



DECENTRALISING CLIMATE FINANCE

INSIGHTS FROM KENYA AND ETHIOPIA

Alice Caravani, Sam Greene, Nella Canales Trujillo and Aklilu Amsalu

Working paper



ABOUT THE AUTHORS



Alice Caravani is a development economist researcher working at the Overseas Development Institute. Her areas of interest include disaster risk reduction finance and decentralised climate finance; risk transfer mechanisms and monitoring analysis.



Sam Greene is a researcher in the Climate Change Group at the International Institute for Environment and Development. His interests focus on approaches to decentralised climate finance as well as climate change adaptation and resilience in dryland contexts.



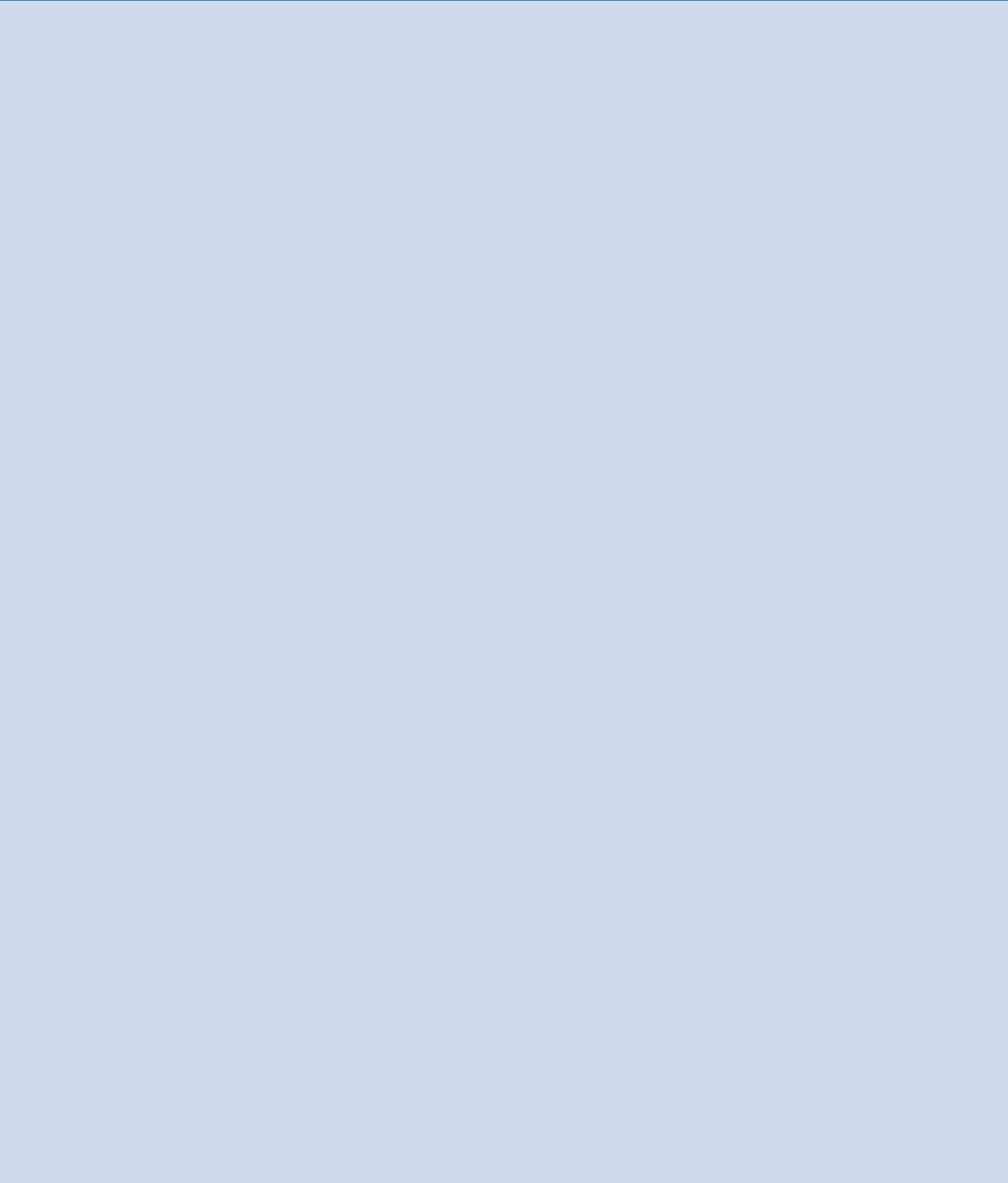
Nella Canales Trujillo is a researcher at the Stockholm Environment Institute. Her research focuses on the policy and implementation dimensions of climate finance and adaptation; and on the relationships between public and private actors for climate change action.



Aklilu Amsalu is Associate Professor of Environmental Studies at the Department of Geography and Environmental Studies of the Addis Ababa University, Ethiopia. His expertise and research interests focus on the analysis of climate change impacts; climate change adaptation and policy responses; climate finance; and natural resources governance.

ACKNOWLEDGEMENTS

The authors would like to acknowledge and are grateful to Sejal Patel for her research assistance, and Elizabeth Carabine and Neil Bird for their strong support and guidance throughout the project, from its inception to its release. We would also like to thank Emily Wilkinson, Ced Hesse, Adis Dzebo, Nicola Ranger and Sabita Thapa for their valuable and thoughtful feedback and suggestions, which greatly enriched the paper. Special thanks to Charlotte Rye, Beth Bradshaw and Jenna Saidi for their support in the design, outreach, contracts and review process. Finally, we are grateful to all the respondents in Kenya and Ethiopia for their insights and the information shared to write the country case studies.



Contents

Executive summary	6
Introduction	10
1. Delivering local-level climate finance: literature review	12
2. Methodology	19
3. Kenya case study	24
4. Ethiopia case study	51
5. Discussion	79
6. Conclusions	85
Bibliography	89
Appendix	101

Acronyms

ACCRA	Africa Climate Change Resilience Alliance
ADA	Adaptation Consortium
ADSE	Anglican Development Services East
AF	Adaptation Fund
ALDEF	Arid Lands Development Focus
ASAP	Adaptation for Smallholder Agriculture Programme
CAPC	County Adaptation Planning Committees
CBO	Community-Based Organisations
CCCFs	County Climate Change Funds
CDDE	Capacity Development for Development Effectiveness Facility for Asia and Pacific
CDKN	Climate and Development Knowledge Network
CIDP	County Integrated Development Plan
COP	Conference of Parties
CPEIR	Climate Public Expenditure and Institutional Reviews
CRGE	Climate Resilient Green Economy
CSO	Civil Society Organisation
CTF	Clean Technology Fund
DFID	Department for International Development
DRR	Disaster Risk Reduction
FCPF	Forest Carbon Partnership Facility
FDRE	Federal Democratic Republic of Ethiopia
FTIs	Fast Track Investments
GoK	Government of Kenya
INDC	Intended Nationally Determined Contribution
IFPRI	International Food Policy Research Institute
ISFL	Initiative for Sustainable Forest Landscapes
KIIs	Key Informant Interviews
KIPPRA	Kenya Institute for Public Policy Research and Analysis
LoCAL	Local Climate Adaptive Living Facility
M&E	Monitoring and Evaluation
MEFCC	Ministry of Environment, Forest and Climate Change

MoA	Ministry of Agriculture
MOFED	Ministry of Finance and Economic Development
MOFEC	Ministry of Finance and Economic Cooperation
MUDHCo	Ministry of Urban Development and Housing Construction
NAPAs	National Adaptation Programmes of Action
NAPs	National Adaptation Plans
NDCs	Nationally Determined Contributions
NGOs	Non-Governmental Organisations
NRM	Natural Resources Management
PBS	Protection of Basic Services
PSNP	Productive Safety Net Programme
PVCA	Participatory Capacity and Vulnerability Analysis
REDD	Reducing Emissions from Deforestation and Degradation
SCCF	Special Climate Change Fund
SLMP	Sustainable Land Management Programme
SMEs	Small and Medium-sized Enterprises
SREP	Scaling-Up Renewable Energy Program for Low Income Countries
StARCK+	Strengthening Adaptation and Resilience to Climate Change in Kenya plus
TAMD	Tracking Adaptation and Measuring Development
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

Executive summary

This paper explores different mechanisms for delivering climate finance at the local level. It focuses on the experiences of a national climate fund – the **Climate Resilient Green Economy (CRGE)** facility in Ethiopia – and a sub-national one – **the County Climate Change Funds (CCCFs)** in Kenya.

The paper aims to understand how well these funds take into account the priorities of local communities¹ alongside recognising and incorporating national climate change policies and development plans. The novelty of the paper lies in understanding the implications of who takes the decisions, in the investment prioritisation process and at what level of jurisdiction, along with how those decisions are taken. This leads us to discuss and interrogate the appropriate levels of decision-making for decentralising climate finance.

It emerges that climate policies in both countries are designed to include local-level priorities. Ethiopia's CRGE consists of a top-down approach including consultation processes, mainly with line ministries and regional states, which are expected to convey zone, woredas and kebele interests. The **Kenyan National Climate Change Action Plan (NCCAP)** has included a consultation process with county governments, with the expectation that counties will include the interests from wards and communities to feed into the policy. However, the extent to which regional and county governments have incorporated the priorities of lower levels of governments and communities into the policy process is perceived as limited in both Ethiopia and Kenya.

¹ As it was out of the scope of this paper to undertake interviews with local communities, their priorities have been analysed using data and information provided by sub-national government officials.

Both countries have linked their climate policies with their national and sub-national development planning processes. In Ethiopia, climate change appears to be fully mainstreamed across the key sectors prioritised in the **Growth Transformation Plan (GTP)** through a national multi-sectoral approach. While this provides coherence among different strategies and ensures climate change mainstreaming within sectors, it also limits the freedom of woredas to decide which sector to focus on or the actions to undertake, particularly if their specific contexts need to centre activities outside the national GTP priorities. In Kenya, mainstreaming is achieved on a more ad-hoc basis ensuring that the CCCFs' various projects are aligned with the **County Integrated Development Plans (CIDPs)**. This, however, has allowed each county to prioritise according to their own needs.

This indicates a trade-off between ensuring local-level participation and national accountability towards long-term climate change goals. This can be recognised in the tension between meeting local needs requiring flexible approaches that can be easily adapted to specific contexts and often oriented in the short term with more rigid national targets that account for longer-term climate change considerations. This tension generates questions regarding the appropriate level of participation and decision-making for climate change investments, particularly when referring to the most vulnerable.

Neither fund has yet achieved full financial integration into their national budget systems. Ethiopia's facility projects have been implemented through the line ministries' regular channels, but they still mainly work with international funding, with no domestic funding mobilised so far. In the case of Kenya, finance has, until the last couple of years, come from entirely external sources not allowing funds to be channeled through the national budget. However, in June 2017, the CCCFs made an important

step in securing domestic sources of finance, with annual allocations of county development budgets totalling 2% for Wajir and 1% for Makueni. These amounts exceeded the start-up funds previously offered by donors and are a good indication of the financial sustainability of the CCCFs.

Overall, we find that the characteristics of a climate finance delivery system clearly reflects the political and economic context, national development priorities and type of decentralisation process in each country. This is particularly evident in the countries examined in this study. In Kenya, devolution has given county governments significant authority over their own planning and budgeting processes. The design of the climate finance delivery system accordingly locates powers to decide investment priorities in institutions that pair community representatives with county government officials. Meanwhile, Ethiopia's more centralised approach has enabled the creation of a national fund where those same decisions are taken by central ministries.

This is linked to the need to ensure that management of funds relies heavily on domestic decision-making. This means that donor support and engagement in the design of local-level climate finance delivery systems should be careful not to undermine recipient country management of funds. Whereas donors may prefer to suggest parallel systems to ensure upstream accountability (i.e. to the donor country), this type of design could lead to dependency on external financial flows for taking investment decisions for climate change. This is particularly the case if the system is designed to work completely outside pre-existing national financial systems.

Furthermore, we find that additional investment needs to go into building expertise at sub-national levels (woredas and counties),

as this will enable community responsive adaptation and offer a better representation of local needs in investment decisions. Expertise should then be complemented with adequate financial resources that can be flexibly channelled.

Finally, we find that if local governments can demonstrate capacity and diligence in managing funds, they should be trusted to decide how well local priorities raised through community consultation meet national policies, and subsequently support them. At the same time, the decision-making power and technical climate-specific knowledge of local government officials shouldn't be overestimated and needs to be counterbalanced by rigorous application of participation tools such as vulnerability assessments.

Introduction

Until the 2015 Conference of Parties (COP) in Paris, climate finance mainly focused on multilateral climate funds and pledges made by donor governments. Since COP 21, this has shifted so as to better understand how to effectively deliver mobilised finance.

Understanding how to channel funding into communities in the most effective and sustainable way has become relevant, not only for local and national governments, but also for the international community as a measure of value for money.

Tracking adaptation finance up to the local level has been the starting point for understanding delivery at that level. Early attempts have found a transparency decrease from international to local spheres (see Terpstra et al., 2014 for challenges on tracking adaptation finance at the local level). This suggests a need for better information and an understanding of how funding flows once it reaches a specific country.

