



Kitui County Climate Change Fund Inventory Adaptation Investments 2014-2017



Kitui County Climate Change Fund (KCCCF): Inventory of Investment 2014-2017



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Tana Athi Water Services Board Building, Ground Floor

P.O. Box 33 - 90200,

Kitui

info@kitui.go.ke

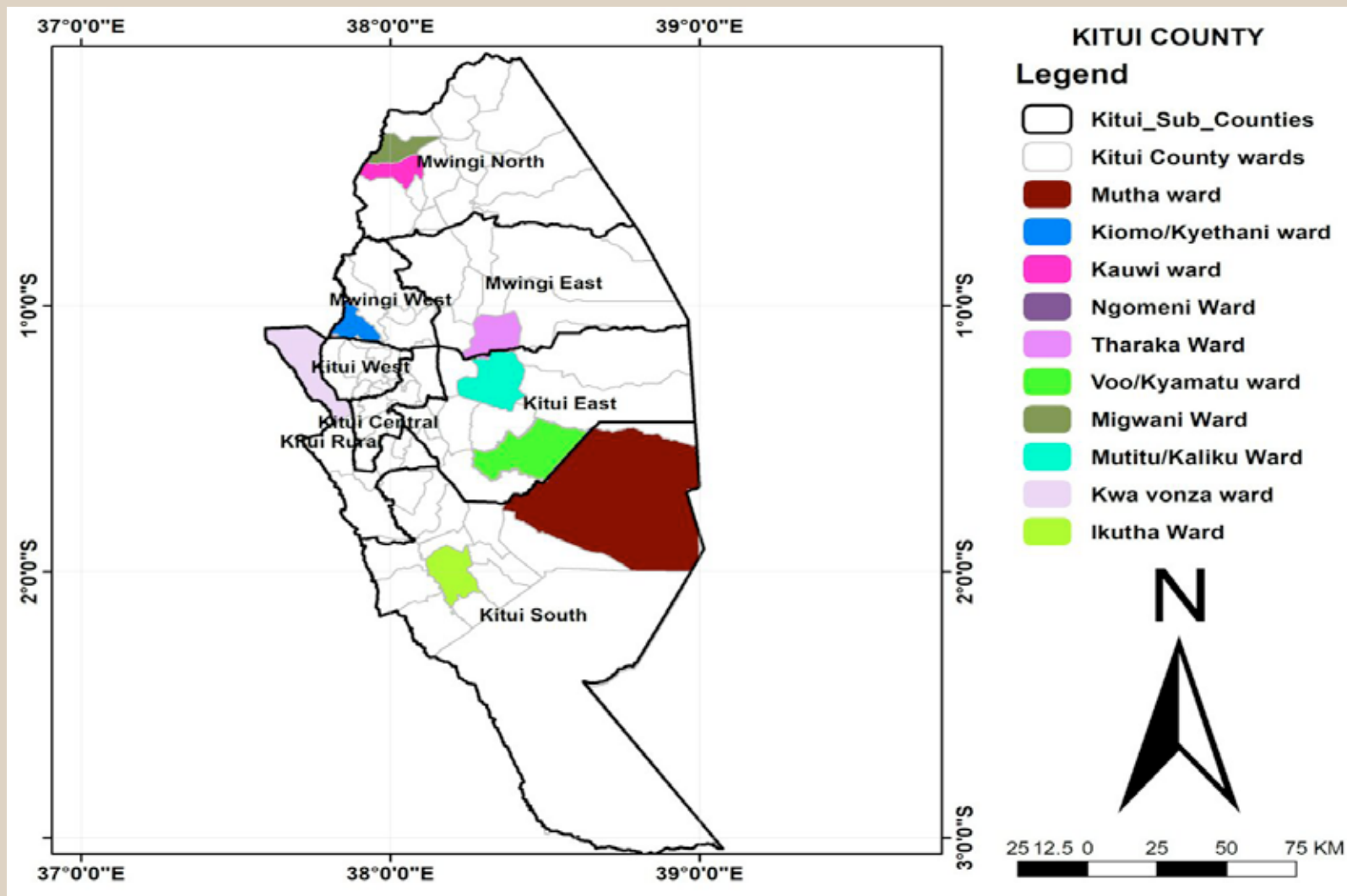
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Designed by Jane Kiiru

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Map of Kitui



Summary

Kitui County Government, with support from the Adaptation Consortium, is implementing an innovative approach that enables vulnerable communities through their climate change planning committees access and use climate finance through identifying and prioritizing public good investments that build their resilience to climate change. The approach known as County Climate Change Fund mechanism also supports county governments to deliver on their mandate of achieving sustainable development in the face of a changing climate. This has encouraged a more effective, transparent and accountable planning process, delivering investments that benefit vulnerable communities and represent good value for money. The involvement of the community in prioritising the public good investments is in line with Kenya's devolution agenda of participatory development, and county governments' mandate to develop social and economic aspects according to local priorities.

