

**COUNTY GOVERNMENT OF BUNGOMA**



**COUNTY ASSEMBLY OF BUNGOMA**

**THIRD ASSEMBLY – FIRST SESSION**

**A REPORT OF THE COMMITTEE ON TOURISM, WATER,  
ENVIRONMENT AND NATURAL RESOURCES**

**THE STATUS OF KOICA I AND II PROJECTS IN BUNGOMA COUNTY**

**JANAURY, 2023**

**Clerk's Chambers  
County Assembly of Bungoma  
P. O BOX 1886- 50200  
BUNGOMA, KENYA**

*Tabled on 15/3/2023  
at 2:30 PM.*

*A Sectorial Committee Report On The Status of KOICA I and II Projects*

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## **CHAPTER ONE**

### **1.0 PREFACE**

**Mr. Speaker Sir**, on behalf of the members of the Tourism, Water, Environment and Natural resources committee, it is my pleasure and duty to present to this House the Report of the Committee on the KOICA I and II projects in Bungoma County.

### **1.1. THE MANDATE OF THE COMMITTEE**

**Mr. Speaker Sir**, the Sectoral Committee on Tourism, Water, Environment and Natural resources is constituted pursuant to the provisions of Standing Order No. 217(1) of the County Assembly of Bungoma Standing Orders and executes its mandate in accordance with Standing order 217(5) which provides as follows:

- a) Investigate, inquire into, and report on all matters relating to the mandate, management, activities, administration, operations, coordination, control and monitoring of budget;
- b) Consider quarterly reports of the assigned departments and report to the House within twenty-one (21) sitting days upon being laid;
- c) Study the programme and policy objectives of departments and the effectiveness of the implementation;
- d) Study and review all county legislation referred to it;
- e) Study, access and analyze the relative success of the departments as measured by the results obtained as compared with their stated objectives;
- f) Investigate and inquire into all matters relating to the assigned departments as they may deem necessary, and as may be referred to them by the County Assembly;

- g) To vet and report on all appointments where the constitution or any law requires the House to approve, except those under *Standing Order 209* (Committee on Appointments); and
- h) Make reports and recommendations to the House as often as possible, including recommendation of proposed legislation.

## 1.2 COMMITTEE MEMBERSHIP

Mr. Speaker Sir, the Committee on Tourism, Water, Environment and Natural resources as currently constituted comprises the following Members:-

1. Hon. Edwin	Opwora	Chairperson
2. Hon. George	Tendet	Member
3. Hon. Joseph	Nyongesa	Member
4. Hon. James	Mukhongo	Member
5. Hon. Meshack	Simiyu	Member
6. Hon. Antony	Lusenaka	Member
7. Hon. Isaiah	Busolo	Member
8. Hon. Dorcas	Ndasaba	Member
9. Hon. Benard	Kikechi	Member
10. Hon. Orize	Kundu	Member
11. Hon Benjamin	Otsiula	Member
12. Hon. Allan	Nyongesa	Member
13. Hon. Florence	Juma	Member
14. Hon. Alice	Kibaba	Member

### **1.3 TERMS OF REFERENCE**

**Mr. Speaker,** It is envisaged in Article 185(3) of the Constitution of Kenya, 2010 that a County Assembly while respecting the principle of separation of powers may exercise oversight over County Executive committee and any other Executive organs. It is on this basis that the committee undertook the exercise of fact finding on the status of water projects in the County with a view to address the following;

- To ascertain the status of KOICA phase I and phase II
- To ascertain if implementation of the projects is in accordance with the agreement with the donors from Korea
- To ascertain some of the challenges facing the execution of the projects.
- To ascertain the time frame of the completion of the project

### **1.4 METHODOLOGY**

**Mr. Speaker Sir,** The committee set out to carry a fact finding exercise to ascertain the implementation status of KOICA phase I and phase II water projects for Chwele area and Chebyuk Ward to Kibabii complex in Bungoma county respectively.

The committee sought the input of department in charge of the water projects in the county to get more information on the status of the project. Further, the committee has made observations and recommendations on the fact finding which are part of this report.

## 1.5. ACKNOWLEDGEMENT


**Mr. Speaker Sir,**

The Committee is grateful to the Offices of the Speaker and the Clerk of the County Assembly for the logistical support accorded to it during the report writing as it executed its mandate.

