Public Policy and Administration Review September 2014, Vol. 2, No. 3, pp. 65-82 ISSN: 2333-5823 (Print), 2333-5831 (Online) Copyright © The Author(s). 2014. All Rights Reserved. Published by American Research Institute for Policy Development DOI: 10.15640/ppar.v2n3a4 URL: http://dx.doi.org/ 10.15640/ppar.v2n3a4

The Impact of Water Sector Reforms on Women's Access to Water Services in Lake Victoria Basin

Dr. Okeyo, Joseph Obosi¹

Abstract

This paper assesses whether by commercializing the provision of water services as part of water sector reforms, the government has reneged on its promise to provide water to its citizens as a basic human right. The study used secondary data and primary data from a household survey of 288 respondents, seven Focus Group Discussions (FGDs), and 28 Key Informant interviews from seven (7) WSPs, namely, Mogombet, Chemosit, Boya, KIWASCO, SNWSCO, MIKUTRA and Nyasare of the Lake Victoria South Water Services Board (LVSWSB) umbrella. The study was conducted through human rights approach under governance theory, positing that the government in as much as it receives either resistance or competition from other interacting actors, still has an obligation to provide basic services, water provision included, to its citizens. The study used both qualitative and quantitative techniques to analyze the collected data. The techniques included use of content analysis of secondary data, frequency tables and cross tabulations to measure the central tendencies and dispersions. The main findings were that water sector reforms has not benefited the consumers of water services in general, and women in particular. Instead it has impoverished the population further as expressed in the form of increased proportion of household income on water expenses. Secondly the government has concentrated more on regulatory and distributive aspects of water service provision than producing more water for increased access to a greater number of population, implying that more women still do not access quality water in the right quantity at the right time. The study recommended that, the "Service Provider" role of the state should be changed to that of a regulator and facilitator of services at the Counties' level for increased popular participation in the governance of water provision services through community and private operators as well. This will therefore enhance the participation of women in the local level governance of water services, hence, increased access to water by virtue of being active participants in the determination of ownership, distributive, and management processes of water.

Keywords: Water, Reforms Service, Governance, Access, Privatization

¹ Department of Political Science and Public Administration, University of Nairobi, Kenya, P.O. Box 30197 00100 GPO, Nairobi, Kenya. Email address: <u>jobosi@uonbi.ac.ke</u>; <u>jokeyoobosi@gmail.com</u>, Cell phone numbers: +254-733772636; +254-714313917

1.0 Introduction

The water sector reforms began in Kenya in 1990's and became more pronounced in 1999 through National Sessional Paper no. 1 on National Policy on water resources Management and development in Kenya (GoK, 1999). Prior to this, it was the responsibility of the government to provide water to its citizens through the respective water departments of Local Authorities. In some areas water was provided through the relevant ministry that housed water portfolio, and also through National Water Conservation & Pipeline Corporation (NWC&PC).

The introduction of water sector reforms started in earnest in the year 2004. The management of water services was through the water Act of 2002 that transferred the responsibility for provision of water services from Local Authorities to regional based Water Service Boards which were also responsible to the Water Services Regulatory Board (WASREB). The changes encouraged the transformation of water departments into Public Limited Companies which, were charged with the responsibility of selling water to the public (consumers). Each Water Service Provider (WSP) has a Service Provision Agreement (SPAs) with a respective Water Service Board (WSB) to supply water to the consumers on their behalf under certain conditions. In Kenya, there are eight (8)Water Service Boards, namely, Nairobi, Tana, Tanathi, Northern, Coast, Rift Valley, Lake Victoria North, and Lake Victoria South.Other than the water companies, there are also private water service providers, community water projects in various forms also providing water services under different conditions instituted by WASREB as the regulator of the water service providers.

The government hoped that water sector reforms would result in reduced distance to water sources, increase water quality and avail affordable water to the consumers in the right amount and quantity, as a way of achieving Millennium Development Goals of improving health care and reducing poverty. An assessment of the impact of water sector reforms, in the area served by Lake Victoria South Water Service Board, reveals that the impact especially on women is far from impressive, despite some gains. This paper assesses whether by commercializing the provision of water services, the government reneged on its promise of providing water to its citizen as a basic human right. This is with specific reference to the seven (7) Water Service Providers(WSPs) that were sampled, namely; KIWASCO, SNWASCO, MIKUTRA, Chemosit, Boya, Nyasare, and Mogombet.

