Wajir County Climate Change Fund Inventory of Adaptation Investments 2013-2016

COUNTY GOVERNMENT OF WAJIR

National Drought Management Authority NDMA

Wajir County Climate Change Fund (MCCCF)
Inventory of Adaptation Investments
2013-2016

Acknowledgment

The County government of Wajir and the Adaptation Consortium would wish to acknowledge the support from Wajir County Climate Change Steering Committee, the County Climate Change Planning Committee and the Ward Climate Change Planning Committee, in the implementation of prioritized adaptation investments in Wajir County.

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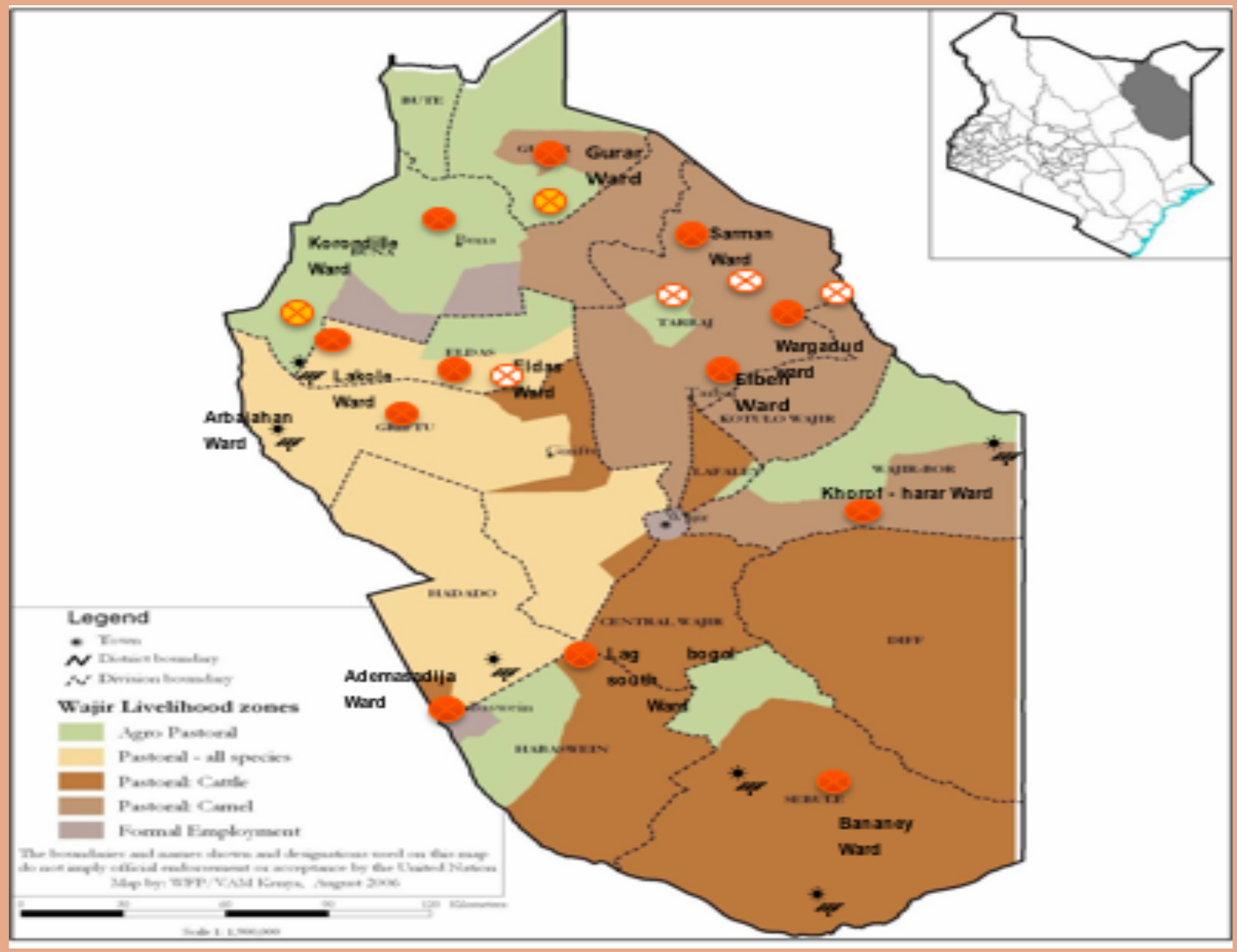
Table of Content

Map of CCCF Investments in Wajir County



Summary

Wajir is among the first counties in Kenya to pass the County Climate Change Fund (CCCF) Act, anchored on the Climate Change Act of Kenya 2016. The CCCF act has seen the county make notable strides in addressing the effects of climate change through concerted efforts by different climate change actors. The County Climate Change Fund (CCCF) approach implemented through stakeholder's participation ensures that communities can make decisions and prioritize needs through consultative process spearheaded by the Ward Climate Change Planning Committees (WCCPCs) and supported by the County Climate Change Fund structures that also include county technical officers.