To ensure sustainability, the design and sitting of the adaptation investment are informed by climate information making sure that current and future climate risks are taken into account. Climate information is also used by small holder farmers to make decisions on farm operations including the choice of crop varieties to plant depending on the seasonal outlook as a measure of adapting to climate change. The completed investments include sand dams, earth dams, rock catchment and water piping all aimed at improving community resilience.

This compendium provides information on (location, name, date of implementation, investment cost, description of the situation before and after the intervention, and nature of benefits as reported by the beneficiaries) the 12 public good investments currently benefiting 50,500 people (32,633 direct beneficiaries and 17,867 indirect beneficiaries) in the ten wards of Ikutha, Mutha, Mutito/ Kaliku, Voo/ Kyamatu, Kwa vonza/ Yatta, Kauwi, Migwani, Kiomo/ Kyethani, Tharaka and Ngomeni.

In Kitui County, a Climate Information Service (CIS) plan was also developed. Through its implementation, 1025 climate information service intermediaries have been trained. The intermediaries receive and disseminate climate information across the county through SMS and public barazas. A total of 723,300 people have received climate information through radio, intermediaries, public barazas and extension officers.



***Quote from Rita Mutua Kituku - Ikutha Ward
in Kitui County***

“before the construction of Itukisya Earth Dam, I walked for 12kms in search of water. I would fetch water at night risking being harassed as most of these wells were individually owned. The construction of the earth dam has lessened the kilometres I walk in search of water giving me ample time to take care of my family needs and house chores”.

Introduction

Kitui County, is one of the counties hard hit by the effects of climate change. It is a semi- arid county characterized by high rainfall variability, prolonged droughts, and high temperatures. The Adaptation Consortium through the financial support of the Department for International Development is piloting an innovative integrated approach that is building community resilience to climate change. Community members are at the centre of the approach which consists of four interrelated components namely:- setting up a County Climate Change Fund (CCCF); formation of climate change planning committees at ward and county levels; integrating climate information and other resilience tools into planning and monitoring and evaluating progress towards building resilience at community level.

In identifying the investments, the following basic criteria must be met: -

1. benefit many people.
2. Support the economy, livelihoods or important services on which many people depend.
3. be relevant to building resilience to climate change.
4. encourage harmony; build relations, understanding and trust.
5. Must have been developed after consultation with all potential stakeholders.
6. Must be viable, achievable and sustainable.
7. Must be cost effective and give value for money

In Kitui, community prioritized 12 investments in 10 wards that is: Itukisya earth dam and Ngomano sand dam in Ikutha ward, Kalikuvu earth dam in Mutha ward, Kamuyuni rock catchment in Mgwani, Kyandevu earth dam and Kaumbu/ Mwinga sand dam in Voo/ Kyamatu, Kaayo earth dam in Mutito/ Kaliku ward, Kwa Mboo earth dam in Kwa Vonza/ Yatta ward, Mikuyuni earth dam in Kauwi ward, Iiani Kwa Ndungu water pipeline distribution in Kiomo/Kyethani ward, Mutethya – Nzaini earth dam in Ngomeni ward and Makithuri in Tharaka ward. In the 10 pilot wards of Kitui county the communities prioritized water security projects as an essential response to climate change risks faced.

All the public good investment projects were implemented with financial support from DfID. This was leveraged with technical support from the county government of Kitui in the form of project design, supervision and quality control etc. In Kyomo/Kyethani ward the county government co-funded the Iiani kwa Ndungu pipeline distribution. All the twelve projects have availed water for domestic, livestock and micro irrigation use. Capacity building for Ward Climate Change Planning Committees and community has led to great ownership of the projects.