I wish to express my appreciation to the Honorable Members of the Committee for their resourceful input that informed the content of this report despite majority of them being new Members. My sincere gratitude also goes to the members of the Secretariat for their technical advice and dedication in compiling this report.

It is therefore my pleasant duty and privilege, and on behalf of the Committee on Tourism, Water, Environment and Natural resources to table this report on KOICA I and II projects in Bungoma County and its recommendations to this Assembly for deliberation and adoption.

Thank you.

Sign .....  ..... Date..... 8/02/2023 .....

**HON. EDWIN OPWORA,**

**CHAIRPERSON, COMMITTEE ON TOURISM, WATER,  
ENVIRONMENT AND NATURAL RESOURCES**

## CHAPTER TWO

### 2.0 CHAIRPERSONS FORWARD

**Mr. Speaker Sir,**

Water is a necessity for all forms of life as well as industries on which humans are reliant, like technology development and agriculture. This global need for clean water access necessitates water resource plans and management policy to determine the means of supplying and protecting water resources.

As water scarcity increases with climate change, the need for robust water resource management will become more prevalent. An estimated 57% of the world's population will experience water scarcity at least one month out of the year by 2050.

Bungoma County is faced with water shortages, and many still must walk some distances to their nearest water points, especially women. Currently, the main sources of water are seasonal rivers, boreholes, few shallow wells, earth dams, and limited tap water. Water production is low against a high demand per day.

The County faces a number of challenges with regard to water resources development and management. The main challenges include the following:

- 1) The catchment degradation is affecting both surface and ground water resources in terms of quantity and quality;
- 2) Limited assessment and monitoring of the water resources in the County, making it increasingly difficult to make informed decisions on development and sustainable management of water resources;
- 3) Increasing pollution of both surface and ground water resources due to urban and agricultural development;
- 4) Lack of proper sewerage and sanitation facilities as well as poor planning, and poor drainage further aggravated by an increasing population;
- 5) Increasing water demand due to increasing population and expansion of agricultural and economic activities across sectors;

- 6) Low practice of harvesting and storing water due to low investment and financing of requisite infrastructure;
- 7) Limited investment and financing for the water sector due to lack of clear national and County investment plans and inadequate public financing; and
- 8) Limited capacity and lack of effective coordination mechanism among actors.

Additionally, there is limited sensitization and awareness of water harvesting and storage techniques as well as poor governance and management of existing water infrastructure.

The County therefore requires development of a framework to improve the sector's service delivery and realign it with constitutional environment as well as to ensure adaptability to meet the needs of a changing environment. The County Government and the department should develop a water policy in line with the Sessional Paper No. 1 of 1999 National Policy on Water Resources Management and the spirit of the Constitution of Kenya 2010 and Kenya's Vision 2030.

The Policy will also address a framework for an integrated approach to planning, sustainable development and management of water resources, and progressive realization of the human right to water, sanitation and environment.



## **2.1 SUBMISSIONS BY THE DEPARTMENT OF WATER ON KOICA I AND II WATER PROJECTS**

**Mr. Speaker Sir,** The committee requested for a status report from the department of water on the two projects and the department submitted as follows:

### **General objective of the water supply project ( KOICA)**

The main goal of the water supply project is to increase the water coverage, access and reduce the walking distance to water collection point in the areas concerned. But the main objectives as espoused in the agreement between the government of Kenya and the Republic of Korea include:

- 1) Improve the water situation in the area through constant and reliable supply thereby improving health, social well-being and reducing poverty.
- 2) Improve the basic water needs in the institutions i.e schools, university and health centers within the project area.
- 3) Reduce the walking distance to the piped water point to maximum of 500m within the project area.
- 4) Eradicate water related infections/diseases, improve health status and facilitate savings on money spent on treatment of waterborne diseases.
- 5) Stimulates growth in other sectors of economy and improve socio-economy status of community which is in line the COK 2010, National SDG goals and the County Government Strategic objectives and the Government of Kenya's Vision 2030.
- 6) Convert time wasted in drawing domestic and livestock water to more economic use in other sector.
- 7) Promote peace and harmony between the neighboring communities living in Bungoma through equitable distribution of quality drinking water.