1.1 Situational Analysis

Access to water in the seven WSPs is through: piped water in the households, piped water in from a distance, rivers, and water vendors in various proportions. The study captured water for domestic use only. It was hoped that the commercialization would bring more water closer to the consumers.

There are more male headed than female headed households which have access to piped water. Currently, of those with access to piped water in the households, only 38.4% of the 288 respondents are headed by females. It is important to note that all male headed households have women as well. In total, 46% of the households sampled were headed by women. At 11%, KIWASCO had the highest proportion of female households headed which had access to piped water. The least proportion of female headed households with access to piped water was registered in Mogombet and Chemosit Water Service providers.

Until 2003, the responsibility for supply/distribution of water in the Lake Victoria Basin, like the rest of the country, largely lay with respective local authorities in each of the councils. After 2003, each of the local Authorities converted their respective water departments into Public Limited Companies (PLCs) and had them registered with LVWSB and WSRB as Water Service Providers. In addition to the PLCs, there were other WSPs which were either registered as Community Water Projects, or Independent Water Service Providers, all expected to operate under the supervision of LVSWSB, and under the supervision of the respective major WSP in the area.

The PLCs under LVSWSB before the implementation of the devolved governance system included Kisumu Water and Sanitation Company(KIWASCO), Siaya and Bondo Water and Sanitation Company (SIBO), South Nyanza Water and Sanitation Company(SNW&SCO), Migori Kuria and Trans Mara water Company (MIKUTRA), Gusii Water and sanitation Company (GWASCO), CHEMOSIT, Kericho Water and Sanitation Company (KEWASCO), and NYANAS and are responsible for Kisumu, Siaya, Homa Bay, Migori, Kisii, Bomet, Kericho, and Nandi councils, now counties, respectively.

Community Water Projects are small scale and independent water service providers most of which are registered as either welfare associations or Community Based Organizations within particular areas to provide water directly to members but also sell water from their respective water kiosks and stand points. The CBO's get funding from various sources including but not limited to Church Organizations, NGOs, Individual Contributions (self help), Government agencies including Water Services Trust Fund (WSTF), Local Authority Transfer Fund (LATF), Constituency Development Fund (CDF), and other well wishers in various forms and kinds.

1.2 Theoretical Framework

The study is based on a theoretical conceptualization of human rights approach under governance theory which holds that water is both a common and basic good whose supply should not be in the hands of the private sector since it should never be treated as a commodity based on market principles being essence of life itself. It further holds that like food and life, water is a fundamental right to all and the state has an obligation to not only provide but also protect. This position has however been contested by other schools of thought (Prasad, 2006). First, there is the group dominated by major international financial institutions like the World Bank arguing that since the government has failed to provide access for everyone, it is worth turning to the private sector and market principles to solve the problem. The understanding was that savings made through reduced non accountable water, non payment of tariffs under the management of government, would be ploughed back into the company for increased water supply. Whereas this could increase more accountability, it did not guarantee reduced water tariffs or direct increased distribution system for increased access by the citizens, especially the women. It was unlikely, the privatization would make water cheaper or increase women's water purchasing power.

The second group argues that better services could be realized by considering water as both an economic good and a human right at the same time. Although the government of Kenya has leaned towards the latter position by treating water as an economic good through the formation of commercial public limited water companies, there is hardly evidence that it has treated water as a human right at the same time. No effort was made to subsidize the cost of water for the women. The public limited companies to distribute water were to be put under private management contracts operating through the principles of private business management.

The overall expected result was to be seen in increased efficiency in water service provision thereby enabling more consumers to access water at affordable prices.

In either instance, women either as household heads or critical stakeholders of water consumption and usage in every household still bore the brunt of all the decisions made affecting its distribution and supply. The water sector reforms introduced in 2004 in Kenya, therefore had direct bearing on women in Kenya. It increased the cost of water and reduced the number of water access points thereby making water less affordable to women.

1.3 Methodology

The paper presents an analysis of data drawn from a sample of 288 households including 127 headed by women randomly selected from seven (7) Water Service Providers under Lake Victoria South Water Services Board (LVSWSB) which covers Kericho, Bomet, Narok, Nandi, Siaya, Kisumu, Nyamira, Homa Bay, and Migori counties. According to 2006 population estimates, LVSWSB serves the largest population of all the WSBs in Kenya at 6,868,876,000 (WASREB: 2008). The current population served the same WSB is 7,326,000(WASREB:2012). The study covered 4 public utility water companies: Kisumu water and Sanitation Company(KIWASCO), Chemosit Water and Sanitation company, South Nyanza water and Sanitation company(SNWSCO), Migori Kuria and Transmara water and Sanitation company(MIKUTRA); and 3 Community Water Project Associations, namely, Mogombet in Bomet, Boya in Kisumu, and Nyasare in Migori.

