Water governance in Kenya:
Ensuring Accessibility, Service delivery and Citizen Participation
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Abstract

Water governance involves the upholding of the policies, strategies and legislation where water service providers have to develop and manage water resources in an efficient and effective manner while being accountable to the recipients of the services.

Effective management and access to water resources is vital to sustainable development and good governance. Governments across the world have spent considerable effort and resources to move toward that goal. Governments, the public, donors, and development agencies have often neglected challenges in water governance. Some of these challenges are related to policies, access to water resources, participation and water information.

In Kenya, a range of technical solutions for water problems could work if governance structures are good. The first section of this paper addresses a review of Kenya’s water supply and sanitation situation. The second section encompasses the governance structure in the water sector, which includes the policies, and institutions set to address water problems. The final section covers key water governance components and the use of technology as a strategic tool in the thematic area of water.

Key words: Water governance, sustainable development, and good governance
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Abbreviations

NCC: Nairobi City Council
MDG: Millennium Development Goals
NCWSC: Nairobi City Water & Sewerage council
AWSB: Athi Water Services Board
WAG: Water Action Group
WASREB: Water Services Regulatory Board
KWAO: Kenya Water for Health Organization
ASAL: Arid and Semi Arid lands
RBM: Results Based Management
RRI: Rapid Results Initiatives
PC: Performance Contracting
IRWS: Integrated Water Resource Strategy
NWSS: National Water Services Strategy
TISDA: Transparency and Integrity Service Delivery
JMP: Joint Monitoring Programme
Kenya is limited by an annual renewable fresh water supply of only 647 cubic meters per capita and is classified as a water scarce country (Momanyi, Quyen Le, 2005). Only 57 percent of the rural population has access to an improved drinking water source, and the time-intensive pursuit of water collection often prevents women from taking up income generating activities or in the case of girls, prevents them from attending school (Ministry of Water and Irrigation Strategic Plan 2009-2012).

In 2007, findings from the National Water Services Strategy indicated that the water sanitation situation is poor with only 57% of households using water from sources that are considered safe. Sustainable access to safe water is around 60% in the urban setting and drops to as low as 20% in the settlements of the urban poor where half of the urban population lives (KIHBS 2005/2006/ 7).

Over 50% of Kenya’s households do not have access to safe drinking water and the proportion is higher for the poor. In urban areas, large populations living in informal settlements within the towns and cities have no access to safe water. In rural areas, there are large disparities between geographic areas where in North Eastern and Eastern Provinces less than 30% of the poor have access to safe water compared to some 60% in Western Province (Social Policy in Kenya Report).

The Millennium Development Goal 7C outlines the target for halving the proportion of population without sustainable access to safe drinking water and sanitation by 2015 (Millennium development goals). It is noted that poor countries with access to clean water and sanitation services experienced faster economic growth than those without: one study found that countries with better access to improved water and sanitation services had an annual economic growth rate of 3.7 percent. Similarly poor countries without access had annual growth of just 0.1 percent. Almost 80% of diseases in so-called “developing” countries are associated with water, causing some three million early deaths. For example 5,000 children die every day globally from diarrhea, or one every 17 seconds (worldometers).
All water resources in Kenya remain vested in the state. The Ministry of Water and Irrigation is tasked with the responsibility of creating institutions to manage water resources and provide water services.

In 2002, the water sector reforms in Kenya culminated in the passing of the Water Act, gazetted in October 2002. The Water Act introduced new water management institutions to govern water and sanitation. The water reforms saw the introduction of the commercialization of water resources as part of the decentralization process and the participation of stakeholders in the management of national water resources. Policy and regulation responsibilities were separated. The devolution of responsibilities for water resources management and water services provision to local level functions has been the principal mechanism for improving accountability and transparency in the water and sanitation sector.

