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Volume 8

Issue 4

2022

ISBN 978-9966-046-15-4

## Managing Water Scarcity in Kajiado County Berita Musau

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### *Abstract*

*Kajiado County is classified as an acute water scarce region due to its low access to water both for domestic and agricultural use. Water access in the county still remains low. In most parts of Kajiado County, the average distance to the nearest portable water point is 15 km to 10 km during the dry season and 5km in the wet season (Gathagu & Agwata, 2014: 1052). This lies below the World Health Organization's (WHO, 1997) standards, which maintain that access to safe drinking water refers to averages of 20 litres per person per day within one kilometer walking distance from the household. Lack of water supply from the county government has led to privatization of the resource and consequently immense exploitation of residents by private water vendors and cartels. Furthermore, the county government has no policy that regulates water resource management, worsening the already bad situation. This paper therefore seeks to fill that gap and propose a policy for managing water scarcity in the county.*

### **Introduction**

Kajiado County is located in the Rift Valley of Kenya. The county borders Narok County to the West, Nakuru County, Kiambu County and Nairobi County to the North, Machakos County, Makueni County and Taita Taveta County to the East, and the Republic of Tanzania to the South and covers an area of about 21,901 km<sup>2</sup> (GOK, 2022). It has seven sub counties namely: Kajiado Central, Kajiado West, Kajiado North, Kajiado South and Isinya, Mashuru and the recently created Oloililai Sub county, created in 2020 (Marindany, 2020).

It is a semi-arid county. Thus, several of its streams are seasonal and only a few are perennial. The perennial streams are found at the foot slopes of Mt. Kilimanjaro, Ngong, hills, Ngurumani escarpment and Namanga Hills (Gathagu & Agwata 2014). Other sources of water in the county include boreholes, dams, ground catchments/pans, wells, water holes, springs, roof catchments, and rock catchments (Gathagu & Agwata 2014).

There are four water and sewerage companies in Kajiado County namely: Oloolaiser, Olkejuado, Oldonyo Orok and Nolturesh in Oloitoktok. However, these companies have had several challenges including water pilferage, lack of reliability and mismanagement. Water from these companies only benefits a few while a great number of the county population is left suffering. In deed the county governor Mr. Ole Lenku established the Kajiado Water and Sewerage Company (KWSC) as a single entity in 2018 and appointed former Kenya Airways boss Titus Naikuni, maintaining that this was meant to improve water access in the county (Siele, 2018). He pointed out that the other water and sewerage companies above would be collapsed so as to bring water management under one entity for effectiveness and accountability. However, by the end of the year 2018, the company was still at the establishment stage and not yet operational.

### **Water Scarcity in Kajiado County**

Residents of Kajiado County have grappled with the problem of water scarcity for a long time. In big towns of Kajiado County such as Kajiado town itself and Kitengela among others, the sight of donkeys pulling hand carts full of jerry cans of water as well as water boozers cannot be swept under the carpet.



*Hand carts packed with jerry cans at a borehole in Kitengela during a biting water shortage in 2018. Source: Githaiga, 2019, Standard Media.*

The areas that are hardest hit include towns mainly along Namanga Road. Towns such as Kitengela, Isinya and Kajiado. They rely on fresh water supply from the Export Processing Zone Authority (EPZA) in Athi River which procures it from the Nairobi Water and Sewerage Company. The EPZA water is shared with Mavoko Water Company that supplies the EPZA factories as a priority and the surplus is then sold to residents. This leaves very little water available for residents.

In order to survive, residents of Kajiado County have resorted to sinking of boreholes. Most of the boreholes however have hard water. Private individuals sink boreholes and sell the water at high prices. The county government has also not been keen to regulate the way the boreholes are distributed. Bore holes are sunk within close proximity. This has led to several boreholes drying up. Moreover, there are hardly any measures taken to establish whether the water from the boreholes is chemically safe for human consumption.

### **Factors Contributing to Water Scarcity in Kajiado County**

An analysis of the water scarcity problem in Kajiado County unearths the following factors that contribute to the problem.

#### **Environmental factors**

Kajiado County lies in the arid and semi arid lands (ASAL) of Kenya, where access to clean water remains a primary challenge. The county has a bimodal rainfall pattern with long rains falling between March and May while short rains fall between October and December (Gathagu & Agwata 2014). The rainfall ranges from 1250 mm to less than 500 mm per annum while temperatures vary with altitude to a mean of 34 °C to 22 °C (GOK, 2008). Most of the time, the rain is unreliable. This has been exacerbated by climate change which has led to long periods of drought and unpredictability of the rains. Furthermore, with most of the rivers in the county being seasonal, there is very limited availability of surface water.

