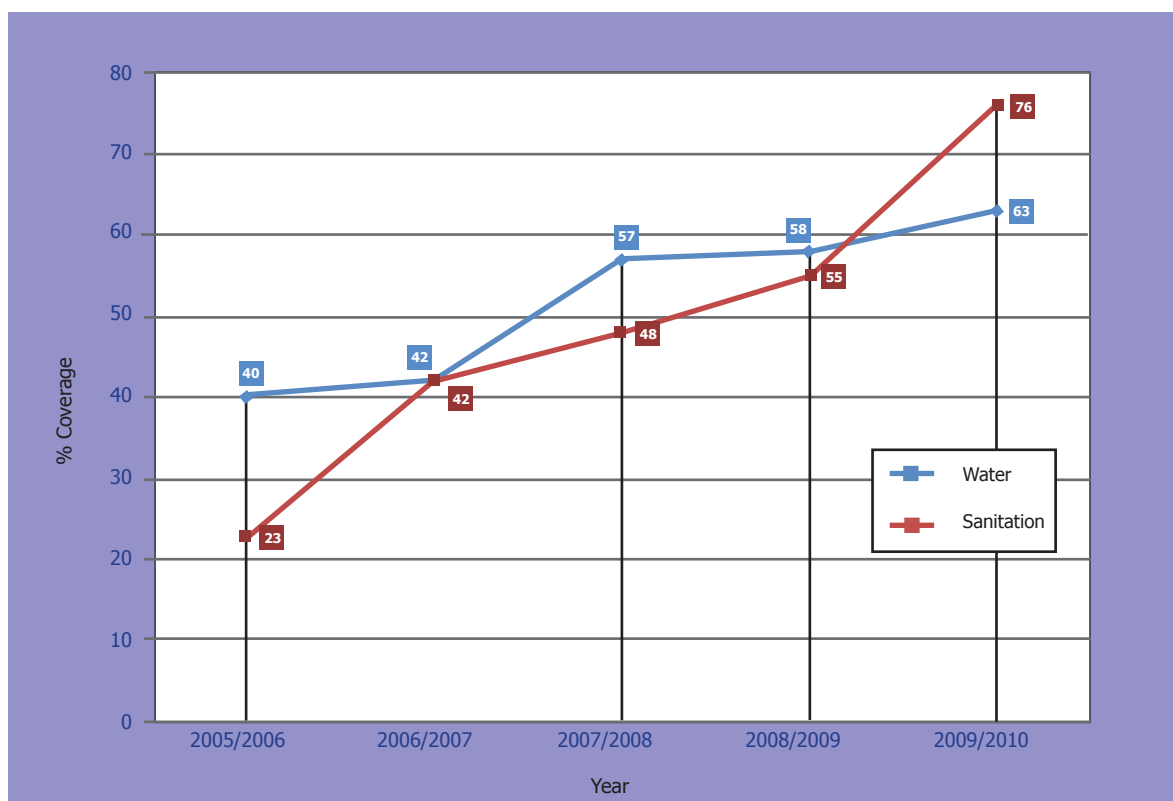
1.2 Sector Performance Summary and Trends

This report rates the performance of both urban and rural WSPs based on nine Key Performance Indicators (KPIs). These are water coverage, sanitation coverage, Non-Revenue Water (NRW), water quality, hours of supply, metering ratio, revenue collection efficiency, staff per thousand connections, and O&M cost coverage.

Analysing the trends in the period from 2008/09 to 2009/10 using the urban WSPs which had reported for the period 2008/9 as a baseline, the urban sector recorded an improvement in water coverage by one (1) percentage point from 46 to 47 per cent; sanitation coverage improved by 20 percentage points, from 47 to 67 per cent; NRW declined by two (2) from 43 to 45; Quality declined by two (2); Hours of Supply decreased by one (1), from 15 to 14; metering ratio improved by one (1), from 82 to 83 per cent; collection efficiency improved by one(1), from 82 to 83 per cent; staff per thousand connections remained at the same level of seven (7) staff; while O&M cost coverage improved by 14 percentage points from 98 to 112 per cent.

Fig. 1.2 shows the trend in water and sanitation coverage (access) for the 24 WSPs that have submitted data continuously since 2005/06. Their sum annual water production in 2009/10 was 242,373,858 m³, which represents 70 per cent of the sector total (346,561,670m³). The trend therefore provides a good and reliable indication of improvements in the urban water supply and sanitation sector (only 3 out of the 24 WSPs reporting since 2005/06 are categorized as rural).

Fig 1.2: Improvements Over time (24 WSPs)



However, while more people have access to safe drinking water and sanitation than ever before, the levels of access remain far behind the MDG targets of reducing by half the number of people without access to safe water and the national target (as defined in the National Water Services Strategy) of 80% water coverage in the urban settings by 2015.

Also, the relatively little water available for consumption is not managed efficiently. The average national consumption per capita (domestic consumption) in 2009/10 was 52 litres per capita per day (l/c/d), including NRW. Once NRW is excluded, this figure goes down to 36, which is significantly below levels of around 100 l/c/d in developed countries. Considering the 2009/10 average tariff of Ksh 53 per cubic metre, the amount of water lost due to NRW in monetary terms can be estimated at Kshs 8.6 billion. This represents approximately a third of the annual sector development budget for 2009/10.

On the part of sanitation, marginal gains have been made especially with respect to onsite sanitation. Sewerage levels, however, remain at unacceptable levels (19% of urban population only). Increased funding and enforcement of the requirement of sanitation component for every water project being implemented is critical. For significant increase in sanitation coverage to be achieved, there is need to implement the Sanitation Concept for the Water Sector adopted by the MWI.

1.2.1 Performance Summary of WSPs

WSPs were ranked on the basis of the nine key performance indicators mentioned above. Tables 1.1 and 1.2 respectively show the best performing and the worst performing urban and rural WSPs in the country.

Table 1.1: Performance of Urban WSPs

URBAN WSPs		URBAN WSPs	
TOP TEN PERFORMERS		TEN WORST PERFORMERS	
WSP	Ranking	WSP	Ranking
Nyeri	1	Gulf	62
Eldoret	2	Kapsabet Nandi	61
Meru	3	Kwale	60
Nanyuki	4	Tavevo	59
Malindi	5	Nyanas	58
Murang'a	6	Mikutra	57
Runda	7	Nol Turesh	56
Embu	8	Moyale	55
Kericho	9	Naivasha	54
Kisumu	10	Amatsi	53

Table 1.2: Performance of Rural WSPs

RURAL WSPS		RURAL WSPS	
TOP TEN PERFORMERS		TEN WORST PERFORMERS	
WSP	Ranking	WSP	Ranking
Ngandori Nginda	1	Nyanadarua North	31
Tetu Aberdare	2	Lugari District	30
Muthambi 4K	3	Mawingo	29
Gatamathi	4	Upper Chania	28
Ngagaka	5	Kinja	27
Kahuti	6	Ruiru Thau	26
Githunguri	7	Muranga South	25
Othaya Mukurweini	8	Karimenu	24
Tachasis	9	Gatanga	23
Murugi Mugumango	10	Trans Nzoia District	22

Wasreb congratulates the best performing WSPs for their efforts to spearhead the progressive realization of the human right to water and sanitation. The worst performers, as well as WSPs who failed to submit complete information, are cautioned that this amounts to resistance to transparency and accountability. Failure to provide information to desired standards may lead to revoking the 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 2008/09 and 2009/10. Tables 1.3 and 1.4 indicate the top improvers as well as the bottom losers.



Table 1.3: Urban WSPs: Top 5 Improvers and Bottom 5 Losers

URBAN WSPS				URBAN WSPS			
TOP 5 IMPROVERS				BOTTOM 5 LOSERS			
WSP	Score 2009/10	Score 2008/09	Change in score	WSP	Score 2009/10	Score 2008/09	Change in score
Eldoret	142	131	11	Nairobi	65	144	-79
Tarda Kiambere	106	97	9	Naivasha	22	87	-65
Gusii	60	51	9	Mavoko	41	106	-65
Rumuruti	45	38	7	South Nyanza	56	120	-64
Lamu	81	76	5	Nakuru	79	138	-59

Table 1.4: Rural WSPs: Top Improvers and Bottom 5 Losers

RURAL WSPs				RURAL WSPs			
TOP 5 IMPROVERS				BOTTOM 5 LOSERS			
WSP	Score 2009/10	Score 2008/09	Change in score	WSP	Score 2009/10	Score 2008/09	Change in score
Ngandori Nginda	128	86	42	Gatanga	52	113	-61
Uasin Gishu District	74	50	24	Nyandarua	11	52	-41
Embe	60	40	20	Kathita Kirua (CEFA)	66	95	-29
Upper Chania	29	12	17	Muranga South	44	73	-29
Muthambi 4K	101	96	5	Karimenu	50	75	-25

Wasreb congratulates the 5 urban and 5 rural WSPs that have impressively improved their performance over the one year and encourages them to keep up their endeavours to the benefit of the consumer. On the other hand, the 5 urban and 5 rural WSPs who lost so much ground at the expense of the consumer are urged to swiftly put in place strategies to reverse this negative trend. Wasreb will keep an eye on them.

The ultimate responsibility for WSP performance lies with the respective Boards of Directors. They need to ensure that strategies are put in place for improving on corporate governance and enhancing professionalism in underperforming WSPs.

Sustainability of WSPs

Despite Wasreb having approved a total of 37 RTAs to date, covering all major WSPs within the 8 WSB areas, many smaller WSPs are still without a justified tariff that would reflect their actual costs.

Whereas most WSBs have improved in implementation of the RTAs, especially Tana, Athi and Tanathi WSBs, LVS WSB is significantly lagging behind and risks the viability of its agents.

Also, the following instances of non-compliance by WSPs and WSBs to tariff conditions have been observed, putting a risk on sustainability:

WSPs:

1. Non-adherence with the set budgetary levels
2. Failure to reach agreed performance targets
3. Non-payment of licensee remuneration

WSBs:

1. Non-issuance of the mandatory two months notice
2. Delayed gazettement of approved tariffs (in some cases up to 1 year)
3. Lack of enforcement of tariff conditions by WSBs

Another challenge to sustainability of – especially small – WSPs are high operational costs per cubic metre of water produced, which means that correspondingly high tariff levels are required for commercial viability. Figure 1.3 shows the average tariffs and average lowest block tariffs for the different categories of WSPs in 2009/10.

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

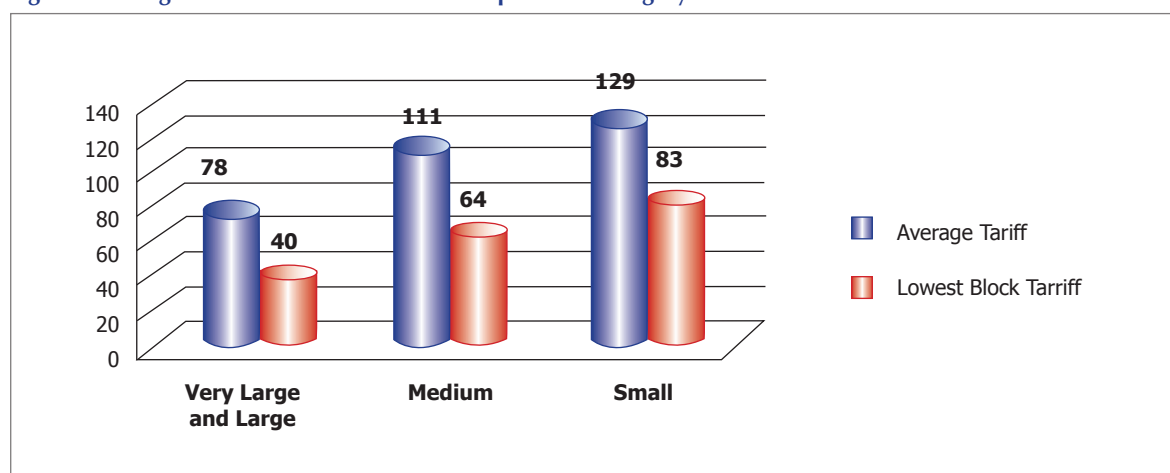


Fig 1.4 and 1.5 show the market share of reporting WSPs per category and the percentage of viable WSPs per category respectively. Whereas very large and large WSPs only constitute 29% of WSPs, they clearly have the largest share of business – covering 71% of the people served and making up for the bulk of the production and turnover – and are much more likely to be viable (63%) than WSPs with fewer connections. The fact that only 25% of small WSPs fulfill the criteria for O&M cost recovery (Fig 1.5) and considering that they have the highest average tariffs and lowest block tariffs (Fig.1.3), this firmly establishes the case for clustering for viability. A minimum threshold of connections must be ensured for the WSP to be commercially viable and to take financial pressure off consumers, which can only be achieved through clustering.



Fig 1.4: Share of Business Among WSP Categories in Percentage

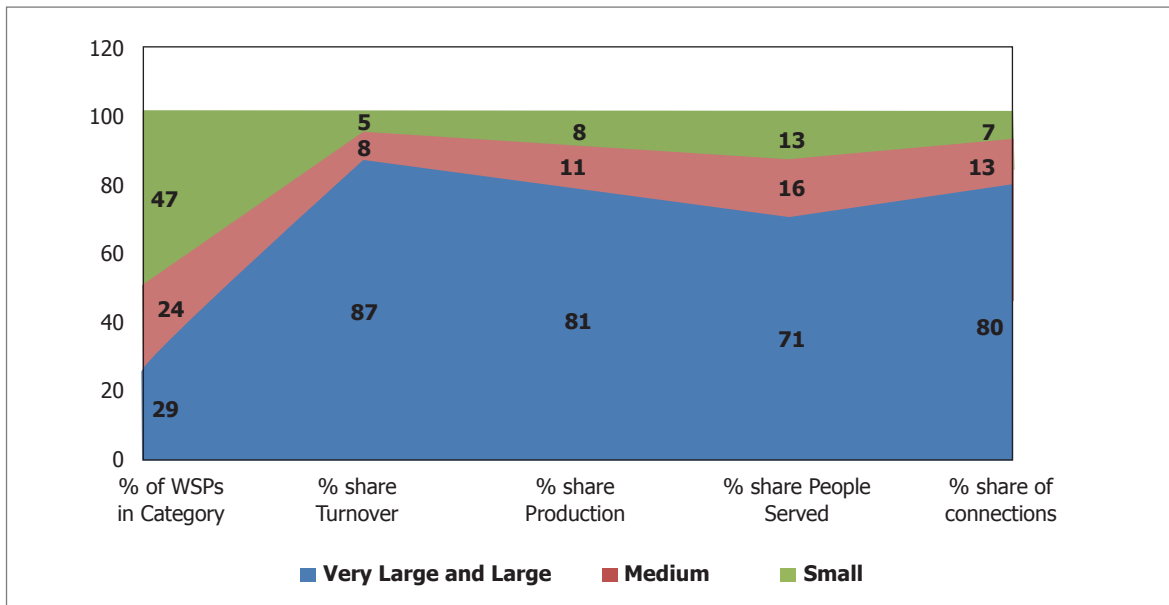
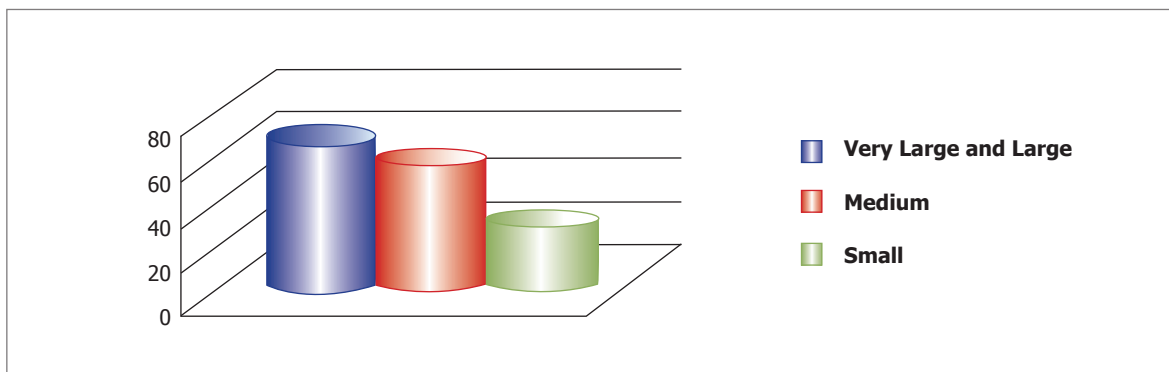


Fig 1.5: Percentage of Viable WSPs (>100% O&M Cost Recovery)



1.2.2 Performance Summary of WSBs

The reporting period saw some improvement in data submission by the Water Services Boards (WSBs). The performance of WSBs in general, however, remains wanting.

The inadequate execution of core activities such as professional investment planning and monitoring as well as the devolvement of operation of infrastructure to WSPs or local communities (for the rural setting) remain a matter of concern. In fact, the biggest weakness of WSBs is the absence of sophisticated investment plans sufficiently detailed for further development through feasibility studies and financing plans. It is not a surprise then that investment realizations remain unacceptably low despite enhanced budgets levels in the sector.

Further, WSBs need to improve compliance with their reporting requirements. This is particularly true for information on investments but applies to subsidies and rural water supply and sanitation as well. Also, the compliance of WSBs with their enforcement obligations concerning data submission by their agents remains largely unsatisfactory (especially the quality of data).

WSBs were assessed on the basis of investment indicators, financial indicators and qualitative indicators. These indicators include water coverage and NRW levels of their WSPs, the sustainability and efficiency of WSB operations, adequacy of monitoring WSPs, implementation of actions to drive efficient investments, improving customer service by their WSPs, strategies put in place to effectively discharge their mandate and

improvement of service levels. On basis of the outlined indicators, Table 1.5 shows the ranking of WSBs in 2009/10 and compares it to the previous reporting period.

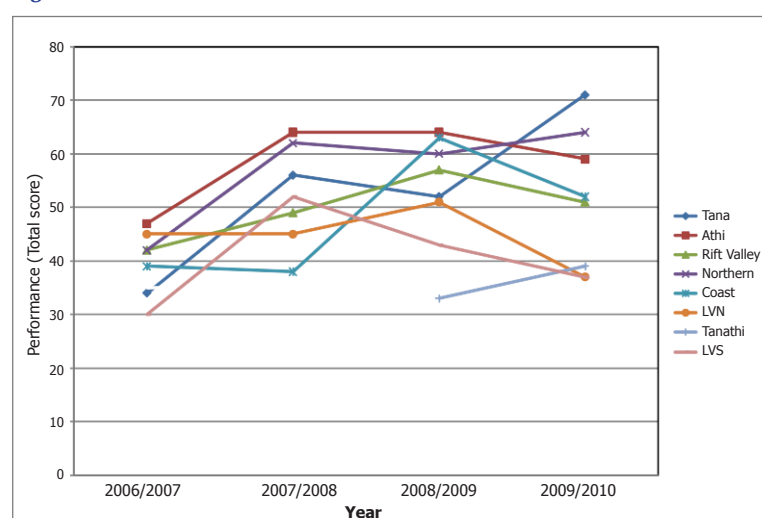
Table 1.5: Comparative Ranking of WSBs

WSBs	Ranking 2009/10	Ranking 2008/9	Change in ranking	Score 2009/2010	Score 2008/2009	Change in Scores
Tana	1	5	+4	71	52	+19
Northern	2	3	+1	64	60	+4
Athi	3	1	-2	59	64	-5
Coast	4	2	-2	52	63	-11
Rift Valley	5	4	-1	51	57	-6
Tanathi	6	8	+2	39	33	+6
LVN	7	6	-1	37	51	-14
LVS	8	7	-1	37	43	-6

Tana WSB was able to significantly improve its performance as compared to 2008/09, moving from position 5 to the top. Northern also improved, to second position. While Tanathi performed better in 2009/10 and moved away from the bottom position, LVN and LVS WSBs continued to underperform.

For the first time, the performance of Athi WSB declined. Also recording a decline in performance were Coast and Rift Valley WSBs (Table 1.6 and Fig. 1.6).

Fig 1.6: WSB Performance Over time



While it is required that all WSBs focus their efforts on improvement, Wasreb challenges particularly the WSBs that have performed poorly in absolute terms, namely LVS, LVN, Tanathi and – to a lesser extent – Rift Valley to improve their performance. Otherwise they risk being penalized in line with the Enforcement and Compliance Strategy.

Assessing how WSBs have fulfilled their enforcement obligations concerning quality data submission by their agents (Table 1.6), it is noted that RV and Coast WSBs were less

committed to ensuring compliance as well as validating data quality and completeness as compared to 2008/09. In contrast, Athi and LVS WSBs slightly improved their performance in this respect but need to do more to reach a good level. Tana WSB recorded the best performance in this category.

Table 1.6: Rating of WSBs According to Data Submission by the WSPs

WSB Data Submission Rating	2009/10	2008/09
Excellent (>80%)	-	-
Good (>65 - 79%)	Tana	-
Average (50 - 64%)	Northern, Athi, LVS	Rift Valley, Northern, Tana
Poor (40 – 49%)	Rift Valley, LVN,	Coast
Worst (<40%)	Coast, Tanathi	Tanathi, LVS, LVN, Athi

One of the main functions of WSBs is to ensure transparency and accountability of WSPs, which can only be done through adequate disclosure of performance data. In this respect, Tanathi, Coast, LVN and RV WSBs did not show good practice and are urged to take corrective measures.

CHAPTER 2



The Regulatory Environment

Responding to Challenges of Service Provision

2.1 Introduction

According to the 2009 Kenya Population and Housing Census report, the population of Kenya is now estimated at 38.6 million. The high rate of population growth poses a major challenge to water service provision with the ensuing high demand especially in the fast growing urban centres.

On the supply side, inadequate water resources continue to pose a challenge, resulting in erratic supply schedules to consumers. It has been an uphill task responding to demands and expectations of consumers and dealing with their concerns fairly.

This, to a large extent, explains the proliferation of small scale water service providers in urban areas.

Fig 2.1a: Urban Households by Main Source of Water (Census 2009)

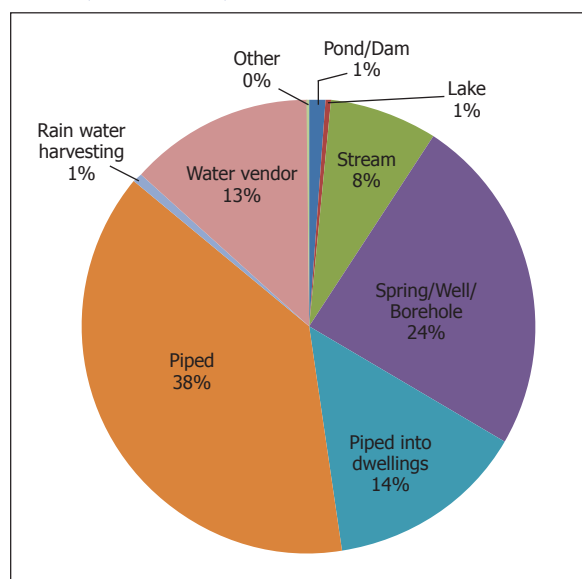
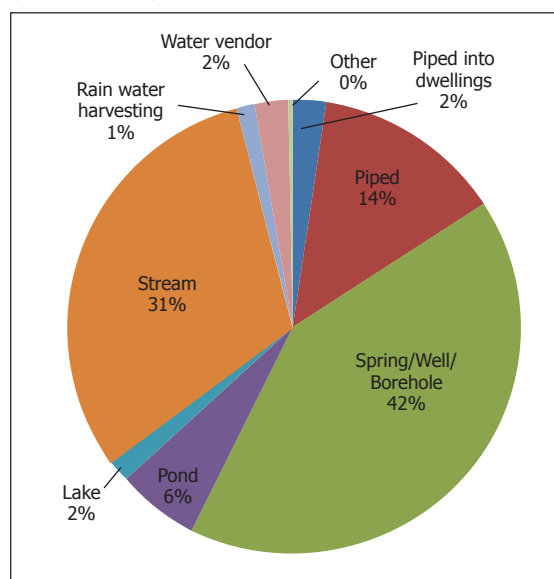


Fig 2.1b: Rural Households by Main Source of Water (Census 2009)



Source: National Census, 2009

According to the Census report, access to piped water has declined over the last two decades: 32% in 1989; 31% in 1999 and 30% in 2009. The trend has since been reversed in urban areas, as confirmed by the coverage figures of WSPs that have reported since 2005/06 (as shown in Figure 1.1).

It is important to note that Census data neither considers the quality, quantity nor price of water. Neither does it consider the efficiency of disposal of human waste which needs to be integrated when progress in the fulfillment of rights according to the new constitution is to be demonstrated. The challenge therefore in analyzing access from the census data is to identify and build consensus on the modes that fulfill the Human Right Based Approach (HRBA) criteria for good practices on water and sanitation.



2.2 Water Now a Human Right

In July 2010, the United Nations declared “the right to safe and clean drinking water and sanitation a human right that is essential to the full enjoyment of the right to life”. The right to water is defined by the UN as the right to equal and non-discriminatory access to sufficient amounts of safe water for personal and domestic uses – drinking, personal sanitation, washing of clothes, food preparation and personal and household hygiene.

In August 2010, Kenya signed into law a new constitution enshrining a comprehensive Bill of Rights that includes the right to clean and safe water in adequate quantities for each person along with the right to adequate sanitation. The domestication of this law underlines the commitment to scale up efforts to ensure access to water that is safe, clean and available in adequate quantities. It also underlines a commitment to reasonable levels of sanitation. Wasreb has already defined, and is enforcing, minimum service levels in fulfillment of this.

The inclusion of water in the Bill of Rights has far reaching implications for the sector. Consumers are likely to become more demanding, putting pressure on service providers, and consequently reinforcing the mandate of the Regulator.

Criteria for good practices fulfilling human rights obligations related to access to safe drinking water and sanitation

(1-5 Normative criteria; 6 – 10 Cross cutting criteria)

1. **Availability** – Refers to sufficient quantities, reliability and the continuity of supply or service.
2. **Accessibility** – Sanitation and water facilities must be physically accessible for everyone within, or in the immediate vicinity, of each household, health or educational institution, public institution and the workplace.
3. **Quality/Safety** – Sanitization facilities must be hygienically and technically safe to use by all. Water must be of such a quality that it does not pose a threat to human health.
4. **Affordability** – Access to sanitization and water facilities and services must be accessible at a price that is affordable for all.
5. **Acceptability** – Water and sanitation facilities and services must be culturally and socially acceptable.
6. **Non Discrimination** – Discrimination on prohibited grounds including race, colour, sex, age, language, religion, political or other opinion, national or social origin, property, birth, physical or mental disability, health status or any other civil, political, social or other status must be avoided, both in law and in practice. Human rights require a focus on the most marginalized and vulnerable to exclusion and discrimination.
7. **Participation/Empowerment** – Processes related to planning, design, construction, maintenance and monitoring of sanitation and water services should enable participation by users including representatives of all concerned individuals, groups and communities.

This requires a genuine opportunity to freely express demands and concerns and influence decisions.

8. **Accountability** – While the State has the primary obligation to guarantee human rights, the numerous other actors in the water and sanitization sector also should have accountability mechanisms. In addition to participation and access to information, rights-holders should be able to participate in monitoring and evaluation as part of ensuring accountability.
9. **Impact** – This criterion aims at capturing the impact of practices and the progress achieved in the fulfillment of human rights obligations related to sanitization and water. It examines the degree to which practices result in better enjoyment of human rights, empowerment of rights-holders and accountability of duty bearers.
10. **Sustainability** – The human rights obligations related to water and sanitization have to be in a sustainable manner. This means good practices have to be economically, environmentally and socially sustainable. The achieved impact must be continuous and long lasting. Water quality and availability have to be ensured in a sustainable manner by avoiding water contamination and over-abstraction of water resources.

Note: (1) All normative criteria must be met for the full realization of the human right to sanitation and water; (2) All of the cross cutting criteria have to be met to some degree, and at the very least, the practice must not undermine or contradict these criteria.

Source: Independent Expert on human rights obligations related to access to safe drinking water and sanitization mandated by the Human Rights Council.

2.3 Implication of the New Constitution to Service Provision

The Constitution of Kenya 2010 provides for a two-tier governance framework: National Government (NG) and County Government (CG). Therefore the continued presence of an arm of government to execute the appropriate sector law, policy, oversight and accountability on water issues remains a necessity. Further, the responsibility for water and sanitation services in the new constitution has been passed to the National Government, with respect to public investments, and the County Governments, with respect to the provision of water and sanitation services.

The introduction of regulation under the Water Act 2002 has greatly improved sector performance. Further, regulation, pro-poor strategies and dispute resolution are among issues that will require uniformity across counties. A strengthened role of regulation is therefore foreseen, calling for repositioning of Wasreb in order to effectively deliver on the requirements of the Constitution.

The Water Act 2002 will need to be aligned to the Constitution. This provides an opportunity to incorporate lessons learnt so far during the implementation of water sector reforms, where the human right to water has already been recognised.

2.4 Investment in the Sector

The sector continues to attract investments both from government and development partners. However, investment levels still fall below the demand for water and sanitation services.

One of the biggest handicaps to the provision of water and sanitation services is the dilapidated state of water and sewerage infrastructure throughout the country. First, a high proportion of WSPs cannot reliably deliver water to the consumers without systemic loss owing to obsolete infrastructure. Second, it continues to undermine the reliability of water service provision. The need to fast track the development of infrastructure is compounded by inadequate and/or inappropriate application of available resources.

Although WSBs have been in existence for more than seven (7) years, they have not been able to produce appropriate investment and financing plans in line with their responsibility as specified in the Water Act 2002. This has led to questions about the effectiveness of WSBs in discharging their mandate.

2.5 Licensing of Water Services Boards

There are eight Water Services Boards in the country. Five of these continue operating on licences issued in the year 2007.

In the review period, Wasreb licensed Rift Valley and Athi Water Services Boards (WSBs) to provide water services over a ten-year period. The Boards had been operating on five-year conditional licences issued in 2004. One other Board, Tanathi, was given a one-year interim licence.

As a tool for regulating the sector, the Licence sets conditions and targets of performance WSBs should reach to ensure quality in service provision. It stipulates conditions WSBs should meet as a way of improving the provision of water services. Conditions include the development of sophisticated investment, financing and business plans, indicating how the Boards intend to achieve the government objective of increasing water access to households. The Boards are also expected to develop a pro-poor strategy and promote low cost technology in the provision of water services.

Wasreb will continue monitoring adherence to conditions set in the licence as a way of gauging progress towards the attainment of the Millennium Development Goals (MDGs) and in line with human rights obligations.



2.6 Approval of Service Provision Agreements

To respond to emerging issues on management of WSPs, Wasreb revised the model SPA I to incorporate urgent and important additions for better management of water services. The model is now being used for the management of services in the interim period.

Runda Water Company became the first fully privately owned WSP to be awarded an SPA. The approval was granted after the company had presented an approved capital works plan and tariff structure.

2.7 Regulation of Small Scale Operators

This refers to operators with a production capacity below 2,500 cubic meters per day. In line with licence conditions, a directive was issued to licensees to commence registration of these small scale operators. The purpose of bringing these businesses into formal regulation is to ensure the sale of quality water at a cost-reflective tariff.

2.8 Enforcement Actions

Following the development and dissemination of the Compliance and Enforcement Strategy, Wasreb issued advisory circulars, warnings, cure orders and penalties for non-compliance. All the Licensees were cited for various forms of non-compliance. Most of the Licensees responded with cure plans which they are currently enforcing in their areas of supply.

2.9 Litigation

As regulatory decisions and actions widened in scope, some providers decided to seek the High Court's interpretation of their rights in regard to several regulatory decisions Wasreb made. The suits were in respect of:

- Increase in tariffs under Tariff Guideline
- Implementation of the Corporate Governance Guideline
- Interpretation of the right to water

The Ruling on many of these cases is pending but Wasreb notes that the suits do not necessarily imply obstruction to regulation. Wasreb views these cases positively as they reveal the nature of regulatory systems already in place. The suits therefore provide a learning platform where in the long run there will be deeper understanding of water as a social and economic good and the realistic implementation of the right to water and the role of regulation in making this happen.

2.10 Addressing Governance Challenges

Wasreb issued the Corporate Governance Guideline with governance standards for companies providing water and sewerage services. The implementation of the Guideline is imperative in addressing issues of transparency, accountability and stakeholder participation, which in the past have impacted negatively on the performance of the sector. While some sector players still resist the implementation of the guideline, the reality is that the power of stakeholders in businesses is increasing and the need to hold institutions accountable to the public will not fade. Wasreb therefore encourages licensees to terminate SPAs with renegade companies and contract compliant companies to deliver services.

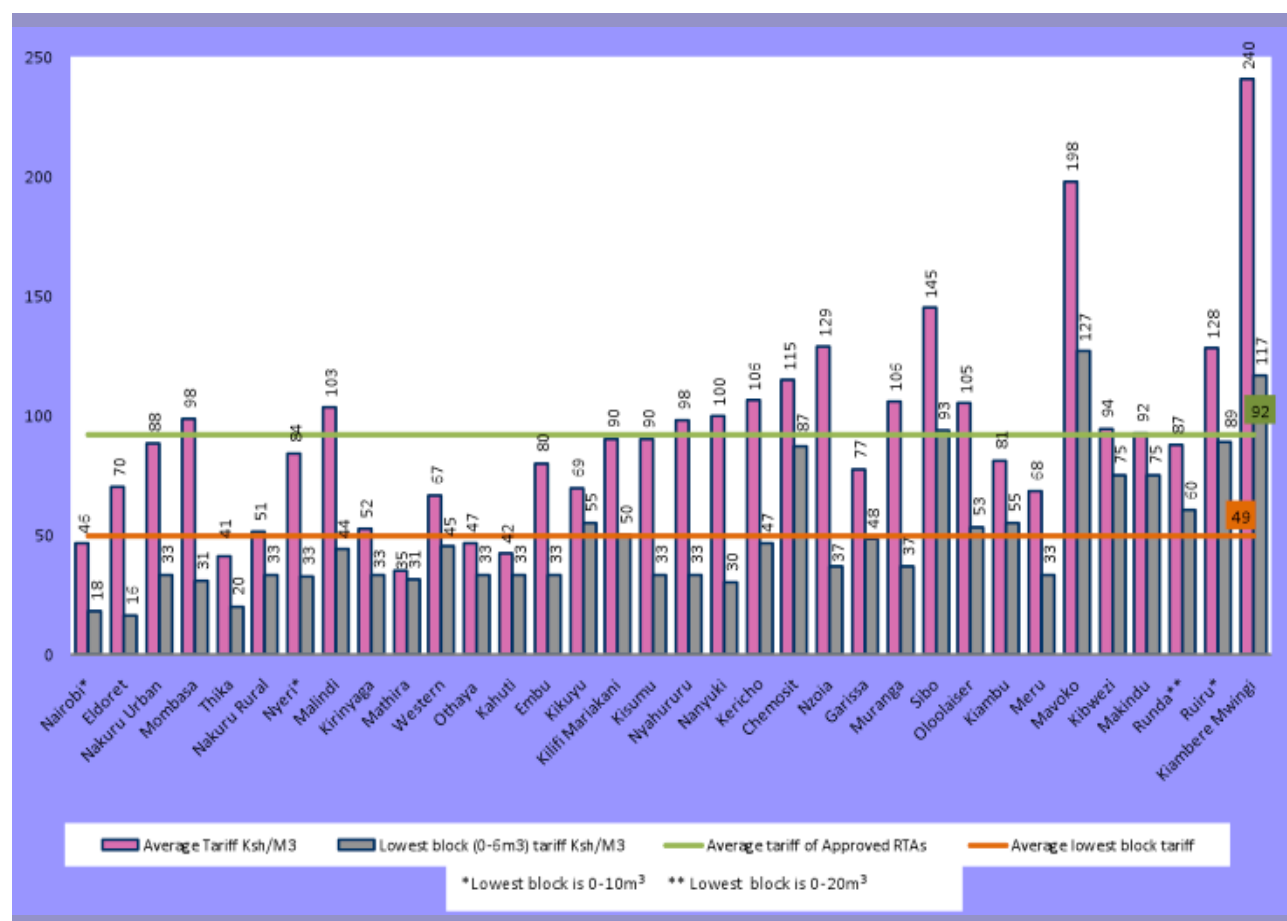
2.11 Tariff Setting

Cost-reflective tariffs form the basis for the sustainability of the sector. Tariff review and determination ensure that WSPs are able to cover their justified costs, allowing them to effectively operate and maintain their assets and enabling WSBs to effectively fulfill their role in asset development.

Wasreb applies a progressive block tariff structure, which seeks to reconcile the economic needs of providers with the social needs and the ability to pay for poorer consumers. This means for the first 6m³ of water consumed – the lifeline block – consumers pay a social rate which is cross-subsidized through the higher rates in the other tariff blocks. Further, Wasreb issued a regulated retail price of Ksh 2 per 20 liter container for water kiosks operated under WSPs.

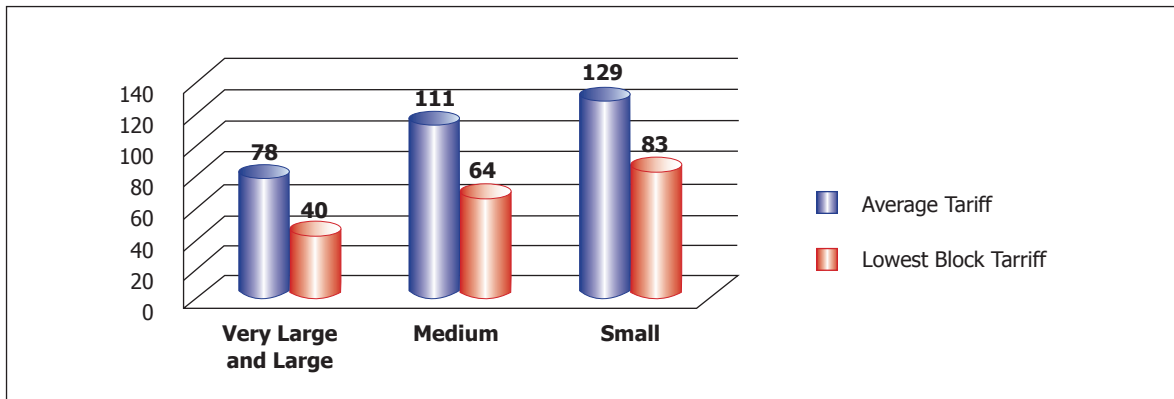
Wasreb has approved a total of 37 Regular Tariff Adjustments (RTAs) covering mainly the large WSPs since the Extra Ordinary Tariff Adjustment (ETA) expired in December 2009. Fig 1.3 highlights the average tariffs and the rates for the lowest block for the approved RTAs.

Fig 2.2: Summary of Approved Regular Tariffs





Average Tariff and Lowest Block Tariff per WSP Category*



* Same as figure 1.3

The figure above presents the average tariff and lowest block tariff per WSP category. It clearly shows that bigger WSPs tend to have lower average tariffs as compared to smaller ones. This is mainly due to their lower operational costs per cubic metre. Due to their larger customer base, they are better placed to cross-subsidize within the different tariff blocks, leading to more affordable lowest block tariffs and thereby allowing them to better address the needs of the poor without compromising their commercial viability. The figures presented above are a clear indication of the need for clustering to unleash the unexploited efficiencies in the sector which would translate to lower consumer tariffs.

2.12 Clustering

In an attempt to improve service delivery and sustainability of WSPs, the Ministry of Water and Irrigation introduced the concept of clustering so that new entities could benefit from economies of scale. The concept received a lot of opposition from WSPs and had to be reviewed. Thus, many WSPs continue operating with little regard to their long term sustainability. They either have to restructure to remain in business or risk collapse.

On the other hand, the Ministry continues to subsidize some WSPs without any regard to their performance. This subsidy is counterproductive to improving self-reliance and the sustainability of their operations. Therefore, subsidies could be construed to go against the spirit of sector reforms.

2.13 Consumer Engagement

In a bid to improve service levels and ensure consumer protection, Wasreb piloted the Water Action Groups (WAGs) concept in the year 2010, in the four towns of Nairobi, Mombasa, Kisumu and Kakamega.

The main purpose of the pilot was to bridge the gap between service delivery institutions and consumers, and by so doing improve responsiveness to consumer concerns as well as improving consumers' faith in sector institutions.

WAGs are meant to serve as a feedback mechanism for water sector institutions in Kenya and to strengthen citizens' voice in the water services sector as a means of protecting consumer interests.

Beyond helping Wasreb to deliver on its mandate of consumer protection, the introduction of WAGs also addresses the growing recognition of water as a human right by bringing the 'consumer voice' into the planning, operation and audit of the sector.

As a link between consumers and sector institutions, WAGs have been able to provide feedback on different matters in the sector. Notably, they have been able to highlight consumer problems as revolving around bill-

ing, metering, water supply scheduling, response to bursts and leakages, sewer flooding, water theft, and customer care. These are pertinent issues the sector must pay attention to.

Nevertheless, significant strides have been made to improve service delivery. In the areas WAGs have been operating, there have been commendable efforts by concerned sector Institutions to improve services.

Wasreb is presently exploring modalities of scaling up the concept.



Consumer voice vital in sector performance.

2.14 The Inspection Programme

Under Section 47 of the Water Act, Wasreb monitors compliance with regulations by WSBs and WSPs. The Inspection Programme serves to fulfill this mandate.

Inspections conducted during the period under review revealed that some WSBs and WSPs were not fully complying with the provisions of the licence and SPA. Some of the issues identified include non-compliance to reporting requirements which are necessary for tracking performance, delays in implementation of approved tariffs, and poor implementation of capital works plans.