In parallel, national and sub-national governments have started to use different mechanisms for delivering climate finance at the local level. These include issuing regulations to foster local-level delivery. For example, Nepal's Climate Change Policy (2011) is tasked with delivering 80% of climate finance to the local level and establishing national and/or local climate funds (Karanjit et al., 2014). They also include the use of national systems and budgets and the establishment of national and local climate funds. In particular, local climate funds have been established with the expectation that local-level structures will guarantee that at least a certain amount of finance is distributed locally and that the communities are engaged in deciding the types of activities to be funded so that they can directly respond to their needs (Hesse, C., 2016).

This paper aims to understand how national and sub-national funds take priorities of local communities into account, alongside recognising and incorporating national climate change policies and development plans. The analysis is based on the experiences of a sub-national fund – the CCCFs in Kenya – and a national one – the CRGE facility in Ethiopia.

This includes a) an analysis of the role and capacity of the institutions involved in delivering climate finance through the funds examined and b) the funding sources and financial portfolio, to assess the level of alignment between local priorities and funding allocations within these resources.

The findings of this study will inform the multilateral climate funds and their efforts to make funding directly available to local institutions, as well as government efforts to ensure climate finance reaches the most vulnerable on the ground. Finally, it also specifically targets both CCCF and CRGE representatives.

The paper begins with a literature review of the different governance mechanisms available for delivering climate finance at the local level in developing countries. It then offers a detailed description of the methodology adopted to conduct the Kenyan and Ethiopian case studies, which follow through a country system overview and a policy, institutional and financial analysis. The paper follows with a discussion containing key points of comparison between the two case studies, before drawing conclusions.



1. DELIVERING CLIMATE FINANCE AT THE LOCAL LEVEL

IMAGE:
UNICEF ETHIOPIA

1.1 Why local-level climate finance?

One key benefit of climate adaptation financing at the local level is that the poor and marginalised can be better targeted (Hesse, 2016). Whereas international donors and national governments will have a higher-level perspective and a sometimes-limited capacity to understand the needs of poor and vulnerable communities so they can be reached, local actors will be able to more effectively provide climate-resilient development interventions. Participatory decision-making is more common and easier to implement at the local level, with planning that is more inclusive of the voices of women, disabled people, young people and the socially excluded (Soanes, et al., 2017). Equally, local institutions, by being better connected

to local realities, are able to be more sensitive to trade-offs between groups and therefore make fairer allocations (Soanes, et al., 2017; Barrett, 2015). Barrett (2015) finds evidence that 'vulnerable communities are indeed more likely to access, design, and receive allocations of finance in devolved political systems.' A decentralised process can lead to an easier integration of the development and climate agendas at the local level, particularly where stakeholders are engaged in participatory decision-making. Local communities and small and medium-sized enterprises (SMEs) can have an informed dialogue and make investments to achieve climate-resilient development (Soanes, et al., 2017).

Directing financing through the local level can also result in more efficient climate interventions that build resilience into local communities (Hesse, 2016), particularly as climate change policy and planning documents assign tasks and responsibilities to local levels (Canales Trujillo et al., 2016). The incorporation of local perspectives when allocating funding can utilise and develop local knowledge that has already led to adaptation and innovations that safeguard communities from increased climate variability (Sharma, 2014). This is particularly the case in areas where there is already high climate variability, where plans and budgets for interventions can more effectively respond to the needs of the local climate.

Another perceived benefit of decentralised climate finance is that it advances the devolution agenda by building capacity for enhanced transparency, monitoring and accountability of local institutions. Local authorities have a greater need to be accountable to communities, and to build the trust between central government, donors and other local communities that can enhance the citizen-state contract (United Nations Development Programme (UNDP), et al., 2013).

A number of challenges are also often encountered in the process of decentralising climate finance. If this is not complemented by administrative and fiscal decentralisation, it can create instability and low capacity in the way climate actions take place. UNDP et al. (2013) have found that this issue is prevalent in many of the recently decentralised systems in the Asian region. If this is decentralised too quickly and without adequate support, it may leave actors at the local level 'unprepared, leading to increased chances of corruption, unless adequate mechanisms are put in place to curb the possibilities of resource leakages' (UNDP et al., 2013).

Where national policies recognise the need for local-level action, a challenge occurs when these are not explicit with regard to the financial mechanisms that can support implementation at the local level (Canales Trujillo et al., 2016). Without explicit considerations of the level and source of funding required to undertake identified climate actions, there is an expectation to rely on either:

- current funding sources and mechanisms that can be limited and restrict the pace of action or
- international funding, which is not guaranteed and can leave some local governments without funding at all.

This lack of planning and support for spending creates and reinforces ineffectiveness, which presents a challenge to decentralising climate financing.

The instruments used to deliver finance to the local level present another challenge. Often, factors at the local level restrict access to finance for many groups. Innovative financial instruments such as municipal bonds, guarantees and equity investments can help increase access to public finance and mobilise greater levels of private sector funds (Soanes et al., 2017).

What is 'local level'?

This could include a county administration covering a large jurisdiction with a number of communities, or it could represent smaller administrations at the village or ward level. In what follows, the terms 'local' and 'sub-national' are used to capture the range of administrations existing below the national level.

1.2 The climate finance delivery system as a reflection of the decentralisation process

The type and span of decentralisation each vary from country to country, and this affects the delivery of climate finance at the local level (UNDP, United Nations Capital Development Fund (UNCDF) and United Nations Environment Programme (UNEP) 2013).

Each type of decentralisation – political, administrative and fiscal (see Box 1) – has impacts on the amount of finance, the government units involved and the mechanism (e.g. budget allocations and off-budget climate funds) that can be used by climate finance to reach the local level. In particular, such impacts can affect the availability of financial resources at the delegated level. This is a significant factor in the effectiveness of any political and administrative decentralisation. The power actually exercised by regional and local governments depends on a number of factors. These include the range of public services they finance, whether their revenues are commensurate with their responsibilities, how much choice they have in allocating their budgets to these services and whether they can determine the rates of their taxes and charges (Davey, 2003).

Box 1: Types of decentralisation

Political decentralisation is 'a process whereby citizens and their elected representatives have more control in the formulation and implementation of policies'. This provides greater discretion for elected and administrative bodies to plan and allocate expenditures that reflect local demands. Administrative decentralisation is defined as taking place 'when there is a redistribution of authority, responsibility and financial resources for the provision of services among the different tiers of government'.

Administrative decentralisation can occur to varying degrees, including deconcentration – where local administration occurs via the supervision of central government ministries who retain decision-making authorities – delegation – where local organisations are given responsibility for decision-making and administration of public functions, but are still accountable to the central government – and devolution – where the authority for decision-making, finance, and resource mobilisation is fully transferred to the sub-national level.

Fiscal decentralisation refers to 'the division of spending responsibilities and sources of revenue between levels of government (i.e. national, regional, local)'.

Source: (UNDP et al., 2013).

1.3 Different sources of climate finance for the local level

Climate finance can reach local governments from different sources. Flows to the local level can come from international donors or funds, both bilateral and multilateral or funds; from national sources; and also from sub-national mechanisms.

In the case of international flows, funding from developed to developing countries is one that is mostly tracked and monitored, particularly funds from international dedicated climate funds (e.g. Adaptation Fund (AF) and Green Climate Fund) and bilateral and multilateral aid flows with adaptation objectives (e.g. Adaptation Rio Marker). These flows can take the form of grants, loans or equity. However, there is limited information on how much of this funding reaches local governments, as there is a lack of information on recipient institutions in tracking data.

At the national level, flows include transfers from central or regional governments, and national climate funds. Both the type and structure of transfers from central or regional governments to local authorities depend on the level of political, administrative and fiscal decentralisation. These transfers take place through conditional transfers or in the form of general purpose grants, which are untargeted and unconditional, and hence can be used at the full discretion of the recipient (UNDP, et al., 2013). National climate funds can also operate with both external and domestic sources.

Sub-national flows include mainly locally generated revenues (e.g. tax or permits) and, more recently, sub-national climate change funds. Locally, general revenues can make up a variable proportion of local government funding, depending on the characteristics of the local government unit. In small rural

districts in East Africa, local revenues represent an average of 9% of the total local income (Canales Trujillo et al., 2016). In these cases, local governments have to rely on supplementary sources, such as intergovernmental transfers and international public financing (UNDP, et al., 2013; Junghans and Dorsch, 2015). Sub-national climate change funds are being established in Kenya, Mali, Senegal and Tanzania, with innovative financial instruments being explored, including municipal bonds, guarantees and equity investments. These are expected to generate wider access to public finance and mobilise greater levels of private sector funds (Soanes et al., 2017).



2. METHODOLOGY

IMAGE:
OXFAM
INTERNATIONAL

The methodology adopted to undertake the case studies in this paper draws from the **Climate Public Expenditure and Institutional Reviews (CPEIR)** framework developed for a series of country studies implemented by UNDP in South-East Asia, which began the detailed analysis of climate finance delivery at the national and sub-national levels (Bird et al., 2013). The framework uses principles, criteria and indicators to assess the development of:

- national and sub-national climate change policies
- institutional architecture and coordination among different government bodies
- financial systems and instruments through which climate change related expenditure is channelled (Bird et al. 2016).

The study focuses on in depth analysis of two case studies: the CRGE in Ethiopia and the CCCFs in Kenya.

The decision to focus on national and sub-national funds is explained by the expectation that such mechanisms consider the inclusion of local priorities in their investment decisions as these are taken by national and sub-national authorities. We did not focus on multilateral climate funds, as abundant research in this area has already been undertaken and, as mentioned, the details on how international funding reaches the local level are scarce.

We have chosen to compare Ethiopia's CRGE and Kenya's CCCFs, as the two countries have relatively similar socio-economic conditions, both characterised by reforms to enable the decentralisation process but with different outcomes that have, in turn, led to the creation of different mechanisms to deliver climate finance to the local level.

We use the Climate Public Expenditure and Institutional Review (CPEIR) framework to analyse the same three dimensions: (a) institutions, (b) policy and (c) financial mechanism analysis. As the framework is built to analyse climate finance at the national level, we have adapted it to a local-level analysis for the in-depth analysis of the two case studies.²

(a) For the **institutional** component of the framework, we analyse the funds' institutions: the CRGE for Ethiopia and the CCCFs for Kenya. The main research questions addressed in this analysis are:

² Where not explained otherwise, 'local level' refers to sub-national jurisdictions. Despite interest in understanding the delivery of climate finance to local communities, it is out of the scope of this analysis to directly interview them. Documentation of their interest can be found via publicly available sources or Key Informant Interviews (KIIs).

- What are the processes used to understand and incorporate local priorities into the way institutions make investment decisions?
- What are the good practices and/or challenges to integrate local priorities into investment decision?

The main sources of information in answering these questions are the TORs and other documents that describe the funds' institutions, along with other relevant publications that identify processes of articulating local priorities.

(b) For the **policy** component, we analyse the in-country climate policies and development plans. Here the main research questions are:

- What are the processes used to understand and incorporate local priorities into the policies?
- Changes to these processes brought by the funds approach
- What are the good practices and/or challenges to integrate local priorities into investment decision?

The main sources of information in answering these questions are: climate policies, nationally determined contributions (NDCs), National Adaptation Programmes of Action (NAPAs), National Adaptation Plans (NAPs) and other climate change and development policies.

(c) For the **financial** mechanism, we analyse the funds' main sources of funding, the projects' portfolio, the channels through which the finance is flowing, and the financial sustainability of the funds. The main research questions addressed here are:

- How much do investment decisions of climate finance mechanisms reflect a) climate change policy and b)

development policies, both in qualitative terms (how) and quantitative terms (how much in US dollars)?

- How financially sustainable are these mechanisms?

For c, the main sources of information in answering these questions are: fund projects portfolio, financial status reports.

All components are complemented by in-country key informant interviews (KIIs) with government officials at national and sub-national levels. These were undertaken in June 2017, in Ethiopia (Addis Ababa and Dire Dawa) and Kenya (Nairobi, Wajir and Makueni). (More details on these available in the Annex.)

2.1 Case study project – selection criteria

In Ethiopia, only two projects (from different sectors) of the 43 financed through the Fast Track Investments (FTIs) project scheme of the CRGE have been studied in detail. This has been due to the limited time, capacity and resources available. These projects were funded by the UK Department for International Development (DFID) and the Austrian Development Agency. To select these two case study projects, the following main criteria was considered:

- The area where the project is implemented should be accessible and convenient for field data collection.
- The project should include both urban and rural settings.
- Two different line ministries should be selected to implement the projects.
- Staff members should be available to undertake key informant interviews.

As agriculture is the dominant sector in the country and has utilised the greatest proportion of the funding (\$6.8million) made available for the FTI projects, a project implemented by this sector in Dire Dawa area has been selected as one of the case study projects. The second case study, which is in Bishoftu town, has been selected from the Urban Development sector, which primarily focuses on mitigation. These two projects provide nuanced evidence about the extent to which local priorities have been included in the FTI projects financed by the CRGE facility. Nonetheless, they are not intended to be representative of all the projects financed during the Fast Track scheme.

In Kenya, the counties Wajir and Makueni have been selected for two main reasons: the recent recognition of the CCCFs and both counties' integration of them into development planning and budgeting processes, and relative ease of access in facilitating interviews in both counties within a short time period.



