Adaptation and Resilience

Assessing the effectiveness of the CCCF Mechanism on rural livelihoods and institutions in Kenya.





This Report

This report is split in two parts:

- 1. Part I details the approach and findings from the Learning Survey conducted by partners during March to June 2018
- 2. Part II contains attendant information on the context surrounding this work, including summaries of the CCCF Mechanism, stakeholders, and context of decentralised climate finance.

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Acronyms

ASAL	Arid and Semi-Arid Land
CCCF	County Climate Change Fund
CCCPC	County Climate Change Planning Committee
CIDP	County Integrated Development Plan
CIS	Climate Information Services
DfID	Department for International Development
FGD	Focus Group Discussion
GoK	Government of Kenya
IIED	International Institute for Environment and Development
M&E	Monitoring and Evaluation
NDMA	National Drought Management Authority
StARCK+	Strengthening Adaptation and Resilience to Climate Change in Kenya Plus
TAMD	Tracking Adaptation and Measuring Development
ТоС	Theory of Change
VfM	Value for Money
WCCPC	Ward Climate Change Planning Committee

Executive Summary

The County Climate Change Fund (CCCF) Mechanism has been pioneered by the Ada Consortium in five Counties in Kenya since 2012. The aim is to support the National Drought Management Authority's Strategy Plan 2018-2022¹ which aims to enhance drought resilience and climate change adaptation. The approach is four-pronged – establishment of a County Climate change fund that enables communities to plan, implement and manage public good investments that enhances their resilience to climate change; establishing County- and Ward-level climate change planning committees; development of and integration of Climate Information Systems into adaptation at all political levels; and a Tracking Adaptation and Measuring Development framework.

This report focuses on the first two. We seek to learn from the three most-advanced County pilots – in Isiolo, Makueni, and Wajir Counties – to enable efficient scale-up that delivers enhanced drought resilience and climate adaptation. We collected data from a range of stakeholders on the costs associated with implementing the CCCF Mechanism from Ada Consortium partners, surveyed 369 households, 30 key informants from County- and Ward-level Climate Planning Committees, and ran 30 focus group discussions at community- and Ward-level with a focus on gender groups and other potentially marginalised groups.

We find the CCCF Mechanism to be Value-for-Money (VfM), cost effective and delivering genuine impact. It strongly points to the potential for transformational change across the Arid and Semi-Arid Lands (ASALs) landscape in Kenya, and beyond. However, the learning reported here must be taken into consideration, and learning itself better integrated, mainstreamed and standardised into all future CCCF Mechanism projects in Kenya, and beyond. Challenges include the lack of qualification and quantification of experience, which both limits learning and the scalability of the CCCF Mechanism, refinement of the existing operations, learning form the implementation, and understanding the precise impact on the ground. This report aims to provide some of the answers sought.

The level of investment by development partners in the CCCF Mechanism in the three Counties was $\pounds 866$, 387 since 2011. The investment per beneficiary is between $\pounds 2.52 - 8.31$ and by household between $\pounds 18.18 - 48.85$. These are minimum figures, and may omit investment in some aspects of the CCCF Mechanism by development partners (on development of the Climate Change Act), by both the Government of Kenya and County-level authorities (in supporting activities on climate change and rural economic development), and by communities (in decision-making, constructing, operating, delivering and governing projects that enhance climate change resilience).

The estimated level of direct economic value created by these changes is $\pounds 3.1$ -3.2 million per annum. This is equivalent to an extra 10% of household income per annum. This is a minimum figure, and omits value

¹ NDMA was established by Act in 2016 with the mandate to exercise overall coordination over all matters relating to drought management including implementation of policies and programmes relating to drought management. See more: <u>http://www.ndma.go.ke/</u>.

created from direct and indirect benefits of climate change resilience uplift, access to water, recognition of community voices in policy processes and capacity built as part of the CCCF Mechanism – including management techniques and negotiation. Furthermore, indirect benefits may include reduced costs for some national investments, such as the National Drought Emergency Fund² and may be relevant to include.

Depending on how these projects progress we can expect these direct economic benefits to persist. Indeed, many projects are leveraging on the direct economic value created through the CCCF Mechanism as a catalyst for generating flows of indirect economic value in communities, with schools expanding, healthier herds, market gardens, Small Medium Enterprises (SMEs), and a range of other livelihood-enhancing activities reported.

Over 99% of respondents are positive about the CCCF Mechanism and the impact delivered by altering political processes and enabling improved management and access to water. Indeed, respondents report a series of economic, social, environmental and livelihood enabling benefits from the CCCF Mechanism.

There are a number of issues which need to be strengthened in the three Counties and integrated into plans to embed CCCF Mechanism in other Counties. These include: ensuring the roles of WCCPC and CCCPC members are fully understood, that inclusion is a focus, and critically that communication between County, Ward and Community is enhanced.

Some stakeholders are currently missing from the supply chain, and need to be integrated. Specifically, the external private sector should be invited to understand how best to integrate their needs and willingness to participate in current and future CCCF Mechanism projects.

Our survey and approach here was constrained by time, and will be revised in future iterations. For instance, we were unable to ascertain how well the CCCF Mechanism works with other initiatives in the field. Clearly, this is a key factor for both national and county government and reporting on the complementarities the CCCF Mechanism brings to the devolution process.

Furthermore, we propose further learning is conducted to understand better how the Operational Fund is used; how communication can be improved among Counties, Ward and Communities; how to tailor the approach based on population density and other unique characteristics of Kenya's Counties and Wards, to ensure delivery of drought resilience and climate adaptation.

² NDEF is managed by the NDMA. See more here: GoK (2018).



Part I –Approach and findings from the Learning Survey

Introduction

This report analyses the effectiveness of the CCCF Mechanism at increasing resilience to climate change in rural Kenya.

The reason for the CCCF Mechanism is straightforward:

- Climate change is impacting Kenya's rural communities hard and will continue to do so
- There is emerging evidence globally that providing local communities with accountability and responsibility for their own development needs improves delivery and benefits
- Furthermore, Clear evidence shows that inclusivity is good for all beneficiaries, and that active participation of all stakeholders in transparent decision-making and governance is both more effective and improves development impacts.
- Devolution to county and ward levels provides an excellent opportunity to leverage the participation of rural communities in political decisions
- Climate finance is being targeted at local communities, yet the majority remains under the aegis of large donors, national governments and IFIs.³

Background

ASAL communities in rural Kenya are among the most impacted by climate change, and the most in need of resources to adapt and enhance resilience.⁴ Poor access to water, reliance on seasonal rains for livestock and cropping, and a lack of services to spread risk at community- and household-level, mean climate change impacts are real and immediate for millions of Kenyans.

There is a growing realisation that policies developed at national level can be unresponsive to local needs, hamper locally-appropriate innovation and inflexible to in ways that increase climate variability and exacerbate economic insecurity.⁵ All climate adaptation must be

underpinned by development that seeks to address the underlying causes of vulnerability.⁶

Furthermore, evidence is emerging⁷ that that common pool resources better managed when local governance systems facilitate high levels of participation in planning collective action for climate adaptation, and direct access to resources for implementing local plans.⁸

³ Colenbrander et al (2017).

⁴ GoK (2013)

⁵ Sharma et al (2014)

⁶ Ayers and Huq (2008)

⁷ See Ostrom (2010)

⁸ Sharma et al (2014)

At the same time, Kenya is innovating solutions to climate challenges that are growing resilience for businesses, urban and rural peoples, and marginalised groups⁹ with a steady stream of new business models being piloted across economic sectors – including agriculture, finance, and manufacturing.¹⁰

However, to date, few of these climate innovation investments have been focused on the water sector¹¹

Governance in general and on climate change issues in particular has changed rapidly over the past decade with the growing realisation of an integrated need for action among the Government of Kenya and the donor community. Significant national changes include:

- Responding to climate change
 - o Launching the National Climate Change Response Strategy (NCCRS) in 2010¹²
 - o Establishment of National Drought Management Authority (NDMA) by Act in 2016¹³
 - Climate Change Act in 2016¹⁴ provides the overarching framework for delivery
 - Development and implementation of the National Climate Change Action Plan¹⁵ which sets priorities for each 5-year period and is overseen by the National Climate Change Council (NCCC)
 - National Adaptation Plan 2015-30 provides adaptation objectives and provides guidance on priority actions in 19 planning sectors for the national and county governments through Medium Term Plans (MTP)
 - Kenya's Intended Nationally Determined Contribution (NDC) establishes adaptation as Kenya's priority response to climate change and sets a goal of mainstreaming adaptation actions in the five-year development plans of Kenya Vision 2030¹⁶
 - Development and implementation of the Country Programme Framework on Ending Drought Emergencies by 2022¹⁷
- Decentralisation and devolution processes under the 2010 Constitution¹⁸ and rolled out since 2013 provide responsibility and accountability to County- and Ward-level authorities as a means of improving efficiency, equity and inclusiveness of government and service delivery. Specific changes are noted to:
 - o Political decision-making¹⁹
 - Participatory budgeting process²⁰

¹⁷ GoK (2015a).

⁹ Rossi (2018)

¹⁰ See Kenya Climate Innovation Centre: <u>https://www.kenyacic.org</u>

¹¹ KCIC (2018)

¹² GoK (2010).

¹³ GoK (2016b).

¹⁴ GoK (2016a).

¹⁵ GoK (2013). ¹⁶ GoK (2015a).

¹⁸ GoK (2010).

¹⁹ Apollo (2018).

²⁰ WBG (2017).

- Strong emphasis on citizen engagement and public participation²¹
- 0 Transparency and accountability²²
- Greater information dissemination to the public²³
- Encourage the allocation of resources for adaptation by both the national and county governments.
- Donor projects focused on drought and climate resilience in ASAL regions of Kenya including StARCK and StARCK+, and many others See Figure 1 for an example of complementary funding streams being piloted in ASAL regions of Kenya.

Figure 1 The StARCK+ programme supported resilience and adaptation across the public and private sectors and civil society through six components²⁴

Component	REACT	KCIC	Act!	CCCFs	FICCF	GoK TA
	Renewable Energy and Adaptation to Climate Technologies	Kenya Climate Innovation Centre	Act, Change and Transform	County Climate Change Funds	Financial Innovation for Climate Change Fund	Technical Assistance to the Government of Kenya
Focus	Challenge fund supporting private sector product and enterprise development	Private sector incubation and proof of concept funding	Grant financing for civil society, community groups and the private sector	County-level investments in public goods to support climate change action	Microfinance support for climate smart agriculture and clean cookstoves Project development support	Technical assistance for implementing National Climate Action Plan

These changes sought collectively to address key capacity gaps, make policy respond to citizens' needs, strengthen institutions, improve service delivery, engage citizens in decision-making, and enhance drought and climate resilience, social inclusion, food security, economic growth, environmental indicators and livelihoods.

Piloting of the CCCF Mechanism has been a cornerstone of this intended transformation across selected ASAL Counties.

²¹ See WBG (2017).

²² See for instance, Odour (2015).

²³ Andvuate (2014). Ndirangu (2014).

²⁴ Vivid Economics (2017)

The CCCF Mechanism

Complementary to the political devolution process in Kenya²⁵, the CCCF Mechanism is attempting to shape a system of decision-making over climate changes issues among and across multiple political scales that is both bottom-up and impactful. The outcomes will be delivered in concert with both the Constitution and devolution mandates to increase the socio-economic circumstances of all citizens by making decisions appropriate to them.

This system includes working at County-level to prepare county governments to access climate finance and mainstream climate change into planning and budgeting for adaptation and climate resilient development.

Through the Adaptation Consortium²⁶ (herein 'Ada') led by the NDMA, initially piloted in Isiolo (2010-12), the work on CCCFs expanded to a further four arid and semi-arid counties (Kitui, Makueni, Wajir, Garissa) with funding from DfID's Strengthening Adaptation Resilience to Climate Change Plus (StARCK+) programme (2013-17)²⁷.

There is anecdotal evidence that this pilot programme is bringing significant benefits for people in poor and marginalised households while strengthening the capacities of county government to ensure citizenled approaches to planning and prioritisation of public funding for development as provided for within the framework of the Constitution of Kenya and devolved governance and the Climate Change Act, 2016.²⁸ Furthermore, tremendous economic benefits are being attributed to these initial CCCF Mechanism projects among the poor and marginalized households.²⁹

Furthermore, emerging evidence from analysis of the pilot projects in Isiolo County illustrate that the CCCF mechanism is proving more responsive than other initiatives and approaches, faster development and implementation of projects, and clearer accountability and transparency. However, this research was conducted in 2016-17 prior to the new Natural Resource Management Bill and CCCF Bill³⁰, and during a time where the political process for CCCF mechanism was perceived to be parallel rather than integrated to the devolutionary process.³¹

UNFCCC (2015) notes the 'provision of funding or direct access to funding facilitates the linkage of local and national adaptation planning. The Country Adaptation Fund Model engaged vulnerable community members through adaptation planning committees in prioritizing resilience-building activities against

²⁵ GoK (2013)

²⁶ Includes the Council of Governors, the National Treasury, the Climate Change Directorate, the Ministry of Devolution and ASALs, Kenya Meteorological Department, National Environment Management Authority, CA, UKMet, and county partners RAP, ALDEF, ADS-E and WomanKind Kenya and is funded by the Department for International Development (DfID).

²⁷ See DFID, <u>http://www.starckplus.com/index.php/about-starck</u>.

²⁸ See Brooks (2017); UNFCCC (2015); Musaya (2016); Letiwa (2017); Mogeni (2017).

²⁹ See, for instance, Nyangena and Roba (2017); King-Okumu et al (2016).

³⁰ Isiolo County (2018) and Isiolo County (2016).

³¹ Nyangena et al (2017)

predetermined criteria for funding. The inclusion of community members in the allocation process not only recognized the value of local knowledge and fostered local ownership, but also recognized the community institutions established as a part of this process as legitimate agents for development that engage constructively with county government structures and processes³².

Recently, Ada received additional funding (2017-18) from DfID and Sida for a "transition phase" to consolidate achievements and distil learning from four years of experience. The learning generated will inform on-going national climate change processes in Kenya. More specifically, it will prepare the NDMA and those national institutions, responsible for the design and implementation of climate change and development policy in Kenya, to scale-out the CCCF mechanism to more counties from 2018.

This document sets out the key learning on the effectiveness of the CCCF mechanism in delivering investments in public goods that build resilience to drought and climate change among poor and vulnerable communities.

This document is not a complete M&E exercise for the CCCF Mechanism, but draws on the work on the Tracking Adaptation and Monitoring Development (TAMD) framework³³ used variously in Ada Consortium and other programmes in the ASAL region.³⁴

Audiences

There are several audiences keen to understand learning from the CCCF Mechanism experience for a variety of reasons, including:

- **Beneficiaries** their voices to be heard on the relative successes, the keys to success and the challenges that may not have been sufficiently captured. No system is perfect, and this report aims to capture these challenges, where appropriate.
- **Development partners** to verify VfM, effectiveness and monitor development goals; plus to inform ongoing and future investments, programmes, projects in Kenya, East Africa, globally
- *Kenyan National Government* how to scale CCCF Mechanism elsewhere, what needs to be refined, tailored for different jurisdictions
- Kenyan devolved County and Ward level authorities -
- *Reference Group* largely national-level government agencies such as NDMA
- NGOs Mercy Corps, IFAD, UN agencies.
- Council of Governors and Future CCCF Mechanism Counties
- *IIED* to inform work in Senegal, Mali and other countries with devolved political structures and with significant risks to their economy, environment and population from looming climate change.

³² UNFCCC (2015)

³³ Brooks et al. (2013).

³⁴ Karani, Mayhew and Anderson (2015).

The CCCF Mechanism exists in legislation in five Counties, and this Learning Framework focuses on three of these – see Table 1.

		Overall		CCCF Mechanism			
							%
County	Wards	Population	Households	Wards	% total	Beneficiaries	total
Isiolo	10	143,294	19,395	6	60%	110,033	77%
Makueni	30	884,527	150,430	6	20%	35,132	4%
Wajir	30	661,941	91,747	12	40%	73,876	11%
Total	70	1,689,762	261,571	23	33%	219,041	13%

Table 1 Profile of the reach of CCCF Mechanism operating in the three Counties

Theory of Change and CCCF Mechanism

The learning framework adopts the theory of change (TOC) approach as its logical approach, linking programme outcomes and activities to explain 'how' and 'why' the desired change is expected to come about. It articulates the causal relation between the inputs, outcomes and long-term impacts, and seek to justify why interventions and processes adopted in the entire project cycle worked or did not work, and what exactly went wrong³⁵. The key components and linkages of TOC are shown in Figure 2.