## **Water Project Brief**

The department of water has had one major donor in water infrastructure development since the advent of devolution. This has been the Republic of South Korea through its implementing agency the **Korea International Cooperation Agency (KOICA), Kenya Office** where they are implementing two major water supply projects within the county.

### **Project financing and management**

It is important to note that besides financing the projects, the Donor (through its implementing Agency KOICA) also directly oversees all contract and project management aspects of these projects and there after hands over the project to the county government when completed.

The county government on the other hand has an undertaking of doing all the necessary land acquisitions and compensations, ensure access to the project area and installation of supportive utilities such as power-lines, acquire all the relevant permits from concerned bodies, and do all the necessary compensation and negotiations on way-leaves. The County is also supposed to provide information and technical input that helps in planning, design and implementation of the project. (Find Annexed)

From both projects, KOICA majorly undertook the main infrastructural works with the county government looking to carry out last mile connectivity by extending water distribution networks through both departmental and CEF funded projects.

### **KOICA PHASE 1 (THE CONSTRUCTION OF THE WATER SUPPLY SYSTEM PROJECT IN CHWELE AREA, BUNGOMA COUNTY)**

The project followed a Memorandum of Understanding (MOU) signed between the Republic of Korea through the Korea International Cooperation Agency (KOICA), Kenya Office and the Ministry of Environment, Water and Natural Resources jointly with the Lake Victoria North Water Works Development Agency (LVNWWDA) on

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the 28<sup>th</sup> March, 2014 with the sole purpose of supplying water to Chwele area and its surroundings.

The implementation period of the project was as from 13<sup>th</sup> June, 2016 to 18<sup>th</sup> August, 2018 with the total sum of Ksh 500,000,000 which was awarded to Nanchang Foreign Engineering Company(Kenya) Limited.

### **Scope of works and coverage**

The works involved construction of a water supply system starting with unit of 2,000 m<sup>3</sup>/day. The project area covers Kapkateny in Mt. Elgon Sub-County and Mukuyuni, Chwele/Kabuchai and West Nalondo Wards in Kabuchai sub-county, Bungoma County. The constructed infrastructure includes the following:

- i. An intake structure on Kuywa River at elevation of 1832.5 mean above sea level(MSL). This intake structure makes consideration and provisions for water demands up to the ultimate year of 2035.
- ii. Raw water gravity main from the intake structure to the treatment plant. The treatment works will be located approximately 1320mm from the intake.
- iii. A new water treatment plant of 2,000m<sup>3</sup>/day comprising of the following facilities:
  - Treated water transmission main from the Treatment Plant to Busakala Reservoirs for a distance of 9,849m..
  - Construction of off-takes to 5 off- takes upstream and connection to the villages upstream.
  - Rehabilitation of existing 6 reservoirs for supply to the villages upstream
  - Rehabilitation of 2 Terminal Reservoirs at Busakala Hill.
  - Rehabilitation and connection of 2 reservoirs; one at Kabuchai of 90 m<sup>3</sup> and another at Nalondo of 50m<sup>3</sup>
  - New main Distribution Mains to Mukhweya Junction of 12.0 km.
  - Construction of Branch line to Sikata Junction of 6.54 km.
  - Construction of another branch line to Kisiwa Centre of 3.66 km.

- Replacement of existing distribution in Chwele town to reduce currently high Non Revenue Water.
- General measures for improvement of revenue collection.

### **Population served**

The project is estimated to be serving approximately 60,000 residents within the project area.

### **KOICA PHASE II (DETAILED DESIGN OF WATER SUPPLY SYSTEM FOR CHEPYUK WARD-KIBABII COMPLEX AND MASTER PLAN OF WATER SUPPLY FOR BUNGOMA COUNTY)**

The project followed a Records of Discussions signed between the Republic of Korea through the Korea International Cooperation Agency (KOICA), Kenya Office, the Ministry of Water, Sanitation and Irrigation and the County Government of Bungoma on the 28<sup>th</sup> May, 2018 for the project

The contractor executing the project is SHANXI Geological Engineering Exploration Institute Limited. The project total grant was of Ksh. 600,000,000 .