The study used data from both secondary and primary sources obtained through field survey methods such as interviews, participant observation, literature review and document analysis. The responses were collected from household heads only who had resided in the same area since the year 2004.

The respondents were randomly selected from a consumer's register provided by each Water Service Provider. Water bills kept, payment receipts kept by the each consumer, and WSPs official debtors' list were used as evidence of not only water bill settlement but also the ownership and length of stay at the current location. Where water bills could not be traced, the researcher relied on the household's ability to recollect previous experiences in terms of cost of and distance to water access points between the year 2004 and presently. The household head regarded as the adult responsible for settlement of water bills in each household. The seven (7) WSPs categorized into two: Public Limited Companies (PLCs), and registered Community Project Water cycles from official register of WSPs where there were individual or group water connections.

The data was then analyzed using descriptive statistics through a computer technique known as Scientific Package for Social Scientists(SPSS) and the results presented in simple table statistics.

1.4 Analysis of the Results

The impact of the water sector reforms was assessed and observed in terms of deviations recorded between the year 2004 and the year 2012 in respect of the following : (i) proportion of women with access to water currently; (ii) The distance to water sources accessed by women, (iii) The proportion of monthly expenditure on water by households, and (iv) Change in monthly income

1.4.1 Proportion of Change in Access to Water

In order to establish the proportion of changes in access to water, the respondents were asked to specify whether or not they had piped water in their households, before the year 2004, and presently. Table 1 shows the responses obtained by gender.

Gender	Did you have p year 2004?	Did you have piped water in your house before year 2004?		
	Yes	No		
Male	97 (33.7%)	64 (22.2%)	161(55.9%)	
Female	76 (26.4%)	51(17.7%)	127(44.1%)	
Total	173 (60.1%)	115 (39.9%)	288 (100.0%)	

Table 1: Res	pondents with	Piped Water	in their Houses	before the Year 2004
		i ipca mutoi		

Source: Author's own compilation.

Table 1 shows that before the year 2004, a total of 60.1% out of whom 26.4% were women headed households had piped water in their houses. However, 39.9% of the households, 17.7% of which were female headed did not have piped water inside their respective houses.

However, the current proportion of the households with piped water in their houses has dropped to only 9.7% for women and 25.3% overall, as shown in table 2. It is worth noting that out of this only 47.9% overall had maintained the same water service provider. This shows that the number of women who had access to piped water are fewer currently than in the year 2004. In essence, more women do not have piped water in their houses. However, this does not necessarily mean that the number of women receiving water have reduced. Only the proportion of individual household connections reduced. This was mainly as a result of disconnection of illegal water connections by the commercial public limited companies.

The reasons for disconnections include downturn in household economic status leading to disconnection of water supply lines due to non payment of water bills by the consumers and the failure by the water companies to maintain the water supply lines like the cases in MIKUTRA, Chemosit (Bomet Scheme) and SNWSCO (Homa Bay and West Karachuonyo schemes).

Gender	Do you have pi	Total	
	Yes	No	
Male	45 (15.6%)	116 (40.3%)	161(55.9%)
Female	28(9.7%)	99(34.4%)	127 (44.1%)
Total	73 (25.3%)	215 (74.7%)	288 (100.0%)

Table 2: Respondents	with Piped Water	Inside Their Hou	ses Currently
----------------------	------------------	-------------------------	---------------

Source: Author's own compilation.

Table 2 also shows that the proportion of women without piped water inside their houses increased to 34.4% from 17.7%. The proportion for male headed households without piped water in their houses also increased to about 40%. This means that more women than men had poor access to water supply. All male headed households also had women in them.

When asked whether or not they had changed water service providers, about 52% including 23.3% female household heads stated that they had changed WSPs as indicated in table 3.

Г	1		
	Is this the same WSP	Total	
Gender of Respondents	Yes	No	
Male	78 (27.1%)	83 (28.8%)	161 (55.9%)
Female	60 (20.8%)	67 (23.3%)	127 (44.1%)
Total	138 (47.9%)	150 (52.1%)	288 (100.0%)

Table 3: The Proportion of Consumers Getting Water Supply from Same WSP
as in 2004

Source: Author's own compilation.