The Water Act provides a legal framework for the creation of water institutions and limits the Ministry’s role to policy formulation; overseeing the implementation of the policies; and resource mobilization. The Ministry is also responsible for irrigation, drainage, and land reclamation. As a result of the provisions in the Water Act of 2002, the Water Resources Management Authority was created. Its mission is to manage, regulate and conserve all water resources in an effective and efficient manner by involving the stakeholders, guaranteeing sustained access to water and equitable allocation of water while ensuring environmental sustainability.

The Ministry of Water and Irrigation has set up several institutions such as Water Resources Management Authority, Water and Sewerage Services Policy among others to streamline its operations in the area of service delivery in the water sector. Some of the duties of the Water Resources Management Authority include: To ensure Rational and equitable allocation of water resources, water quality monitoring, testing and surveillance to ensure compliance with drinking water standards and other standards for various water uses and effluent discharges into public sewers and the environment and Mapping and publishing of key water catchment areas, groundwater resources and flood prone areas.
In 2008 a report by Joint Monitoring Programme for Water (JMP) showed that 59% of Kenyans had access to improved drinking water sources with urban and rural areas standing at 83% and 52% respectively. A recent study conducted by the African Research Institute in two constituencies (Embakasi and Lang’ata) within Nairobi County established that water still continues to be the thematic area that citizens demand right for. According to this study, 13.5% of the respondents had at one time demanded a right, the highest number of citizens 23.9% demanding rights on water related issues. With 71.6% of the citizens stating that they encountered a problem while trying to access their rights. This indicates there is need for a range of actors to work together to improve access to water - policy makers, development practitioners, citizens and producer associations, community leaders and other civil society actors - and discusses practical ways to take account of water access and programmes contribution to the development of water and sanitation issues.

Components of water governance

Access to Water

In 2008 a report by Joint Monitoring Programme for Water (JMP) showed that 59% of Kenyans had access to improved drinking water sources with urban and rural areas standing at 83% and 52% respectively. A recent study conducted by the African Research Institute in two constituencies (Embakasi and Lang’ata) within Nairobi County established that water still continues to be the thematic area that citizens demand right for. According to this study, 13.5% of the respondents had at one time demanded a right, the highest number of citizens 23.9% demanding rights on water related issues. With 71.6% of the citizens stating that they encountered a problem while trying to access their rights. This indicates there is need for a range of actors to work together to improve access to water - policy makers, development practitioners, citizens and producer associations, community leaders and other civil society actors - and discusses practical ways to take account of water access and programmes contribution to the development of water and sanitation issues.

Figure 1.0: Issues demanded rights for
A case study conducted in Kangemi area by TISDA (Transparency and Integrity Service Delivery in Africa) revealed that many families in informal settlements such as Kangemi suffer acute shortages of water because some landlords have illegally continued to control access as well as the cost of water without approval from the water service provider or the regulator. Such landlords determine when their tenants get water, how much water they get, and how much money they pay for the water. This they have made certain by locking the yard taps which is the main source of water for their tenants (TISDA, 2011).

The study also revealed that the tenants in the low-income areas pay more for water than their counterparts in the well-off residential areas. For example an average consumption per household is 78.7 liters per day, translating to 2.4m3 per month, which according to the water service provider should cost about Kshs 45. With the additional cost of Kshs 500 to 1000 that the tenants pay for water services, the landlord, makes a profit of about Kshs 455.

According to a recent study conducted by African institute most of the participants, 56.5% of the households interviewed, stated that they spend Ksh 500 per month to cater for the cost of water. 10.8% pay between Ksh 1000 to Ksh 4000 so as to get this vital commodity. It is worth noting from the findings that despite the efforts to avail water to the citizens at affordable price a significant number of people still pay above Ksh 4000 per month for their water bill, which is high considering the fact that water is a necessity that needs to be accessible to all at affordable rate. All this is summarized in figure 2.0. The high cost could be attributed to the many middlemen such as water vendors and uncounted water, many of whom are out to maximize profit at the expense of citizens.

Different articles and surveys show that up to 50% of water goes unaccounted for in Nairobi, something attributed to possible leakages. Many of the capital’s water pipes were laid down before independence in 1963 and are now worn out.

