



NATIONAL WATER HARVESTING & STORAGE AUTHORITY

WATER HARVESTING AND STORAGE FOR DROUGHT RESILIENCE

10th December 2021

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1. INTRODUCTION & BACKGROUND INFORMATION

- National Water Harvesting and Storage Authority (NWHSA) changed from National Water Conservation and Pipeline Corporation 2017
- The authority is now implementing its functions and powers as established in the *Water Act 2016*

Introduction & Background.....

Establishment of **NWWSA**

- Water Harvesting & Storage – enables **Irrigation**
- Functions include **drought & disaster mitigation**
- Headquarters is in Industrial Area, Nairobi (5 regional offices yet to be opened – 2022)
- Strategic Plan **(2021 – 2026)** – Launch will be on 15th December 2021

Introduction & Background.....

The functions and powers of the Water Storage Authority as per the WA 2016 are as follows:-

- (a) Undertake on behalf of the national government, the **development of national public water works** for water resources storage and flood control;
- (b) Maintain and manage national public **water works infrastructure** for water resources storage;
- (c) Collect and provide information for the formulation by the **Cabinet Secretary** of the national water resources storage and flood control strategies;

Introduction & Background.....

(d) Develop a water harvesting policy and **enforce water harvesting strategies;**

(e) Undertake on behalf of the national government strategic water **emergency interventions** during drought; and

(f) Advise the Cabinet Secretary on any matter concerning national public water works for **water storage and flood control.**

2. HIGHLIGHTS OF THE STRATEGIC PLAN (2021-2026)

- ✓ Increase water storage in the country by 34 million cubic meters (m³).
- ✓ Construct of 70kms of disaster management structures (earth dykes)
- ✓ Increase the access of water to Kenyans from 60% to 80%
- ✓ Improve corporate image and improve customer service
- ✓ Enhance financial sustainability

Highlights of the Strategic Plan.....

- ✓ Total Budget is 61 Billion

Funding Source

- ✓ Government of Kenya (GoK)
- ✓ Development Partners
- ✓ Public Private Partnerships (PPP)
- ✓ Business Development Unit (BDU) – NWHSA Division

3. NWHSA Previous Interventions.....(All GoK Funded)

- ✓ Elgeyo Marakwet (Kipsero Area) – 15M
- ✓ Kitale (River Sabwani) – 35M
- ✓ Homabay (River Awach / Tende) – 121M
- ✓ Marigat (River Perkerra) – 157M
- ✓ Bura (Tana River) – 15M
- ✓ Garissa – 179M
- ✓ Tana Delta – 128M
- ✓ Narok (Daraja Mbili) – 202M

NWHTSA Previous Intervention.....

Drought & Flood Mitigation Sites (2003 – 2020)

- ✓ About 1,143 Boreholes *(all over Kenya)*
- ✓ About 1,036 Small Water Pans *(all over Kenya)*
- ✓ Over 15 Flood Control sites *(all over Kenya)*

DROUGHT & DISASTER MITIGATION ≈ 12.4 Billion

Current Disaster Interventions (Total: KShs 1.8 B)

- ✓ Busia (River Nzoia) – 1.4 Billion (World Bank & GoK)
- ✓ Kisumu (River Nyando) – 40 Million (Gok)
- ✓ Homabay (River Awach) – 40 Million (Gok)
- ✓ Turkana (River Kalawase) – 50 Million (Gok)
- ✓ Migori (River Kuja) – 35 Million (Gok)
- ✓ Isiolo (Godha Plains) – 50 Million (Gok)
- ✓ Narok (Daraja Mbili) – 60 Million (Gok)
- ✓ Marigat (River Perkerra) – 70 Million (Gok)

Current Water Resources Intervention.....

PROJECT NAME	DAM CAPACITY (m3)	LOCATION	STATUS
KORU DAM	93.7 Million	KERICHO	TENDERING
BOSTO DAM	29.5 Million	NAKURU	FINANCING
LONDIANI DAM	55 Million	KERICHO	TENDERING
ISIOLO DAM	215 Million	ISIOLO	FINANCING
SIYOI DAM	8.9 Million	WEST POKOT	CONSTRUCTION
BADASA DAM	5 Million	NAKURU	TENDERING
UMAA DAM	870,000	BARINGO	TENDERING

4. BUDGET ESTIMATES

- ❖ Develop Works Infrastructure = 52 Billion
- ❖ Disaster Management = 1.3 Billion
- ❖ Cross Cutting Policy = 1.1 Billion
- ❖ Financial Sustainability = 649 Million
- ❖ Enhancing Customer Service = 56 Million
- ❖ Recurrent & Capex = 1.8 Billion
- ❖ Ongoing Project = 4.2 Billion

GRAND TOTAL = 61 BILLION

Budget Estimates.....

Resource Mobilisation Projections:

- ❖ Exchequer $\approx 85\%$
- ❖ Business Development Unit $\approx 1\%$
- ❖ PPP $\approx 7\%$
- ❖ Development Partners $\approx 7\%$

6. LESSONS LEANT & CHALLENGES

- Financing & Planning must be correlated
- Monitoring, Evaluation & Reporting is mandatory
- Reduce overdependence on Exchequer
- Align Performance Contracting (PC) with annual plans
- Establish risk management framework
- Engage development partners (DP) in annual plans

7a. Photos....[Budalangi Flood Control, Busia]



7b. DRILLING RIG AT NWHSA YARD



7e. NWHSA HEADQUARTERS OFFICE BLOCK IN INDUSTRIAL AREA, NAIROBI



8. CONCLUSION

The recently established National Water Harvesting and Storage Authority require support for further capacity building in both **human resource and capital** to enhance efficiency and effectiveness in water harvesting and storage to ensure **drought resilience** in the country.

- THE END -

THANK YOU

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**NATIONAL WATER HARVESTING & STORAGE AUTHORITY
(NWHSA)**