



.....
.....

The Water Problem in Nairobi

Student's Name

.....

Institutional Affiliation

.....

.....

.....



The Water Problem in Nairobi

The world population is growing very fast, but resources cannot increase at the same rate. Most of the natural resources do not get replenished after their consumption, which means that soon they are likely to be exhausted. There are several other factors that negatively affect the planet and its inhabitants. Some people are very selfish and get involved in activities which are beneficial to them but detrimental to other human beings. This research paper will discuss the water problem in Nairobi and steps taken by inhabitants to address it.

THE BACKGROUND OF THE PROBLEM

Nairobi is the largest city and center of most activities in Kenya. Its name comes from the Maasai language and means "a region with cold water" (Mulinge & Getu, 2013). Many years ago, pastoralists traveled in search of grass for their cattle and often stayed in this place which had enough water for them and their herds. Nairobi was founded by the British as a rail depot on the railway linking the coastal region with neighboring countries. Those people who built the railway often settled in Nairobi,

starting new businesses. Due to the strategic and advantageous location of Nairobi, the British decided to make it the administration center.

After the attainment of independence, the current government continued to use the city for its administrative, trading, and industrial activities. Most industries were established in this place, attracting investors who supplied raw materials. The expansion of industries created new job opportunities for people from other regions who did not have enough money to take care of their families. This gave rise to settlements that needed roads, electricity, and water. Since the population was increasing very fast, existing local amenities were insufficient to meet people's basic needs. This situation explains why Nairobi faces water scarcity. Currently, city authorities are under pressure to find effective ways of providing people with clean water.

It is also worth noting that the weather has greatly changed due to several human activities and other factors. People cut down trees to create new space for industries and settlements (Mulinge & Getu, 2013). Consequently, the number of forests has significantly decreased. Deforestation has adversely affected weather patterns and led to rainfall reduction. The reduced forest cover also means that there is a higher rate of evaporation. As a result, the amount of water flowing into rivers and used for most domestic and industrial activities has decreased.

THE CURRENT SITUATION

When the population was small, there were no advanced mechanisms for supplying it with water, and most individuals relied on wells and rainwater directed into storage tanks. As the number of inhabitants started to grow, existing mechanisms stopped being effective. Therefore, people needed a more efficient water system with reliable pipes to distribute water to various parts of the city. The system had to be able to supply water throughout the year irrespective of whether it rained or not. This explains why authorities decided to build dams to collect rainwater and deliver it to factories and houses through the piping system.

Nowadays, the whole city relies on dams, and some private firms and individuals have dug water boreholes that make them independent of the piping system. Other firms have invested money in digging boreholes, selling water to their neighborhoods at reasonable prices. There are also water vendors who use tankers and other containers to take water from distribution points and supply it to areas which are not covered by existing piping systems. Most industries have their own boreholes since they cannot rely on the piping system and, in some situations, the supply of water is inadequate for their requirements. The water industry is a lucrative business for some investors and water

vendors who earn a living by digging boreholes, delivering water to customers, and repairing water distribution systems.

Due to the increased demand for water and its inadequate supply, city authorities try to find effective solutions to the water crisis. Currently, city dwellers do not have enough water, especially when there is no rain. The existing piping system is prone to leakage. Illegal connections to water pipes also worsen the water scarcity problem. Yuen and Kumssa (2011) assert that it is necessary to teach households how to rationally use water to minimize wastage. Therefore, the water department of Nairobi should introduce educational programs for citizens in order to save water.

VIEWS ON WATER SCARCITY

City dwellers believe that there are some negative factors that lead to water scarcity. If these factors are removed, then there will be enough water to satisfy their needs. Firstly, the mismanagement of water resources results in water scarcity. Citizens think that it is necessary to build new dams and increase the capacity of tanks used for storing water. Secondly, the existing piping system should be completely overhauled to increase its efficiency and timely detect leakages (Charton-Bigot

& Rodriguez-Torres, 2010). Thirdly, the part of the population believes that politicians use the water crisis to attract public attention, especially before elections. They want to persuade the electorate that they plan to solve the water problem and manipulate individuals into voting for them (Chaisse, 2017). However, electors should not believe them. Lastly, there is also artificial water shortage created by cartels operating in some regions and seeking to take advantage of the situation to make supernormal profits.

PROPOSED SOLUTIONS

Several experts have conducted studies on the problem of water scarcity in Nairobi and have offered different suggestions. According to Grafton, Daniell, Nauges, Rinaudo, and Chan (2015), it is vital to increase the water storage capacity in order to have enough water even when rains are inadequate. During the rainy season, water fills existing dams to the brim, and its excess is absorbed by the ground. Therefore, it is better to expand dams so that they will be able to hold all rainwater which will be later used for domestic and industrial activities. However, city authorities should find alternative ways of supplying the population with water while the rebuilding of dams is in progress. In addition, Zetland (2014) asserts that local inhabitants should learn how to

rationally use water and reduce its consumption, which will help to save water for other families. Moreover, reliable electronic devices should be used to detect leakages and timely repair the piping system. Such measures will enhance the efficiency of the system and help to curb illegal connections.

CURRENT WORKS

Recently, some rebuilding works have been started with the aim of expanding existing dams to increase their capacity and store more water. The water department, in collaboration with other relevant departments, is currently rebuilding the largest dam supplying the city with water. The experts believe that the new dam will be able to hold more water which will be used by the population during droughts (Diop, Scheren, & Machiwa, 2016). There have also been numerous campaigns aimed at teaching citizens how to minimize water wastage. Individuals waste much water as they lack knowledge about the best ways of saving water resources. Chaise (2017) states that the water company has also retrained its staff to detect leakages which pose a serious threat in most areas. In addition, the company has formulated strict policies aimed at eliminating illegal connections and unauthorized water use.

CONCLUSION

Nairobi was founded by the British as a rail depot. Individuals building the railway often settled in this city. Due to its convenient location, Nairobi became the administration center. After the attainment of independence, many investors and workers from other regions came to this city to earn money. As a result, the population started to grow at an alarming rate, which caused the shortage of resources.

Several other problems have appeared over time, compounding water scarcity. Due to the changes in weather patterns, the amount of rainfall has decreased. Consequently, droughts have become rampant. Inhabitants also believe that the water crisis is caused by the mismanagement of water resources and the inability of city authorities to introduce effective strategies for saving water. Illegal water connections, constant leakages, and improper use of water are other factors which lead to water shortage.

There are several effective solutions proposed by experts who have undertaken various studies on water shortage in Nairobi. They all agree that it is vital to construct new dams and expand the old ones. It is also necessary to develop policies that will eliminate illegal connections to the piping system and

unauthorized water use. Moreover, the education of the population will help to reduce water wastage.

The aforementioned problems experienced by Nairobi have some similarity with the ones in most places around the world. Therefore, proposed solutions can be also used by countries facing similar problems. However, if the Nairobi authorities ignore solutions offered by the experts, the city will be uninhabitable, and citizens will have to leave it to survive. Nairobi still has an opportunity to regain its former status and become the center of trading, industrial, and business activities. To do this, the city should use new ways of managing water as it is one of the essential commodities.