Figure 2.0: Cost of water per month

COST OF WATER PER MONTH

KEY
- Nothing
- Less than Kshs 500
- Kshs 500-1000
- Kshs 1000-2 000
- Kshs 2000-4000
- Above 4000

- 56.5%
- 27.9%
- 8.9%
- 3.6%
- 1.9%
- 0.8%
There is a perception among community members that there are cartels comprising of powerful politicians, employees of Nairobi Water Company (NWC), water vendors, employees of Nairobi City Council (NCC) among others who are out to ensure that the status quo of the existing water problems is maintained. These cartels fiercely protect their ‘investments’ and thwart attempts at initiatives set by stakeholders in the water sector to improve water access among the citizens.

There are huge variations between rural and urban dwellers. While only 6.8% of urban residents are dependent on unsafe water sources, 42.3% of their rural counterparts are dependent on unsafe water sources. Over 80% of people in West Pokot, Marakwet, Bomet, Rachuonyo and Mwingi Districts depend on sources of drinking water that are considered unsafe (KIBHS Survey 2005/2006).

Eighty seven per cent of the population living in informal settlements in Mombasa use drinking water from an improved source and 49% are reportedly treating the drinking water. More than 80% of the households take less than 15 minutes to fetch drinking water (Multiple Indicator Cluster survey, 2009). These figures show there is urgent need to ensure easy access to clean water sources and awareness on how the community at large can ensure water is accessible through affordable rates, above all effective operations ensured to streamline the quality of water.

**Service Delivery**

The piped water consumer in Nairobi gets water from Nairobi City Water & Sewerage Company (NCWSC), a water service provider appointed by the Athi Water Services Board (AWSB) to provide water and sewerage services to the residents of Nairobi and its environs. Although NCWSC is a subsidiary of the Nairobi City Council (NCC), it has operational autonomy to enable it to run efficiently and without political interference.

In informal settlements (slums), the consumer typically gets water from private vendors operating water kiosks, or from pushcart vendors. Often these vendors get their water from NCWSC through illegal connections, or from private individuals who have drilled boreholes. Most of Nairobi’s water comes from water dams located about 50km from the city that harnesses the Aberdares ranges water catchment area. The biggest of these sources is Thika dam (Ndakaini) upstream of Ng’ethu Water Works in Gatundu, which produces over 80% of the water from this source. Unreliable water supply and lack of coverage by the water distribution network in some parts of the city prompted some private individuals and organizations to drill boreholes. With over 2,500 boreholes drilled since 2005, the current utilization of groundwater in Nairobi is unsustainable.

In 2009, an environmental impact assessment commissioned by AWSB (Athi Water Services Board) stated that approximately 75% of these city residents get water from pushcart vendors and resellers at water kiosks. These vendors’ prices currently range between Ksh 5 and Ksh 10 per 20 L plastic jerrycan, which amounts to between Ksh 250/m3 and Ksh 500/m3. This makes the cost over 26 times higher than the regulation rate of Ksh 18.71/m3 for domestic consumers, as published by Athi Water Service Board in their cur-
rent water tariff structure. City residents connected to piped water are charged using the published tariff structure. This large disparity in water prices with Nairobi’s poor paying an exorbitant price that aggravates their already shaky economic circumstances is attributed to many factors.

A survey which covered five districts in Western Province and parts of North Rift including: Kakamega, Busia, Bungoma, Uasin Gishu and Nandi was commissioned by the Lake Victoria North Services Board and National Taxpayers Association in 2010. Its aim was to survey customer satisfaction in the area of water services provision. Findings from the survey indicate that springs, rivers and streams are the main sources of water for residents in those areas. During the wet season, most households harvest rainwater. Only 23% of those surveyed access drinking water from a tap, while 8% harvest rain. Others include rivers and streams. During scarcity, springs and wells account for up to 40% of source of drinking water. On average, households spend between Ksh 607 every month on water during normal times, and Ksh724 in times of scarcity respectively.