### **Scope of works and coverage**

The grant for KOICA phase II involved doing a detailed design and construction of a water supply system from Chepyuk to Kibabii complex covering Chepyuk, Kapkateny Wards in Mt. Elgon Sub-County, Mukuyuni, Chwele/Kabuchai Wards in Chwele/Kabuchai Sub-County and Tuuti Marakaru Wards Kanduyi Sub-Counties and developing a County water supply master plan. The works are ongoing and the contract period is from May 13<sup>th</sup>, 2021 to May 12<sup>th</sup> 2023 for a period of two years.

It is worth noting that the county water supply master plan was completed and handed over to Bungoma county. The goal of the Master Plan is to identify a robust, flexible water sources development strategy that ensures security of supply to areas

within Bungoma County and meets the expected growth in water demands over the next 25 years from the year 2020 to 2045.

### **Population to be served**

The project is estimated to serve approximately 86,000 residents within the project area when completed.

### **Current status**

- 1) Construction of 800m<sup>3</sup> reinforced concrete tank at Kimkung'i is complete.
- 2) Clear Water Pipeline has been laid from Kibabii to Masaek in Kapkateny ward with the stretch from Masaek to Kapkerwa Treatment plant at 80% completion.
- 3) Raw water pipeline of 3.8km is complete.
- 4) Major equipment and materials mobilization and construction of contractor's temporary camp at the water treatment plant done.
- 5) Construction of staff houses is ongoing and is currently at 80%.
- 6) Construction of the water filter gallery is at 50% completion.
- 7) Construction of administration block and offices is ongoing and the works currently stands at 50% completion.
- 8) Construction of 500m<sup>3</sup> reinforced concrete tank at the Water Treatment Plant (WTP) done.

## CHAPTER THREE

### 3.0 SITE VISIT AND COMMITTEE FINDINGS

**Mr. Speaker Sir,**

The committee visited the two sites where the project was carried out. The committee found out the following on the two KOICA projects.

#### 3.1 KOICA PHASE I

**Mr. Speaker sir,** the committee made the following findings on KOICA phase I:

1. The project was indeed complete, commissioned and currently operational under the management of NZOWASCO
2. The intake structure on Kuywa River at elevation of 1832.5 mean above sea level (MSL) was done and is in place.
3. The raw water gravity main from the intake structure to the treatment plant with the treatment works located approximately 1320mm from the intake were done.
4. A new water treatment plant of 2,000m<sup>3</sup>/day comprising the following facilities was in place (Find Annexed photo III):
  - Treated water transmission main from the Treatment Plant to Busakala Reservoirs for a distance of 9,849m
  - Construction of off-takes to 5 off- takes upstream and connection to the villages upstream.
  - Rehabilitation of existing 6 reservoirs for supply to the villages upstream
  - Rehabilitation of the 2 Terminal Reservoirs at Busakala Hill
  - Rehabilitation and connection of 2 reservoirs; one at Kabuchai of 90 m<sup>3</sup> and another at Nalondo of 50m<sup>3</sup>
  - New main Distribution Mains to Mukhweya Junction of 12.0 km.
  - Construction of Branch line to Sikata Junction of 6.54 km
  - Construction of another branch line to Kisiwa Centre of 3.66 km
  - Replacement of existing distribution in Chwele town to reduce currently high Non Revenue Water.

### 3.2 KOICA PHASE II

**Mr. Speaker Sir,**

During the site visit for fact finding on KOICA II, the committee found out as follows:

The project is currently at 44% completion point:

1. The construction of 800m<sup>3</sup> reinforced concrete tank at Kimkung'i is indeed complete.
2. Clear Water Pipeline has been laid from Kibabii to Masaek in Kapkateny Ward only a stretch of 6 Km from Masaek to Kapkerwa Treatment plant is remaining.
3. Raw water pipeline of 3.8km is indeed complete
4. The works of intake facilities commenced after rehabilitation of the access road from the river to the intake point, and mobilization of major materials, equipment had been done.
5. Major equipment and material mobilization and construction of contractor's temporary camp at the water treatment plant was complete.
6. Construction of staff houses is ongoing and is currently at 85% completion.
7. Construction of the water filter gallery is at 50% completion.
8. Construction of administration block and offices is ongoing and the works currently stands at 50%.
9. Construction of 500m<sup>3</sup> reinforced concrete tank at the water treatment plant is done.
10. Review about the locations of kiosks is underway for Water Points. The locations will be discussed with Bungoma government and NZOWASCO.
11. For distribution Pipeline, review about the route plan including site survey is underway. The route will be discussed with Bungoma government and NZOWASCO.