Table 3 shows that only 47.7% of the households had maintained the same WSP as they had before the year 2004. This can be attributed to lack of information on the part of consumers on governance issues of water management. Only the names of the WSPs changed but they still remained the same. For example the water department of Kisumu municipal Council changed to KIWASCO, Ministry of Water in the cases of Homa Bay and Migori local Authorities changed names to SNWSCO and MIKUTRA, respectively. When analyzed in terms of gender by individual water service providers, the results are as shown in table 4.

Table 4. The Distribution of Respondents with Access to Piped Water by Wsps
and Gender Currently
and Gender Currently

Name of current water service provider	Gei	nder	Total	
	Male	Female		
Chemosit Water supply & San Co	33 (11.5%)	18 (6.3%)	51 (17.7%)	
Mogombet Community Water Project	22 (7.6%)	7 (2.4%)	29 (10.1%)	
Kiwasco	36 (12.5%)	20 (6.9%)	56 (19.4%)	
Boya Comm Water Project	14 (4.9%)	16(5.6%)	30 (10.4%)	
South Nyanza Water and Sanitation Company	32 (11.1%)	28 (9.7%)	60 (20.8%)	
Mikutra	13 (4.5%)	25 (8.7%)	38 (13.2%)	
Nyasare Community Water Supply Association	11 (3.8%)	13 (4.5%)	24 (8.3%)	
Total	161 (55.9%)	127 (44.1%)	288 (100.0%)	

Source: Author's own compilation.

Table 4 shows that the proportion of women getting water from various positions in terms of distance from the respective houses is 44.1% compared to households headed by males at 55.9%. The females' headship of households appear more challenging in the rural based WSPs including Chemosit, Mogombet but almost comparing favourably with WSPs within the urban or semi-urban areas including SNWSCO, Mikutra and Nyasare except in KIWASCO. This is attributed to the high cost of water vis a vis the income of the households on the one hand and the irregular supply of water from the conventional WSPs. In urban areas like KIWASCO, the renting of water metre is tied to possession of land title deeds or letters of allotment to the disadvantage of most women. The same scenario applies to SNWSCO, Homa Bay scheme while West Karachuonyo scheme water metres are rented under the name of male household heads save for the widows most of whose water payment register

In summary, in the rural set up, majority of household heads are males. The water supply under MIKUTRA has greatly been irregular and most consumers have resorted to other alternative sources in which case more females than males facilitate the alternative arrangements.

In short, women's access to water in the WSPs have been affected by economic empowerment and governance issues related to restricted participation in the management hence direct bearing on the distance between the households and the source of water supply.

1.4.2 Distance from Water Points

are still maintained in the late husbands' names.

The focus was to assess the changes in distance covered by consumers currently compared to how it was in the year before 2004. The respondents were asked to state how far in metres they were from their respective water access points.

The assumption was that access to water supply by consumers differed with the monthly income and influenced the proportion of income spent on water and subsequently the distance between individual household and their respective points of water supply. The responses are shown in Tables 5 and 6.

WSP	How far (in	How far (in metres) are you from the water access/connectivity point?					
	0-200	201-399	400-599	600-799	800-999	>=1000	
Chemosit	35 (16.3%)	5 (2.3%)	0 (.0%)	2 (.9%)	1 (.5%)	1 (.5%)	44 (20.5%)
Mogombet	23 (10.7%)	1 (.5%)	0 (.0%)	0 (.0%)	0 (.0%)	0 (.0%)	24 (11.2%)
KIWASCO	28 (13.0%)	0 (.0%)	2 (.9%)	0 (.0%)	0 (.0%)	0 (.0%)	30 (14.0%)
Boya	20 (9.3%)	0 (.0%)	0 (.0%)	2 (.9%)	0 (.0%)	0 (.0%)	22 (10.2%)
SNWSCO	43 (20.0%)	3 (1.4%)	3 (1 .4%)	0 (.0%)	0 (.0%)	1 (.5%)	50 (23.3%)
MIKUTRA	21 (9.8%)	4 (1.9%)	1 (.5%)	1 (.5%)	0 (.0%)	0 (.0%)	27 (12.6%)
Nyasare	16 (7.4%)	1 (.5%)	1 (.5%)	0 (.0%)	0 (.0%)	0 (.0%)	18 (8.4%)
Total	186 (86.5%)	14 (6.5%)	7 (3.3%)	5 (2.3%	1 (.5%)	2 (.9%)	215 (100.0%)

Table 5: Distance (in Metres) from the Water Access/Connectivity Point Per WSP

Source: Author's own compilation.