Recently, African Research Institute further established that 38.7% of the households in Lang’ata and Embakasi constituencies rely mostly on public taps as their main source of water. The reason could be linked to the fact that a good number of the participants are low-income earners who cannot afford self-contained houses with tapped water and are therefore subjected to go for the next available better option. 26.9% had access to water being piped into their plots, 17.8% of the households interviewed had access to water being piped in their dwelling places, 9.7% relied on tankers/trucks or vendors while another significant percent of 6.2% have to depend on pumped water from borehole. The summary is as drawn in figure 3.0. Only a small percentage of about 0.5% of the people interviewed relied protected springs/wells or rivers/ponds. This could be attributed to the fact that the study was conducted in an urban setting where accessibility to such natural water systems is not easy.
Figure 3.0: Main source of water

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public tap</td>
<td>38.7%</td>
</tr>
<tr>
<td>Piped into Plot</td>
<td>26.9%</td>
</tr>
<tr>
<td>Piped into dwelling</td>
<td>17.8%</td>
</tr>
<tr>
<td>Borehole with pump</td>
<td>9.7%</td>
</tr>
<tr>
<td>Tankers/Trucks</td>
<td>6.2%</td>
</tr>
<tr>
<td>Protected dug well</td>
<td>0.7%</td>
</tr>
<tr>
<td>River/Ponds/Springs</td>
<td>0.0%</td>
</tr>
<tr>
<td>Protected spring</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
The research sought to find out whether water supply was constant in the Embakasi and Langata areas under study and it established that only 22% of the households had access to regular and constant water supply. It’s important to note that the proportion of households who stated the main source of water as not being constant was almost equal in Embakasi and Lang’ata with 51.3% from Embakasi affirming this while Lang’ata standing at 48.7% as shown in Table 1.0 below. This actually indicates that the problem is not limited to one given constituency but cuts across the two areas under the study.

**CROSS TABULATION OF CONSTITUENCY AND IF THE MAIN SOURCE OF WATER IS CONSTANT**

<table>
<thead>
<tr>
<th>Constituency</th>
<th>Count</th>
<th>Is the main source of water constant?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Embakasi</td>
<td></td>
<td>210</td>
<td>730</td>
</tr>
<tr>
<td>% within CONSTITUENCY</td>
<td>22.30%</td>
<td>77.70%</td>
<td>100.00%</td>
</tr>
<tr>
<td>% within Is the main source of water constant</td>
<td>51.70%</td>
<td>51.30%</td>
<td>51.40%</td>
</tr>
<tr>
<td>% of Total</td>
<td>11.50%</td>
<td>39.90%</td>
<td>51.40%</td>
</tr>
<tr>
<td>Langata</td>
<td></td>
<td>196</td>
<td>693</td>
</tr>
<tr>
<td>% within CONSTITUENCY</td>
<td>22.00%</td>
<td>78.00%</td>
<td>100%</td>
</tr>
<tr>
<td>% within Is the main source of water constant</td>
<td>48.30%</td>
<td>48.70%</td>
<td>48.60%</td>
</tr>
<tr>
<td>% of Total</td>
<td>10.70%</td>
<td>37.90%</td>
<td>48.60%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>406</td>
<td>1423</td>
</tr>
<tr>
<td>% within CONSTITUENCY</td>
<td>22.20%</td>
<td>77.80%</td>
<td>100.00%</td>
</tr>
<tr>
<td>% within Is the main source of water constant</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>% of Total</td>
<td>22.20%</td>
<td>77.80%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Table 1.0: Cross tabulation of constituency and if the main source of water is constant

Figure 4.0 below reflects the relationship between the main sources of water and whether the supply of water from the main source is constant. From the chart, it is clear that public taps remain one of the water sources that is never constant in supply, despite most people relying on public taps. Of those relying on public taps, 79.3% do not have access to constant water supply. This is a very high percentage bearing in mind that majority use this source (public taps) as their main water access point.
Unless citizens are aware of the public services they are to receive and to what standards then challenges of having public piped water that is seen to be the main source, will continue to be unreliable. Citizens should also be well informed and have access to service charters of what the service providers are to provide to be held accountable and the citizens will be able to evaluate the quality standards of the services they receive.