## **CHAPTER FOUR**

### **COMMITTEE OBSERVATIONS AND RECCOMANDATIONS**

#### **4.0 COMMITTEE OBSERVATIONS**

**Mr. Speaker Sir,**

The committee made the following observation

1. The KOICA I and II projects covers the main infrastructural development of the plant which is the construction of the water supply system including; intakes and off-takes facilities, transmission pipes, rehabilitation of old tanks, but the County Government was to undertake the distribution of water to residents.

#### **2. The KOICA I:**

- The main distribution lines have been vandalized and water tapped into residential homes for domestic use.
- The Wash-out lines were not done at the treatment plant hence dirty water runs off into nearby road and farms and it damaged the police camp and the dispensary forcing them to relocate.
- Several water points and valves have since been either closed, vandalized or have illegal connections done on them.
- The project was complete, commissioned and is currently under the management of NZOWASCO.
- There exist a dispute between the community and NZOWASCO management over the distribution of water to homes, especially at Terem area.

#### **3. KOICA II project,**

- It is worth noting that the county water supply master plan was completed and handed over to Bungoma County.



- Permits and licenses from Water Regulatory Authority, Kenya Forest service and National Environment Management Authority (WRA,KFS,NEMA) have been acquired so far.
- The County Government is in the process of acquiring the private (4 private lands) lands identified for the implementation of the project.
- The County Government has connected power at the plant and also done the extension lines.

#### **4.1 COMMITTEE RECOMMENDATIONS**

**Mr. Speaker Sir,**






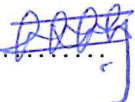
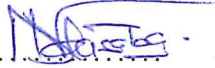






1. **THAT**, the County Executive Committee Member to liaise with his counterpart from Roads, Infrastructure and Public Works and fast track the rehabilitation of the road to Terem water treatment plant for ease of accessibility.
2. **THAT**, the Department, in collaboration with the National Government, Ministry of Water should ensure that KOICA phase II project is successfully completed by October, 2023 as per the agreement.
3. **THAT**, the County department should expedite in carrying out sensitization meetings on the need to pay for water services provided in the water source regions. This will promote peace and harmony with the communities living around the water treatment plant and will eliminate vandalism and illegal connections on transmitting pipes.
4. **THAT**, there is need for the department through the management of NZOWASCO to control the massive backwash of water that has caused mayhem around Terem area by constructing the wash-outs at the water treatment plant.
5. **THAT**, a clear guideline should be developed by the department to guide renting of Kiosks by locals interested in water provision services to reduce on cases of non-performing water kiosks.
6. **THAT**, some water tanks used under KOICA-1 should be renovated instead of constructing new tanks in distribution of water to residents in the Wards enlisted in the project.
7. **THAT**, the KOICA management majorly undertook construction of the main infrastructural works and the county government should immediately embark on carrying out the last mile connectivity by extending water distribution networks through both departmental and CEF funded projects as is in the agreement.