Figure	2	Theory	of	Change
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INPUTS	OUTPUTS
 Human resources Investments Materials Training Knowledge 	 Legislation Reports and materials Institutional framework (e.g. CCPCs) Manuals, plans and resilience assessments Public good investments
IMPACTS	OUTCOMES
 Stronger economy Increased capacity of county governments to access climate finance Climate change mainstreamed into planning and budget processes Community institutions strengthened Improved resilience to drought Enhanced climate adaptation/reduced vulnerability 	 Changes in knowledge Changes in behaviour Improved adaptation practices More funding of community priority initiatives Improved access to water Enhanced linkages of local institutions with county and national level institutions

Inputs

The project was conceptualized with the aim of building adaptation and resilience of the communities towards climate change and its extreme effects on their livelihoods. To achieve this, there was considerable investment in human resources, skills capacity and knowledge transfer and creation. For example, working with politicians at county and ward level to create awareness on issues of climate change resilience, climate information services and supportive decision-making. At a local level, capacity-building of communities and their leadership in project identification and prioritization proves fundamental in addressing specific local challenges.

³⁵ Clark and Anderson (2004).

Outputs

Legislation embedding CCCF mechanisms in County law has occurred in five counties: Garissa, Isiolo, Kitui, Makueni and Wajir³⁶, with institutional frameworks such as the CCPCs and funding vehicles – such as the 2% of government revenue earmarked in Isiolo.

The outputs for the CCCF provide tangible links in the process for delivering locally-prioritised climateresilience investments. For instance, developing new systems of decision-making over climate change issues include establishing county- and ward-level climate change planning committees to guide investments in various public goods. Plus, resilience assessments (herein also include participatory vulnerability and capacity assessment – PVCA) inform broad resilience challenges and become integrated into community prioritisation. As such, accountability over climate change resilience – see Figure 3 – integrates with ongoing decentralisation and devolution processes and to the Constitution's focus on transparency, accountability and engagement.

Figure 3 Accountability under decentralisation



Source: World Bank (2015).37

³⁶ Isiolo County was the most recent enacting its CCCF Law on 14/8/2018. Isiolo County (2018).

³⁷ Finch and Omolo (2015).

This 'learning exercise' seeks to understand better and quantify where possible Outcomes and Outputs from this project. By quantifying the cost of Inputs, and surveying along the 'supply chain' of decisions around climate finance, we are able to begin assessing the effectiveness of the CCCF mechanism.

Outcomes

The outcomes of the CCCF mechanism at both ward and county levels across the Counties are expected to change knowledge and behaviour of local communities about climate change and resilient measures. How do climate information and resilience planning tools lead to improved adaptation practices that are effective in sustaining development by the local leadership? Are these communities sufficiently empowered with necessary and relevant knowledge on how climate change affects them to seek resources for critical community-agreed initiatives from development partners and government within the existing governance and institutional structures at county levels? Does the rhetoric match the reality – does improved access to higher-quality water for both human and livestock use lead to enhanced developmental outcomes?

Impacts

Although the CCCF mechanism is currently in its pilot phase, it has already been called 'potentially transformative'. In the long run, we expect the impacts of CCCF mechanism would include a stronger economy with enhanced climate adaptation and reduced incidences of vulnerability to climate change. Further we expect mainstreaming of climate change into planning and budgeting for adaptation and climate resilient development at local level would result in increased effectiveness of the investments. Empowered county governments would increase access to climate finance for its decentralized units through documented learning framework from the pilot to enable its citizens to sustain resilience to climate change and its extremes. This would lead to better management of drought, floods and their associated risks through enhanced community approaches and institutions that are more cohesive and participative in decision making with regards resource production and utilization.

We are aware of the outset of the disruptive nature of the changes expected and the difficulty of unpicking some of the impacts. For instance, accountability versus participation can be in conflict on one hand, strong Ward-level committees that are accountable to their constituents may reduce the need for public participation, which may save money and time but may exclude marginalised groups. For this reason, we designed our Key Informant Interviews and Focus Group Discussions to capture these factors as accurately as possible.

Learning Framework

Why the Learning Framework?

Climate adaptation investments that seek to generate a range of complementary and simultaneous benefits across social, environmental and economic factors are notoriously challenging to analyse, quantify and learn from, despite the existence of numerous toolkits and frameworks.³⁸

Brooks (2017) describes this challenge well: 'there is a high degree of uncertainty regarding the number of initiatives involving 'incremental' adaptation measures that help existing systems adapt to changes in climate.... because of the uncertain nature and extent of the 'ancillary adaptation benefits' of initiatives focused principally on addressing current climate variability and the productivity of livelihoods'.³⁹

Fortunately the CCCF mechanism experience includes some tangible outputs including development of county level climate change legislations; development and operationalization of County Climate Information Service plans; establishment and minutes of County- and Ward-level Climate Change Planning Committees; investments in over 80 community-prioritized public good projects; and implementing the Tracking Adaptation and Measuring Development (TAMD) M&E approach; contributing to national level climate change policies; and informing county-level sectoral plans and strategies.⁴⁰

Yet development partners, NGOs, stakeholders, beneficiaries and the county and national government of Kenya wish to know more about the outcomes and impacts. This 'learning exercise' is an initial contribution to this investigation.

There are distinct outcomes sought by different funders and audiences from the CCCF Mechanism. Key among these are those of the Reference Group and development partners.

The Reference Group

The Reference Group assembled for this Learning project comprise:

- Council of Governors
- the National Treasury
- the Climate Change Directorate
- the Ministry of Devolution and Planning
- NDMA
- IIED
- Christian Aid

³⁸ See for instance, UNDP (2010), IIED (2014), UNEP (2016).

³⁹ Brooks (2017) p4.

⁴⁰ Nyangena et al (2017).

• National Environment Management Authority.

The Reference Group are focused on three key learnings, with the role of the learning exercise displayed in Table 2.

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Table 2 Deference	Croup's summarised	loaming augstians	and non-orting from orriging
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Learning	Framework
County-level resilience to	Given increasing climate variability, incidents of extreme weather events and
climate variability.	longer-term climate change, has CCCF mechanism:
	 Prepared counties to plan and respond Improved the preparedness of the pilot Counties compared to those without CCCF Achieved financial sustainability by embracing Value for Money approach in infrastructure development Addressed social inclusion and strengthened community engagement in climate change policy strengthening Improved livelihoods and food security
Landscape-level	Between the CCCF mechanism and other drought and disaster risk response
complementarity/	mechanisms.
synergy/ cohesion	 E.g. Drought Contingency Fund and other Ending Drought Emergencies programmes (Hunger Safety Net, Index-based Insurance, Food for Asset programme, Early Warnings) How can greater institutional cohesion be built to strengthen climate resilient development pathways for poor and vulnerable households?
General	Contribution to Constitutional objectives and national economic development
complementarities and	policy in the framework of the County Integrated Development Plans. The key questions to be addressed include:
r	 In what manner does the CCCF mechanism contribute to key government agenda, policies and laws such as the, Big four agenda, Constitution, the County Governments Act, Climate Change Act, Vision 2030 and the commitments to global processes such as the Sustainable Development Goals and the Paris Agreement? How CCCF is mainstreamed into the County Integrated Development Plans (CIDP)?

Development partners

Development partners are seeking accountability for the funds they invest in social and environmental development, including quantifying (where plausible) the expected returns on their investments. In the economic development community, there are often limited financial returns to report and hence impact is challenging to quantify.

For this reason, DfID has developed its Value for Money (VfM) framework – see Figure 4 – which has guided our approach on this project.⁴¹





Our approach

Owing to lack of primary baseline data and a lack of complete coverage of all issues in our rapid survey in May 2018, we adopt a hybrid approach to determine VfM on this project – see Table 3, and to design our framework – see Table 4.

⁴¹ The main question addressed under Economy is whether the inputs procured to implement the project were of the appropriate quality and right price. Inputs cover personnel, consultants, raw materials and capital, used to generate outputs. Efficiency responds to the question, "how are inputs converted into outputs?" Effectiveness answers the question "how well the output is realized delivering the desired outcome, while Cost-effectiveness assesses the impact of the intentions on poverty reduction relative to the inputs.

⁴² DFID (2011).

Table 3 Project Indicators to be Evaluated

Indicators	Description	Specifics
Economy	Economy relates to the price at which inputs are purchased (consultants, supply of goods, transport, training etc.).	 Unit costs for key supplies – see Table 10, Table 11, Table 12 Staff costs for different staff categories – see Table 10
Efficiency & Cost-efficiency	Efficiency relates to how well inputs are converted into a specific output, such as the construction of a water point, conducting campaign etc.	 Number of people living in Communities with new projects via CCCF – see Table 6 Cost per beneficiary – see Table 12 % communities and community members that have become resilient following triggering Number of people living in communities that have benefited – see Table 12 % wards and counties with CCCF Committees, manuals, legislation (% of intended/ expected) – see Table 1
Effectiveness	Effectiveness relates to how well outputs from an intervention are converted into sustained actual outcomes. Yazan: do we have any resources with these data?	 % of assumed outcomes translated into actual outcomes (i.e. assumed beneficiaries versus actual new users) % new project investments still operating % new users (e.g. Wards, CIS recipients) still using service (e.g. CCCF mech, CIS texts, etc)
Equity	Equity means making sure that results of programmes are targeted at the poorest and most disadvantage groups, distributed fairly and reaching the intended beneficiaries.	 % of access to project by specific groups (defined either in terms of poverty quartiles or disadvantaged group) All projects are mandated to benefit the majority of the population in an area Cost-efficiency and cost-effectiveness indicators by household income quartiles
Inclusion	Inclusion is whether project took into account age, persons with disability and gender differentials throughout the project cycle.	 Proportion of female, age-deciles, youth, persons with disability involved as beneficiaries Are women, youth and persons with disability represented in planning Committees? Are the interest of minority groups e.g. agronomist within a pastoral dominated community taken into consideration in decision making? What efforts have been made to identify inclusion challenges, and rectify these?

These inter-connected MEL outcomes are represented in our Learning Framework – see Table 4, to the deployment of the CCCF Mechanism and attendant change elements:

- 1. Drought and climate resilience of beneficiaries in rural areas
- 2. Institutions of policy-making at National, County
- 3. Devolved decision-making over budgets and public good priorities to beneficiaries and policy-makers
- 4. Impact: quantifiable returns on the investment made.

Figure 5 Summary of framework for Learning Project



Table 4 Learning Framework: summarised anticipated changes owing to the use of the CCCF Mechanism, attendant Learning Questions

No.	Element	Output under CCCF	Impact	Learning Questions
1	• Enhancing resilience of populations resident in ASAL and water- stressed regions	 Water access higher Information on climate change Resilience information 	 More, cheaper, cleaner water Reduced time spent in collecting water Less conflict Stronger economy 	 Value-adds of CIS Value adds of information to beneficiaries on dealing with CC Inclusion Water access Economic value

2	• Institutional process of making decisions	•	Training on CC Stronger links across organisations (public, NGO, private) working to heighten resilience	•	Better climate- proofed decisions owing to understanding of climate Closer ties among levels of government organizations and community	• • •	Landscape-level complementary Complementarity with Constitution, CIDP Cost-effectiveness Better able to plan adaptation, and make adaptation-ready investments Productive linkages with Drought Contingency Fund and other drought emergencies programmes (Hunger Safety Net, Index-based Insurance, Food for Asset programme, Early Warnings)
3	Devolved decisions to beneficiaries	•	Devolution coupled with WCCPC and CCCPC development under CCCF	•	Accountability, transparency, responsibility is passed to locals with knowledge, ideas, etc.	•	Engagement Accountability
4	Impact	•	Costs v Benefits – particularly time saved from water collection and re-invested, Trust and organised structure of service delivery	•	Does investment returns exceed invested funds? Long-term potential Scale-up/ out within counties	•	Value-for-Money Sustainability Affordability for the government in future (ex-donor pilots)

Figure 6 Summarised direct drought and climate resilience impacts felt by beneficiaries from CCCF Mechanism

Livestock – impact

- More secure access to water 100%
- Less conflict: Clearer rules mean conflict is reduced
- Healthier livestock: Better governance means less congestion at waterhole – which means less transmission of disease among cattle from different herds, more time spent grazing
- Less time queueing at waterhole
- Higher milk yield
- Greater fodder availability owing to more structured herding and watering
- Lower mortality



- Cleaner
- Greater volume
- Cheaper
- Free household water
- Easier access
- · More reliable
- Available year-round
- · Less drought risk
- Governance over access

Households – impact

- Women walk almost **700 hours** fewer per year per household
- Women report having less fatigue, greater security
- Diversified economic flows enhance food security – market gardens and crop diversification
- Less time queueing at waterhole
- Less disease diarrhoea
- Cost of diesel reduced as solar panels used
- Reduced noise and air pollution



Figure 7 Summarised institutional and decision-making changes owing to CCCF Mechanism, rural Kenya, 2012-18

Previously, projects were funded and designed with a top-down flavour (on the left of **Error! Not a valid bookmark self-reference.**), with the community input limited to occasional impact on design. Under CCCF mechanism, with a bottom-up flavour (on the right), places the community at the heart of making both funding decisions and project design, and having a governance role over the implementation.

A typical project under CCCF mechanism in the drylands of Kenya has a wide range of impacts - see

Figure 8 – including transparent processes, lower government supervision, speedier completion, greater community oversight, more resilient project with higher local content and higher perceived quality.





The framework will act as reference tool in structuring monitoring and evaluation activities during the scale-out of the CCCF mechanism in strengthening adaptation planning at county and ward levels that build community resilience to increasing climate variability and extreme events as a result of a changing climate. The documentation of the processes and procedures, and the findings would be critical in informing the NDMA and other national and county stakeholders for up scaling of the CCCF mechanism across the country.

Methodology

The learning process benefited from both the qualitative and quantitative data. New data on costs, benefits, data on indirect costs and secondary benefits



The evaluation exercise targeted Isiolo, Makueni and Wajir counties. We hoped to expand the analysis to include Marsabit and Machakos counties as counterfactuals for impact assessments of CCCF mechanism, but the timing was unfortunate, and this work only covers the direct beneficiaries.

Investment data

The Learning Project Team interviewed CCCF implementing partners – Makueni: Anglican Development Eastern ADS-E; Wajir – ALDEF – Arid Lands Development Focus; and Isiolo Merti Integrated Development Programme, and the Ada Consortium's Finance Officers – to collate data on the costs of implementing the CCCF Mechanism.

Beneficiary and stakeholder data

Three survey tools were designed to capture the essential learnings from the CCCF Mechanism projects to answer the critical questions posed by the Reference Group, development partners and government agencies.

County	Households	FGDs	KIIs
Isiolo	90	10	8
Makueni	129	10	11
Wajir	129	10	11
Total	348	30	30

Table 5 Summary of survey numbers, by county, by survey tool

Our sampling methodology:

- Household survey⁴³ respondents were purposively selected while taking into consideration subcounties where Ada had interventions – see Table 6
- KIIs respondents selected based on their first-hand knowledge and close interaction with the CCCF work at the county and ward levels⁴⁴
- FGDs three categories of groups were selected this include, WCCPC, a group of beneficiaries of specific public good investment and a women group. Three separate tools were used to respond to different various questions related to the research themes.⁴⁵
- The selection of the ward climate change planning committees (WCCPC) was done in consultation
 with Ada consortium partners– Makueni- Anglican Development Eastern ADS-E, Wajir –
 ALDEF Arid Lands Development Focus and Isiolo MID-P Merti Integrated Development
 Programme and comprised of a mix of those from high and low performance projects. This will
 ensured factors that enable and constraint project success were captured in the learning. Table 6
 shows the wards and the respective household samples. The sampling took into account the
 diverse nature of projects implemented by Ada for purposes of monitoring, learning and
 evaluation and the level of investment.

⁴³ See Annex 1 for the questionnaire.

⁴⁴ See Annex 2 for the questionnaire.

⁴⁵ See Annex 2 for the questionnaire.