**Citizen Participation**

There are two broad dimensions of citizen participation namely, indirect involvement and direct involvement. Indirect involvement acknowledges that electoral officials and professional administrators should act on behalf of the citizens in a representative democracy. Direct involvement suggests that citizens are the owners of the government and should be involved in the decisions of the State. (Water supply to Nairobi 2011)

When it comes to water issues affecting the various communities in Kenya, the approach taken has ranged from Water Companies partnering with residents in the low income
areas (registering the water service vendors, to receiving complaints and assisting in setting up infrastructure like pipes) to the use of Community groups to address water-related problems. Issues faced by citizens in the water sector include: lack of access, water shortages due to rationing, overbilling, and high costs among others like not knowing who to complain to when faced with challenges on the ground that are their rights.

Water Action Groups (WAGs) - an initiative of the WASREB Kenya are being used to solve the water issues. During the pilot project of 2010, WAGs gathered feedback on water services across neighborhoods in the capital city of Nairobi, in Kisumu and Kakamega Town in Western Kenya, and in the coastal city of Mombasa. By the end of the pilot in December 2010, WAGs helped resolve 97% of more than 400 complaints. Utilities also improved their complaint-handling systems - in some cases, dramatically, says Water and Sanitation Specialist Rosemary Rop, of the World Bank’s Water and Sanitation Program, Africa region. Along the way, the groups encountered resistance from the water utilities and faced threats of physical harm after reporting cases of corruption. These challenges are being overcome with introduction of electronic systems that are helping to track complaints and resolve issues.

According to the recent study done by African institute as summarized in table 2.0 most citizens have no one to complain to when faced with water issues, this shows there are no effective feedback mechanisms in place to enhance citizens’ participation and communication in the water sector among other thematic areas.

<table>
<thead>
<tr>
<th>Ever had to complain about provision of water services in the community?</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>278</td>
<td>15.2</td>
</tr>
<tr>
<td>NO</td>
<td>1556</td>
<td>84.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1824</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2.0 Number of citizens in relation to who to complain to

15.2% of the research participants had launched complains about provision of water services in the community. It is important to note that the other 84.8% of the participants had not launched complains on water related issues not because they lacked complaints, but because they failed to get the audience that would listen to, address their pleas and act accordingly. The question is: “Why is the ministry of water and local authorities not the first to be approached?” Is it that they are far from reach by the affected citizens or
that they do not have the right tools to ensure an effective feedback loop is enhanced?

Whom do you complain to when you fail to get water?

<table>
<thead>
<tr>
<th>Whom</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No one</td>
<td>1233</td>
<td>68.9</td>
</tr>
<tr>
<td>Provincial administration</td>
<td>87</td>
<td>4.6</td>
</tr>
<tr>
<td>Church/religious leaders</td>
<td>17</td>
<td>1.0</td>
</tr>
<tr>
<td>Local authority</td>
<td>143</td>
<td>8.0</td>
</tr>
<tr>
<td>Water vendors</td>
<td>76</td>
<td>4.1</td>
</tr>
<tr>
<td>Ministry of water</td>
<td>16</td>
<td>0.9</td>
</tr>
<tr>
<td>Water company</td>
<td>69</td>
<td>3.4</td>
</tr>
<tr>
<td>Media</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Member of parliament</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Other</td>
<td>173</td>
<td>9.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1773</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 3.0 Whom do you complain to when you fail to get water

The questions that arise after launching complaints are: has someone listened to you? Has action been taken? Are you satisfied with the attention given to you?