3. KENYA CASE STUDY

IMAGE:
TECH. SGT. DANIEL
ST. PIERRE

3.1 Climate change context

Kenya is highly vulnerable to the impacts of climate change, with an estimated burden to the economy of around \$500m per year. The types of impact vary across Kenya's seven ecological zones. Extreme events such as flash flooding and frequent drought are a serious risk, threatening rapid crop and infrastructure loss and food security threats. These are particularly hazardous for the populous and agriculturally dominated western provinces, with consequent threats to the economy through undermined farm-based production. In the drought-prone ASALs, climate change is likely to increase the severity of existing climate hazards. Repeats of a drought similar to the 2008–2011 one, which cost \$12.1 billion, with a 72% productivity drop in the livestock sector alone (Ministry of Devolution and Planning, 2013, p.41) would raise

food insecurity and undermine development progress. Experience has shown that the social consequences of drought are equally damaging, particularly in pastoralist areas, where customary social safety nets are eroded, undermining food security and increasing potential for conflict over limited resources (International Food Policy Research Institute (IFPRI), 2015).

3.2 Political organisation

Kenya's 2010 constitution was developed to address chronic ethnic conflict and bring the government closer to its people (Cheeseman et al., 2016). This has established principles for devolved government and enhanced citizen participation in policy-making, protecting the rights of marginalised and minority communities. There are now 13 major governance functions devolved to 47 counties, including agriculture, trade, disaster management and implementation of environment and natural resources policies. County executives are headed by elected governors, and held accountable by county assemblies. The new constitution insists that all policy-making should be based on broad public and multi-stakeholder consultation. Counties plan implementation of policy using a County Integrated Development Plan (CIDP), a document formed every five years in line with the Medium-term plan. Beneath the county, sub-counties and ward level administrations also function to enable community-level planning.

Box 2: Multilateral climate finance flows

According to the Climate Funds Update website (CFU, 2017), multilateral climate funds approved about \$100 million to the country between 2002 and 2017. This is equal to approximately 3% of the total amount of funding approved in sub-Saharan Africa in that period. The majority (67%) of this funding targets mitigation activities, mainly through the Scaling-Up Renewable Energy

Program for Low Income Countries (SREP) and Clean Technology Fund (CTF). Of the remaining funding, 29% focuses on adaptation, through the Special Climate Change Fund (SCCF), Adaptation for Smallholder Agriculture Programme (ASAP) and Adaptation Fund (AF). Only 4% is spent on activities centred on reducing emissions from deforestation and degradation (REDD), through the World Bank's Forest Carbon Partnership Facility (FCPF).

The majority (67%) of multilateral climate finance flowing to the country is based on energy and generation supply, including geothermal and other renewable energy sources. This is followed by agriculture (19%), multi-sectorial projects (10%) and forestry (4%). Water and sanitation is not targeted at all, which marks a big contrast with the national and sub-national priorities of water related activities.

Source: (Climate Funds Update Website, 2017).

The constitution specifies equitable sharing of public funds across national and county governments, with a minimum of 15% of national government revenue flowing to the counties. The exact amount of funding reaching the counties in real terms has been contested. At present, the overall amount reaching counties is thought to be higher than 15%, and certainly higher than the 3–5% reaching counties before devolution (Kenya Institute for Public Policy Research and Analysis (KIPPRA), 2016, *ibid.*).

Long-running governance challenges remain. Kenya has an acute corruption problem ranking of 145 out of 176 in a recent corruption perceptions index (Transparency International, 2017). While county governments can generate their own revenue, systems remain typically weak, with poor financial controls (KIPPRA, 2016). There are also questions about how customary institutions of Kenya's multiple ethnic groups will align with the new infrastructure (Barrett, 2015).

3.3 The County Climate Change Funds

The CCCFs in Wajir and Makueni are pilot programmes of the **National Drought Management Authority (NDMA)**, with the technical support of the **Adaptation Consortium (ADA)**, funded by a grant of £6.5m through DFID's Strengthening Adaptation and Resilience to Climate Change in Kenya plus (StARCK+) programme. The consortium operates as part of the NDMA's remit to deliver climate change adaptation. This consists of several partners, including Christian Aid, IIED and their local partners, the Anglican Development Services East (ADSE), Arid Lands Development Focus (ALDEF) and Kenya Meteorological Department (KMD). The pilot aims to mainstream climate change into county development planning and enable county governments to deliver funding climate adaptation responses at the local level, prioritised by communities. The remainder of the funds has supported piloting of the approach in the counties of Garissa, Isiolo and Kitui.

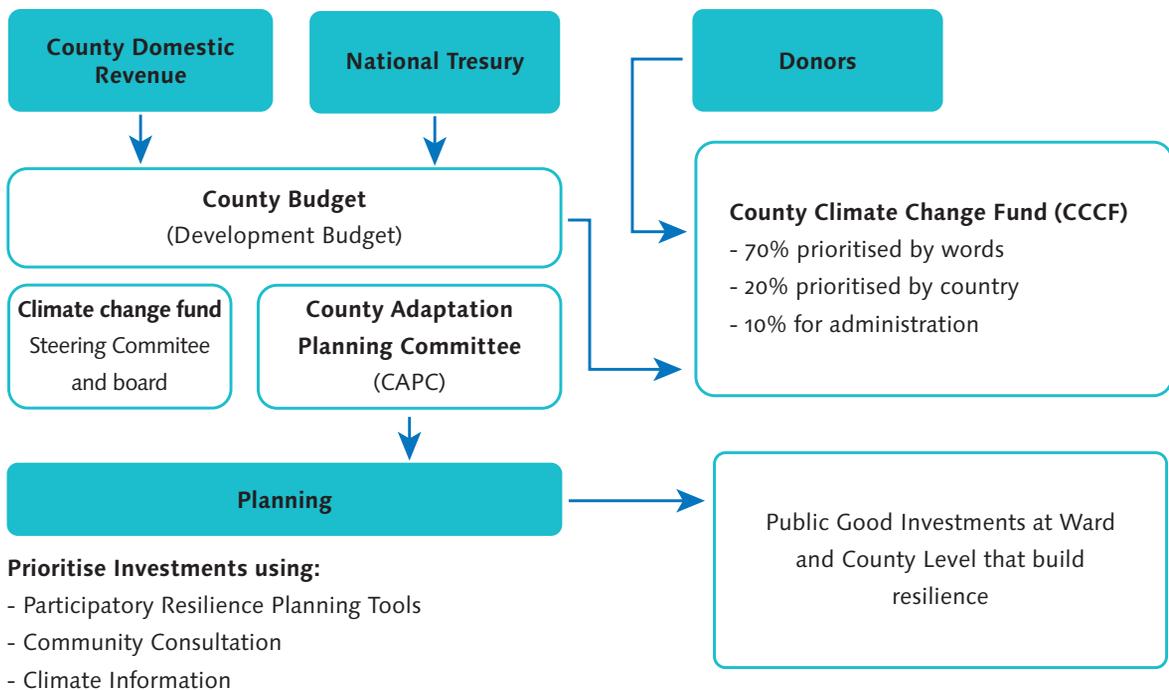
The CCCFs in Wajir and Makueni have four interrelated elements:

The County Climate Change Fund

These are public funds for local adaptation that exist at the discretion and fiduciary management of the county government. In terms of financial allocations, 70% is set aside for investments prioritised by ward level committees composed of elected community members, while 20% is for county-wide investments. Meanwhile, 10% is allocated for fund administration, monitoring and evaluation (M&E) and enlisting of technical support where necessary. The rationale for this split is the premise that ward community representatives are best placed to plan effective adaptation because of their extensive local knowledge and understanding of existing successful adaptive strategies. Each ward committee plans against a pre-defined pot of funds for

prioritising investment decisions according to their own priorities, provided they meet the investment criteria (see diagram below). This motivates wards to prioritise investments within their budget and avoid a shopping list of proposed projects. With greater geographic perspective, county level committees, can make strategic investments that add value to those made by ward level committees.

Figure 1: CCCFs Institutions



Source: Adapted from Soanes et al. (2017).

County level committees are staffed by county technical officers. They prioritise 20% of the fund, scrutinise ward level proposals and facilitate technical support. The committees scrutinize proposals against agreed criteria (see Figure 1) and cannot reject proposals if criteria are met, only improve them. They are known as County Adaptation Planning Committees (CAPC) in Wajir and County Climate Change Planning Committees in Makueni.

A multi-stakeholder steering committee is responsible for ensuring investments of the fund are aligned with national policies and mobilising additional funds. This includes community members, development partners, local civil society organisations (CSOs) and officers from several agencies in the county.³

Makueni has also created a Climate Change Fund Management Board, with powers to coordinate mainstreaming of the proposals into the CIDP and budget development processes, monitor the fund budget and coordinate capacity-building of county and ward committees. It consists of chief officers from several departments and a representative of the governor.

Makueni has also created a **Climate Change Fund Management Board**, with powers to coordinate mainstreaming of the proposals into the CIDP and budget development processes, monitor the fund budget and coordinate capacity-building of county and ward committees. It consists of chief officers from several departments and a representative of the governor.

Climate Information Services

Prioritisation of investments stemming from the various committees' planning is supported with climate information from the KMD. Throughout the course of the project, this department has built capacity to downscale regional climate forecasts to provide information and advisories relevant to specific wards and counties. It has developed climate information service strategies with each county government participating in the project. These have identified methods of interpreting climate information and disseminating advisories in formats comprehensible to local people in languages they

³ These agencies include the NDMA, National Environmental Management Agency (NEMA) and the KMD.

can understand. In Makueni, KMD has begun developing weather information specific to each ward. The incorporation of climate information enables ward committees to prioritise investments that are responsive to likely environmental conditions and more cognizant of climate hazards and both current and future risks.

Box 3: Participatory resilience planning tools

These enable communities to articulate their priorities based on their understanding of existing local livelihood and adaptive strategies.

Resilience assessment: This draws on participatory rural appraisal and other tools that enable communities to articulate the rationale behind their livelihood strategies. Participants are facilitated to explain all the elements of their livelihood systems, the interlocking factors and how these all function together. They identify constraints to the successful functioning of the system and priorities for improving its resilience. Often, the methods of addressing constraints directly overlap with those needed to build resilience.

Participatory vulnerability and capacity assessment (PVCA): Developed by Christian Aid, this assessment draws on Disaster Risk Reduction (DRR) planning tools. It takes an integrated approach to vulnerability, identifying local needs and risks, and links between different kinds of risk, in order to plan resilience building interventions. Similar to the resilience assessment, it takes a systemic approach to understanding risks.

Participatory Digital Resource Mapping: Resource mapping enables communities to articulate knowledge of their surrounding physical environment, mapping key resources and their qualities, users and approaches to sustainable management. Mapping

supports planning in identifying resource placement or support need, or where local management systems need to be explained. This has mainly been used in Wajir.

Source: (Adaptation Consortium, 2017; Christian Aid, 2009; Greene and Hesse 2016).

Monitoring

The Tracking Adaptation and Measuring Development (TAMD) Framework is used for M&E. The framework tracks how policy changes and systems at the local government authority level impact on both development and resilience indicators at the community level. Effectiveness is assessed in terms that are relevant to project beneficiaries and participants (IIED, 2014).

Investment Portfolio of Wajir and Makueni

The majority of ward level investments made through the Wajir and Makueni CCCFs have funded improvement and rehabilitation of water sources and damaged water infrastructures. Counties have used their 20% for capacity-building to support strong community-led governance of those water sources. In Wajir, a total of Kenyan shilling (Ksh) 49,960,465 (\$480,756) has been invested through 12 ward investments and two county investments enabling capacity-building of water use groups to ensure sustainability (calculated at exchange rate of \$1: 103.94 Ksh).

Makueni's nine investments have totaled Ksh 28,280,830 (\$272,139) and focused on development of water sources to facilitate mainly domestic water access. While Wajir's water investments have been typically designed to facilitate pastoralist livelihoods, Makueni's have enabled micro irrigation and increased access to viable water sources for domestic use, reflecting local livelihood types. (See appendix for details of investments, costs and their beneficiaries.)

3.4 Policy overview

This section will identify how well investments made by the CCCFs address major national climate adaptation policies and the CIDPs of Makueni and Wajir. The section will identify:

- the alignment of the investment of the CCCFs with climate relevant policies
- the processes used to integrate local priorities into the policies
- the changes in approach used by the CCCFs to understand local priorities
- the emerging good practices and challenges from the approach.

Overview of key climate policies

Kenya has developed an array of climate change policies based on an analysis of vulnerability across the country and a broad consultation across as part of development of the NAP. Key policies relevant to the CCCFs are outlined in Table 1.