## **Hydropolitics**

Water politics play a major role in worsening the already bad situation in Kajiado County. Kenya is classified by the United Nations as a chronically water scarce country based on the fact that it has one of the lowest water replenishment rates (Koech, 2018). Amid this scarcity, hydropolitics have set in and exacerbated the problem especially with Kenya's new constitution adopted in 2010 that divided the country into counties. People in various counties are increasingly recognizing and claiming rights over resources in their counties. Water, as a natural resource is bound to be shared across counties.

Politicization of access to waters cuts across counties in Kenya. For instance Nairobi County is served by water from Ndakaini Dam in Murang'a County. There have been growing concerns in which residents as well as political leaders from Murang'a claim that their county has been supplying water to Nairobi leaving them with nothing to show for a resource that is in their county (Koech, 2018). They also called for Nairobi County to pay for the water. These politics have also affected water supply in Kajiado County due to rationing of water from Nairobi Water Company to the EPZA in Athi River, the main supplier of fresh water to Kajiado residents especially in Kitengela and other areas along Namanga road.

Water politics have also pervaded between Kajiado County and the neighboring counties particularly Makueni and Machakos counties mainly concerning the water from the Nolturesh water dam and pipeline (Githaiga & Muchiri, 2017). The source of the dam is at the foot of Mt. Kilimanjaro in Kajiado County but its water is shared by Kajiado, Makueni and Machakos counties (Githaiga & Muchiri, 2017). Kajiado County accuses Machakos and Makueni counties for sidelining the Maasai community regarding the access and management of water from Nolturesh dam, despite the dam being in Kajiado County (Koech, 2018, Marindany, 2018). The governor further argued that residents of Kajiado County did not benefit from Nolturesh water (Ngunjiri, 2017). Hydropolitics have also affected the supply of fresh water from the EPZA. The EPZA supplies residents of Machakos and Kajiado County with fresh water. The county government of Machakos claimed that since the EPZA is situated in Athi River which is in Machakos County,

priority should be given to Machakos county residents. This adversely reduced the supplies of fresh water to Kajiado county residents.

### **Unequal/ unregulated distribution of available water**

At the heart of the water scarcity problem in Kajiado County is lack of reliable water supply which is occasioned by mismanagement of the little water that is available. Water supply in many parts of Kajiado County is mainly done by private business people who own private boreholes. This to a great extent is occasioned by the failure of the four water companies in the county. There is no county water supply.

The Nolturesh –Athi River –Kajiado water pipeline for instance is used for irrigation of private flower farms in Makueni and Kajiado counties. This leaves the section of the Kajiado population that was supposed to be served by that pipeline without water for domestic use while individual owners of the flower farms benefit.

### **Corruption and mismanagement of funds set aside for water supply**

The four main water companies in Kajiado: Oloolaiser, Olkejuado, Oldonyo Orok and Nolturesh in Oloitoktok are said to have been marred with corruption and mismanagement. A survey conducted by the Kajiado County on water mismanagement established that mismanagement of water providers' entities has resulted to massive corruption, unskilled personnel, and huge salaries eventually making the entities unable to run maintenance work and pay their bills running into millions of shillings (Kamunde, 2018). Ole Kejuado water and Sewerage Company has become dormant and non-functional while Nolturesh Water and Sanitation Company has been making losses of up to 31 million monthly and the company has been unable to pay its staff leading to them going constantly on strike (Koech, 2018). In addition to these, embezzlement of funds set aside for water supply has pervaded at the county level. For instance, it was reported that in 2018, the county lost 1.4 billion earmarked for boreholes with reports indicating that 53 boreholes had been sunk while that remained only on paper since there was nothing to show on the ground (Koech, 2018).

### **Water privatization**

The fact that there is no water supply from the county has led to privatization of the resource. Thus, water scarcity in Kajiado County has been attributed to water vendors and cartels who take advantage of water shortages to make money. In one of his speeches, the county governor Mr. ole Lenku referred to them as “merchants of misery” (CGK, 2018). For instance in Kitengela, it was alleged that the water shortage in the town was actually a creation of the EPZA and some cartels who wanted to enrich themselves by selling water at exorbitant prices which are not within the government tariffs (Githaiga, 2018).

### **Efforts to Address Water Scarcity in Kajiado and Inherent Gaps**

Aware of the water scarcity issue in the county, the county government has carried out various efforts to address the issue. The efforts are based on the county’s strategic plan to achieve a 60 percent water access coverage from the current 35 percent (CGK, 2018). The following are some of the efforts by the county government of Kajiado to address water scarcity:

Most of the rivers in Kajiado County are seasonal while the permanent ones dry up owing to long periods of drought. Thus the county government resorted to sinking boreholes so as to harvest underground water. Recently, in 2018, during an event, the governor announced that the county intended to take measures to provide fresh and clean water noting that “*maji si maji tu*” which implied the intention of providing Kajiado residents with healthy water (CGK, 2018). He noted that most of the boreholes in the county have saline water and pointed out that this was a major concern and a threat to human health. He declared sale of salty water in the county illegal and directed the county department of water to start the process of desalinating water from boreholes constructed by the county government. He also issued a directive in November 2018 for those selling or intending to sell water for public consumption to desalinate it to make it clean and fresh (Githaiga, 2019). This raised a major outcry among private water vendors in the county. In spite of this directive, saline water is still being sold to residents of the county.