Through the CCCF approach, the county government of Wajir implemented fourteen (14) community prioritized adaptation projects in twelve wards at a cost of Kshs. 54 Million in 2016. The projects are currently benefitting 281,696 people. Twelve of the fourteen projects were on improvement of existing water infrastructure to curb the perennial water shortage in the County. Five water sources were fenced to protect water from contamination and misuse while five others rehabilitated through desilting and expansion to increase storage capacity to prolong the duration of use. This has reduced water stress and by extension water-related conflicts around water points. Two other projects involved installation of solar panels and hybrid water pumps in the boreholes to utilize solar energy which not only reduce use of fossil fuels but also ensure optimal use of the boreholes as needed.

The final two projects were mainly on capacity building of WCCPCs through training on natural resource management and awareness creation through the Wajir Community Radio to the general public on proper use of natural resource governance for sustainability.

The County also developed an elaborate County Climate Information Service (CIS) plan that helps in mainstreaming climate change in her development planning and budgeting system. The plan is aimed at improving dissemination and utilization of climate information for timely decision making for enhanced resilience.

Quote from Ayaan Abdullahi

"I enjoy clean water due to the fencing of the Laghboghol Water-Pan, water retention increased and the cases of cholera has reduced compared to 2016 whereby many people contracted it"

Introduction

Like other counties in Kenya, Wajir County's economy is highly dependent on natural resources which are rainfed and thus highly vulnerable to climate variability and change. Rising temperatures and changing rainfall patterns results in increased frequency and intensity of extreme weather events such as droughts and flooding which often lead to loss of livelihoods and destruction of infrastructure thereby negatively impacting on the county's development.

Key economic sectors in Wajir County such as livestock production, agriculture and mining are particularly susceptible to climate change. Unless managed pro-actively, climate impacts will continue to undermine the development gains made so far. It is therefore important that the county builds and enhances its resilience to changing climate. This would aid the County bounce back to normal range of functions even when faced with adverse impact of climate. Strengthening adaptive capacity is vital to improving socio-economic activities of communities and households as it includes adjustments in behavior, resources and technologies that are necessary in implementation of effective adaptation strategies. The sustainable development of Wajir County therefore, is significantly dependent on the design and implementation of developmental approaches that trigger and enhance climate change resilience and adaptive capacity.

Wajir County government with the support of Ada Consortium through Aldef has been working to mainstream climate change into planning and budgeting processes. This has helped to reduce the risks of impacts from increased climate variability and hence optimize the opportunities brought by the devolved governance system. Climate change mainstreaming entails integration of climate concerns in the development planning and implementation. It encourages co-

operation across government departments and with other actors in jointly planning for the longer-term rather than fragmented and reactive actions. In mainstreaming climate change in the different sectors of the county's economy, it's necessary to equip various coordinating departments with the tools to effectively respond to the complex challenges of climate change.

The county government of Wajir and Ada consortium used an integrated approach to mainstream climate change in planning and implementation. The integrated approach consists of setting up county level climate change fund (CCCF); formation of climate change planning committees at ward and county levels; integrating climate information into planning and implementation and; monitoring and evaluating progress towards building resilience at community and institutional levels as a result of the investments funded by the CCCF. The approach enables implementation of public good investments that address communities' needs while supporting the County government deliver their mandate in realizing sustainable development in the face of climate change.

The County Climate Change Fund is a public fund created by the Wajir County Climate Change Act, 2016 and managed by the County government to finance investments in local public goods prioritized by communities through representative Ward Climate Change Planning Committees with technical and administrative support from the County Climate Change Planning committee. Supported by the County level committee and technical staff of relevant County departments, WCCPCs conduct participatory 'resilience assessments' to establish those factors that underpin the local economy and their livelihood to ultimately enhances their resilience.