County Sub-district Population % county Household KII FGD popn. interviews 10.74 40 Isiolo Oldonyiro 15,388 Merti 20,341 14.2 31 Kinna 14,618 10.2 35 Garbatulla 16,401 11.45 Sericho 12,099 8.44 Chari Ward Sub-total 106 10 10 78,847 55.02 Kitui Ngomeni 1.82 18,447 Tharaka 13,084 1.29 Migwani 28,169 2.78 Kiomo/Kyethani 2.07 21,000 Kauwi 25,385 2.51 Kwavonza/Yatta 30,732 3.03 Voo/Kyamatu 23,011 2.27 Mutitu/Kaliku 15,506 1.53 Mutha 2.48 25,138 Ikutha 2.58 26,176 Sub-total 226,648 22.38 Kithungo/Kitundu Makueni 28,185 3.18 Kiima 22,991 2.59 34 Kilungu 33,952 3.83 3.43 Mbitini 30,384 55 Nguu/Masumba 23,764 2.68 Mtito Andei 35 34,354 3.88 Sub-total 19.59 124 10 10 173,630 Wajir Arbajahan 124,854 18.86 27 Elben 31,669 4.78 43 Wargadud 96,164 14.53 Eldas 10.15 67,182 KhorofHara 70,980 10.72 34 Adammasajida 26,216 3.96 Sarman 26,064 3.94 Lakole 11,373 1.72 Korondile 20,967 3.17 Lagboghol 24,295 20 3.67 Gurar 20,434 3.09 Banane 24,542 3.71 Sub-total 544,740 82.29 124 10 10

Table 6 Sample in Wards with CCCF Mechanism projects, across all five pilot Counties

Garissa	Sankuri	12,520	2.01			
	Nanighi	8,561	1.37			
	Goreale-Shantabaq	17,128	2.75			
Sub-total	Total	38,209	6.13			
Total		1,062,074	32%	354	30	30

Source: Based on Ada, 201846

Secondary data

To have more insights on the project, in-depth research of various secondary data resources including those produced by Ada and others related to the assessment exercise were reviewed. This included both qualitative and quantitative data from project documents such as baseline reports, progress reports, and technical reports, as well as available reports from NDMA, NEMA and the Kenya Meteorological Department's documents. A keen review of pertinent policy documents at national and county level were analyzed as well.

Survey profile

The household survey, Key Informants Interview (KII) and FGD were conducted over 8-12 May 2018 in three counties simultaneously. The survey team was comprised of partners from the Ada Consortium. They developed three survey instruments for households, KII and focused groups. For the full survey, the team split into three groups, each deployed to a single County. Ten research assistants were selected for training which was conducted in the respective counties in Isiolo, Makueni and Wajir. A pilot survey with 20 households in each county was conducted on the first day, with subsequent adjustments made across the three counties to the survey instruments.

All three surveys were conducted at the same time. The FGDs are summarised in Table 7 and the KIIs in Table 8.

Counties	County level	Ward level	Project level	Total
Isiolo	1 FGD with	3 FGDs with WCCPC at	3 FGD with project site committees	10
	CCCPC at	ward level	from selected projects within the	
	county level	1. Cherab ward	ward	
		2. Kinna ward (Dedha	1. Blocking ya Yamicha Water pan	
		Committees)	2. Harr Bibi Water pan	
		3. Oldonyiro ward	3. Siangawn rock catchment	

Table 7 Focus Group Discussion Target Groups

⁴⁶ Ada Consortium (2018).

Makueni	1 FGD with CCCPC at county level	 3 FGDs with WCCPC at ward level 1. Kiima Kiu –Kalanzoni 2. Mbitini 3. Mtito Andei 	 3 FGD with project management committees from selected project within the ward 1. Masue Rock Catchment 2. Kwa Atumia Earth Dam 3. Ngai Ndethya Mega Sand Dam 	10
Wajir	1 FGD with CCCPC at county level	 3 FGDs with WCCPC at ward level 1. Ademasajida 2. khorofharar 3. Arbajahan 	 3 FGD with project management committees from selected project within the ward 1. Adan Awale Water Pan 2. Wajir bor water pan 3. Solar panels at LMD borehole 	10
TOTAL	3	9	9	30

Table 8	Typical 'key	informants'	targeted in	each county
	J I J			

COUNTY	INDIVIDUALS INTERVIEWED
Isiolo/ Wajir/	
Makueni	• One or two leaders from active CBOs/NGOs in the area involved in the projects
	(including RAP, ALDEF, ADSE)
	• Former CECs / chief officer of Environment, water, energy and climate change
	across the counties.
	• Current CEC/ chief officer of Environment, water, energy and climate change
	across the counties OR officer from governor's office
	• Former/current directors of Environment, water, energy and climate change across
	the counties.
	Former MCA who participated in CCCF/committee legislation
	• The village/ ward administrator
	Religious/opinion leader in the community
	Former/current county planner/planning officers
	• Former/current technical officer that participated in design of Ada consortium projects
	• Former/current CEC in charge of finance and planning where approval of CCCF took place in pervious/current year
	• Other individuals that have worked with the mechanism at the county level, such
	as Chairman of the CCCF board, Speaker of County Assembly, former governors.

For the Household Survey, we randomly sampled the beneficiaries across the three counties, choosing 3-4 villages/locations within a 30 kilometre radius of each project, and aiming for at least 20 respondents from each village chosen. We chose households randomly and not on the level of perceived engagement

or beneficiation form the project, or involvement in the CCCF Mechanism process. The households were purposely selected using lists detailing the location of engaged participants in the project invested in using the CCCF Mechanism.

In total, 158 household surveys were completed by female enumerators – 44% - see Table 9.

Isiolo	No.	Makueni	No.	Wajir	No.
Female					
Fatuma	17	Nzuki	24	ASHA	26
Luisa	11	Sam	15	Zakaria	26
		Maingi	27		
		Mutisya	12		
Male					
Ibrahim	7	Emmanuel	22	Mohamed	28
Molu	13	Joseph	26	Abdinassir	23
Phineas	8			Ahmed	27
Ramadhan	19				
Halkano	13				
Guracha	19				
Total	107		126		130

Table 9 Profile of enumerators by County, by gender

Investment costs of CCCF in the three Counties

The Learning Project Team visited the offices of our partners, and worked with the Ada Consortium's Finance Officers to assemble data on the costs of implementing the CCCF Mechanism. See Annex 4 for the survey data collected, with the headline figures summarised in Figure 9, and a breakdown of these data by budget line in Table 10.

Figure 9 Summary of investment costs of the CCCF Mechanism across the three Counties



Table 10 Summary investment costs for establishment of the CCCF Mechanism in three Counties (KESH,2018)

	Makueni	Wajir	Isiolo
WCCPC - Ward level		-	
Establishment of the committees	2,551,929	3,456,432	3,044,700
Ward committees capacity needs assessment	538,850	637,744	1,736,529
Training of Committees	5,688,226	1,286,244	1,557,317
Institutionalization of Committee	297,668	-	1,437,823
Community Consultation and Inter-ward meeting	655,100	654,000	574,476
Proposal writing	330,044	607,744	
Proposal evaluation	31,000	125,000	
Procurement of service providers and contracting	220,918	306,000	
Monitoring of Service providers and conclusion of contracts	271,540	643,119	
Total	10,585,275	2,335,863	12,921,138
CCCPC - County level			
Establishment of the committees (Technical and planning			
committees	163,000	-	1,736,529
Establishment of the committees (Steering/ board committees)	418,200	-	1,437,823
Training of Committees	424,000	-	1,557,317
Inauguration of CCCF structures	102,850	-	
Provision of technical input to the proposal	-	120,000	
Proposal approval and Tendering	468,210	132,000	
Monitoring of Service providers and conclusion of contracts	141,605	767,198	653,877
Documentation	-	902,000	
County Level engagement	1,113,410	322,400	169,287
Total	2,831,275	2,243,598	5,554,833
M&E	250,400	266,400	1,957,500
CCCF			
Pre-Inception	-	158,223	
Inception meeting/s (explain to the county what CCCF			
activities)	915,318	174,500	1,052,228
Establishment of institutional legislative framework	339,100	546,000	301,844
Manuals and MoU	-	-	
Inter county learning visits	1,032,968	407,000	
Other expenses		-	1,867,647
Total	2,287,386	1,285,723	3,221,719

Staff			
IIED	8,128,997	5,865,555	14,356,115
Ada Secretariat	5,770,064	4,163,445	10,190,151
Partners	9,547,499	3,593,647	8,795,554
Total (KES)	39,400,896	25,134,651	52,426,717
Total UK£	291,858	186,183	388,346

The total cost of the investments made by development partners into the three Counties to establish the CCCF Mechanism is ± 866 , 387. Table 11, Figure 10 and Figure 11 summarise the main cost centres by County, with Staff time accounting for an average of 60% and CCCPC costs at Ward level (23%) and County level (9%).

Figure 10 Summary investment costs of establishing the CCCF Mechanism, across three counties, 2012-18


Overall, staff costs dominate.





Table 11 Summary of investment proportions by factor, by county, 2012-18

Factor	Makueni	Wajir	Isiolo
CCCPC - Ward level	27%	31%	16%
CCCPC - County level	7%	9%	11%
M&E	1%	1%	4%
CCCF	6%	5%	6%
Staff	60%	54%	64%

The number of beneficiaries per County varies considerably, so to compare like-with-like, in Table 12. The investment per beneficiary is between $\pounds 2.52 - 8.31$ and by household between $\pounds 18.18-48.85$.

Table 12 Summary	investment by	County	and by ben	eficiary (ind	lividuals and	households)
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County	Beneficiaries	Households	Cost	Cost/ ben	Cost/ ben HH
Isiolo	110,033	14,893	388,346	3.53	26.08
Makueni	35,132	5,975	291,858	8.31	48.85
Wajir	73,876	10,239	186,183	2.52	18.18
Total	219,041	31,107	866,387	3.96	27.85

Household survey data

Over the three Counties, our survey data show that households are poor, communities are economically unequal, and the majority of households are male-headed, with between 5.9-7.4 persons. There are notable differences in livestock assets, main economic activity and education reflecting the diversity among the three Counties and our purposive sampling technique.

Overall 32% of the respondent households are female-headed, only 24% in Isiolo and 40% in Wajir with an average age of 44 years, 45 for men, 42 for women– see Table 13.

County	% respondent	0/0		Ages of	
		household		respondents	
		heads			
			F	Μ	Overall
Isiolo	23%	24%	43.26	47.34	46.28
Makueni	59%	30%	41.49	44.53	43.57
Wajir	67%	40%	43.54	42.63	43.01
Total	49%	32%	42.77	44.91	44.19

Table 13 Profile of respondents (n=363)

There are considerable differences in educational attainment of respondents in the three Counties. Overall 77% of respondents had maximum primary education – see

Table 14.

Table 14 Education profile of respondents

Education	Isiolo	Makueni	Wajir
None	50%	2%	87%
Primary	34%	50%	9%
Secondary	14%	41%	3%
Post- Secondary	2%	7%	1%

Average HH is 6.8 people, evenly split gender – larger size in Isiolo and Wajir – see Table 15.

Table 15 Profile of households, by gender, three Counties

County	Average of HH size/ number	Average of male	Average of female
Isiolo	7.39	3.73	3.67
Makueni	5.88	2.90	2.98

Wajir	7.22	3.51	3.73
Total	6.79	3.36	3.44

We asked about the main economic activity of households in the three counties, and received a range of responses. Using ranking, we develop an index of priority economic activity for each County – see Table 16.

H 1 1 4		1 0		. • • .		a .	1			/ 11		•1	<u> </u>	
I able 1	6 Profi	le of e	economic	activity	bv (County.	bv	average	ranking	(gold =	highest.	silver a	δċΙ	bronze)
					·- J	,	·- J			0				

Economic activity	Isiolo	Wajir	Makueni
Livestock – sales of animal	3.82	3.10	1.79
Livestock – sales of milk	0.19	1.85	0.34
Animal Herding	0.18	0.65	0.48
Crops farming	0.26	-	2.86
Petty trade	0.68	0.35	0.60
Casual labour	0.60	0.60	1.64
Formal employment	0.28	0.49	0.79
Remittances	0.14	0.75	0.66
Poultry	0.10	0.05	1.74

Livestock ownership is a main economic activity of most respondents in Isiolo and Wajir and second placed in Makueni. Livestock assets are broadly similar in Isiolo and Wajir, with households in Makueni owing considerably fewer (80% fewer) – see .

Table 17.

Table 17 Profile of livestock assets reliant on water pans, by County, by household, average units owned

County	Camels	Cattle	Shoats	Donkeys
Isiolo	10	33	88	3
Makueni	-	5	8	0.4
Wajir	14	20	72	1.5
Total	6	17	57	1.5

Income per household varies among the three Counties, from KES 8,423 in Wajir to KES 21, 094 in Makueni – see

Table 18. Female-headed household income is 35% lower than male-headed households.

Table 18 Income profile by household, in KES, by gender, by County

County	F	Μ	Total
Isiolo	17,918	17,869	18,050

Makueni	12,946	24,612	21,094
Wajir	7,188	9,247	8,423
Total	11,423	17,549	15,659

The average declared income per household across the three Counties is KES 15,616 per month – See Table 19, with wide variation from Wajir at KES 8,423 to Makueni at KES 21,094.

County	Q1	Q2	Q3	Q4	Average	Gini Coefficient
Total	5,700	10,500	18,250	114,000	15,616	0.53
Isiolo	8,600	14,000	20,000	100,000	18,050	0.42
Makueni	7,500	12,150	23,000	114,000	21,094	0.54
Wajir	3,000	5,800	10,000	44,000	8,423	0.44

Table 19 Declared income per household, by County, by Quartile

According to the World Bank, these three Counties are poor and unequal⁴⁷, and this is reflected in our survey data. There is low household and per capita income, with only 7% of households exceeding the threshold of US2/ day per person. There is considerable income inequality between respondents with households in the wealthiest quartile reporting income twenty times higher than the least wealthy quartile – see Table 19.

It is revealing to examine further the distribution of income among our sample. Wajir's quartiles are consistently half of Isiolo and Makueni. The inference being that Wajir is poorer, and possibly has weaker community institutions, which is borne out by some other indicators⁴⁸. The overall picture in Figure 12 is of income inequality, with the richer quartile in each County earning over five times as much as the second-richest quartile. Overall, the Gini Coefficient for these households is 0.53, which is slightly higher than the World Bank's declared Gini Coefficient for Kenya at 0.48.⁴⁹

⁴⁷ World Bank (2011).

⁴⁸ See for instance, World Bank (2011), KNBS (2014).

⁴⁹ Although this data is for 2004. See World Bank (2018). Further data here: World Bank (2013).





On average, the income per capita is US\$0.69 per day, with considerable variation – see Table 20.

County	KES/ day	US\$/Day	Over US\$1/ day (no.)	Over US\$2/ day (no.)
Isiolo	2,783	0.69	19	5
Makueni	4,248	1.05	33	18
Wajir	1,213	0.30	5	1
Total	2,777		57	25

Table 20 Income per capita per day, 3 counties

Overall only 57 respondents (16%) have an income per capita over US\$ 1/ day, and 7% over US\$ 2/ day.

Survey findings – summary

This section summarises the document 'Initial findings from the Learning Project survey'.⁵⁰ The chief costs and benefits owing to the CCCF Mechanism we find are summarised in Figure 13. There are many positive quantitative findings, a selection of which are in Figure 13, including:

- All respondents report improved access to water for household and livestock
- Each household saves almost two hours per day in water collection time, typically for females
- Each household receives economic benefits estimated at \pounds 109/ KES 14,170 each year from the CCCF Mechanism
- Almost two-thirds of respondents report investing their time and resources in the projects implemented through the CCCF Mechanism
- An average household income increases by 8% owing to the CCCF Mechanism.

We follow our Learning Framework in Table 4.

Figure 13 Summary quantitative results from the household survey



⁵⁰ Ada Consortium (2018).

No.	Element	Output under CCCF	Impact	Learning Questions
1	 Enhancing resilience of populations resident in ASAL and water-stressed regions 	 Water access higher Information on climate change Resilience information 	 More, cheaper, cleaner water More time Less conflict Stronger economy 	 Value-adds of CIS Value adds of information to beneficiaries on dealing with CC Inclusion Water access* Economic values of new opportunities afforded Conflict

1. Enhancing resilience of populations resident in ASAL and water-stressed regions

* = covered by our analysis

Water access

Previous studies indicate there is considerable efficiency, effectiveness and value-for-money in locallymanaged funds over nationally-managed funds when building resilience for rural populations⁵¹. Our results strongly support this.