Out of the 272 respondents who had filed complaints to the various authorities, only 91 (about 33.5%) of them got satisfied with the response they got. The other 66.5% either got dissatisfying responses or didn’t get any response at all. In terms of the vari-
ous authorities, a high percentage of respondents, 40.9% got satisfying responses from the water vendors. The probable reason could be; since they are in business they would want to lure more clients and expand their customer base. Local authority followed very closely at 39.1% of the respondents who filed complaints to them feeling satisfied with attention accorded to them. Of the people who had send complaints to the ministry of water, only 28.6% received satisfactory responses from the ministry. Only one person complained to the media and he/she received a dissatisfactory response. 16.7% complained to no one but still got satisfied as shown below in figure 5.0.

Figure 5.0: Who to complain to and feelings on responses

Failure to respond to the demands tabled to them is one of the ways that authorities use to derail efforts of the community members in getting justice. 73.8% of the respondents who had demanded rights on water related issues complained of authority’s sluggishness to address their demands. Authorities’ unwillingness to listen to citizens also came out as a major challenge that citizens face while demanding their rights.
The disparity in the water governance comes in when one considers all the effort government has put in to set up infrastructure and policies and regulations vis-a-vis the information that the citizens have of services available on how they can interact with government to get better water services. This situation has led to citizens taking the initiative to get involved in the water governance sector to try and reduce their water related challenges. This is usually classified as citizen participation.

Citizen participation has been shown in the following ways:

1. **The tech community**: has participated in building technology applications using platforms like SMS, USSD, Web and Desktop applications to address issues like billing, water access, complaints management and general information provision. Examples of applications that have been built include M-Maji, MajiVoice, SODIS as successful technologies being implemented on the ground with a social impact.

2. **Informal and formal groups** have been created where citizens in a community come together and combine effort to tackle the water related issues in their communities.

3. **The government**: has set up initiatives through their local institutions, for example Water Action Groups (WAGs) by WASREB (Water Services Regulatory Board) to ensure citizens participate in solving water problems and decision-making process. Also through the ministry of water and
Irrigation website, it acts as an e-governance platform where citizens are able to get access to information of the different facilities.

4. **NGOs:** Several NGOs are working in Kenya to try and solve water related issues. Examples of these include: Water San Project by KWAHO (Kenya Water for Health Organization). This project which was initiated two years ago has so far managed to install 3 water tanks averaging 10,000 litres each. The areas where these tanks are located are: Makina Baptist School, Kisumu Ndogo village and are managed by Darajani Women Group and Kisumu Ndogo Usafi na Maendeleo Group (partner CBOs) respectively.

5. **Inter-governmental organizations:** UNDP commissioned a study on improving water governance in Kenya through the human rights based approach in November of 2007. The World Bank is spearheading the tackling of water issues through holding of information seminars that link stakeholders in the various water sectors. In October 2011, the World Bank sponsored the Water Hackathon at the iHub where developers were tasked to build applications that could tackle problems in the water sector.

6. **Research firms & Academia** e.g. local firms such as iHub research have been on the front line of interacting with the different stakeholders to drive policy-related research that will provide a platform that acts as a meeting point where all stakeholders meet and discuss these water issues and work together to find possible solutions. More so, these academia institutions have acted as lobbyists by being part of telling stories and writing about them to enhance positive feedback and engagement. Local universities such as Nairobi University have also been greatly involved in such initiatives through working with communities in the rural areas.

7. **Media:** local radio stations, private media institutions and print media play an important role in escalating citizen’s issues by reporting water issues and creating an informative media. Media such as local radio stations, Internews, county editions among others have been used as a means to report issues on the ground to embark on active participation through mapping citizen voices to reduce corruption in the country.
Potential of technology as a strategic tool in the governance components

Potential of Technology in Citizen Participation

I. **Social mobilization tool**: Technology can act as means of interaction among citizenry and stakeholders in which citizens can engage horizontally with their county authorities via provision of multiple channels e.g. through local media

II. **Create awareness**: Through technology tools citizens can be regularly informed through avenues of citizens participation platforms and SMS alerts channeled to them

III. **To extend buy-in**: Technology can be used to extend community gatekeepers buy-in and the different stakeholders involved especially the state to ensure sensitization and allow decisions in the government to be citizen centric.