Corporate governance remains a challenge in many of the sector institutions, with WSBs still not fully internalizing their roles. In certain cases, conflict of interest was cited, which raises integrity issues.

The inspection programme identified inadequate co-ordination between sector institutions as a factor impeding performance. Some WSPs were found to be implementing projects without involving licensees, who in essence are the ones accountable for those projects.

While there was improvement in the payment of the Regulatory Levy, some WSPs still based it on collection rather than on billing as required.

To address anomalies unearthed during the inspections, respective institutions were advised to adhere to Public Procurement requirements, and ensure proper accounting and record keeping. Further, the institutions were advised to put in place proper policies and adhere to guidelines issued to them by Wasreb.

2.15 Building Networks

Networking is vital for purposes of comparing experiences and benchmarking best practice. It is in line with this that Kenya subscribed to membership of the East and Southern African Water and Sanitation (ESAWAS) Regulators Association. The regulators have since finalized the development of a Strategic Plan specifying milestones in regulatory collaboration.

CHAPTER 3



Performance of Water Service Providers

3.0 Methodology

Improvement Realised in Information Submission

This report draws a distinction between rural and urban WSPs for purposes of better data representation. This is a departure from *Impact 3* where the performance of these WSPs was aggregated. The classification is done on the basis of where a WSP derives most of its turnover from. Thus, if a WSP derives over 50 per cent of its turnover from an area officially classified as urban, the WSP will be classified the same. The analysis of the report is, therefore, based on 93 WSPs, 62 urban and 31 rural. Of the 31 rural providers, 28 are regular WSPs with SPAs while three (3) are District Water Officer (DWO) Schemes.

There is significant improvement in information submission compared to the previous issue of *Impact*, both in absolute and relative terms (i.e 90 WSPs in 2009/10 vs. 77 in 2008/09; and 87% of WSPs reporting in 2009/10 vs. 62% in 2008/09). This shows that, whereas challenges in terms of data quality and consistency remain, the sector is moving in the right direction and is beginning to appreciate the importance of information in planning, management, and delivery of water services.

Further, the scoring criteria for both urban and rural WSPs was reviewed to bring it closer to the sector benchmarks. Different scoring ranges were applied for rural and urban providers to reflect the different operating environments.

The urban WSPs covered in the analysis serve a total of 20.5 mio people, which actually exceeds the 2009 Kenya Population and Housing Census figures for urban (12.5 mio people) by 8 million. This is explained by the fact that most WSPs (whether classified as urban or rural) cover areas with urban, peri-urban, and rural characteristics, with differing ratios between the three. In addition, the classification of urban/rural by the Census report does not necessarily follow the criteria of population density whereas water and sanitation systems usually do. Nevertheless, the figures attributed to urban WSPs can be said to be representative of the water and sanitation situation in the urban context.

These figures are expected to improve once MajiData (database covering all low income urban areas of Kenya) is finalized to complement reporting on WSP performance in urban Low Income Areas (LIAs). MajiData is being developed by the Ministry of Water and Irrigation (MWI) and the Water Services Trust Fund (WSTF) in cooperation with UN-Habitat, Google.org, KfW and GIZ. The programme is collecting data on water supply and sanitation situation in LIAs in 246 towns.





There are on-going efforts by Water Services Boards (WSBs), in collaboration with Wasreb, MWI and other sector stakeholders, to implement a series of 'Water Point Mapping (WPM)' pilots to close the data gap for rural areas.

This report analyses the performance of WSPs based on nine key performance indicators (KPIs) namely: 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 staffing (per 1000 connections). Together these indicators give a good picture of the performance of a WSP and, in aggregate, the overall sector performance. The KPIs form part of the binding Minimum Service Levels (MSLs) of the WSPs. The latter have committed to progressively improve on service delivery to meet MSLs and other sector benchmarks over the SPA validity period.

Data used in the performance analysis was generated mainly from WARIS. To guarantee a higher level of data reliability, the data was verified through inspections reports, data from RTAs where available, and annual Licence reports of WSBs. Cross checks were conducted to avoid unrealistic figures and, where necessary, WSPs were contacted directly.

Out of 104 WSPs, 90 WSPs, comprising 62 urban and 28 rural WSPs submitted fairly complete information. Three (3) DWOs also submitted information and were analysed together with the rural WSPs. They, however, are not counted in terms of information submission, since they do not constitute formal WSPs as per the Water Act 2002. The drop in number of WSPs from 124 in 2008/09 to 104 in 2009/10 is as a result of clustering of some WSPs mainly in the Tanathi region and the exclusion of all but three (3) reporting DWOs. WSBs contract WSPs through SPAs and therefore have a responsibility to ensure WSPs fulfill reporting requirements to Wasreb. Fourteen (14) WSPs did not comply with these reporting requirements. WSBs holding SPAs with these non-compliant WSPs must ensure they adhere to regulatory reporting requirements.

Table 3.1 shows the compliance of WSPs and the respective WSBs.

Table 3.1: Compliance with Data Submission

WSB Status	RVWSB	CWSB	TWSB	LVSWSB	LVNWSB	TaWSB	NWSB	AWSB
Incomplete	Gitei, Nyakanja, NdaragwaTia Wira	—	—	Nyasare	—	Matungulu-Kangundo	—	—
Non submission	0	Hola Tana River	D.O.M Kathita Katunga,	Boya, Ahono Sinaga	—	Oloitoktok, Namanga, Mwala	—	—
Number Compliant	15	6	23	10	5	11	8	12
Number not compliant	4	1	1	4	0	4	0	0
Number of WSPs	19	7	24	14	5	15	8	12

Although data submission has greatly improved over time (Table 3.1), challenges on quality, completeness and the timeliness of reporting still remain. Continuously improving the quality of data submitted will involve:

- i. Capacity building of agents responsible for data collection (WSBs and WSPs)
- ii. Sensitization of agents as regards their responsibilities in data collection and provision as well as the benefits of proper fulfillment of reporting obligations
- iii. Improving the control mechanisms for checking reliability and completeness of data submitted and to ensure timely reporting.
- iv. Penalising WSBs for inaccurate and incomplete submission of data

The trend in data submission has been as follows:

Table 3.2: Trend in Data Submission by WSPs

Status of data submission	Impact 1		Impact 2		Impact 3				Impact 4	
	2005/6		2006/7		2007/8		2008/9		2009/10	
	Nr of WSPs	%	Nr of WSPs	%	Nr of WSPs	%	Nr of WSPs	% submitting	Nr of WSPs	%
Complete	25	28	55	47	72	59	77	62	90	87
Incomplete	33	36	13	11	12	10	13	11	6	6
Nil	33	36	50	42	38	31	34	27	8	7
Total	91		118		122		124		104	

All WSBs are obliged to submit comprehensive data and ensure that the WSPs under their jurisdiction do the same.

3.1 Categorization of WSPs

In order to facilitate fair analysis, WSPs have been categorized based on total water and sewerage connections as Small, Medium, Large or Very Large (Table 3.3). Urban and rural WSPs have been analyzed and compared to reflect their different operating environments.

Table 3.3: WSP 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

3.2 Sector Benchmarks and Scoring Criteria

Nine KPIs were selected for the purpose of scoring and ranking WSPs. The sector benchmarks and the scoring criteria adopted are indicated in Table 3.4. Although the same KPIs were used in assessing the performance of the WSPs, different scoring criteria was used for urban and rural. This is again due to the difference in the operating environment as well as the currently advanced status of development of urban as compared to rural WSPs. Wasreb is gradually reviewing the scoring criteria for both to eventually match the sector benchmarks.



Table 3.4: Performance Indicators, Sector Benchmarks and Adopted Scoring Regime

Indicators		Sector Benchmarks			Adopted Scoring Regime				
		Good	Acceptable	Not Acceptable	URBAN		RURAL		
					Perfor- mance	Score	Perfor- mance	Score	
1	Collection Efficiency	>90%	85-90%	<85%	>90%	30	>90%	30	
					<75%	0	<75%	0	
2	NRW	<20%	20-25%	>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
						<90	0	<90	0
	No of Tests Bacteriological	>95%	90-95%	<90%	>95%	10	>95%	10	
					<90	0	<90	0	
		Compliance - Bacteriological	>95%	90-95%	<90%	>95%	5	>95%	5
					<90	0	<90	0	
4	Hours of Supply	Population >100,000	21-24	16-20	<16	>20	20	>20	20
						<10	0	<10	0
	Population <100,000	17-24	12-16	<12	>16	20	>16	20	
					<6	0	<6	0	
5	O&M Cost Coverage		≥150%	100- 149%	<100%	>149%	20	>149%	20
						<90	0	<90	0
6	Metering Ratio		100%	95- 99%	<95%	>99%	20	>99%	20
						<80%	0	<80%	0
7	Staff Per 1000 Connections	Large & Very Large Companies	<5	5- 8	>8	<5	20	<7	20
						>8	0	>11	0
	Medium & Small Less Than 3 Towns	<7	7- 11	>11	<7	20	<9	20	
					>11	0	>14	0	
Medium & Small More Than 3 Towns	<9	9- 14	>14	<9	20	<11	20		
				>14	0	>16	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%	20- 30%	>30%	N/A	N/A	N/A	N/A
		Medium Companies	<30	30- 40%	>40%				
		Small Companies	<40%	40- 45%	>45%				

The scoring criteria above shows the upper and lower limits defined for each indicator and scores assigned thereof. 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. 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.



Section B

3.3 Urban Water Service Providers

Smaller WSPs to Blame for Stagnating Growth

Water and sanitation coverage in urban settings recorded improvement if activities of larger WSPs are considered. These WSPs also record comparatively better performance in other KPIs compared to their rural counterparts who are relatively smaller.

Table 3.5 summarizes the basic data for the 62 urban WSPs analyzed for the year 2009/10. They are placed in the four categories depending on the total number of registered water and sewerage connections (Table 3.5).

Table 3.5: General Data on Urban WSPs

WSP	Total Population in Service area	Population served	No. of connections	No. of active connections	No. of towns	Turnover/billing (Ksh in mio)	Domestic + Kiosk Billed Volume(000)	Production in M3 (000)	NRW	Consumption/ d (incl. NRW)	Consumption/ d without NRW	No. of staff
Very Large WSPs (>35,000 connections)												
1 Nairobi	3,555,553	2,250,607	415229	415229	6	4,512	46,539	145,184	42	80	57	2,075
2 Mombasa	976,945	708,054	65688	41395	6	730	6,971	16,240	35	36	27	483
3 Eldoret	429,558	220,198	50567	47110	1	280	6,028	10,365	25	94	75	205
4 Nakuru	473,288	372,366	44247	42171	1	602	3,984	12,135	53	45	29	251
Large WSPs (10,000-35,000 connections)												
5 Thika	235,908	215,142	31827	31010	1	178	4,745	9,162	39	84	60	166
6 Nakuru Rural	453,105	213,476	29846	14035	4	153	1,080	8,825	62	22	14	151
7 Nzoia	199,602	129,798	26792	19817	4	135	1,231	5,167	61	42	26	151
8 Nyeri	128,064	89,582	21813	19089	1	233	2,148	4,734	31	86	66	111
9 Malindi	224,018	186,300	14026	13997	2	243	2,938	4,460	25	54	43	100
10 Kirinyaga	430,000	186,478	19930	10436	5	74	1,072	7,800	82	29	16	197
11 Mathira	148,847	29,760	19845	8574	1	48	1,154	4,018	66	176	106	63
12 Western	448,400	138,831	18608	8603	4	79	444	2,410	56	14	9	110
13 Kilifi Mariakani	709,221	418,307	17500	9480	4	174	1,819	4,546	39	17	12	153
14 Kisumu	379,270	181,512	16843	15493	1	276	971	5,226	50	22	15	120
15 Kericho	142,842	98,507	13894	11383	1	117	936	2,609	46	38	26	146
16 Embu	149,000	83,865	13334	11439	1	119	1,698	3,741	55	86	55	81
17 Chemosit	1,263,435	79,488	12591	7381	7	46	1,011	2,987	56	54	35	113
18 Nanyuki	86,054	57,252	12332	12332	1	115	960	3,833	43	66	46	83
19 Gusii	503,052	221,439	12085	6342	7	58	446	1,292	46	8	6	89
20 Nyahururu	103,264	46,014	10402	9514	2	86	589	2,496	57	55	35	128
21 Kwale	349,486	149,344	10058	5934	5	69	1,010	2,347	50	28	19	60
Medium WSPs (5,000-9,999 connections)												
22 Limuru	239,738	59,590	9686	7575	3	41	1,323	810	33	81	61	38
23 Garissa	131,500	124,715	9634	9035	2	102	1,419	4,215	58	49	31	88
24 South Nyanza	963,796	417,021	9041	7451	5	15	835	3,740	39	8	5	59
25 Murang'a	55,000	32,034	8688	8341	1	67	744	1,814	47	94	64	59
26 Meru	128,274	56,914	8228	6871	1	106	1,374	1,799	23	82	66	72
27 Sibo	1,616,875	52,590	7699	5745	9	33	1,301	1,519	64	111	68	99
28 Kikuyu	143,930	32,868	6593	4573	4	39	632	1,811	54	81	53	26
29 Amatsi	175,798	25,767	6367	2161	5	22	170	919	46	26	18	48
30 Oloolaiser	397,961	116,025	6331	3930	3	54	946	1,762	44	32	22	65
31 Isiolo	75,000	34,168	6264	5339	1	40	418	1,196	51	51	33	54
32 Naivasha	274,153	54,420	6240	2796	3	10	194	430	44	14	10	32
33 Machakos	199,211	13,412	6000	3040	1	20	137	575	48	41	28	32
34 Mavoko	185,000	47,571	5031	4400	3	38	355	970	37	28	20	55
35 Kiambu	140,439	21,630	5003	4156	9	40	547	1,295	58	109	69	38
Small WSPs (<5,000 connections)												
36 Ruiru Juja	176,342	69,740	4956	4520	3	38	572	835	31	30	22	34
37 Kitui	533,681	174,231	4704	4704	1	26	518	1,339	56	13	8	63
38 Eldama Ravine	57,079	26,013	4392	2609	1	14	163	1,559	80	31	17	36
39 Tavevo	103,085	30,971	4072	4002	2	81	834	2,393	49	110	74	91
40 Lodwar	116,580	28,920	3521	2647	7	15	224	1,993	66	35	21	32
41 Olkejuado	44,500	9,762	3295	2180	3	11	246	310	24	86	69	33
42 Lamu	20,031	12,802	3282	2171	2	17	318	1,077	50	102	68	29
43 Mikutra	1,501,887	11,814	2948	1547	3	6	127	316	60	47	29	46
44 Nyanas	707,834	302,747	2715	2125	2	12	226	1,017	66	3	2	42
45 Gulf	16,045	6,956	2679	1152	1	8	232	663	59	145	91	53
46 Karuri	143,799	13,896	2606	1854	1	12	472	423	45	135	93	19
47 Mandera	87,692	13,890	2430	2380	1	14	288	600	52	86	57	17
48 Nol Turesh	134,595	14,630	2370	1430	4	54	1,568	3,833	59	467	294	66
49 Kapenguria	70,514	18,281	2154	806	1	6	130	622	56	30	20	24
50 Tarda Kiambere	77,000	57,240	2048	1668	1	16	134	326	35	9	6	24
51 Kibwezi Mtitto	177,546	38,999	2021	1243	4	14	224	444	40	22	16	31
52 Narok	43,000	12,540	1833	1756	1	16	208	540	45	66	45	20
53 Makindu	69,413	36,656	1421	1391	1	14	190	559	46	21	14	21
54 Iten Tambach	45,793	6,492	1400	1103	2	5	157	319	42	94	66	14
55 Kapsabet Nandi	32,532	1,584	1295	692	1	3	15	198	63	41	25	16
56 Maralal	41,800	17,328	1213	1053	1	8	80	276	47	19	13	25
57 Olkalou	94,766	10,240	1144	814	1	4	60	115	30	21	16	10
58 Yatta	40,000	6,828	1122	778	1	5	52	142	28	27	21	20
59 Runda	15,000	13,180	865	865	1	39	486	754	35	137	101	36
60 Moyale	28,760	9,110	564	416	1	1	19	21	30	8	6	17
61 Rumuruti	10,064	990	530	165	1	0.7	4	19	27	15	12	5
62 Wote	56,595	9,610	309	243	1	4	16	53	29	6	5	12
Total	20,561,520	8,120,495	1,040,151	882,491	164	9,400	105,731	303,177	*45	*102	*36	

* Average figures

A summary of the respective categories with respect to turnover, production, people served and staffing is presented in the following table:

Table 3.6: Summary of WSP Categories

WSP Category	No. of WSPs	Turn-over in Billion KSh	Annual Production in million M ³	People served in millions	No. of connections	No. of staff
Very large	4	6.12	183.9	3.55	575,731	3,014
Large	17	2.2	75.7	2.53	301,726	2,022
Medium	14	0.63	22.9	1.09	100,805	765
Small	27	0.45	20.7	0.96	61,889	836
Totals	62	9.40	303.2	8.13	1,040,151	6,637

Analysis of WSPs by categories (Fig 3.1 a, b, and c) shows that, whereas there are only 21 WSPs (33%) within the very large and large categories, their combined turnover accounts for 89% of the total reported turnover, 86% of production, 75% of the total urban population served and 84% of all urban water and sewerage connections. Further, 100% of WSPs in the Very Large Category, 53% of the Large category, 50% of the Medium category and a meagre 19% of the Small category fulfill the criteria for O&M cost recovery (Fig. 3.2). This firmly establishes the case for clustering for viability. A minimum threshold of connections must be attained for a WSP to be commercially viable, which can only be achieved through clustering.

Fig 3.1(a): Percentage Share of Turnover

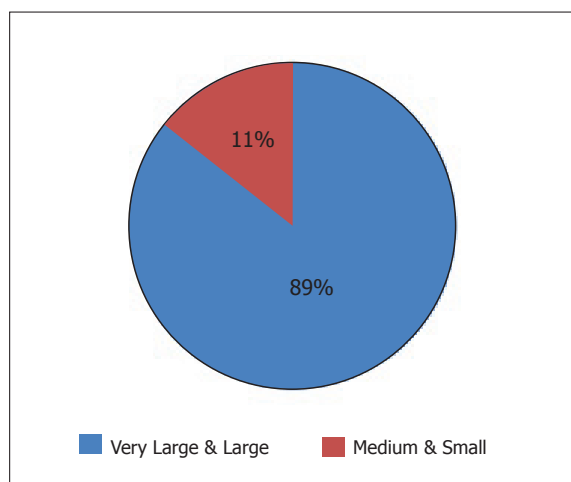


Fig 3.1(b): Percentage Share of Production

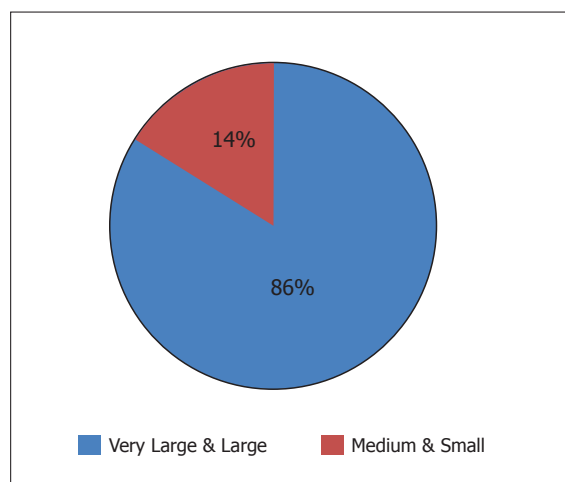


Fig 3.1(c): Percentage Share of People Served

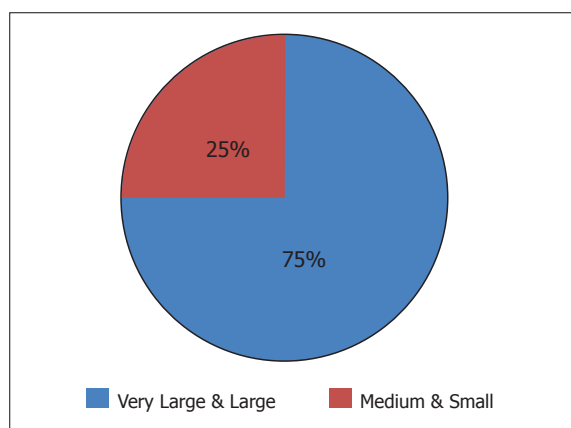
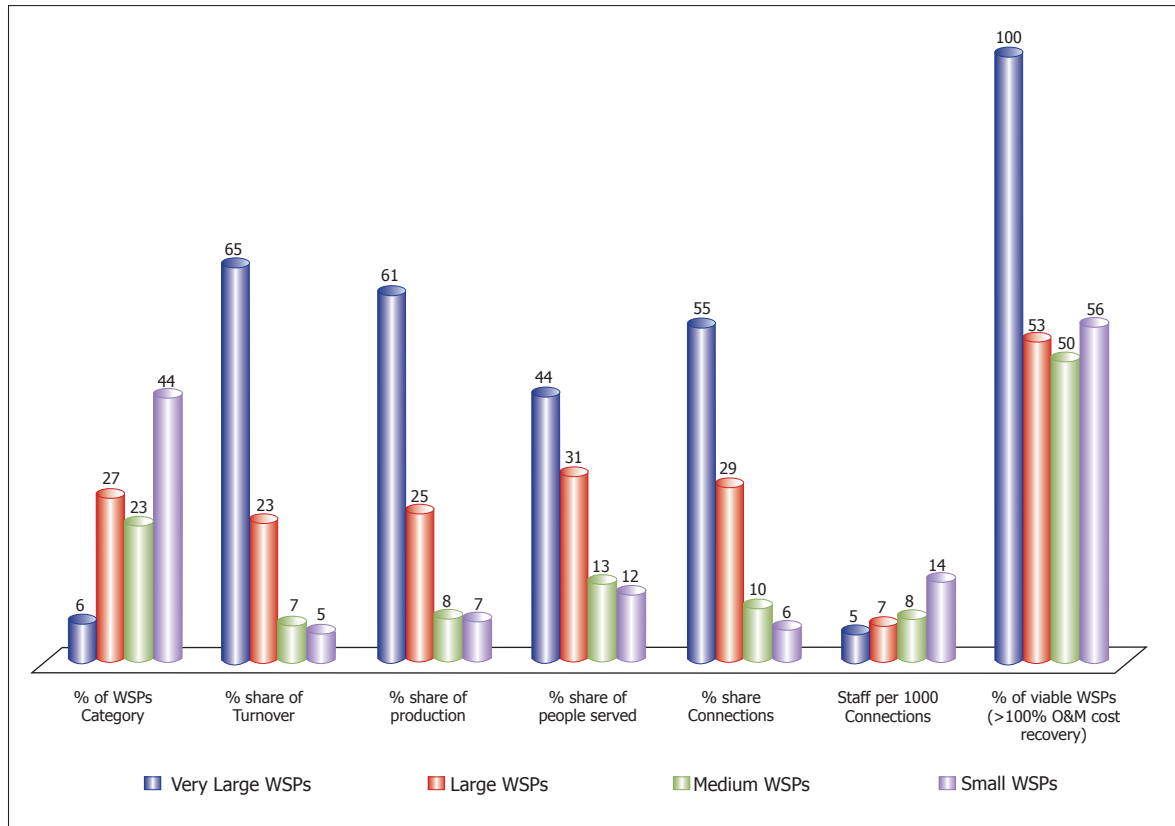


Fig 3.2: Analysis of WSPs by Category



3.3.1 Ranking Analysis

Table 3.7 provides an overview of analysis, ranking in categories as well as overall ranking for urban WSPs in the 2009/10 performance review period. All the 62 urban WSPs that submitted complete data have been assessed and ranked. Scores on the KPIs have been assigned based on the scoring regime elaborated in Table 3.4 and overall scores computed, enabling ranking of WSPs within categories and overall ranking of all urban WSPs.

In the overall ranking for the year 2009/10, Nyeri emerges as the best performing WSP, followed by Eldoret, Meru, Nanyuki and Malindi in second, third, fourth and fifth positions respectively. Nyeri has consistently emerged as the best performing WSP for three (3) consecutive periods (2007/08, 2008/09 and 2009/10) while Meru, Embu, Malindi and Murang'a, which were ranked second, third, fourth and fifth respectively in the last report have dropped to third, eighth, fifth and sixth position respectively.

Among the WSP categories, Eldoret emerges as the best in the Very Large category, Nyeri in the Large category, Meru in the Medium category and Runda in the Small category.

The five least performing WSPs for the period 2009/10 were Gulf, Kapsabet Nandi, Kwale, Tavevo and Nyanas.

Table 3.7: Overall Ranking and Ranking by Category for Urban WSPs 2009/10

	Drinking Water Quality (resid chlor. in %)	Compliance with res. Chlor. Standards in %	Drinking Water Quality (bacteriological In %)	Compliance with bacteriological standards in %	Non-Rvenue Water %	Water coverage in %	Total Sanitation coverage in %	Hours of supply No.	Staff per 1000 connections	Collection efficiency in %	Cost recovery O&M in %	Metering ratio in %	Score	Ranking	Overall Ranking
Very Large (35,000 or more Connections)															
Eldoret	63	96	97	96	25	51	85	20	4	91	102	100	142	1	2
Nakuru	69	95	21	100	53	79	100	18	6	69	108	92	79	2	25
Mombasa	29	98	47	98	35	72	97	8	12	90	114	60	76	3	27
Nairobi	91	96	76	94	42	63	71	11	5	75	126	87	65	4	32
Large (10,000- 34,999 Connections)															
Nyeri	100	99	100	100	31	70	85	24	6	120	164	100	165	1	1
Nanyuki	100	100	8	100	43	67	99	23	7	101	177	100	137	2	4
Malindi	82	98	12	100	25	83	57	24	7	94	112	90	125	3	5
Embu	100	88	16	100	55	56	99	23	7	98	134	100	121	4	8
Kericho	100	100	45	100	46	69	78	23	13	95	129	100	120	5	9
Kisumu	96	98	90	99	50	48	29	24	8	94	121	100	108	6	10
Kirinyaga	100	100	100	96	82	43	44	20	19	96	94	87	87	7	17
Thika	31	97	10	86	39	91	46	24	5	88	88	75	86	8	19
Nzoia	99	100	29	98	61	65	62	21	8	87	104	64	85	9	20
Nyahururu	32	100	79	100	57	45	91	21	13	97	108	88	85	10	22
Mathira	82	100	34	96	66	20	78	21	7	85	106	54	69	11	30
Gusii	85	100	15	100	46	44	83	16	14	93	90	72	60	12	34
Kilifi Mariakani	83	99	19	80	39	59	32	16	16	89	90	86	57	13	37
Nakuru Rural	34	99	66	99	62	47	42	7	11	90	91	15	39	14	44
Western	73	89	16	69	56	31	38	12	13	102	73	66	35	15	48
Chemosit	99	98	30	83	56	6	48	1	15	85	45	39	34	16	50
Kwale	77	83	40	91	50	43	51	12	10	59	61	75	7	17	60
Medium (5000- 9,999 Connections)															
Meru	100	99	100	100	23	44	100	24	10	83	144	99	142	1	3
Murang'a	100	99	22	100	47	58	100	22	7	94	101	100	125	2	6
Kiambu	2	100	4	100	58	15	68	11	9	96	107	100	90	3	14
Garissa	100	100	2	100	58	95	93	18	10	78	113	71	88	4	16
Kikuyu	No Data	No Data	4	100	54	23	46	16	6	103	68	98	85	5	21
Isiolo	56	100	82	97	51	46	90	18	10	97	104	77	81	6	24
Limuru	51	81	12	100	33	25	34	8	5	100	84	71	65	7	31
South Nyanza	98	73	No Data	No Data	39	43	2	19	8	77	54	79	56	8	39
Mavoko	7	100	15	100	37	26	5	6	13	85	46	85	41	9	43
Oloolaiser	33	99	14	70	44	29	22	9	17	93	101	74	39	10	45
Sibo	50	No Data	5	No Data	64	3	No Data	11	17	98	69	0	33	11	51
Machakos	59	92	25	89	48	7	15	2	11	81	62	92	32	12	52
Amatsi	33	100	54	95	46	15	60	11	22	60	110	30	22	13	53
Naivasha	No Data	No Data	34	100	44	20	22	18	11	70	47	38	22	14	54
Small (Less than 5000 connections)															
Runda	96	100	88	100	35	88	88	20	42	90	93	99	124	1	7
Tarda Kiambere	100	100	30	100	35	74	68	12	14	91	32	100	106	2	11
Ruiru Juja	93	98	44	100	31	40	95	14	8	85	112	90	100	3	12
Kibwezi Mito	100	100	22	100	40	22	92	24	25	99	89	95	97	4	13
Iten Tambach	100	95	8	100	42	14	91	12	13	94	148	55	90	5	15
Wote	100	75	33	75	29	17	73	8	49	95	61	100	87	6	18
Lamu	54	100	9	100	50	64	90	12	13	90	102	90	81	7	23
Narok	75	100	67	94	45	29	89	12	11	111	78	95	76	8	26
Makindu	89	97	66	93	46	53	85	12	15	101	108	86	73	9	28
Olkalou	No Data	No Data	25	100	30	11	No Data	15	12	99	25	84	71	10	29
Lodwar	39	97	15	100	66	25	64	6	12	100	118	53	61	11	33
Yatta	82	100	17	100	28	17	24	12	26	85	21	59	58	12	35
Maralal	99	100	100	100	47	41	10	8	24	96	49	82	58	13	36
Kapenguria	50	100	No Data	No Data	56	26	85	13	30	104	50	33	57	14	38
Karuri	No Data	No Data	23	100	45	10	No Data	8	10	84	77	100	49	15	40
Eldama Ravine	87	87	8	100	80	46	40	13	14	100	89	21	48	16	41
Rumuruti	55	60	100	67	27	10	98	6	30	77	28	0	45	17	42
Kitui	63	96	No Data	No Data	56	33	No Data	6	13	81	33	100	37	18	46
Olkejuado	No Data	No Data	No Data	No Data	24	22	37	10	15	77	49	29	36	19	47
Mandera	60	60	73	51	52	16	46	16	7	44	66	0	35	20	49
Moyale	No Data	No Data	No Data	No Data	30	32	37	8	41	74	4	9	20	21	55
Nol Turesh	76	100	1	100	59	11	60	12	46	67	42	0	18	22	56
Mikutra	20	100	62	100	60	1	57	3	30	77	17	52	17	23	57
Nyanas	2	67	No Data	No Data	66	43	65	5	20	77	36	53	10	24	58
Tavevo	46	100	No Data	No Data	49	30	9	6	23	56	90	81	7	25	59
Kapsabet Nandi	75	98	No Data	No Data	63	5	5	6	23	68	38	26	7	26	61
Gulf	56	30	No Data	No Data	59	43	No Data	1	46	5	3	0	0	27	62

3.3.2 Performance Over time

Comparing the performance of WSPs by ranking in a single year is essential for assessing the relative sector performance. However, it does not award those that have been able to make progress in terms of performance but cannot sufficiently improve in the short or medium term to emerge at the top, due to factors beyond their control. Also, it does not necessarily penalize those that have declined in performance. Due to differing conditions of infrastructure, it is inevitable that some WSPs may have their starting positions at the top and others at the bottom. Acknowledging this and other factors that may not always provide a level playing field, Wasreb, through this analysis, recognizes WSPs that have shown progress and shames those that have declined.

Analysis over time is more critical in this period considering that the scoring regime was reviewed upwards. WSPs who have shown progress despite the above revision reflect on the positive development of the sector. It is important to note that the WSPs that indicated negative change in scores do not necessarily indicate a decline in performance, rather they could not sufficiently improve to compensate for the more stringent scoring criteria.

Table 3.8 shows the performance of WSPs, whose positions improved or declined, as shown by the changes in overall score from the performance review year 2008/9 to the current review year 2009/10.

Table 3.8: Performance Over time of Urban WSPs

	WSPs	SCORE 2009/10	SCORE 2008/9	Scores gained (+)/ dropped(-) from 2008/09 to 2009/10
Best Ten Performers 9/10	Nyeri	165	176	-11
	Eldoret	142	131	11
	Meru	142	173	-31
	Nanyuki	137	143	-6
	Malindi	125	146	-21
	Murang'a	125	146	-21
	Runda	124	n/a	n/a
	Embu	121	160	-39
	Kericho	120	136	-16
	Kisumu	108	111	-3
	Tarda Kiambere	106	97	9
	Ruiru Juja	100	116	-16
	Kibwezi Mtito	97	118	-21
	Kiambu	90	132	-42
	Iten Tambach	90	102	-12
	Garissa	88	113	-25
	Kirinyaga	87	109	-22
	Wote	87	n/a	n/a
	Thika	86	n/a	n/a
	Nzoia	85	104	-19
	Kikuyu	85	103	-18
	Nyahururu	85	115	-30
	Lamu	81	76	5
	Isiolo	81	137	-56
	Nakuru	79	138	-59
	Narok	76	84	-8
	Mombasa	76	110	-34
	Makindu	73	116	-43

Olkalou	71	73	-2
Mathira	69	105	-36
Limuru	65	n/a	n/a
Nairobi	65	144	-79
Lodwar	61	105	-44
Gusii	60	51	9
Yatta	58	n/a	n/a
Maralal	58	101	-43
Kilifi Mariakani	57	96	-39
Kapenguria	57	77	-20
South Nyanza	56	120	-64
Karuri	49	n/a	n/a
Eldama Ravine	48	86	-38
Rumuruti	45	38	7
Mavoko	41	106	-65
Nakuru Rural	39	92	-53
Oloolaiser	39	86	-47
Kitui	37	43	-6
Olkejuado	36	n/a	n/a
Western	35	85	-50
Mandera	35	n/a	n/a
Chemosit	34	75	-41
Sibo	33	n/a	n/a
Machakos	32	58	-26
Amatsi	22	n/a	n/a
Naivasha	22	87	-65
Moyale	20	n/a	n/a
Nol Turesh	18	60	-42
Mikutra	17	n/a	n/a
Nyanas	10	n/a	n/a
Tavevo	7	54	-47
Kwale	7	32	-25
Kapsabet Nandi	7	42	-35
Gulf	0	n/a	n/a

3.3.3 Performance of WSPs by Indicators

The following section seeks to provide the reader with a deeper insight regarding comparative performance of urban WSPs and overall performance of the urban water services sector. Bar charts are used to display current performance in each indicator and comparing it with their performance in the period 2008/09.

It is important to note that the weighted averages reported for the individual indicators for 2008/09 are different from the ones reported in *Impact 3*. This is due to the fact that the weighted averages for 2008/09 have been split into urban and rural retrospectively to allow for better comparison.

(a) Water Coverage

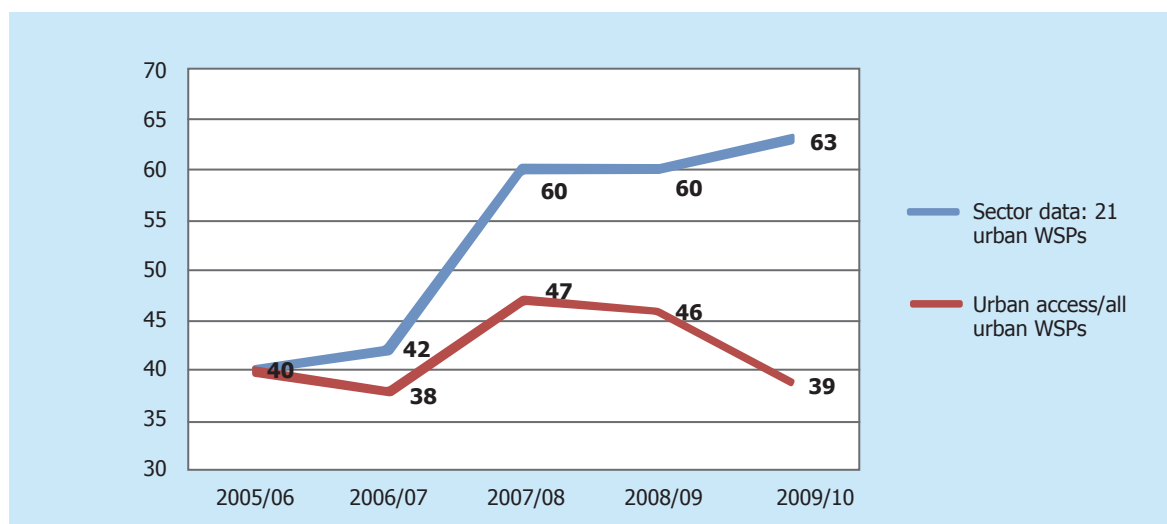
This is defined as the percentage of people served by a WSP compared to the total population within the service area of the WSP. It assesses the performance of WSPs in supplying potable water to people living within their service area.

Table 3.9: Water Coverage by Segmentation

Urban WSPs	Water coverage %		Change in coverage
	2008/09	2009/10	
21 Very large and Large WSPs	52	53	1
21 WSPs reporting since 2005/06	60	63	3
48 WSPs baseline 2008/09	46	47	1
All WSPs reporting	46	39	-7

Looking at the Very Large and Large WSPs, water coverage improved from 52% in 2008/09 to 53% in 2009/10 (Table 3.9). Considering that they account for 89% of the sector turnover, 86% of total water production and cover 75% of total population served (Fig 3.2), this gives a good indication of water coverage in the urban setting. This positive trend is further supported by the water coverage recorded by the 21 WSPs that have been reporting since 2005/06 and account for 77% of total urban water production. They improved from 60% to 63% for the year 2008/09 and 2009/10 respectively (Fig 3.2).

Fig 3.3: Trend in Urban Water Access in Percentage



The 2008/09 baseline shows an increase from 46% to 47% in 2009/10 (Table 3.10). This further confirms that there is progress in urban water coverage.

Table 3.10: Baseline Comparison for Water Coverage

Indicators	2008 / 2009* Same baseline	2009/2010 Same baseline	Increase / Decrease	2009/2010 - including new WSPs
Water Coverage %	46	47	1	39

* Excludes WSPs that did not report in 2009/10. The same applies to the rest of the indicators in the report.

In contrast to the above indicated positive trends the weighted average for the urban sector (Fig. 3.4 a & b) shows a decline of 7%, from 46% in 2008/09 to 39% in 2009/10. This is mainly attributed to the following:

1. The inclusion of additional small poorly performing urban WSPs which negatively impacted on the weighted average. While the total population served by urban WSPs increased by almost 1 million, from 7.2 to 8.1 million, the total population in service areas of urban WSPs increased from 15 million to 20.6 million between 2008/9 and 2009/10 respectively. Many small WSPs just do not have the capacity to adequately serve the population within their service areas. This sharply contrasts with the positive trend recorded by the Large and Very Large urban WSPs.
2. In 2009/10, WSPs used population data from the Census 2009 while estimated data was used for earlier periods. The latter lead to discrepancies of population figures, with a bias towards underestimation.

Generally, the sector average is still far below the acceptable sector benchmark of at least 80% coverage. More targeted resource allocation is therefore required to improve water coverage. WSPs are obligated to develop realistic investment plans targeted to achieve progressive increase in coverage paying tribute to the fact that access to safe water in adequate quantity is a human right entrenched in the Constitution. Further, the significant performance gap between Small and Very Large and Large WSPs presents a strong case for clustering.

The issue of inadequate water coverage is particularly a problem in urban low-income areas (LIAs). Due to the unequal distribution of the available water, consumers living in LIAs, often informal settlements, usually suffer most as they get less of the share while at the same time paying more for it than those living in higher income areas. WSPs are encouraged to improve formalized coverage in LIAs linked to the WSP supply system through increased use of low cost technologies such as water kiosks and yard taps to cover more people in these areas. This will ensure the poor access quality water at regulated prices.