Table 1: Major Climate Related Policies in Kenya

POLICY	YEAR	INTENTION OR GOAL
Kenya Vision 2030	2012	Long term strategy guiding Kenya to middle-income status by 2030.
Vision 2030: ASAL Development Strategy	2002	Recognises the role of livestock development to the ASALs and the complexities of ASAL development, as well as risks of climate change.
Medium Term Plan 2013–2017	2013	Medium term planning document as part of Vision 2030 strategy. The sectors defined within shape county level planning documents and expenditure frameworks.
National Adaptation Plan	2015	Long term adaptation planning document identifying adaptation actions across multiple time scales, in line with Vision 2030.
National Climate Change Action Plan	2013	Medium term adaptation planning document for 2013–2017.
Ending Drought Emergencies Framework for Drought Risk Management (EDE)	2014	Links drought management responses across sectors and policies including climate change, social protection, food and nutrition, livestock and disaster management.
Kenya Climate Smart Agriculture Framework Programme	2015	Recommends resilient agriculture actions in 5 sectors, in line with Vision 2030.
National Water Master Plan	2010	Comprehensive planning document for water sector in line with Vision 2030.
Kenya Climate Change Act	2016	Legislation formalising policy and institutions in respond to climate change. NDMA given a key role in implementing climate change adaptation response.
Kenya Nationally Determined Contribution to the UNFCCC	2015	Identifies key strategic mitigation and adaptation actions relating to climate change, albeit with little detail.

Source: Authors.

The NAP prioritises adaptation actions across sectors based on their urgency and compatibility with development plans, while emphasising low-regret actions. On three occasions, the Adaptation Consortium noted it as an example of ongoing projects/initiatives that support the policy, under sectors for Devolution, Water and Sanitation and Gender, Vulnerable Groups and Youth.

Because the investments of the CCCFs are not 'sectoral' in design, focusing instead on increased wellbeing and resilience, it is difficult to map particular investments onto individual sectors. However, following the NAP's own identification of the work of the ADA consortium, it can be argued that the following NAP actions are directly supported:

Table 2: Areas where Adaptation Consortium activities support NAP policy, drawn from NAP actions

DEVOLUTION	BUDGET (\$)
Short term actions	
Conducting participatory county level climate risk and vulnerability assessments	
Increasing awareness of climate change impacts for communities in counties	\$108,608,452
Building capacity of county governments on climate change adaptation	
Medium term actions	
Develop county climate financing mechanisms for adaptation	
Medium term actions gender, vulnerable groups and youth	
Mainstream Disaster Risk Reduction Measures	
Enhance Collaboration of trans boundary water resource management	\$5,075,489,183
Long term actions	
Promote and support climate resilience sustainable livelihoods	\$274,646,553

Source: Ministry of Environment and Natural Resources. (2015) GoK.

From the high-level figures in the NAP, the figure allocated to the sectors to which the adaptation consortium directly contributes comes to just under \$5.5 billion of the \$38.25 billion total budget, close to 15% of the total NAP budget. The explicit recognition of the CCCFs in the NAP demonstrate explicit

recognition of national government aligning their contribution to adaptation policy. From these high-level figures, however, it is difficult to demonstrate how much in comparison to other projects taking place. It is, nonetheless, clear that there is significant alignment with the overall climate response strategy.

The National Climate Change Action Plan (NCCAP) has identified adaptation policy for 2013–2017. It identifies interventions across six sectors including improved grazing management, mainstreaming climate change into water resource management plans and rehabilitating water catchments. It encourages flexible planning systems reflecting realities of the drylands and indigenous technical knowledge. The use of resilience planning tools in the CCCFs planning process enables government to recognise customary resource governance and how it interacts with formal government service provision. As a result, it encourages more flexible, cross sectoral thinking on natural resource management and resilient development planning. The CCCFs have constructed investments that have supported climate-relevant water resource management and rehabilitated water catchments. Communities have taken on management of these water sources in line with existing local adaptive strategies, linking closely to the need for improved grazing management.

The NCCAP identifies and costs actions to improve the following:

- grazing management (Ksh 4.5 billion)
- mainstreaming climate change into water resource management plans (Ksh 5.0 billion)
- rehabilitating water catchments (Ksh 75 billion)
- enhancing irrigation, drainage and water requirements for agriculture and livestock (Ksh 63.4 billion).

The Ksh 63.4 billion allocated for drainage and water requirements represents almost 10% of the Ksh 638 billion reserved for adaptation. This makes it a high priority reflected in the investment choices of the CCCFs, which also seek to rehabilitate water sources, as well as support farming and livestock keeping.

The Kenya Climate Smart Agriculture Framework Programme (2015–2030) offers wide ranging guidance to improve resilience of agriculture in five ways, including agricultural productivity and improved knowledge on climate change agriculture. Investing CCCFs helps support directives designed to increase the range of micro-irrigation and improve watershed management.

Makueni's investments in rock and sand dams contribute to watershed management, although it is difficult to pin down the extent to which these relatively small investments are essential to the climate smart agriculture framework. Priorities have been developed from a 'systemic' perspective and have responded to immediate need, potentially risking overlooking national strategies or longer-term structural issues that undermine climate smart agriculture. The establishment of dams is contributing to small scale micro-irrigation and, to some extent, supporting delivery of the strategy. However, if the Makueni CCCF choose to invest more directly in climate smart agriculture activities, particularly in areas such as irrigation or seed research, it will be more closely aligned.

County Integrated Development Plans

CIDPs are the guiding documents for county development investment, echoing the nine sectors and scheduling periods of Medium-term plans. The first CIDPs, developed in 2013, do not consider recent climate policies though they do incorporate

strategies such as the 'Ending Drought Emergencies' framework and disaster risk reduction guidelines.

Makueni County Integrated Development Plan (MCIDP)

MCIDP is a brief document overviewing planned investments for 2013–2017. It identifies poverty rates of 64.3% and severe water shortages across the county for all users. Climate change is briefly mentioned in relation to specific sectors, but with little detail. There is little explanation of priorities or strategies, with the document mainly identifying existing and planned projects in the water, environment and sanitation sector.

Table 3: Edited from Makueni County Integrated Development Plan (2013)

PROJECT NAME	LOCATION	OBJECTIVES	TARGETS	ACTIVITIES DESCRIPTION
Rehabilitation of existing water supplies	County Wide	Improve Accessibility to clean drinking water	To Rehabilitate existing water facilities within the plan period	Rehabilitation of infrastructure facilities and pumping units. Completion of water system in the county
Dam construction and rehabilitation	County wide	Provide water to communities in areas where surface/spring water is not available	Reduce the distance covered in fetching water by half	Desilting of dams, Construction of new dams

Source: Adapted from Makueni CIDP (2013).

There is correlation between the aims of the Makueni CCCF investments and the CIDP projects for 2013–2017. Makueni water investments have sought to reduce the distances travelled for water, as well as rehabilitate and construct dams to increase access.

In the short-term, the Makueni CIDP allocates over Ksh 600 million for construction of sand and earth dams, rainwater

harvesting and sinking boreholes, with this rising to Ksh 8 billion in the medium-term. These are reflected in CCCFs' investment choices.

Wajir County Integrated Development Plan

Wajir's CIDP reflects the dominance of pastoralist livelihood strategies operating in a water scarce environment. Climate change is mentioned mainly in reference to renewable energy and the increased likelihood of drought, rather than in relation to climate change adaptation directly. Policies relevant to the priorities of the CCCFs are detailed in Table 4.

Table 4: Edited From: Wajir County Integrated Development Plan, Chapter 7 (2013)

SECTOR	PROJECT	CURRENT BARRIERS	RECOMMENDATIONS
Agriculture	Water Harvesting through pan construction	Communal land ownership, lack of credit facilities, lack of grain storage facilities	Strengthen drought monitoring systems, educate farmers on post-harvest management
Water, Environment, Sanitation	Increase access to domestic and livestock water	<ul style="list-style-type: none"> • Persistent drought successive rain failure • Poor water management interventions • Pressure on water points from large livestock herds • Poor water harvesting techniques • Poor distribution of water resources in the district • Inadequate knowledge and capacity of water use associations 	<ul style="list-style-type: none"> • Carry out feasibility surveys training for water users committees • Construction of water canals • Surface run off harvesting • Roof catchments • Water treatment • Flood management Monitoring • Strengthen Farmers organization for participatory irrigation development and management • Mobilizing private sector participation • River bank protection

Source: Adapted from Wajir CIDP (2013).

Processes used to incorporate local priorities into policies

The typical processes of integrating local priorities into policy have been of variable quality. National priorities have been developed with participation of representatives from all the counties (Ministry of Environment and Natural Resources, 2015). However, it is unknown how well those representatives have understood and represented the views of the most vulnerable in their regions. There was a belief that the NAP 'should not be too prescriptive' and that counties should be free to make it relevant to their contexts through consultation.

In principle, local priorities should be recognised and targeted through the CIDP development process. CIDPs are ideally developed via comprehensive consultation with multiple county stakeholders. While the medium-term plan identifies the sectors for funding, community consultation meetings are supposed to define priorities. The County Government Act (2012) specifies a number of public fora and county responsibilities designed to facilitate meaningful engagement of citizens in the formal county planning and budgeting process. In practice, this has been carried out with variable quality. According to one report, many past public meetings were carried out with limited budgets, poor coordination, limited availability of key documents for participants and little public notice (Finch and Omolo, 2015). These findings are supported by our interviews with officials in Wajir and Makueni, where the issue of vulnerable people from remote areas not being facilitated to attend was highlighted. Consultations also used technical language and failed to utilise participatory tools. Along with this, the rushed consultation process of the CIDPs led to development of a 'wishlist' of projects that were believed to be poorly considered. In practice,

these wishlists have not always been followed, as local politics has exploited ambiguities and governing parties have redirected funds to other policies.

Changes to inclusion processes brought by the CCCF approach

Many respondents at the county level noted that establishment of the CCCFs has influenced how the county will move forward in the upcoming CIDPs due to be developed for the period 2018–2022. With development of high profile climate relevant policies, counties will be required to recognise integration of climate risk into development planning. The CIDPs are likely to incorporate planning and implementation of the CCCFs as part of their actions to deliver national climate strategy documents.

The most convincing evidence of change is that legislation and regulations have been passed within the county to establish the operations of the funds. The Wajir County Climate Change Fund Act (2016) creates a fund for the purpose of 'facilitating climate finance in the county' and establishes the fund infrastructure and oversight systems. The Makueni County Climate Change Fund has established similar fund institutions, albeit through regulations under the Public Finance Management Act (2015). One addition is the establishment of a County Climate Change Fund Board, focusing on consolidating their CCCF with their CIDP, ensuring mainstreaming and cross-learning takes place.

The CCCFs ensure that investment strategies meet with national and county policy through the fund institutions, such as steering committees and climate fund boards in each county. The Makueni CCCF Regulations (17, iv) state that the committee responsibility is to 'ensure County Climate Change Fund operations and its sub-components remain aligned to projects

and programmes identified and prioritised by the community based on their needs and are consistent with climate change policies, strategies and plans'. In Wajir, the County Adaptation and Steering Committees coordinate with national government. The involvement of county technical officers in proposal development for CCCFs reduces potential for disagreement between policy and practice.

However, investments have been developed from a livelihoods perspective rather than a sectoral one, and it is therefore not always easy to pin them to a particular policy or sector. The resilience planning tools take a deliberately systemic approach to planning, enabling communities to identify projects that would enhance their overall resilience, rather than capabilities in any one area. Past participants in the committee have been encouraged to consider the multi-sectoral benefits of proposed investments and the focus on strategic rehabilitation of water sources and support for natural resource governance reflects a desire to see broadly resilient livelihoods bring development benefits to the economy and local society. For example, improved water access for both livestock and domestic use has consequential benefits to health, productivity of livestock, reduction of vulnerability to disasters, including drought, and environmental management.

Challenges and good practices raised by implementation of the CCCF

There is a risk that the integration of the CCCFs will undermine mainstreaming efforts across sector-specific policies across other county ministries. The CCCFs provide an institutional architecture that enables government planners to work with communities to identify and enable customary adaptive strategies. Both counties have agreed to channel a percentage of their development

budget to support the CCCFs (see below). However, the remainder of the district development budget planning process does not mainstream climate considerations in the same way, and yet continues in the counties' CIDPs to fund infrastructures closely linked to natural resource availability. While NDMA and NEMA officers will have a role, it is unclear how effective they will be in ensuring climate is properly recognised across the rest of the planning process. County politicians can therefore legitimately claim they are mainstreaming climate change, but without going far enough or recognising its necessity in other government planning processes and funds. This means central government will likely need to push for continued incorporation of climate change risks into planning across all sectors.

Local politics is a major challenge to the CCCFs' longevity. Cheeseman (2016) notes the local power of governors in their posts and the incentive for them to demonstrate independence from central government. Makueni officials have noted the supportive role of the governor in determining the success of the Makueni CCCF. The possibility of a less supportive governor taking over in future elections is a real threat, bringing risk of instability to the Makueni CCCF in the longer-term.

Internal community politics between clans or ethnic groups can also place multiple pressures on the participatory CCCF approach. Politically driven investment decisions by counties, influenced by various pressure groups, may clash with participatory, system-focused decisions drawn from the given CCCF's prioritisation focus, with potential for disputes or clashes that undermine the resilience outcomes of the fund. This is particularly the case in Wajir, where resilience assessments have explained how unchecked expansion of water sources undermines sustainable pastoralist grazing regimes by changing how rangeland is used and sustainably managed. One good practice that may reduce

tension is ensuring transparency of the prioritisation process. Resilience assessment findings can be turned into reports, with all community consultation meetings where priorities are further discussed minuted and made available to fund institutions and the public. While this cannot solve deeper problems, it would ensure that institutions with CCCFs can be held accountable for their decisions in a political context. Ultimately, however, it is unclear how these tensions will play out as the CCCF in question takes on budget commitments from the county.

