



## MINISTRY OF WATER AND SANITATION

### EXECUTIVE BRIEF ON WATER SUPPLY STATUS IN MACHAKOS COUNTY

17<sup>th</sup> July 2018

#### **I. Introduction**

Machakos County has a population of **1,098,584** people 264,500 households and covers an area of **6,208 km<sup>2</sup>** . The gender population was 543,138 males and 555,446 females (2009 Census). The total population of Machakos County is projected to be 1,476,405 persons in 2019. This is a 9.5 per cent increase from **1,098,584** in 2009. The county population growth rate is 3. per cent, and the sex ratio is 98 males per 100 females. The County major towns are Mlolongo, Athiriver, Machakos, Chumvi, Masii, Mwala, Tala, Kangundo, Masinga, Ekalakala, and Matuu . The County has eight constituencies namely Masinga, Yatta, Kangundo, Matungulu, Kathiani, Mavoko, Machakos and Mwala constituencies.

The main piped water schemes within major towns are; Machakos County are Mavoko, Machakos, Yatta Matungulu and Mwala water supply schemes. The other sources of water in the county rural areas are; shallow wells, small dams, pans and rivers. The distance to the nearest water point in the county is from zero to **4km**.

#### **II. RECENTLY COMPLETED PROJECTS**

##### **1. Rehabilitation of Yatta Canal**

The rehabilitation of Yatta Canal and Water Supply System was funded by Africa Development Bank and the Government of Kenya at a cost of Ksh 2.2 Billion. The project currently serves 5,000 farmers with irrigation water and 75,000 residents with clean water. The project components were rehabilitation of the 58.8km Yatta canal with reinforced concrete, de-silting of 2 No. reservoirs of 110,000m<sup>3</sup> capacities (both), an office block, 15 No.cattle troughs, 17 No. bridges, 5 aqueducts, 1,500 water off takes and 3 No. staff houses. The project also improved the 58.8 km access road to marram standard and improved the capacity of water passing through the canal from 1.13m<sup>3</sup>/day to 3m<sup>3</sup>/day.

The canal is also supplying water to irrigate 25,000 acres. After construction of Yatta dam, the canal will be able to supply water to irrigate 45,000 acres.

## **2. Kaewa – Masinga water supply project;**

The project cost was Ksh 83 million and produces 500m<sup>3</sup> of water per day serving 14,285 people and was completed in fy2015/16. The scope of works included; 14km of distribution line, 4 No. water kiosks, 150m<sup>3</sup> steel elevated tank at Kaewa market, and 250m<sup>3</sup>; steel elevated tank at Masinga town.

## **3. Masinga - Kitui Water Supply and Sanitation**

Masinga-Kitui water supply project was funded by Africa development Bank and the Government of Kenya at a cost of Ksh 2.2 billion serving both Machakos and Kitui Counties. It was completed in June 2015. The project serves 12,285 people with water within Machakos County in Masinga Constituency. The project components within Masinga Constituency are; Intake works and treatment works of capacity 9,000m<sup>3</sup>/day, a 18Km rising main, a 10Km distribution line, and 3,000m<sup>3</sup> reinforced concrete tank at Kwamuthumba hill .

# **III. ONGOING WATER SUPPLY AND SANITATION PROJECTS**

## **1. Mavoko Drinking Water Supply Project**

The project is within Mavoko Constituency, funded by Belgium Government and Government of Kenya at a cost of Ksh 2.8 billion and will serve a population of 150,000 people within Mlolongo and Athiriver towns. Currently the project is ongoing and at 10% complete. Its scope of works involve; Independent line from Nairobi Water Company to supply 5,000m<sup>3</sup>/day, Rehabilitation of Nol-Turesh line and tanks to supply 1,000m<sup>3</sup>/day, Rehabilitation and de-silting of KMC (8,000m<sup>3</sup>/day) and EAPC dam (3,000m<sup>3</sup>/day), New Mavoko water treatment plant of 12,000m<sup>3</sup>/day capacity, construction of new pipeline works of over 70km including rehabilitation of the reticulation system, construction of 2No. 2,500M<sup>3</sup> Water storage tanks and 1No. 5,000M<sup>3</sup> tank at KCAA grounds.

## **2. Masinga Cluster Water Supply Project**

Masinga Cluster Water Supply Project is 99% complete and in, Masinga Constituency. It is fully funded by the National Government. The project cost is Ksh 139 million and will serve 16,000 people with clean water. The project components are laying of 23.4 km rising main, laying of 13 km gravity distribution main, construction of one 200m<sup>3</sup> masonry tank and construction of four water kiosks. The daily production capacity will be 560m<sup>3</sup>.

## **3. Matungulu Water Supply Project.**

The project is funded by Kenya Italy Dept Development Programme at a cost of Ksh 107 million. It will serve a population of 28,000 people. The project is currently at 98% complete and the scope of works include; Drilling and equipping of 1No. borehole, construction of 1 no. grade 9 house, laying of a 5km rising main, construction of 1500m<sup>3</sup>rc tank, laying of 15km gravity main line, fabrication and erection of 250m<sup>3</sup>and100m<sup>3</sup>elevated steel tanks, construction of 6no. water kiosks. after completion the total production capacity will be 720m<sup>3</sup>/day.