Fig 3.4(a): Water Coverage in Percentage

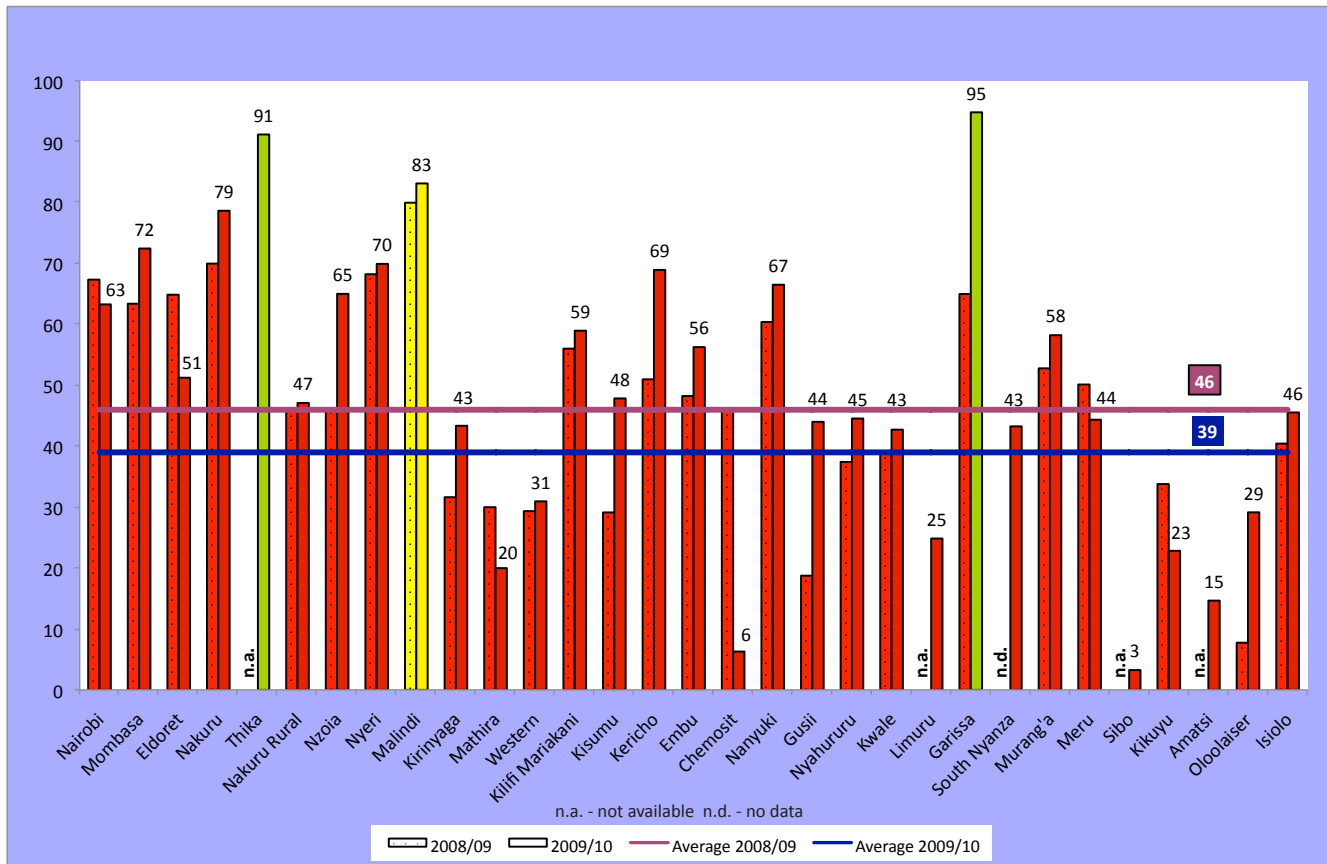
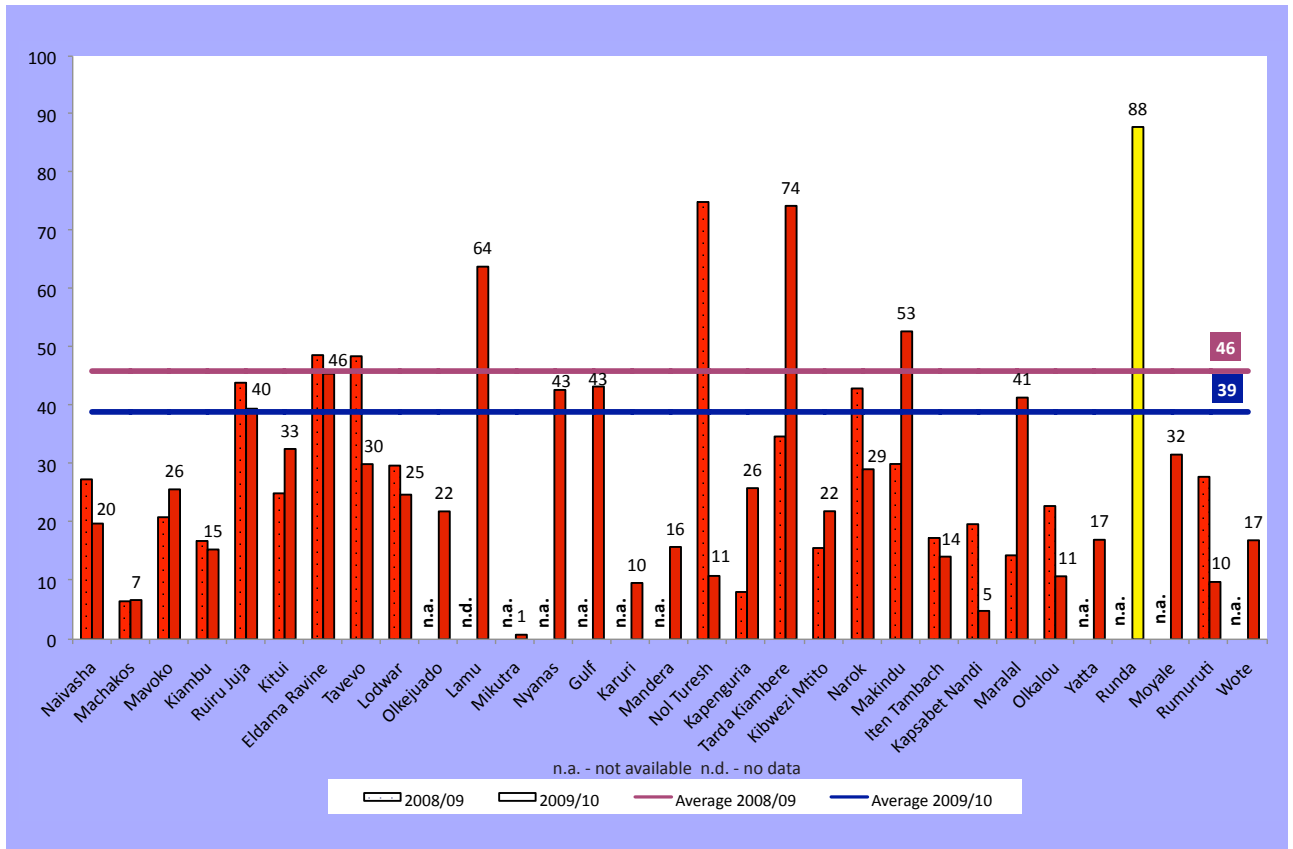


Fig 3.4(b): Water Coverage in Percentage

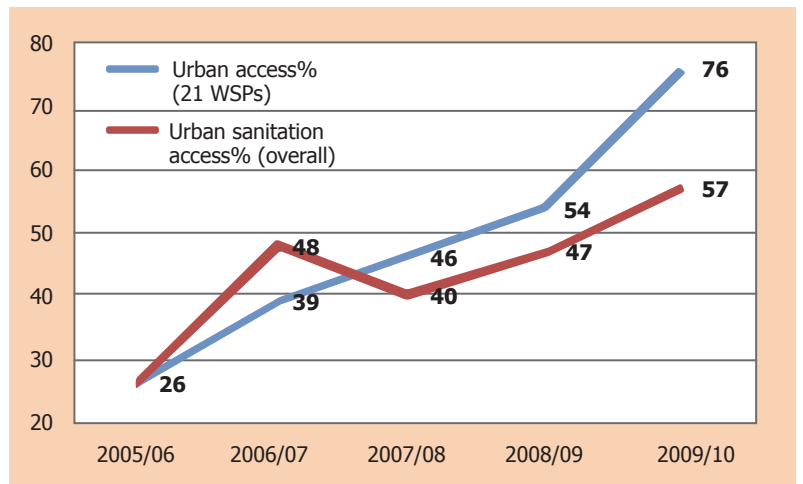


(b) Sanitation Coverage

Sanitation coverage is defined as the percentage of people using improved sanitation facilities, which include flush or pour-flush to water born systems, septic tanks, ventilated improved pit latrines and, for the time being, traditional pit latrines, compared to the total population within the service area of a WSP.

During the reporting period, the overall urban sanitation coverage improved by 12 percentage points from 47% in 2008/09 to 59% in 2009/10 (Fig. 3.6 a, b). For the 21 WSPs that have reported consistently from 2005/6, the progress on coverage is even more pronounced, from 54% in 2008/9 to 76% in 2009/10 (Fig 3.5).

Fig 3.5: Trend in Urban Sanitation Access in Percentage (Wasreb Data)



The baseline analysis (Table 3.11) indicates an even more significant improvement of 20 percentage points as compared to 2008/09. While the recorded progress can be attributed to improved reporting by the WSPs, the fact that WSPs do not manage and therefore often do not have good information on on-site sanitation facilities like pit latrines, continues to be reflected in the dataset. The latter shows a relatively large number of non submission and a significant spread in the data submitted.

Overall, sanitation coverage is still below the acceptable sector benchmark of at least 80%. Sanitation coverage is critical to human dignity and for the maintenance of basic hygiene. Insufficient coverage contributes to the pollution of water sources. Therefore, more targeted resource allocation and adoption of low cost onsite systems is required, especially in areas of high density where public health risks are most significant.

Fig 3.6(a): Sanitation Coverage in Percentage

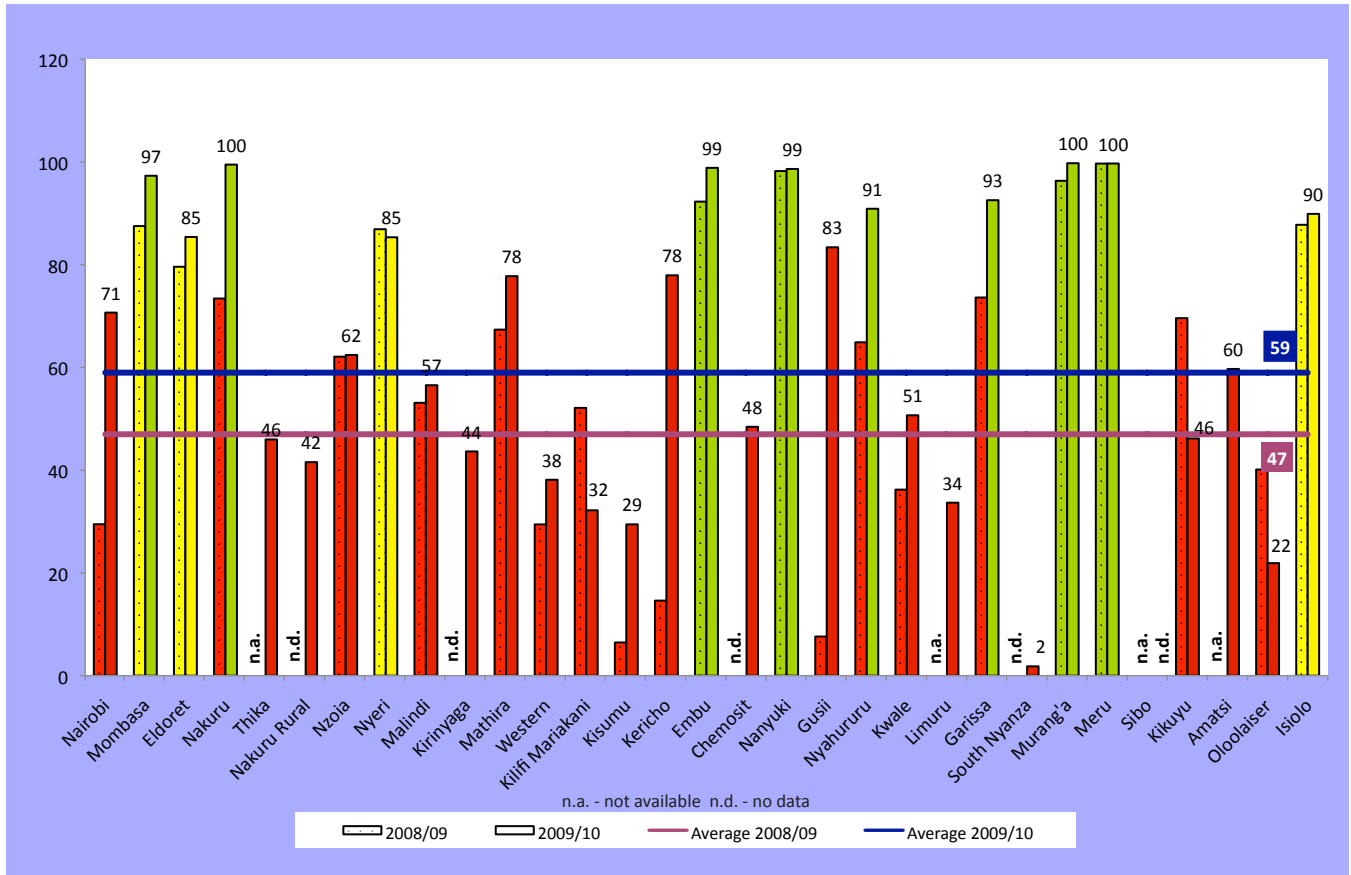


Fig 3.6(b): Sanitation Coverage in Percentage

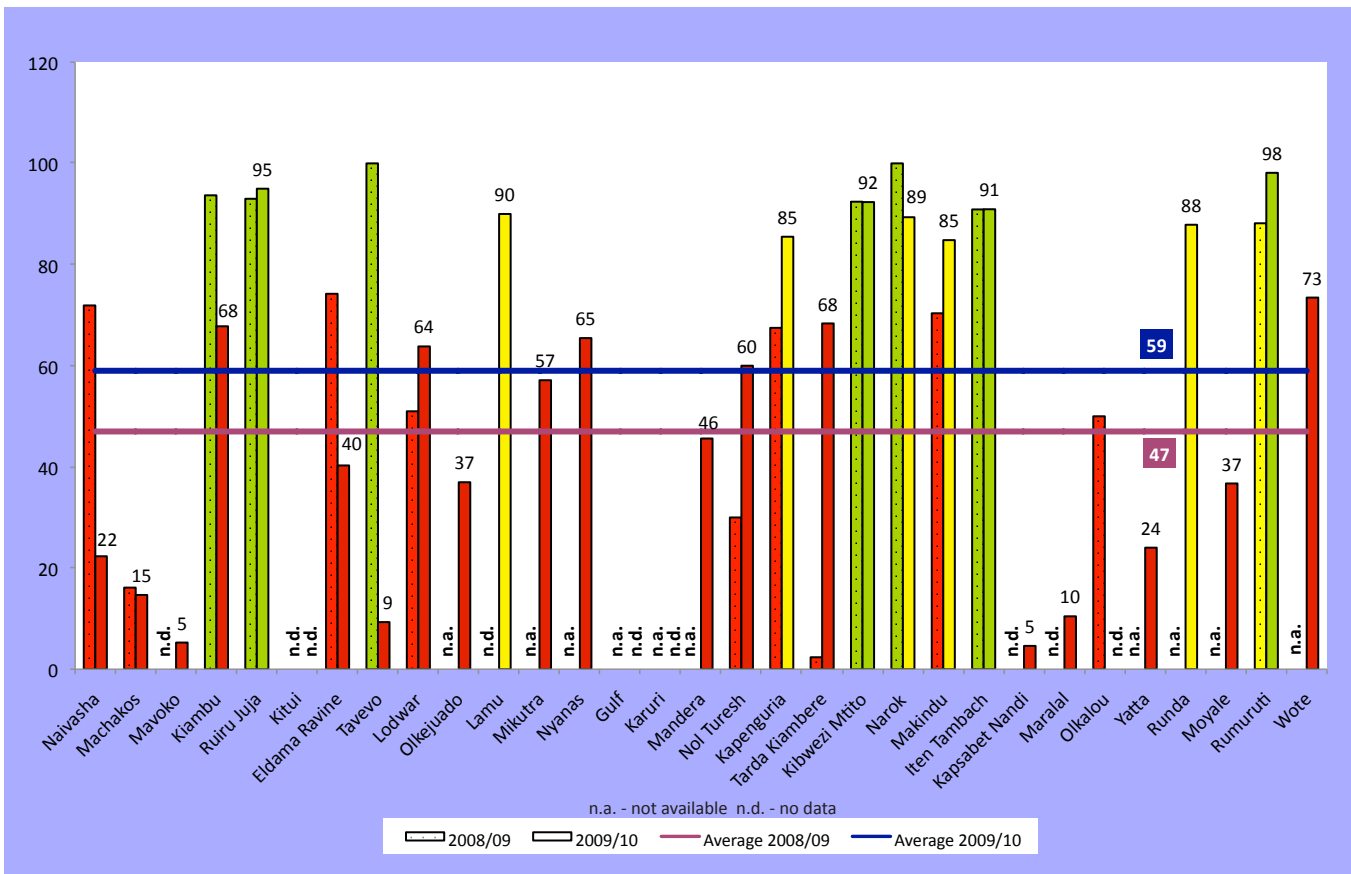


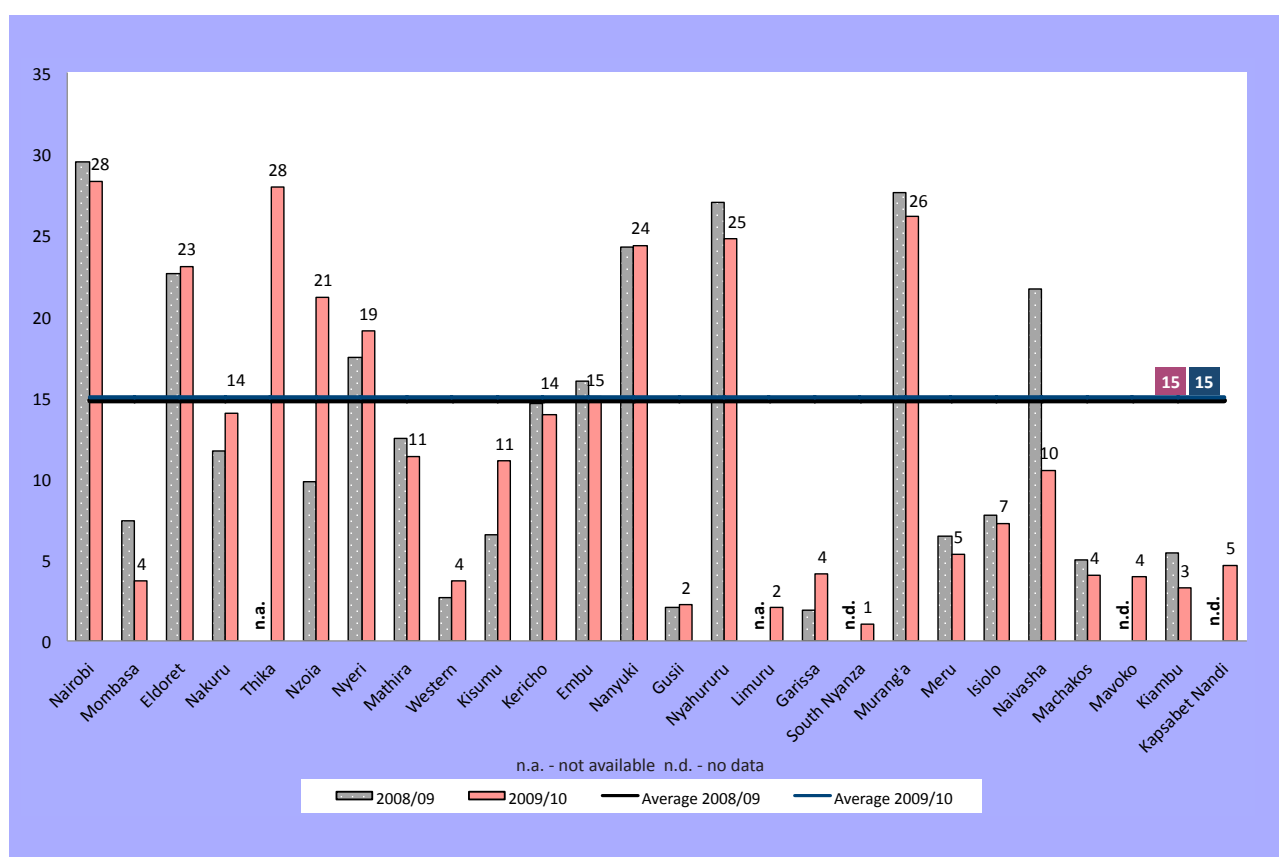
Table 3.11: Baseline Comparison for Sanitation Coverage

Indicators	2008 / 2009 Same base- line	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Sanitation Coverage %	47	67	20	59

Sewerage Coverage

While sanitation may not entirely be under the ambit of the WSPs, sewerage on the other hand is directly under their control. There are 23 WSPs with sewerage systems in their areas. The sewerage coverage in these areas is shown in figure 3.7 below:

Fig 3.7: Sewerage Coverage in Percentage



Sewerage coverage remains low at 15%, pointing at the difficulty of attracting funds for sewerage and wastewater treatment systems. Also, effluent treatment remains largely inadequate, posing a major threat to water quality and public health. The relatively low sewerage coverage shows that on-site sanitation solutions play a crucial role in filling the gap in the short- to medium-run, especially in high density LIAs. These areas should therefore be supported accordingly. Another challenge that will need to be addressed is the disposal of sludge from onsite and offsite sources.

(c) A Non-Revenue Water

Non-Revenue Water (NRW) is defined as the difference between the amounts of water produced for distribution and the amount of water billed to consumers. It results from a combination of physical losses (leakage) and commercial losses (illegal connections/water theft, unmetered public consumption, metering errors, unbilled metered consumption and water use for which no payment is collected).

NRW increased from 43% in 2008/09 to 45% in 2009/10. Since the figures are the same for the baseline analysis, it clearly shows a negative trend and confirms that WSPs and WSBs are not doing enough to reduce NRW. The sector performance is moving farther away from the acceptable sector benchmark of below 25%.

Wasreb inspections have established that most of the WSPs do not have accurate and reliable measuring devices (master and consumer meters) and therefore rely on estimates to determine production and consumption. For effective management of NRW, it is of utmost importance to switch to accurate measuring both at production, distribution as well as consumer level. It has been established that commercial losses resulting from poor management account for the highest proportion of NRW.

NRW is a threat to the financial sustainability of the WSPs, directly translating into poor service and large revenue losses. WSPs should therefore improve on the management of their systems to stem the massive financial losses from the sector by prioritizing customer management and maintenance of the infrastructure.

Fig 3.8(a): Non-Revenue Water in Percentage

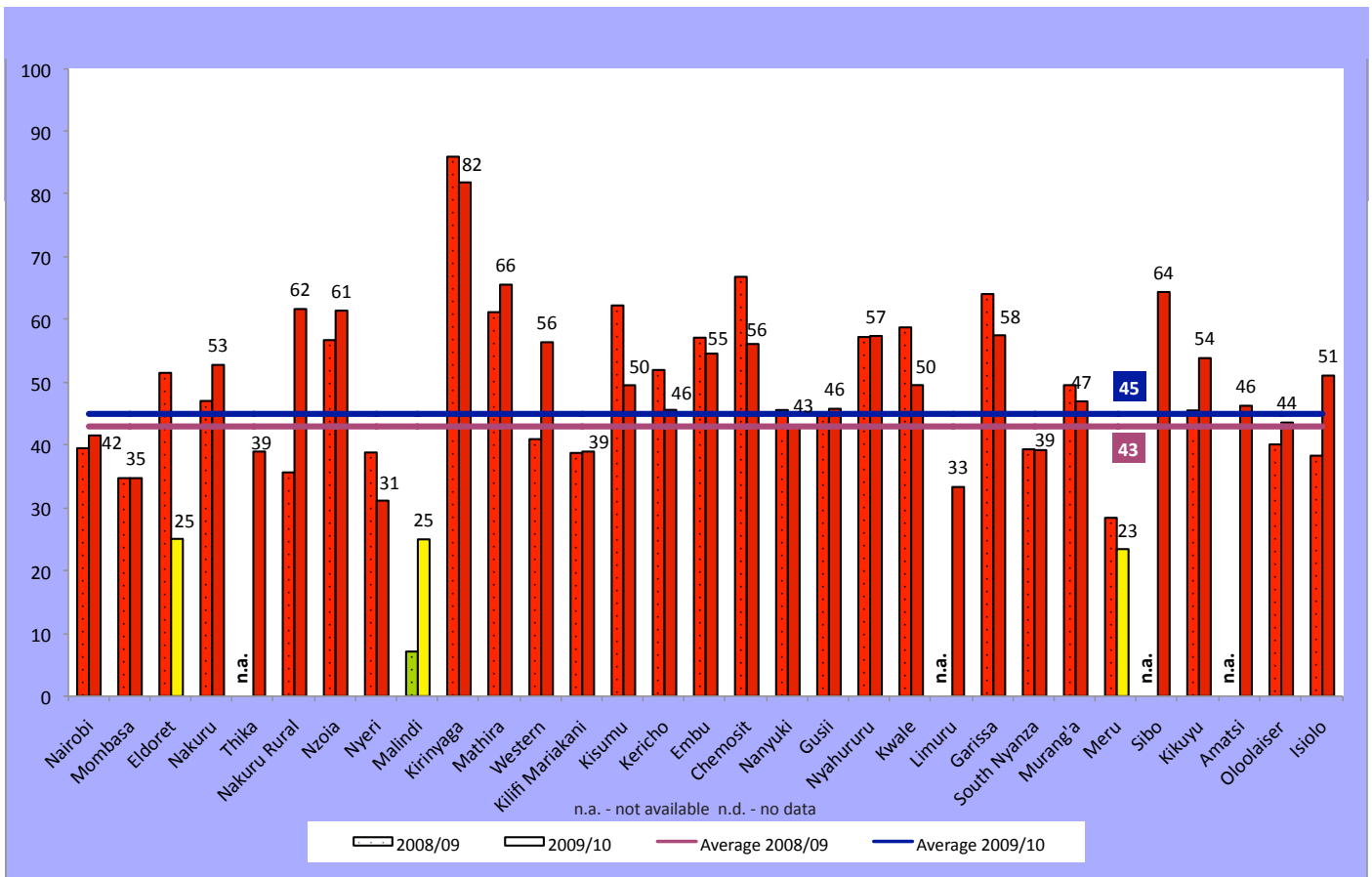




Fig 3.8(b): Non-Revenue Water in Percentage

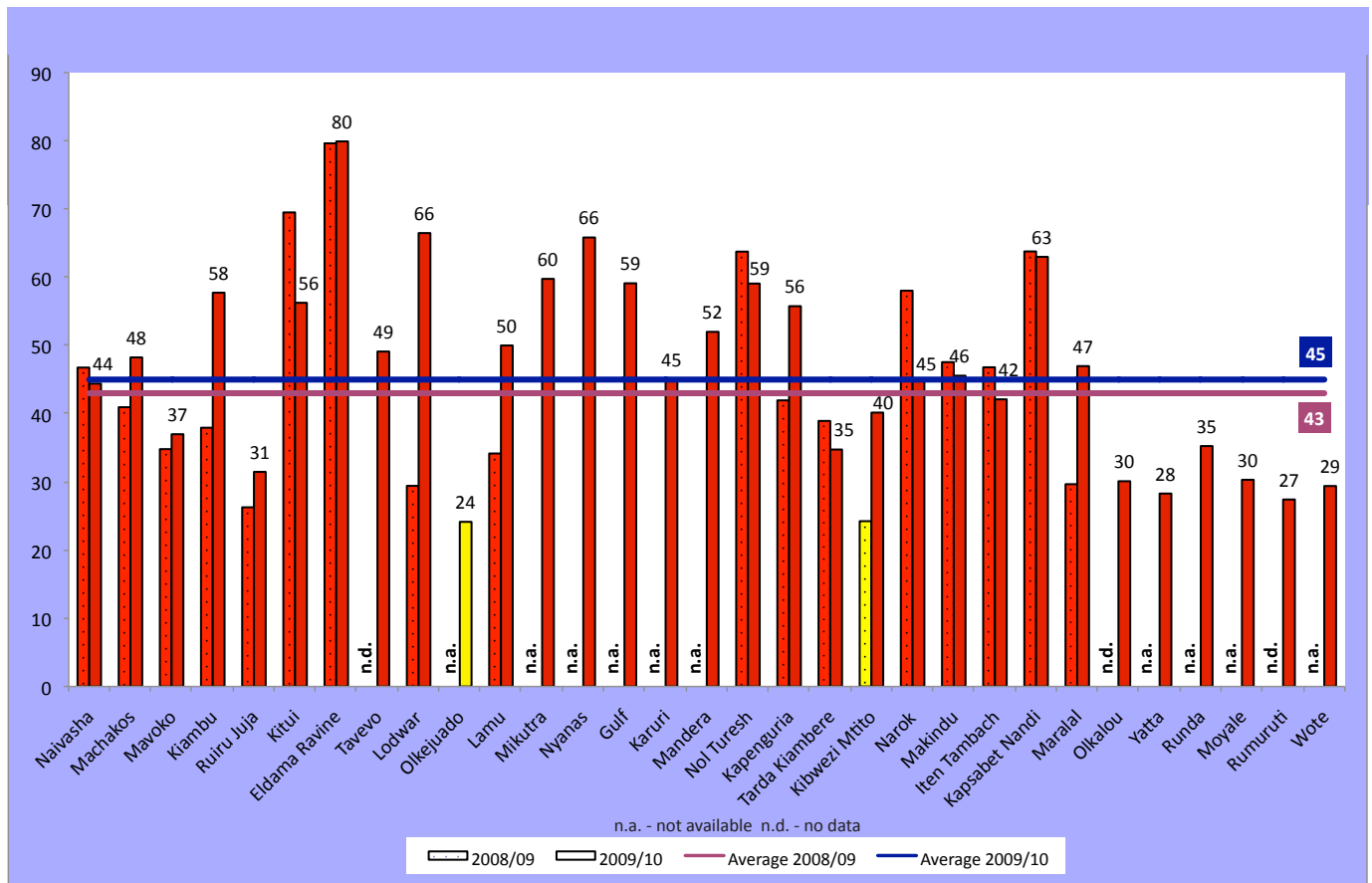


Table 3.12: Baseline Comparison for Non-Revenue Water

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
NRW %	43	45	2	45

(d) Dormant Connections

Dormant connections are defined as connections that have had no water supply continuously for more than three months. The ratio of dormant connections to total connections is an indicator for WSP efficiency and ability to discharge its mandate. A percentage above 20% is considered extreme and implies lack of sufficient investments and capacity within a WSP to provide reliable and sustainable services. The national average improved from 33% in 2008/09 to 31% in 2009/10. This positive development is confirmed by the baseline analysis, indicating a drop of 3% (Table 3.13).

Where disconnections result from alternative sources of service being available, especially from small informal operators, Wasreb requires that all such operators register with respective WSBs and to discharge their responsibility under the principal WSB. Where demand outstrips supply or where there is a loss of capacity in the network, WSPs need to put in place strategies that reduce the level of dormant connections to improve consumer confidence and increase their revenue base.

Fig 3.9(a): Dormant Connections in Percentage

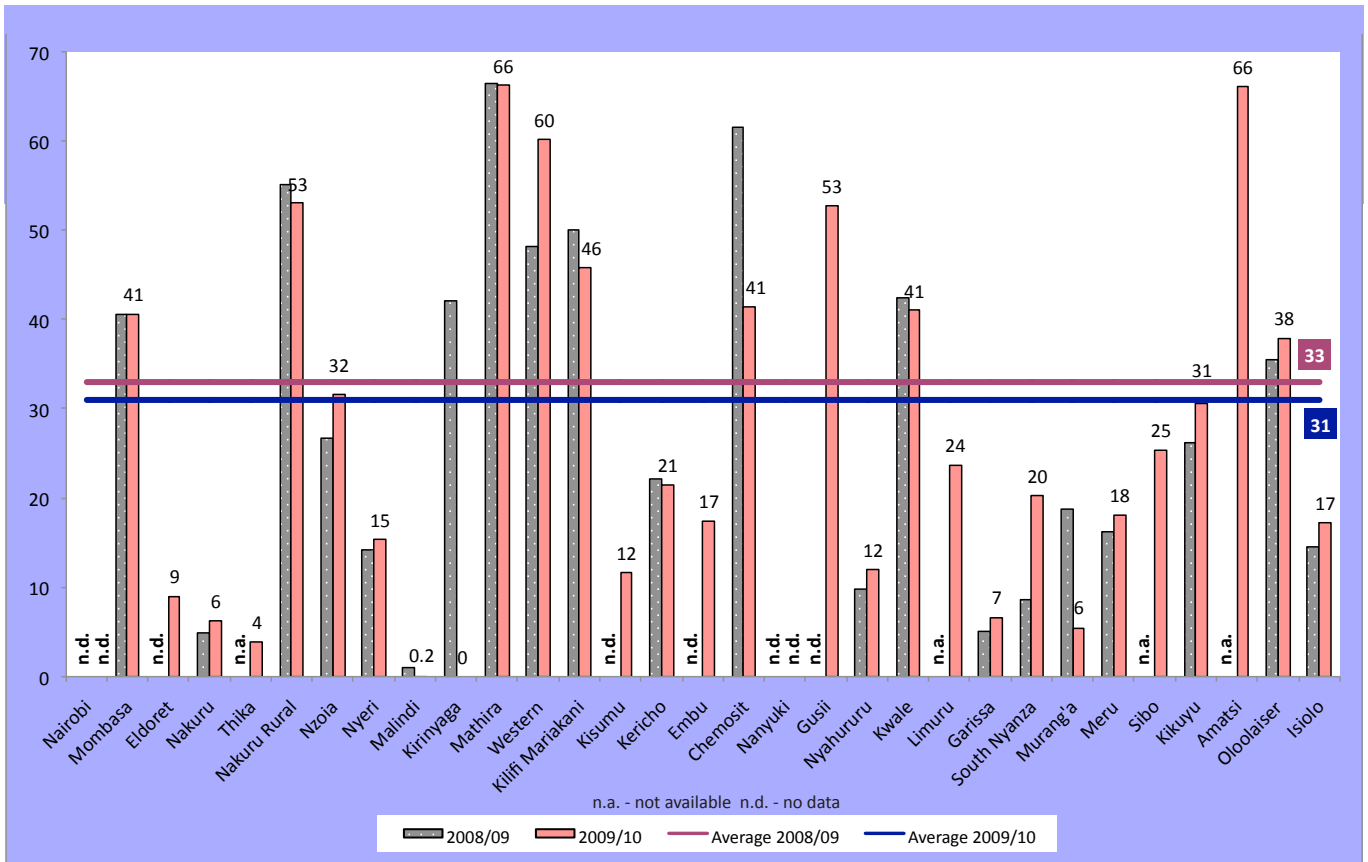


Fig 3.9(b): Dormant Connections in Percentage

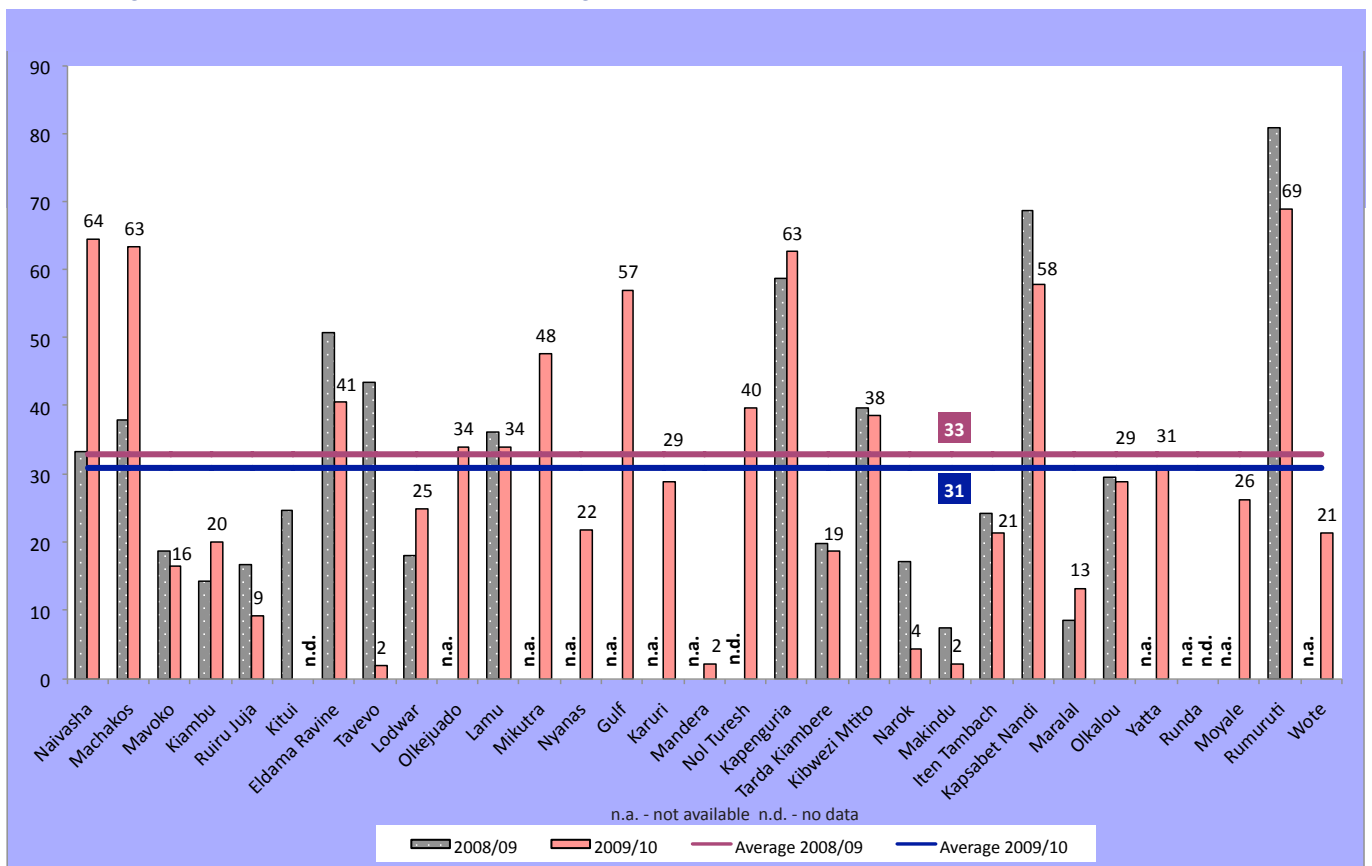




Table 3.13: Baseline Comparison for Dormant Connections

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Dormant Connections %	33	30	-3	31

(e) Drinking Water Quality

Drinking Water Quality (DWQ) is one of the key indicators of the level of service a WSP is providing because it has a direct impact on the health of consumers. It measures the potability of water provided by WSPs.

In this report, the performance of WSPs on Drinking Water Quality (DWQ) was assessed in terms of number of actual residual chlorine tests carried out against the number planned, compliance with residual chlorine standards, the number of actual bacteriological tests carried out vis-à-vis the number planned and compliance with bacteriological standards.

(i) Number of Residual Chlorine Tests

This indicator of DWQ is measured in terms of the number of actual residual chlorine tests carried out by a WSP against the number planned according to the Guidelines on Drinking Water Quality and Effluent Monitoring.

The average compliance in terms of the number of tests carried out by WSPs dropped from 90% in 2008/2009 to 84% in 2009/10. Only 20 WSPs (32%) were within the acceptable sector benchmark of (90%). The remaining 42 WSPs fell below the acceptable range, did not submit data or submitted non-credible data. The 2008/9 baseline comparison (Table 3.14a), although showing a less pronounced decline (-2%), confirms the negative trend.