The county has also decided to work together with Makueni and Machakos County to revive Nol-Turesh water and Sanitation Company to enhance effective water supply. Other measures include measures to cap prices to protect residents from exploitation by exploitative water vendors as well as increased county budgetary allocations.

The county government holds an annual event known as “*Maji Awards*”. The event is aimed at encouraging citizens to be part of the solutions to water scarcity in the county. During the event, the county awards projects that have adopted strategies to improve water sustainability in the county (CGK, 2018). The top most awards go to the best managed water projects in both rural and urban areas in the county.

In spite of the above efforts from the county government, there exist inherent gaps that underpin scarcity of water in the county. The main gap lies in the fact that the county has no legal and institutional framework upon which management of water scarcity hinges. Most of the plans, promises and directives are proclaimed during public rallies but implementation remains wanting. A good case in point is the directive for private water dealers to desalinate water, which has not been heeded. Water problems in Kajiado County seem to take priority theoretically while practically, they remain in the periphery.

### **The Need for a Water Policy in Kajiado County**

In spite of the dire scarcity of water that is very evident, Kajiado County lacks legal and institutional framework that concerns water resources. The county neither has a policy nor an Act that guides planning, implementation and management of water resources. In deed the department of water, irrigation, environment ad natural resources which is in charge of water in the county has paid little attention to addressing water scarcity. The main focus has been laid on waste management, regulation of sand harvesting and charcoal burning (CGK, 2018). The neighboring countries have already established some legislation to guide water management. Machakos county for instance has a legislation known as Machakos County Water and Sanitation Act, 2014 (GoK, 2014). A policy for the management of water scarcity in Kajiado County is therefore urgently necessary.

## **Policy Recommendations for Managing Water Scarcity in Kajiado County**

The perennial water problem in Kajiado County can be addressed by establishing a sustainable water access strategy. It should be coupled with a supply strategy to enhance equitable distribution to the population of the entire county. These should be anchored on a policy that guides the entire exercise. This paper proposes the following policy recommendations to guide the establishment of a policy for managing water scarcity in Kajiado County.

Proper management of the Kajiado County Water and Sewerage Company: The establishment of the Kajiado County Water and Sewerage Company is a step in the right direction which can lead to better supply of water in the county. The county water policy should have provision for investment in building a strong financial and technical capacity for the company in order to enhance its effectiveness and efficiency in supplying water in the county. This would go a long way in reducing overreliance on private business people for water supply.

Addressing Hydro politics: The fact that water catchment and water resources are shared across the counties makes water politics inevitable. The county water policy should provide guidelines for managing water politics that ensue between the county and other counties with whom they share water resources particularly Machakos and Makeni. Most of the politics have been played in public political rallies thus heightening feuds. Others have been sporadic in response to public outcries. The policy should entail strategies of diplomatically managing the conflicts way before they escalate to the point of disrupting water supply and hinder access. These could even entail joint activities such as inter county sports that enhance the value of cooperation across the counties for better access to shared water resources. To this end, the county could also find ways of incorporating women groups. Women are the ones mostly charged with the responsibility fetching water for domestic use and any politics hindering access to water strongly affect them. They would therefore be more motivated to participate in efforts that enhance peace among the counties and consequently harmonious sharing of water resources.

Regulation of boreholes is also a key concern. The policy should provide clear guidelines to regulate sinking of boreholes especially by private investors. Boreholes have been sunk in close proximity leading to others drying up. In addition, most of the water from the boreholes is hard, and measures are not taken to establish whether the minerals contained in the water are safe for human consumption. The governor of Kajiado County noted that the main issue exacerbating water scarcity is partly the fact that the water especially from boreholes is saline which makes it unsafe for drinking. He prohibited the selling of saline water and directed private owners of boreholes to desalinate their water before selling. This raised a major outcry. If this had been anchored in a policy, it would have been easier for the governor to address the outcry since it would just entail calling on people to comply with the policy.

The policy should address the problem of cartels and water vendors. Residents of Kajiado County have suffered in the hand of cartels that exploit the water scarcity and sell water at exorbitant prices. This can only be addressed through a clear policy which would set standards and also regulate prices so that residents are not exploited.