On the other hand, the CCCFs also have potential to mitigate these challenges. The detail elicited by the resilience assessments demonstrates the importance of recognising local grievances and nuances of their needs before making investment planning decisions. Using comprehensive and systemic information gathering also allows communities to identify locations of investments that will avoid political disputes that might be hidden from external actors, including those within formal levels of government.

Finally, the nature of the CCCF approach contributes to development of an informed and engaged citizenry and links to the 'making devolution work' agenda. Here, communities are asked to elect representatives to ward committees based on their ability to represent local needs rather than party political affiliations. This enables greater participation in the planning process, as these committees facilitate more and deeper opportunities for inclusive decision-making. Enabling the Ward Adaptation Planning Committees (WAPCs) to frame the indicators of success through proposal development ensures M&E is appropriate to the context and local visions of how development pathways should be actualised. Feedback from our interviews also indicates the flexibility inherent in the localised nature of the fund. This gives communities an ability to lead

the process, provided the national system is flexible enough to allow and enable counties to incorporate community-led institutions in the formal planning and budgeting process. Both Wajir and Makueni have had the freedom to either create an act of the county parliament or implement financial regulations, under public scrutiny, without too high a level of involvement from central ministries.

3.5 Institutional arrangements of the County Climate Change Funds

County and national government officials almost unanimously agreed in interviews that the quality of community participation in the process has been the major distinguishing factor between the CCCFs and existing government project cycles. The funds incorporate participation in all stages of the project cycle, including problem identification, project development, procurement, and M&E.

Incorporating local priorities into CCCF investment decisions

ALDEF and ADSE have worked with governmental technical staff to facilitate community engagement in the project cycle. Problem identification, project design, procurement and monitoring have all ensured that ward committees can scrutinise government engagement. One key feature ensures that community priorities are recognised; if a proposal meets all the selection criteria (see Figure 2), the county committee has no grounds to reject it. This places the decision-making power regarding the majority of the CCCFs in the hands of communities. Evaluation indicators are also shaped by ward members themselves in the proposal design process, enabling them to shape the terms of success for a given

investment. Additionally, the county-level committees include ward members, further ensuring community representation.

Challenges to incorporating local priorities in the CCCFs

Establishing the necessary depth of participation brings challenges. Continuous outreach to remote areas is expensive and time consuming. While CCCFs allocate 10% to enable this participation, there is a time demand on county technical officers, which is difficult to justify for a small part of the budget. Limited numbers of technical staff are available to support proposal development and improvement, and many ward committee members are not literate or used to formal, bureaucratic processes of government. The project has also placed a high demand on water engineers and technical staff to provide support which the county cannot provide as quickly as communities need, slowing the process.

Interviewees indicated that broad participation raised community expectations for multiple investments that could not all be funded through the CCCFs budget, causing tension between wards. More positively, the county agreed to take on some WAPC proposals that could not be funded or developed through the CCCF system. In one case, a sand dam was rehabilitated as directed by the ward committee. However, the county implemented the project poorly, without key features such as fencing or sufficient kiosks for domestic access.

The quality of monitoring project impacts has suffered for lack of engagement and the 10% administrative budget within the fund has not enabled comprehensive M&E after construction of the water sources. There has also been a lack of personnel for this process and inadequate funds for carrying it out effectively

(Adaptation Consortium, 2017). This does not undermine the concept of community-led monitoring in principle, but it does demonstrate need for simplicity; capacity must be built and sufficient funds need to be made available for it to work. Future iterations of the fund may therefore need to increase the administrative pot.

Challenges and good practices in incorporating local priorities into investment decisions

Establishment of the participatory process for CCCFs has required considerable upstream investment by adaptation consortium partners. Capacity-building and training has been needed to build recognition and ability to implement the approach among stakeholders. Meanwhile, useful, resilience planning tools are complicated and time consuming for county staff to facilitate, requiring modification (ibid). ADSE and ALDEF are still needed to facilitate engagement with communities and provide support in delivering participatory consultation tools. While continued engagement of CSOs is not intrinsically negative, it demonstrates the need for continued quality assurance by external partners.

However, the need for upstream investment is not necessarily a weakness if it offers value for money later in the project's lifespan. Piloting a new approach to planning, budgeting and project implementation requires time to change mindsets and address unforeseen problems. Future evaluations will shed light on the costs of establishing investments relative to their development and resilience outcomes.

Internal community dynamics bring further challenges. There has been 'push and pull' between villages within and across wards for projects to be funded in their areas. This has been reduced by allocating the same amount of funds to each ward regardless of their population size or geographical area. This recognises that livelihood

systems cross boundaries (particularly in pastoralist-dominated Wajir), while interventions in one ward can have benefits for users that travel across administrative boundaries to use it.

It is beyond the scope of this paper to directly investigate how readily the views of community members have been publicly recognised. However, county officials have noted this is key to their success, as local power-brokers understand their role in influencing the public and reflecting their views. Further research and the outcomes of monitoring and evaluation will be key in identifying how well proposals have met community priorities and expectations in different wards.

3.6 Financial mechanisms

Financial decision-making in the CCCFs follow a transparent process. Selection criteria for investments are agreed between community representatives and county government in advance, and these have since been enshrined in the CCCF act in Wajir and regulations in Makueni. Selection criteria for investments are detailed below:

Figure 2: Selection criteria

SELECTION CRITERIA: INVESTMENTS MUST

1. Focus on the public good, with a large number of beneficiaries, especially women and young people
 2. Enhance resilience to climate change (adaptation) and propose mitigation measures, where possible
 3. Ensure a participatory approach in design and M&E
 4. Meet local development priorities and national strategies and policies on sustainable development and climate change
 5. Foster peace and strengthen social relations between actors
 6. Not have a negative impact on the environment
 7. Provide a realistic and achievable work plan and offer value for money
-

Proposals must also include viable sustainability plans, theories of change and M&E indicators. They must also be in line with existing national strategies and policies. This can cause tension if communities believe national policies significantly undermine local priorities. However, there is no clear evidence this is the case for those related to climate. The consensus according to county staff – with this reflected in the constitution and national policies – was that counties had leeway to respond to needs in their own contexts, and that policy clashes were unlikely.

Financial sustainability

The use of agents such as ALDEF and ADSE to channel funds to service providers on behalf the government has been a notable facet of the establishment of such resources. The flow of finance in this pilot has avoided going through government financial management systems, with funds going from the donor, to IIED and Christian Aid, on to ALDEF and ADSE, before going onto service providers to deliver the investments. This approach was shaped by the fact that donors did not want to channel funds through the government system until a thorough fiduciary risk assessment of the system was carried out. The pilot has therefore sought to demonstrate concept proof through the agent model, before enabling government to implement the approach via the same principles and its own financial systems. The CCCFs now established through county legislation enable the committees, which are legally established entities, to seek finance independently from private sources or other entities. However, their main sources of funding are expected to be through government, and this is likely to depend on the extent of international climate finance routed to Kenya and onwards into the CCCFs.

Wajir's County Climate Change Fund Act maintains the 70:20:10 split in allocation of funds to ward committees, the County Committee and administration of the fund. The county has legislated to finance the fund through a minimum of 2% of the funds accruing to the county government from:

- funding from national Government
- climate finance from international sources
- funding received from Public Benefit Organisations
- fees and charges from climate finance activities
- fees and charges from climate finance activities
- grants and donations.

This 2% of the development budget amounts to approximately Ksh 80 million, almost \$780,000 (Kiiru, 2017). A climate finance framework aligned with the county framework is to be produced every two years, identifying context-relevant aspects of national climate policy and existing projects on climate change. The budget including 2% for the Wajir CCCF was formally approved in June 2017.

In Makueni, a similar system has been established via the Public Finance Management Act, allocating 1% of the budget from the same sources as those in Wajir. Makueni's development budget is estimated at Ksh 50 billion, with 1% approximately Ksh 50 million, approximately \$485,000 (Mutua, 2016). At the time of writing, Makueni's budget for this year has not yet been formally approved.

In both cases, the county government's committed figures from domestic development budgets is greater than funds committed by DFID. These funds are also greater than any funds provided

previously by DFID, which totalled almost Ksh 50 billion (\$480,000) in Wajir and Ksh 28 billion (\$272,000) in Makeni, demonstrating a commitment to maintain and improve the level of spending for adaptation, as long as political support remains. Officials working on climate finance for national government have identified the establishment of a national climate finance mechanism as an opportunity to channel more domestic revenue into the CCCFs. Looking for 'quick-wins', the fund will be able to use the established infrastructure to support NAP priorities.

In addition to county revenue sources and the National Climate Fund, **Ward Adaptation Planning Committees** are established entities in their own right, complete with legal registration papers and bank accounts. They are entitled to seek funding from other sources, including national or international non-governmental organisations (NGOs) or private donors if they find it beneficial to their purposes. This may provide avenues for private sector engagement with communities, although these have not been well-defined.

The funds remain open to expansion in the future if they demonstrate effectiveness in resilience-building and development. The planned establishment of a national climate finance fund, drawing on both domestic sources and donor finance, may be a source of enhanced funding for the CCCFs. County legislatures may also choose to allocate greater portions of the domestic development budget if the payoffs are beneficial to both climate resilient and development outcomes.

A photograph of a rural Ethiopian landscape. In the foreground, a young boy in a red shirt and dark pants stands next to a white water container. To his right, a woman in a blue and red patterned dress carries a large white sack on her head. A donkey stands to the left of the boy. The background shows a vast, open, dusty plain under a clear blue sky. The text '4. ETHIOPIA CASE STUDY' is overlaid in large white letters on the left side of the image.

4. ETHIOPIA CASE STUDY

IMAGE:
MARTINA ULRICH

4.1 Climate change context

Climate change projections in Ethiopia foresee an increase in temperature during all four seasons and across the country (Conway et al., 2011). This increase of temperature could affect export-oriented crops, such as coffee, with a projected expansion of crop pests, such as the coffee berry borer in coffee-producing areas, including Ethiopia's highlands (Jaramillo et al., 2011). The IPCC also mentions likely increases in rainfall, with extreme rainfall in Ethiopian highlands by the end of the 21st century (Niang et al. 2014). Variability in rainfall can significantly affect crop production, particularly as 80% of the total agriculture is rainfed (Suryabhagavan, 2017). Climate change is estimated to impact GDP growth between 0.5 and 2.5% each year, with the potential to reverse current development gain. This could exacerbate social and

economic issues unless effective steps to build resilience are put in place (World Bank, 2010; Federal Democratic Republic of Ethiopia (FDRE), 2011).

Box 4: Multilateral climate finance flows

According to the Climate Funds Update website (CFU, 2017), multilateral climate funds between 2002 and 2017 approved about \$110 million to the country, which equals approximately 3% of the total amount of funding approved in sub-Saharan Africa during that period. In terms of funding allocation, 45% of this goes to adaptation, while 35% focuses on mitigation and the remaining 20% flows to REDD+ projects.

The Least Developed Countries Fund (LDCF), ASAP and AF are the most active multilateral adaptation funds in the country. SREP and the Biocarbon Fund Initiative for Sustainable Forest Landscapes (ISFL) are the most active funds that respectively focus on mitigation and REDD+ aspects.

Energy generation and supply, especially geothermal and other renewable sources, is the sector favoured by the multilateral climate funds in Ethiopia, with 27% of the funding. This is followed by general environmental protection at 25% and forestry at 20%. Interestingly, agriculture and water and sanitation – both considered priorities in the CRGE strategy (Resilience component) – only receive 7% and 6% of the total amount funded in the country, respectively.

Source: (Climate Funds Update Website, 2017).

4.2 The decentralisation process in Ethiopia

This started in 1991, with a shift from a centralist government into a federal government. The new constitution of 1995

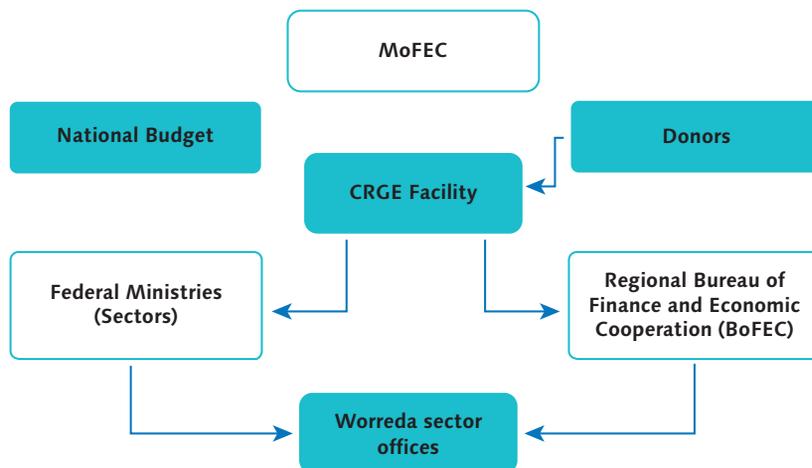
established a federal state and nine regional states based on ethnicity, with two special administrative regions (Addis Ababa and Dire Dawa). Two decentralisation phases have been recognised in this process, one from 1991 until 2001, focused on the devolution of legislative, executive and judicial powers to the regional states, while another, from 2002, transfers power to districts or woredas (Bekele and Kjosavik, 2016). In this second phase, resources were available for woredas from regional levels mainly through District Level Decentralisation Programmes via block grants (Bekele and Kjosavik, 2016; Alemu, 2015; Snyder et al., 2014). While the main driver of regional state decentralisation is ethnic identity, the creation of sub-national entities – zones, woredas and kebeles – aimed to facilitate administration. Woredas exercise fiscal and administrative authority under their jurisdiction.