Fig 3.10(a): Drinking Water Quality- Residual Chlorine in Percentage

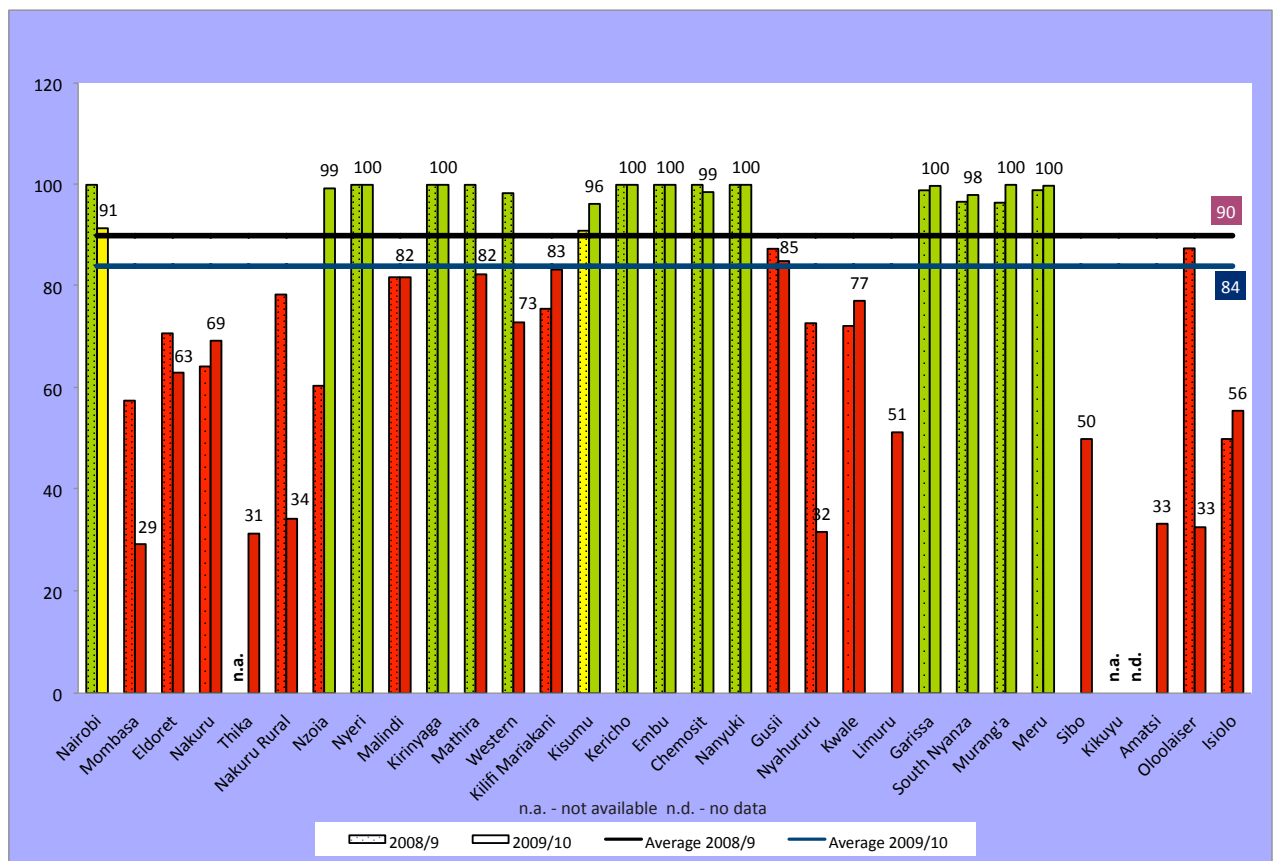


Fig 3.10(b): Drinking Water Quality - Residual Chlorine in Percentage

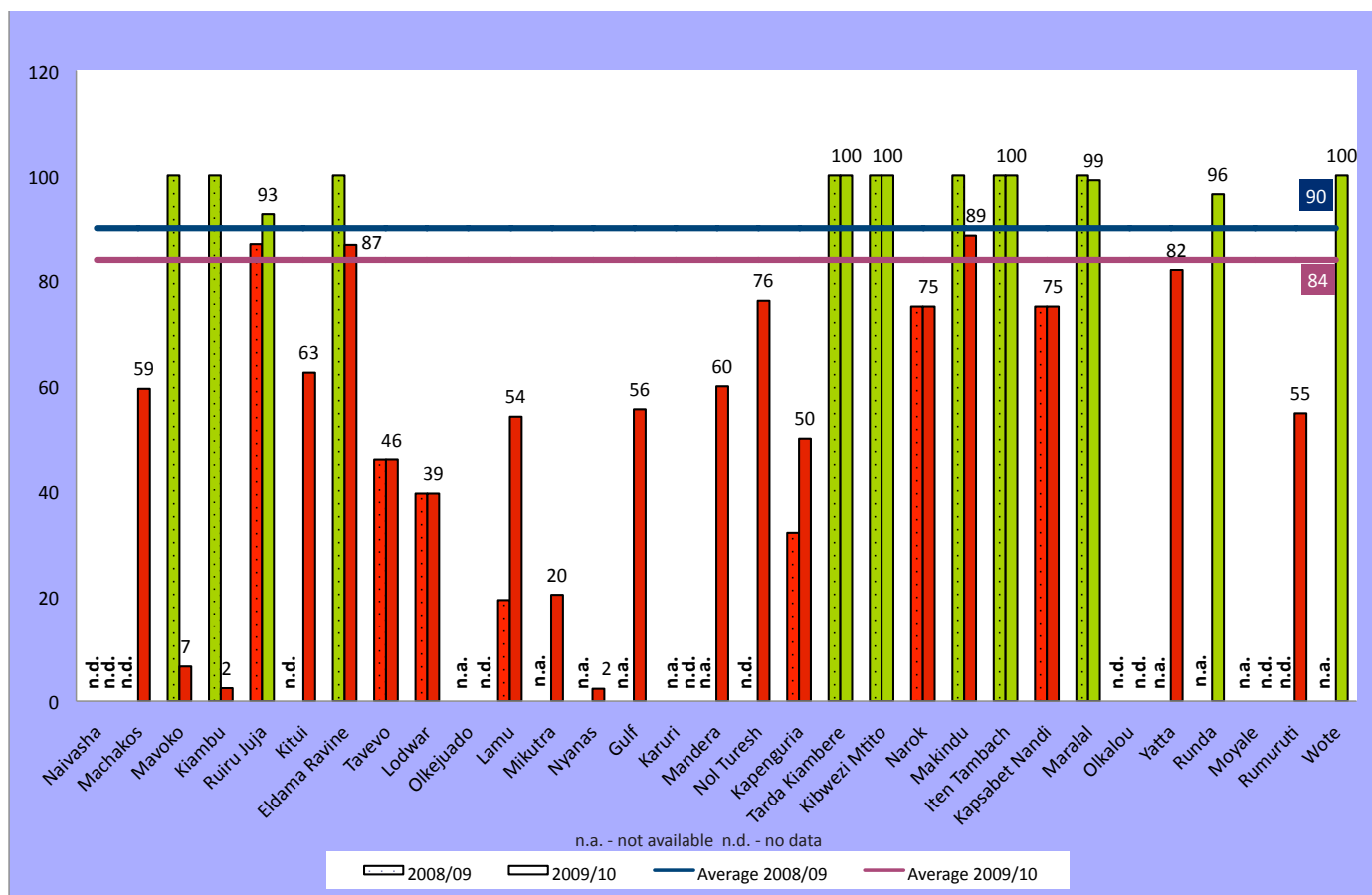


Table 3.14(a): Baseline Comparison for Drinking Water Quality - Residual Chlorine

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Drinking Water Quality Tests – Residual Chlorine%	90	88	-2	84

(ii) Compliance with Residual Chlorine Standards

This indicator of DWQ measures the ratio of the number of samples within the norm compared to the total number of samples taken. In the reporting period, compliance dropped from 97% in 2008/09 to 95% in 2009/10. This marginal decline is confirmed by the 2008/9 baseline comparison (-1%). However, with the average performance still within the acceptable sector benchmark of 95%, this indicator draws a relatively better picture than the one above. The tests that were carried out were mostly compliant.



Fig 3.11(a): Compliance with Residual Chlorine Standards in Percentage

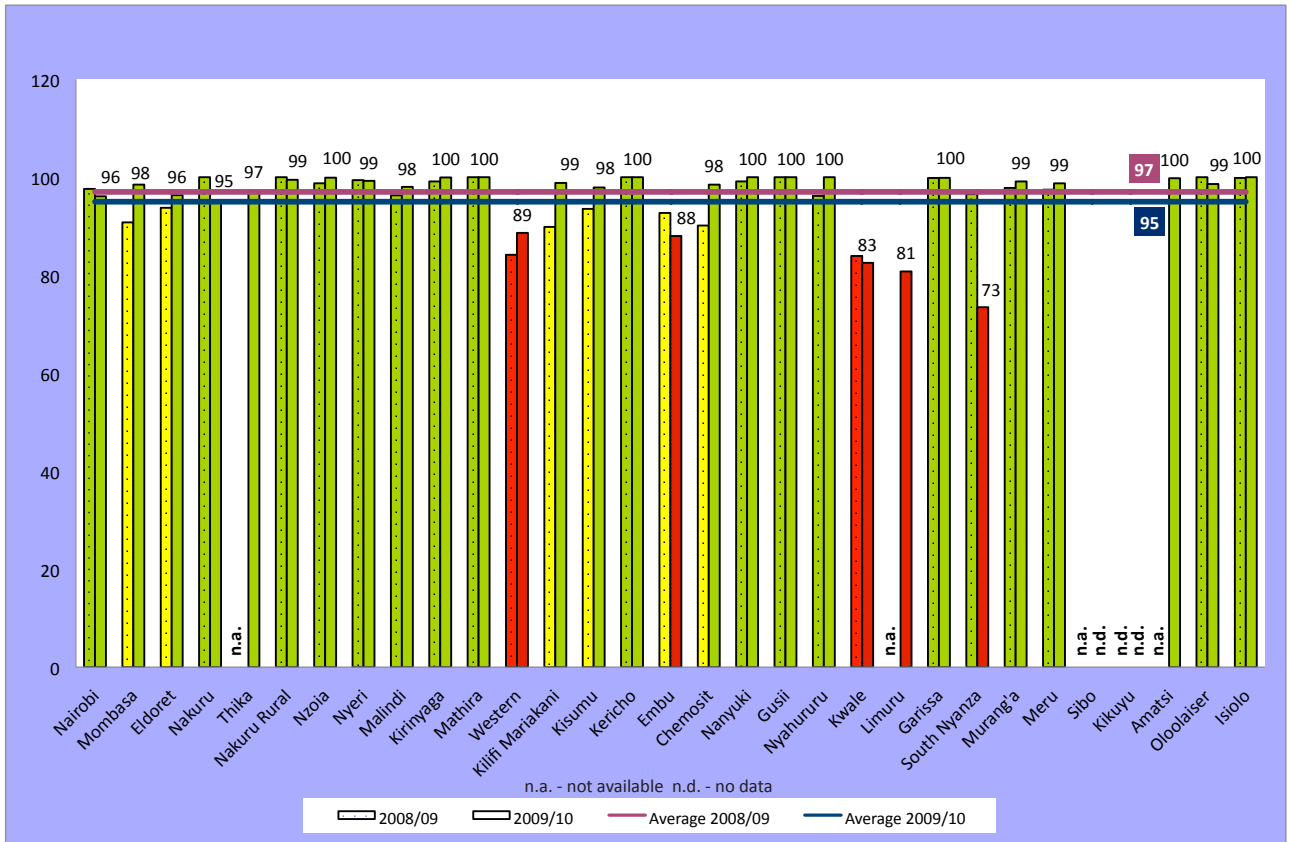


Fig 3.11(b): Compliance with Residual Chlorine Standards in Percentage

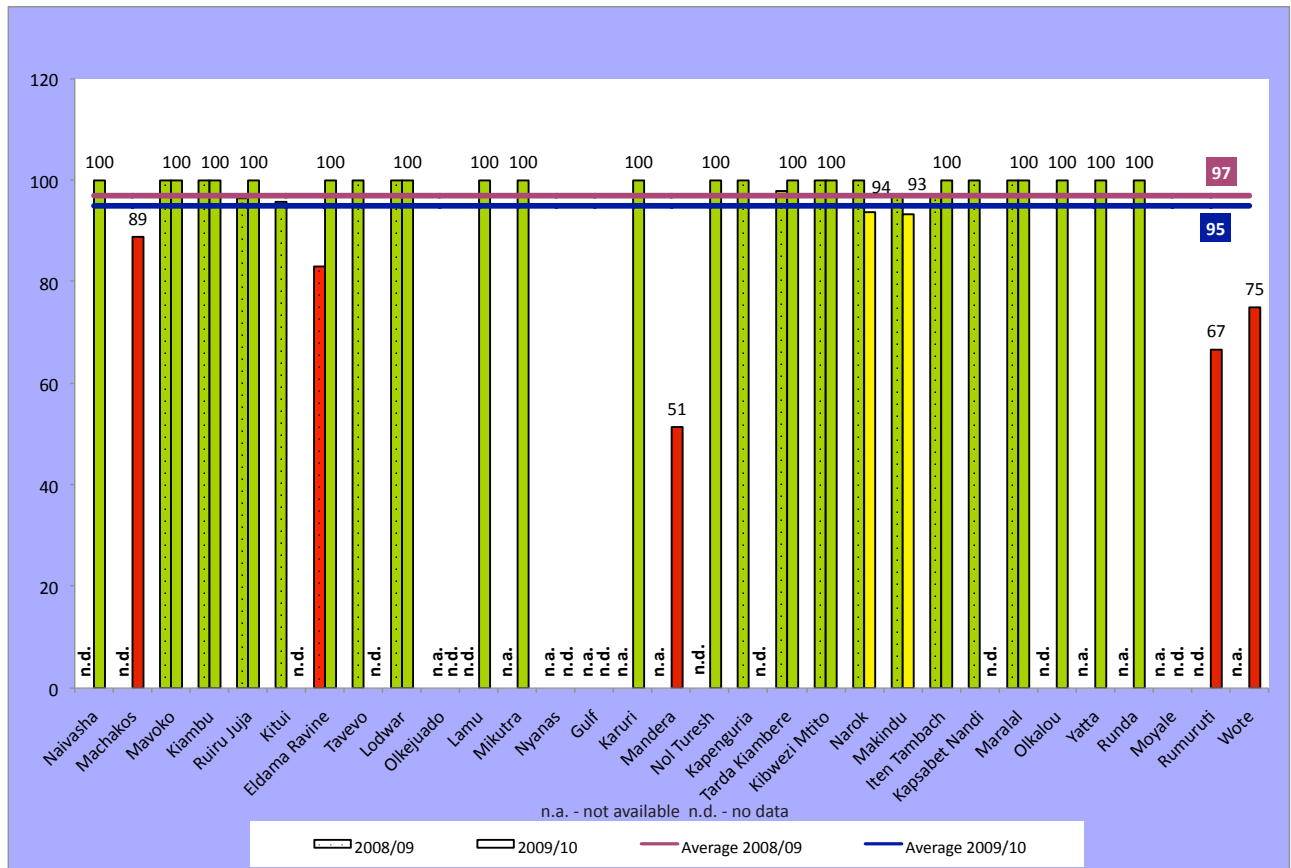


Table 3.14(b): Baseline Comparison for Compliance to Residual Chlorine Standards

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Compliance to Residual Chlorine Standards %	97	96	-1	95

(iii) Number of Bacteriological Tests

This indicator of DWQ is measured in terms of the number of actual bacteriological tests carried by a WSP against the number planned according to the DWQ Monitoring Guideline. The average performance on this indicator was a staggering 62% against a sector benchmark of >90%. Only 6 WSPs (10%) were within the acceptable sector benchmark.

Fig 3.12(a): Drinking Water Quality - Bacteriological in Percentage

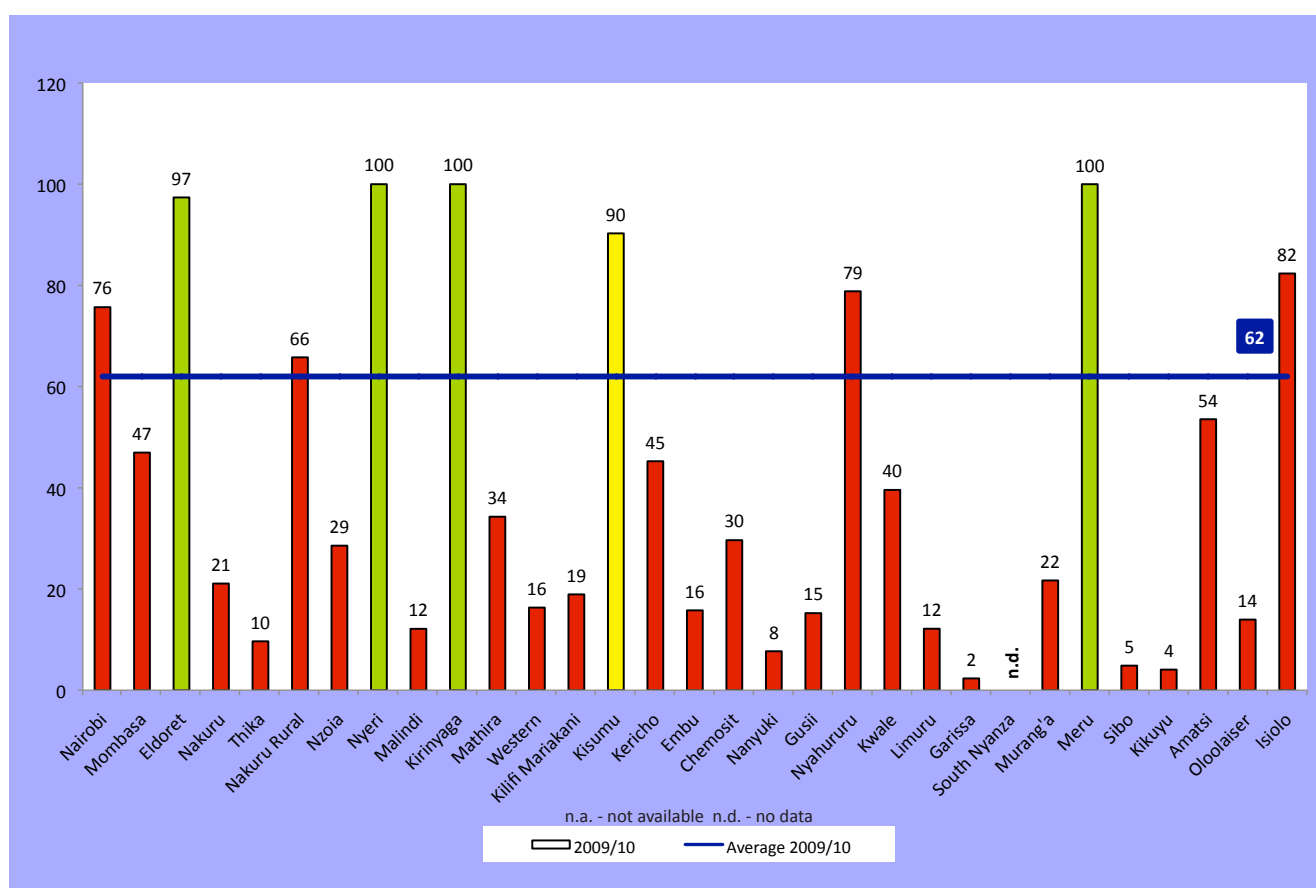
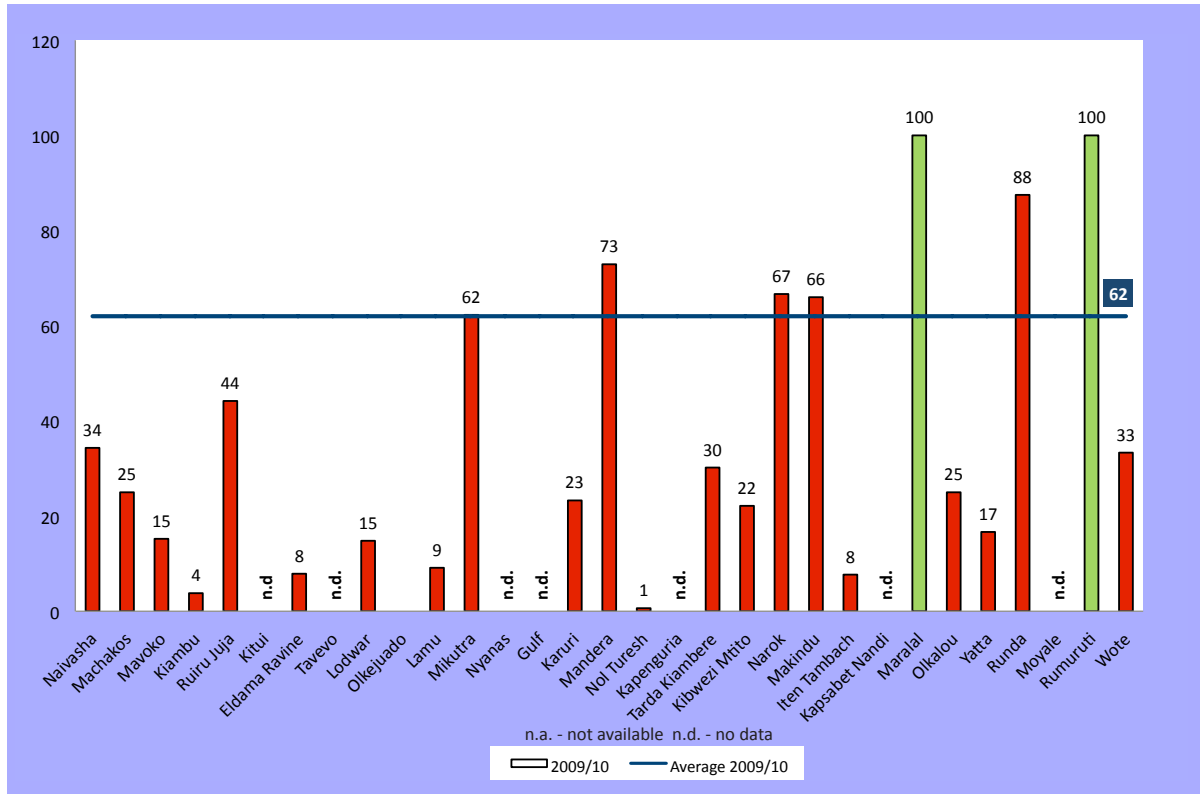


Fig 3.12(b): Drinking Water Quality - Bacteriological in Percentage



(iv) Compliance with Bacteriological Standards

This indicator of DWQ measures the ratio of the number of samples within the norm compared to the total numbers of samples taken. In the reporting period, the average compliance was at 94% with 43 WSPs (69%) within the acceptable sector benchmark of >90%. Considering the low compliance levels with the required number of samples (62% in section 3.75a (c)), positive performance in this indicator cannot be viewed in isolation.

Fig 3.13(a): Compliance with Bacteriological Standards in Percentage

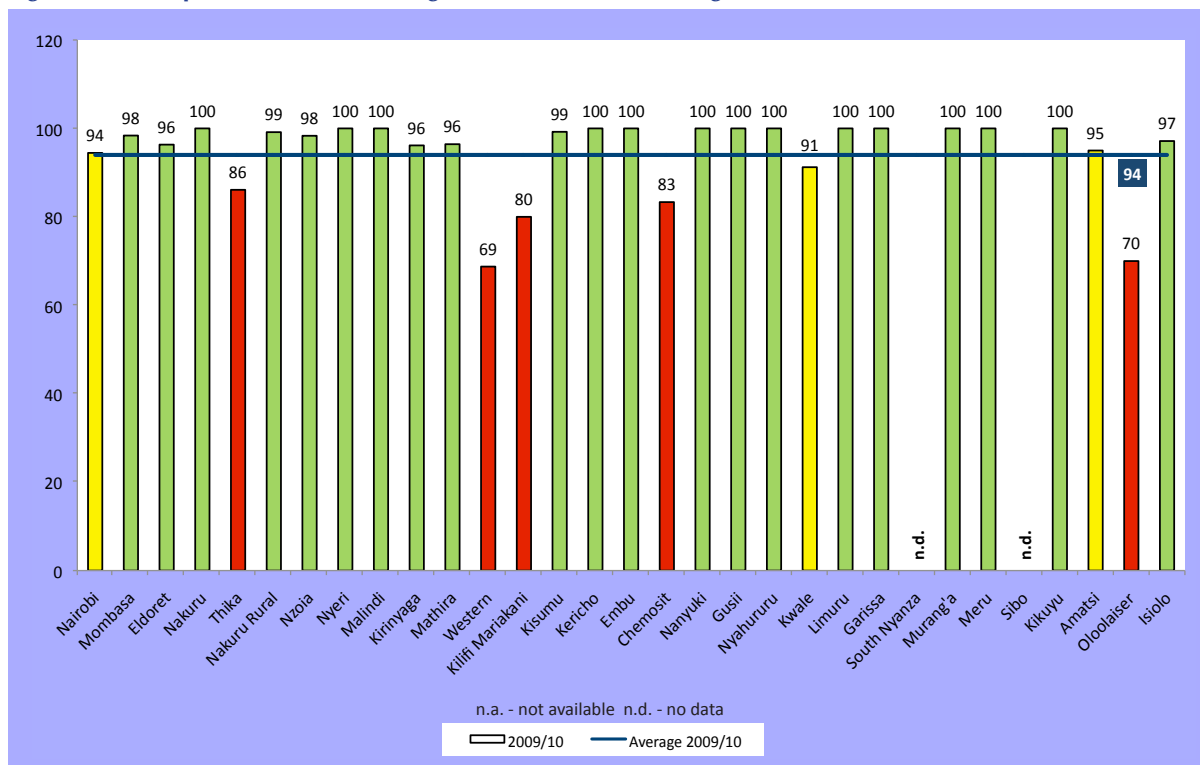
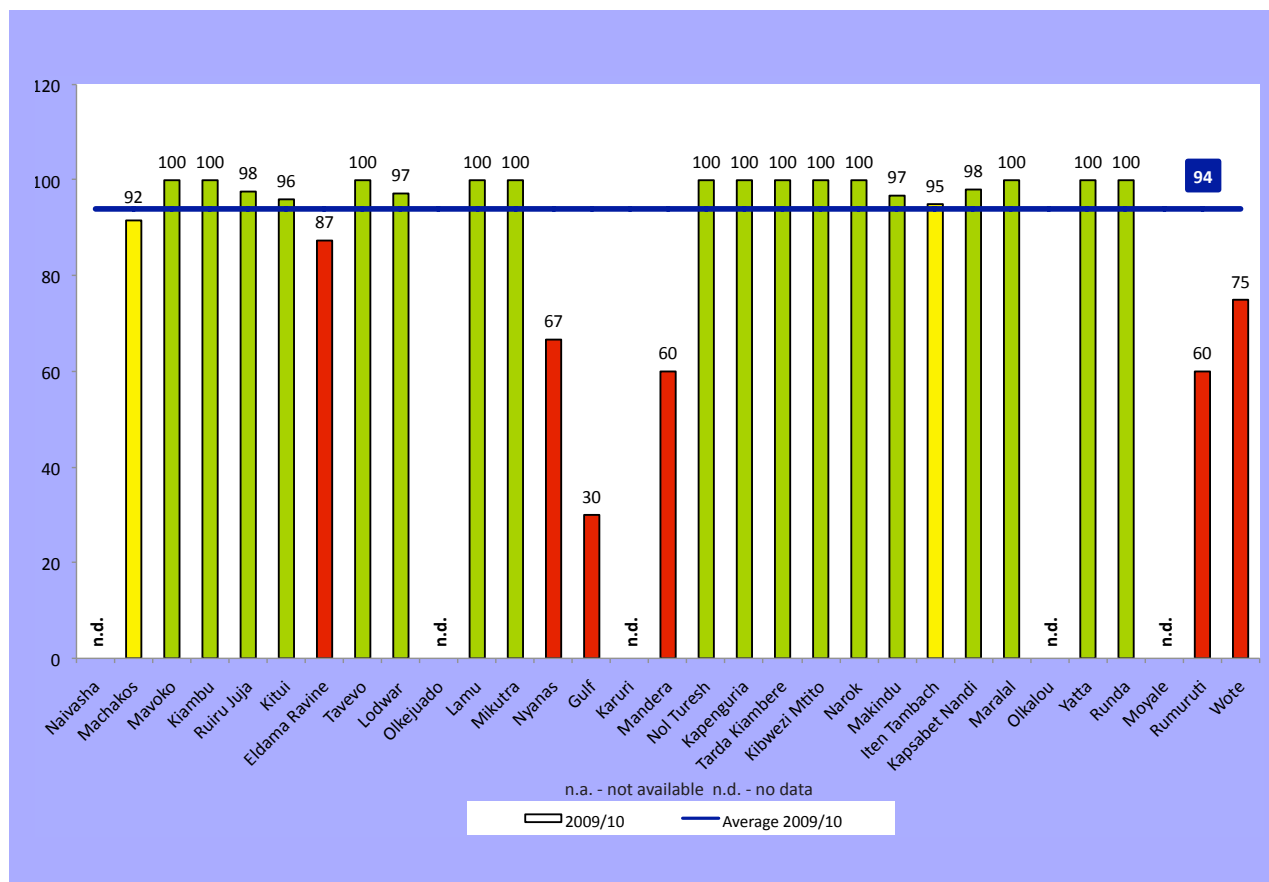


Fig 3.13(b): Compliance with Bacteriological Standards in Percentage



Concerning all four DWQ indicators, WSPs are obliged to adhere to the DWQ Monitoring Guideline, which entails developing elaborate sampling programmes, and timely submission of monthly and annual water quality reports. In addition, they should have in place the right skills and facilities for water quality monitoring. WSPs need to assist WSPs in carrying out regular tests (especially bacteriological) by investing in the establishment of well equipped laboratories.

(f) Hours of Supply

Hours of supply measures the average number of hours per day that a utility is able to provide water. In fact, most consumer complaints, other than billing, are due to irregular water supply. Accordingly, customer satisfaction and willingness to pay is directly related to the hours of supply.

Depending on the population in the service area of a WSP (refer to Table 3.4), different sector benchmarks are used for this indicator.

The performance on the indicator dropped from 15 hours/day in 2008/09 to 14 hours/day in 2009/10. The negative trend is confirmed by the 2008/9 baseline analysis (3.14). However, 34 WSPs (55%) were within the acceptable sector benchmark of 20 hrs/day.

To address the decline in service hours, WSPs should put in place measures to curb the increased levels of NRW in order to raise the amount of water available for distribution. They should also try to match expansion in coverage with increase in production. In addition, the WSPs should strive to utilize their optimal production capacities.



Fig 3.14(a): Hours of Supply

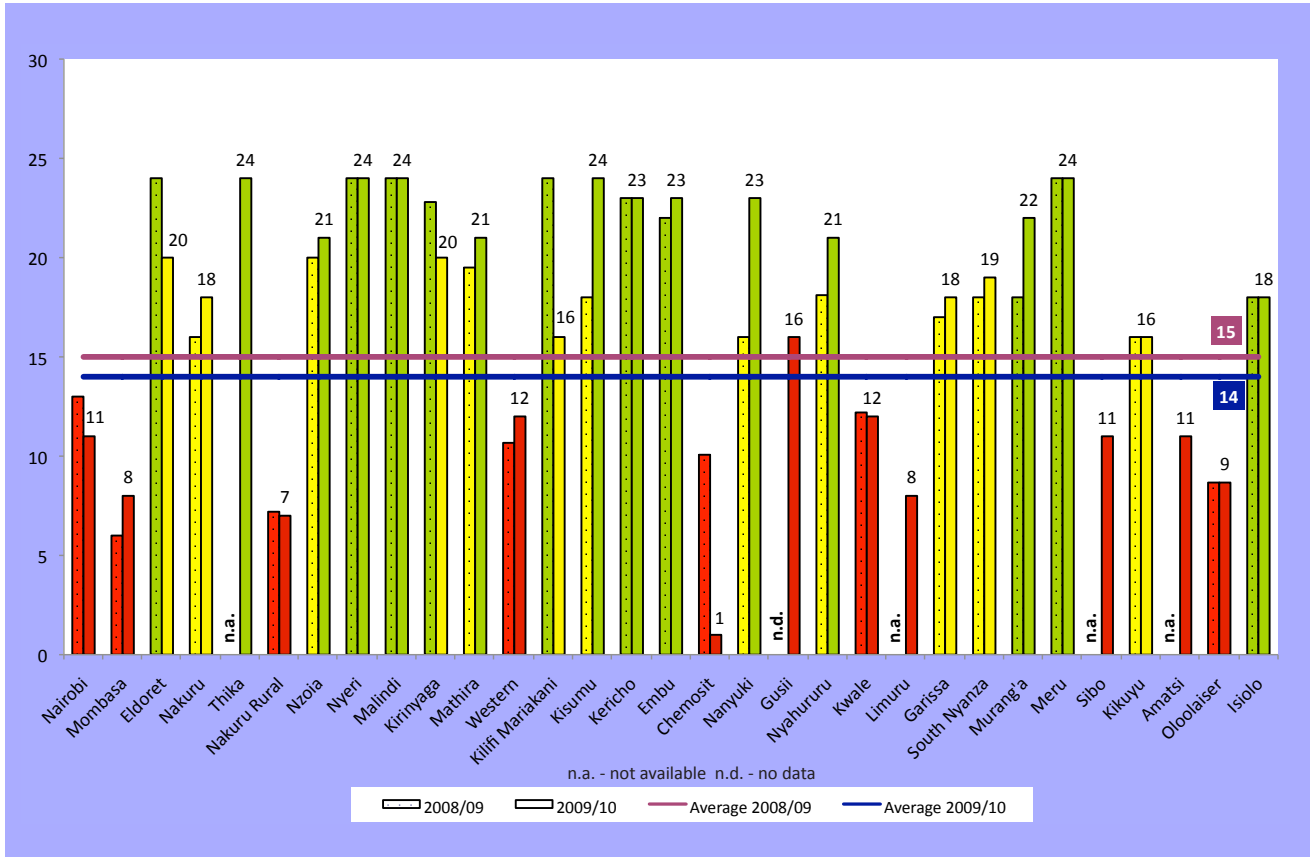


Fig 3.14(b): Hours of Supply

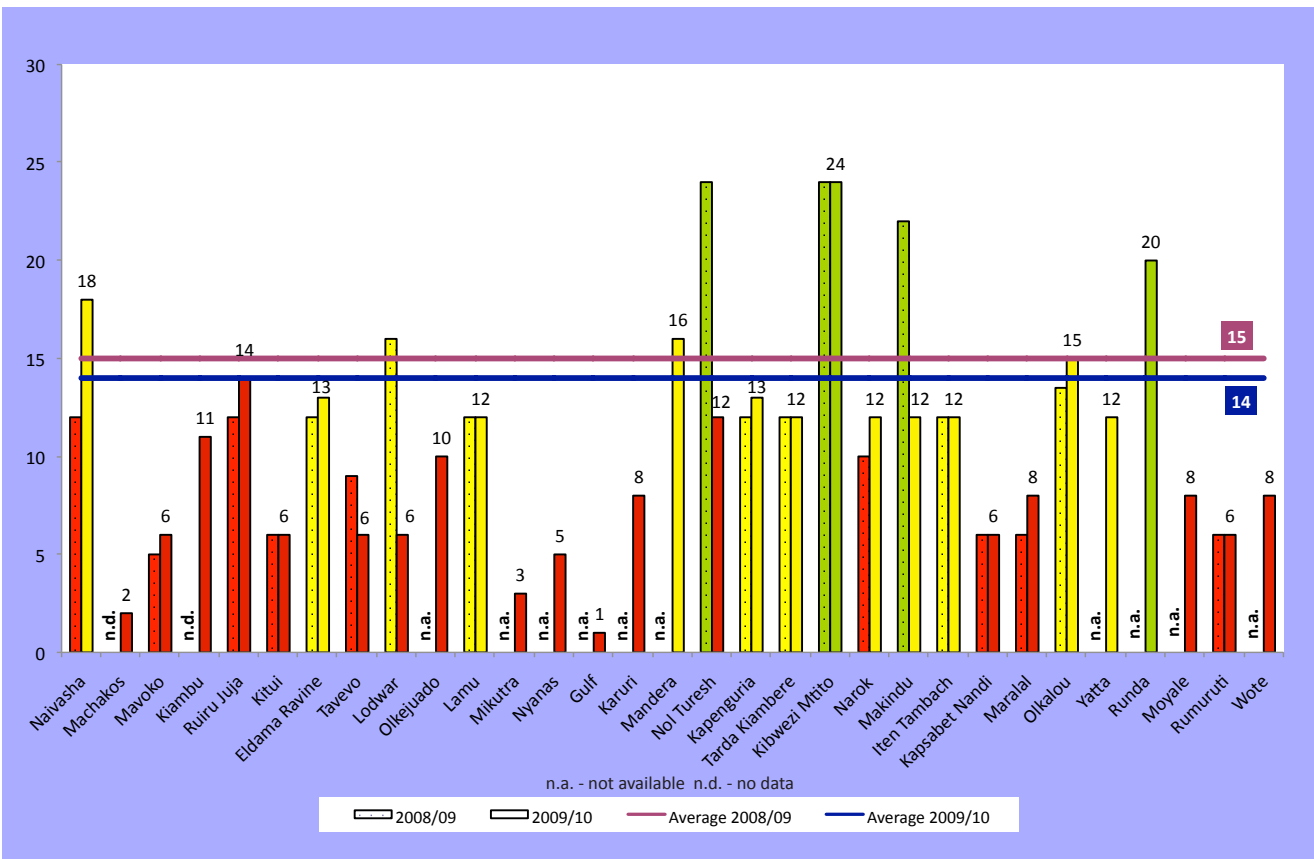


Table 3.15: Baseline Comparison for Hours of Supply

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Hours of supply	15	14	-1	14

(g) Metering Ratio

Metering Ratio is defined as the number of connections with operational meters compared to the total number of connections. Metering enables a WSP to charge consumers according to what they have actually consumed. It is also a critical tool for controlling NRW (especially commercial losses) and for managing per capita water consumption.

The average performance on this indicator remains at 82% in 2009/10 and is therefore still far below the sector benchmark of 100%. However, WSPs who had reported in 2008/9 recorded a slight improvement of 1% in 2009/10. Only 17 WSPs (27%) were within the acceptable sector benchmark during the reporting period. Also, the reported average performance estimates the actual metering ratio, since a considerable portion of reported metered connections have non-functional meters.

More effort is required for a commercially sustainable water services sector that makes efficient use of available resources. Through provision of earmarked funds in RTAs, Wasreb is reinforcing WSPs' efforts towards 100% metering.

Fig 3.15(a): Metering Ratio

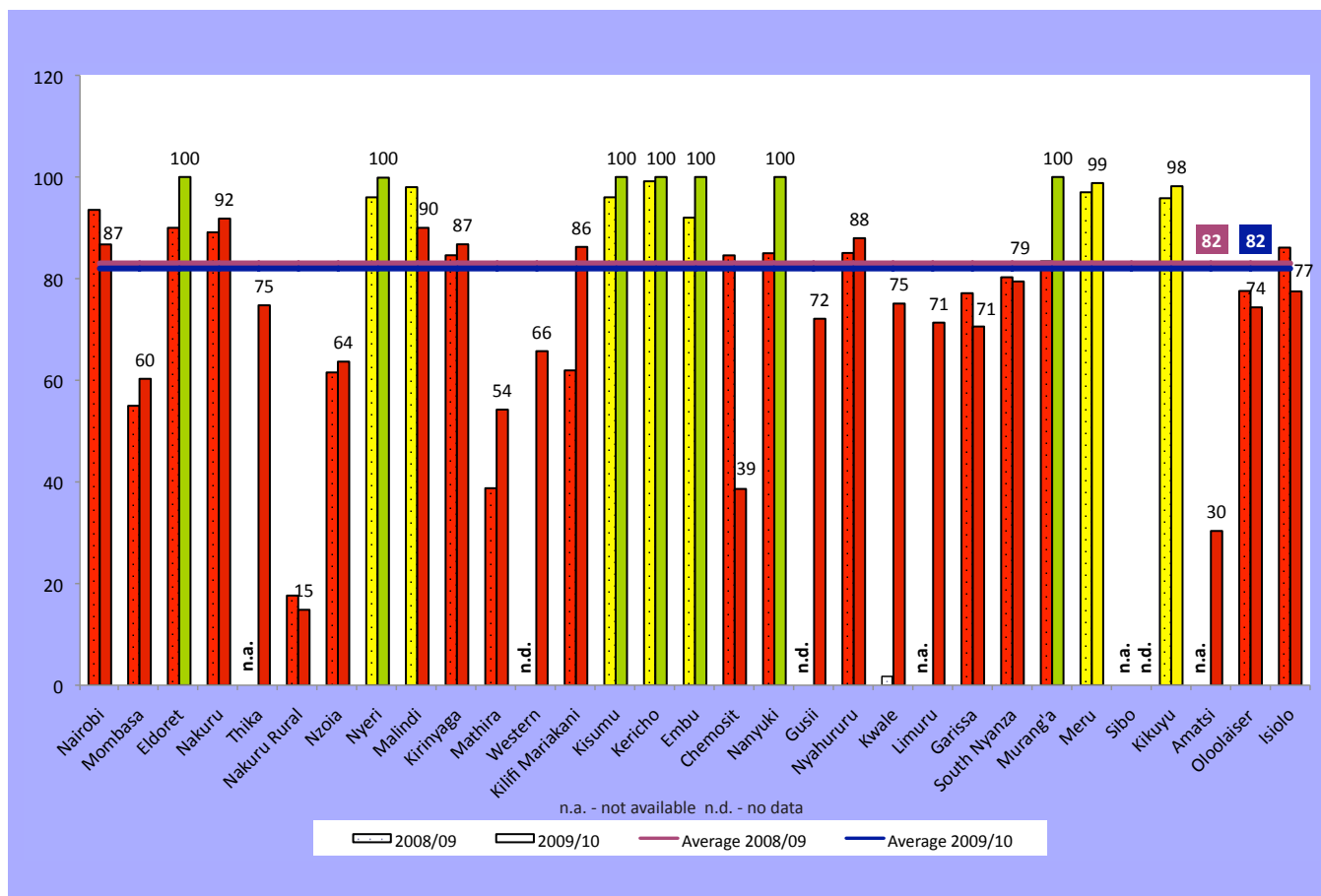


Fig 3.15(b): Metering Ratio

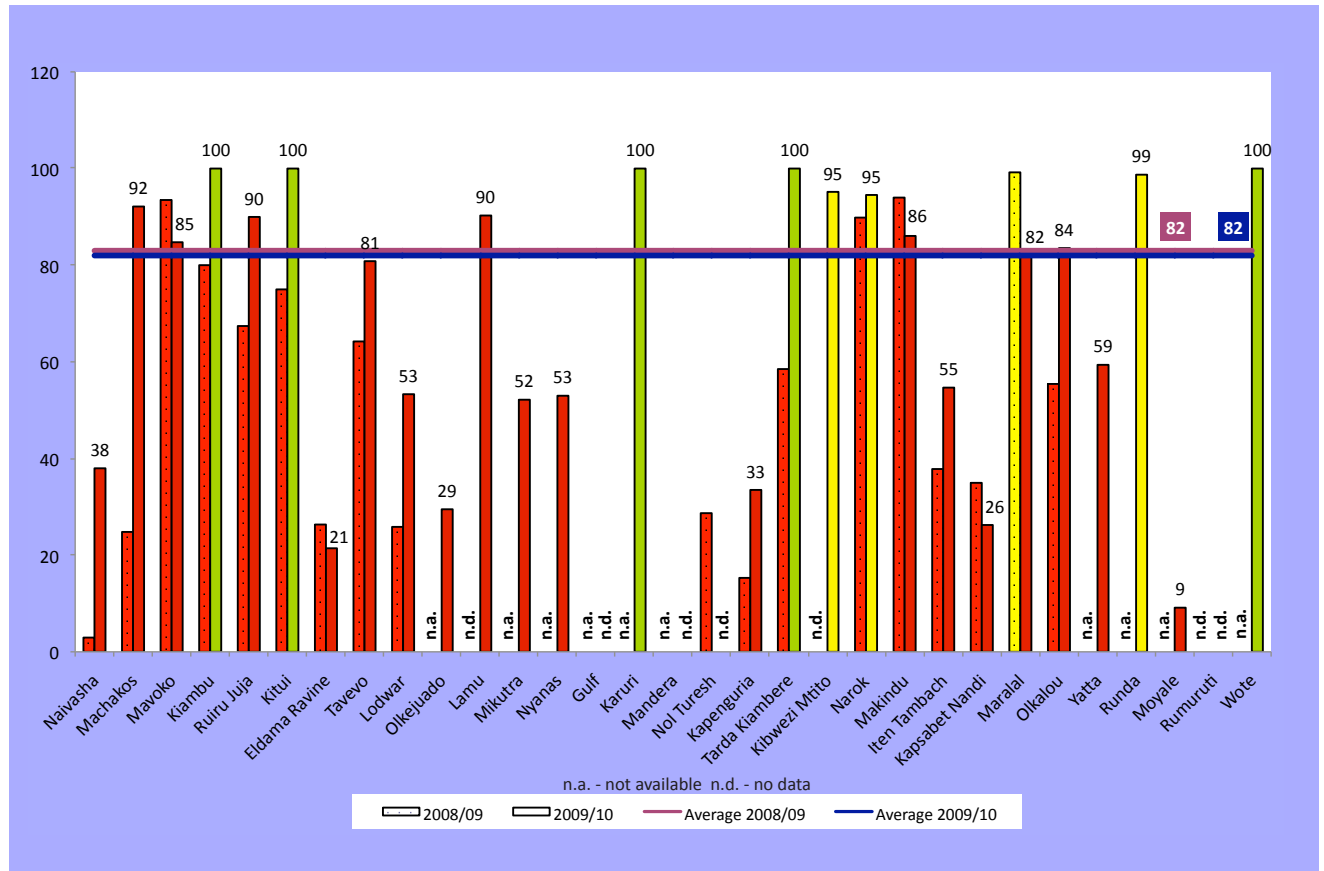


Table 3.16: Baseline Comparison for Metering Ratio

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Metering Ratio %	82	83	1	82

(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 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 correlated to customer satisfaction with the service a WSP provides.