Evidence suggests strongly that investments through the CCCF Mechanism increased water access for household and livestock, reduced time investment at household level in water collection, increased income at household level, and a majority of households contributed in materials and labour to the project – see Figure 14.

⁵¹ Nyangena, Scott and Wario (2017)



Figure 14 Summary of water access responses, across the three Counties

Water collection has changed remarkably. The profile of water collection, time invested and volume consumed by each household each day has changed with the investments made using the CCCF Mechanism. This water access has increased the economic opportunities of households and reduced the cost of water – see Figure 6.

Respondents reported improved access to water - Figure 14 – and listed a range of benefits from the investments in water – see Figure 6. Table 21 further illustrates by County. On water collection, the investments are nearer in the dry season by almost 5 kilometres, reducing walking by almost 10 kilometres per day for females and children in households. In Isiolo, average distances were reduced by almost double this average, translating to over three hours less travelling for water collection daily. Overall, accessible water is closer by over 3 kilometres, meaning almost two hours less walking per household per day – see Table 21.

QUOTES:

• "Before, women walked for 7kms in search of water and took a whole day, children also didn't go to school as they would be sent to fetch water"

• "We can now have water for a whole year in some of our pans"

• "The project provided water for livestock use lasting the entire dry period of 2017. This translated to substantial saving for most households which keep livestock because in similar situations before the earth dam was established families were forced to buy borehole water from Malili for their livestock"

• "The Ngai Ndethya Mega Sand dam captured and stored water which was available through the year.... farmers were enabled to produce in and out of season, improving food security and earning income "

• *"Water pan contributed to the recharge of the shallow wells"*

• "Giraffes used to die in the water pan. They would get stuck in the mud, but now giraffes are watered outside. This has minimised deaths"

• "The cattle do not go very deep in search of pasture and the quality of meat is now higher"

• "At Ngai Ndethya mega sand dam the problem of water insecurity is now solved as communities and households have access to water throughout the years in an area characterised by prolonged drought and water scarcity"

• Investments reaching the most vulnerable in the society "Masue secondary school which for a long time could not start a boarding facility due to lack of water and now a boarding facility for the students is running as a result of the investment availing water from a rock catchment investment."

County	Nearest water point (km)			Change (km)	Water collection (hours)		Change (hours)	Volume of water (litres/day)
	Dry season	Wet season	After WCCPC project	After WCCPC project	Before WCCPC project	After WCCPC project	After WCCPC project	From WCCPC project
Isiolo	15.73	6.48	5.95	8.96	5.08	1.92	3.11	75
Makueni	5.43	2.61	1.35	4.62	2.94	1.29	1.65	120
Wajir	4.80	2.09	2.30	4.16	2.55	1.34	1.17	79
Total	7.86	3.40	3.06	5.74	3.43	1.49	1.91	93

Table 21 Profile of water collection, by household, by County, before and after the investments made using the CCCF Mechanism

Water collection is reported as a primarily female-dominated activity, and the time saved is used for a range of household and business opportunities.

Examples from FGD and KII survey:

Kwa Atumia Sand dam serving an estimated 200 households and also pastoralist from Kajiado

"In Kima Kiu, women walked for 7kms in search of water and took a whole day, children also didn't go to school as they would be sent to fetch water"

The project has directly benefitted 200 households in terms of water for their livestock, domestic use and small kitchen gardening

There were a number of pastoralists from Kajiado who used the water with hundreds of livestock during the dry spell of 2017.

Women from the 200 households which form the immediate catchment of the earth dams now take an average of 30 minutes to water point unlike in the past when it took them 2 hours to get to the nearest water point

Ngai Ndethya mega sand dam has adequate water which lasts twelve months in a year serving 1200 households and six public primary and secondary schools which have an average of 300 pupils/students.

In Mbitini cost of water has drastically come down from initial of 10 shillings per 20 litre jerrican to two shillings levied by the WCCCPC to access the water.

Masue rock catchment has benefited 3000 individuals, three public schools and 2 community churches benefited from the project in terms of water for use. Taking an average of 300 pupils per school together with school and church fraternity it is estimated that the project has benefited has so far benefited 4500 people.

At Mtito Andei's Ngai Ndethya sand dam, water distribution has availed water to households and 6 schools within reach of less than 30 minutes. Before schools and households used a lot of money to access water from boreholes in the nearby Kambu urban centre. There is a major savings as water supplied from the sand dam is relatively affordable costing two shillings for 20 litre jerrican as opposed to the situation before where similar quantity of water cost twenty shillings.

"We were happy about the consultation and the issues addressed our core problems of water. We were the prime beneficiaries of the project. The school going children were struggling because they had to fetch water before going to school and that was really affecting us" Women Only FGD-Oldonyiro

In all Women Only FGD, it came out that domestic water use was sole responsibility of women and as such it was their headache to sort out that. However, CCCF water projects helped a lot in not only availing clean water for home use for a longer period as compared to the past but also reduced the distances their use to trek to get water. This so much impacted the relationships at home especially with their husbands, for example, for the case of Oldonyiro where women whispered to us how they used to encounter domestic violence because their husband could not understand it takes them longer hours walking back home after searching for water and sometimes this meant arriving at sunset to prepare evening meals which annoyed their husbands leading to altercation that lead to their beatings. They confided in us that they now enjoy peace at home since water is close to them

Ngai Ndethya mega sand dam has adequate water which lasts twelve months in a year serving 1200 households and six public primary and secondary schools which have an average of 300 pupils/students. Before the CCCF sand dam project was constructed, most of the households and the school fraternity relied on bore hole water obtained from Kambu urban centre. According to the chairman of Mtito Andei WCCPC, this translated to millions of shillings saved per year for the community. Further some of the households around the sand dam are now engaged in small scale irrigation agriculture of growing vegetable crops for income.

Inclusion

Negative:

"Lack of awareness of equity issues a general problem with county technical staff" Inclusion and reaching vulnerable groups not really at top of agenda of some CCCPC members; officers from line ministries are more interested in the technical side of things. Hence their view is that consultation was inclusive – but we see from women FGD the consultation process was not as inclusive as it could be. There is the problem of clan divisions.

- Illiteracy levels are high particularly among the women. Lack of meaningful participation in decision making. But where possible the project used simple tools and local language to engage and solicit their input in the project. Positive:

- The CCCF Mechanism project was consultative and all inclusive
- They took our ideas adding more water kiosk for the woman but the funds were not adequate
- "We rarely meet as women unless we are collected together like this by an organisation
- "We also have two main tribes here that are both represented"
- Guidelines were followed: all groups were involved in preparatory meetings, implementation and management
- Using participatory tools enable Women to fully engage in the process

- Women rarely involved in county government public participation process, (and) when involved (can devote only) limited time. This in contrast to their experience with WCCPC where their views were considered through the community consultation exercise.

Examples of benefits given by respondents (in Wajir County): request for a pan (ELBEN); adding more domestic water kiosks (LMD); at womens' request the pan was fenced (LMD); added a toilet at the water point (BOR), piped the water to the town; rehabilitate fence and install water Kiosk for Bibi pan in Kinna ward was an idea that originated from a woman, this was confirmed by Chair of Dedha during the FGD (Isiolo)

- The County is also being informed by the constitution and ensuring that 30% of the projects are reserved for the marginalised
- For the 30 wards in Wajir, there are 18 nominated members: 15 are women and 3 respresent youth and disability.

- I: "A balance needs to be found between the need for literate people who can draft proposals, keep minutes and do basic book keeping on one hand and the need to eliminate access barriers by not requiring education as a prerequisite for membership in the ward committees."

have decreased and no more used of engine during the day because free solar energy



QUOTES:

CIS information, perceptions of value:

• WCCPC can respond to emergency as they have a clear picture of the situation at the community (at ward level) ... the CIS component makes it possible for the mechanism to be an early warning system

• The mechanism has been able to build communities skills to become resilient and know the type of crops that are suitable to the various seasons and also select projects/investments that can build their resilience to climate change

• In the era of climate change decision makers at all levels should apply the use of climate information to prepare and minimise the impacts of climate risks such as drought and flooding. The corrective procedure as a result of the impacts of climate change risks diverts resources clawing back on development gains.

(quantification required) (Makueni have a well-developed CIS intermediaries system that was done by ADA, where they receive daily, monthly, seasonal and frequent alerts by SMS)

• "We got networks like the Kenya Met that gave us climate change information. They sent texts to people telling them details of the forecast".

CIS data and information are covered in a separate Learning Document⁵². Yet, we received considerable indication that beneficiary communities see enormous value in the provision of information on climate.

⁵² Ada Consortium (2018). CIS and the CCCF mechanism. Paper in prep., Ada Consortium, Kenya.

Climate information is highly valued and recommendations taken seriously to guide selection of viable projects.⁵³

• There is value in the receipt of climate information and the changes in economic behaviour it enables

• Some respondents indicate that the CCCF investment lessened impact of 2016-17 drought. Information on adaptation skills, techniques and approaches to climate change are also valued:

QUOTES:

Climate change information:

Moving forward climate proofing will be an important aspect for sustainable development...this has not been the case in most of the flagship projects designed before including the giant fruit processing factory in Makueni.

- The exercise has helped communities to prioritize on their needs and therefore becoming more resilient and able to absorb shocks
- "CCCF is good for Wajir because of the climate change effects....changes in vegetation, catastrophes, disasters and loss of livestock have continued to increase over the years

Respondents report increased resilience to the effects of climate change, through:

- Better more accountable decisions made by those experiencing the impacts of CC
- Resilience during drought
- Better understanding of expected/ likely climate impacts
- "(we) raise development concerns some of which goes beyond climate change"

⁵³ See for instance, World Bank (2016).

2. Institutional process of decision-making

No.	Element	Output under CCCF	Impact	Learning Questions
2	• Institutional process of making decisions	 Training on CC Stronger links across organisations (public, NGO, private) working to heighten resilience 	 Better climate- proofed decisions owing to understanding of climate Closer ties among levels of govt 	 Landscape-level complementary Complementary to CIDP and national/ Constitutions plans Are Counties with CCCF Mechanism better able to plan adaptation, and make adaptation-ready investments? How can CCCF mechanism link up with and add value to the Drought Contingency Fund and other ending drought emergencies programmes (Hunger Safety Net, Index-based Insurance, Food for Asset programme, Early Warnings) and other initiatives that also target poor and climate vulnerable communities?

This was not covered directly in the household survey. We were seeking to learn from the impact on institutions and institutional decision-making processes from the experience of devolving decisions, finance and accountability over drought and climate resilience. We focused on these issues in the FGD and KII, seeking to understand how the institutions have worked, changed and enhanced resilience across the three counties. Summarised findings are presented in Figure 15.

Figure 15 Summary of institutional findings from the household survey, all three Counties



As a complement to the national devolution process, the CCCF Mechanism has piloted devolved climate finance, devolved decision making and accountability. The results show many minor changes and some large changes have taken place. Perceptions of most of these changes are positive:

Landscape-level

Respondents noted general improvements to standards, public participation, and decision-making rigour.

Increased the standards of delivering on investments, specifically by changing the way communities engage with:

- the policy and political process
- other communities particularly over access to water resources
- Contractors implement investments.

The added voices of the communities coupled with governance at ward level, if not all, levels of decisionmaking, have been accepted by the vast majority of stakeholders. Indeed, the success in delivering more efficient, more effective project investments has seen the approach pioneered in the CCCF Mechanism.

Perceived devolved decision-making benefits, include:

- "improved relations between WCCPC, CCCPC and other county actors as a result of CCCF mechanism"
- "The blame game was reduced"
- "transparency was enforced"
- Learning from each other and supporting each other and therefore legitimizing the structure"
- "We (as dedha/or WCCPC) have earned the trust of the communities in the region.
- "Structures are now in place from the ward to the county level that can be institutionalised and used in other departments. This structures also provide opportunity to engage with the county staff"

While respondents are mostly positive on relations along the political hierarchy – community, *dedha*, ward, county, there are examples of County-level decision-making appearing to not take seriously the process,

QUOTES:

"under the county government five years integrated and annual development plans, the community have made it clear that all sand dams should be constructed to the standards set by CCCF Ngai Ndethya sand dam which has a sump for water capture and sand media for purification together with distribution pipeline and community water points for ease of access."

"In a new settlement area of Kwa Atumia neighbours did not know each other, the CCCF has acted as a platform which brings people together"

"In Mbitini ward the WCCPC is fully recognised by the national and county government officials based at the wards and are now regularly consulted an all development matters concerning the ward."

"Through the CCCF institutional framework under which the WCCPC is established, the community has a formal relationship with the county government through which they raise development concerns some of which goes beyond climate change".

"The establishment of ward committees led to community ownership in the sense that the community were tasked to draw out proposals and seek funds against the activities proposed. They were to manage the funds and therefore a sense of ownership. The implementation of the project activities was well done.

Previously there was no structured consultation on project implementation, decisions were made in the boardrooms. With the CCCF mechanism there is continuous consultation which takes lot of time. Although it is time consuming, the quality of projects are of higher standards and serve community better.

"improved relations between WCCPC, CCCPC and other county actors as a result of CCCF mechanism"

There were references to "politics" as the source of most of the problems. Reference to non-adherence of traditional regulations by infiltrating groups were made.

such as calling meetings at short notice, and failing to record, communicate or circulate minutes from meetings.

Complementary to CIDP and national/ Constitutions plans

QUOTES:

There is a perception that the CCCF Mechanism has influenced the CIDP process:

"County public consultation is low or not sufficient"

"CIDP done at ward headquarter only and not participated by each community only few committee participated, poor information dissemination, poor public participation, poor engagement"

"Previously there was no structured consultation on project implementation, decisions were made in the boardrooms. With the CCCF mechanism there is continuous consultation which takes a lot of time. Although it is time consuming, the quality of projects are of higher standards and serve community better."

"County now more aware on importance to have climate change mainstreamed in CIDP. The first CIDP had to be reviewed to have climate change mainstreamed for the first time"

"There were mixed feeling about how well the CCCF impacted the CIDP process. In some cases where the Ward-level committees were not able to work with County..."We have not worked very closely with the Countyseems to work with the person from the committee that was easily accessible and more educated, and so able to quickly understand issues and contribute to the ideas that are being shared. This was not necessarily the person elected as a county representative. This contributed some tensions within the committee"

"As a result of engaging with the CCCF mechanism, the CCCPC members reported that the current CIDP is better than the previous one and that climate change issues are aligned in all sectors"

"Some of the WCCPC members like myself were invited to participate in of 2018-2022 formulation at the county level. It is my view that Makueni County has made strides particularly in 2018-2022 CIDP where climate change is mainstreamed. This is one of the key outcomes of the CCCF legislation which created institutions involved in articulating climate issues into the CIDP"

"The CIDP has borrowed the principle of climate proofed projects from CCCF"

"Ward planning committee went through the CIDP planning process. ALDEF used another budget to mobilize them to take part in CIDP"

"Developed sectoral plans for water, environment, agriculture and livestock. Some of the aspects have been incorporated in the CIDP with the help of Green Africa Foundation"

There is a perception that the CCCF Mechanism has positively influenced the 5-year County Integrated Development Planning (CIDP) process, and has proved a complementary catalyst for change. Respondents report:

- Elements of the CCCF Mechanism are now mainstreamed into the CIDP, including climate change risk and resilience
- Methods of public participation are improved from a "passive formality" to "active engagement"

The role of strong partners is indicated strongly:

• ALDEF and Green Africa Foundation are singled out for bridging between these two mechanisms.