Through an extensive community consultation process, the WCCPCs then use the resilience assessments derived from the consultation process to identify and prioritize investments. The investments must meet basic criteria that promote climate resilient growth and adaptive livelihoods for the local community. Key criteria are that they must: This inventory takes stock of all projects implemented in the first round between December 2015 and December 2016 with a total budget of KShs. 54 million

1. Must benefit many people.
2. Must support the economy, livelihoods or important services on which many people depend.
3. Must be relevant to building resilience to climate change.
4. Must 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

WCCCF PUBLIC GOOD INVESTMENTS IN ADIMASAJIDA WARD

Installation of solar energy equipment at Livestock Marketing Department (LMD) Borehole

number of beneficiaries: **26,216 people**

10,500 Cattle; **47,000** Shoats; **7400 Camel**

LMD (above) before and (below) after

Location

GPS coordinates: Lon: 01 54 38.2 --- Lat: 037 12 58.9

Date of Implementation

December 2016

Investment cost

Kshs. 3,699,750.00

Description of the situation before intervention

The borehole, a key water source in the area was powered by two engines with high diesel consumption that raised the cost of accessing water. Recurrent breakdown of the engines during critical time e.g. dry spell brought/led to serious water shortage and more time taken in collecting water.

Description of the situation after the intervention

- Installation of solar panels and accessories at LMD borehole lowering cost of operation (cut by 50%).
- Project strengthened borehole governance and tariff collection mechanisms to improve utilization.

Benefits to Local Community

- Improved accessibility to water by animals and humans at a low cost
- Reduced cost of running the diesel engines
- Reduced conflict over water due to improved supply and access

Livestock Marketing Department (LMD) Borehole

LMD Borehole

WCCCF PUBLIC GOOD INVESTMENTS IN ARBAJAHAN WARD

Rehabilitation of Adan Awale water pan

number of beneficiaries: **21,750 people**

6200 Cattle; **37,000** Shoats; **7600 Camel; 150 Donkey**

Adan Awale (above) before and (below) after

Location

GPS coordinates: Lon: 01 54 38.2 --- Lat: 037 12 58.9

Date of Implementation

December 2016

Investment cost

Kshs. 3,699,750.00

Description of the situation before intervention

Silt filled open pan with unrestricted access leading to contamination thus posing grave health implication to users.

Description of the situation after the intervention

- Desilting and expansion of the pan to increase its storage capacity.
- Fencing using cedar post and other supporting infrastructure such as troughs, piping system, storage tank, motor pump and pump house was constructed thus water is safe from contamination.

Benefits to Local Community

- Improved pan management through controlled access, lengthening the pan storage time, hence reduced water stress.
- Regulated access to the water pan, improved sanitation and water quality which ultimately reduced waterborne disease

Rehabilitation of Adan Awale water pan

Adan Awale (above) before and (below) after

WCCCF PUBLIC GOOD INVESTMENTS IN BANANE WARD

Rehabilitation of Buruka Water pan

number of beneficiaries: **24542 people**

11000 Cattle; **2200** Shoats; 4900 **Camel; 150 Donkey**

Buruka water pan (above) before and (below) after

Location

N62'64'67'-E07'14'01'

Date of Implementation

December 2016

Investment cost

Kshs. **3,783,920.00**

Description of the situation before intervention

- A shallow, open natural water pan with a low water capacity affecting its quantity and quality.
- Free access led to contamination of water used by both human and livestock.

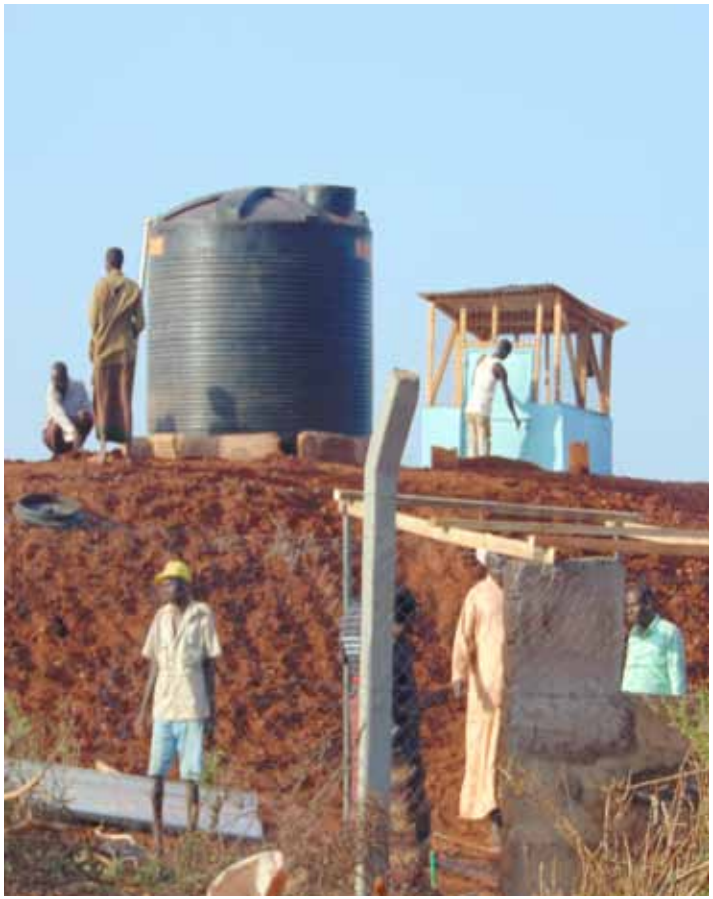
Description of the situation after the intervention