## **4. Machakos Water supply & Sanitation Project**

The Machakos Water supply & Sanitation Project is funded by Africa Development Bank and the Government of Kenya at a cost of Ksh 2.7 billion. The daily production capacity will be 15,000m<sup>3</sup>. The project water supply components are Construction/Augmentation of water supply system, construction of Miwongoni dam of 15m high, rehabilitation of Maruba dam and existing water

supply system, construction of 5,000m<sup>3</sup> tank and 3,000m<sup>3</sup> tank, rehabilitation of existing 5 No boreholes, drilling and equipping of new 10 No, boreholes. The population to be served is 200,000 people. The sewerage component will involve; Construction new sewerage system of capacity 10,000m<sup>3</sup>/day and rehabilitation of existing Machakos town sewerage system of 3,000m<sup>3</sup>/day to serve 100,668 people. Currently review of technical designs are complete and procurement of civil works contractor ongoing. The works are expected to start by Month of October 2018 and completed by October 2020

#### **5. Mwala Cluster Water Supply & Sanitation Project**

The Mwala Cluster Water Supply & Sanitation is financed by Africa Development Bank and the Government of Kenya through at a cost of Ksh 586 million. The project is within Mwala constituency and will serve the areas of Mwala, Mbiuni, Masii, and Kabaa markets. The daily production capacity will be 6,000m<sup>3</sup>. The project components are Construction of intake works at Ndarugu river, construction of new water supply system and rehabilitation of the existing water supply systems . The project will serve 55,428 people. The second phase will involve Construction of Masii sewerage system and Sanitation Facilities in Mwala, Mbiuni, and Kabaa markets to serve over 26,666 people in the market centres. Currently review of technical designs are complete and procurement of civil works contractor ongoing. The works are expected to start by Month of October 2018 and completed by October 2020.

#### **6. Matuu Last Mile Water Supply Project**

This project is funded by Africa Development Bank at a accost of Ksh 450 million and will involve extension of water supply systems within Matuu town and its environs including individual household connections. It's expected to serve over 15,000 people. Currently the procurement of consultancy services for technical design is ongoing.

#### **7. Ndarugu Dam 1 Water Supply Project**

The Ndarugu Dam 1 Water Supply Project is currently under procurement and aimed at serving 1,422,000 people with clean water in Ndarugu and Junja areas in Kiambu, Nairobi Eastlands in Nairobi County, Mavoko in Machakos county and Kitengela in Kajiado county at a cost of approximately Ksh 40 billion. The project components will entail a 35m high dam to store 225 million M<sup>3</sup> of water, a treatment plant of 173,000m<sup>3</sup>/day of clean water, 103km raising main and distribution system, 2 Booster stations, 2 RC reservoirs of 10,000m<sup>3</sup> each and other several tanks of different sizes. Bidding process closed on 31<sup>st</sup> Jan 2017 and the evaluation report forwarded to the Ministry of Water and Sanitation for No Objection. Civil works are expected to start once the project has been cleared by all the relevant Government Ministries.

#### **1. Drilling and equipping of Boreholes**

The Boards' mandate also includes drilling and equipping of boreholes through financing from the Government of Kenya and its development partners. The total number of boreholes drilled and equipped by end of 2017 is 47 in number within Machakos County at a cost of 262,692,526 and serves approximately 81,688 people.

## GOK FUNDED ONGOING PRIORITY PROJECTS IN F/Y 2017/18

S/No	Name of Project	Ward/Constituency	Scope of Works	Cost (Kshs.)	Population Served	Current Status
1	Ngunyumu-pipeline Water supply Project	Machakos Town	<ul style="list-style-type: none"> <li>• Laying of 8.3 km</li> <li>• Construction of 2 No. 50m<sup>3</sup> masonry tanks</li> <li>• Construction of 1 water kiosks and installation of 10m<sup>3</sup> plastic tank</li> </ul>	5,230,711.00	1,500 People and 300 livestock	Project ongoing and at 95% complete and to be completed by end of August 2018
2	Mikuyu Borehole water supply project	Machakos Town	<ul style="list-style-type: none"> <li>• Equipping of 1 No. borehole</li> <li>• Laying of 450m pipeline</li> <li>• Construction of 1 No.1 No water kiosk with 1 No 10m<sup>3</sup> plastic tank</li> </ul>	2,849,923.00	3000 People and 1,000 livestock	Project ongoing and at 95% complete and to be completed by end of August 2018

### ONGOING WATER SUPPLY AND SEWERAGE PROJECT DESIGNS

#### 1. Yatta Dam & Yatta Water Supply Project

The Proposed Yatta Dam & Yatta Water Supply Project designs were funded by Africa Development Bank and the Government of Kenya. The designs are complete and estimated design costs are Ksh 8.3 billion. TAWSB has forwarded the designs to different development partners for funding. The project will serve Machakos County. The project components are Construction of 30m high dam, water supply to Matuu, Sofia, Katangi towns and their environs together with a Sewerage system for Matuu town.

#### 1. Design of Mwanja water supply project

The proposed Design of Mwanja Dam water supply project designs are funded by ADB to serve Machakos town and its environs. The total population to be served will be 200,000 with water supply. The consultancy services for feasibility study, technical design and preparation of tender documents is currently ongoing.

## **CONCLUSION**

The National Government is committed to ensure that the people of Machakos County achieve the right of access to adequate Water and Sanitation. Tanathi Water Services Board will provide the National Government quarterly progress reports on projects within the County Government of Machakos. TAWSB will work collaboratively with the County Government of Machakos to realize these rights and contribute to the achievement of the sustainable Development Goals by year 2030.