IV. **Prevent corruption**: Technology tools can be used to reduce corruption. An open platform lets citizens amplify their voices, exercising their rights and cement trustworthy relationships among stakeholders in the governance structure through online platforms and media such as local radio stations.

V. **Social portal**: where citizens get freedom of information/expression and interact with the stakeholders to ensure advocacy.

VI. **Feedback tool**: Technology can be used as an efficient tool to provide evidence-based feedback to the citizens and save time for the leaders to communicate with the different stakeholders involved.

Potential of Technology in access to information/ transparency

I. **Openness**: As a strategic tool to provide relevant information to the citizens at the county and constituency levels, hence facilitating democracy and create Freedom of Information legislation that needs to be enacted

II. **Development opportunities**: through open information, opportunities are created for the Tech community to build applications that raise public demand and solve the challenges of the community
III. **Sharing information:** the power of technology allows sharing of more information to more people in a faster, more accessible and customizable way

IV. **Monitor human rights:** by enhancing divulgence of the different categories of information to the most appropriate levels of citizens

V. **Effective communication:** through means such as call-in-radio as a communication media where citizens can discuss topical issues and their challenges on an open platform that is affordable to citizens

**Potential of Technology in service delivery**

I. **To allow service providers focus** on unmet needs of citizens by determining which services are to be delivered to the citizens and getting a confirmation from the citizens via mobile technology and other platforms

II. **To enhance** rights entitlements for better service delivery

III. **To relay access** to service related information in simple format

IV. **As a Feedback tool** for citizens to communicate possibility on quality of services offered by service providers and be able to amplify their concerns without difficulty

V. **To create awareness** on Service charter; informing citizens about what the service providers are to offer and guidelines of how and where they can access the services

VI. **Efficient communication** needed to solves underlying structural and infrastructural problems as they continue to hamper service delivery
Challenges

Kenya faces several development challenges that limit the extent of service delivery in the water sector. In addition to the challenges that citizens face as mentioned throughout the paper, the other challenges at national and ministry level include:

The National Challenges

1. **Access to water resources**: Reaching the poor and the underserved through commitment to providing water and sanitation services to a majority of Kenyans within a reasonable distance of 2km for rural areas and 150 to 200 metres for urban settings. This goal has not been realized in most of the target areas. The Ministry has to obtain more pro-poor resources for this purpose.

2. **High poverty levels**: in the country remains one of the biggest challenges facing Kenya today. About 46 percent of Kenya’s population lives below the poverty line (2008). There are also large income disparities between regions in the country. This is a challenge, which may undermine realization of the Plan targets and may compel the Ministry to re-evaluate the sustainability of user charges or community contributions among the poor sections of water consumers, especially in the Arid and SemiArid Lands (ASAL) regions.

3. **Poor governance and corruption** prevent effective use of resources and may lead to such resources being diverted away from the Plan’s activities if not addressed.

4. **Continued Degradation of Water Catchment Areas**. Degradation of the catchment areas leads to decreasing water flows in rivers, which may, consequently, cause conflict over water uses.

5. **Increased Energy Cost** impact on the cost of delivering water services to the people at an affordable price. This problem is also compounded by the fact that people are reluctant to pay for water services

6. **Discharges to river systems**: As water sources get more and more polluted so does the cost of treating that water for domestic use

7. **Lack of a comprehensive land policy**: the owning of land in water catchment areas presents the Ministry with a challenge as such areas become degraded as the land owner develops the piece of land leading to decreased water flows in rivers.
8. **Flooding and Drought:** Certain areas such as the Kano Plains and Budalangi are prone to flooding whereas others face long periods of dry weather.

9. **Storage Levels:** The current storage level in the country stands at 4.5 cubic meters per capita of water. This level is low and needs to be increased to meet the growing demand for water.