KCCCF INVESTMENTS IN PUBLIC GOODS IN KAUWI WARD



Rehabilitation of Mikuyuni earth dam to increase access to water for domestic, livestock and small scale irrigation



no of people: **5450 people**

Animals: **Cattle 1200; Shoats 3500**



Mikuyuni earth dam (during) and (below) after construction

Location

GPS coordinates: Lon: 01 21 48.0 - Lat: 037 81 08.7

Date of Completion

January 2017

Investment cost

Kshs. 7,839,760

Description of the situation before intervention

A silted open earth dam with indiscriminate access by both humans and livestock causing water contamination.

Description of the situation after the intervention

The scope of work included bush clearing, cutting and rebuilding of existing embankment, desilting of the reservoir, excavation of core trench, construction of draw off system and sanitation facilities.

Benefits to Local Community

- Improved water access for both livestock and human use through a centralized water point.
- Better management of the earth dam by a well-trained site committee.
- The availability of watering troughs minimized direct entry into the earth dam hence reduced contamination of the water.

Rehabilitation of Mikuyuni earth dam to increase access to water for domestic and livestock use



Mikuyuni earth dam

KCCCF INVESTMENTS IN PUBLIC GOODS IN MIGWANI WARD



Construction of Kamuyuni Rock Catchment



no of people: **3281 people**

Animals: **Shoats 1000**



Kamuyuni rock catchment (before) and (below) after construction

Location

GPS coordinates: Lon: 01 05 24.8 - Lat: 038 03 22.8

Date of Completion

December 2016

Investment cost

Kshs. 3,616,607.65

Description of the situation before intervention

The community relied on shallow wells which dried up during the dry season.

Description of the situation after the intervention

The scope of work included construction of retaining walls, concrete weir, installation of piping system and construction of 150m³ masonry tank.

Benefits to Local Community

- Improved access to portable water for both livestock and human use through a centralized water point.
- Availability of water during drought season.

Construction of Kamuyuni Rock Catchment



Kamuyuni rock catchment

KCCCF INVESTMENTS IN PUBLIC GOODS IN KIOMO KYETHANI WARD



Construction of Iiani kwa Ndungu Pipeline Distribution



no of people: **4234 people**

Animals: **Cattle 800; Shoats 2200**



Pipeline distribution during (above) and (below) after construction

Location

GPS coordinates: Lon: 01 05 24.8 - Lat: 038 03 22.8

Date of Completion

December 2016

Investment cost

Kshs. 14,891,241.65 (10m - county government contribution)

Description of the situation before intervention

The community relied on open small streams which dried up during the dry season. This led them to walk for 5kms on average in search of water. Humans and livestock had direct access thus contaminating the water.

Description of the situation after the intervention

- Construction of piping system, storage tank, and water kiosk bringing water closer to the community.
- Community gets tapped water which is free from open defecation by human and livestock hence is safe from contamination.

Benefits to Local Community

- Improved access to water for both livestock and human use, who no longer have to walk for long distances in search of water.
- Reduce cases of water borne diseases due to improved sanitation.

Construction of Iiani kwa Ndungu Pipeline Distribution



Iiani kwa Ndungu pipeline distribution

KCCCF INVESTMENTS IN PUBLIC GOODS IN NGOMENI WARD



Construction of Mutethya Nzaini Earth Dam



no of people: **930 people**

Shoats **2000**



Mutethya Nzaini before (above) and (below) after construction

Location

GPS coordinates: Lon: 01 05 24.8 - Lat: 038 03 22.8

Date of Completion

December 2016

Investment cost

Kshs. 4,035,060.00

Description of the situation before intervention

The community members relied on shallow wells which dried after cessation of rains.

Description of the situation after the intervention

- The scope of work included bush clearing, excavation of core trench, construction of dam wall; Fencing of reservoir; construction of cattle trough and V.I.P. latrine/bathroom, installation of draw off system.
- Community gets water through a draw off system i.e. a gravitated water pipe from lowest part of the sand dam to a lower side, hence is safe from contamination.

Benefits to Local Community

- Improved access to water for both livestock and human use through a centralized water point.
- Reduce cases of waterborne diseases due to improved sanitation around the earth dam.

Construction of Mutethya Nzaini Earth Dam



Mutethya Nzaini investments after construction

KCCCF INVESTMENTS IN PUBLIC GOODS IN THARAKA WARD



Construction of Makithuri Earth Dam



no of people: **1344 people**

Animals: **Cattle 200; Shoats 1000**



Makithuri earth dam before (above) and (below) after

Location

GPS coordinates: Lon: 01 05 24.8 - Lat: 038 03 22.8

Date of Completion

December 2016

Investment cost

Kshs. 4,035,060.00

Description of the situation before intervention

Communities walking long distances - upto 8 kilometers in search of water during the dry season.