Table 5 shows that of those who did not have piped water inside their respective houses, 86.5% had water within a range of 200m, while 6.5% (2) had accessed water at a distance of between 201-399 m. Only 0.9% of the population accessed water from a distance of over 1 kilometre away. These were from Chemosit and SNWSCO water service providers. The figure of 86.5% shows an improvement in access to water compared to the findings of Wagah, G. et al (2010) which gave a figure of 77.1% especially for Kisumu for those households which had access to water within a distance of 200m.

However, only 25.3% of the 288 respondents had piped water inside their respective households. KIWASCO has the highest number of respondents with piped water in the house at 9.0% followed by MIKUTRA at 4.2%, SNWSCO at 3.1% and Chemosit at 2.4%. The water companies have more piped water connected to individual houses than the community water projects, courtesy of the existing water pipeline network. The proportion of households with access to piped water appears to be on the downward trend from 31.9% in 1989 to 30% in 1999 (Republic of Kenya, 1999). The Kenya Demographic Health Survey of 2004 however gave a higher figure of 39.9%. This shows a decline in all cases compared to those with piped water currently at 25.3%. The decline was attributed partly to the diminishing performance of the water schemes.

However, the higher figure registered around 2004 could be attributed to illegal connections that might have been removed when the management under the water companies reduced operational loopholes. Our figure of 25.3% appear realistic and could be on the upward trend compared to 24% found by Wagah et al (2010).

Water Service Provider	Distance from water source in metres				
	Now	Before 2004	Difference		
CHEMOSIT	241.7	333.3	-91.06		
KIWASCO	188.3	218.3	-30.0		
MIKUTRA	221.7	258.3	-36.6		
SNWSCO	213.3	345	-131.7		
MOGOMBET	173.3	208.3	-35.0		
BOYA	211.7	273.3	-61.6		
NYASARE	195	361.7	-166.7		
OVERALL MEAN	211.7	290	-78.3		

Table 6. Distance from water sources in the year before 2004 and currently in metres

Source: Author's own compilation.

Table 6 shows that at a mean distance from the water sources to the households obtained for the year before 2004 were greater compared to the current mean distance of 211.7m in all the WSPs. Currently it stands at 290m.

In 2004 Nyasare Community water Supply Association had the highest mean distance from water sources at 361.7m while Mogombet had the lowest mean distance from water source at 208.3m. There is noticeable reduction in distance from respective water sources in all the WSPs currently compared to the figures in 2004 with Nyasare recording the highest reduction of 166.7m followed by SNWSCO at 133m and Chemosit at 95m. The least change was registered in KIWASCO at 30m, which is still very significant given the fact that KIWASCO serves the city with high population density compared to the other areas served by the respective WSPs.

We can attribute the reduction of the distance to water sources from the households to the entry of public private partnerships in the water sector in water service provision financing.

Whereas Boya community project partnered with SANA, an NGO, to facilitate water supply in its area of operation, KIWASCO partnered with AFD to increase access to water in informal settlements of Nyalenda in Kisumu city while West Karachuonyo community water project, which is a scheme of SNWSCO, through Koguta community water project received facilitation from WSTF to extend water pipeline by 13 kilometres.

It is also observed from Table 6 that currently, community water projects have the shortest distance from water points to the households than the water companies. This is only with the exception of KIWASCO which has the second overall shortest distance at 188m after Mogombet community water project which has a mean distance of 173m from water points. This means that women who are hardly household heads in the rural set ups are still more disadvantaged. We can therefore infer that in as far as distance from the water point from respective household is concerned, the community water projects have better services than the water companies. Implicitly, women in residing in areas served by community water projects have realized more improvements in terms of water access than their counterparts in areas served by public water companies.