**Mr. Speaker Sir, I beg to move the motion.**

**Thank you.**

## ADOPTION SCHEDULE


The committee members hereby append their signatures adopting this report

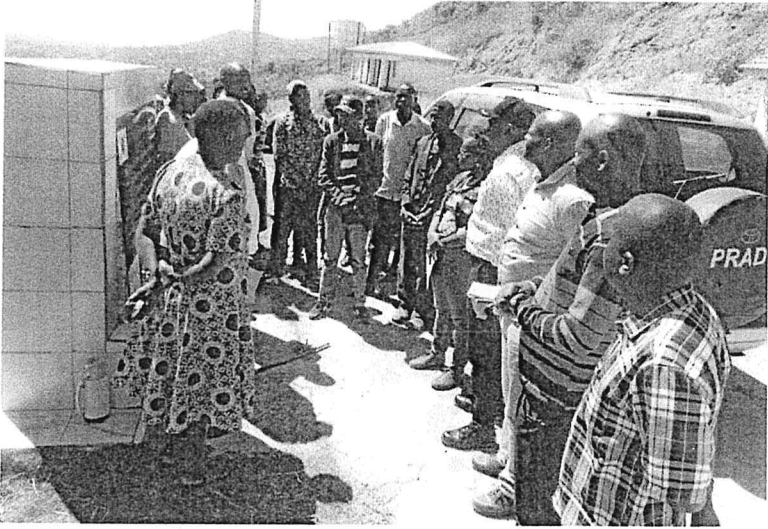
1. Hon. Edwin	Opwora	Chairperson	...	
2. Hon. George	Tendet	Member	...	
3. Hon. Joseph	Nyongesa	Member	...	
4. Hon. James	Mukhongo	Member	...	
5. Hon. Meshack	Simiyu	Member	...	
6. Hon. Antony	Lusenaka	Member	...	
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12. Hon. Allan	Nyongesa	Member	...	
13. Hon. Florence	Juma	Member	...	
14. Hon. Alice	Kibaba	Member	...	



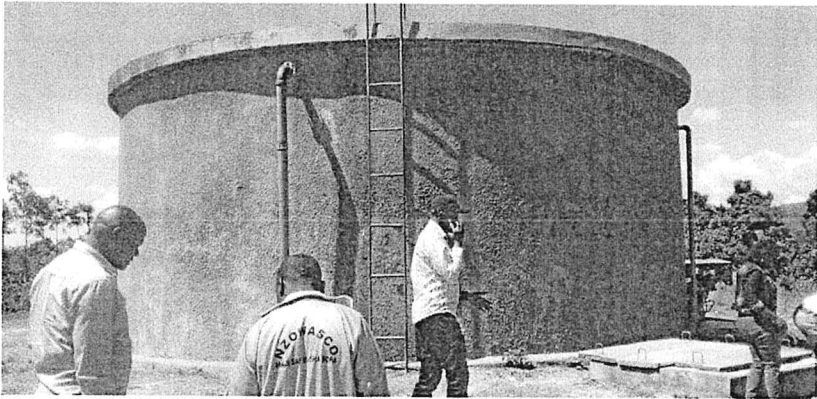
## ADOPTION SCHEDULE

The committee members hereby append their signatures adopting this report

			Sign
1. Hon. Edwin	Opwora	Chairperson	
2. Hon. George	Tendet	Member	.....
3. Hon. Joseph	Nyongesa	Member	.....
4. Hon. James	Mukhongo	Member	.....
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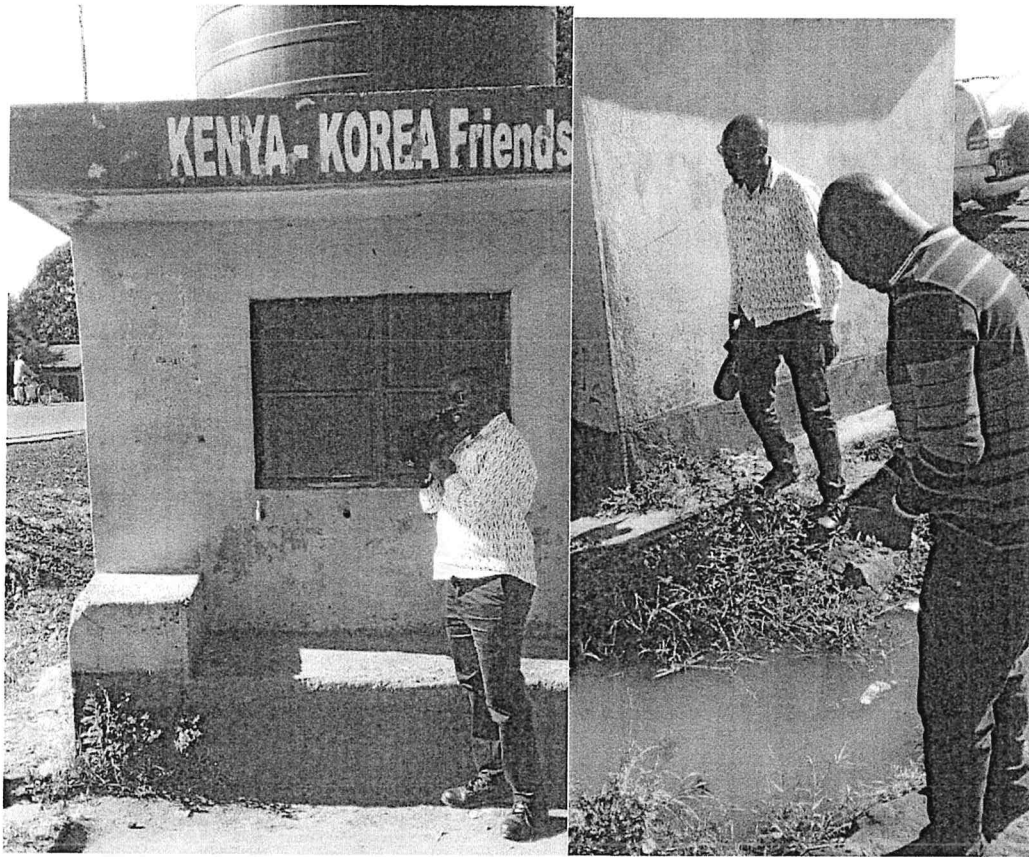
The committee engaging the community at the water treatment plant