Description of the situation after the intervention

The scope of work included bush clearing, excavation of core trench, construction of dam wall, cattle trough and V.I.P. Latrine/bathroom; installation of a draw off system and fencing of reservoir.

Benefits to Local Community

- Improved access to water for both livestock and human use through a centralized water point.
- Reduced cases of waterborne diseases due to improved sanitation.

Construction of Makithuri earth Earth Dam



Makithuri earth dam after construction

KCCCF INVESTMENTS IN PUBLIC GOODS IN MUTITU KALIKU WARD



Rehabilitation of Kaayo Earth Dam



no of people: **1446 people**

Animals: **Cattle 2400; Shoats 4000**



Kaayo earth dam before (above) and (below) after

Location

GPS coordinates: Lon: 01 05 24.8 - Lat: 038 03 22.8

Date of Completion

December 2016

Investment cost

Kshs. 4,937,049.00

Description of the situation before intervention

- The community relied on risky shallow wells which occasionally collapsed leading to loss of lives.
- Women and children would spend nights at the wells waiting for them to fill up with water.

Description of the situation after the intervention

The scope of work included bush clearing, excavation of core trench, construction of dam wall; cattle trough and V.I.P. Latrine/bathroom, installation of the draw off system, and fencing of reservoir.

Benefits to Local Community

- Improved access to water for both livestock and humans through a centralized water point.
- Emergence of small scale businesses such as water vending.
- The water is free from contamination as its fetched from a controlled water point.

Rehabilitation of Kaayo Earth Dam



Kaayo earth dam

KCCCF INVESTMENTS IN PUBLIC GOODS IN VOO KYAMATU WARD



Construction of Kaumbu Sand Dam



no of people: 1246 people

Animals: Cattle 700; Shoats 1800



Kaumbu Sand dam before (above) and (below) after

Location

GPS coordinates: Lon: 01 05 24.8 - Lat: 038 03 22.8

Date of Completion

December 2016

Investment cost

Kshs. 3,702,168.75

Description of the situation before intervention

The community got water from a borehole 7 kilometers away.

Description of the situation after the intervention

The scope of work included bush clearing, excavation of core trench, construction of dam wall, cattle trough and V.I.P. Latrine/ bathroom, installation of draw off system, and fencing of the reservoir.

Benefits to Local Community

- Improved access to water for both livestock and humans through a centralized water point.
- Reduced cases of waterborne diseases due to improved sanitation.
- Emergence of small scale businesses such as water vending.

Construction of Kaumbu earth dam



Kaumbu Earth dam

KCCCF INVESTMENTS IN PUBLIC GOODS IN VOO KYAMATU WARD



Construction of Kyandev Sand Dam



no of people: **2749 people**

Animals: **Cattle 300; Shoats 800**



Kyandev Sand dam before (above) and (below) after

Location

GPS coordinates: Lon: 01 05 24.8 - Lat: 038 03 22.8

Date of Completion

December 2016

Investment cost

KSh 450,996.32

Description of the situation before intervention

The community relied on shallow wells whose supply was not adequate for both domestic and livestock especially during the dry seasons.

Description of the situation after the intervention

The scope of work included bush clearing, foundation excavation and construction of concrete weir.

Benefits to Local Community

- Improved access to water for both livestock and human use.
- Availability of water for small scale irrigation.

KCCCF INVESTMENTS IN PUBLIC GOODS IN MUTHA WARD



Construction of Kalikuvu Earth Dam



no of people: **6159 people**

Animals: **Cattle 500; Shoats 2500**



Kalikuvu Earth dam before (above) and (below) after

Location

GPS coordinates: Lon: 01 05 24.8 - Lat: 038 03 22.8

Date of Completion

December 2016

Investment cost

KSh. 3,639,415.50

Description of the situation before intervention

Communities would walk for long distances in search of water (8 kilometers on average).

Description of the situation after the intervention

The scope of work included bush clearing, desilting of the reservoir, construction of sanitation facilities (toilet and bathroom) and fencing of the dam area.

Benefits to Local Community

- Improved access to water for both livestock and human use.
- Reduced cases of waterborne diseases due to improved sanitation.
- Water lasting for longer.