Rain water harvesting is very important. A lot of water goes to waste whenever it rains in Kajiado. Thus the policy could make provisions for harvesting rain water. This could be through construction of dams along big rivers such as Olkejuado River, and other seasonal rivers in the county. It could also be done through promotion of institutional and household level water harvesting.

Above all, the policy should have provisions for cooperation with the national government which has the main institutional and legal frameworks for management of water resources. Some of these frameworks include the Water Act 2002, Water Appeal Board (WAB), Water Services Regulatory Board (WASREB), and Water Resources Management Authority (WRMA) among others.

### **Conclusion**

Water scarcity is a problem that has tormented Kajiado County residents for a long period. Lack of county water supply coupled with absence of legal and institutional framework for the county has left residents suffering in the hands of private water vendors and cartels. Water being a basic human need, the county government should step in to assist its residents so as to win their legitimacy. A policy for managing water scarcity in the county is therefore an urgent necessity for the county.

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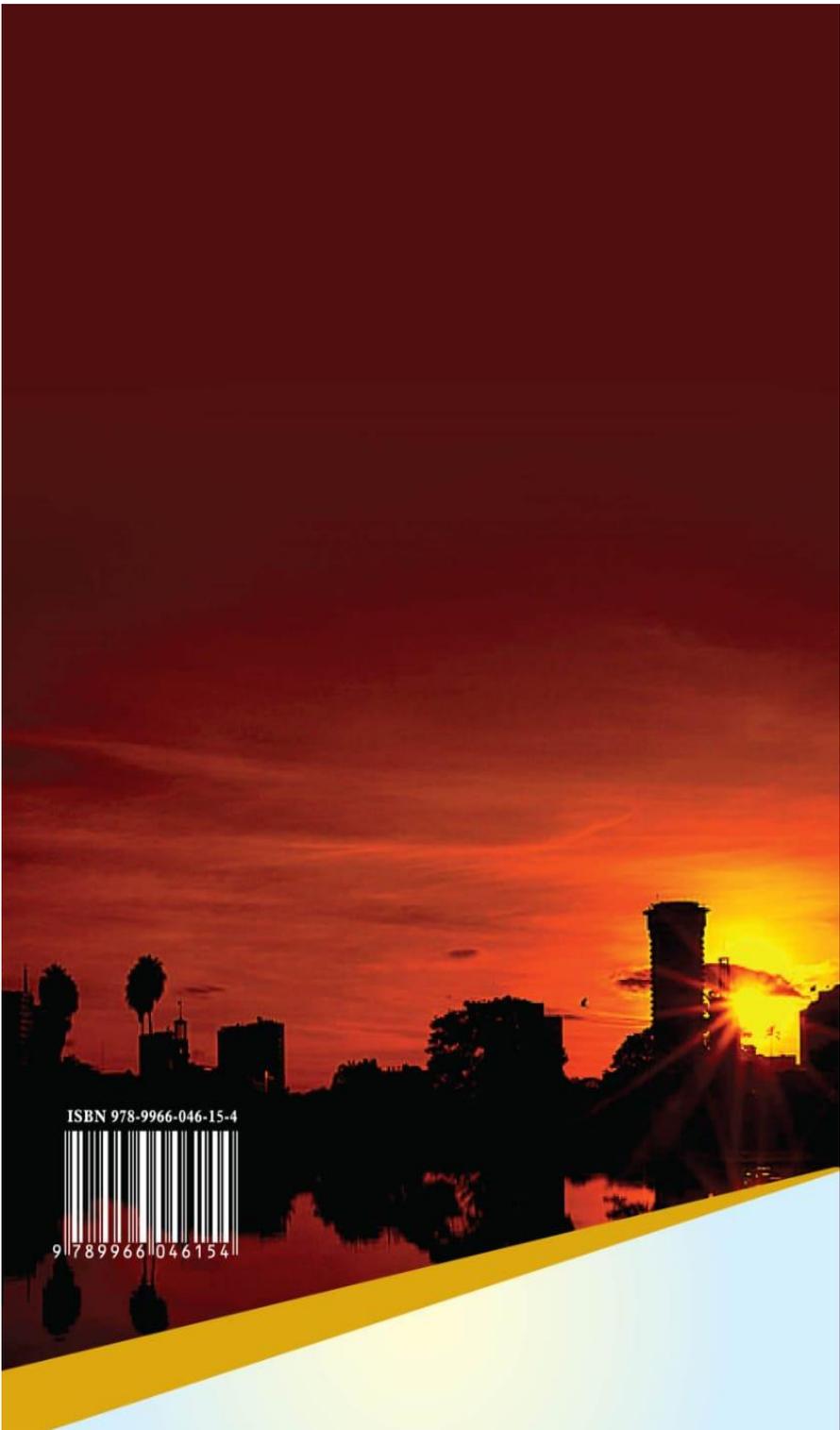
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ISBN 978-9966-046-15-4



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