• "Mercy Corps has adopted the CCCF system and scaled up more activities with 8 additional wards in Wajir

QUOTES:

Direct benefits as perceived by the beneficiaries:

"The project was more beneficial to community than to contractors: More resources reached the community"

"...the way community are engaged in public participation changed, it is never a passive formality thing to tick a box on the side of the county government, community are very much actively engaged, asking question on previous priorities they have set for the counties, questioning commitment on the county side, insisting on what is of high priority to them and pushing for accountability on the side of the government"

"Planners now look out for views of ward committees to capture in annual plans since it represent local priorities and as a result WCCPC are now keen on participating in annual planning e.g. WCCPC now presenting written submission during public participation"

"The project has led to other communities demanding similar services in their locality"

"Communities developed their own plans and priorities. Some activities were moved to county development plans (CIDP)"

The benefits of County- and Ward-level working together:

"The technical input at CCCPC level has been very useful in not only improving the proposals but also follow up to ensure technical person is available to do the work" - WCCPC representative at CCCPC, Isiolo. e.g. Water Engineer gave example of Yamicha pan where community proposed backfilling of the pan but this changed to simply blocking the inlet which was less costly this happened after the review of CCCPC"

"Renovation of Kina livestock laboratory and Vaccination programme where the cost came down by more than 50% after CCCPC involved veterinary officers in not only costing the work but how to mobilise other support to manage cost"

"We are now invited to County annual planning meetings because our contributions/views present the top needs as prioritised by the community and this is what planners want to have captured in annual plans"

"County government using the CCCF investment as model for other investments. The empowered communities through the elected members of the WCCPC holding the county government accountable"

"The county assembly speaker talks about how the CCCF mechanism changed the perspective of county assembly on climate change"

'The mechanism has helped in eradication of white elephants' projects, create cohesion within community and increase transparency in the procurement of investments''

"County level support creating enabling environment for ward level investment through county government co-funding the Mtito-Andei earth dam"

Across all the KII's the elements of the project design were key in delivering better investments "training of the committee members on proposal development and financial management ensured fiduciary standards are met in managing and that proposals are sound"

The benefits of a renewed alignment among county and Ward-level policy and investment is clear:

- Both tiers learn from each other about the most effective way to operate with respect to climate change
- Increasing interaction at meetings e.g. with Ward representatives invited to County strategy meetings
- Increased exposure of Community innovation within Ward and County-level meetings and discussions

Are Counties with CCCF Mechanism better able to plan adaptation, and make adaptation-ready investments?

Planning of adaptation has been improved by widely deploying the approach within the CCCF Mechanism of decentralised climate financing, which is delivering wide benefits to projects, process, stakeholders, beneficiaries and investment governance, including:

- Actual implementation of legislation
- More efficient and effective bureaucracy
- Meetings convened frequently

- "planning certainty"
- Structures formed but need to be strengthened
- Increased linkages with the community
- Better planning
- Benefitted from capacity building exercises.

In addition, actual investments are being made differently:

- New investment models being used
- Co-funding is becoming a popular vehicle
- County investments are using the CCCF Mechanism approach in a bid to increase efficiency, include the local beneficiaries as participants.

There have been changes in County planning since CCCPC was established, including:

- Decentralization
- Transparency
- Complaints forum
- Increased capacity on proposal writing and tendering process.

Pilot projects started with donor funds have created the conditions for investment by other entities. By piloting the initiative, other entities have been able to monitor, understand the needs and risks and eventually invest. For instance, in Wajir, initial funding from DfID for the pilot has seen:

- Sida is now also on board implementing a 4-year programme. This is to scale up in NDMA.
- Climate change is a key entry point and base for fundraising for County governors
- The county has now provided matching funds to address climate change
- More projects are being implemented by partners (other than ALDEF) in the county using climate change funds
- The enactment of the bill has proved that the country is taking the issue of climate change seriously and therefore attracting more funds.

CCCF Mechanism and investing for resilience:

• "The CCCF is providing a working example of an investment model that drives financing, decision-making and responsibility to the local level"

- "County government (are) using the CCCF investment as model for other investments"
- "The CCCF has proved instrumental in conveying the challenges of climate change and the changes required to instil resilience into rural livelihoods"
- "The county assembly speaker talks about how the CCCF mechanism changed the perspective of county assembly on climate change"
- "It serves as a guiding framework for the planning committee for budgeting purposes"
- "There was clear evidence that the communities and the county government is able now to deal with climate change more effectively"

Incentives for change given by the CCCF Mechanism:

"Funds are inadequate. Only 10% allocated which is not enough. This affects the inclusion of all the line ministries. It also lends to weak monitoring processes; The scope of the work did not much the funds available. This affected the budgeting process."

"The fact that we know the budget allocated to wards for development and what is in the climate change kitty, prioritization will be on a different scale"

The community will also be aware of the budget allocations and therefore demand for better and quality services"

County v Ward

"Need for a 50/50 % allocation to ward and county. Activities at the county level cannot be underestimated".

Research, travel and meeting., monitoring and evaluation activities can be compromised if not well budgeted for.

"Some percentage has to remain at the county level to address the gaps in capacity that ward level faces"

"There needs to be collaborative efforts at both levels. Leaving it all to wards means that there will be no synergies in efforts made at the two levels of governance"

"One needs to account for the funds and therefore the county can perform this role very well"

How can CCCF mechanism link up with and add value to the Drought Contingency Fund and other ending drought emergencies programmes (Hunger Safety Net, Index-based Insurance, Food for Asset programme, Early Warnings, community based disaster risk management) and other initiatives that also target poor and climate vulnerable communities?

The added rigour that the CCCF Mechanism has brought to the devolution process around climate resilience presents opportunities for other initiatives to learn how best to structure implementation of projects, how to align incentives so that communities, politicians, development partners and entrepreneurs can work together, and how to empower beneficiaries.

Some of this is already happening, with tangible changes in the approaches taken in the field by Ada Consortium partners, Mercy Corps, KCEP-KRAL and DDP. One learning from this work is the need to work closely with these complementary agencies in implementation and design of future projects.

Also, the disruption attendant with the CCCF Mechanism is far-reaching, and has changed the behaviour patterns and risk management of many beneficiaries and stakeholders. This needs to be borne in mind when designing projects. Water access is a major limiting factor to economic activity. When improved water access is made available, there remain unknowns over how individuals, communities and outsiders will react. This will entail far closer monitoring going forward than has occurred to date on this Phase of the CCCF Mechanism piloting. Ideally, the Ada Consortium will work in concert with other stakeholders to ensure complementarity of approach, implementation, delivery and impact.

3. Devolved decisions to beneficiaries

No.	Element	Output under CCCF	Impact	Learning Questions
3	Devolved decisions to	Devolution coupled with	Accountability,	Engagement
	beneficiaries	WCCPC and CCCPC	responsibility is passed to	Accountability
		development under	locals with knowledge,	
		CCCF	ideas, etc.	

Engagement with the WCCPC

The CCCF mechanism devolves decision-making closer to the beneficiaries from the improved climate change resilience. There is evidence that empowering poor communities to make decisions, be accountable and take responsibility means better decisions are taken with greater community value⁵⁴.

The household survey demonstrates considerable local knowledge of and participation in the CCCF Mechanism development and implementation process.

⁵⁴ See for instance, Nyangera et al (2017).

Table 22 Household survey responses about the institution WCCPC and its activities under the CCCF Mechanism

% of respondents	Factor
70%	Know about the WCCPC (n=196)
Of which	
75% (from 55% in Isiolo	participated in the elections
to 78% in Wajir)	
84%	vetting good
85%	Leaders make better decisions
52%	Understand less-than enough about the role of the WCCPC
13%	Know everyone on the WCCPC (13% knew 4+ people; 37% knew 1-3
	people; 5% knew no one)
60%	Were consulted to identify priority actions
97%	WCCPC consultation was positive
65%	Of households discussed the WCCPC consultation process
99%	Believe the investments represent good quality
100%	Prioritisation is a useful approach for making investment decisions
98%	Benefits of being consulted
<1%	expressed criticisms of WCCPC
4%	saw no change in their household following the CCCF Mechanism
2%	believe WCCPC decisions to be poor

The existence of the WCCPC and its role is understood by 70% of respondents. Of these 70%, there was considerable disruption at household level with 96% indicating changes in the functioning of their households owing to the investment.

Furthermore, there is overwhelming support for the implementation of the WCCPC, consultation, prioritisation. Respondents were positive about their involvement in the decisions – including identifying priority actions, being consulted, and overall, less than 1% of respondents are critical of WCCPC. The outputs are seen as being of high quality. However, several factors indicated opportunities to learn, refocus to ensure higher levels of beneficiary satisfaction, including communication after project implementation, enabling better understanding of the scope of the WCCPC's role, increasing familiarity of local populations with their representatives on the WCCPC, and identifying and engaging with those who believe the WCCPC is underperforming.

There is some variation among the Counties in the collective responses to these implementation questions – see Table 23 – indicating an ongoing need to ensure communication of WCCPC activities with the local population.

Table 23 Selected implementation factors, by County, %

Question	Isiolo	Makueni	Wajir	Average
Do you know the WCCPC?	74%	71%	69%	72%
Did you participate in the vote for WCCPC	54%	78%	69%	67%
membership?				
Do you think the vetting process worked?	75%	88%	86%	84%
Do you believe the process led to better	82%	82%	93%	86%
leaders?				
Were you consulted?	60%	71%	48%	59%

Notably, participants have largely positive perceptions about all aspects of the WCCPC activities – see Table 24. While these vary across Counties, the findings indicate that the mechanics of the process of WCCPC – making decisions, design, and implementation – are all extremely positive across Counties. Yet for Isiolo and Wajir, these findings highlight challenges on community participation, costs, communication and participation of respondents in decision-making.

			Isiolo	Makueni	Wajir	Total
1.	Community participation	Positive	74%	95%	79%	84%
		Same	23%	5%	16%	14%
		Worse	2%	0%	5%	2%
2.	Design	Positive	66%	84%	84%	79%
		Same	31%	15%	15%	19%
		Worse	3%	1%	1%	1%
3.	Implementation of the project	Positive	76%	91%	85%	85%
		Same	23%	6%	14%	13%
		Worse	1%	2%	1%	2%
4.	Quality of the project	Positive	79%	88%	91%	87%
		Same	15%	11%	8%	11%
		Worse	6%	1%	1%	2%
5.	Communication	Positive	43%	90%	71%	71%
		Same	46%	9%	25%	23%
		Worse	11%	2%	5%	5%
6.	Your involvement in decisions	Positive	47%	88%	64%	69%
		Same	43%	10%	30%	25%
		Worse	10%	2%	6%	5%
7.	Overall project Costs	Positive	64%	84%	67%	74%
		Same	30%	14%	23%	20%
		Worse	7%	2%	9%	5%

Table 24 Perceptions of the project's implementation and WCCPC activities, by County

Furthermore, respondents in the KII and FGD report at length the advantages they perceive in devolved decision-making or the 'bottom-up approach', including:

- Encourages ownership by the community
- Overall county ownership
- It is cheaper
- It supports the domestication of devolved governance
- It attracts global funding which is then channelled through the established structures by CCCF
- Community have full control of the procurement process.
- Resources are utilised fully once in County Climate Change Fund.

"The CCCF mechanism of establishing the WCCPCs has served as an eye opener to the members and community at large on what they are capable of achieving together and there is an increased sense of community cohesiveness and collective action"

"The community is highly empowered to monitor the prioritize projects, procure Service Providers and monitor their projects to get the best. This improves ownership"

"The mechanism puts the community at the centre of decision making"

"In the case of CCCF mechanism, the service providers were answerable to the WCCPC as their client and the bottom-up approach and successful completion of the pilot is proof that the communities are capable of working with contractors"

"The bottom up approach is the best so far. It encourages ownership by the community and in essence overall county ownership"

"Ward-based development has more advantages compared to the top down management. Senior government officials have often gone to the people and requested them to do afforestation. But this needs some form of facilitation – for example going into a school and letting children plant trees but informed that they own that particular tree planted by them. They therefore have responsibility to water it every day. That way ownership is created and trees increase"

"We have communicated to the people who infiltrate (our lands and access our water pans) that the previous notion that this is "no man's land" is no longer acceptable"

"Community able to plan and narrow down on investments that fit within their budget - Because the community knew the budget they we able to plan for a project the size that could be supported by the available resources. It also helped in reducing suspicion of corruption associated with projects supported by the government. Further by knowing the budget set aside for the project, communities owned the project following keenly on all stages of project implementation with intention of achieving value for money."

"This was the first time when the community through the WCCPC and had information before hand on the quantity and quality of construction materials. As part of the WCCPC monitoring team I can confirm that we checked and verified all the procured materials to ensure that they were of the right quality and quantity as detailed in the BOQ."

"The contractors procured the materials in bulk at wholesale price and enjoyed better price as compared to the prevailing market prices"

But...

"However some suggestions by the community can be very expensive. One needs to use persuasion for the community to understand about budget issues – that it is not enough to implement a prioritised activity

- The funds were not enough. e.g. the chain link is of very poor quality and the wires are very weak.

- There is a tendency of too much wastage on the part of the county. A similar project can be funded to the tune of 8 million yet provide the same service. Need some form of standardization.

Figure 16 Summary communication and consultation responses expressed by respondents (n=362)



Table 24 illustrates perceptions of the establishment and implementation process by County, and Figure 16 summarises. The overall learning is a need to communicate more effectively, more often and more meaningfully. Only three-fifths of respondents were consulted about investment prioritisation, and one-third received feedback.

4. Impact

No.	Element	Output under CCCF	Impact	Learning Questions
4	Impact	• Costs v Benefits – particularly time saved from water collection and re-invested	 Does investment returns exceed invested funds? Long-term potential Scale-up 	 VfM of project – beneficiaries VfM of projects – sustainability and affordability for the government in future (ex-donor pilots) – investors VfM of project – development partners VfM of project

VfM of project for beneficiaries

The benefits for beneficiaries are discussed elsewhere. The reported benefits in Figure 6 are complemented by less than 1% of respondents indicating any issue with the investment made. All respondents report having better access to water for both livestock and domestic purposes. The spillover benefits of this are considerable, including:

- Devolved decision-making and accountability
- Projects cheaper to implement partially owing to community prioritisation
- Co-investment from beneficiaries
- Co-governance of investment meaning higher standards, longer-lasting
- Less water travel costs per household
- More productive uses of water at household level healthier, cleaner, less disease, etc.
- More productive uses of water for livestock healthier,
- Incentives
- Diversify cropping to those thirstier crops
- New SMEs with time saved
- Household
- Children at school
- Less fatigue for the women water carriers
- Less risk from water collection.

Furthermore, community co-investment occurred in all Counties. Indeed, respondents appear highly invested in the process and projects. While two-thirds of respondents were not aware of the scale of investment being made – rising to over half in Makueni – it is considered well-spent by almost every respondent.

Does investment returns exceed invested funds?

Co-investment benefits of local engagement and participation:

• Cost of implementing of the CCCF projects is also cheaper – across the projects communities members provided labour and material in the construction/rehabilitation of the investment

• In all the 3 wards in Makueni County, community members provided labour, in Mtito andei and Mbitini contributed land for construction of the water kiosks, they monitored the implementation of the project, provided security for the investments at no cost,

Quality of investment:

• "Ngai Ndethya mega sand dam is a model sand dam which has set standards for the entire county. Many people have come from far and wide including those from other counties to bench mark and learn. The county government of Makueni has registered its recognition of the high quality work achieved and increased sense of ownership through the bottom up approach of CCCF"

VFM? General perception that CCCF mechanism projects are cheaper and more efficient than other projects. However, simple comparison is not easy, more evidence needed

There are many as-yet unquantified benefits for communities. For instance:

• Ngai Ndethya mega sand dam has adequate water which lasts twelve months in a year serving 1200 households and six public primary and secondary schools which have an average of 300 pupils/students. Before the CCCF sand dam project was constructed, most of the households and the school fraternity relied on bore hole water obtained from Kambu urban centre. According to the chairman of Mtito Andei WCCPC, this translated to millions of shillings saved per year for the community. Further some of the households around the sand dam are now engaged in small scale irrigation agriculture of growing vegetable crops for income. (this has been included in one of the earlier boxes – perhaps cross-reference?) Projects under CCCF Mechanism are disruptive and create their own, often new, economy, and provide fresh opportunities for entrepreneurs. Project created job opportunities and a source of income from proceeds of selling water

Furthermore, 64% of households contributed to the project, e.g. attending meetings, providing transport, carried/ collected ballast, tree planting, trenching for pipes, casual labour, land clearing, digging holes, fencing, land (for pipeline and construction), and management, governance and enforcement during construction and implementation.

Water payments

There are indications that people are paying less for vended water than before the CCCF Mechanism was used to develop resilient investments. Typical methods of vending include entrepreneurs transporting water by donkey in jerry cans (20 litres) and selling at farm-gate or at household.