Since WSPs have not been able to separate between payments for current billing and arrears collected, some WSPs recorded revenue collection efficiencies of over 100%. In the reporting period, average collection efficiency dropped from 84% in 2008/09 to 82% in 2009/10. However, the baseline analysis (Table 3.17) shows a slight improvement from 82% to 83%, indicating that the recorded drop is in part a result of the inclusion of new WSPs with the lower collection efficiencies. Another factor counteracting a strong positive trend is the amount of arrears collected having reduced in the current reporting period. WSPs should put in place systems to separate current collections from arrears.

In spite of the drop in the weighted average, 42 WSPs (68%) achieved the sector benchmark of 90%.

Fig 3.16(a): Revenue Collection Efficiency

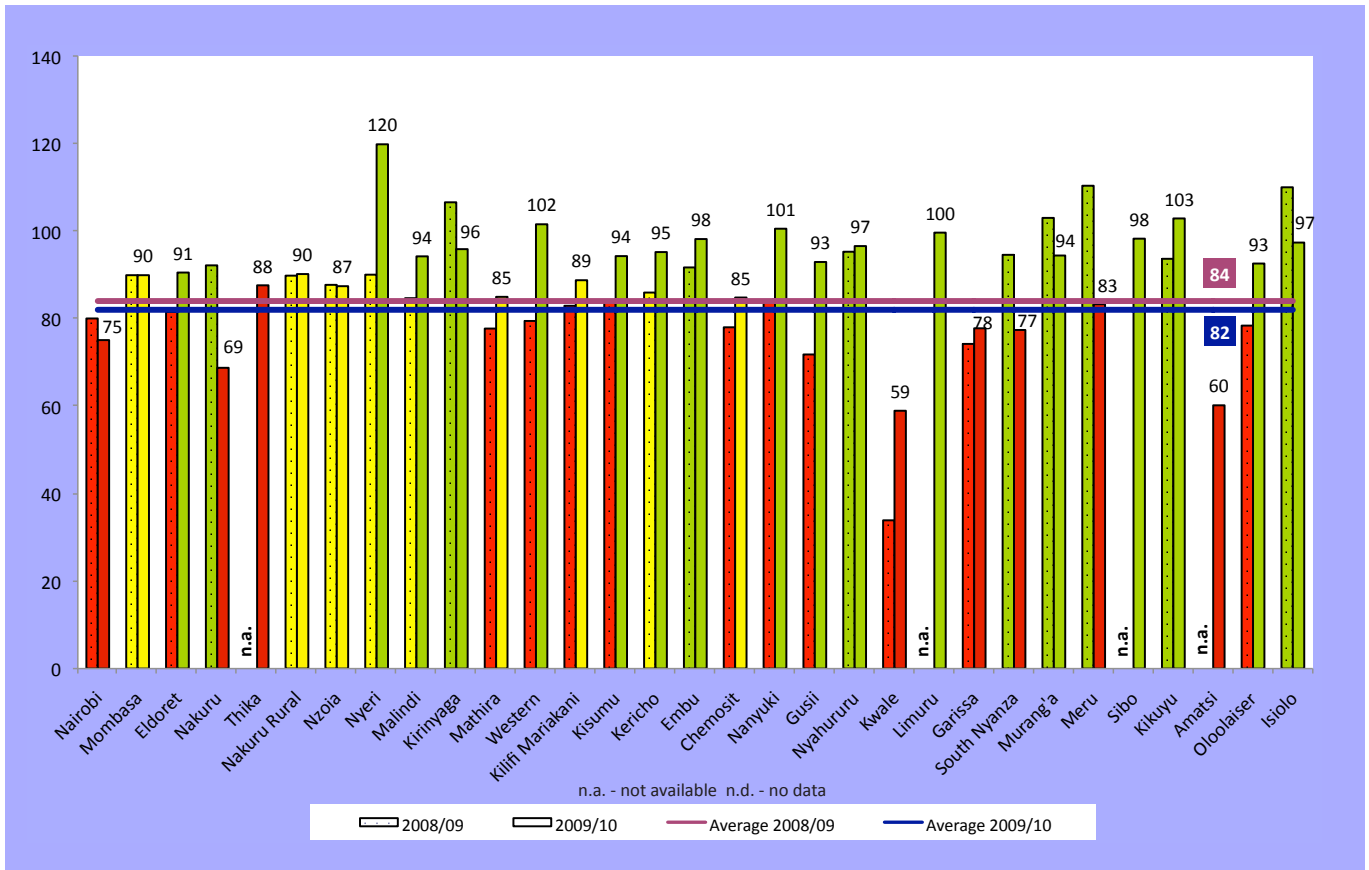


Fig 3.16(b): Revenue Collection Efficiency

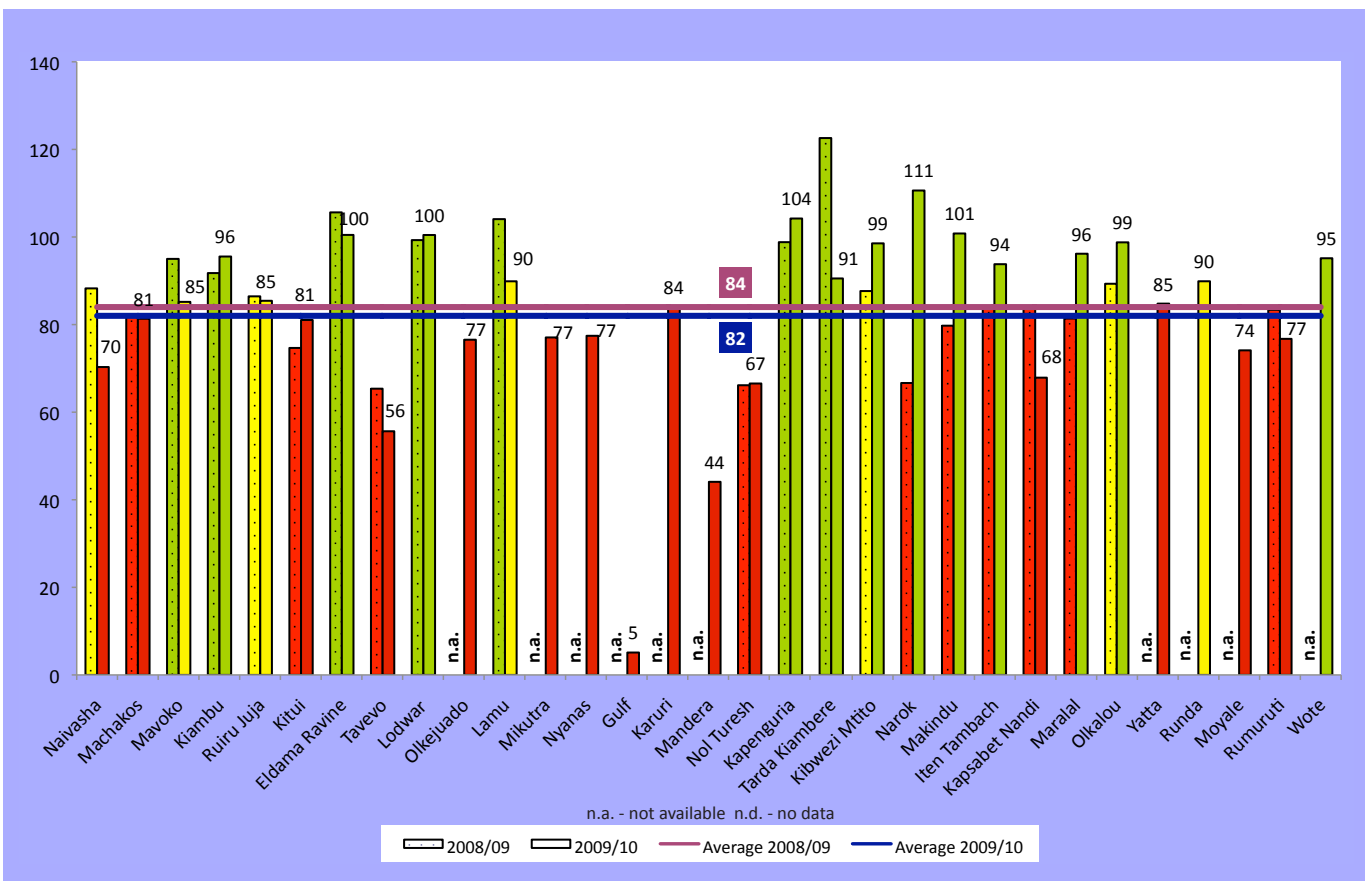


Table 3.17: Baseline Comparison for Revenue Collection Efficiency

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Collection Efficiency %	82	83	1	82

(i) Staff per Thousand Connections

Staff per 1000 connections describes the number of staff a WSP utilizes for every 1000 connections. Since staff costs are one of the main cost drivers in WSP operations, a low ratio, indicating high efficiency in the utilization of staff, is desirable while a high ratio points to low staff efficiency and is undesirable.

Different sector benchmarks apply depending on the category a WSP falls in and the number of towns it covers; (refer to Table 3.4 for the benchmarks and Table 3.5 for WSP categories). The different benchmarks have been used in the analysis.

The average performance on this indicator dropped from 7 to 8 staff per 1000 connections for the period 2008/09 and 2009/10 respectively. While this is still within the acceptable sector benchmark of 8 staff per 1000 connections, it points in the wrong direction. Further, the spread between different WSPs is rather large, which points to lack of consistency in terms of management in the sector.

Unfortunately the majority of the WSPs do not have the right skills mix and/or qualified personnel. WSPs need to comply with the Wasreb criteria for appointment of WSP staff when employing people to ensure that a high level of skills and capacity is built in the WSPs.

Fig 3.17(a): Staff per Thousand Connections

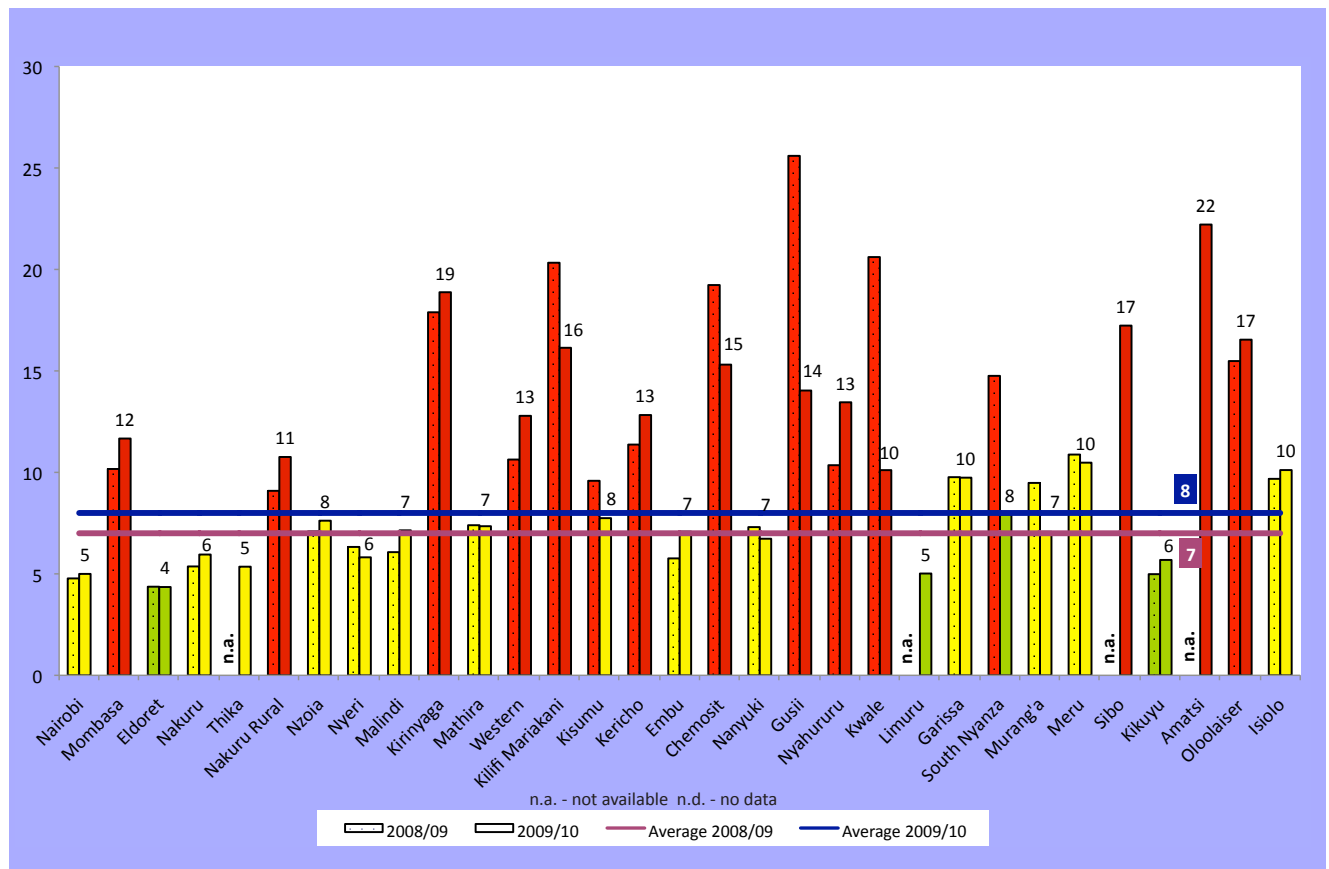


Fig 3.17(b): Staff per Thousand Connections

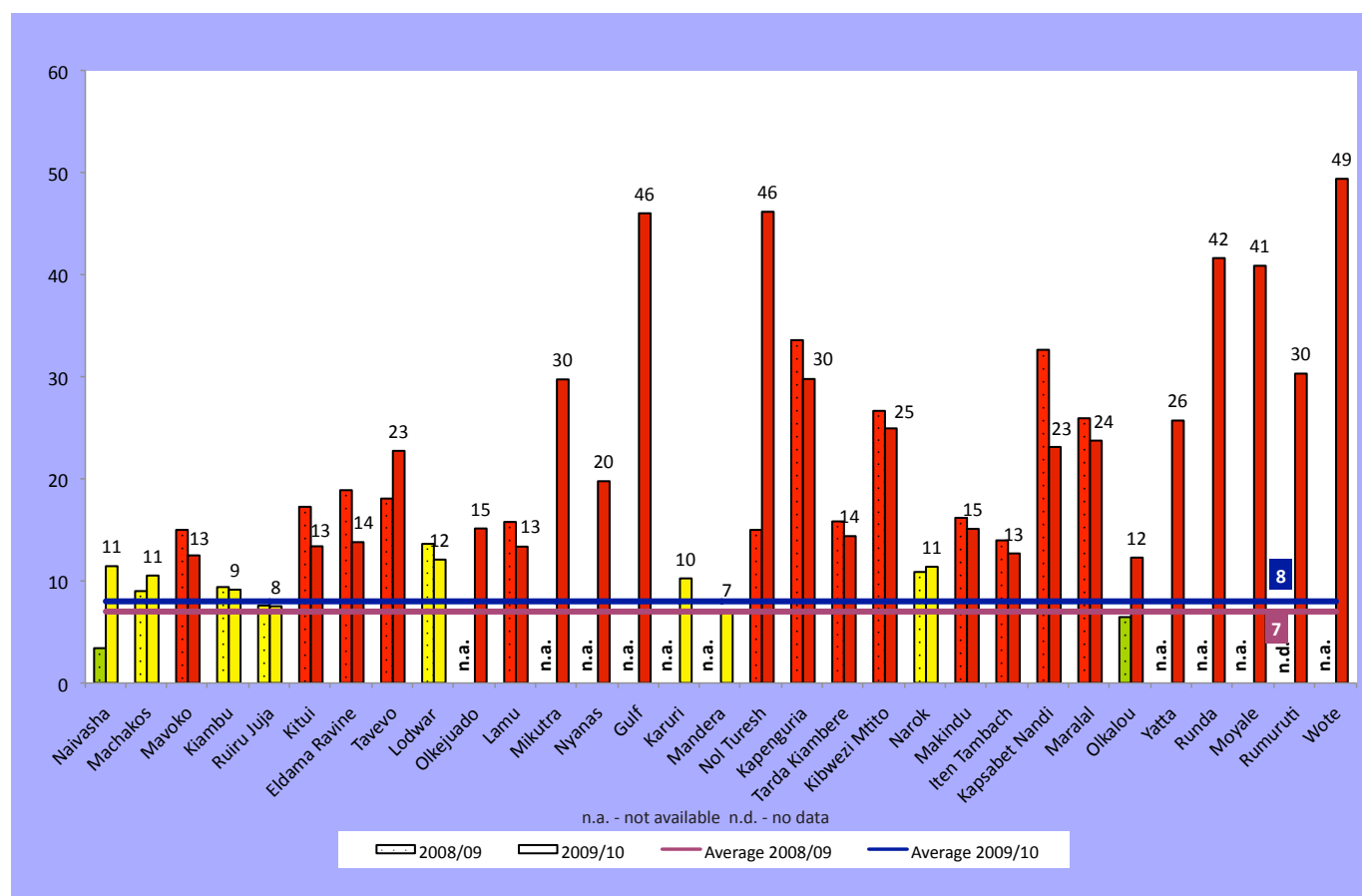


Table 3.18: Baseline Comparison for Staff per one Thousand Connections

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Staff per 1000 connections	7	7	0	8

(j) O & M Cost Coverage

Operation and maintenance (O&M) costs are incurred by a WSP while operating and maintaining a system. They include administration, personnel, energy, chemical costs and maintenance of plant and equipment. O&M cost coverage therefore measures the ability of a WSP to meet its costs from revenues. It is critical to a WSP, being an indication of its short term sustainability. It is the first step towards total cost recovery which would later enable a WSP to cover investment costs as well.

Through continuous tariff reviews, Wasreb ensures that WSPs reach the second level of sustainability by applying tariffs that cover not only O&M costs but also investment costs. The sustainability of a WSP is supposed to be assured if it attains the benchmark O&M cost coverage of 150%. However, while approving the tariffs, Wasreb ensures that tariff increases do not lead to exclusion of the poor by distributing the cost burden equitably to the different consumer groups.

During the reporting period, the average O&M cost coverage improved from 98% in 2008/09 to 109% in 2009/10. It is Wasreb's policy that WSPs who cannot be sustainable in the medium and long term because of their size, endeavour to merge with the bigger and better managed WSPs through clustering so as to take advantage of economies of scale. In addition, where need for subsidy is identified, it should be linked to performance improvements towards sustainability.

Fig 3.18(a): O&M Cost Coverage

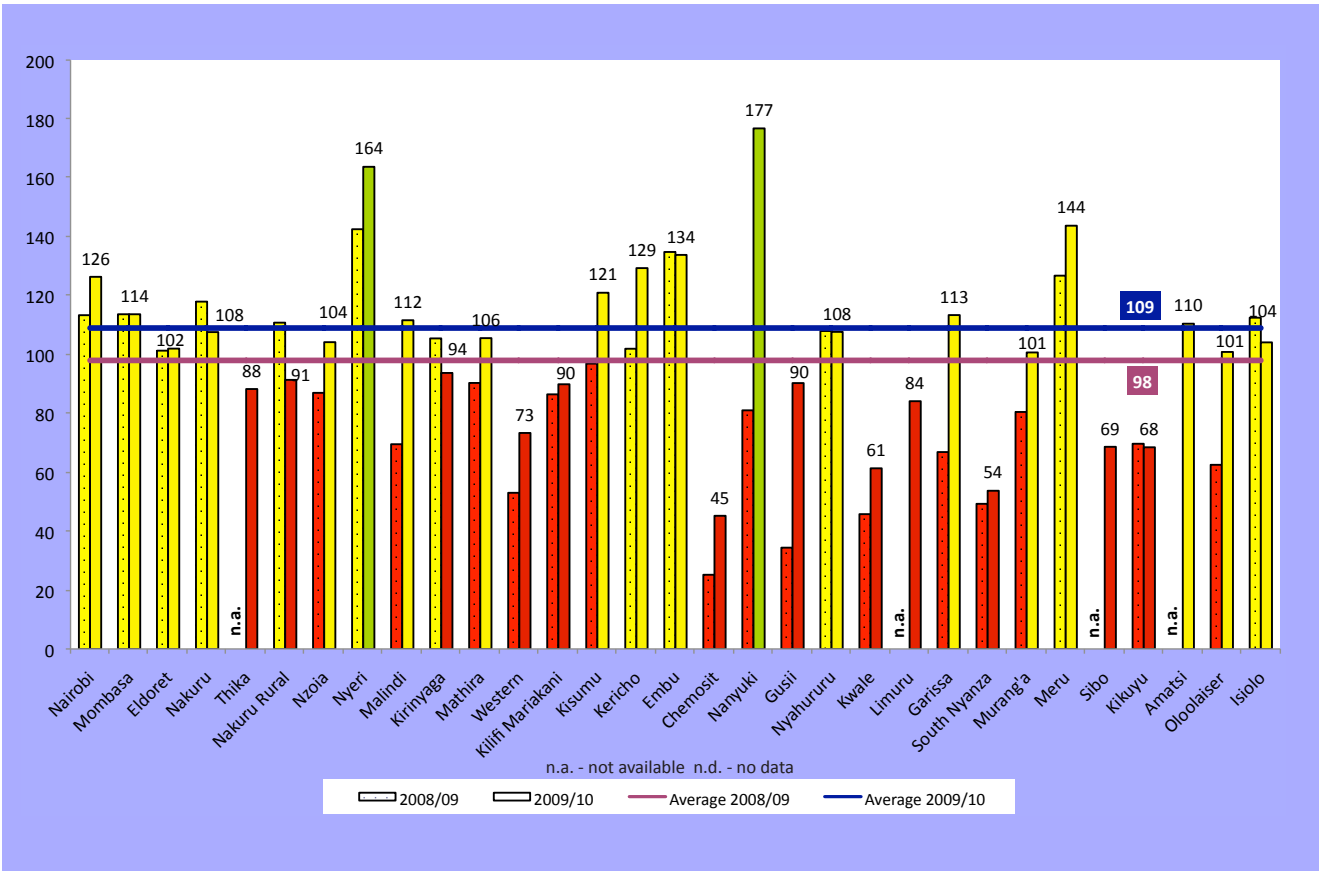


Fig 3.18(b): O&M Cost Coverage

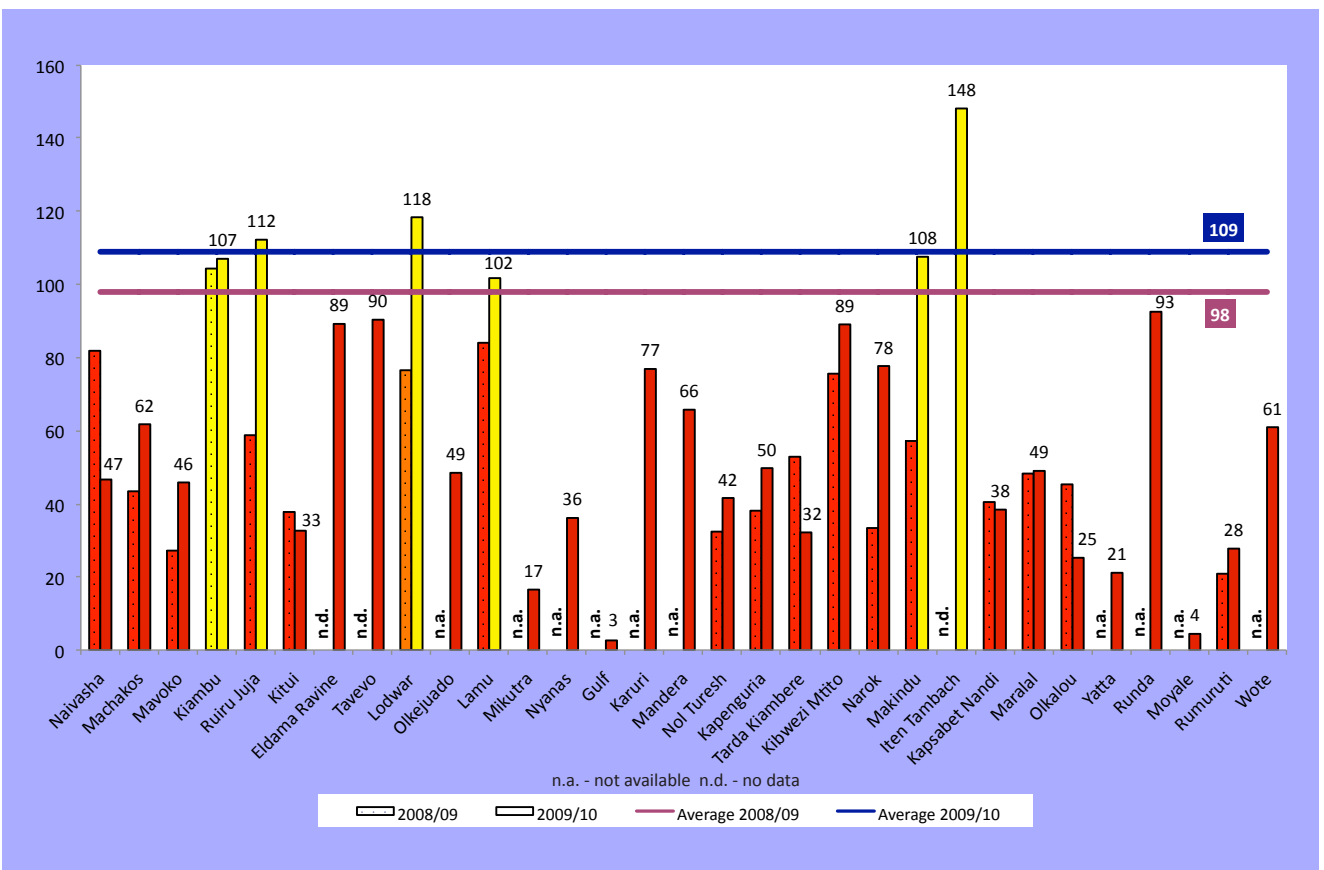


Table 3.19: Baseline Comparison for O&M Cost Coverage

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
O & M Cost Coverage %	98	112	14	109

(k) O&M Cost Coverage by Billing at 85% Collection Efficiency

This indicator measures the level of O&M cost coverage if utilities are to collect 85% of the amount billed which is the acceptable collection efficiency level. Thus, WSPs below a collection level of 85% must strive to achieve this benchmark. Subsidies to WSPs should be based on the WSPs performance towards achievement of this benchmark.

During the reporting, the average performance on this indicator improved from 100% in 2008/09 to 113% in 2009/10.

WSPs that do not reach at least an acceptable level under this indicator urgently need to apply for an RTA if they have not already done so.

Fig 3.19(a): O&M Cost Coverage by Billing at 85% Collection Efficiency

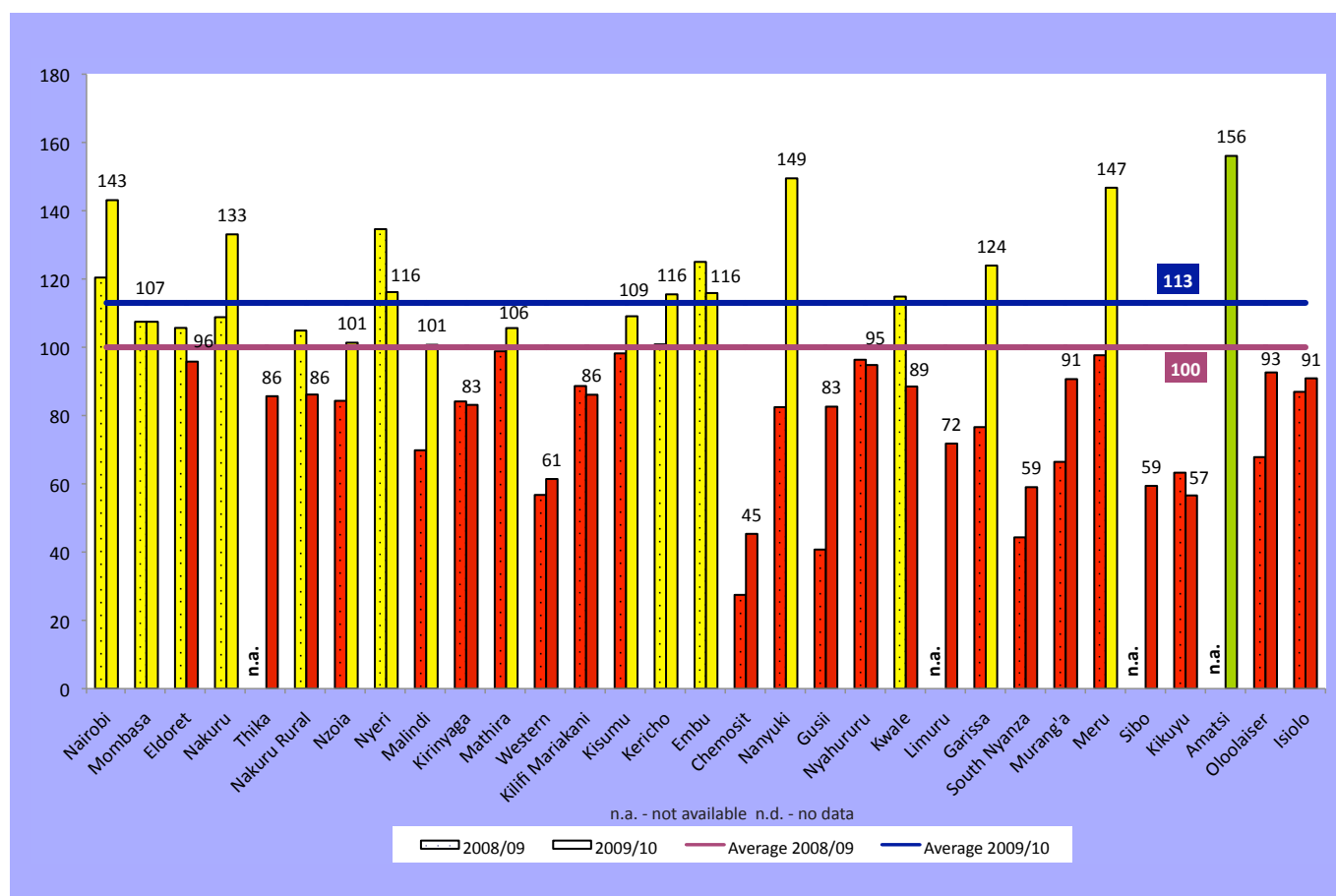


Fig 3.19(b): O&M Cost Coverage by Billing at 85% Collection Efficiency

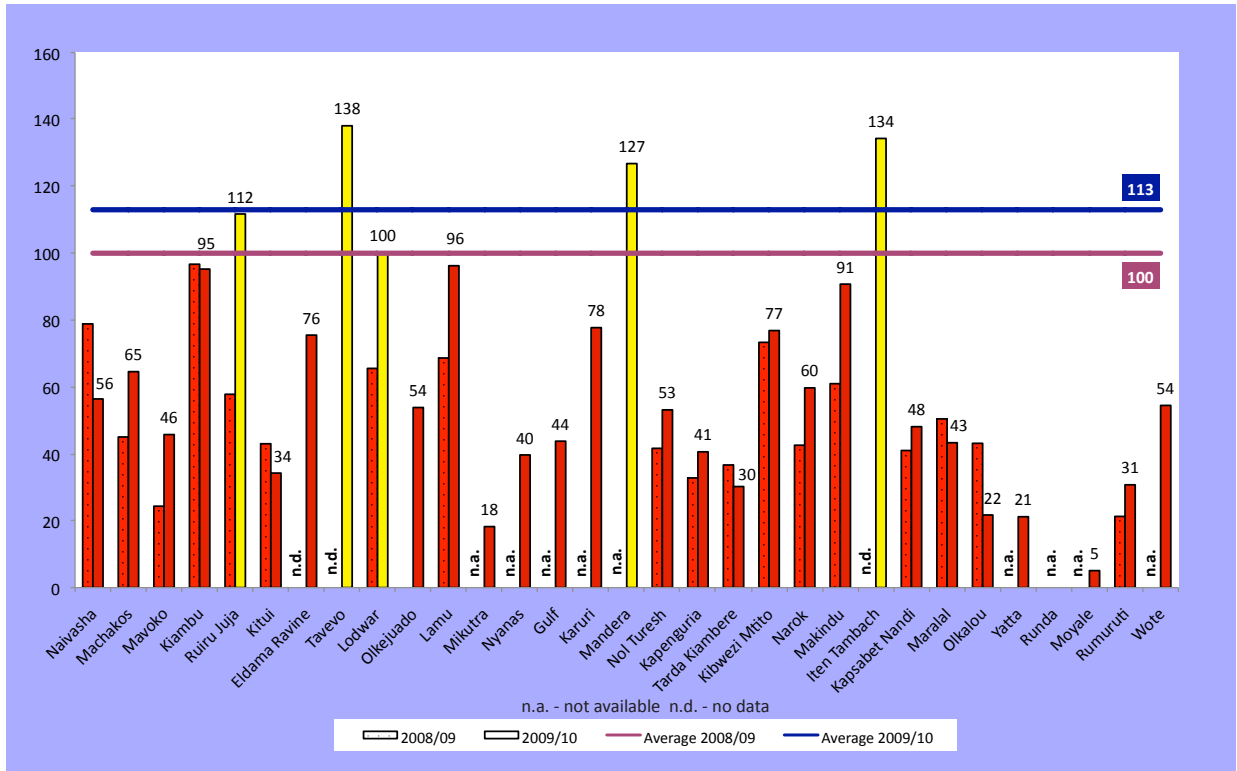
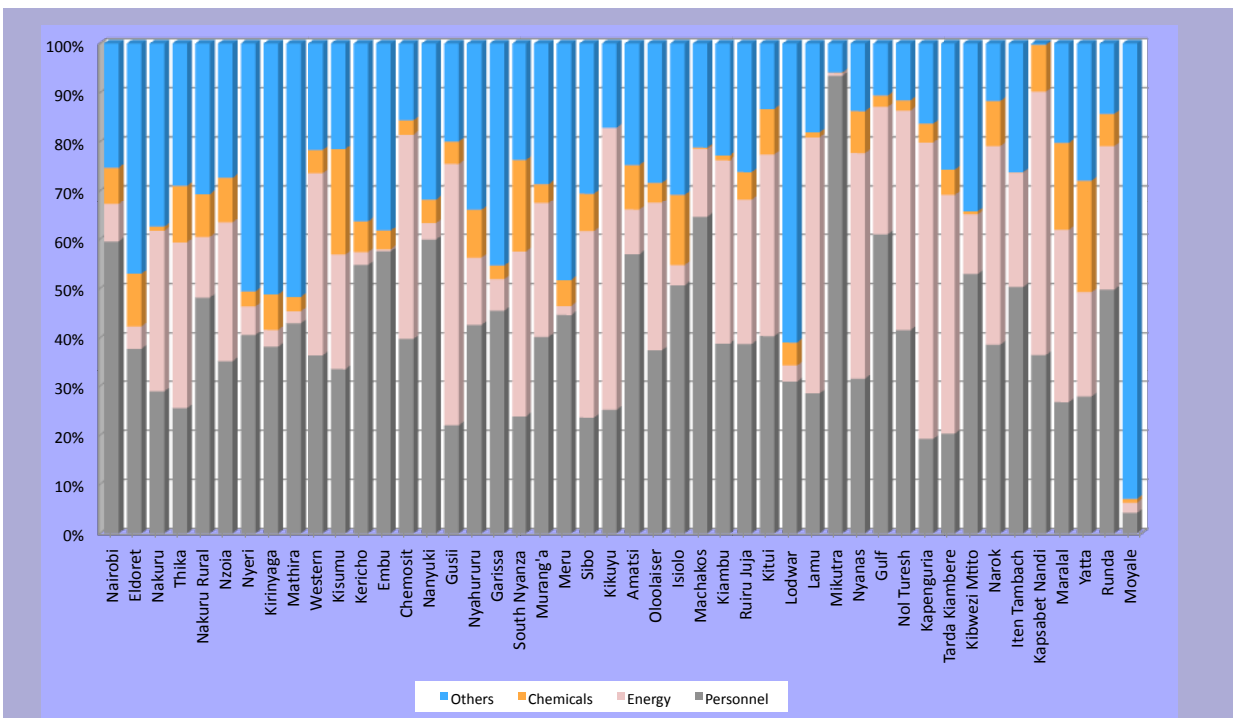


Table 3.20: Baseline Comparison for O&M Cost Coverage at 85% Collection Efficiency

Indicators	2008 / 2009- Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
O & M Cost Coverage at 85% Collection Efficiency %	100	116	6	113

Fig 3.20: O&M Cost Breakdown



(I) Personnel Expenditure as a Percentage of O&M Costs

Personnel costs are incurred by a WSP in hiring and maintaining staff. The benchmarks applied vary according to the category a WSP falls in (Table 3.4). The national average of personnel expenditure as a percentage O&M costs deteriorated from 45% in 2008/09 to 46% in 2009/10. WSPs are required to focus on reduction of the proportion of personnel costs to total O&M costs by having the right staff in place and ensuring that they have the right skills mix in order to increase their efficiency and therefore achieve an acceptable staff per 1000 connections ratio.