**Limitations/challenges faced by the Ministry**

The Ministry’s capacity to achieve envisaged targets faces a number of constraints among which the following are the main ones:

1. **Lack of unified framework** for the management of water resources, which limits the ministry’s capacity to fully play its leadership role in the sector. This also includes inadequate regional cooperative frameworks for the management of shared water resources.

2. **Unwillingness** by some local authorities to implement certain aspects of the on-going water reforms.

3. **Inadequate private sector investment** in water infrastructure. Putting up infrastructure for water requires heavy investment. There has been a backlog of investments into this sector creating a challenge for the country.

4. **Continued human settlements** in water catchment areas and destruction of forests due to lack of irrigation and land reclamation policies

5. **Un-harmonised data/information system**, weak monitoring and evaluation system leading to ineffective communication and shortage of staff and/or skills in some areas.
Just like food, water is a basic human need it’s also a fundamental right that Kenyan citizens need to enjoy without any limitation, the constitution of Kenya in Article 43(1) (d) states that every person has the right to clean and safe water in adequate quantities while Article 43(1) (b) provides for the right to accessible and adequate housing, and to reasonable standards of sanitation. Most important, citizens need to be educated about their rights in access to water resources. With these rights stipulated no individual or entity should seize the power to arbitrarily control the price of or access to this source of life. It is the mandate of the government and all other stakeholders involved to ensure that this basic need and human right is available, accessible, adequate, safe and affordable to all its citizens. As mentioned earlier, continued degradation of water catchment areas may lead to decrease in water levels in rivers, dams, oceans and lakes resulting to acute shortage of water in the country. The government should therefore continue with its spirited efforts to save the water catchment areas by protecting such boundaries from human exploitation through joint efforts.

The Government of Kenya has been undertaking a series of reforms aimed at enhancing quality, efficiency and transparency in service delivery by Water sector institutions. To support reforms, planning has evolved, using modern planning practices like the Results Based Management (RBM), Rapid Results Initiative (RRI) and Performance Contracting (PC). PC in particular uses strategic planning as the main point of reference. As indicated in the “General Guidance and Direction for negotiating the 2007/08 Performance Contracts,” the Strategic Plan is the cornerstone for the design and development of a performance contract in public sector institutions. Within the sector, the ministry has developed an Integrated Water Resource Strategy (IRWS), the National Water Resources Management Strategy (NWRMS), the National Water Services Strategy (NWSS), the Water Sector Master Plan, and is providing leadership for the water sector strategic plan.
Conclusion

Water is life. Despite this it remains to be the major challenge that the community demands rights about. Justice, governance, security, health remains to be other nightmares that the communities have to continue demanding rights about as reported by African institute research in Embakasi and Langata 2011. It also emerged that 71.6% of the community still encounter problems when claiming for their rights. The challenges include no one willing to lend an ear to their problems, no action being taken towards their claims, intimidation or being beaten up, long and complex process involved in claiming a right.

The decisions made by those in power hardly reflect the opinion of the citizens and at the same time 62.7% of the citizens affirmed that government officials never consult with them while making crucial decisions affecting the citizens. This could be attributed to the fact that a good number of the citizens (50.2%) do not know about their rights and more so the poor governance structure that does not work together to achieve a common goal that promotes good governance.

As mentioned before, many citizens encounter numerous challenges when it comes to channeling problems facing them. For instance regarding the issue of water, only 17.8% receive piped water into their dwelling places of which 80.7% said that the source is never constant. Matters get more complicated when people experience the problem and they fail to know whom/where to complain to. 68.9% of the respondents said they have no one to complain to whenever they fail to get water.

This really shows how urgent measures need to be unveiled to curb this problem especially a time like this when Kenyans are living knowing they are “wenye inchi” and not “wana inchi” (owners of the country and not children of the country). Finally the different stakeholders need to work together in a flat structure and ensure each of them play their roles actively instead of blaming each other, this way then we can comfortably talk about reaching the millennium goal of halving the proportion of population without sustainable access to safe drinking water and sanitation by 2015 - which is just around the corner.
References