				2004					
Water Service		Now		Before 2	2004		Change t	o date	
Provider	Mean expend.	Mean monthly	% of income	Mean expend.	Mean monthly	% of income	Expend. On	Monthly income	% of income
	on water	income	spent on	on water	income	spent on	water		spent on water
			water			water			
CHEMOSIT	462.13	16667.0	2.0	215.2	15333.6	1.4	246.91	1333.36	1.40
KIWASCO	760.76	29167.25	2.6	253.59	23667.1	1.1	507.17	5500.11	1.50
MIKUTRA	513.85	16417	3.1	285.29	13416.9	2.1	228.56	3000.06	1.00
SNWSCO	510.51	15750.32	3.2	226.89	14750.3	1.5	283.62	1000.02	1.70
MOGOMBET	395.4	12667.9	3.1	273.61	17083.7	1.6	121.79	-4415.78	1.50
BOYA	377.04	12916.9	2.9	235.24	10666.9	2.2	141.80	2250.02	0.70
NYASARE	520.52	29167.25	1.8	315.32	15083.6	2.1	205.20	14083.61	-0.30
OVERALL MEAN	453.79	18167.03	2.5	243.58	16417	1.48	210.21	1750.03	1.02

1.4.3 Household expenditure on water by WSP

Table 7: Monthly Expenditure versus Income of Households Currently and in

2004

Source: Author's own compilation.

Table 7 shows that the current mean monthly income at Kshs 18,163 while the expenditure on water is Kshs 453.79 compared to the monthly income in 2004 at Kshs 16,417.00 against mean expenditure on water of Kshs 243.58.

This implies that households currently spend 2.5% of their income compared to 1.48% in 2004 on water. As expected, respective monthly household incomes increased in all the areas. However, it is worth noting that in 2004, the households around community water projects had higher mean monthly incomes than those of the water companies even where they are in the same locality, for example, MIKUTRA and Nyasare in Migori town on the one hand, and Mogombet and Chemosit around Bomet town on the other as shown in Table 7. This could be attributed to the fact there was a likelihood of social exclusion factor whereby only more privileged people were more likely to spend more money to connect water which will normally be beyond reach of the common person where there was no public utility supply. As expected being in a city hence serving a population of a relatively higher income bracket, KIWASCO not only registered the highest mean monthly income then but also currently.

1.4.4 Economic Situation of the Consumers

We wished to establish the impact of the water sector changes on the economic situation of the consumers as determined by: mean monthly income; expenditure on water; and proportion of respective households income spent on water. This was to establish whether, by holding other factors constant, the expenditure on water has impoverished or has made life cheaper to the consumers.

Before the year 2004, mean monthly water bill was Kshs 243.58 while as at January 2012 it was Kshs 453.79. However, the mean monthly income for the consumers before 2004 was Kshs 16,416.99 while currently, mean monthly income is Kshs 18,167.03. This implies that before 2004, the consumers spent 1.45% of their income on water expenses while currently, they spend an average of 2.5% of their incomes on water bills. This is still however within the acceptable limit of UNDP's recommended proportion of 3% (UNDP, 2006).

We wish to note that the proportion of monthly income spent on water increased in the WSPs between 2004 and 2012 with exception of Nyasare Community Water Supply Association which recorded a decrease from 2.1% to 1.8%. The highest increase was registered in SNWSCO at 1.7%. Other than MIKUTRA, SNWSCO and Mogombet, the proportion of the expenditure on water of the monthly household income are all within the recommended level by UNDP as shown in Table 7.

The increased costs of water in registered in public water companies, is most likely to be as a result of the withdrawal of or reduced subsidies by the government following the introduction of water sector reforms since the companies got into private management. At Mogombet, the situation was made worse by the high cost of electricity for pumping water from the rivers to the reservoir tanks up hill. In general terms, the increased proportion of individual household's expenditure on water is likely to have raised the cost of living for the consumers in general and to women, in particular.

1.5 Conclusion

The decline in the proportion of those with access to piped water in the households implies increased responsibility for women who have to either pay more for water delivered through vendors or have to walk longer distance to fetch water. This is the same case with male headed households as well since the responsibility to get water for domestic use still is on the woman of the house.

The implication is that the water sector reforms is yet to be felt by the consumers in general and women in particular in as far as the envisaged increased access to affordable and quality water in the right quantity at the right time. Although at face value one could be hoodwinked to associate general average reduction in distance covered by households to the main water supply sources by 78m in a period of over ten years, this is too little to write home about. Again, given the fact the reduction has been felt more in the community water projects than the subsidized and government supported commercialized public limited water companies, is enough evidence to show that the commercialization of the water provision services has not done enough to justify its existence.

Finally, commercialization of the water services has caused drastic reduction of access to water from about 44% to about 25%.

The expected quick recovery is yet to be realized as the companies save for KIWASCO still receive massive subsidies from the government which implies further tax burden on the consumers.