Fig 3.21(a): Personnel Expenditure as a Percentage of O&M Costs

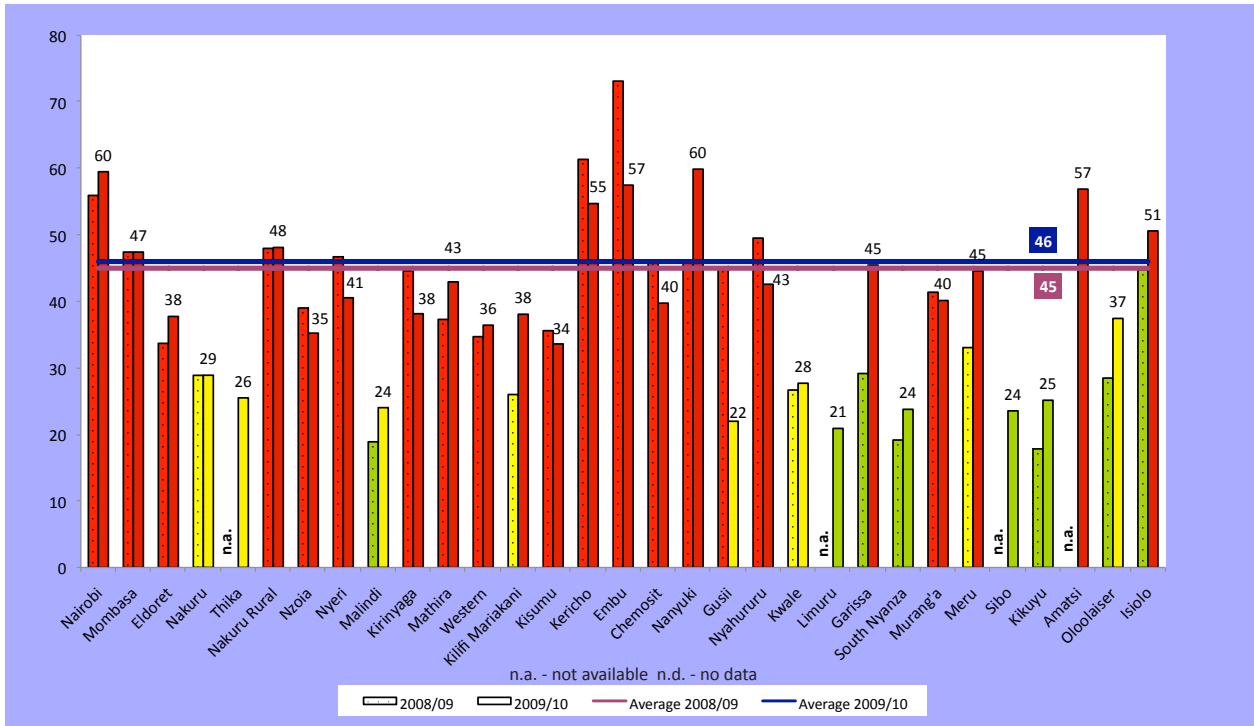


Fig 3.21(b): Personnel Expenditure as a Percentage of O&M Costs

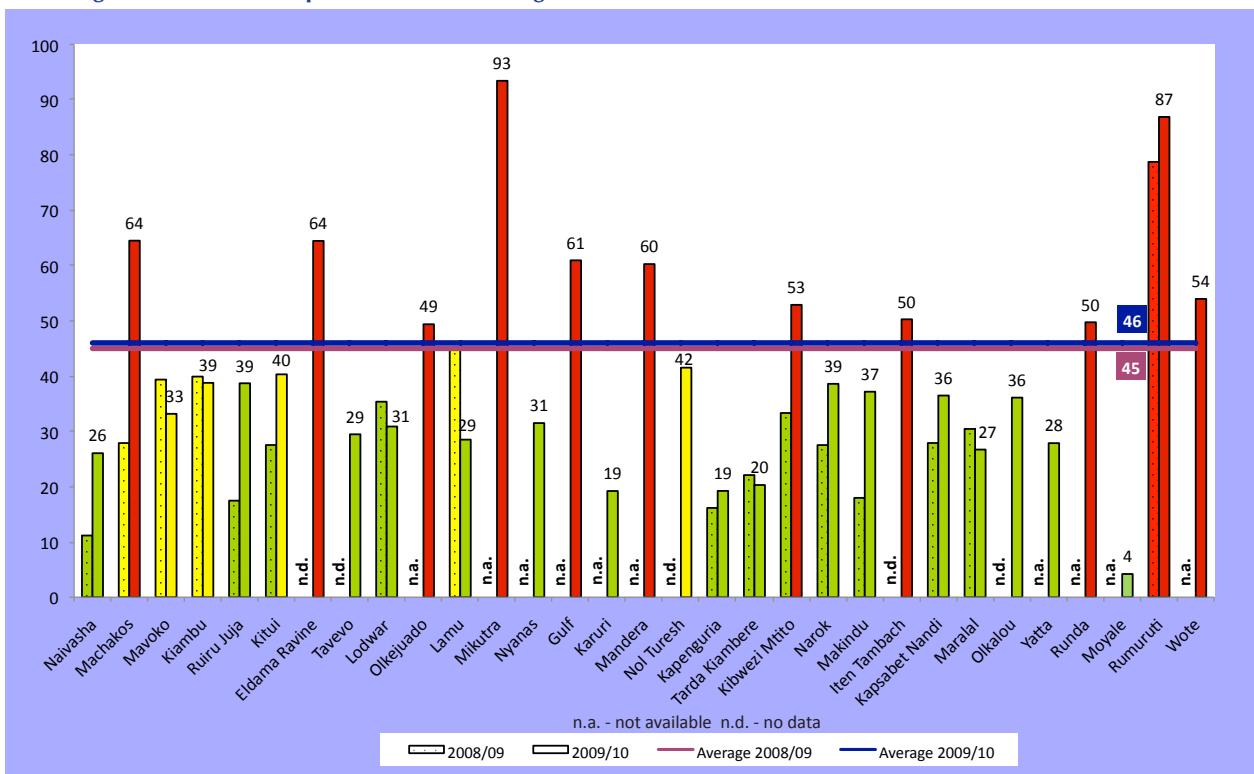



Table 3.21: Baseline Comparison for Personnel Expenditure

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Personnel Expenditure as a % of O & M Cost	45	47	2	46

(m) Unit Cost of Operation and Average Tariff

The price of water and sanitation should reflect the fact that both are social and economic goods. In line with the human rights to water and sanitation, the cost of water must be affordable to all consumers including the low income group while at the same time ensuring the sustainability of operations, which is entirely dependent on payment by end users. Inefficiencies in operation increase the cost of service delivery with high NRW being the biggest contributor. WSPs must have strategies to reduce the NRW to the sector benchmark.

The rising block tariff structure has been adopted for all WSPs in Kenya in order to ensure that high usage customers pay marginally higher unit prices to discourage excessive consumption, while poor (low usage consumers) have access to affordable water through subsidized tariffs (cross-subsidization from high to low consumption).

Table 3.22: Average Tariff Comparison

	Average tariff (KShs/m ³)	Unit cost of production (KShs/m ³)	Unit operating cost of water billed (KShs/m ³)
2008/09	42	25	35
2009/10	56	33	42

From the above tabulation, the average tariff and the unit cost of production increased between the period 2008/09 and 2009/10. This can be attributed to:

- Increase in cost of water production (chemicals, electricity and maintenance).
- Inefficiency in operations.
- High levels of Non-Revenue Water

3.4 Rural Water Service Providers

Commendable Improvement Realised in Rural Areas

The rural water supply and sanitation situation presents a reporting challenge because most rural areas rely on water points and rural schemes not managed by formal WSPs. The 31 providers classified as rural cover a combined population of just below 3 million people. While their turnover is derived from areas which are officially classified as rural, the areas show relatively high population densities. The 31 WSPs cover a total of 65 towns.

Table 3.23 summarizes the basic data from the 31 rural WSPs analysed for the year 2009/10. They are placed in three categories depending on the total number of registered water and sewerage connections.

Table 3.23: Rural WSPs

WSP	Total Population in Service area	Population served	No. of connections	No. of active connections	No. of towns	Turnover/billing (Ksh in mio)	Domestic + Kiosk Billed Volume(000)	Production in M3 (000)	NRW	Consumption/ c/d (incl. NRW)	Consumption/ c/d without NRW)	No. of staff
Large WSPs (10,000-35,000 connections)												
1 Othaya Mukurweini	171,306	85,782	19,928	10,110	2	78	2,215	5,982	58	112	71	95
2 Muranga South	312,227	119,346	16,079	7,542	4	24	1,315	4,425	53	46	30	85
3 Tetu Aberdare	88,116	72,403	12,913	8,901	3	34	840	2,479	58	50	32	60
4 Gatundu South	136,906	68,784	10,990	7,702	3	34	838	2,724	69	57	33	74
5 Gichugu	109,595	29,928	10,842	4,988	1	14	588	2,301	74	94	54	71
6 Kahuti	179,983	52,578	10,028	5,700	1	34	583	3,135	69	51	30	60
Total	998,133	428,821	80,780	44,943	14	219	6,380	21,047				
Medium WSPs (5,000-9,999 connections)												
7 Gatamathi	127,723	38,930	9,592	4,140	2	24	479	2,111	72	58	34	31
8 Imetha	128,000	52,698	8,899	2,324	7	25	459	1,834	74	41	24	73
9 Gatanga	120,000	36,354	7,405	6,285	1	27	533	1,559	38	55	40	34
10 Ngandori Nginda	80,000	49,977	7,391	5,788	4	15	2,132	3,600	26	147	117	50
11 Ngagaka	75,000	27,504	6,851	4,651	1	14	486	1,728	70	82	48	38
12 Karimenu	100,611	21,000	6,569	3,561	1	14	62	753	89	15	8	22
13 Tuuru	335,912	158,950	5,899	3,705	1	19	283	1,402	75	9	5	58
14 Nithi	78,713	35,799	5,250	2,991	3	23	226	2,255	79	31	17	28
Total	1,045,959	421,212	57,856	33,445	20	160	4,660	15,242				
Small WSPs (<5,000 connections)												
15 Kyeni	58,242	8,916	4,768	1,524	2	3	118	190	38	50	36	22
16 Embe	47,067	7,871	3,293	1,056	3	8	135	1,037	86	87	47	33
17 Githunguri	87,613	20,844	3,281	1,427	2	24	253	517	30	43	33	18
18 Murugi Mugumango	25,000	15,612	3,220	2,911	1	6	904	2,484	67	265	159	20
19 Nyandarua North	41,320	19,239	2,023	1,048	4	5	0	212	42	No Data	No Data	27
20 Uasin Gishu District	84,391	17,116	1,864	825	6	5	18	474	38	4	3	48
21 Muthambi 4K	17,496	11,259	1,526	1,326	1	2	202	467	42	70	49	12
22 Kikanamku	35,017	28,536	1,308	1,035	1	3	118	224	51	17	11	8
23 Engineer	25,500	5,700	1,024	984	1	1	71	214	No Data	No Data	34	5
24 Tachasis	22,025	4,106	784	445	3	1	87	250	44	84	58	5
25 Mawingo	20,000	10,000	750	650	1	1	1	23	95	No Data	No Data	22
26 Kinja	11,000	4,500	620	500	1	1	12	18	No Data	No Data	7	4
27 Upper Chania	12,000	7,600	426	426	1	No Data	952	18	No Data	No Data	343	7
28 Kathita Kiirua (CEFA)	30,000	16,788	355	355	1	8	112	490	60	29	18	27
29 Ruiru Thau	28,000	13,892	302	299	1	1	61	394	85	22	12	5
30 Lugari District	231,260	5,512	296	247	1	2	47	60	No Data	No Data	23	5
31 Trans Nzoia District	50,781	5,046	229	106	1	0.43	11	24	25	7	6	20
Total	826,712	202,537	26,069	15,164	31	72	3,101	7,096				
Total	2,870,804	1,052,570	164,705	93,552	65	451	14,141	43,385	*61	*113	*137	

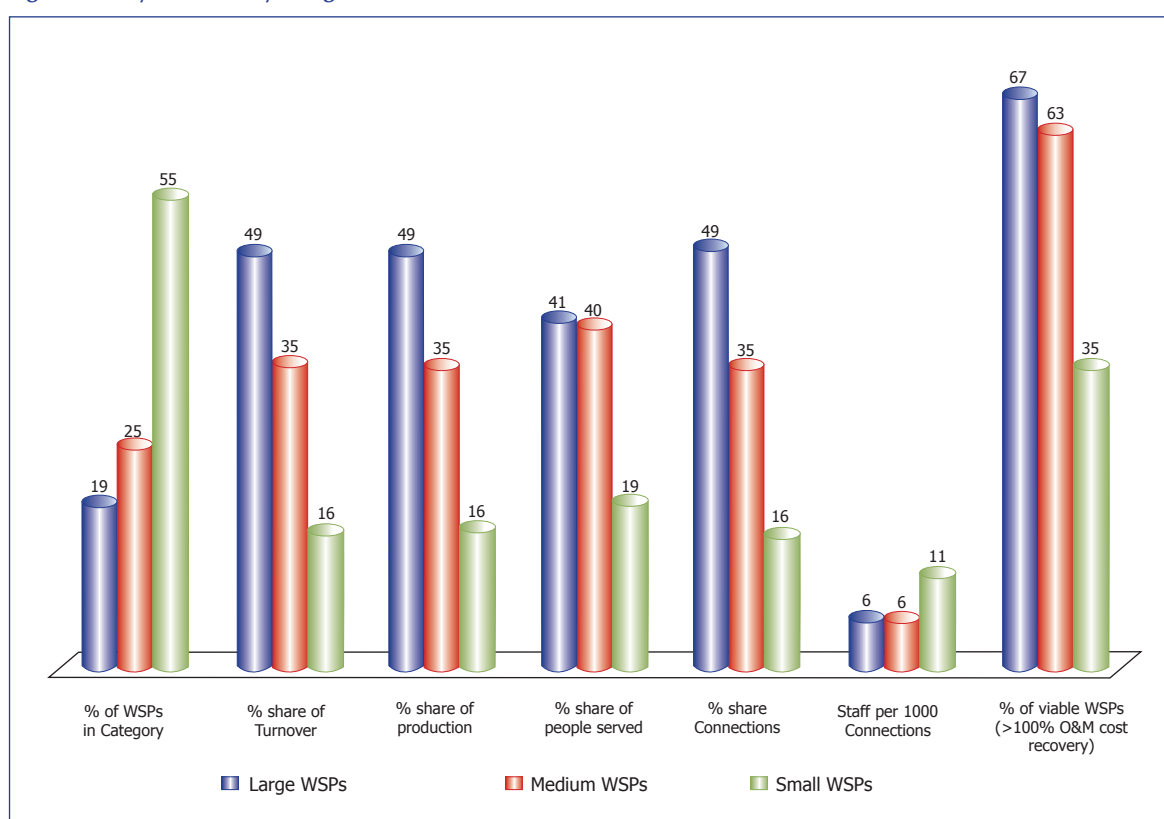
*Average figure

Table 3.24 gives a summary of the respective categories with respect to turnover, production, people served, and staffing.

Table 3.24: Summary of WSP Categories – Rural

WSP Category	No. of WSPs	Turn-over in Billion Ksh	Production in million m3	People served in millions	No. of sconnections	No. of staff
Large	6	0.22	21	0.43	80,780	445
Medium	8	0.16	15	0.42	57,856	334
Small	17	0.07	7	0.20	26,069	288

Fig 3.22: Analysis of WSPs by Categories



Analysis of WSPs by categories (Fig 3.22) shows that while there are only 6 WSPs out of 31 rural providers (19%) within the large category, their combined total turnover represents 49% of the total reported turnover and they account for 41% of the total population served in the rural sector. Further, most of the WSPs in the Large Category fulfill the criteria for O&M cost recovery, while more than two thirds of the small WSPs are not viable. This firmly establishes the case for clustering for viability.

3.4.1 Ranking Analysis

The overall ranking has been considered for the 31 rural providers who submitted complete data in the year 2009/10. From the scores of the overall ranking for the year 2009/10, Ngandori Nginda emerged in first position, followed by Tetu Aberdare, Muthambi 4K, Gatamathi and Ngagaka in second, third, fourth and fifth positions respectively.

The five least performing providers for the period 2009/10 were Nyandarua, Lugari District (DWO scheme), Mawingo, Upper Chania and Kinja.

Table 3.25: Overall Ranking and Ranking by Category for Rural WSPs 2009/10

INDICATORS	Drinking Water Quality (resid chlor.) in %	Compliance with res. Chlor. Standards in %	Drinking Water Quality (bacteriological) in %	Compliance with bacteriological Standards in %	Non-Revenue Water in %	Water coverage in %	Total Sanitation coverage in %	Hours of supply No.	Staff per 1000 connections	Collection efficiency in %	Cost recovery O&M in %	Metering ratio in %	Score	Rank	Overall Rank
Large (10,000- 34,999 Connections)															
Tetu Aberdare	91	100	44	100	58	82	100	21	7	95	103	84	116	1	2
Kahuti	100	100	9	100	69	29	93	20	11	86	115	61	83	2	6
Othaya Mukurweini	95	98	104	78	58	50	66	20	9	70	149	50	80	3	8
Gatundu South	No data	No Data	No Data	No Data	69	50	90	18	10	78	131	58	57	4	19
Gichugu	No data	No Data	No Data	No Data	74	27	92	20	14	90	89	15	57	5	21
Muranga South	79	95	100	87	53	38	86	10	11	84	50	32	44	6	25
Medium (5000- 9,999 Connections)															
Ngandori Nginda	63	100	8	100	26	62	83	9	9	106	155	8	128	1	1
Gatamathi	95	94	No Data	No Data	72	30	96	18	7	96	122	50	98	2	4
Ngagaka	89	94	No Data	No Data	70	37	81	10	8	92	126	94	96	3	5
Turu	No data	No Data	14	100	75	47	71	24	16	94	95	77	66	4	14
Imetha	100	100	100	100	74	41	75	20	31	73	70	82	59	5	17
Nithi	76	100	13	100	79	45	78	24	9	71	62	75	59	6	18
Gatanga	No data	No Data	2	100	38	30	No data	3	5	72	135	67	52	7	23
Karimenu	No data	No Data	13	75	89	21	100	5	6	81	113	70	50	8	24
Small (Less than 5000 connections)															
Muthambi 4K	No data	No Data	No Data	No Data	42	64	86	20	9	88	81	92	101	1	3
Githunguri	1	100	29	100	30	24	42	8	13	77	138	96	81	2	7
Tachasis	No data	No Data	No Data	No Data	44	19	No data	24	11	105	124	31	79	3	9
Murugi Mugumango	No data	No Data	No Data	No Data	67	62	81	18	7	85	77	70	76	4	10
Kyeni	100	68	No Data	No Data	38	15	80	12	14	112	70	28	74	5	11
Uasin Gishu District	14	100	42	100	38	20	91	5	58	103	19	92	74	6	12
Kikanamku	No data	No Data	No Data	No Data	51	81	91	24	8	70	98	0	69	7	13
Kathita Kiirua (CEFA)	33	66	83	90	60	56	35	24	76	100	113	80	66	8	15
Embe	93	95	88	100	86	17	76	15	31	83	104	55	60	9	16
Engineer	No data	No Data	No Data	No Data	No data	22	No data	8	5	90	99	0	57	10	20
Trans Nzoia District	91	90	100	100	25	10	47	10	87	83	5	0	53	11	22
Ruiru Thau	No data	No Data	No Data	No Data	85	50	No data	8	17	83	133	80	40	12	26
Kinja	No data	No Data	No Data	No Data	No data	41	65	12	8	68	85	0	37	13	27
Upper Chania	No data	No Data	75	100	No Data	63	No data	12	16	No Data	100	5	29	14	28
Mawingo	No data	No Data	No Data	No Data	95	50	50	24	34	7	8	0	26	15	29
Lugari District	100	100	50	100	No data	2	No data	9	20	66	49	0	20	16	30
Nyandarua North	67	74	25	67	42	47	No data	5	26	51	18	61	11	17	31



3.4.2 Performance Over time

Table 3.26 shows the overall score of Rural WSPs in the year 2009/10 as compared to 2008/09. Wasreb recognizes the WSPs that have shown improvement and shames those that have declined in performance.

Table 3.26: Performance of Rural WSPs Over time

	WSPs	2009/10	2008/9	Scores gained (+)/ dropped(-) from 2008/09 to 2009/10
Best Ten Performers	Ngandori Nginda	128	86	42
	Tetu Aberdare	116	119	-3
	Muthambi 4K	101	96	5
	Gatamathi	98	105	-7
	Ngagaka	96	96	0
	Kahuti	83	82	1
	Githunguri	81	90	-9
	Othaya Mukurweini	80	96	-16
	Tachasis	79	82	-3
	Murugi Mugumango	76	n/a	n/a
	Kyeni	74	74	0
	Uasin Gishu District	74	50	24
	Kikanamku	69	n/a	n/a
	Tuuru	66	88	-22
	Kathita Kiirua (CEFA)	66	95	-29
	Embe	60	40	20
	Imetha	59	60	-1
	Nithi	59	64	-5
	Gatundu South	57	57	0
	Engineer	57	58	-1
	Gichugu	57	n/a	n/a
	Trans Nzoia District	53	77	-24
	Gatanga	52	113	-61
	Karimenu	50	75	-25
	Muranga South	44	73	-29
	Ruiru Thau	40	n/a	n/a
	Kinja	37	n/a	n/a
	Upper Chania	29	12	17
	Mawingo	26	n/a	n/a
	Lugari District	20	n/a	n/a
	Nyandarua North	11	52	-41

3.4.3 Performance of WSPs by Indicators

(a) Water Coverage

During the year under review, water supply coverage improved from 30% in the last reporting period (weighted average of 2008/09 adjusted for separation into urban and rural) to 37%, indicating progress as compared to the last reporting period. The baseline analysis confirms a positive trend, indicating an increase from 30% to 39%.

Nevertheless, coverage is still far below the acceptable sector benchmark of at least 80%. Out of the WSPs assessed in this category, only two WSPs – Tetu Aberdare and Kikanamku – passed the test with water coverage reaching 82% and 81% respectively. With the rest of the population getting its supply from unregulated sources, discrimination in terms of water quality (unsafe water) and/or tariffs for those getting their water from informal vendors, continues to be a reality.

It is the responsibility of WSBs and their agents to ensure that this scenario is reversed in line with the Bill of Rights – inter alia through increased use of low-cost technologies.

Fig 3.23: Water Coverage in Percentage

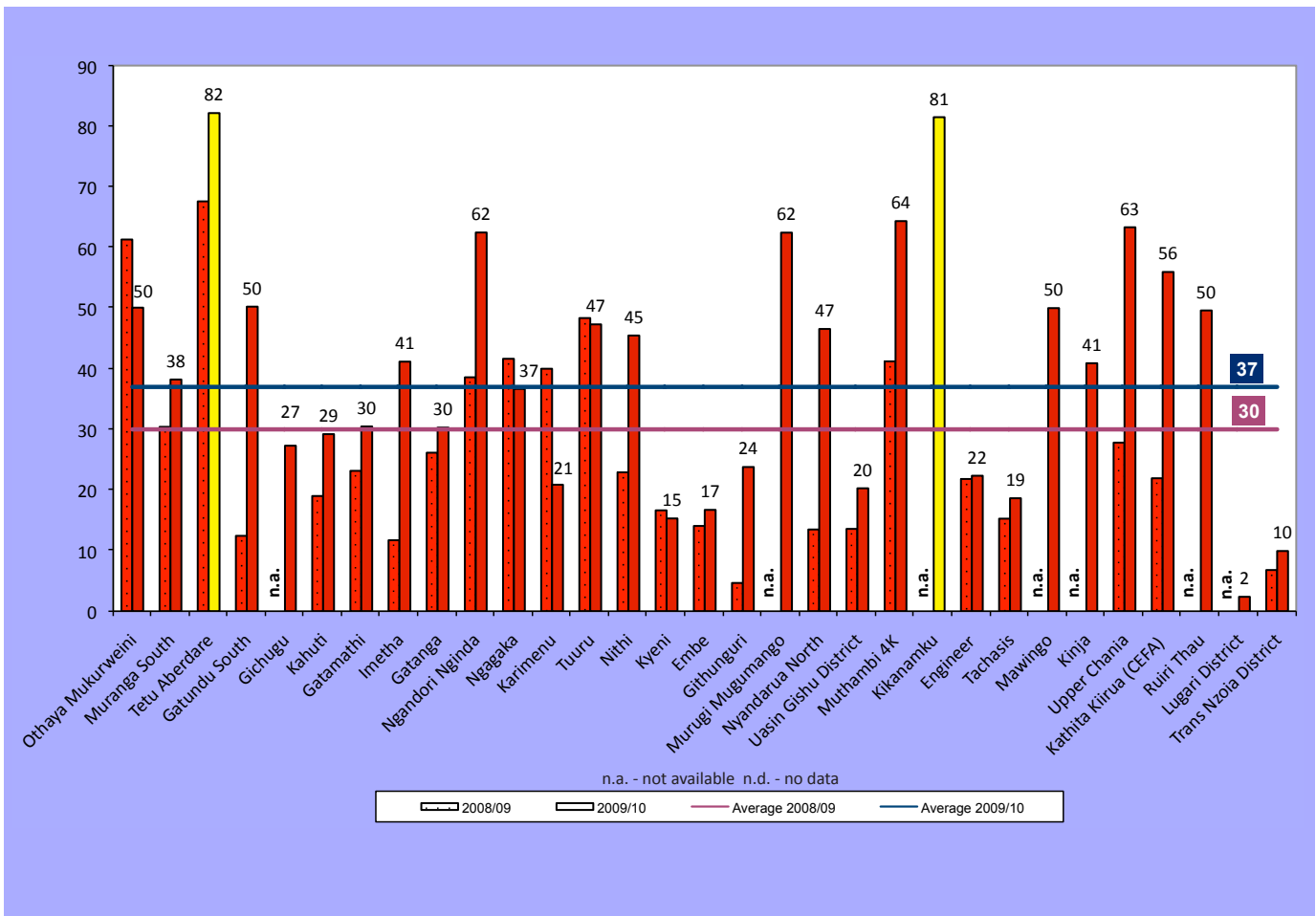




Table 3.27: Baseline Comparison for Water Coverage

Indicators	2008 / 2009 Same baseline	2009/2010 same baseline	Increase / Decrease	2009/2010 - including new WSPs
Water Coverage %	30	39	9	37

(b) Sanitation Coverage

During the reporting period, the weighted average in sanitation coverage improved considerably, from 66% to 80% in 2008/09 and 2009/10 respectively. This improvement can mainly be attributed to better reporting and data collection by the WSPs compared to the previous reporting period.

Some WSPs still report coverage far below the sector benchmark of at least 80%, with Githunguri, Mwingo Kathita Kiirua (CEFA) and Trans Nzoia District showing the worst performance.

Since WSPs do not manage on-site sanitation facilities like pit latrines, they cannot be held fully accountable for the performance (negative and positive) on this indicator. At the same time, the promotion of on-site sanitation solutions is all the more relevant for rural WSPs, since they do not operate sewerage networks. It is in this light that Wasreb is determined to implement mechanisms to reward WSP efforts in that area and encourages them to make use of funding opportunities that might become available.

Fig 3.24: Sanitation Coverage in Percentage

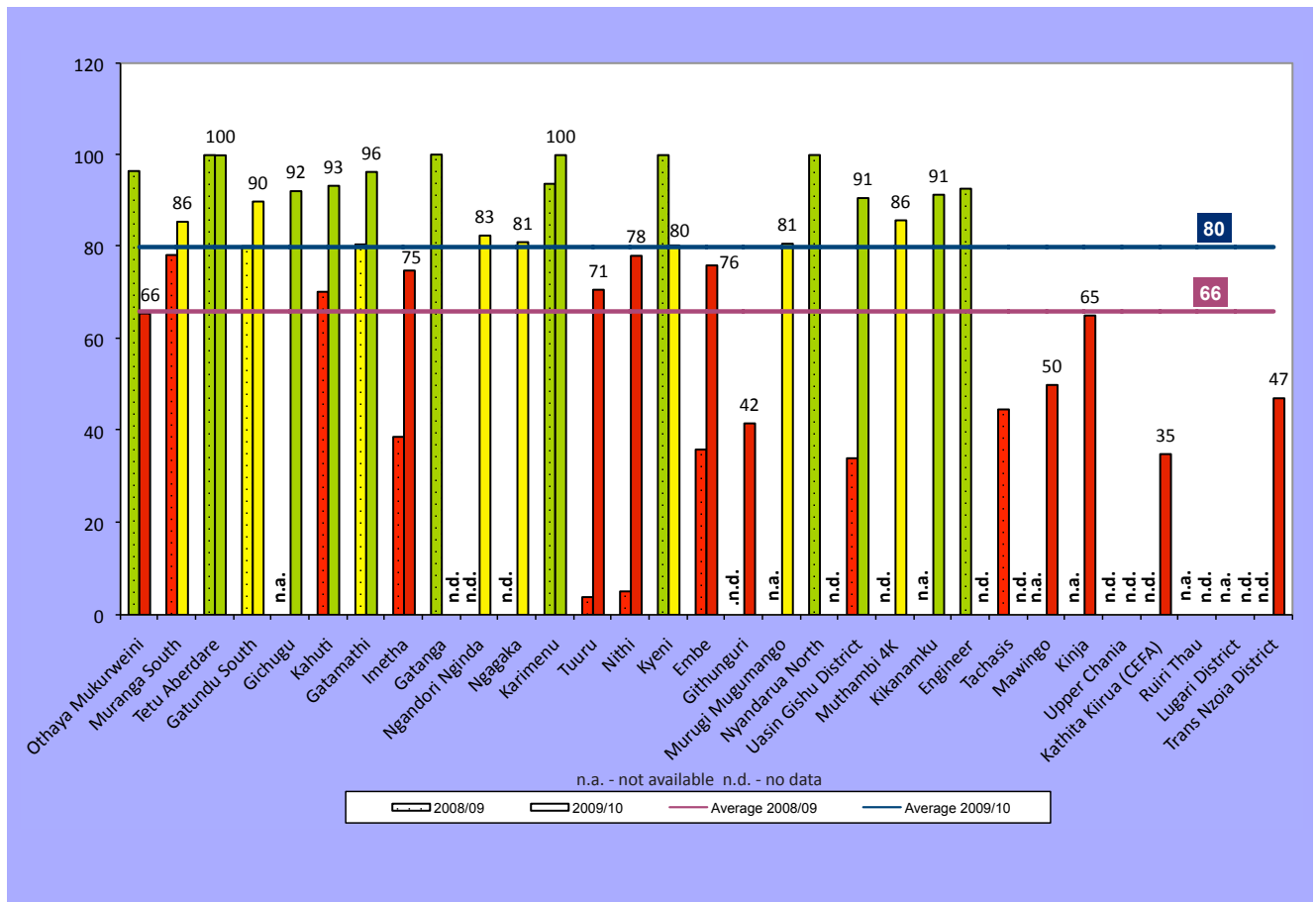


Table 3.28: Baseline Comparison for Sanitation Coverage

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Sanitation Coverage %	66	80	14	80

(c) Non-Revenue Water

Despite some improvement in the weighted average, the extremely high average NRW of 61% is an indicator of serious inefficiencies of rural WSPs. The latter, on average, billed only 39% of what they produced. This has serious consequences for it implies that customers indirectly pay for inefficiencies– higher production costs – of the WSPs. Higher production costs lead to higher pricing, which then limits the affordability of water.

A big portion of these inefficiencies relate to poor corporate governance within the WSPs. Poor management practices result in increased commercial losses. This is unacceptable if one considers that the 31 rural providers at an average tariff of Kshs 26 produce water losses amounting to about Kshs 700 million per year.

Wasreb urges these WSPs to initiate measures that can contribute to cutting down on these losses. Complying with the Corporate Governance Guideline is a good start.

Fig 3.25: Non-Revenue Water in Percentage

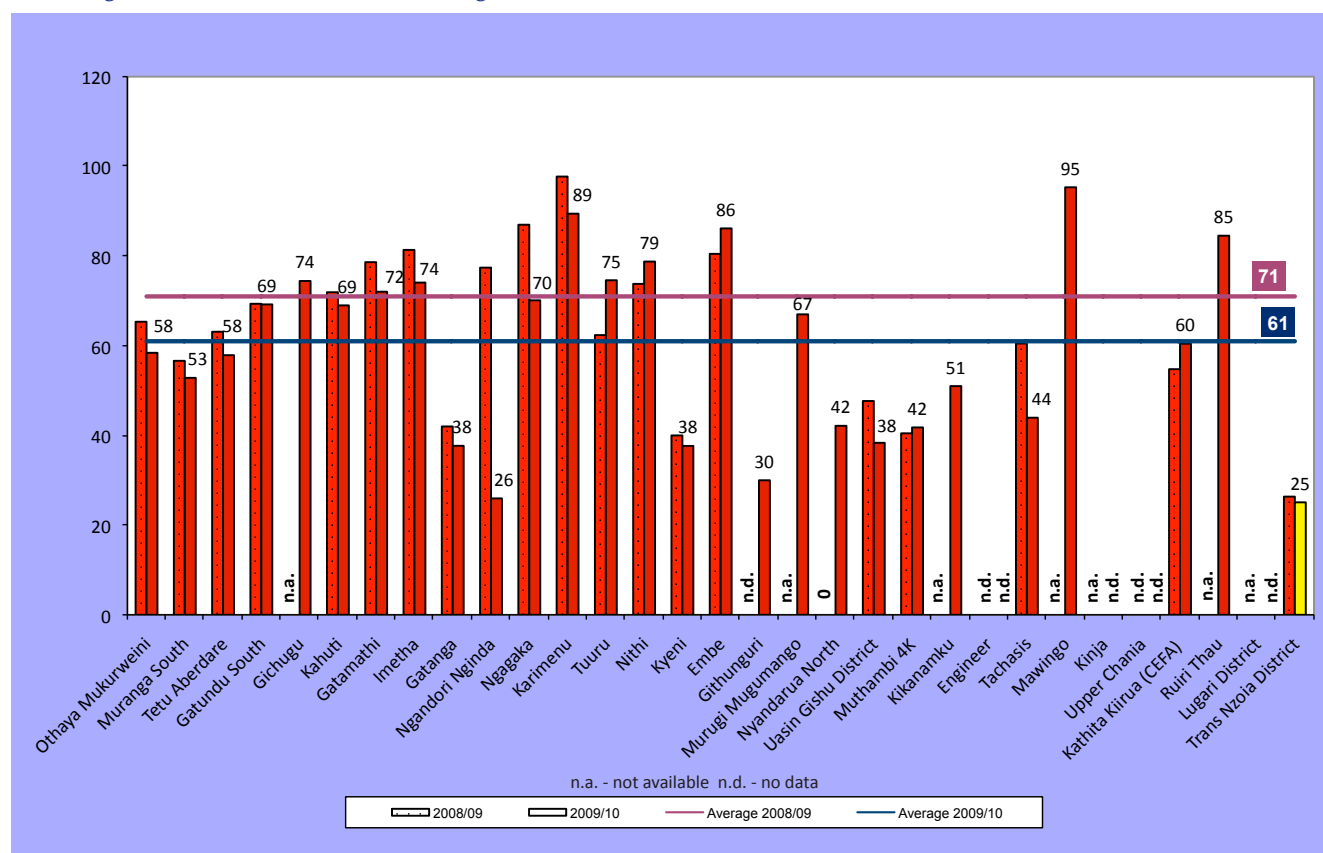


Table 3.29: Baseline Comparison for Non-Revenue Water

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
NRW %	71	60	-11	61

(d) Dormant Connections

While the national average improved by 5% from 48% in 2008/09 to 43% in 2009/10 (Fig 3.26), the percentage of dormant connections remains far too high, implying lack of sufficient investments and capacity within most rural WSPs to provide reliable and sustainable services.

Fig 3.26: Dormant Connections in Percentage

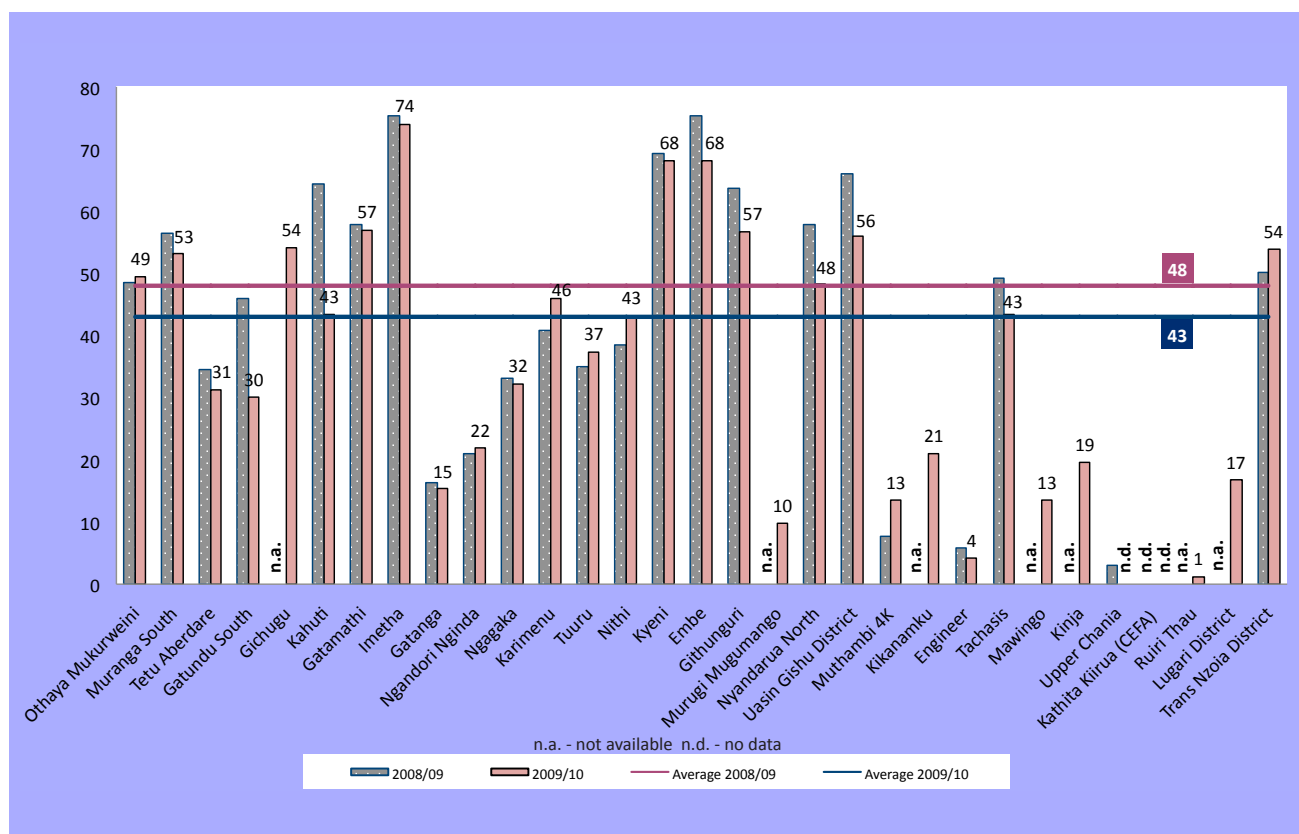


Table 3.30: Baseline Comparison for Dormant Connections

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Dormant Connections %	48	44	-4	43

(e) Water Quality

(i) Drinking Water Quality – Residual Chlorine Tests

The average number of tests actually carried out vis-à-vis the required number of tests slightly increased from 83% in 2008/09 to 87% in 2009/10. However, apart from the fact that only 9 WSPs (29%) were within the acceptable sector benchmark of 90%, the finding that only 17 out of 31 rural providers submitted credible data is alarming. To ensure that the water provided to consumers is safe, WSPs are obliged to at least fulfill the minimum standards for water treatment, complemented by regular tests as per the Guidelines on Water Quality and Effluent Monitoring.

Fig 3.27: Drinking Water Quality – Residual Chlorine Tests

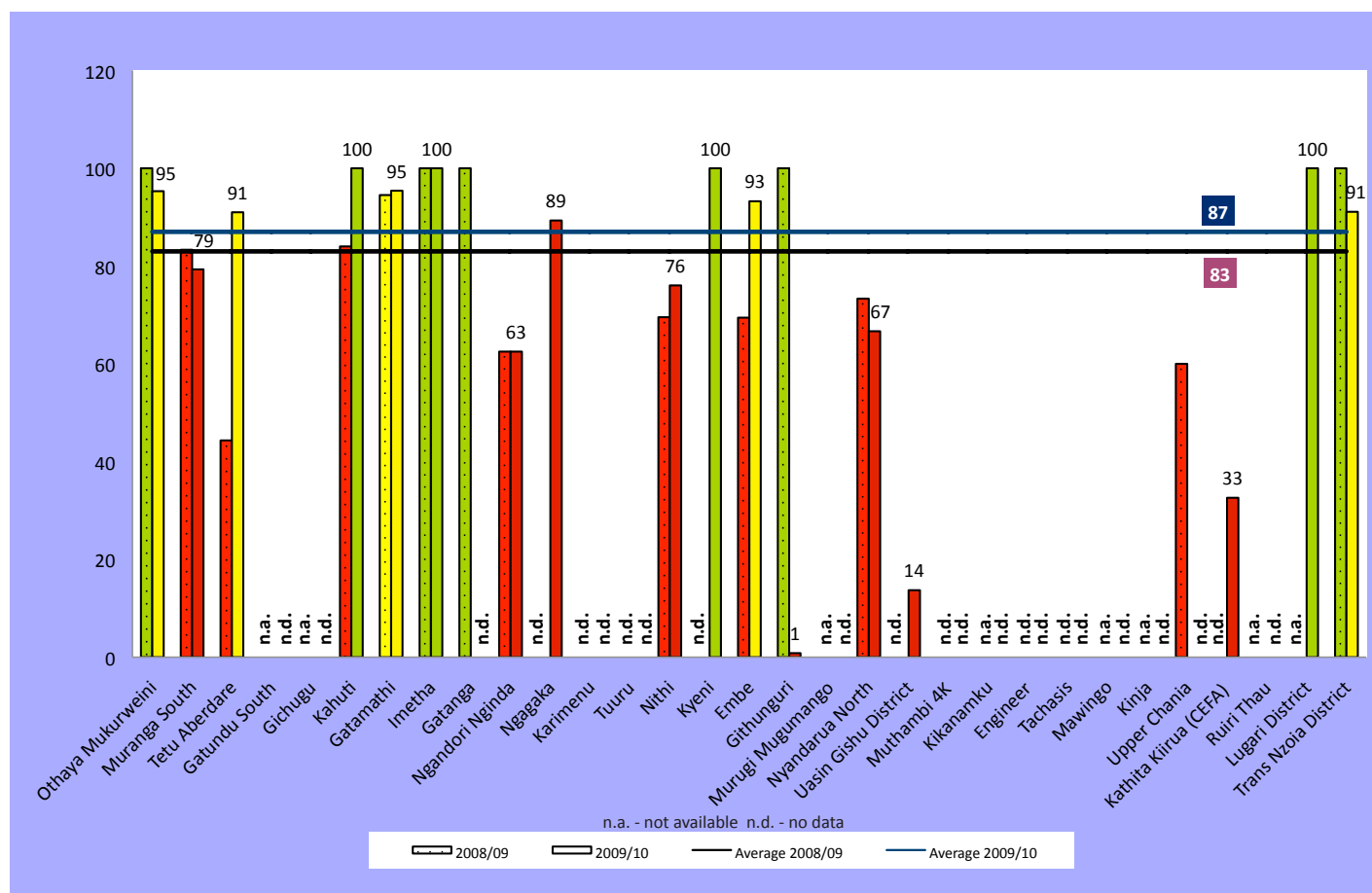


Table 3.31(a): Baseline Comparison for Drinking Water Quality - Residual Chlorine

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Drinking Water Quality Tests – Residual Chlorine%	83	87	4	87

(ii) Compliance with Residual Chlorine Standards

Compliance with residual chlorine standards of those tests that were actually conducted increased from 92% in 2008/09 to 96% in 2009/10. The average performance was within the acceptable sector benchmark of at least 90%. This positive performance needs to be qualified, however, as only about 50% of the WSPs report, and those who report still conduct fewer tests than required.