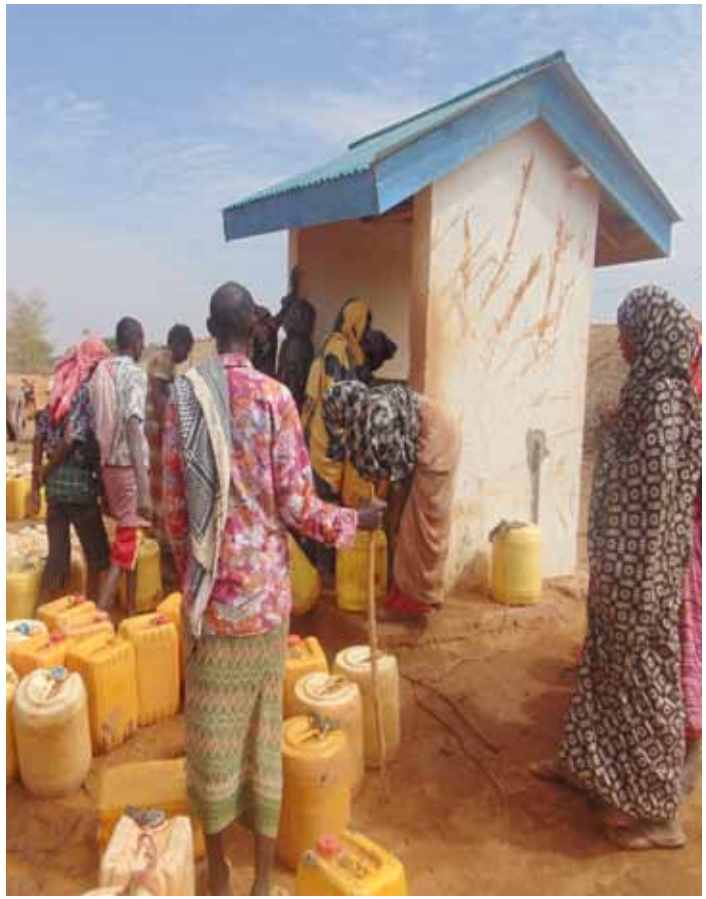
- Desilting and expansion of the natural water pan increasing its capacity.
- Perimeter fence and supporting infrastructure such as troughs, piping system, storage tank, and pump house were constructed. This ensures that water is safe from contamination as its being pumped outside the fence.

Benefits to Local Community

- Increased water capacity and controlled access leading to prolonged storage time
- Regulated access improves sanitation and water quality which reduces waterborne diseases

Rehabilitation of Buruka Water pan





Buruka water pan

WCCCF PUBLIC GOOD INVESTMENTS IN ELBEN WARD

Fencing and reticulation of Elben water pan

number of beneficiaries:**19322 people**

2500 Cattle; **39,000** Shoats; **3300Camel; 290 Donkey**

Elben water pan (above) before and (below) after

Location

N63'19'19'-E25'49'37'

Date of Implementation

December 2016

Investment cost

Kshs. **3,900,036.00**

Description of the situation before intervention

The water pan had unrestricted access making the water unpalatable even before the pan dried up. This led to water shortage even when pasture was available.