The FGD captured respondents' perception of the change in value, but insufficient responses to draw significant conclusions. However, all respondents who expressed a preference indicated that the cost of water collected and delivered had fallen considerably since the CCCF mechanism project began.

Furthermore, opinions provided in the FGD and KII indicate the unit cost of water for domestic purposes has dropped by 25% since the projects have been operational.

Value-for-money of investments by development partners

Time savings from reduced water collection time for domestic use are over KES 400 million (\pounds 3 million) annually, with a net benefit to each household of over KES 13,000 (\pounds 100). This exceeds the overall investment by a factor of three each year. Hence, on this indicator alone, the CCCF Mechanism appears to be a worthwhile investment.

Assumptions include:

- Estimates of number of children U14 per household Wajir 52%, Makueni 45%, Isiolo 45%⁵⁵
- Working hours per day -8^{56}
- Use of the 50% cost per hour of 18 KES.⁵⁷

The value of time saved from improved access to water has been estimated to understand the value in investments in upgrading water infrastructure for over 40 years.⁵⁸ Valuing changes in time use, particularly travel times, is often a critical parameter in the economic evaluation of development programs in lowand middle- income countries.⁵⁹ Despite a robust empirical literature on travel times in industrialised countries – using a range of non-market valuation techniques – there are relatively few studies when time changes occur in a household's activities outside of salaried employment, particularly if travel time displaces or increases time spent in leisure or on other unpaid household work.⁶⁰

Many women in rural Kenya spend a significant portion of their day hauling water from sources to their homes.⁶¹ One of the principal benefits of improved water delivery systems that the time women spend carrying water is reduced.⁶² The time saved by not having to haul water from more distant sources may be put to many other productive uses, such as child care, wage employment, agricultural labour, or food

⁵⁵ KNBS (2013). Exploring Kenya's Inequality: Wajir County. KNBS/ SID, 75pp. KNBS (2014). Socio-economic Atlas of Kenya. KNBS, 162pp. <u>https://www.kenya-atlas.org/pdf/Socio-Economic_Atlas_of_Kenya_2nd_edition.pdf</u>.

⁵⁶ 2009 data from KNBS <u>http://kenya.opendataforafrica.org/</u>.

⁵⁷ Cook et al 2016.

⁵⁸ See for instance, Becker (1972).

⁵⁹ Whittington and Cook (2017).

⁶⁰ Whittington and Cook (2017).

⁶¹ Whittington et al (1990); Cook et al (2016).

⁶² Churchill et al. (1987).

preparation⁶³. Or they may use the travel time savings to travel more frequently to the water source, increasing the volume of water available.⁶⁴

Reported times for water collection are replete with challenges over precise timings, full or empty For instance, Cook et al (2016) recommends: these reported estimates are multiplied by 1.75 to get reported round-trip walk times, to account for faster one-way trips with empty containers.

Having an improved water source closer to one's household is an economic benefit, and a common approach to measuring the magnitude of this benefit is to multiply the amount of time "saved" in the activity by a monetary value per time unit (shadow value of time)⁶⁵. Most women in rural Kenya typically do not have jobs in the formal sector, so changes in their time allocation occur in the informal economy and their household, and valuing these changes in time allocation requires nonmarket valuation approaches.⁶⁶

There is a gap in the knowledge of effective wage rates in rural areas of developing countries where the informal economy dominates.⁶⁷ In our survey, only 10% of households receive income from formal employment. Analysts typically use a fraction of reported prevailing wage rates for unskilled agricultural workers⁶⁸ or generate shadow wage prices from survey data,⁶⁹ as we do in this project.

Guidance on how to value the saved time from improved access to water in rural areas of developing countries:

- For increases to economic activity use the pre-tax wage rate plus benefits⁷⁰
- For increases to non-salaried economic activity (household or leisure) 50% of the after-tax rate – of 18-20 KES per hour⁷¹
- Values determined indicate close to the market wage for unskilled labour.⁷²

We use two methodologies to calculate the economic benefit of reduced water collection times for women on their households:

- Using data from the IHS to quantify additional working hours per household as a proportion of gross income
- Using estimates generated by Cook et al, (2016), which were developed in similar geographical locations to our projects, in rural Kenya.

⁶³ Demie, Bekele and Berhanu (2016).

⁶⁴ Whittington and Cook (2017).

⁶⁵ Whittington and Cook (2017).

⁶⁶ Whittington and Cook (2017).

⁶⁷ Barnes et al (2002); Palmer and MacGregor (2009)

⁶⁸ Cook et al (2016).

⁶⁹ See for instance, Barnes et al (2002).

⁷⁰ See Whittington and Cook (2017)

⁷¹ Cook et al (2016).

⁷² Whittington et al (1990).

	County	Poppn(1)	HH in County	Hours saved	Hours saved per year/ HH	FTE equivalent/HH (2)	Average HH size	
1	Isiolo	143294	19,395	3.11	1135	9.61%	7.4	
	Makueni	884527	150,430	1.65	602	6.37%	5.9	
	Wajir	661941	91,747	1.17	427	4.22%	7.2	
	County	HH incom	Est Financial b	Est Financial	UK££	Number of HH affected	Benefits of CCCF	
	Isiolo	18,050	1,735	20,816	149	14,893	2,214,393	
	Makueni	21,094	1,343	16,116	115	5,975	687,770	
	Wajir	8,423	356	4,268	30	10,239	312,191	
							3,214,375	
2	County	Effective	County	18 Ksch per h	Est Financial benefit/ HH/ year	UK££	Number of HH affected	Benefits of CCCF
	Isiolo	10.69	Isiolo	1,703	20,433	146	14,893	2,173,568
	Makueni	15.96	Makueni	903	10,841	77	5,975	462,644
	Wajir	5.17	Wajir	641	7,687	55	10,239	562,209
								3,198,421

Table 25 Financial benefits of CCCF water investment, by county

Two methods to calculate the economic value of these savings (numbered in pink in Table 25), both approaches yield similar value estimates:

- Using the estimated hourly wage from the IHS data ($f_{3.21}$ million)
- From Cook et al (2016), using 18 KES per hour (\pounds 3.20 million).

Total costs – see Table 11 – show expenditure of \pounds 1 million. Hence, we have obtained stark evidence that this initiative is yielding considerable benefits for the beneficiaries.

Examples of community co-investment:

- "the project did not fully utilize the potential of the rock catchment because the tanks are too few. This encouraged community to invest in additional tanks for storage for use during the dry season. Inspired by this the neighbouring school (Masue primary) has also acquired additional tanks for storage (two 10,000lts tanks and repaired an old 70,000lt masonry tank) to store water for the dry seasons for school children (the school now has boarding facilities since the water became available in 2017)."

Furthermore, this is only one element of the benefits seen by the beneficiaries– see Figure 6**Error! Reference source not found.** Plus, there are process benefits within the political and policy-making infrastructure at Ward, County and national level owing to the CCCF Mechanism.

Sustainability, other broader benefits:

"There are incidences where some users have refused to pay for the services"

"When communities own the process, the project is likely last a lifetime and therefore achieving sustainability becomes easier"

"I now have the financial training to do my personal book keeping and I have also learned how to prioritize"

"I can explain to my friends how to place tender bids without which information one would not win a tender"

"Even me because of the training, I applied for a job and got employed as an ECD teacher, the training added value to my CV and now I have a job"

Youth – a youth representative from Oldonyiro told us that..."what I can say is that from the project monitoring visits that we have to make, project has brought to us some 'fame'. As I walk around people ask me 'how is that project of ours?'. Even women in the area know about me. They say can you consider this another project in this area."

Testimony of the chairman of Oldonyiro WCCPC – "Before getting to this committee I was just a herder in the bush. I knew very little Kiswahili. But now after getting to this I am knowledgeable.) I have even made a mabati house, all my kids are in school and now I am able to mix up with people in town. Before I had not seen the need to take my children to school. I thought I was wasting time, I thought they were better off herding, but the seminars and outings have opened up the world to me".

This justifies the broad benefit-cost and indicates strongly the value in the use of the CCCF Mechanism coupled with its attendant CIS, information and etc. without monetising the other factors – in Figure 6.

Affordability: Affordability for the government in future (ex-donor pilots)

There is more cost effective management of the water systems. "In the past people used to bring their own fuel and the pumping machine. Roughly this costed 500/- per watering since they would hire a motorbike to come from the nearest centre and pay its return trip. Then there was a big decision, and announcements were made in the mosques and the decisions were acceptable to those who were there and those who weren't. That there be a community pump and that people pay a smaller fee to water their animals. The community is now happy with the management"

Discussion

Access to water is a cornerstone challenge for all populations living in the drylands of rural Kenya. While many donor and public projects have focused on water access, the decision making on critical components – location, water type, contractor, local labour, etc. – coupled with accountability and responsibility, have resided partially and more often fully, outside the beneficiary area.

The CCCF mechanism seeks to leverage the value of local participation in decision-making as an integrated part of the political system, not a parallel process. The CCCF Mechanism has complemented devolution in developing a bottom-up approach that is successfully delivering value-for-money to development partners, bringing immense direct value to poor households in the three Counties, empowering communities, and amplifying the voices of poorer rural communities along the political supply chain. Outcomes are summarised in

Figure 17.

Furthermore, in addition to drought and climate resilience through improved water access, a cascade of economic benefits has occurred. This includes economic, financial, social and environmental benefits reported in our surveys. In addition to each household spending almost two hours less collecting water each day, we see the average household diversifying economic activity, increasing food security, improved livelihoods, less physical and emotional stress on women and children from water collection activity, and reduced costs of water. The average household is spending almost two hours per day less time collecting water.

There is strong evidence from stakeholders (95%+) that the changes are positive, and further that the public sector and NGO community are eager to replicate the CCCF Mechanism in all decisions and projects. The principles of bottom-up participatory budgeting and governance are proven as value drivers across ASAL regions of Kenya.

The challenge for all concerned is to learn from this process, to deliver efficient future projects that can deliver on the goodwill and positive economic uplift of these existing Counties.

Accountability, engagement and empowerment appear critical elements highly valued by the beneficiaries, and it remains to be seen how this will translate into lasting change for other issues, not just climate change and water access. For instance, other economic development benefit streams, such as access to healthcare products, financial instruments and data and broadband.

Policy and regulation outcome	 Climate Change Legislations Act in Wajir CCCF Act, 2016 and Isiolo CCCF Act, 2018; Makueni CCCF regulations 2015. Effective use of drought and climate resources Increased national, county and ward-level credibility
Governance outcomes	 Increased community trust in climate and drought investments Greater transparency Greater stakeholder engagement Better checks and balances in service delivery Less corruption owing to decentralised procurement rules Greater scrutiny of decisions and investments by beneficiaries and other stakeholders Community ownership Improved natural resource governance/less conflicts over water/pasture?
Climate and drought resilience outcome	 Diversification of crops and household income Healthier herds Time saved herding, walking
Service provision outcomes	 Greater access to water Higher quality construction Local needs addressed first
Community empowerment outcomes	 Higher utilisation Co-investment in construction Empowerment on ability to influence decisions, negotiate with politicians and contractors

Figure 17 Summary of outcomes from the CCCF Mechanism, across 3 Counties

The learning has shown that some improvements need to be addressed:

Further investment in water – many respondents noted the need for further investment in water infrastructure to enhance water access for their communities. This includes piping of water into towns, better waste and sanitation, more boreholes, and provision of water kiosks.

Communication: was raised by many respondents as an area where further investment is required. Examples include requests for more regular communication, greater use of local languages to ease understanding, communication on intended next phases, and activity at County levels.

Expectations management: Some communities suffered from transactional expectations from development projects that were unmet by the CCCF Mechanism. Ensuring the political process is not hampered by such expectations will be key for scalability.

Flexibility: It is critical for the scalability of the CCCF mechanism to enable all stakeholders to make decisions, and to be flexible when engaging in processes. We suggest a risk-based approach is taken,
possibly funded by a draw-down contingency fund. Currently, for instance, when processes break-down for whatever reason, there are often insufficient funds set aside or protocols to enable the community, Ward and County stakeholders to re-start or find solutions. This has proved costly in instances where only one priority had been selected by the community, entailing a costly process of re-engagement to establish subsequent priorities for investment. This could have been avoided by having several selected priorities at the initial meeting. Other examples include where costs have escalated meaning the project needs to be re-cast, and when circumstances necessitated hiring a lawyer competent on pastoralist issues which was unforeseen and expensive. Equally, changes to the government roles are relatively frequent requiring persistent investment in training and capacity-building, which require funding:

- Planning for meetings: Travel to the meetings is challenging in the larger counties. In Isiolo, "It's is not possible to come from one ward to the county headquarters and return in one day. It is necessary to hire vehicles if one has fixed plans for certain days otherwise in some cases vehicles only operate on one market day of the week." Some representatives dwell in rangelands without access to email or phone signals. Some meetings are called at relatively short notice.
- Lesson is that selection criteria not respected/not understood...or maybe not appropriate. E.g. criteria for being WCCCPC member including agreeing to be a volunteer, this info clearly not widely communicated.

Capacity: Members of the CCCPC noted that communities are demanding service providers from their localities who may not have capacity and skill to construct structures.

Inclusion: The CCCF Mechanism demonstrates the value of embedding inclusion into political decisionmaking processes. In order to ensure this principle is integrated and adhered to in practice, our learning shows added support may be required. For instance, to ensure women, clans, youth and the disabled are able to participate fully.

Furthermore, ensuring that inclusion is offered persistently throughout the lifecycle of projects, from initial assessment to implementation. For instance, in Makueni, one community members pointed out that they weren't involved directly in the vulnerability assessment, but were asked to validate its findings.

Movement of pastoral communities and specifically youths raises ongoing challenges to ensuring inclusion, with some WCCPC structures without youth representatives and even forced re-elections which are costly and time-consuming.

Economic empowerment: better structure of services for marginalised groups – particularly women and youth – who wish to enter or expand markets in trades, livestock and other SMEs.

Clarify political process implementation: Respondents report several instances of the County not adhering to the principles of the CCCF Mechanism. This illustrates the need for governance mechanisms that the Ward and communities can exercise to ensure the political process is adhered to.

Private sector. include members from the private sector. This can be done through the expansion of the CCCF fund to include other financial model that gears towards private sector financing such as clean energy, loans aggregators, commercial water management companies, insurance services and agricultural suppliers among others. Private sector can as well contribute a percentage (agreed amount) in support of climate change adaptation as part of their corporate social responsibility.

Decision-making: Several respondents raised the issue about the need to incorporate several elements into decisions – inclusion, technical aspects, and financial aspects. This requires quite complicated trade-offs and governance. Who provides these information and data – for instance on the technical aspects of water pan management or the difference in strategic value in upgrading existing water pans or establishing new ones? Guidance is clearly needed on this for decision-making forums.

Design features: OF – some practical steps are required to ensure the OF can be used appropriately by the WCCPC members and does not prove onerous transactional to access the finance:

- OF management is harder with greater distance to the local bank branches
- Accounting documents such as invoices and receipts cannot be gotten from the shops
- Requirement for many bank signatories led to inconvenience in cash withdrawal
- Accounting for funds is difficult without financial mgmt. skills.

Development of a suite of indicators: ideally that can be dashboarded and tracked across CCCF Mechanism Counties and further afield. Some indicators are presented in this paper – such as investment cost per household,

Transformational adaptation: The CCCF Mechanism has been termed transformational by some authors. Brooks (2017) writes: "The Isiolo CAF clearly demonstrates how this work can deliver transformational changes in governance and policy regimes that have facilitated actions to improve resilience to familiar climate hazards, and which are likely to increase the resilience of existing systems to climate change. The Isiolo CAF and associated policies and legislation represent an exemplary governance framework for resilience and adaptation at the sub-national level, based on decentralised climate finance, predictable budgets, and participatory decision-making relating to resilience and adaptation investments. This model should serve as an example to other counties, and indeed to other countries". While the changes in governance and policy appear positive, transformational change is only glimpsed in pilot studies, and we must reserve judgement until it is scaled to ascertain the full impact of the CCCF Mechanism.