In economic terms, the average proportion of monthly expenditure in three of the seven WSPs including two of the commercialized water companies, MIKUTRA and SNWSCO have surpassed the UNDP recommended figure of 3% which means the households have further been impoverished by the water sector reforms.

The proportion of the monthly expenditure for Boya community water project, which is among the best performing WSPs, has also surpassed the 3% mark, courtesy of the government regulatory charges without the promised services, hence charges being transferred to the consumer.

1.6 Recommendations

The study recommends that the government should be more concerned more with increasing the supply of water instead of over concentrating on regulating the distribution of the constant supply of water. This could be achieved by enhancing the direct financing of the community based water projects and promptly instead of taking them through long and less transparent process through Water Service Boards whose performance have been wanting in this area. There is more presence and participation of women in the governance of community based water projects. More support from the government would emancipate women further. The Public water companies are all male dominated in their governance structure and as such the interests of women have not been adequately captured.

The government should also enhance the development of more water infrastructure which currently takes water from the rural to the urban centres with no access to the former. This could be part of the mandate for the devolved county governments. This would enable the rural women access clean piped water easily.

List of Abbreviations

ADB	African Development Bank
AFD	French Agency for Development
BOT	Build Operate Transfer
BOOT	Build Own Operate Transfer
CAAC	Catchment Area Advisory Committees
CBO	Community Based Organization
DANIDA	Danish International Development Agency
FBO	Faith Based Organisation
GWASCO	Gusii Water and Sanitation Company
IWSP	Independent Small Water Service Provider
KEWASCO	Kericho Water and Sanitation Company
KFW/GTZ	German Development Agency
KIWASCO	Kisumu Water and Sanitation Company
LA	Local Authority
LVWATSAN	Lake Victoria Region Water and Sanitation Initiative
MDG	Millennium Development Goal
NWC&PC	National Water Conservation & Pipeline Corporation
PLC	Public Limited Company
SANA	Sustainable Aid in Africa International
SNWSCO	South Nyanza Water and Sanitation Company
SPAs	Service Provision Agreements
WSB	Water Services Board
WSP	Water Services Provider
WSRB	Water Services Regulatory Board
WSTF	Water Services Trust Fund

References

- Alila P. et al (2007) "Business in Kenya: Institutions, Interactions, and Strategies" in Alila P. et al (Eds), Business in Kenya: Institutions and Interactions University of Nairobi Press, Nairobi.
- Asingo, P.O. (2005) Privatization of Water Services in Kenyan Local Authorities: Governance and Policy Issues. IPAR Discussion Paper no. 067/2005, Nairobi.
- Budds, J. et al.(2003) "Are the debates on privatization missing the point? Experiences from Africa, Asia and Latin America", in Environment and Urbanization, 15 (2).
- Clarke, G. et al.(2004) "Has Privatization of Water and Sewerage improved coverage? Empirical Evidence from Latin America". World Bank policy Working Paper No. 3445, Washington DC, World Bank.
- Dagdeviren, H.(2008) "Waiting for miracles: The commercialization of Urban water services in Zambia" in Development and Change 39(1), Blackwell Publishers, UK

- Estache, A. et al. "How Different is Efficiency of Public and Private Water Companies in Asia?" in The World Bank Economic Review, Vol 16, no.1. Oxford University Press: http://www.jstor.org/stable/3990169 on 06/08/2010
- Gopakumar, G. "Transforming Water Supply Regimes in India: Do Public-Private Partnerships Have a Role to Play"? Water Alternatives 3(3): 492-511
- Migai, A (2009)Privatization & Democracy in East Africa: The Promise of Administrative law, EAEP Ltd, Nairobi.
- Ndokosho, J et al(2007) : "Assessment of management approaches in a public water utility: A case study of the Namibia water corporation (NAMWATER)" Physics and of the Earth 32 1300–1309
- Nyarko, K.B. et al (2011) "Local authorities, community and Private Operators Partnerships in small towns water service delivery in Ghana" Physics and Chemistry of the Earth 36,1078–1084
- O A K'Akumu (2004) "Privatization of the urban water supply in Kenya: policy options for the poor" in Environment Urbanization Vol 16 No 2 October