Construction of Kalikuvu Earth Dam



Kalikuvu Earth dam

KCCCF INVESTMENTS IN PUBLIC GOODS IN IKUTHA WARD



Construction of Itukisya Earth Dam



no of people: 3732 people

Animals: Cattle 700; Shoats 3000



Itukisya Earth dam (during) construction and (below) after

Location

GPS coordinates: Lon: 01 05 24.8 - Lat: 038 03 22.8

Date of Completion

December 2016

Investment cost

Ksh. 3,742,173.00

Description of the situation before intervention

Communities walking long distances to water points (9 kilometers on average).

Description of the situation after the intervention

The scope of work included bush clearing, excavation of core trench, construction of dam wall, cattle trough and V.I.P. latrine/bathroom, installation of draw off system, and fencing of reservoir

Benefits to Local Community

- Improved access to water for both livestock and human use through a centralized water point.
- Emergence of small scale irrigation.
- Reduced cases of waterborne diseases due to improved sanitation.

Construction of Itukisya Earth Dam



Itukisya Earth dam

KCCCF INVESTMENTS IN PUBLIC GOODS IN IKUTHA WARD



Construction of Ngomano Sand Dam



no of people: **902 people**

Animals: **Cattle 500 cows; Shoats 1000**



Ngomano Sand dam before (above) and (below) after

Location

GPS coordinates: Lon: 01 05 24.8 - Lat: 038 03 22.8

Date of Completion

December 2016

Investment cost

KSh. 858,083.59

Description of the situation before intervention

Community relied on shallow wells which dried up especially during the dry seasons.

Description of the situation after the intervention

The scope of work included bush clearing, foundation excavation and construction of concrete weir.

Benefits to Local Community

- Improved access to water for both livestock and human use
- Emergence of small scale irrigation.

Construction of Ngomano Sand Dam



Ngomano Sand dam

KCCCF INVESTMENTS IN PUBLIC GOODS IN YATTA KWA VONZA WARD



Construction of kwa Mboo earth dam



no of people: **1160 people**

Animals: **Cattle 800 Shoats 1200**



Kwa Mboo earth dam

Location

GPS coordinates: Lon: 01 05 24.8 - Lat: 038 03 22.8

Date of Completion

December 2016

Investment cost

KSh. 4,490,346.00

Description of the situation before intervention

The community relied on river Mwita syano which is over 5 kilometers away.

Description of the situation after the intervention

The scope of work included bush clearing, excavation of core trench, construction of dam wall, cattle trough and V.I.P. latrine/ bathroom, installation of draw off system, and fencing of the reservoir.

Benefits to Local Community

- Improved access to water for both livestock and humans through a centralized water point.
- Tree growing in the area.
- Reduced cases of waterborne diseases due to improved sanitation.
- Emergence of small scale irrigation.

Construction of kwa Mboo earth dam



Kwa Mboo Earth dam

Conclusion

The inventory provides strong evidence on the benefits that communities are accruing by being in charge of their development agenda, through the County Climate Change Fund mechanism. The mechanism has also built community capacity to demand for better services from the county government and other stakeholders in the counties.

Overall, the County Climate Change Fund (CCCF) mechanism has helped change the lives of 50,500 people in Kitui with an average of 5kms to water sources eliminated, allowing people, more so women and girls more time to engage in other productive work. There has also been a reduction of incidences of water borne diseases in the different villages where the investments have been constructed.

The CCCF mechanism has helped in ensuring proper coordination among different stakeholders, improved local participation and enhanced accountability in the use of public funds by the county government. The inventory will also help in reduction of redundancy in development projects by Non-Governmental Organization and County governments.

The County Climate Change Fund mechanism implemented by the Adaptation (ADA) Consortium is a core component of the National Drought Management Authority (NDMA) five year strategic plan (2018-2022) and is funded by DfID within the Strengthening Resilience and Adaptation to Climate Change in Kenya plus (STARCK+) programme. The aim of Ada is to pilot climate change adaptation planning approaches and to enhance climate resilience through provision of climate information services in the five Arid and Semi-Arid Lands (ASALs) counties (Garissa, Isiolo, Kitui, Makueni and Wajir) that, if successful, will be replicated in other ASAL counties and beyond. The consortium consist of Christian Aid working with ADS- Eastern in Kitui and Makueni, International Institute for Environment and Development (IIED) working with Merti Integrated Development - Programme (MID-P) in Isiolo, WomanKind Kenya in Garissa, and Arid Lands Development Focus (ALDEF) in Wajir, Met Office (UK) and the Kenya Meteorological Department (KMD).



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