Greater certainty over the scale of benefits: Here we monetise the economic benefits of the reduced water collection time alone at over $\pounds 3$ million per year, which far outstrips the financial investments by development partners. The actual ratio of benefits appears to be high, but we need further information and monitoring evidence into the future to ascertain the precise ratio. Factors to consider include:

- Length of time these initial investments continue to be used for, the costs of maintenance (and who bears this)
- The profile of those receiving benefit
- Co-investments made by other stakeholders, which remain unquantified by this report:
- GoK has invested in infrastructure, decision-making processes and a vast array of services to ASAL areas
- Community over two-thirds of respondents report investing their time, labour and resources in making the investments under CCCF Mechanism a success
- Development partners many have been investing in many development priorities, not just the CCCF Mechanism, across the three Counties for many years.

Furthermore, potential costs from the disruption of the CCCF Mechanism must also be considered, but are beyond the scope of this report:

- Costs of disruption to the existing benefits of the informal pastoral and customary rangeland management systems. We have found evidence from respondents of less time required to find pasture, and there is higher quality and quantity of meat. Yet, we lack the data to provide rigour to assessing costs and benefits of disruption to these systems.
- Costs of improved access in light of traditional and customary systems of negotiated land and water access such as dedha. On one hand, there is evidence that dedha shares its approach with the CCCF Mechanism and these commonalities are generating renewed power for dedha and the Elders.⁷³ Yet, disruption is often as famous for its unintended consequences as for its successes. This learning has failed to provide evidence, and this will be important for assessment in subsequent learning exercises.
- The loss of livelihoods of some potentially poor households owing to a change to the status quo. For instance, following the CCCF Mechanism, water vendors are facing wider access to water, less demand for their product, and lower prices. We need to assess whether these roles have simply been lost or whether a new stream of opportunities has taken its place.

Further learning is required:

- The survey tools would be improved with greater quantitative approaches, particularly with respect to questions on happiness with the process, outcomes and household economics of before-and-after CCCF Mechanism project investments in their communities.
- Baselines need to be persistently updated, and where possible common and harmonised to enable comparison
- Climate resilience questions need to be expanded to ensure we can affirm VfM

⁷³ See Ada Consortium (2017). Politics and Management of Pasture and Water in a Changing Climate. Ada Consortium, <u>http://www.adaconsortium.org/index.php/component/content/article/95-blogs/235-politics-and-management-of-pasture-and-water-in-a-changing-climate?Itemid=437</u>.

- Develop a water management master plan to cover delivery, policy, management, maintenance and legislation - for each County which integrates CCCF Mechanism protocols and processes where appropriate and complements this with other delivery vehicles, including public provision and private entrepreneurs, and together as public-private partnerships
- To understand the changes in economic factors is critical. For instance, we were unable to capture changes to herd sizes or profile, or changes in gross household income.
- Consultancy on use of OF to date is needed to clarify understanding on its use, how decisions are being taken and what additional value extra funding may enable
- Better administration and data on the functioning of these related to CCCF Mechanism numbers active, meeting frequency, finances, key decisions made, investments
- Improved data is required to provide context to these surveys which have been focused on the beneficiaries and those stakeholders at the heart of the development of the CCCF Mechanism. This includes:
 - o Secondary data
 - o Counterfactual research
 - Wider ecosystem benefits carbon sequestration, wildlife, landscape benefits.
- Consideration should be given to understanding the full suite of changes from the disruption to political processes. For instance, what is the impact on customary institutions?
- It is critical to integrate the private sector meaningfully in the project and in its learnings.
- Outcomes and impacts from the TAMD and CIS work would be useful to integrate into learnings.
- The financial incentives associated with the design features for the CCCF Mechanism need to be systematically assessed. ⁷⁴
- Distribution of returns to communities. Although the economic value created through reducing water collection times are stark, the team feel there is scope for more detailed research on this aspect, with a specific focus on both the social distribution of returns and those entrepreneurs who are being forced out of business.
- Marginalised groups in communities. Further research and quantification on the benefit streams to women, youth and other marginalised groups would expand our understanding of the empowerment enabled by the project investments.
- Learn from Table 24,that for Isiolo and Wajir highlight challenges on community participation, costs, communication and participation of respondents in decision-making. Targeted, focused follow-up is required with the beneficiaries and the Ada Consortium partners to understand how this can be dealt with in a positive, seamless manner, and ultimately to support learning for other future DCF initiatives.
- The importance of the food-energy-water nexus for rural livelihoods, climate resilience and inclusivity is well understood. Future assessments of climate resilience in Kenya and ASALs generally need to be cognizant of this, and assess, for instance, changes to milk production as

⁷⁴ Vivid Economics, 2017: "Instrument design should be adaptive and respond to contexts, partners, the timeframes needed to achieve outcomes, and the supporting instruments needed to enable success"

proxy for herd stability and growth, and indicators of well-being to proxy for general food security., market prices for cattle as a proxy for health of the herd, number of school days per pupil, changes to savings or investments, and working days lost through illness.

Part II – Context, Background of the CCF Mechanism

Summary of the key features, design features, funding and stakeholders of the CCCF Mechanism in Kenya, since 2012.

CCCF Mechanism

The CCCF mechanism is designed to enable county governments access climate finance from accredited National Implementing Entities (NIE) of the Green Climate Fund (GCF) or other funding sources (e.g. Kenya's National Climate Fund, budgetary allocation, private sector) to fund investments in public goods prioritized by local communities that build climate resilience. The mechanism, in enabling county governments to institutionalise a decision-making process that puts communities in control of their adaptation priorities, also contributes to the objectives of the Constitution (2010), the County Governments Act (2012) and Climate Change Act (2016) that obliges county governments to ensure citizen-led approaches to the planning and prioritisation and climate proofing of public funding for development

Components

The mechanism consists of four interrelated components – see Figure 1 below.



- a. **County Climate Change Fund**. The CCCF is a public fund under the discretionary management of the county government, with the necessary fiduciary mechanisms to ensure accountability and transparency (see CCCF financial management procedures manual). The fiduciary mechanisms are consistent with public finance policy and law and complement the counties' existing finance systems. As public funds, the CCCFs can be capitalised from various sources, such as county development budgets, national climate funds or in-country bilateral and multilateral development partners. It is anticipated that the counties will be able to draw down resources from these global climate funds. Wajir and Makueni counties have passed legislation formalising the CCCFs and committing themselves to capitalise them with a minimum of 2% and 1% of their development budget. Draft CCCF legislation is before the Members of the Assembly in the other three counties.
- b. **County and Ward-level Climate Change Planning Committees**. Representative Ward Climate Change Planning Committees (WCCPCs) are responsible for the identification and prioritisation

Figure 1: Four components of the CCCF mechanism

of investments in local public goods that strengthen the adaptive capacities of communities. WCCPCs conduct participatory assessments of a community's resilience to climate hazards and future climate change. These assessments are used by WCCPCs through a community consultation process to prioritise investments in public goods whose costs fall within their budget envelope and which meet the funding criteria that promote climate resilient growth and adaptive livelihoods (see Box 2). Each WCCPC is allocated a set budget in advance of their planning that represents an equal share of the overall budget allocation earmarked for ward-or inter ward level investments. Committee members consider options and weigh up the costs and benefits of different investments against the CCCF funding criteria and arrive at a consensual decision. The prioritised investments are submitted for review to the County Climate Change Planning Committee (CCCPC) composed of representatives from the ward committees, local government and other stakeholders. The CCCPC does not have authority to reject WCCPC prioritised proposals if the first five proposal criteria are met (Box 2). They are expected to provide additional technical support to the WCCPCs, and work together to ensure the proposals meet the last two criteria. Once approved, WCCPCs led the procurement process and the chair of the CCCPC sign contracts with service providers guided by the Public Finance Management Act 2012.

- c. Climate information and resilience planning tools. Climate information provided by the Kenya Meteorological Department (KMD) is integrated into the participatory resilience assessments or resource mapping carried out by WCCPCs to ensure that prioritised investments take into account current and future climate variability and hazards. County directors of meteorology (CDMs) play a key role in institutionalising climate information services (CIS) at county level. They are standing members of key decision-making fora such as the CCCPCs responsible for ensuring WCCPCs proposals specifically addressing climate change and uncertainty. They are also responsible for the development of county CIS plans and facilitating the two-way communication of weather and climate information between the Meteorological Department and county and community actors. Resilience Assessments (RA) and participatory digital Resource Mapping (RM). These participatory tools enable more informed discussion between communities and county government planners on the factors that strengthen or weaken local livelihood systems in the face of climate variability and change, differentiated by production system, gender and age. The tools complement the CIDP process by empowering local people to explain to those external to their community, such as government planners or NGO staff, the logic of their adaptation strategies in the face of climate variability and change. It provides an opportunity for county governments and communities to discuss how local livelihoods function and interact, the factors that constrain their resilience to the impacts of climate change, and practical ways to build adaptive capacity and long-term resilience.
- d. **Tracking Adaptation and Measuring Development**. TAMD is a 'twin-track' framework that evaluates the extent and quality of climate risk management (CRM) processes and actions on the one hand (Track 1), and the associated development and adaptation outcomes (and their longer-term impacts) 'on the ground' on the other hand (Track 2). The TAMD framework was tested in Isiolo and Kitui counties where the focus was on two fronts first, helping WCCPCs develop theories of change and relevant M&E indicators for public goods investments; second,

strengthening the existing M&E systems at county government to better support climate risk management.

CCCF design features

Funding criteria

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

The CCCF mechanism introduces several features designed to strengthen the capacity of county government, communities and their institutions, particularly for the management of natural resources, to plan and prepare for climate induced hazards and opportunities. See Table 1. A key premise of the CCCF mechanism is that county government support for community-identified and driven adaptation, often building on existing livelihood strategies for managing climate variability and extreme events, is more sustainable, benefits more people and leads to transformative adaptation to address future climate change. This central premise needs to be assessed.

Table 26 Key de	esign features a	and premises	underpinning	CCCF mechanism
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CCCF	Design feature	Premise
component		
The Fund	90% of fund allocated	70%-20% split random. Learning to establish optimal distribution of funds
	for investments of	between ward and county-level investments. But premise is adaptation needs to
	which 70% prioritised	be tailored to local context. Elected, representative WCCPCs are better placed
	by WCCPCs and 20%	than county-level actors to identify community-prioritised investments that build
by CCCPCs.		climate resilient development, are more sustainable, benefit more people & lead
		to transformative adaptation to address future climate change.
10% of fund allocated		10% allocation random. Learning to establish nature of management costs to be
	for operational costs	legitimately covered and the minimum operational budget for the management of
	of WCCPCs and	CCCF and full project cycle.
	CCCPCs to administer	
	fund.	

	Funds are divided equally among wards, rather than according to population density or vulnerability; and ward committees expected to consult each other to identify cross-ward investments as a	In ASAL environments, characterised by climate and natural resource variability, communities typically access local public goods such as water or forest resources as well as social services (e.g. health) across different ecological & administrative boundaries. For example: resilience of pastoralists in Garissa dependent on access to pastures, water, etc. in Isiolo at certain times of the year. Cross-ward consultation designed to overcome limitations of using administrative units of wards as planning frameworks and promote landscape-level/ecosystem- based approaches to planning.
	"landscape" level. WCCPCs and CCCPCs informed of their budgets in advance of planning.	Planning against known guaranteed budgets encourages a more effective, participatory, transparent & accountable planning process that delivers high priority investments that benefit the vulnerable with good value for money.
Planning Process	WCCPCs composed of elected community members through public vetting against criteria of integrity, commitment, leadership, knowledge rather than academic qualifications. WCCPCs provided with operational fund to cover costs of managing project cycle (consultation, proposal design, tendering, M&E).	Public vetting reduces risk of political manipulation and exclusion of vulnerable, builds consensus on those selected to serve on & public commitment by those selected to be accountable. Criteria of integrity, leadership & local knowledge of greater importance than academic qualifications when WCCPCs can access technical assistance from county-level actors, and receive training on project cycle & financial management, climate change and committee governance. In Isiolo, inclusion of customary leaders (<i>dedha</i>) builds legitimacy of local institutions and provides "bridge" between customary and statutory institutions. Enables WCCPCs to function independently & ensure better quality consultation & accountability; identification of more effective investments that meet local priorities and funding criteria; better value for money in design & implementation of investments; more effective M&E. Also builds capacities (skills, confidence) of WCCPCs to participate more effectively in wider local governance & planning processes; creation of effective local institutions for success of devolution, maintenance of peace.
	tendering process with support from CCCPCs. Design of resilience planning tools (resource mapping, resilience assessments) to align community planning with county government planning Design of County CIS plans	 WCCFCs to ensure and account for the good use of their budget allocation of CCCF; builds accountability and transparency. Enables communities to articulate their knowledge of critical resources and resilient livelihood strategies in manner that county planners can understand, appreciate and support; builds dialogue, understanding and respect between government actors and citizens central to success of devolution agenda; identifies practical and cost-effective ways in which county planning can strengthen local adaptive strategies & build longer-term resilience to climate change. Enables the institutionalisation of CIS in all development planning and budgeting at county level; identification of investments that better prepare counties and
	Fund	communities to respond to and recover from climate induced hazards.

CCCPCs not	WCCPCs remain in control of their adaptation priorities in planning process in
authorised to veto, but	line with provisions of the Constitution and the County Governments Act.
strengthen as	Reduces risks of political interference and builds greater accountability of
necessary, WCCPCs	WCCPCs to local community.
investments priorities	
IF in line with funding	
criteria.	
Mainstreaming of	Build capacity of CIDP M&E systems to assess outputs, outcomes & impacts of
TAMD framework	climate adaptation & climate resilient development.
into CIDP	

Annexes

Annex 1 – individual household survey tool

Introduction (to be spoken to each surveyed)

"Hello my name is and we are here today to talk about the project. We would like to inform you that the information we are gathering today will only be used for research and it would not be shared with anyone outside the research team.

1. General information

1.1 Date of interview:/	·	Name of enumera	.tor:
1.2 Name of respondent (optional	l):	Sex: 1) Male	2) Female
1.3 Location	. Sub-location	Vi	llage
2. Household head's information			-

2.1 Sex: 1) Male	2) Female	2.2 Age? Years
2.2 Education: 1) None 2) Primar	y (3) Secondary	y 4) Post-Secondary
2.3 Household Size/Composition (per	ople live together) No. (of male No. of female
2.4 What is your main livelihood activity	?	
2.5 Please list all the income generation :	activities and how much you	a get from each per month
Source of income	Rank (1, 2, 3,4,5,6,7)	Average amount (Kshs) per month
Livestock – sales of animal		
Livestock – sales of milk		
Animal Herding?		
Crops farming		
Petty trade		
Casual labour (specify)		
Formal employment		
Remittances		
Poultry		
Others Specify		

3. Water Use

3.1 How far was the nearest water point during the wet season in the year 2015?
3.2 How far was the nearest water point during the dry season in the year 2015?
3.3 Before the WCCPC (WAPC) project how far was access to water during the dry season?
3.4 After the WCCPC (WAPC) project how far was access to water during the dry season?
3.5 How many hours do you use to go for water before the WAPC project? hours
3.6 How many hours do you go for water after the WAPC project? hours
3.7 How many liters of water does the WAP project provide to your household during the dry season?
liters
3.8 How much is the 20 liter Jerrycan of water during the dry season ?Ksh.
3.9 How many animals do you water at WAPC project? 1) Cattle/cows
3.10 How do you pay for water? And how much?
4. Engagement and communication with WAPC
4.1 Did you know the WAPC? 1) Yes
4.2 If Yes did you participate in the choice/vetting of the WAPC members? 1) Yes 2) No
4.3 If yes what are your views on vetting process? Was it a good idea 1) Yes
4.4. If yes did lead to better leaders? 1) Yes 2) No

4.4	If yes did lead to better leaders? 1) i es
4.5	Do you know all the members of the WAPC? 1) 0 members 2) 1 – 3 members
	3) 4 – 6 members 4) All members
4.6	How well do you understand the role of WAPC? 1) 0 Nothing at all 2) Not much
4.7	If you understand the role of the WAPC, what do you understand?
4.8	Were you consulted by WAPC to identify your priority action? 1) Yes 2) No
	(if no move to section 5)

4.9 How did the WAPC explain to you their role in prioritising investments to build resilience against climate change? 4.10 Follow-up consultation: how and how often were you contacted by the WAPC after the initial consultation? (e.g. informed of final investment decision, informed of when the work on the investment will start, informed of the name of the service provider, informed on how they can monitor the role of the service provider) 4.11What do you think was the value of the consultation? What did it add to the decision-making? (+ve and/or – ve) 4.12Did the household/ family discuss the WAPC or consultation process? Why? How? 4.13Please name the PROJECT you wore consulted about? 5.1 What are your views on the quality of the investment in terms of decision making and implementation? 4.14 Was the consultation and decision made inclusive? Please explain (women, youth, etc.)..... 4.15 How did you feel the prioritisation decisions were taken? 4.16 What are the benefits to your household of being consulted about this project?