Fig 3.28: Compliance with Residual Chlorine Standards in Percentage

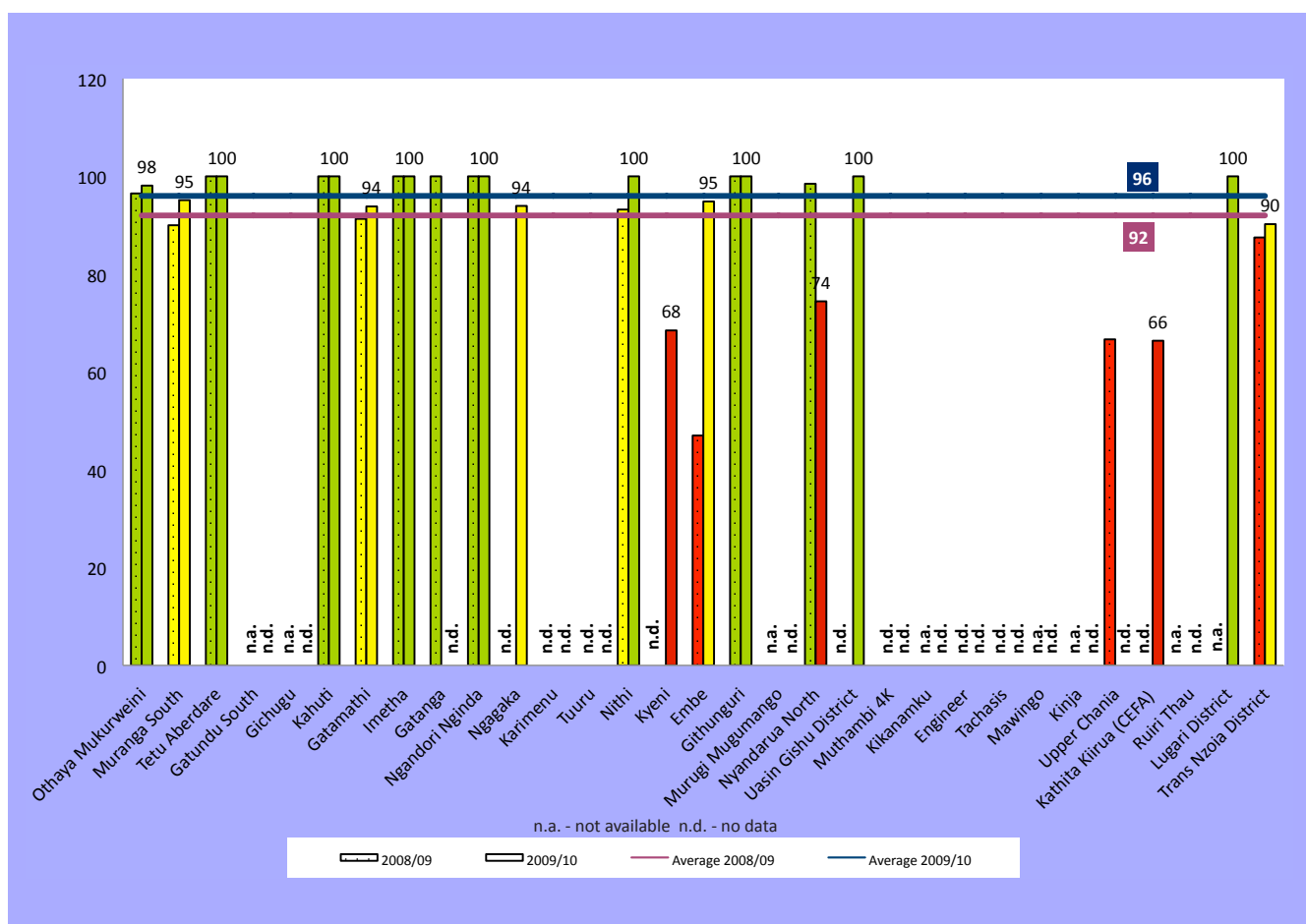


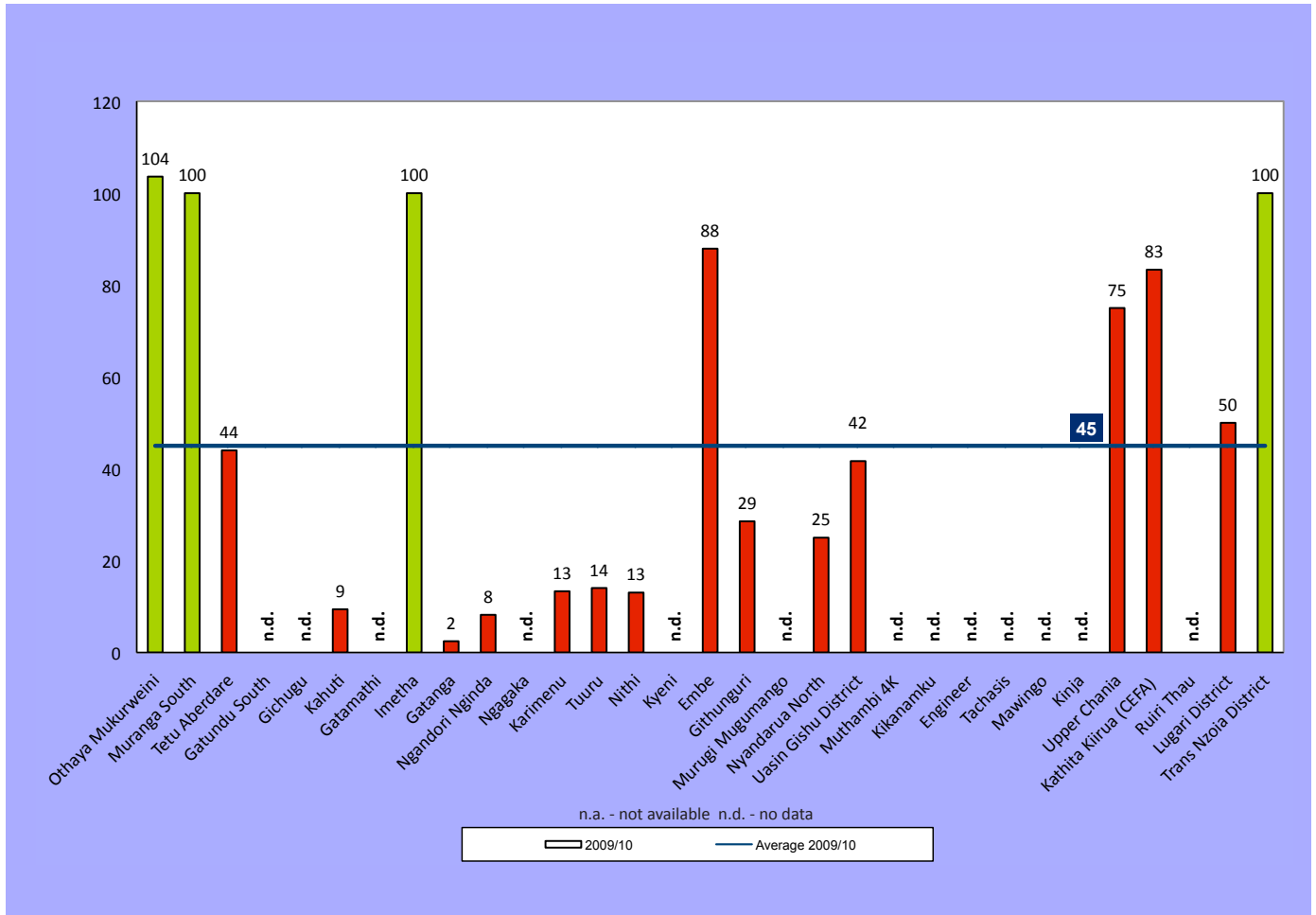
Table 3.31(b) Baseline Comparison for Compliance to Residual Chlorine Standards

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Compliance to Residual Chlorine Standards %	92	96	4	96

(iii) Drinking Water Quality – Bacteriological Tests

The average performance on this indicator was an unsatisfactory 45% against a sector benchmark of at least 90%. Only 4 WSPs (13%) were within the good sector benchmark, the rest recorded an unacceptable performance. Hence, the concerns expressed above apply for this indicator as well. Regular bacteriological tests are a must to ensure that water provided to consumers is safe.

Fig 3.29: Drinking Water Quality – Bacteriological in Percentage

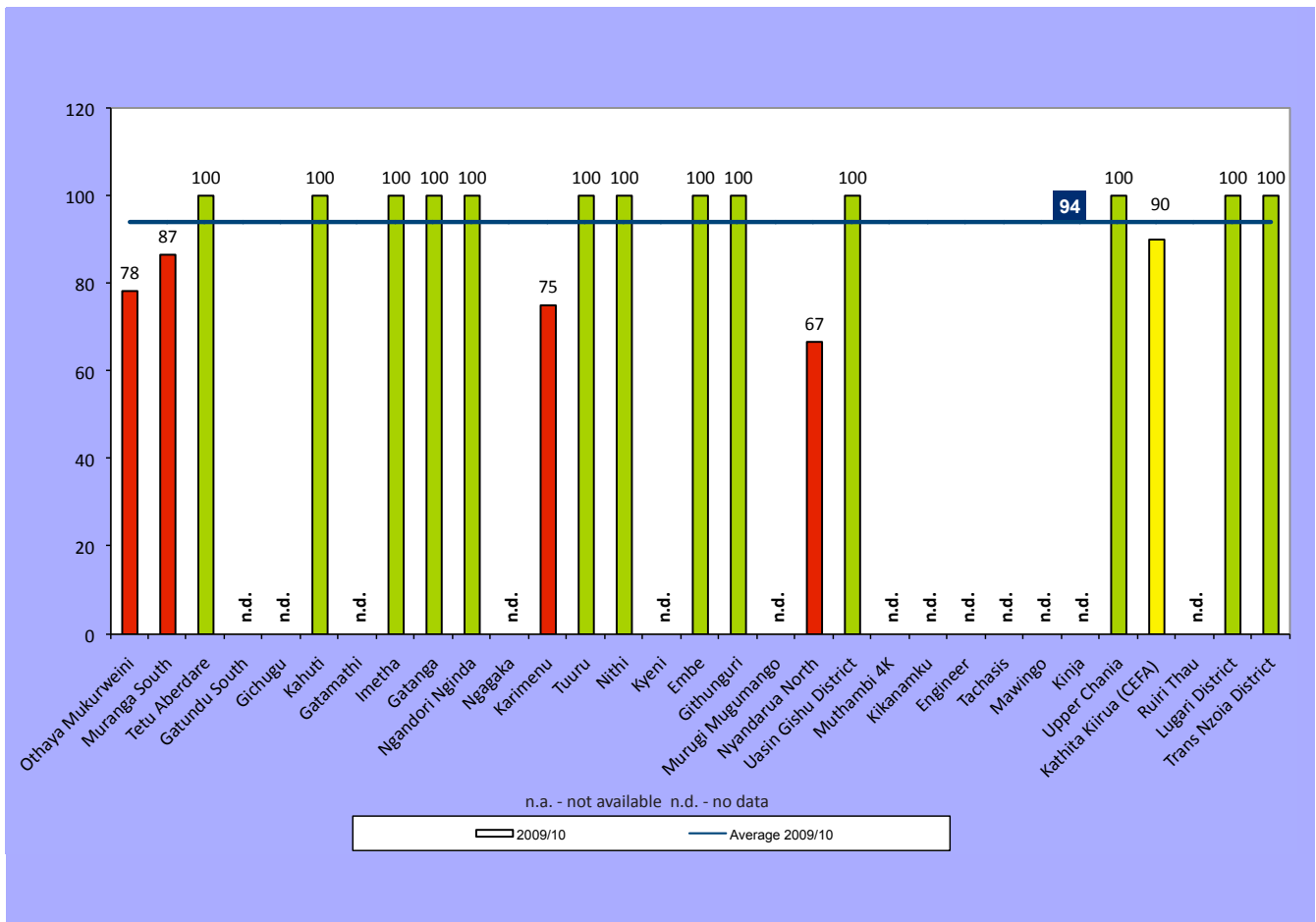


(d) Compliance to Bacteriological Standards

In the reporting period, the average compliance was assessed at 94% with 13 WSPs (42%) within the acceptable sector Benchmark of >90%. It is, however, notable that some WSPs face challenges in ensuring the safety of the water they provide.



Fig 3.30: Compliance to Bacteriological Standards in Percentage



Unsafe water goes against the criteria of Human Right to Water and Sanitation. Therefore, WSBs need to assist WSPs in carrying out regular tests (especially bacteriological) by investing in the establishment of well equipped laboratories so that the quality of water is guaranteed.

(f) Hours of Supply

Different sector benchmarks apply for this indicator depending on the population size in a WSP's service area (refer to Table 3.4).

Nineteen (19) out of 31 rural providers (61%) were within the acceptable sector benchmark of at least 12 hours (serving less than 100,000 people) and 16 hours (serving more than 100,000 people). Performance on this indicator improved slightly from 14 hours to 15 hours in 2008/09 and 2009/10 respectively. This is confirmed by the positive trend in the baseline analysis.

Considering that irregular supply is one of the biggest concerns of consumers and often forces them to get their water from unregulated private vendors, WSPs need to put in place strategies to improve the reliability of their services. There is need for WSPs like Muranga South, Ngagaka, Karimenu and Ruiru Thau to focus on reducing their NRW as a way of improving performance in this indicator.

Fig 3.31: Hours of Supply

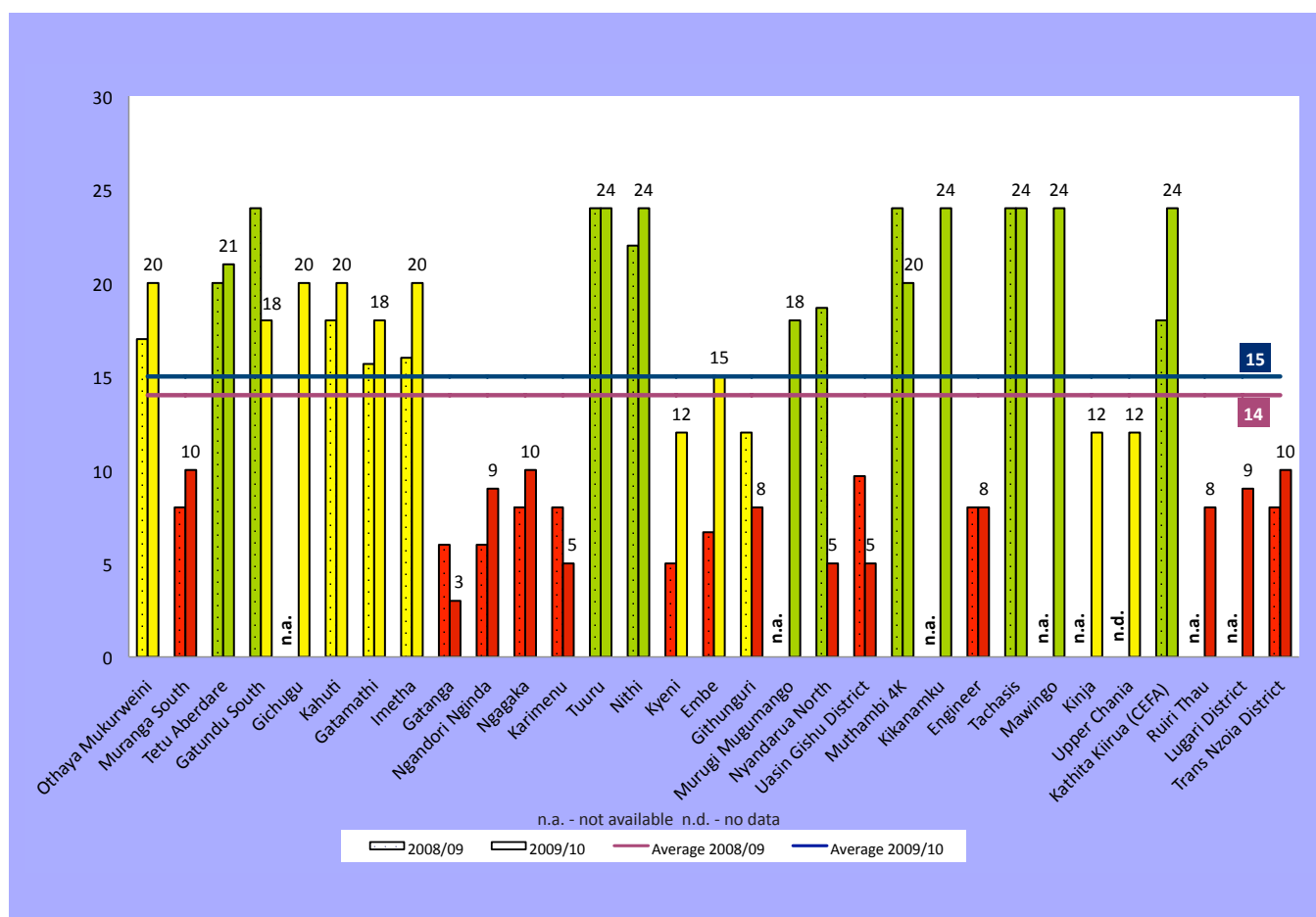


Table 3.32: Baseline Comparison for Water Hours of Supply

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Hours of supply	16	17	1	15

(g) Metering Ratio

Considering the weighted average, Metering Ratio went down slightly by 1% from 59% to 58% in 2008/09 and 2009/10 respectively. Yet, looking at the baseline analysis, a marginal positive trend can be identified. Nevertheless, the performance on metering ratio still remains below the acceptable sector benchmark of at least 95%. The actual average metering ratio is lower since the reported average includes a high number of non-functioning meters.

Out of 36 rural WSPs, only Githunguri managed a 96% metering ratio. Further, there are cases like Ngagaka, Karimenu or Ruiru Thau, which report metering ratios of 94%, 70% and 80% respectively but at the same time have high NRW levels at 70%, 89% and 85%. This shows that data reliability is still a challenge in this indicator.

Given the central role of metering in reducing NRW, Wasreb has earmarked funds through RTAs for utilization in metering as a way of supporting WSP efforts towards sustainability.



Fig 3.32: Metering Ratio in Percentage

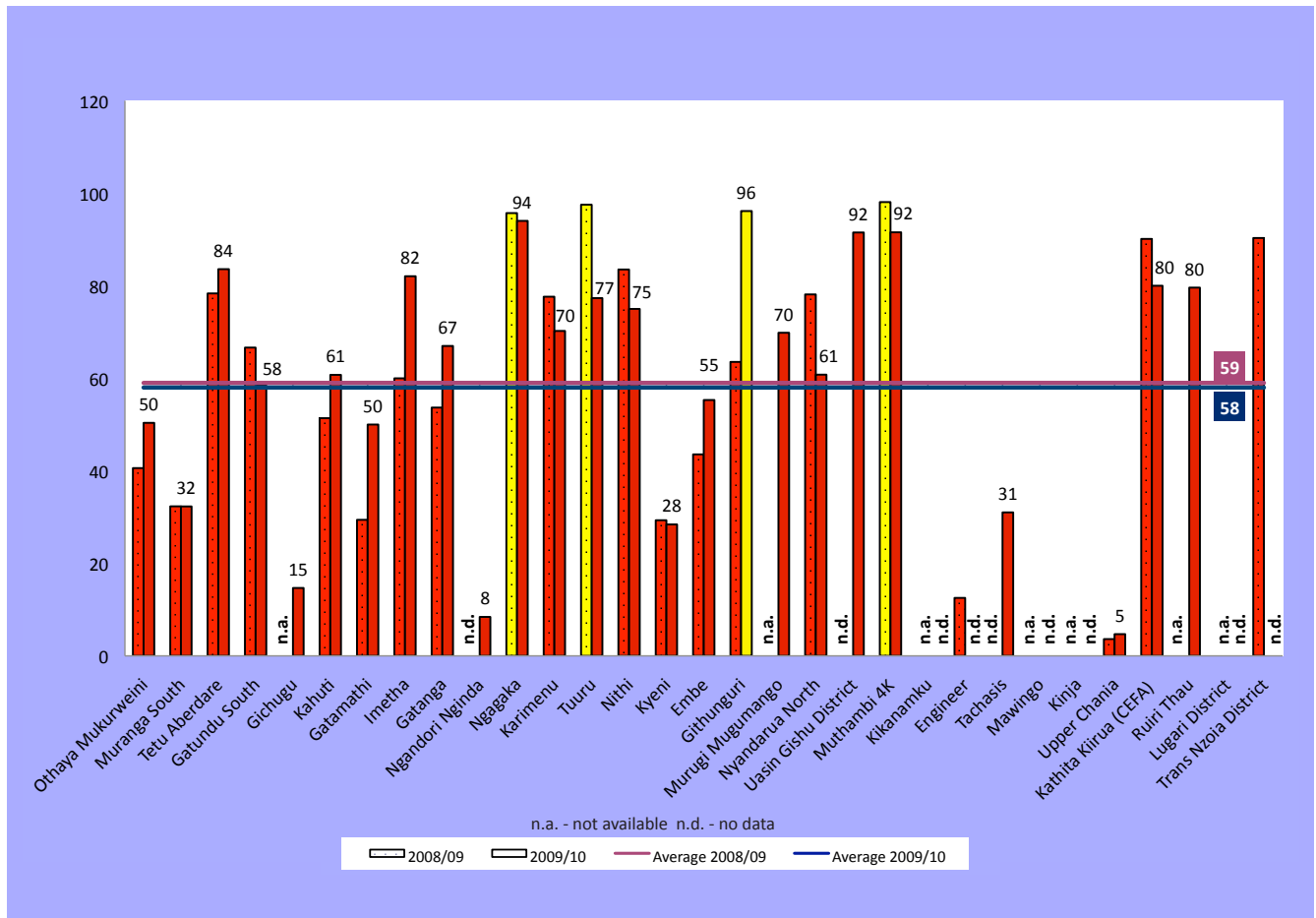


Table 3.33: Baseline Comparison for Metering Ratio

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Metering Ratio %	59	60	1	58

(h) Revenue Collection Efficiency

In the reporting period, average collection efficiency dropped from 84% in 2008/09 to 82% in 2009/10. At the same time, the baseline analysis indicates a positive trend (increase of 3 percentage points). The drop in the average performance can mainly be attributed to inclusion of new smaller WSPs with lower collection efficiencies.

The reporting of collection efficiencies of over 100% is due to WSPs using billing systems that do not differentiate between current collections and arrears.

Fig 3.33: Collection Efficiency in Percentage

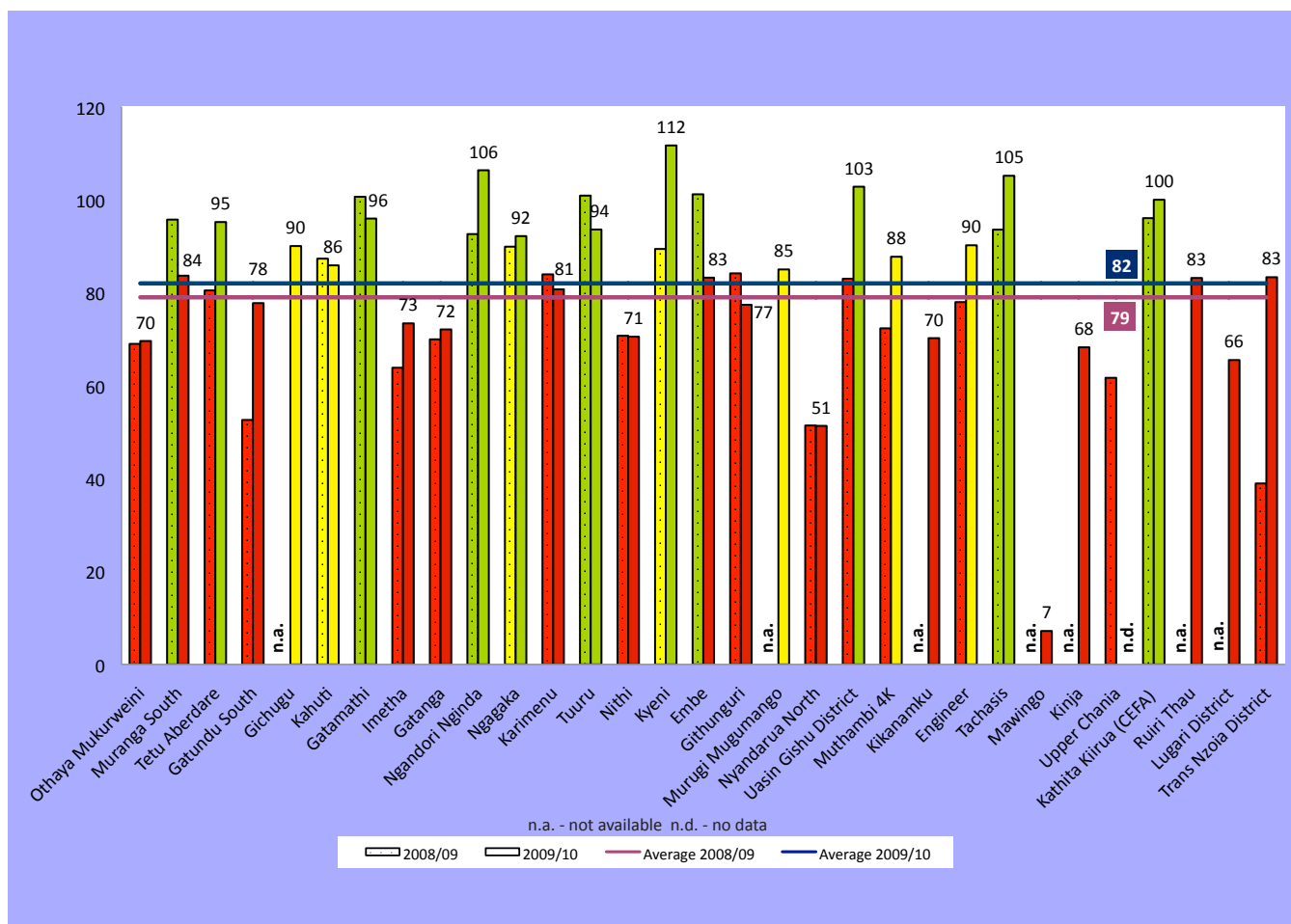


Table 3.34: Baseline Comparison for Revenue Collection Efficiency

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Collection Efficiency %	79	82	3	82

(i) Staff per Thousand Connections

There was a slight improvement in staff efficiency in terms of staff per 1000 connections by a margin of one (1). Yet, efficiency is still below the acceptable sector benchmark of less than 9 staff per 1000 connections.

Different sector benchmarks apply depending on the category a WSP falls in and the number of towns it covers; (refer to Table 3.4 for the benchmarks and Table 3.22 for WSP categories). The different benchmarks have been used in the analysis.

Some utilities recorded ratios as high as 58 (Uasin Gishu District), 76 (Kathita Kiirua) and 189 (Trans Nzoia District). This is an example of small WSPs which cannot reach good efficiency levels as per the benchmark and would need to be clustered with other WSPs to become viable.

Fig 3.34: Staff per Thousand Connections

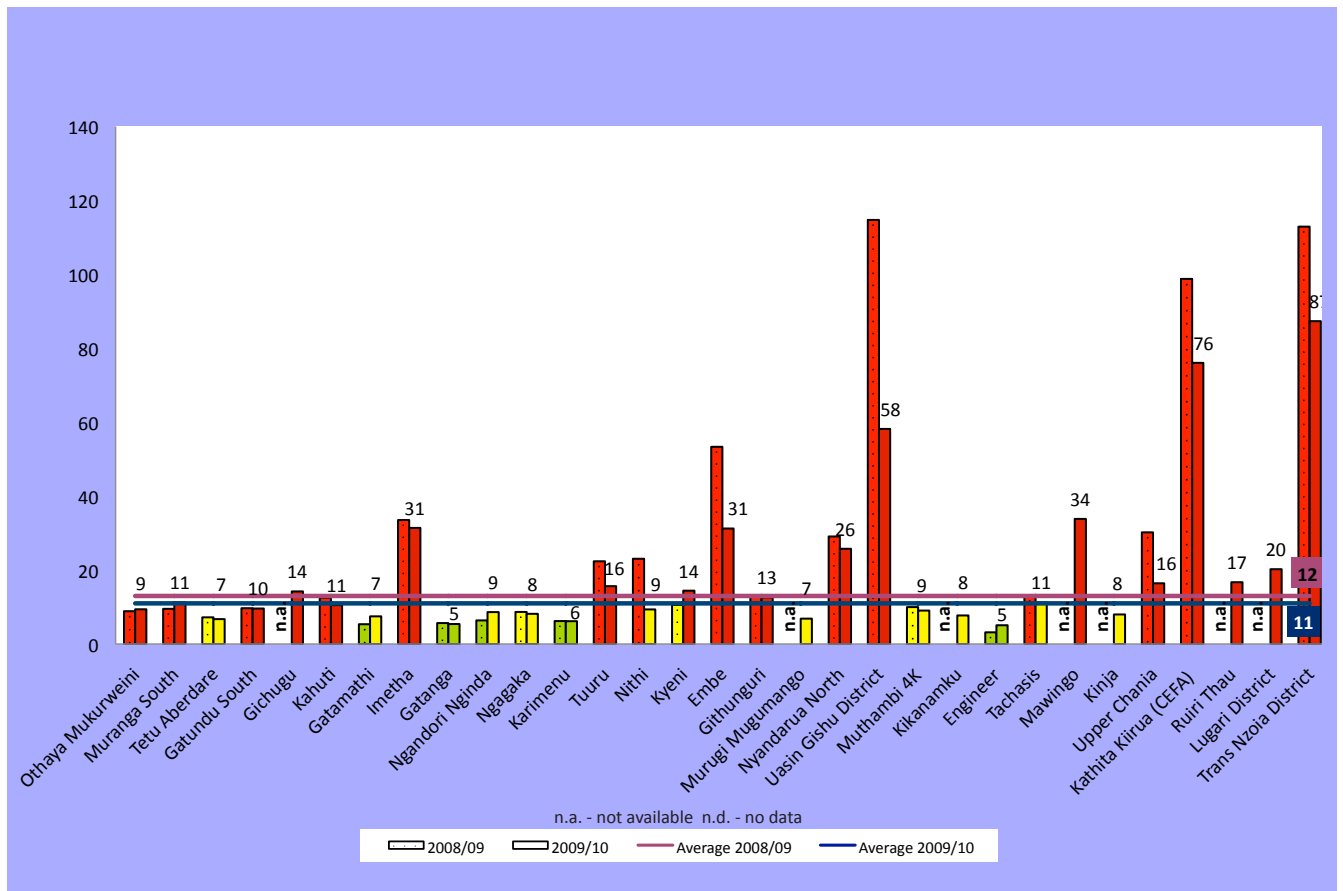


Table 3.35: Baseline Comparison for Staff per one Thousand Connections

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Staff per 1000 connections	12	11	-1	11

(j) O & M Cost Coverage

Average O&M cost coverage improved from 70% in 2008/09 to 92% in 2009/10. This positive trend is confirmed by the baseline analysis. Yet, Othaya Mukurweini (Large Category) and Ngandori Nginda (Medium Category) were the only WSPs able to cover their costs.

Those WSPs who cannot reach commercial sustainability in the medium to long run because of their small size need to cluster with bigger and better managed WSPs. In addition, where need for subsidy has been identified, it should be linked to performance improvements towards sustainability.

Fig 3.35: O&M Cost Coverage in Percentage

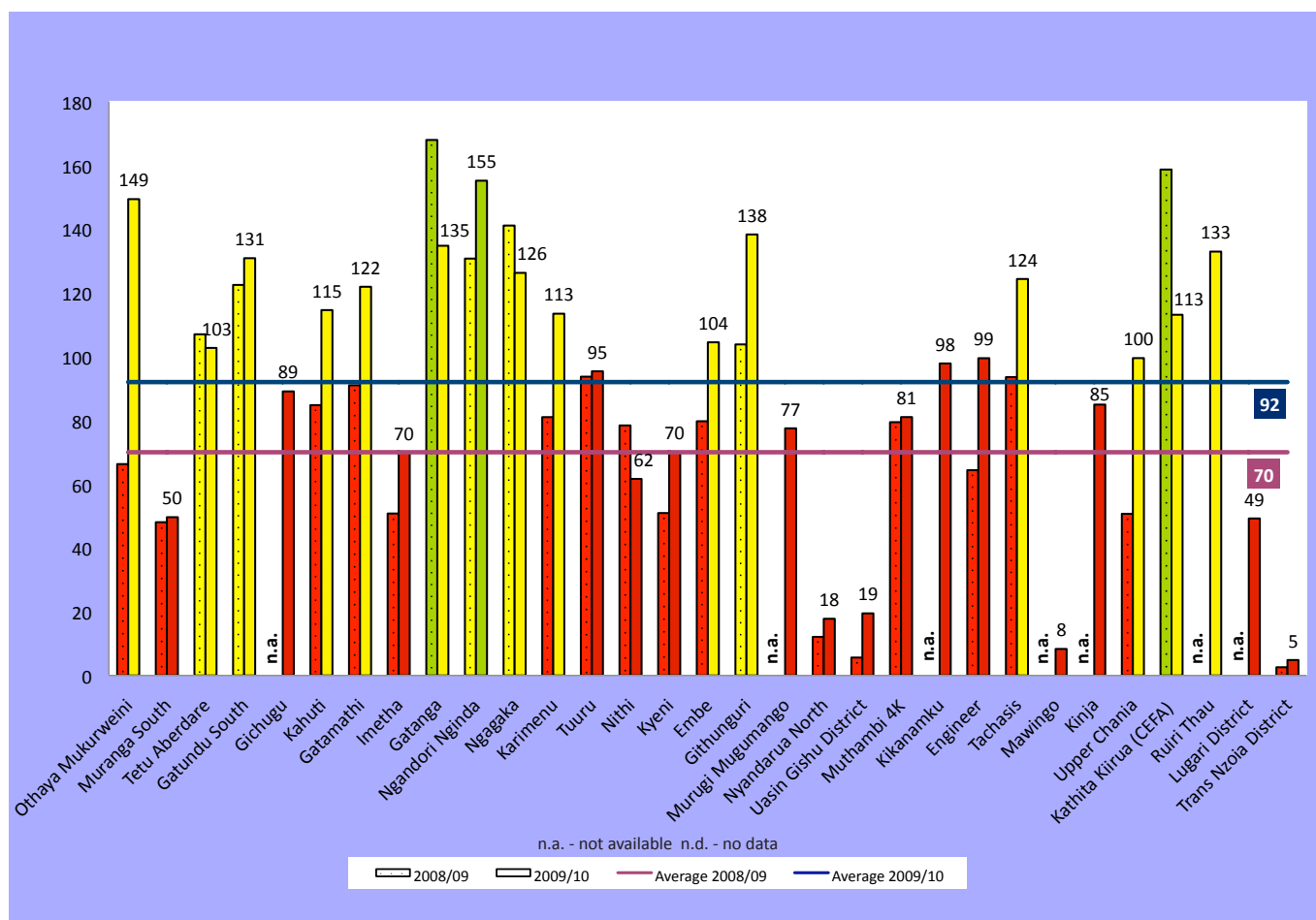


Table 3.36: Baseline Comparison for O&M Cost Coverage

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
O & M Cost Coverage %	70	93	23	92

(k) O&M Cost Coverage by Billing at 85% Collection Efficiency

During the reporting period, the average performance on this indicator improved from 73% in 2008/09 to 96% in 2009/10. This positive trend is confirmed by the baseline analysis. However, only 3 WSPs could fully cover their O&M costs at a collection efficiency of 85%, hinting at the urgency of assessing O&M costs through RTAs for rural WSPs, which so far has only been done for Kahuti.



Fig 3.36: O&M Cost Coverage by Billing at 85% Collection Efficiency

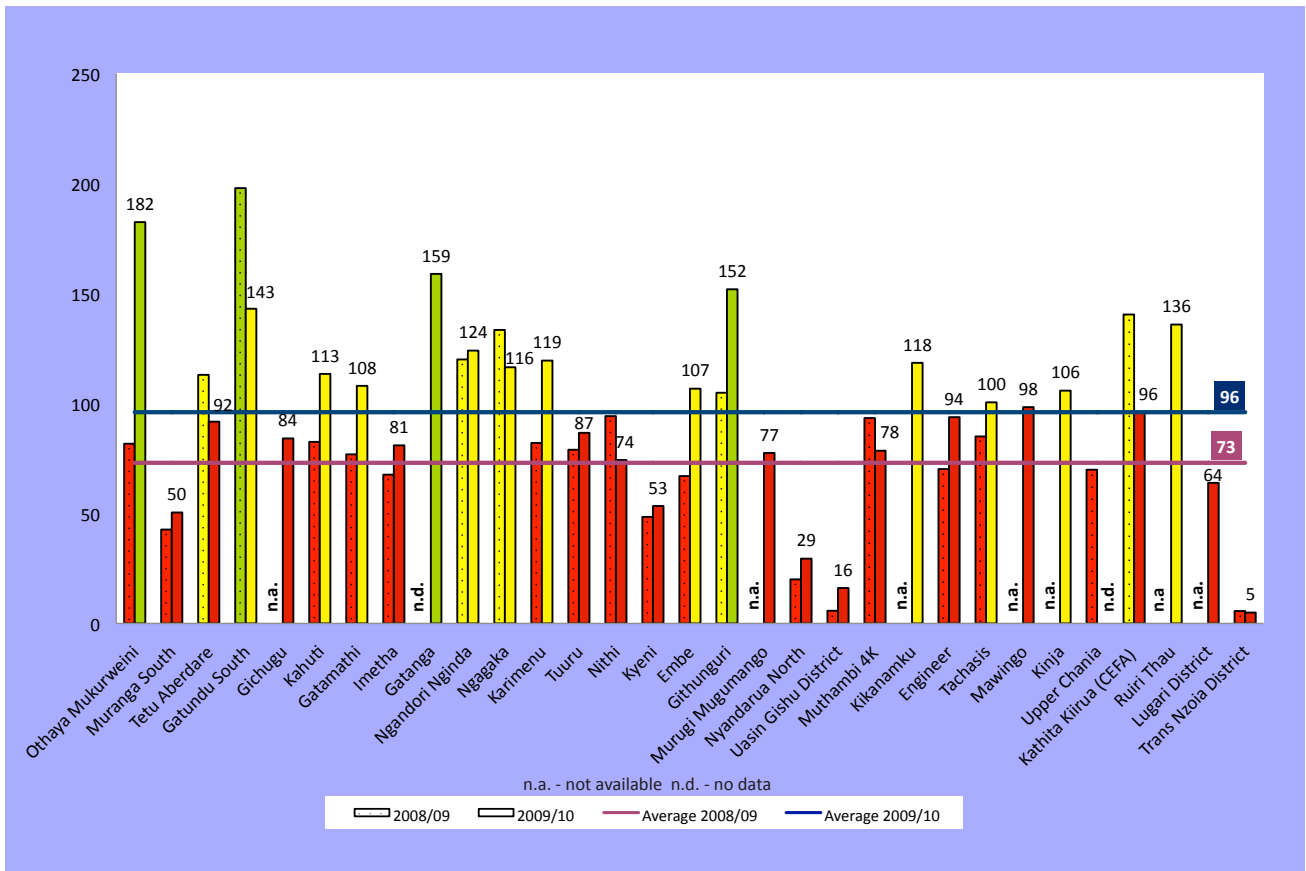
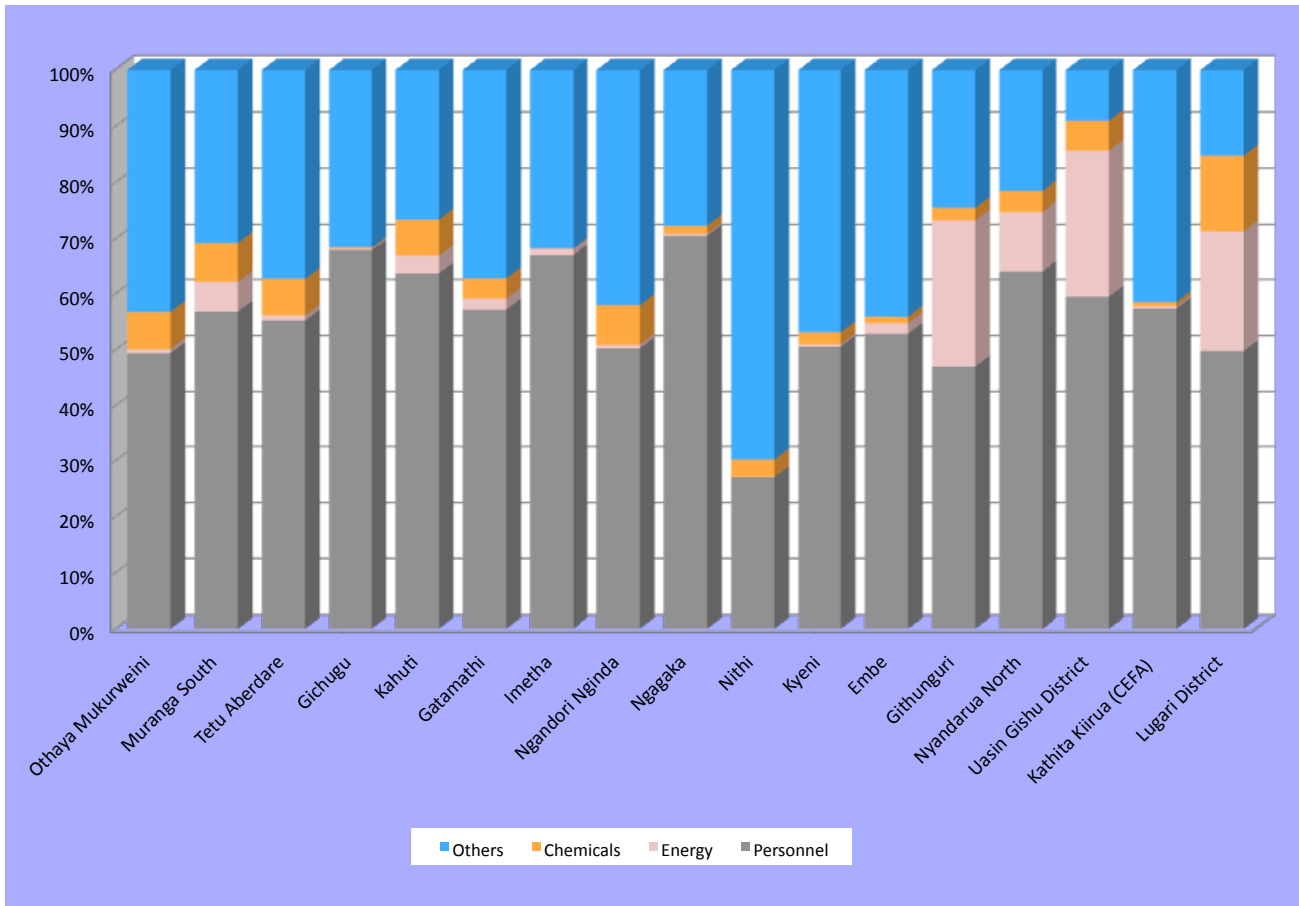


Table 3.37: Baseline Comparison for O&M Cost Coverage at 85% Collection Efficiency

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
O & M Cost Coverage at 85% Collection Efficiency %	76	97	21	96

Figure 3.37 shows the breakdown of O&M cost into the main cost categories of Personnel, Energy, Chemicals and others. It shows that most WSPs have too high personnel costs relative to their overall O&M costs (further analysed below). It also indicates which WSPs operate gravity schemes (low energy costs) and which WSPs spend a lot of money on pumping (high energy costs).