The delivery of public services at the district-level has been one of the main objectives of decentralisation, including agriculture extension, education, health, water supply and rural roads (Alemu, 2015). However, the capacities for successful delivery significantly depend on the resources transferred along the chain, as well as the human resource capacity available. Districts therefore depend on regional transfers, and these on transfers from the federal government (Snyder et al., 2014). The funding amount is based on a formula developed by the Ministry of Finance and Economic Development, and in practice defines the level of planning and implementation that different levels of sub-national government can afford (Snyder et al., 2014). District-level planning follows the achievement of federal policy priorities, particularly those established in the national GTP (Eshetu et al., 2014; Snyder et al. 2014). This focus on target delivery could result in local priorities and contexts such as agro-ecological conditions being ignored, compromising the sustainability and effectiveness of policy implementation (Snyder et al., 2014), as it provides a more centralised control over decision-making.

4.3 The CRGE facility and its institutional setting

The CRGE facility is the centralised financial mechanism of the CRGE. It was created to support the implementation of the priorities set out in the CRGE strategy. mobilises, accesses and combines domestic and international sources of finance, both public and private (Eshetu et al., 2014; FDRE, 2012). The facility is hosted by the Ministry of Finance and Economic Cooperation (MOFEC). It is also expected that the facility would generate greater coordination among climate change activities, mainly across sectors, minimising duplication of activities, enhancing integration and increasing overall effectiveness. Although the CRGE is claimed to have been domestically initiated and designed, it was also introduced as a mechanism to access international climate finance and boost donors' confidence in the utilisation of funds (see interview with the coordinator of the CRGE facility).

Figure 3: Financial channels and institutions of the CRGE



Source: Authors.

The CRGE facility comprises Ministerial Steering Technical and Management committees, with an advisory group. The Ministerial Committee sets policy direction and guidance for the facility, approves operations, ensures alignment with the CRGE Strategy and facilitates coordination with other related initiatives. The Technical Committee is in charge of assessing the investment plans under approval from line ministries and regional governments, and includes MOFEC's planning and research directorate to ensure alignment with the GTP. Finally, the Management Team is responsible for prioritising the investments approved by the Technical Committee and provides the oversight and financial management of the facility. The advisory group is a non-decision-making unit that includes development partners, NGOs, civil societies and private actors to provide comments and suggestions to the facility (FDRE, 2012).

Following the establishment of the CRGE facility in 2011, key implementing line ministries and regions were required to establish CRGE focal units to translate the CRGE strategy into sectoral programmes and investment plans. Implementation of CRGE projects now follows a sectoral approach where line ministries are responsible for monitoring and evaluating their respective activities.

Several interview respondents commented that the CRGE facility originated more as a coordinating body but its role expanded to include project management functions over time. This clash of roles has resulted in limited accountability as the ministries implementing projects funded through members of the CRGE facility are reporting to themselves, instead of an external agency, and are undertaking both regulatory and implementation mandates. Lack of internal capacity and technical staff was also signalled by interviewees as a facility issue (Jones and Carabine, 2013). This lack of capacity related to the use

of mainly international consultants for the technical design of the facility. Examples of these include UNDP support, which seconded staff to Ethiopia offices. This ultimately undermined the CRGE's national mandate and accountability.

There is a challenge in keeping a balance between high-level ownership and bottom-up inclusion and engagement (Jones and Carabine, 2013). The CRGE facility at FTI did not include funding for non-state actors and the government has been criticised for this approach by a number of civil society organisations (as reported during an interview with an NGO practitioner). Donors address this by allocating their financial support to the CRGE facility and NGOs through two different windows.

FTI eligibility criteria and M&E process

According to the guideline for CRGE project preparation, all line ministries, regional bureaus and NGOs are eligible to apply for funding from the facility. Once the proposals are submitted to the facility, a technical review is conducted by the technical team. This assessment is carried out by ministry staff, with the support of external consultants hired by the Ministry of Environment and Forest and Climate Change. According to the interviews with the Ministry of Environment, Forest and Climate Change (MEFCC), this assessment looks into the following criteria:

- sustainability
- rationality
- social and environmental safeguards
- responsibilities in place for monitoring the project
- project costs, including local community contribution

- financial project administration
- owner of the projects.

FTI projects have received support and guidance for complying with the assessment criteria.

The CRGE facility started its operation by financing FTI projects as a learning strategy. These were identified by the CRGE pillar sectors (line ministries), who were invited by the facility to prepare proposals for projects to be implemented within 18 months, starting in January 2014. Approximately 43 projects from the pillar sectors⁴ were financed by the CRGE facility during its initial stage of operation. These were expected to design projects integrating CRGE activities and their GTP targets. The selection of projects considered regional distribution.

The CRGE initiative was created as a way to demonstrate national commitment to climate change and, similarly, the FTI projects were implemented to showcase success. This means the projects gained increased attention from the government and led to the M&E being carried out separately from the M&E of regular non-CRGE activities. The CRGE focal unit under each implementing line ministry undertakes M&E functions and is responsible for internal project implementation management and monitoring. At the CRGE facility level, the M&E is carried out quarterly and informs the steering committee about the progress of projects. Monitoring the activities is complemented with field visits. The MFECC is the liaison with the CRGE focal units in the respective implementing sectors.

4 The CRGE strategy has identified agriculture, forestry, water and energy, urban development, transport and industry sectors as pillar sectors (Federal Democratic Republic of Ethiopia, 2011).

Box 5: FTI eligibility criteria

1. As much as possible, activities should be identified and selected from the options set out in either the Green Economy Strategy and/or the Climate Resilient Strategies.
2. Activities should be able to be implemented using the lessons learned from existing programme vehicles to make climate proof them (e.g. **Sustainable Land Management Programme (SLMP), Productive Safety Net Programme (PSNP) and Protection of Basic Services (PBS)**).
3. As much as possible, Sectors and regions need to ensure that the activities can be sustained in the long-term and scaled up in line with CRGE ambitions when developing the concept note.
4. Concept notes and proposals need to:
 - clearly indicate how they will contribute to poverty reduction.
 - indicate the expected benefits to gender equality and equity.
 - demonstrate how activities will contribute to the promotion of accountability.
 - be clearly designed to deliver mitigation, adaptation and/or GTP results.
 - All proposed activities need to clearly indicate that the environmental and social impact is localised or has no impact at all. Proposals should avoid activities that might give rise to unacceptable or unmanageable environmental and social impacts (Refer to the FDRE Proclamation 299/2002 and Regulation No. 1/2007 for the national environmental and safeguards requirements).

Source: (Major Economies Forum (MEF) and MOFED, 2013).

4.4 Policy overview

Following a change in constitution in 1995, Ethiopia adopted an environmental policy in 1997. This focused on combating land degradation and enhancing environmental conservation and was followed by specific sectoral policies and strategies aimed to reduce poverty linked to environmental degradation and loss of agricultural production. Table 5 presents some of the most important policies and strategies Ethiopia adopted to deal with climate change impacts.

Currently, the main climate policy is the CRGE Strategy, published in 2011. It aims to support the country in reaching the middle-income status by 2025 through a sustainable growth model. The CRGE is considered transformational (Jones and Carabine, 2013) and expects to make Ethiopia a 'green economy front-runner' (Zewdu et al., 2014).

The CRGE is composed of two strategies, the Green Economy Strategy – also published in 2011 – and the Climate Resilient Strategy, which was still under development at the moment of publication of the CRGE and focused on integrating disaster risk reduction and adaptation objectives into sectoral and regional plans (Jones and Carabine, 2013). When both components are compared, the mitigation or green economy element of the strategy seems to be more developed both in its formulation and implementation mechanisms. Some scholars have raised that there is 'room for improvement' within the climate resilience element (Simane and Bird, 2016). The approach of the resilience strategy has been sectoral, with current specific strategies for agriculture and forestry, and water and energy (both published in 2015).

More recently, Ethiopia has also submitted its **intended nationally determined contribution (INDC)** to the UNFCCC.

Ethiopia's INDC is of the few classified as 'sufficient' by the Climate Action Tracker, a category only attributed to five countries, with only The Gambia as another sub-Saharan African country achieving this (Climate Action Tracker, 2017). If fully implemented, Ethiopia would be 64% below its business as usual scenario by 2030, which reflects ambition in its intended contribution. On the adaptation side, the INDC includes a goal focused on increasing resilience and reducing the vulnerability of livelihoods and landscapes, particularly to drought and floods.

Table 5: Summary of key policies relevant to climate change in Ethiopia

POLICY	YEAR	INTENTION OR GOAL
Environmental Policy of Ethiopia	1997	Overall guidance in the conservation and sustainable utilization of the country's environmental resources.
Environmental Impact Assessment Proclamation	2002	Ensure that the environmental implications are taken into account before decisions are made.
National Adaptation Program of Action (NAPA)	2007	The NAPA represented the first step in coordinating adaptation activities across government sectors.
CAADP Compact	2009	One of the pillars of CAADP is extending the area under sustainable land management and reliable water control systems.
Growth and Transformation Plan (GTP I)	2010	The GTP recognizes that the environment is a vital pillar of sustainable development.
Agriculture Sector Program of Plan on Adaptation to Climate Change/APACC	2011	The Agriculture Sector Climate Change Adaptation Plan.
Ethiopian Program of Adaptation to Climate Change (EPACC)	2011	More programmatic approach to adaptation planning.
Climate Resilient Green Economy Strategy	2011	Carbon-neutral middle-income status before 2025.
Green Economy Strategy	2011	
Disaster Risk Management Policy	2013	Disaster risk management framework, including early warning and risk assessment, information management, capacity building, and integration of disaster risk reduction into development plans. Focus on droughts.
Growth and Transformation Plan (GTP-II)	2015	Second federal, national development plan.
Agriculture and Forestry Climate Change Resilience Strategy	2015	Sectoral chapter of the Resilience Strategy of the CRGE. Focuses on agricultural crops, livestock, forestry, food security and disaster prevention; under a transformation of the agriculture and forestry sectors into services and industry based.
Water and Energy Climate Resilience Strategy	2015	Sectoral chapter of the Resilience Strategy of the CRGE. It assesses and addresses rainfall variability challenges to hydropower and food security.

Source: Adapted from FAO (2016).

Development and climate change planning in Ethiopia

Ethiopia introduced GTP-I in 2010, a five-year development plan primarily intended to accelerate economic growth and reduce poverty. The CRGE was also designed to mainstream climate change into the GTP, as this is the guide for national development planning and was designed with careful consideration of environmental challenges and climate change impact. The second phase of the plan, the GTP-II for the period 2015/16–2019/20, includes climate change across sectoral plans and is designed to ensure that the country's development is achieved in a low-carbon and climate resilient manner. The GTP is expected to deliver high average annual economic growth through improved agricultural productivity, strengthening the industrial base and fostering export growth. It recognises that there is a need for participation, integration and harmonisation, particularly to deal with climate change impacts. The linkages between the CRGE and the national development planning process, through the GTP, has been highlighted as good practice in terms of mainstreaming climate change into national development planning, and not only as an environmental issue (Eshetu et al., 2014; Simane and Bird 2017). Regional and local governments are expected to use the GTP as a framework for preparing their development plans and the specific activities of the local plans are intended to contribute to meeting the targets set out in the GTP.

What are the processes used to understand and incorporate local priorities into the policies?

The CRGE investment selection process included a consultation process with six line ministries, in particular those related to its four pillars: agriculture; forestry; power; and transport, industrial sectors and infrastructure and a consultation with the ethnic-based regions. Responsibility for the CRGE implementation relies

heavily on regional states and line ministries, in collaboration with federal institutions (FDRE 2011). The actual implementation of the projects is carried out by the sector offices at the lower level of the administrative structure, mainly the woredas.

In the case of the climate resilient element, the investments selection was also undertaken by the ministries. The country prioritised the development of resilience strategies for agriculture and forestry, and water and energy. As the livelihoods of the most vulnerable populations to climate change particularly depend on agriculture and forestry, with access to water and energy, this shows the intention of the government to secure specific guidance for making those who are most vulnerable to climate change more resilient (Eshetu and Bird, 2015). In addition, the strategy also recognises the need for a multi-scalar approach, including management and implementation of actions at federal, basin wide and regional levels.

This requirement for local-level implementation is also part of the INDC targets. These include the provision of food and feed storage facilities at the community level and watering points available in all rural woredas, to provide drinking water for humans, domestic animals and wildlife (FDRE 2015). Other policies also have specific targets for woredas, as the DRM Policy, which suggests the development of disaster risk profiles and contingency plans for disasters at the woreda level.