Description of the situation after the intervention

- Fencing of the water pan using chain-link with concrete posts, to regulate pan access.
- Construction of power house, two troughs, water kiosk, installation of water pump and piping system. This ensured that water is safe from contamination as its being pumped outside the fence

Benefits to Local Community

- Regulated access into the pan hence improved water quality
- Prolonged storage time after the rains
- Improve water governance thus reduce water based conflict

Fencing and reticulation of Elben water pan

Elben water pan (above) before and (below) after

WCCCF PUBLIC GOOD INVESTMENTS IN ELDAS WARD

ELDAS WARD

Rehabilitation of Dadantalai water pan through desilting and repair of the broken ridge

number of beneficiaries:**19322 people**

5000 Cattle; **33500** Shoats; **7,000 Camel; 2300 Donkey**

Dadantalai water pan (above) before and (below) after

Location

N54'55'36'-E27'27'70'

Date of Implementation

December 2016

Investment cost

Ksh. 3,748,970.68

Description of the situation before intervention

An old water pan filled with silt and a broken ridge reducing its capacity. The pan was also not fenced leading to indiscriminate access to water by livestock and humans causing contamination and poor management.

Description of the situation after the intervention

- Desilting of the water pan increased its capacity to hold more water during the rainy season.
- Repair of the broken ridge by creating a spillway to allow the over flow to bypass the pan
- Fencing and supporting infrastructure such as troughs, piping system, storage tank, motor pump and pump house was constructed.

Benefits to Local Community

- Increased water capacity by repairing of the broken ridge and desilting to accommodate more water
- Regulated access improved sanitation and water quality reducing waterborne diseases for both human and livestock
- Created spillway ensures the pan is not damaged improving storage time

Rehabilitation of Dadantalai water pan

Dadantalai water pan

WCCCF PUBLIC GOOD INVESTMENTS IN GURAR WARD

Rehabilitation of Bamba water pan by desilting and repairing of the broken embankment

number of beneficiaries: **20434 people**

8000 Cattle; **39,000** Shoats; **7,500 Camel; 500Donkey**

Bamba water pan (above) before and (below) after

Location

N56'07'16'-E36'55'34'

Date of Implementation

December 2016

Investment cost

Ksh. 3,700,115.80

Description of the situation before intervention

Open pan filled with silt that reduced water storage capacity. This was coupled by broken embankment that released water before the pan was full. Free access to the pan leading to misuse of water.

Description of the situation after the intervention

- Desilting of the water pan reversing it to its original capacity
- Fencing and supporting infrastructure such as troughs, piping system, storage tank, motor pump and water pump. This ensures that water is safe from contamination as its being pumped outside the fence.
- Repair of the broken embankment to increase water capacity.

Benefits to Local Community

- Prolonged use of water due to the increase storage capacity
- Regulated access lengthening pan storage time, hence reduced water stress to the residents/livestock
- Controlled access improving sanitation and water quality which ultimately reduces waterborne diseases.

Rehabilitation of Bamba water pan by desilting and repairing of the broken embankment

Bamba water pan

WCCCF PUBLIC GOOD INVESTMENTS IN KHORO HARAR WARD

Rehabilitation of Jehjeh water pan in Wajir bor

number of beneficiaries: **29,772 people**

16,400 Cattle; **48,100** Shoats; **6,700 Camel; 200 Donkeys**

Jehjeh Waterpan before (above) and after (below)

Location

N62'51'31'-E19'27'30'

Date of Implementation

December 2016

Investment cost

Kshs. 3,786,066.00

Description of the situation before intervention

The water pan had unrestricted accesses making the water unpalatable even before the pan dried up. There was also constant conflict between resident and wildlife especially giraffe and lions. This meant long hours of guarding the pan, and guards risking their lives.

Description of the situation after the intervention

- Perimeter fencing of the water pan using concrete posts with chain-link, to regulate pan access
- Construction of a trough, power house, water kiosk, installation of water pump and piping system. This ensured that water is safe from contamination as its being pumped outside the fence.

Benefits to Local Community

- Regulated access into the pan which helps to keep wildlife at bay - this reduced wildlife human conflict.
- Prolonged storage time after rains due to regulated access.
- Improved access to water which also enhance tariff collection.

Rehabilitation of Jehjeh water pan in Wajir bor

Jehjeh Waterpan

WCCCF PUBLIC GOOD INVESTMENTS IN KORONDILLE WARD

Installation of solar energy equipment Yatta borehole

number of beneficiaries: **220967 people**

27000 Cattle; **59,000** Shoats; 42,000 **Camel; 6000 Donkeys**

Solar energy equipment before (above) and after (below)

Location

N57'74'02'~E33'12'76'

Date of Implementation

December 2016

Investment cost

Kshs. 4,215,046.00

Description of the situation before intervention

Engine powered borehole with high consumption of diesel. The high fuel cost coupled with recurrent breakdown of the engines during dry spell posed serious water shortage for residents.