___ "The political ecology of water commercialization in Kenya" in Int.

J. Environment and Sustainable Development, Vol. 6, No. 3, 2007

______ "Privatization model for water enterprise in Kenya" in Water Policy 8, 2006.

- O. A. K'Akumu and P. O. Appida (2006) "Privatization of urban water service provision: the Kenyan experiment" in Water Policy 8.
- Okeyo J. O.(2011) "Public Private Partnerships in the Privatization of Water Service Delivery in Kenya", in Uhlig, U. (Ed.), Current Issues of Water Management, Rijeka, Croatia
- Onjala, J.(2007)" Essential services- Electricity and Water: The Challenges and Options for Business in Kenya". In in Alila P. et al (eds), Business in Kenya: Institutions and Interactions University of Nairobi Press, Nairobi
- Ouyahia, M. A (2006) "Public-Private Partnerships for Funding Municipal Drinking Water Infrastructure: What are the Challenges? PRI Project Sustainable Development Discussion Paper.

http://www.pppcouncil.ca/pdf/muni_water_p3_report_govcanada_052006.pdf: downloaded on 8/10/2012

- Owuor S.I O. & Foeken D.W.J. (2009) Water reforms and interventions in urban Kenya: Institutional set-up, emerging impact and challenges, ASC Working Paper 83.
- Prasad, N.(2006)"Privatization Results: Private Sector Participation in Water Services sector after 15 Years" in Development Policy Review,24 (6). Blackwell Publishing, Oxford, United Kingdom.
- Republic of Kenya (1972) The Water Act Chapter 372, Laws of Kenya: Revised Edition. Government Printer, Nairobi.
- Republic of Kenya (1996) Report on next step in the commercialization of water and sanitation services in Eldoret, Kericho and Nyeri Municipal Councils. Ministry of Local Government, Nairobi.
- Republic of Kenya (2002) The Kenya Gazette Supplement No. 107 (Acts No. 9): The Water Act 2002. Government Printer, Nairobi.
- Republic of Kenya, (2004) The Kenya Gazette Supplement No. 14 (Bills No. 4): The Privatization Bill, 2004. Government Printer, Nairobi, March 31.

- Republic of Kenya (2007) "The National Water Services Strategy (2007-2015)", Nairobi: Ministry of Water and Irrigation.
- Sahooly, A. (2003) "Public–Private Partnership in the Water Supply and Sanitation Sector: The Experience of the Republic of Yemen" Water Resources Development, Vol. 19, No. 2, 139–152.
- Stoker, G. (1998)Governance as a Theory: Five propositions. Blackwell publishers, Oxford, United Kingdom.
- Schwartz, K. (2008) "The New Public Management: The future for reforms in the African water supply and sanitation sector" Utilities Policy 16, 49-58.
- Tati, G, (2005) "Public-Private Partnership (PPP) and Water-Supply Provision in Urban Africa: The Experience of Congo-Brazzaville" in Development in practice, Volume 15, Nos 3 & 4, June http://www.jstor.org/stable/4029964?seq=2 downloaded on 8/10/2012
- UNCHS (1998b): Privatization of Municipal Services in East Africa: A Governance Approach to Human Settlement Management. United Nations Centre for Human Settlements (Habitat), Nairobi.
- Wagah G. G et al (2010) "Accessibility of water services in Kisumu Municipality, Kenya ", in Journal of Geography and Regional planning Vol. 3(4), May
- Wambua, S. (2004), "Water Privatization in Kenya", in Global Issue Papers No. 8.
- Water Services Regulatory Board (2009): A performance Report of Kenya's Water Services Sub-Sector Issue No 3.,

http://www.wasreb.go.ke/index.php?option=com_content&task=view&id=70&Ite mid=145 downloaded on 15/1/2011

- Water Sector Reform Secretariat (2003) Proposed Delineation of Boundaries for Water Services Board. Water Sector Reform Secretariat, Nairobi.
- Water Sector Reform Secretariat (2005) A Handbook of the Water Sector Reforms. Water Sector Reform Secretariat, Nairobi.
- Webb, P. & M. Iskandarani (2001) "The Poor Pay Much More for Water and Use Much Less, Often Contaminated"; Water and Sanitation Update.
- World Bank (1983)World Bank Development Report, New York, OUP.
- World Bank (1997) World Development Report, World Bank. Washington DC.
- World Bank (2004a)" The Republic of Kenya: Towards Water Secure Kenya". Report No. 28398-KE. World Bank: Washington DC.
- Zaki, S. Et al (2009) "Does Basic Services Privatization Benefit The Urban Poor? Some Evidence From Water Supply Privatization In Thailand" in Urban Studies 46(11).