For woreda divisions, development plans are the main preparation tools. These plans are expected to be developed in line with the GTP and comply with GTP-specific targets. This can generate limited flexibility to accommodate local priorities if they are different to the ones specified in the GTP (Jones and Carabine, 2013). This focus on targets also affects budget allocation, as most of the transfers to the woredas from

federal government are determined by the financial needs of the activities prioritised to meet the GTP targets.

This means that, despite a lack of deep involvement of local actors within the planning and decision-making process, the country's priorities appear to target the needs of the most vulnerable. However, our interviews indicate that a lack of a tailored approach at sub-woreda level to better identify the needs of the different kebeles. The planning and decisions of resources allocation are instead taken at woreda level, assuming no big differences of needs within them.

4.5 Institutional arrangements of the FTI

Evidence from FTI projects at the local level

Dire Dawa Project

Dire Dawa is one of the two special administrative regions in Ethiopia. Located in the eastern part of the country, it is among the most drought and flood prone regions. The area receives rainfall during two seasons: small rains from March to April and heavy showers from August to September, which often cause flooding risks. The administration is divided into the urban area distributed in nine kebeles – which hosts 74% of the population – and the rural area with 38 kebeles.⁵ Mixed crop and livestock production are the main sources of livelihood in the rural areas of the region.

Implemented by the **Ministry of Agriculture (MoA)**, the intervention focuses on activities intended to reduce

⁵ A kebele is the smallest administrative unit in Ethiopia. A woreda is divided into kebeles, but kebeles are not budget units and hence don't administer budgets.

GHG emissions from the agriculture sector, reduce vulnerability to climate change and contribute to meeting per capita income of \$500 by 2015. A number of core activities have been devised to increase the following:

- crop and livestock productivity
- agriculture value chain development and market access
- watershed management and water harvesting
- community mobilisation
- institutional partnership
- capacity-building
- knowledge management.

The FTI project in Dire Dawa is implemented in three of the 38 rural Kebeles of the administration. The total budget of the project is \$126,755.00 and it has targeted around 150 households: poor farmers affected by the impacts of climate change.

The MoA was invited by the CRGE steering committee to prepare project proposals for funding by the CRGE facility. After the ministry developed a framework proposal, it was sent to the regional sector offices for comments and identification of potential woredas for implementation. The stakeholders involved include woreda representatives and experts such as specialists in crops, livestock and **natural resources management (NRM)**. These came from both the woreda and regional sector office, but community members were not included. Local communities were approached to participate in the project while the priorities for intervention were identified, with an explanation of the benefits of the project to gain their consent, as the projects were intended to be implemented on individual land holdings. The proposal

has also been reviewed in a multi-stakeholder platform involving experts from FAO and the World Bank for a wider input from other project implementers and donors.

Usually, the regions focus on woredas that have limited or no projects implemented. During this process, the woreda in Dire Dawa commissioned Haramaya University to participate in the development of the project, identifying priority areas for the FTI projects. The research recommended investment in moisture conserving activities at the household level alongside other integrated interventions to build resilience. The woreda agriculture office has been engaged in soil and water conservation to deal with the challenge of degradation and moisture stress. This led the project to include these activities to build on the woreda's previous experience. The woreda agriculture office has also been involved in natural resource rehabilitation and moisture conservation to address the challenges to agricultural production in the area. In particular, moisture stress during the flowering stage of crops is one of the main challenges leading to crop failure and reduced crop yields. Hence, the activities proposed by the project – enhancing productivity through water harvesting, investment in livestock production and maintaining the natural environment through conservation and rehabilitation – responded to specific needs in the targeted area. This means that, though the project proposal process didn't include the priorities expressed by communities, the project activities were geared towards responding to local needs and capacities.

Bishoftu Project

Bishoftu is a woreda located in the Oromia Regional State, about 47 Km east of Addis Ababa, the capital city of Ethiopia. The climate of the area is characterised by a mean annual

rainfall of 747 mm and an average annual temperature of 18.70°. Bishoftu has a total population of over 154,000 people and it is divided into nine Kebeles. In the past, the woreda has experienced rapid industrialisation and urbanisation, leading to increased generation of solid waste, which is beyond the existing infrastructure in place. Current insufficient collection and inappropriate disposal of solid waste has resulted in water, land and air pollution, posing risks to human health and the environment.

The FTI in Bishoftu is one of the several projects under the **Ministry of Urban Development and Housing Construction (MUDHCo)**. The municipality of the town has taken this funding opportunity to enhance already existing sanitary and urban greening activities of the town, therefore fully integrating with the national climate change priorities. The project focuses on solid waste collection and sorting, which also involves the production of compost. (More details on projects implementation are provided in the annex.)

The Municipality in Bishoftu received the FTI project proposal from MUDHCo to improve solid waste management and urban greening activities in the town. The Municipality Management Committee of Bishoftu town discussed the project proposal and returned it to the ministry for approval before it was submitted to the CRGE facility for funding. According to the Head of Bishoftu town Sanitation and Beautification Office, the idea for this project came from MUDHCo. In its sectoral GTP, MUDHCo has set a target to construct 358 landfills and 50 compost centers to help improve the collection coverage to effectively utilise the landfills and improve sanitation of cities in the country. The FTI opportunity was used by MUDHCo to contribute to efforts aimed at meeting the targets already set in the GTP. Furthermore, the climate related targets of

the MUDHCo are primarily dictated by CRGE initiatives in which the urban sector is expected to establish solid waste management systems, landfill gas management, composting and recycling throughout the country as key strategies to GHG emission reduction. MUDHCo provided awareness training to Bishoftu City administration regarding the envisaged FTI project. Solid waste management in the municipality has been using push-carts owned by women to collect and dump solid waste, but this was neither an adequate nor labour efficient way to properly manage the town's solid waste. The FTI project was intended to improve the Municipality's capacity to improve its solid waste management system to build a clean and green city. Project activities includes awareness creation, improving waste collection system by adopting motorised vehicles, building waste transfer stations and employment creation. The key strategies employed were to replace push-carts with such vehicles and organise unemployed youth and women into cooperatives. Nine cooperatives of 10 members each participated in waste collection, sorting and dumping.

Incorporating Local Priorities into CRGE Investment Decisions

Due to its central design, the CRGE facility incorporates local priorities in an indirect way, mainly through line ministries and regions, which are required to establish focal units to receive funding from the facility. In addition, the facility can receive direct inputs through the advisory group, which includes NGOs and civil society organisations. However, as it is not a decision-making body, there is no enforcement mechanism for the uptake of the inputs provided.

Similarly, the selection criteria for the FTI indirectly take local priorities into account. For example, the criterion

on sustainability may require local-level engagement and therefore could assume a linkage with local priorities. Also, the criteria on contributions to poverty reduction and equity, can be interpreted as a prioritisation of the needs of the most vulnerable. But these are all potential readings, as the criteria in itself does not provide explicit linkages with the local level.

The two case study projects demonstrate that they were both initiated by the line ministries following the call for FTI funding proposals from the CRGE facility. However, while there is a great deal of similarity in terms of accommodating local priorities in the proposals, local communities in Dire Dawa were more involved in setting priorities compared to local communities in Bishoftu. In Bishoftu, the project was entirely initiated by the MUDHCo and there was no consultation carried out with the local community or other stakeholders to set priorities or shape the approach of the project. Nevertheless, although the approach has been entirely top-down, it appears that the Bishoftu project was well organised and implementation of the activities has been effective.

The steering committees at the woreda level are composed of representatives from the agriculture and finance sectors, woreda officials and the woreda administrator. Communities are not represented in these committees. However, below these, there are also Kebele watershed committees comprising the watershed team, which does include members of the local community, along with the chairman of the Kebele. The kebele committees use community-based resource management approaches. They also coordinate with farmer training centres and cooperatives on the use (or allocation) for equipment, such as hand-held tractors in the Dire Dawa project.

Anecdotal evidence highlights situations where communities have expressed immediate needs for water activities even if they

were beneficiaries of forestry activities reflecting national priorities. This shows a lack of alignment between national and local priorities, where the national ones take long-term climate change targets into account (e.g. reducing emissions from deforestation) while community-priorities address urgent needs such as lack of access to water.

Challenges for incorporating local priorities in Dire Dawa and Bishoftu projects

according to the interviews undertaken and as explained in the next section, implementation of the studied FTI projects has been fairly successful. However, the projects have also faced a number of challenges, including their short implementation period, delays in releasing finance to the woredas and a lack of technical experts and high staff turnover, as well as limited institutional support.

The short implementation period required the FTI projects to invest in additional capacity-building activities. In Dire Dawa, the 18-month implementation period of the FTI projects led to resistance from the farmers at the start. The farmers indicated a preference to keep their own traditional cultivation practices and showed an aversion towards the more innovative and riskier practices proposed by the project (such as the use of water resistant seeds to be cultivated in a particular period and fertilisers). To overcome this, the MoA – the implementing entity – decided to provide training to farmers in two ways: to inform on the immediate and long-term impacts of the interventions and also, more importantly, a demonstration plot on public land, where the increases in productivity as a result of the measures proposed by the project could be tested without farmers taking the risk of using their own production or land.

Delays in releasing funding flows on time at the woreda level affected the performance of projects. In Dire Dawa, the purchase of short-maturing seeds was delayed once and affected farmer's confidence in the project, as this prevented the implementation of activities. In particular, if inputs are imported, delays in the purchase can lead to an actual reduction of resources due to changes in exchange rates. In Bishoftu, the short period of the project also restricted the capacity-building activities, particularly at the community level. Communities' awareness when sorting materials and the need to pay collection fees was limited even during implementation of the project.

The FTI projects in Dire Dawa and Bishoftu used existing staff of their respective offices to implement the projects. No new dedicated staff were hired. Whereas this has formed part of the strategy of the CRGE, to mainstream climate change within current activities and resources, CRGE FTI projects required the implementation of new technologies or the display of new skills within the woredas in some cases.

Good Practices in incorporating local priorities into investment decisions

When asking interview respondents to compare CRGE projects with traditional domestic investments, it emerged that CRGE projects increased awareness of climate change issues among the community. They introduced new technologies to deal with climate change impacts. These included:

- the introduction of hand tractors to deal with the challenge of oxen shortage
- use of improved agricultural inputs in Dire Dawa
- introduction of motorised vehicles for solid waste management in Bishoftu.

The integrated approach bringing crop, livestock production and natural resource management interventions together was also positively received and created new job opportunities. Overall, interviewees reported that CRGE projects benefitted the local communities (e.g. through value chains activities and increased participation of women). Flexibility in amending planned activities was also considered a positive feature of the CRGE projects.

In theory, woredas should define and shape their own development targets according to local needs and priorities. However, a typical woreda sector budget allocates less than 10% to capital investments, with more than 90% allocated to recurrent costs, of which the majority is assigned for salaries, which does not promote decision-making at the woreda level (Africa Climate Change Resilience Alliance (ACCRA), 2014). From the interviews, it emerges that the CRGE has provided technical support to communities, meaning these are now the owners of the projects and should therefore be able to continue activities by themselves, as most costs are incurred at the beginning of implementation.

4.6 Financial mechanism of the CRGE facility

The facility has been able to secure funding from a set of bilateral public sources (DFID 2017). It has also been able to access the AF, a multilateral climate fund under the UNFCCC. There is no evidence of private or domestic funding supporting the CRGE facility even if it was also designed to mobilise domestic budget (see Table 6). According to interviews with the coordinator of the facility, there has been interest in developing a strategy to engage the private sector through different financing mechanisms including public-private-partnerships.

Table 6: CRGE facility funding as of May 2017

TYPE OF SOURCE	COUNTRY	YEAR OF APPROVAL	AMOUNT IN US\$ MILLION	PURPOSE OF FUNDING
	United Kingdom	2012	25.00	CRGE facility support; fast track investments
	Austria	2012	0.83	CRGE facility support; fast track investments
Bilateral	Norway	2013	16.00	Mitigation and adaptation, including renewable energy in rural areas, reduced deforestation and land management
	Denmark	2015	4.60	Green agricultural transformation, focused on small holder farmers
Multilateral	Adaptation Fund*	2017	9.90	Increase rural resilience in seven rural landscapes
Total			56,33	

Source: Authors, compilation of data from multiple sources.

*Funding is earmarked for a specific project

A list of all the projects approved through the CRGE facility is available online (Climate Resilient Green Economy, 2017). According to this source, there are a total of 43 projects financed through the CRGE facility's Fast Track funding modality. These projects were allocated to the six line ministries, all within the priorities of the CRGE Strategy.

Table 7 shows that most of the funding was allocated to projects in the ministries of water, irrigation and energy, with most of the funding going to support the use of solar energy for water supply and as a source of electricity in rural areas. The projects under the MoA have piloted different measures to combine improvements in agricultural productivity and per capita income, while reducing GHG emissions and vulnerability to climate change

in all ten country region-states. Activities under the Ministry of Environment and Forestry are focused on forest management and bamboo plantations. There are also investments in transport (for promoting cycling and off-street parking), urban development (for dealing with solid waste management and establishing green urban spaces), and for industry (design of a monitoring, reporting and verification system for GHG emissions).