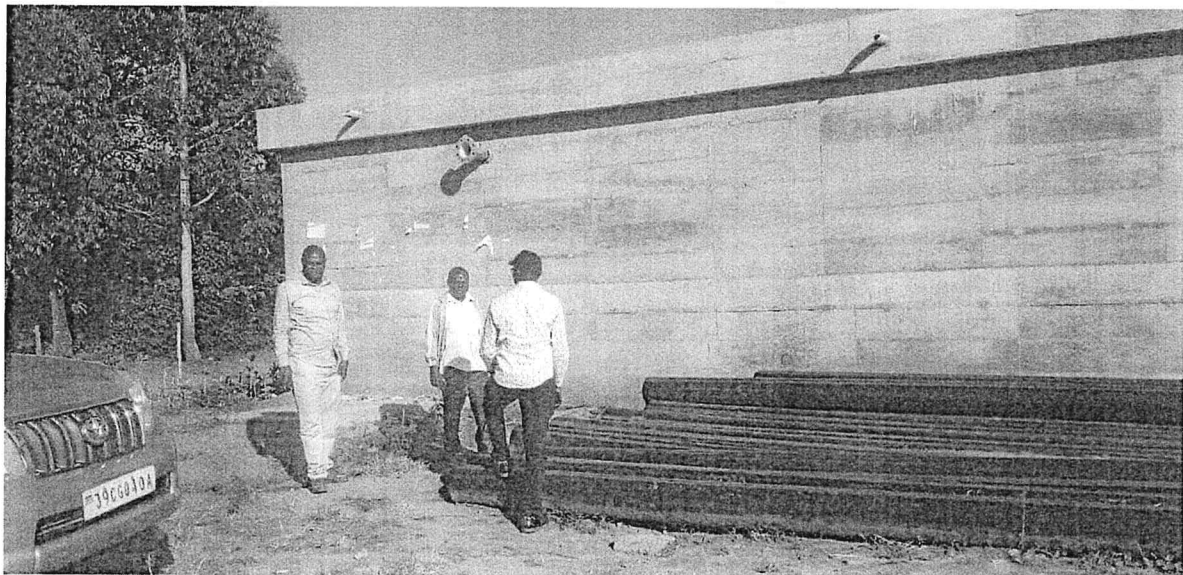
The committee inspecting a refurbished Busakala water tank