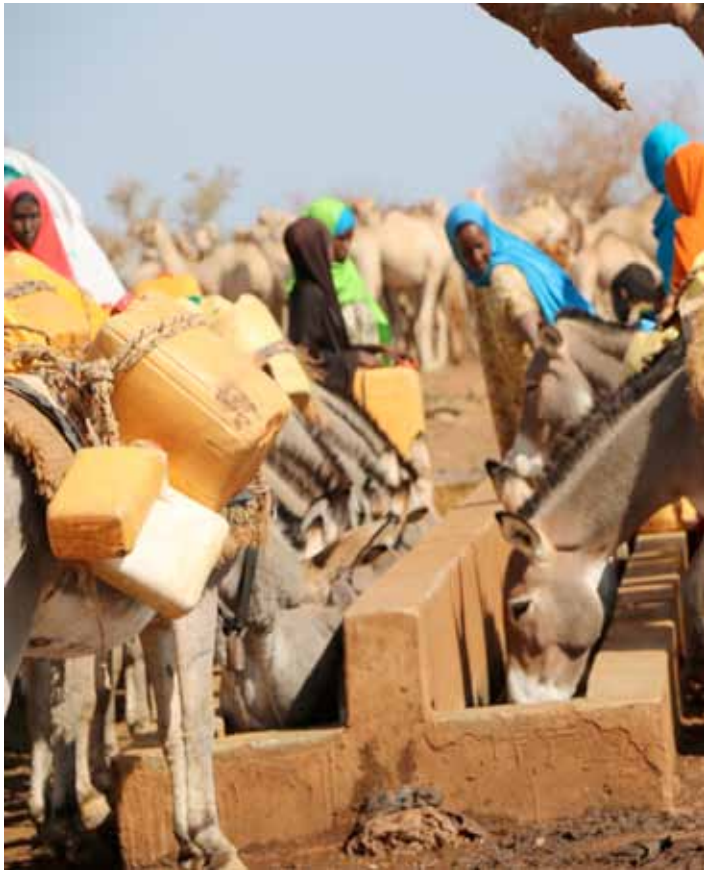
Description of the situation after the intervention

- Installation of solar panels and accessories at Yatta borehole reducing fuel need.
- Reduced water tariffs charged per head hence supports low income house holds
- Repair of the perimeter fence to ensure security for the facility and the operators
- Project strengthened water governance and tariff collection mechanisms improving utilization of the borehole

Benefits to Local Community

- Reduce the cost of running the engine's fuel, thus accessibility to low cost water
- Reduced carbon emission and noise pollution by the engines leading to healthy environment

Installation of solar energy equipment Yatta borehole



Solar energy equipment before (above) and after (below)

WCCCF PUBLIC GOOD INVESTMENTS IN LAGBOQOL SOUTH WARD

Rehabilitation of Lagboqol water pan by desilting, fencing and establishing of a reticulation system

number of beneficiaries: **24,295 people**

4,800 Cattle; **28,000** Shoats; **5000 Camel; 2000 Donkeys**

Lagboqol Water pan before (above) and after (below)

Location

N59'47'23'-E14'26'76'