5. Project (VFM, effectiveness)

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5.1 Are you aware of the cost of this investment? 1) Yes
5.2 If aware about the cost of the investment then how much did it cost?
5.3 Do you feel the money well spent? 1) Yes
5.4 What was your household's and your community's contribution to the investment? (both financial and non-financial – e.g. some labour or meeting attendance or)
5.5 Is your household happy with the investment/project? Why?
5.6 How is the project benefiting your households and others?
5.6.1 Your households:
5.6.2 The women in your households
5.6.3 Your community
5.6.4 Other:

5.7 Ha [i.e list	as water availability changed after the project? If so, how. If not, why? For the following: e. reduced waiting time for women to collect domestic water; cleaner/potable domestic water; AND for livestock could have sub- t on – quicker watering times/less waiting for livestock; less congestion at troughs; water lasts longer after the end of the rains
(th	5.7.1 Potable water
	5.7.2 Water for livestock
5.8 W	'hat is your view on the WAPC decisions? (good, bad, focus)
5.9 Ha	as the investment changed how the community manage water access for livestock or potable water? If yes
5.10 D to	Do you have any criticisms of the process, implementation or decisions of the WAPC which you would like see addressed?
 6. Pos	st-project (Empowerment questions)
6.1 H: ар	as the WAPC asked you for feedback on the project? By Who? When? Do you feel you were consulted propriately?
···· ···	
6.2 W 6.2.1	That impact has this project had on relations? Within the following? Within the family?
6.2.2	Within the community?
6.2.3	With other/ external groups?
7. Pre	vious projects - comparison

7.1 Compared to previous project/any other project that was done before the WAPC project (name if possible) how was the process with this new one WAPC compared with the pervious one?

Features	1 – better 2 – same 3 – worse	
1. Community participation		
2. Design		

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3.	Implementation of the project	
4.	Quality of the project	
5.	Communication	
6.	Your involvement in decisions	
7.	Overall project Costs	
8.	Other (specify)	

7.2	What are the challenges with the WAPC/CCCF project?
7.3	How can the WAPC project be done better?
7.4	how can CCCF projects influencing other projects
7.5	Any other comments

Thank you

Annex 2 – Survey tool for focus groups and key informants

1. Effectiveness of CCCF Mechanism				
VFM & cost-effectiveness				
· Inclusion				
· Appropriate investments (e.g. address CC, support dominant livelihoods/econom				
etc.)				
2. Challenges				
3. Successes				
4. Any quantification				
5. Anything to follow-up on				
6. Examples provided that can be used in the final report				
7. Any quotes that appear to illustrate the benefits-costs of the CCCF Mechanism.				
8. Planning and how CCCF strengthens CIDP process				
Plan better for climate				
· Deal with climate variability and periodic climate shocks				
9. Synergy With other drought initiatives				
10. Constitutional/ National/ wider development relevance				

COMPLETE THIS SECTION

• Add in extra rows by right-clicking INSERT ROW

FRAMEWORK FOR LEARNING ANALYSIS FOR FGD&KII					
1. Effectiveness of CCCF Mechanism					
	· VFM & cost-effectiveness				
Page					
	· Inclusion				
Page					
	· Appropriate investments (e.g. address CC, support dominant livelihoods/economy, etc.)				
Page					
2. C	2. Challenges				
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3. Sı	3. Successes				

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	4.	Any	quantification
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	5.	Any	thing to follow-up on
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	6.	Exa	mples provided that can be used in the final report
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	7.	Any	quotes that appear to illustrate the benefits-costs of the CCCF Mechanism.
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	8.	Plan	ning and how CCCF strengthens CIDP process
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	Plan better for climate
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	Deal with climate variability and periodic climate shocks
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9. 5	Synergy With other drought initiatives
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10. 0	Constitutional/ National/ wider development relevance
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References

Ada Consortium (2018). Ada Final Report 2013-17. Ada Consortium, Nairobi, 39pp.

Ada Consortium (2018). Initial findings from the Learning Project survey. Ada Consortium and IIED, 50pp.

Andvuate, D.V. (2014). The Place of Community Radio in Rural Development in Kenya: Case Study of Sauti FM in Rarieda, Siaya County. University of Nairobi, 117pp,

Apollo, S. (2018).How devolution has changed Kenya. The Nation (Kenya), April, 23 https://www.nation.co.ke/news/How-devolution-has-changed-Kenya/1056-4494048-117gesa/index.html (2018).How devolution has changed Kenya. The Nation (Kenya), 23 April, Apollo, S. https://www.nation.co.ke/news/How-devolution-has-changed-Kenya/1056-4494048-117qesa/index.html Barnes, J. I., MacGregor, J., and Weaver, L. C. (2002). Economic Efficiency and Incentives for Change within Namibia's Community Wildlife Use Initiatives. World Development 30(4): 667-681.

Becker, G. S., 1977. A theory of the production and allocation of effort. NBER Working Paper No. 184, National Bureau for Economic Research, New York.

Brooks, N., Anderson, S., Burton, I., Fisher, S., Rai, N., & Tellam, I. (2013). An operational framework for tracking adaptation and measuring development (Climate Change Working Paper No. 5). London, United Kingdom: International Institute for Environmental Development (IIED).

Brooks, N. (2017). Adaptation and Resilience Learning From The Kenya Starck+ Programme: Key Findings. DfID, Nairobi, Kenya, 18pp.

Churchill, A., 1987. Rural Water Supply and Sanitation: Time for a Change. World Bank Discussion Paper No. 18,TheWorldBank,Washington,162pp,http://documents.worldbank.org/curated/en/840401468764671363/pdf/multi-page.pdf.

Clark, H & Anderson, A. A (2004). Theories of Change and Logic Models: Telling Them Apart Presentation at American Evaluation Association, Atlanta, Georgia, November 2004

Colenbrander, S., Dodman, D. and Mitlin, D. (2018) Using climate finance to advance climate justice: the politics and practice of channelling resources to the local level, *Climate Policy*, 18:7, 902-915.

Cook, J., Kimuyu, P., Blum, A.G., and Gatua, J., 2016. A Simple Stated Preference Tool for Estimating the Value Travel Time in Rural Africa. Journal Benefit-Cost Analysis 7: 221-247. of of https://www.cambridge.org/core/journals/journal-of-benefit-cost-analysis/article/simple-stated-preferencetool-for-estimating-the-value-of-travel-time-in-rural-africa/10F287CABE447CF73B441FBB215BCA6D/corereader.

Demie, G., Bekele, D. and Seyoum, B. (2016) Water accessibility impact on girl and women's participation in education and other development activities: the case of Wuchale and Jidda Woreda, Ethiopia. *Environmental Systems Research* 5:11.

DFID (2011). DFID's Approach to Value for Money (VfM). Department for International Development, London, UK, 15pp,

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/49551/DF ID-approach-value-money.pdf.

DFID, <u>http://www.starckplus.com/index.php/about-starck</u>.

Finch, C.M., Omolo, A,A. (2015). Building public participation in Kenya's devolved government: overview of key challenges and opportunities for enhancing participation in newly devolved institutions and systems: Building public participation in Kenya (English). Kenya devolution; No. 1. Overview note. Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/458231467997561854/Building-public-participation-in-Kenya

GoK (2010). Constitution of the Republic of Kenya. Government of Kenya, Nairobi.

GoK (2010). National Climate Change Response Strategy. Government of Kenya, 122pp,

https://cdkn.org/wp-content/uploads/2012/04/National-Climate-Change-Response-Strategy_April-2010.pdf.

GoK (2013). National Climate Change Action Plan 2013-17. Government of Kenya, 258pp, <u>http://www.kccap.info/index.php?option=com_content&view=article&id=31</u>.

GoK (2016). Kenya National Adaptation Plan 2015-2030. Government of Kenya, 68pp, http://www.kccap.info/images/docs/nap_final.pdf.

GoK (2015a). Kenya's Intended Nationally Determined Contribution (INDC). Government of Kenya, Ministry ofEnvironmentandNaturalResources,7pp,http://www4.unfccc.int/ndcregistry/PublishedDocuments/Kenya%20First/KenyaNDC20150723.pdf.

GoK (2015b). Country Programme Framework on Ending Drought Emergencies by 2022. Government of Kenya, 192pp, <u>http://www.ndma.go.ke/index.php/resource-center/ede-reports/send/43-ending-drought-emergencies/4251-common-programme-framework</u>.

GoK (2016a). Climate Change Act (No. 111 of 2016). Government of Kenya, 25pp, http://www.kenyalaw.org/lex/rest/db/kenyalex/Kenya/Legislation/English/Acts%20and%20Regulations/C/C limate%20Change%20Act%20-%20No.%2011%20of%202016/docs/ClimateChangeAct11of2016.pdf.

GoK (2016b). National Drought Management Authority Act. Government of Kenya, 17pp http://kenyalaw.org/lex/rest//db/kenyalex/Kenya/Legislation/English/Acts%20and%20Regulations/N/Natio nal%20Drought%20Management%20Authority%20Act%20-%20No.%204%20of%202016/docs/NationalDroughtManagementAuthorityAct4of2016.pdf.

GoK (2018). Press Release Cabinet Meeting Held on 29th May, 2018. Government of Kenya, Cabinet Briefs, http://www.president.go.ke/2018/05/29/press-release-cabinet-meeting-held-on-29th-may-2018/.

IIED (2014). Monitoring and evaluating climate adaptation: a review of GCCA experience. IIED, 4pp, <u>http://pubs.iied.org/pdfs/17253IIED.pdf</u>.

Isiolo County (2016). The Isiolo County Customary Natural Resource Management Bill, 2016. Isiolo County, Kenya, 12pp,

http://kenyalaw.org/kl/fileadmin/pdfdownloads/bills/2016/2016/IsioloCountyCustomaryNaturalResourceMan agementBill2016.pdf.

Isiolo County (2018). The Isiolo County Climate Change Fund Bill, 2018. Isiolo County, Kenya, 27pp, https://assembly.isiolo.go.ke/wp-content/uploads/2017/08/THE-ISIOLO-COUNTY-CLIMATE-CHANGE-FUND-BILL-2018.pdf

Karani, I., Mayhew, J., & Anderson, S. (2015). Tracking adaptation and measuring development in Isiolo County, Kenya. In D. Bours, C. McGinn, & P. Pringle (Eds.), *Monitoring and evaluation of climate change adaptation: A review of the landscape*. New Directions for Evaluation 147: 75–87.

KCIC (2018). Unlocking the policy and regulatory bottle necks in the water sector entrepreneurship. Kenya Climate Innovation Centre, Dialogue/ Working Paper, 22 June, 10pp, https://www.kenyacic.org/sites/default/files/publications/Water%20dialogue%20report.pdf

Kenya Climate Innovation Centre: <u>https://www.kenyacic.org</u> KNBS (2013). Exploring Kenya's Inequality: Wajir County. Kenya National Bureau of Statistics, Nairobi, 75pp.

KNBS (2014). Socio-economic Atlas of Kenya. Kenya National Bureau of Statistics, Nairobi, 162pp. https://www.kenya-atlas.org/pdf/Socio-Economic_Atlas_of_Kenya_2nd_edition.pdf

Letiwa, P. (2017). Hope at last for the Drylands. The Nation (Kenya), 12 June, https://www.pressreader.com/kenya/daily-nation-kenya/20170612/281925952997007.

Mogeni, J. (2017). Interview with the Council of Governors of Kenya. NRG4SD, 26 June, http://www.nrg4sd.org/interview-council-governors-kenya/.

Musaya (2016). Makueni dam project transforms arid land into flourishing farms. *Standard* (Kenya), 15 March, <u>https://www.standardmedia.co.ke/article/2000195006/makueni-dam-project-transforms-arid-land-into-flourishing-farms</u>.

Ndirangu, F.I. (2014). The Contribution Of Community Radio In Promoting Good Governance Through Public Participation In Murang'a County: A Case Study Of Kangema RANET FM. University of Nairobi, 49pp.

Nyangena, J. and A. W. Roba (2017) Funding Adaptation in Kenya's Drylands. Briefing paper. IIED, 4pp, <u>http://pubs.iied.org/17418IIED/</u>.

Nyangena, J., Stott, C. and Wario, A. (2017). Finance for Resilience Building and Ecosystem-based Adaptation in Kenya. A comparative study of local and national managed funds. Ada Consortium,

Odour, C. (2015). Institutionalising Social Accountability in Devolved Governance. Institute for Economic Affairs, Nairobi, 42pp.

Palmer, C. and MacGregor, J. (2009). Fuelwood scarcity, energy substitution, and rural livelihoods in Namibia. *Environment and Development Economics* 14: 693–715.

Rossi, M. (2018). How Climate Change is Fueling Innovation in Kenya. The Smithsonian, 12 February, https://www.smithsonianmag.com/science-nature/kenya-climate-change-fuels-new-business-180968122.

Sharma, V., Orindi, V., Hesse, C., Pattison, J. and Anderson, S. (2018). Supporting local climate adaptation planning and implementation through local governance and decentralised finance provision. *Development in Practice* 24:4, 579-590.

UNDP (2010). Designing Climate Change Adaptation Initiatives: A UNDP Toolkit for Practitioners. UNDP, 62pp, <u>https://sustainabledevelopment.un.org/content/documents/951013_Toolkit%20for%20Designing%20Climate</u> <u>%20Change%20Adaptation%20Initiatives.pdf</u>.

UNEP (2016). Monitoring and evaluation for climate change adaptation. UNEP, Geneva, 18pp.

UNFCCC (2015). Good practices and lessons learned in adaptation planning processes addressing ecosystems, human settlements, water resources and health, and in processes and structures for linking national and local adaptation planning: a synthesis of case studies. UNFCCC, Subsidiary Body for Scientific and Technological Advice, 1-4 December, 95pp, https://unfccc.int/resource/docs/2015/sbsta/eng/04.pdf.

Vivid Economics, 2017. Innovative climate change financing in Kenya. Learning from financial instruments under the StARCK+ Programme. Vivid Economics for StARCK+ Programme, 39pp.

WBG (2017). Inclusive and effective citizen engagement: participatory budgeting Makueni and West Pokot Counties.WorldBankGroup60pp,http://documents.worldbank.org/curated/en/231501494574792952/pdf/1149 93-WP-P160017-PUBLIC-FinalPBreportMay.pdf.

Whittington, D. and Cook, J., 2017. Valuing Changes in Time Use in Low- and Middle- Income Countries. Guidelines for Benefit- Cost Analysis, Working Paper No. 1, BMGF, 20pp. <u>https://cdn2.sph.harvard.edu/wp-content/uploads/sites/94/2017/09/Whittington-Cook-Value-of-Time-2017.10.11.pdf</u>

Whittington, D., Mu, X., and R. Roche, 1990. Calculating the Value of Time Spent Collecting Water: Some Estimates for Ukunda, Kenya. *World Development* 18(2): 269-280. Available at: http://www.efdinitiative.org/sites/default/files/dale_0.pdf

World Bank (2011). Kenya Fact Sheets. Commission on Revenue Allocation, World Bank, Washington, USA, 65pp, http://siteresources.worldbank.org/INTAFRICA/Resources/257994-1335471959878/Kenya_County_Fact_Sheets_Dec2011.pdf

World Bank (2013). World Development Indicators 2013. Washington, USA.

World Bank (2016). Climate information services providers in Kenya. World Bank, Washington DC, USA, 46pp, <u>http://documents.worldbank.org/curated/en/706021467995075539/pdf/103186-REVISED-PUBLIC-AG-GP-TAP-CIS-Providers-in-Kenya-WEB-02292016.pdf</u>

WorldBank(2018).Data.<u>https://data.worldbank.org/indicator/SI.POV.GINI?end=2005&locations=KE&start=2</u>004. World Bank, Washington, USA.

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