The water tank at the Busakala Water Treatment Plant



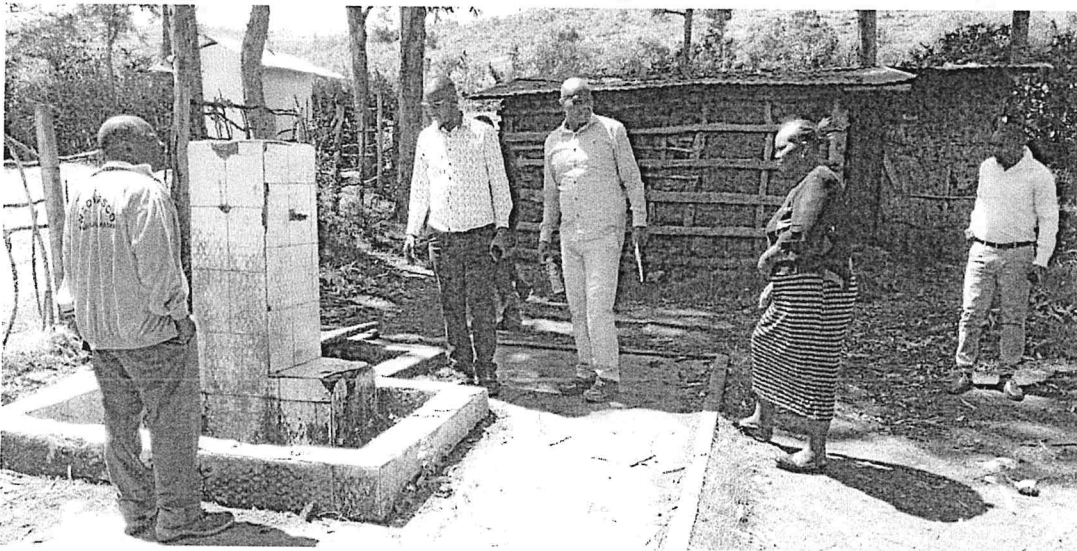
One of the water kiosk in Bongola market center



A huge water tank with a capacity of 800 meter cubic in Kinakung'.



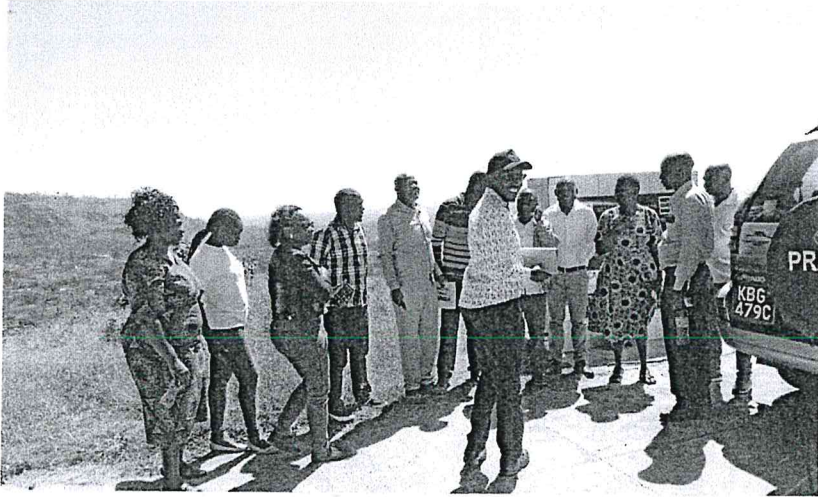
One of the operating water Kiosk located in Chebukwa market center KOICA II



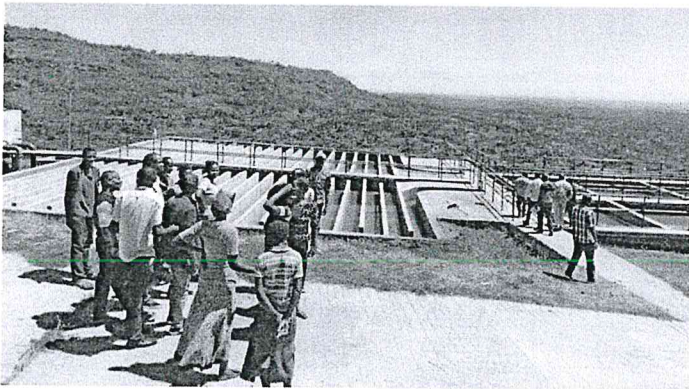
Vandalized water point at Kipchoria Primary school, Mt. Elgon







The Chairperson addressing the NZOWASCO staff at Chepyuk, Mt. Elgon



Committee members and some members of the community at the Water Treatment Plant at Kipchoria, Mt. Elgon