Date of Implementation

December 2016

Investment cost

Kshs. 3,745,640.00

Description of the situation before intervention

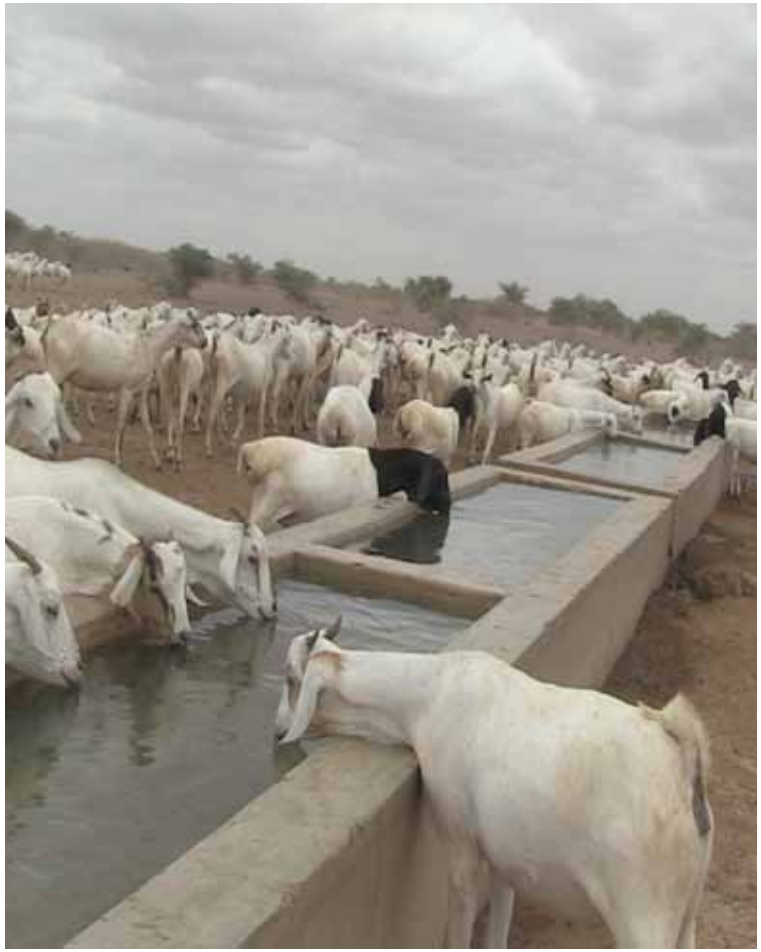
- The water pan was filled with silt reducing its storage capacity
- Unrestricted access by human, livestock and wildlife affecting the quality and quantity of water.

Description of the situation after the intervention

- Fencing of the water pan using cedar posts, to regulate access by human, livestock and wildlife
- Construction of a trough, power house, water kiosk, installation of water pump and piping system to pump water outside the water pan. This ensures that water is safe from contamination as its being pumped outside the fence.

Benefits to Local Community

- Regulated access to the water pan reducing contamination
- Prolonged storage time after rains due to regulated access
- Improve water governance that enhance tariff collection
- Reduce cases of waterborne diseases due to improved sanitation around the pan



Water tank and trough at Lagboqol Water pan before (above) and after (below)

WCCCF PUBLIC GOOD INVESTMENTS IN LAKOLE WARD

Rehabilitation of Lakole water pan

number of beneficiaries: **11,373 people**

9500 Cattle; **46,000** Shoats; **6500 Camel; 300 Donkeys**

Lakole Waterpan before (above) and after (below)

Location

N51'79'18'-E27'83'45'

Date of Implementation

December 2016

Investment cost

Kshs. 3,781,839.82

Description of the situation before intervention

The Unrestricted access to the water pan caused contamination rendering it unusable for human and livestock.

Description of the situation after the intervention

- Perimeter fencing of the water pan using concrete posts with chain-link, to regulate access.
- Construction of a trough, power house, water kiosk, water pump and piping to ensure safe water
- Controlled access to the preventing contamination

Benefits to Local Community

- Prolonged storage time due to regulated use, improving access to water for both livestock and human.
- Reduced cases of waterborne diseases due to improved sanitation around the pan.
- Improved water governance and enhance tariff collection.

Rehabilitation of Lakole water pan

Lakole Waterpan before (above) and after (below)

WCCCF PUBLIC GOOD INVESTMENTS IN WARGADUD WARD

Fencing and reticulation of Wargadud water pan to regulate access

number of beneficiaries: **29,949 people**

6800 Cattle; **40,900** Shoats; **4300 Camel; 180 Donkeys**

Wargadud water pan before (above) and after (below)

Location

N65'11'17'-E25'57'03'

Date of Implementation

December 2016

Investment cost

Kshs. 3,800,000.00

Description of the situation before intervention

- Constructed in the 1970s along the livestock market corridors, the water pan was neglected for a long time after the livestock market system collapsed
- Deep water pan with raised embankment thus makes it difficult for women to fetch water

Description of the situation after the intervention

- Perimeter fencing of the water pan using concrete posts with chain-link, to regulate pan access
- Construction of two troughs, a power house, water kiosk, installation of water pumps, water tank and piping system. This ensures that water is safe from contamination as its being pumped outside the fence.