Fig 3.37: O&M Cost Breakdown



(I) Personnel Expenditure as a Percentage of O&M Costs

The average of personnel expenditure as a percentage O&M costs remains far too high. Having slightly deteriorated from 56% in 2008/09 to 57% in 2009/10, it reflects stagnation in terms of pushing efficiency to sustainable levels. WSPs need to ensure that they hire the right staff with the right skills in order to increase efficiency, and reduce the staff per 1000 connections ratio.



Fig 3.38: Personnel Expenditure as a Percentage of O&M Costs

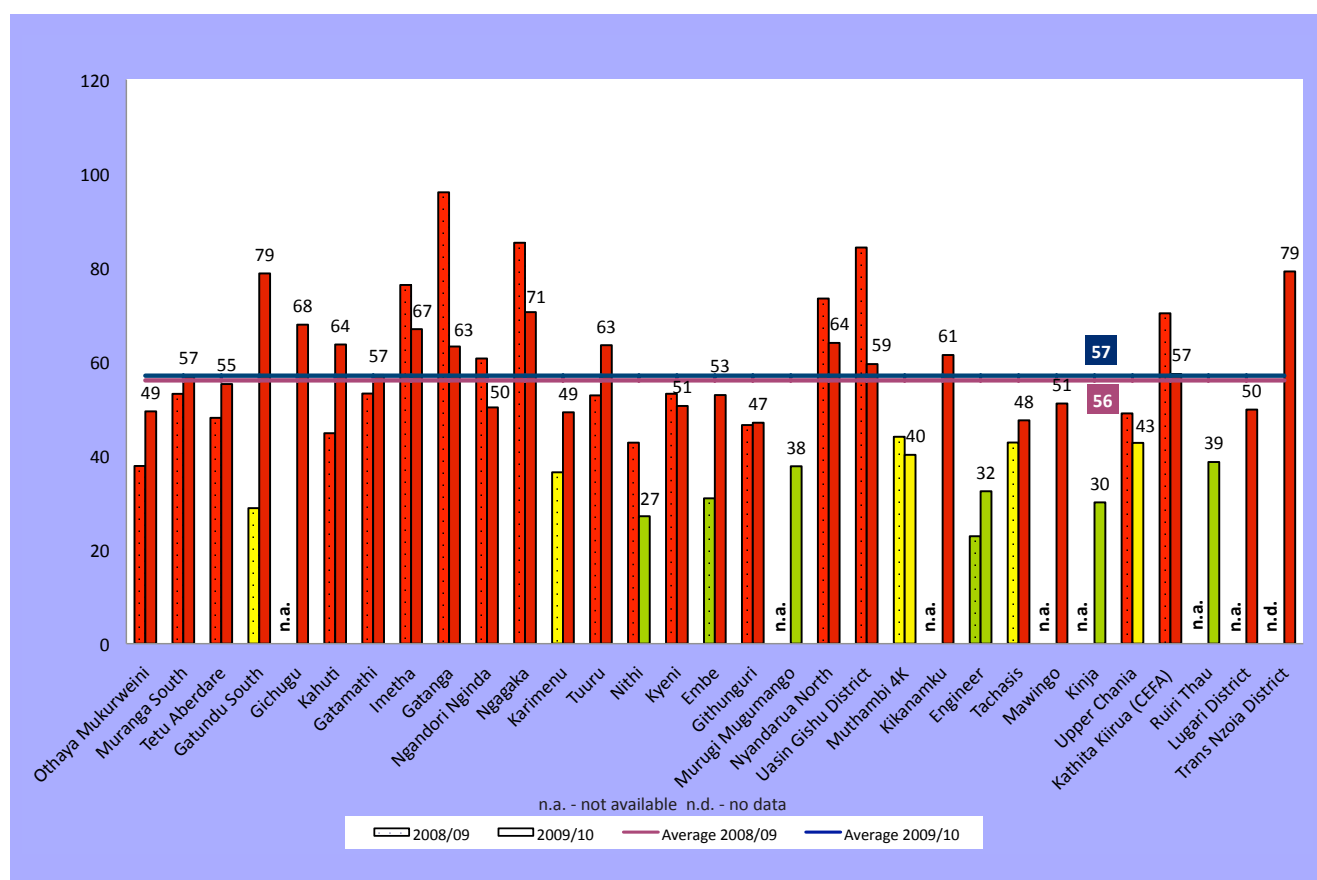


Table 3.38: Comparison for Personnel Expenditure

Indicators	2008 / 2009 Same baseline	2009/2010 - same baseline	Increase / Decrease	2009/2010 - including new WSPs
Personnel Expenditure as a % of O & M Cost	56	57	1	57

(m) Unit Cost of Operation and Average Tariff

The sustainability of the water value chain is entirely dependant on payment by end users. On the other hand, there has to be equity in water service provision, hence the block tariffs. Inefficiencies in operation increase the cost of service delivery with high NRW being the biggest contributor. This is also reflected in Table 3.38 where despite an increase in the unit cost of production (especially higher costs for electricity and chemicals) as compared to last reporting period, the unit operating cost of water billed decreased from Kshs 26 to 23. One explanation for this is the significant drop in NRW levels from 71% to 61% in 2009/10. At the same time, average tariffs increased from Kshs 23 to 26 KShs in 2009/10. Tariffs that are higher than the unit operating costs are essential for sustainability. This indicates that the rural sector is slowly going in the right direction.

Table 3.39: Average Tariff Comparison

	Average tariff (KShs/m ³)	Unit cost of production (KShs/m ³)	Unit operating cost of water billed (KShs/m ³)
2008/09	23	9	26
2009/10	26	12	23



CHAPTER 4



Performance of Water Services Boards

Low Investment Levels Despite Enhanced Sector Funding

Investment realizations in all the WSB regions remain unacceptably low despite enhanced budget levels in the sector. As noted earlier in the report, the budgetary allocation for the water sector increased from Ksh 22,875 billion to Kshs 27,789.1 billion in the year 2009/10. The development allocation increased by 27.7%. Of the total actual expenditure by the Ministry of Water and Irrigation (MWI), 81.6% was on development with 72.2% of the development budget being allocated to water supply and sanitation.

Despite the significant investment levels in the sector, rapid population growth (38.6 million by 2009 Census report) and urbanization present ever bigger challenges for Kenya in meeting the Millennium Development Goal (MDG) 7c to "halve by 2015 the population without access to safe drinking water and basic sanitation". There is therefore need to ensure effectiveness of investments and to focus investments in areas with the maximum impact on coverage.

Yet, the effectiveness of investments can only be ensured if planning and disbursement of funds is based on solid investment and financing plans. This is a key responsibility given to WSBs, which they have not been able to fulfill.

Wasreb has recommended to the MWI that future subsidies be linked to the performance of WSBs, especially the development of adequate investment financing plans.

4.1 Data Coverage

All the eight Water Services Boards (WSBs) submitted information for the years 2009/10. Compared to the previous reporting period, data submission and content slightly improved. It will be noted that most of the WSBs are not enforcing regulations sufficiently. An example is the submission of data from the WSPs where WSBs are not vigorous enough to demand compliance by WSPs and do not validate the data in terms of completeness and quality.

Challenges still exist especially in the quality of data on investments and additional people served. Analysis of investment per capita could therefore not be objectively determined. Challenges were also evident in the separation of administrative costs of Boards from the operational costs of the schemes still supported by the Boards. In addition, WSBs should separate administrative costs for urban and rural providers to allow for the apportioning of costs.

The total population in the service area of the 90 WSPs and 3 DWQs who submitted data is 23.4 million, most of who reside in urban areas. This represents approximately 63% of the total country's population. The combined turnover of these WSPs is Kshs 9.85 billion which is estimated to be more than 90% of the total subsector turnover. This analysis may therefore be considered to be representative of the sector. However, challenges on rural data collection (rural water points and schemes) still persist.



Table 4.1 below rates WSBs according to data submission by their WSPs (No. of WSPs submitting complete information and quality of data) and compares this period's performance to the last reporting period.

Table 4.1: Ranking of WSBs According to Data Submission by the WSPs

WSB Data Submission Rating	2009/10	2008/09
Excellent (>80%)	-	-
Good (>65 – 79%)	Tana	-
Average (50 – 64%)	Northern, Athi, LVS	Rift Valley, Northern, Tana
Poor (40 – 49%)	Rift Valley, LVN,	Coast
Worst (<40%)	Coast, Tanathi	Tanathi, LVS, LVN, Athi

Although data submission has greatly improved over time, challenges on quality, completeness and the timeliness of reporting still remain. Tackling these is of utmost importance towards continuous improvement of the quality of this report. This will involve:

- i) Capacity building of agents responsible for data collection (WSBs and WSPs)
- ii) Further sensitization of agents as regards their responsibilities in data collection and provision as well as the benefits of proper fulfillment of those obligations.
- iii) Improvement and better implementation of control mechanisms to check reliability and completeness of submitted data and to ensure timely reporting.

The MWI should oblige all WSBs to submit comprehensive data, including subsidies received from MWI and other sources, and ensure that the WSPs under their jurisdiction do the same. This should be realized through the performance contract system, with Wasreb being involved in assessing compliance to this.



Table 4.2: General Information on the WSBs for the Period 2009/10

WSB	Turnover in Million Kshs	No of WSPs		No. of WSPs below 100 O&M	Water coverage %	Sanitation coverage %	Metering Ratio %	O&M cost coverage %	Hours of supply	Staff per 1000 connections	Compliance with residual chlorine standards%	Compliance with bacteriological standards %	Non-Revenue Water (NRW)	Collection Efficiency
		S	M											
Athi	4,999	S	4	5 out of 12 (41.6%)	55	67	85	122	8	5	97	94	42	76
		M	5											
		L	2											
		VL	1											
Coast	1,314	S	2	3 out of 6 (50%)	63	63	73	105	13	12	96	96	37	87
		M	0											
		L	3											
		VL	1											
LVN	526	S	4	5 out of 8 (63%)	33	61	84	90	10	8	98	96	40	90
		M	1											
		L	2											
		VL	1											
LVS	572	S	4	7 out of 10 (70%)	19	47	78	89	3	13	92	98	50	92
		M	2											
		L	4											
		VL	0											
Northern	366	S	4	4 out of 8 (50%)	54	82	84	112	6	10	99	81	52	91
		M	2											
		L	2											
		VL	0											
Rift Valley	837	S	12	11 out of 15 (73%)	46	63	64	96	18	9	92	99	58	75
		M	1											
		L	1											
		VL	1											
Tana	980	S	6	9 out of 23 (39%)	44	78	71	120	24	10	95	96	60	96
		M	8											
		L	9											
		VL	0											
Tanathi	256	S	8	10 out of 11 (91%)	27	40	82	52	10	17	93	89	49	84
		M	3											
		L	0											
		VL	0											
TOTAL	9,850		93											

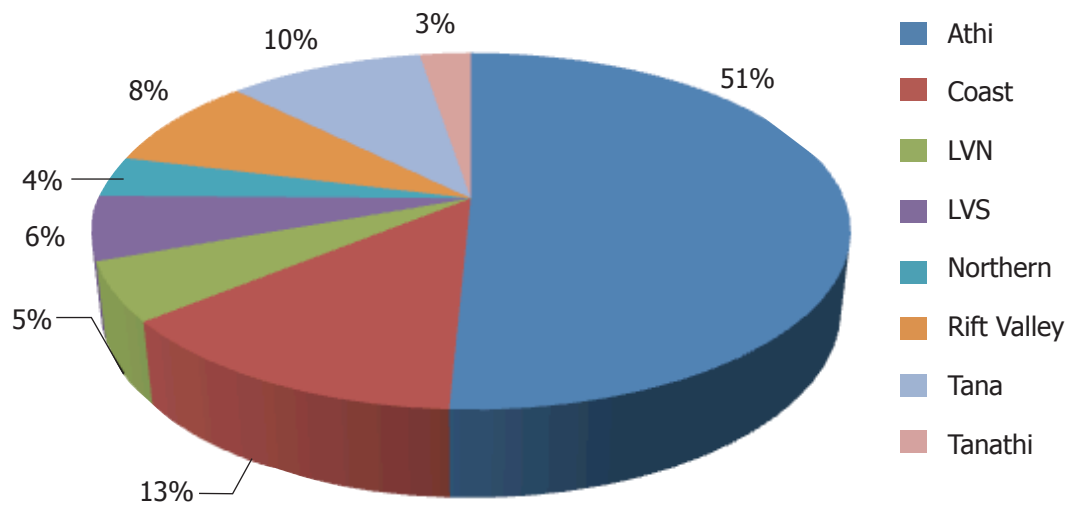
NOTE: S=small, M=medium, L=large, VL=very large



As compared to the previous period, the number of WSPs meeting their O&M costs increased from 24 to 29 and this could partly be attributed to increasing number of RTAs approved by Wasreb. This is also supported by the case of Tana which has the highest number of RTAs and WSPs meeting their O&M costs at 61%. The number of WSPs covering their O& M costs was 58% for Athi, LVN 37% for LVN, 30% for LVS, 27% for RV, 50% for Coast, and 9% for Tanathi. Coast WSB is the only WSB which had the number of WSPs covering O&M costs dropping (from 4 to 3). WSBs need to urgently submit RTAs for all their providers to ensure coverage of O&M costs.

Figure 4.1 below depicts the WSBs turnover within the reporting period.

Fig 4.1: Turnover of WSBs in the Year 2009/10



4.2 Ranking of WSBs

The ranking criteria is based on the indicators outlined in Table 4.2.

To be able to rank the performance of the WSBs on the criteria, the indicators were assigned weights as indicated below:

Table 4.3: Performance Indicators and Scoring Criteria

	Indicator		Good		Unacceptable	
			Performance	Score	Performance	Score
a) Investment indicators	Water coverage	Urban	>90%	15	<50%	0
		Rural	>90%	15	<50%	0
	Non-Revenue Water, NRW	Urban	<20%	15	>40%	0
		Rural	<20%	15	>50%	0
	Sanitation coverage	Urban	>90%	10	<50%	0
		Rural	>90%	10	<40%	0
Hours of supply		>20	10	<10	0	
b) Financial indicators	Cost coverage of Operational expenditures through fees from WSPs		> 100	5	<50	0
	Personnel expenditures as a % of Operational costs		<20%	5	>70%	0
	BoD expenditures as a % of Total Operational expenditures		<2%	5	>5%	0
	Operational Expenditure of WSBs as percentage of turn-over in WSB area	> 1.5 Bio KSh Turnover	< 3.5%	5	> 10%	0
		> 0.75 < 1.5 Bio Ksh Turn-over	< 10 %	5	>20 %	0
< 0.75 Bio Turn-over		< 15 %	5	> 25 %	0	
c) Qualitative indicators	Adequacy of monitoring of WSPs	(1) Enforcement and compliance strategy applied?*	Available	3	Unavailable	0
		(2) Reporting and compliance of WSPs with the regulatory regime	Complying	3	Not complying	0
		Submitting tariff proposals in cooperation with WSPs	All WSPs in WSB area work with RTA	10	No WSPs in WSB area with RTA	0
	Driving efficient investments in WSB area	Facility Management System (and register)	Available	2	Unavailable	0
		Five year Business and Capital works plan for the WSB area	Available	2	Unavailable	0
		Implementation of the five year Business plan for the WSB area	Adequately implemented	5	Not implemented	0
		Pro-poor efforts and strategies	Available	3	Unavailable	0
		Discerned issues in procurement and management of capital projects	No issues and capital projects implemented well	5	Discerned issues and poor implementation	0
	Improving customer service of WSPs	Use of customer complaints procedure	Available	3	Unavailable	0
	Transparency and interaction with WASREB	WARIS data submitted (timely, accurate)	Available	9		0
		WSB duties derived from License (Public information officer in place, information available on website etc.)	Available	2		0
		Provision of Performance Guarantee	Available	3		0
	Total maximum Score			120		

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



The total score on compliance with licence conditions was reviewed to reflect the focus of Wasreb on the mandate of the WSBs. The total score for this section increased by 5 percentage points from 37% to 42%. This can be attributed to:

1. Adequacy of monitoring and compliance of the WSPs with the regulatory regime. Considering the significance of RTAs on the sustainability of WSPs, submission of tariff proposals and their implementation was emphasized.
 2. Discerning issues in the procurement and management of capital projects. This is in line with the focus of Wasreb of providing advice on cost-effective and efficient management and operation of water services.
 3. Implementation of the five year business plans in WSB areas. Attainment of the MSL requirements by the WSBs is determined by the adequate implementation of the business plans and therefore the weight of this indicator was increased.
 4. Use of customer complaints procedure to improve adherence of WSBs to their service delivery charters.
- Wasreb will continue to review the scoring regime to ensure improved performance of the sector in line with the agreed licence conditions.

Based on the criteria set out under Table 4.3 above, the performance of the WSBs was ranked for the two years as shown in Table 4.4 below.

Table 4.4: Ranking of WSBs

WSBs	Ranking 2009/10	Ranking 2008/9	Change in ranking	Score 2009/2010	Score 2008/2009	Change in Scores
Tana	1	5	+4	71	52	+19
Northern	2	3	+1	64	60	+4
Athi	3	1	-2	59	64	-5
Coast	4	2	-2	52	63	-11
Rift Valley	5	4	-1	51	57	-6
Tanathi	6	8	+2	39	33	+6
LVN	7	6	-1	37	51	-14
LVS	8	7	-1	37	43	-6

4.3 Detailed Performance Analysis of WSBs

As compared to the previous period, the WSBs submitted more detailed information. The section below analyses the performance of the WSBs on a few selected indicators.

4.3.1 Coverage of Operational Costs

Coverage of operational costs of WSBs is key to their sustainability. The sector envisages financing of WSBs' operations from the licensee remuneration obtained from urban WSPs. However, the financing mechanism of operational costs for RWSS is yet to be developed by the MWI. This could either be covered through subsidies from the MWI budget or through cross subsidy from urban water systems.

Table 4.5: Coverage of WSBs Operational Costs

WSB	Operational costs 2008/09, mio	Coverage of operation costs in 2008/2009, %	Operational costs 2009/10, mio	Coverage of operation costs in 2009/10, %
Athi	108	474	152	484
LVN	53	38	58	11
Northern	300	6	94	24
Rift Valley	109	52	121	87
Coast	462	120	179	60
Tana	71	73	101	75
LVS	218	20	112	28
Tanathi	No data	No data	138	16

No clear trend is evident from the operational costs of the WSBs. This points to the possibility that most WSBs are not capturing all their costs. Considering that WSBs have similar mandates, there is no justification for CWSB to have expenditure that is three times that of LVN. This implies that either the cost of LVN is not realistic or the expenditure for CWSB is too high.

It is also incomprehensible that the operational costs of Tanathi, whose turnover is a seventeenth of Athi's, are almost equal to the operational cost of Athi. The same applies to the other WSBs with slight variations.

The ongoing process of evaluation of Regular Tariff Adjustments (RTAs) for WSPs includes the assessment of operational costs of the WSBs. This is based on justified costs as assessed by Wasreb and apportioned to the WSPs based on their turnover. Above these operational costs for WSBs, Wasreb might allow provision for funds for asset development in cases where WSPs are already meeting their own O&M costs plus the portion of the operational costs attributed to the WSB.

Taking the spread of the approved RTAs and cost coverage, the following scenario can be depicted.

Table 4.6: Relationship Between Cost Coverage of Operational Costs and Number of RTAs

WSB	Number of RTAs in 2008/09	Coverage of operation costs in 2008/2009, %	Number of RTAs in 2009/10	Coverage of operation costs in 2009/10, %
Athi	1	474	2	484
LVN	0	38	3	11
Northern	0	6	3	24
Rift Valley	0	52	2	87
Coast	0	120	3	60
Tana	1	73	4	75
LVS	1	20	2	28
Tanathi	0	No data	2	16

It can be seen that there is no correlation between the number of approved RTAs and the coverage of operational costs contrary to the objective of the tariff process. This then begs the question: what happens to the costs apportioned to the WSPs? It means that either the costs of the WSBs are not realistic or the licensee remuneration is not collected from WSPs. Inspections have confirmed in certain cases that WSBs do not collect what is due to them from the WSPs. Considering that these costs had already been factored in the tariff, any unclear use of this money amounts to an unjustified burden to the consumer.

Coverage of more than 100% of operational costs implies fees from the WSPs are not separated between administrative costs and amounts for asset renewal. Wasreb expects the WSBs to put in place a contingency fund to be utilized in asset renewal.

Although all WSBs, except LVN and Coast, improved on the coverage of operational expenditures through fees, it is only Athi which is able to cover its operational expenditure from the fees it collects from the WSPs. Rift Valley and Tana are moving towards full cost coverage while the others are far from meeting their costs



from the licensee remuneration. This means they still rely heavily on government subsidies. There is a wide gap between viable WSBs such as Athi, RV and Tana and most probably Coast and the remaining four WSBs which still require to be heavily subsidized in the medium and long term. The drop in cost coverage by Coast is most probably attributable to unclear separation of administrative costs of the Board and the cost of running the bulk water supply. As a matter of urgency the Board should immediately cease operating the bulk system in line with the options recommended by Wasreb.

4.3.2 Expenditure of WSBs as Percentage of Turn-over in WSB Area

Operational expenditure can also be related to the total turn-over for each WSB.

Table 4.7: Expenditure of WSBs as Percentage of Turn-over in WSB Area

WSB	Operation costs 2009/2010 in Mio KSh.	Turn-over WSB 09/10 in Mio KSh.	Operation costs % of turn-over 09/10	Operation costs 2008/2009 in Mio KSh.	Turn-over WSB 08/09 in Mio KSh.	Operation costs % of Turn-over 08/09
Athi	152	4999	3	108	3375	3
LVN	58	526	11	53.4	397	13
Northern	94	366	26	300	301	100
Rift Valley	121	837	14	109	577	19
Coast	179	1314	14	462	1183	9
Tana	101	980	10	70.6	772	52
LVS	112	572	20	218	423	52
Tanathi	138	256	54	No data	No data	No data

The continued approval of Regular Tariff Adjustments (RTAs) has seen the turnovers of all the WSBs increase significantly. TaWSB, NWSB, and LVSWSB recorded the highest operational cost ratios against their turnover. They need to urgently cut down their costs in order to stop overcharging the consumer.

4.3.3 Personnel Cost as Percentage of Operational Costs

Table 4.8: Personnel Cost as Percentage of Operational Cost

WSB	Personnel cost % of operational cost 2009/10	Personnel cost % of operational cost 2008/09	% increase
Athi	60	72	-12
LVN	69	57	+12
Northern	20	No reliable data	-
Rift Valley	44	41	+3
Coast	38	25	+13
Tana	33	36	-3
LVS	46	16	+30
Tanathi	30	29	+1

With the exception of the Northern WSB, WSBs' personnel costs are high relative to their total operational costs. The WSBs should ensure balanced spending on other operations so that service delivery is not compromised at the expense of staff remuneration. They should therefore aim at a justified balance of the different spending lines of operational expenditure. It is recommended that the MWI stops subsidies to all WSBs for expenditure linked to urban water supply and sanitation as tariff adjustments for WSPs are linked to cost recovery.

4.3.4 Average Gross Monthly Salary per Staff

The following table illustrates the development of the gross monthly salary per staff in the WSBs.

Table 4.9: Average Gross Monthly Salary per Staff

WSB	Total no. of staff 09/10	Total no. of staff 08/09	Average monthly gross salary per staff in 2009/10	Average monthly gross salary per staff in 2008/09	% increase
Athi	47	44	162,218	146,483	+11
LVN	41	40	81,057	63,300	+28
Northern	36	28	44,037	62,071	-29
Rift Valley	40	39	110,880	96,665	+15
Coast	93	170*	60,574	56,175	+8
Tana	58	50	47,644	41,684	+14
LVS	45	39	96,012	73,281	+31
Tanathi	53	43	65,513	83,591	-22

**This includes staff for the bulk system*





4.3.5 Board of Directors' (BoD) Expenditure as Percentage of Administrative Costs

Wasreb's Corporate Governance Guidelines sets a benchmark on expenditure on the BoD. This is measured as a proportion of the total operational expenditures. The acceptable proportion depends on the size of the WSBs. The benchmark for spending of the BoD for the WSBs is 2% while that of the bigger WSBs like Athi and Coast should even be lower than this.

Table 4.10: Board of Directors' (BoD) Expenditure as Percentage of Administrative Costs

WSB	Board Expenditure Mio Ksh 2009/2010	Board Expenditure Mio Ksh 2008/2009	As % of Administrative costs 2009/10	As % of Administrative costs 2008/2009
Athi	5.1	4.5	3	4
LVN	4.0	8.4	7	16
Northern	2.0	8.2	2	3
Rift Valley	6.4	9.0	5	8
Coast	8.8	7.0	5	2
Tana	6.4	11.1	6	16
LVS	5.5	9.3	5	4
Tanathi	9.0	4.9	7	3

All the WSBs except Northern exceeded the sector benchmark for BOD expenditures as a percentage of administrative costs. There is no justification for Tanathi to spend more than four times what Northern is spending. WSBs therefore need to adhere to the schedules of planned board meetings in order to contain costs. This will free funds which can be used in improving service delivery.

4.3.6 Investments

WSBs are mandated to ensure provision of efficient and economical services. Asset development carried out by the WSBs is a critical determinant of the cost of service. Information submission on investments continues to be poor as reflected in the table below.

Table 4.11: Investment Realization by the WSBs

WSB	Investments in WSPs Mio Ksh 2009/2010	Investments Rural networks Mio Ksh 2009/2010	Investments Rural Point Sources Mio Ksh 2009/2010	Total Investments planned in Mio Ksh 2009/2010	Investments in WSPs Mio Ksh 2008/2009	Investments Rural networks Mio Ksh 2008/2009	Investments Rural Point Sources Mio Ksh 2008/2009	Investment Realisation, % 2009/2010
Athi	No data	No data	No data	No data	No data	No data	17.05	No data
LVN	No data	No data	No data	No data	No data	No data	25.13	No data
Northern	30	45	30	1,199	109.76	No data	No data	8.8
Rift Valley	654	55	148	No data	47.8	No data	No data	No data
Coast	108	No data	No data	No data	No data	No data	No data	No data
Tana	468	38	63	2,578	306	No data	No data	22
LVS	337	169	167	1,974	1,058	No data	No data	34
Tanathi	80	273	300	700	No data	No data	No data	83

As table 4.12 shows, information provided by the WSBs on additional population served is incomplete and further analysis showed insufficient data quality. This should imply inadequacy in the quality of management or unwillingness by the WSBs to be transparent and accountable.

Table 4.12: Efficiency of Capital Utilization

WSB	Total Investments in Mio Ksh 2009/2010	Additional population served, 000	Efficiency of capital utilization, Ksh/capita
Athi	No data	No data	No data
LVN	No data	No data	No data
Northern	105	17	6,176
Rift Valley	857	685	1,251
Coast	No data	No data	No data
Tana	762	2,898	263
LVS	673	No data	No data
Tanathi	653	8.7	75,057

4.3.7 Other Performance Indicators for WSBs

(a) Enforcement and Compliance

The Enforcement and Compliance (C&E) Strategy was approved and disseminated during the current reporting period. The purpose of the C&E strategy is to:

1. Ensure conformity to the Water Act 2002 and guidelines issued by Wasreb
2. Prevent future non-compliance as much as possible through voluntary effort
3. Improve the standards of water service delivery in a sustainable manner in the whole country

WSBs were assessed on the extent to which they were implementing this strategy with their agents. None of the WSBs is effectively applying the strategy, a situation that Wasreb expects to change with increased surveillance at the national level.

(b) Submission of Tariff Proposals

The first extension of the Extra Ordinary Tariff Adjustment (RTA) expired in December 2010. A total of 21 applications were approved during this period which represents 64% of the key WSPs targeted. To date Wasreb has approved a total of 37 RTAs spread across the 8 WSBs. Implementation of the RTAs is of concern in certain WSBs, with non-compliance being witnessed in the following key areas.

- i. Adherence with the set budgetary levels
- ii. Attainment of agreed performance targets
- iii. Issuance of the mandatory two months notice
- iv. Payment of licensee remuneration

Most WSBs have, however, improved in implementation except LVS which scored very poorly (3/10). The best performing WSBs are Tana, Athi and Tanathi. The rest recorded average performance.

(c) Facility Management Systems

Most of the WSBs are yet to put in place a comprehensive Facility Management System with only 6 out of 8 having a listing of their assets in place. Northern and Tanathi still lack a listing of their assets. In the absence of an acceptable Facility Management System no WSBs can fulfill their responsibility of asset

management and development. Therefore, it is recommended that all WSBs take up speedy action to establish such a system.

(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) Plans. While all WSBs have developed these plans, there are a number of weaknesses. First, the business plans of the WSPs are not linked to the investment plans of WSBs. WSBs therefore need to ensure that the business plans of WSPs are harmonized with their investment plans and contain clear targets to attain the MSLS.

Second, and one of the biggest weaknesses of the WSBs, is the absence of investment plans sufficiently detailed for further development through feasibility studies as well as financing plans. Both are legal requirements stipulated in the Water Act 2002 which have not yet been fulfilled despite WSBs having been in existence for more than 7 years. There is urgent need for the MWI to put more pressure on WSBs to develop such plans for which actually software is available. Further, MWI should link subsidies to the performance of WSBs, especially the development of sophisticated investment financing plans.

(e) **Pro-poor Efforts and Strategies**

Some WSPs, in cooperation with WSBs, are very active in submitting proposals to the WSTF in order to extend their services to urban low income areas. Cross subsidization between the different blocks in the tariff is another pro-poor strategy adopted by WSPs. It is recommended that the WSPs pay more attention to the underserved areas by mapping out these areas within their service area and include extension of their services through low cost technology.

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

Adherence to the Public Procurement and Disposal Act 2005 by WSBs remains a challenge. Tanathi and LVS scored relatively low. Monitoring of WSPs by WSBs to ensure compliance with the Act will be enforced through regular inspections and Wasreb will continue to publicize cases of non compliance with 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. WSBs should ensure that the minimum requirements as per the new Water Services Regulations are contained in the Model Contracts.

(h) **Use of Customer Complaints Procedure**

The development of a complaints handling mechanism is mandatory under Clause 7.2 of the licence. All WSBs should ensure they submit to Wasreb a customer complaints handling procedure for their WSPs. This is in addition to ensuring that each WSP has an officer designated to handle complaints. The Water Action Groups Pilot has shown that WSBs perform poorly in handling complaints.

(i) **Performance Guarantee**

During the period under review, only Tana, Northern, Rift Valley and Athi WSBs had a performance guarantee with Wasreb. All WSBs should ensure that they provide performance guarantees to Wasreb as required by the licence.



4.4 The Rural 'Knowledge' Gap

A majority (67%) of Kenyan's live in rural areas where water and sanitation coverage levels are inadequate. The reason being that before the water sector reforms of 2002, investments were mainly skewed towards the urban sub-sector. However, the picture has changed since the reforms with considerable investments having gone into the rural sub-sector.

The rural sub-sector, however, lacks reliable data to establish coverage levels, increments and progress against set targets. This information gap continues to make it impossible to respond to key indicators and undermines the MWI's ability to assess whether money spent is translated to impact as reflected in increased coverage.

Considering these constraints, sector stakeholders agreed to support the WSBs in implementing a series of 'Water Point Mapping (WPM)' pilots in 2010. The pilot study involved 940 water points in West Pokot, Kyuso and Mbeere Districts.

The findings of the Pilot were as follows:

- Disparities in country-wide investment
- Low post-implementation sustainability of water points (particularly hand and submersible-pumps)
- Difficulty in establishing the number of households that benefit from minimum or better service levels (involving quantity, quality, distance and payment for water)
- Importance of governance and management structures being in place
 - Community ownership e.g. through a committee
 - Importance of oversight by the Boards

The Pilot made the following recommendations:

- Sub-location specific coverage and functionality data/water point maps for needs based investment planning by WSBs and budget allocation by MWI
- Establish a water point coding and in-field tagging system for data consistency
- Establish clear coverage definitions (JMP-KNBS-MWI/WASREB) within the framework of the ongoing WaSH Data Reconciliation exercise
- Obtain GIS-data for the administrative boundaries that coincide with the population Census data from the Kenya National Bureau of Statistics (KNBS)
- Develop robust GIS-based database to store all collected data on individual water points to feed into WARIS and WASBIT.

CHAPTER 5



Conclusion

Some Strings to Tie but Sector Largely on Right Track...

There is no doubt that some progress has been realised in the water services sector over the reporting period. It is notable that most of the sector institutions are becoming more responsive to reporting requirements as seen from the increased numbers of WSPs submitting information and even from the quality of information submitted. Indeed, it can never be over-emphasised that such reporting is crucial for purposes of transparency and accountability to consumers, stakeholders, and the general public, who are essentially the reason for the existence of water institutions.

Nevertheless, there are still key areas in the sector which have been identified in our previous reporting as impeding a smooth development of the sector. Some of these include the pending gazettment of water rules and the incomplete transfer plan. For a regulator, the absence of rules makes the task of enforcement very challenging because there has to be a legal basis upon which enforcement actions can be taken. Similarly, delays in finalizing the transfer plan raises questions of staff loyalty which has implications on governance and productivity. The continued holding of assets by Local Authorities negates the spirit of reforms since funds, which could be utilized to grow the sector, cannot be ring-fenced.

These issues have been mentioned in the past reports of Wasreb but they still need to be isolated for attention because they continue holding the sector back.

Other challenges the sector continues to face are examined below:

5.1 Corporate Governance

Failure by WSBs and WSPs to adopt good corporate governance practices has continued to plague the sub-sector therefore negating the benefits of water sector reforms. There are a number of cases of resistance by shareholders of WSPs to comply with Wasreb's Corporate Governance Guidelines. Following the implementation of the criteria for appointment of WSPs, Wasreb will not approve Service Provision Agreements of WSPs who are not compliant. WSBs need to ensure that their agents adopt and comply with the Corporate Governance Guidelines.

5.2 Improved Reporting by WSPs and WSBs

Although data submission has greatly improved, quality, completeness and the timeliness of reporting still remain a challenge. Apart from capacity gaps, the following instances of non-compliance hamper transparency and accountability:

- Prescribed reporting standards are ignored rendering auditing less effective.
- Data is maintained negligently making independent verification impossible.
- Data is supplied reluctantly and inconsistently.
- Hoarding of information from supervisory bodies/ structures and stakeholders hampers informed decision making.

These practices obstruct efficiency in service since they lead, for example, to revenue losses through illegal connections, flawed procurement procedures, poor collection of revenue and unauthorized expenditure.

Overcoming these challenges will involve:

- Capacity building of agents responsible for data collection (WSBs and WSPs)
- Further sensitization of agents as regards their responsibilities in data collection and provision as well as the benefits of proper fulfillment of those obligations.
- Improvement and better implementation of control mechanisms to check reliability and completeness of submitted data and to ensure timely reporting.



The MWI should oblige all WSBs to submit comprehensive data, including subsidies received from the Ministry and other sources, and ensure that WSPs under their jurisdiction do the same. This should be realized through the performance contract system, with Wasreb being involved in assessing compliance to this.

5.3 Non-Revenue Water

The high level of Non-Revenue Water (NRW) continues to threaten the sustainability of the majority of WSPs since they are getting revenue from far much less water compared to production while operation and maintenance expenditure continues to rise. This has translated to declining revenue and gradually to poor service levels in both urban and rural areas. It is imperative that WSPs and WSBs focus on the reduction of NRW in order to realize higher levels of service and, in the long-run, surpluses that can be ploughed back to improve efficiency in the WSPs.

Reducing NRW especially in the older systems is an expensive affair. However, there are critical steps that WSPs in conjunction with WSBs can take in order to minimise the losses. Key among these are:

- Targeting universal consumer metering
- Aggressive meter replacement programmes
- Adoption of accurate bulk measuring devices at production and major distribution points
- Punitive penalties for illegal connections
- Rapid response to reported bursts and leakages
- Gradual replacement of ageing infrastructure
- Aggressive awareness campaign
- Block Mapping/Zoning

5.4 Sustainability and Viability of WSPs

Clustering of WSPs is in the interest of consumers and fosters the economic growth of Kenya.

This report establishes that the very large and large WSPs which constitute only 29% of WSPs, have the largest share of business – covering 71% of the people served and making up for the bulk of the turnover (87%) and production (81%). They are also likely to be more viable (63%) than WSPs with fewer connections.

Further, the bigger WSPs tend to have lower average tariffs as compared to smaller ones with an average of ksh 40/m³ compared to ksh 111/m³ and ksh 129/m³ for the medium and smaller WSPs respectively. This is mainly due the lower operational costs per cubic metre.

Further, due to their larger customer base, they are better placed to cross subsidize within the different tariff blocks, leading to more affordable lowest block tariffs and thereby allowing them to address the needs of the poor without compromising their commercial viability.

The fact that only 25% of small WSPs fulfil the criteria for O&M cost recovery firmly establishes the case for clustering for viability. Apart from the expected efficiency gains from such aggregation, it is possible that subsidies and grants that were supporting these inefficient units can be channeled to capital development in the subsector. Therefore the continued subsidization of unviable WSPs undermines the reform agenda.

5.5 Sector Investments

Insufficient planning for investments and financing by WSBs leads to ineffective investments and less value for money. Despite the growth of investments into the sector, Kenya's rapid population growth (38.6 million by 2009 census report) presents an ever bigger challenge towards meeting the millenium goal to "halve by 2015, the population without access to safe drinking water and basic sanitation". There is therefore need to improve planning for investments and then focus on areas with the maximum impact on coverage.

Further there is need to recognize the important role that the private sector can play in increasing access, either directly in water services provision or indirectly through financing. As part of preparing the ground for this partnership, Wasreb intends to publish the credit rating of WSPs regularly.

Lack of investment and financing plans, which is a key responsibility given to the WSBs by the Water Act 2002, calls for drastic actions by the MWI.

5.6 Rural Data Gap

Lack of sufficient and accurate data and information systems for rural areas make it difficult to give a realistic country-wide picture of coverage. There is need for urgent interventions such as:

- Rolling out of WaSBIT at the WSP level to improve reporting on investments. This reporting must be stimulated and enforced through a 'carrot (MWI incentives) and stick' (Wasreb regulation) approach since WSBs have been reluctant to report on rural WSS to date.
- Water Point Mapping (WPM): This is focused on collection of data for all improved rural point sources and piped networks within a geographical area. The initiative is piloted in Tana, Tanathi and Rift Valley Water Services Boards.

Further there is need to harmonize definitions, data collection and reporting between various efforts involved in data collection. They include GOK(KNBS - Kenya population and Housing Census, Kenya Integrated Household and Budget Survey) and sector (WARIS, WaSBIT, Maji Data).

5.7 Water Quality

WSBs have a responsibility to secure water sources within their areas. To ensure improvement in drinking water safety, there is need to implement Water Safety Plans. Water Safety Plans are considered as the most effective and consistent means of ensuring drinking water safety through the use of a comprehensive risk management approach that encompasses all steps in a water supply from catchment to consumer. Implementation of water safety plans will also reduce NRW.

5.8 Sanitation

Sanitation coverage has improved, however this improvement is not satisfactory with sewerage levels still at unacceptable levels. (According to this report only 15% of the urban population has access to the sewer network, according to the Census 2009 this number is slightly higher, at 19.5%). Increased funding and enforcement of the requirement of sanitation component in projects is critical. For an increase in sanitation coverage to be achieved, the Sanitation Concept for the Water Sector adopted by the MWI needs to be implemented.

5.9 Services in Urban Low Income Areas (LIAs)

There are many water and sanitation development projects in urban LIAs being implemented by various institutions, development agencies, NGOs, and CBOs. Many of these projects are not well coordinated and aligned to the national service delivery framework. This gives rise to conflicting objectives. The projects are in most cases not sustainable and hence undermine sector policy by promoting informal service provision. Promoters of these projects should align them to the UPC as the national concept to reach the urban poor.

Further, with MajiData becoming available soon to the sector and WSP reporting on performance in urban LIAs becoming obligatory, the picture of the water and sanitation situation in the urban setting will become more accurate.

Water Services Regulatory Board
5th Floor, NHIF Building, Ngong Road
P.O. Box 41621 - 00100 GPO Nairobi, Kenya
Tel: +254 (0) 20 2733559/61
Fax: +254 (0) 20 2733558
Email: info@wasreb.go.ke
Website: www.wasreb.go.ke