Benefits to Local Community

- The fence hinders direct access to the pan, reducing water related diseases
- Prolonged storage time after rains due to regulated access
- Improved governance ensures clean and safe water for human

Communities fetching water from water kiosk at Wargadud water pan

WCCCF PUBLIC GOOD INVESTMENTS IN SARMAN WARD

Perimeter fencing of Basanicha water pan

number of beneficiaries:**26,064 people**

6000 Cattle; **25,400** Shoats; **4800 Camel; 130 Donkeys**

Basanicha water pan before (above) and after (below)

Location

N60'10'65'-E31'36'90'

Date of Implementation

December 2016

Investment cost

Ksh. 3,799,987.60

Description of the situation before intervention

Open and easily accessible water pan causing water contamination and overuse. This led to water scarcity and compromised quality.

Description of the situation after the intervention

- Perimeter fence using concrete posts with chain-link, to control the open access by humans and livestock.
- Construction of troughs, storage tank, power house, water kiosk, water pump and piping. This ensures that water is safe from contamination as its being pumped outside the fence.
- Enhanced water governance system to enable proper utilization of water.

Benefits to Local Community

- Improvement of water quality and quantity - the fence prevent open access to the pan hence keeps human, livestock and wildlife at bay.
- Prolonged storage time due to regulated access and proper use.
- Improved water governance and enhance tariff collect.

Perimeter fencing of Basanicha water pan

Basanicha water pan

WCCCF PUBLIC GOOD INVESTMENTS IN ALL WARDS

ALL WARDS

Building community resilience through strengthening natural resource governance

Date of Implementation

December 2016

Investment cost

Ksh. 1,730,000

Description of the situation before intervention

Lack of adequate natural resource management capacity by ward climate change planning committees (WCCPC) to handle and manage resources effectively and efficiently

number of beneficiaries: **281,696 people**

150 Cattle; **2200** Shoats; **560 Camel;**

Description of the situation after the intervention

- WCCPC trained on natural resource management, governance and conflict management
- WCCCPC trained on maintaining implemented projects and ensuring their sustainability
- Required skills for tariff setting, and financial management in calculated.
- Site committee trained on operation and maintenance of equipment

Benefits to Local Community

- Skilled WCCPC able to educate communities on best natural resource management practice
- Proper tariff setting ensured adequate collection and good compliance in tariff remission.
- The knowledge helped to utilize the scares natural resource effectively and efficiently

Community engagement on strengthening natural resource governance using the radio sessions, interactive talk shows, and live coverage of events

Date of Implementation

December 2016

Investment cost

Ksh 1,200,000

Description of the situation before intervention

- Inadequate knowledge and understanding of natural resources, their importance and good management.
- Lack of information on best practices of natural resource governance and climate change hazards

number of beneficiaries: **270,000 people**

Description of the situation after the intervention

- Interactive talk show with call in from community members to help them understand natural resource governance
- Weather updates in the bulletin
- Replay of pre-recorded deliberations on climate change events and forums.

Benefits to Local Community

- Awareness creation on climate change issues,
- Educating the public on the implementation of CCCF projects
- Exchange of ideas on best practices to enhance resilience to climate change

Conclusion

The Wajir County Climate Change Fund Inventory provides strong evidence on the success of the County Climate Change Fund approach. This document shows the output of fruitful engagements and partnerships between County Government of Wajir, local communities and development partners. It further demonstrates the results of good governance as the model that can be used to illustrate a successful devolution where planning, budgeting and the development interventions are results of participatory planning and implementation approach.

The inventory is designed as an accountability and learning tool, where public good investments are recorded with subsequent inventories recording successful and failed investment. This provides a learning opportunity for all stakeholders that were part of the process of planning, selecting, and implementation of the investments and a guide to those who are planning to take similar approach in addressing climate change challenges in development. Complemented by other products, such as the Wajir resource atlas; Community-based mapping of County natural resources and their attributes 2016 and the Resilience assessment reports, this document would prove useful in planning for further interventions as it may help in coming with well pertinent but well coordinated interventions for resilience building that also avoid duplication and waste of resources.

The Adaptation (ADA) consortium is a core component of the National Drought Management Authority (NDMA) strategy and 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 Resource Advocacy Programme (RAP) in Isiolo, WomanKind Kenya in Garissa,and Arid Lands Development Focus (ALDEF) in Wajir, Met Office (UK) and the Kenya Meteorological Department (KMD).

ADA consortium

UKaid
from the British people

Ada Consortium is funded by UK aid from the UK Government, however the views expressed do not necessarily reflect the views of the UK Government.