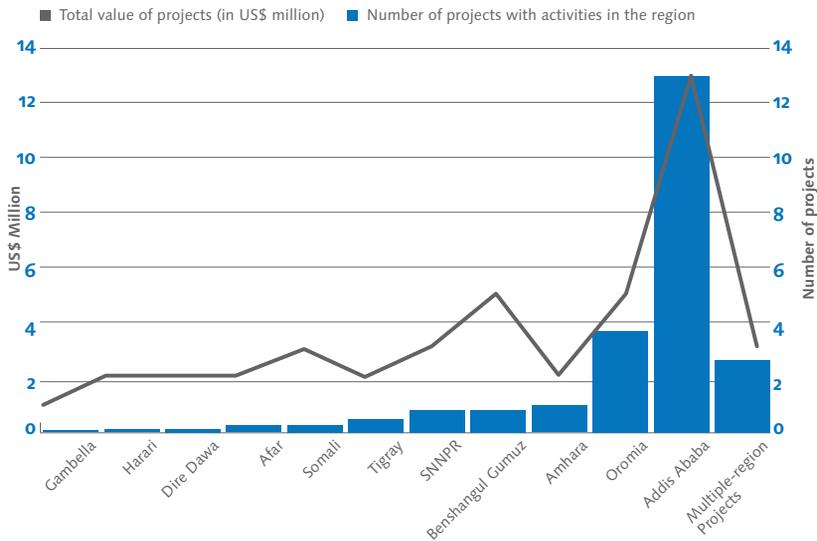
Table 7: CRGE projects funded through the FTI programme

IMPLEMENTING ENTITY	VALUE OF PROJECTS (USD)	NUMBER OF PROJECTS
Ministry of Water, Irrigation and Energy	8,713,865	6
Ministry of Agriculture	6,630,000	4
Ministry of Environment and Forestry	3,490,500	12
Ministry of Transport	2,995,000	4
Ministry of Urban Development	1,354,775	16
Ministry of Industry	584,000	1
GRAND TOTAL	23,768,139	43

Source: Authors, based on data from CRGE Website (2017).

In terms of geographical distribution, Figure 4 shows that projects were implemented in all the region-states of the country, but with a notable majority (13 projects) to be implemented in Addis Ababa. While we do not have evidence on why this is the case, this focus on the capital city could be explained by the relative short timeframe for implementation of the FTIs (18 months). This would have required a set of resources and capacities that were likely located within Addis Ababa, rather than other regions. Projects in Addis Ababa include those related to piloting agriculture measures (\$5.2 million), as well as solar power for water supply and irrigation (\$2.7 million).

Figure 4: FTI projects (number and value) across regions



Source: Authors, based on data from CRGE Website (2017).

The CRGE facility is currently implementing projects beyond the FTIs. Initial funding from the Fast Track phase resulted in mobilisation of additional funding, and is currently being used in some cases to expand some of the successful projects implemented during the Fast Track. For example, the MoA has expanded the Dire Dawa project to additional woredas.⁶

Financial channels in Dire Dawa and Bishoftu projects

Initially, the CRGE facility has been allocating funding to the sectors. In turn, the sectors distribute money to the regions and eventually to the woredas, where project implementation takes place. In some cases, sectors at the federal level directly channel the finance to the woreda without going through the

⁶ The FTI project in Dire Dawa is one of the CRGE projects initiated and implemented by the Ministry of Agriculture and is titled 'Piloting CRGE strategy measures through agriculture sector climate proof and low carbon agricultural investments in 8 regions of Ethiopia'.

regions. However, according to the coordinator of the CRGE facility, this channel has been found to be inefficient and has been changed back to the traditional delivery system, which is to allocate funds from MoFEC to the regional Bureaus of Finance and then to the woredas. This is because the regional finance offices already have an established channel, with appropriate personnel in their financial administration with the woredas: something the line ministries don't have.

Both Dire Dawa and Bishoftu interviewees reported that the finance for the FTI projects were channelled through the line ministries. In Dire Dawa, the finance was released quarterly, following the monitoring and reporting of quarterly-planned activities by the line ministry. Meanwhile, in Bishoftu, the finance was released in three installments because of the delay in timely utilisation of the first installment. Here, the project finance was managed centrally by the city administration, not the unit responsible for the CRGE project. However, implementation and financial utilisation of the project was efficient and additional FTI funding from the MUDHCo was granted. As MUDHCo was responsible for effective utilisation of the FTI project, the ministry had the mandate and the administrative flexibility to transfer u-used finance among its implementing towns. Overall, the interviews revealed that the CRGE projects' financial administration was very quick and effective due to less bureaucracy in comparison to the regular budget administration and the special attention given to CRGE projects by the government.

Financial sustainability

The FTIs were short-lived projects that were quickly implemented to kick start the functioning of the CRGE facility. The fact that most projects are built on existing ones implemented through the regular budget means the activities are presumed

to continue even if additional finance outside the regular budget is not secured. This also indicates that CRGE projects are well-mainstreamed and aligned to the national climate change priorities. Nonetheless, while some projects are still working – especially those based on community-based resource management in the agricultural sector – the ones discussed that didn't have a phasing-out strategy stopped quite abruptly. According to an official at the MoA, the assumption at the time was that the community would continue with the activities started by the projects, as the finance available to support them was only there for a short period of time (18 months).

The project in Dire Dawa has demonstrated relative success and been scaled up for a high number of other households. The office of agriculture has mainstreamed the activities learned from the CRGE project and trained an additional 450 households to adopt the interventions. The office's annual plan has further included an intention to expand these interventions to additional kebeles through the regular budget. In Bishoftu, the project uses the FTI finance as a revolving fund to continue and expand its activities, as the cooperatives are expected to pay back the money they were loaned.

Overall, the case study shows that the CRGE facility has fully reflected its strategy by focusing on nationally-determined priorities.

Climate change is also mainstreamed into national development planning across a number of key sectors, with the budget allocated to these sectors intended to support activities in line with the CRGE strategy. According to experts at the CRGE facility, MoFEC is planning to introduce a climate finance tracking system to monitor effectiveness of budget-utilisation for the realisation of the CRGE strategy.

This top-down approach generally limits the extent to which local priorities are taken into account (see Box 1 on what can be defined as 'local level'). However, both projects studied reveal a good understanding of the needs of poor communities, with the multi-sectorial approach of the activities appearing to adequately reflect both national and local-level priorities.

Despite the above, an important limitation across the whole CRGE facility portfolio, in terms of inclusiveness and targeting the most vulnerable people, is the CRGE facility's prioritisation of mitigation investments over adaptation ones. This better reflects the CRGE Strategy Green Economy component, indicating it is more well-developed and has clearer targets than the climate-resilient one.



5. DISCUSSION

IMAGE:
AFRICA
PROGRESS PANEL

Ethiopia's CRGE facility and Kenya's CCCFs used different strategies for understanding and incorporating local priorities into their investment decisions.

In Ethiopia, the CRGE facility was established as a federal climate fund intended to centralise the funding supporting climate change action in the country. The facility was set up to enable the implementation of federal-level targets, including the Climate Resilient and Green Economy Strategy and the Growth and Transformation Plan. This was also reflected in the selection criteria for FTI projects, where the contribution to these strategies formed the main criteria. The FTIs were designed by line ministries with the expectation that these would identify local priorities through their own decentralised institutions

and mechanisms, including woreda level offices. Line ministries conducted consultation processes at woreda level for the design of FTIs, but these were ad hoc, depending on the ministry, project objective and size. In Dire Dawa, the process included consultation with the local university, to identify specific areas of implementation, whereas participation of woreda institutions in Bishoftu was limited. Nevertheless, the FTIs were a strategy geared towards starting to implement projects through the CRGE facility. It is expected that future iterations of funding will include different levels of government and other institutions, including non-governmental organisations.

In Kenya, the starting point was to establish specific funds at county level, denominated CCCFs. These were conceptualised in partnership between staff within the NDMA and IIED, and funded through an externally supported project from the United Kingdom: Strengthening Adaptation and Resilience to Climate Change in Kenya plus (STARK +). The CCCFs directly support the constitutional requirement to promote further participation of citizens public decision-making. This is also reflected in the selection criteria of the CCCFs' projects, including the provision of public goods and resilience building. Given their location at county level, the formulation and prioritisation of projects within CCCFs is very much county driven, relying heavily on community-level resilience assessments and participatory vulnerability and capacity assessments. These are also supported by civil society organisations currently working at the community level. Interviewees reported that CCCFs used NGO agents to channel funds to investment service providers, although public financial management systems run by government staff were used to track and account for funds.

A common reported practice in both Kenya and Ethiopia was for the respective funds to work with existing institutions

and capacities at the local level. While this has the potential to generate local climate change capacity, it also has some challenges. The CRGE facility works under a mainstreaming strategy, where climate change activities are included within regular activities, including at woreda level. Therefore, project implementation avoids having additional members of staff at woreda level, and instead uses current woreda staff. For example, the CRGE facility funding has a specific monitoring process that is different and additional to the regular activities. This generates further pressure on existing staff, particularly when demands from the projects include the deployment of new technologies or new practices – which is particularly common in pursuing resilience or adaptation results. The CCCFs have also worked with current county government staff, but the higher demands from CCCFs have also generated the need to receive external NGO support. Interviewees reported that county governments had limited expertise to run participatory resilience planning tools, with limited time, budgets and skills to engage quickly with all of the water-related projects in need of planning. In theory, the CCCFs are in a better position to identify local needs – when compared to the CRGE facility – but also could be limited by the existing capacity within the counties. This can impact the capacity of some counties to formulate good quality proposals to be funded.

National level climate change policies in Ethiopia and Kenya were developed at the start of this decade, with the Climate Resilient and Green Economy (CRGE) strategy having guided the climate change action in Ethiopia since 2011, with the NCCAP doing the same since 2013 in Kenya. Both climate policies have similar approaches in terms of how to include local-level priorities. Ethiopia's CRGE has a top-down approach that mainly included consultation processes with line ministries and regional states (the first level of sub-national government after the federal

one), with the assumption that sectors and regions will be able to convey interests from zones, woredas and kebeles through their own channels. In the case of Kenya, the formulation of the NCCAP included a consultation process with county governments (also the first level of sub-national government after the national level), with the expectation that counties would comprise ward and community interests to feed into the policy. However, the extent to which regional and county governments incorporated the priorities of lower levels of governments and communities into the policy process was perceived by interviewees as limited in both countries.

Overall, both countries have linked their climate policies with their national and sub-national development planning processes. Ethiopia is focused on achieving middle-income status, and diverse institutions and policies showcase this through a federal approach, where the country strategies are guided by a federal vision of growth and the Growth and Transformation Plan (GTP) represents the most important document for development planning for all levels of government. This is reflected in the design of the CRGE and its implementing instruments, as the CRGE was explicitly designed to support the implementation of the GTP and achieve its targets. However, this is also applicable in regional and woreda development planning, which is heavily influenced by specific GTP targets established at federal level. In Kenya, there is also a goal to become a middle-income country, reflected in Vision 2030. Here, the NCCAP is linked to the medium-term plan (GTP) for achieving Vision 2030. The new constitution of 2010 is focused on the devolution of decision-making to county governments, together with enhancing the participation of citizens in development planning. This is reflected in how the NCCAP is integrated within the CIDPs. County governments in Kenya have the capacity to decide what and

how to apply the NCCAP mandates and what to prioritise according to their own context. The level of power and capacity of the counties in Kenya is lacking in the woredas in Ethiopia, where the whole system is more centralised.

The different roles given to sub-national government officials is also reflected in the identification of priorities within the climate policies. In the case study of Ethiopia, the Climate Resilient Strategy undertook a sectoral approach, identifying agriculture and forestry, and water and energy as priority sectors, which resulted in these developing climate resilient strategies. These included actions expected to align with the GTP and its specific targets. While this provides coherence among different strategies, and ensures climate change mainstreaming within sectors, it could also result in reduced or limited degrees of liberty at the woreda level to decide which sector or actions to undertake, particularly if the woreda's specific contexts need to prioritise activities outside those of the national GTP. In the case of Kenya, climate policies (including the NAP and NCCAP) are linked to Vision 2030, but are recognised as multi-sectoral strategies and co-exist with other sectoral policies, such as the National Water Master Plan, Ending Drought Emergencies or the climate smart agriculture framework, but without a clear hierarchy. This has nonetheless allowed each county to prioritise depending on their own needs, or interests.

Neither of the funds have yet achieved full financial integration into their national budget systems. Whereas Ethiopia's facility projects were implemented through the line ministries via regular channels, this still only works with international funding. The facility was successful in its purpose for increasing trust from donors and has continued to secure funding from external sources beyond the \$ 21 million 'fast start' investment phase. This provides stability to the funds through national level efforts,

even when there are not yet any specific funding flows from the federal or local governments. This multilateral support has also impacted the size of the funding available at country level. Projects under the FSI vary in size, from \$27,000 for the specific project of greening the urban space in a kebele, to \$5.2 million for piloting agriculture sector level climate proofing.

In the case of Kenya, the funding has, until recently, also only come from external sources. In the cases analysed in Wajir, the scale of funding for specific projects ranged from US\$27,000 for a ward and \$480,000 in the whole county. However, counties have recently taken steps to integrate the CCCF approach into their budget, with Wajir allocating 2%, and Makueni allocating 1% of their development budgets to capitalise the fund each financial year. In both cases, the committed figures by county government from domestic development budgets is greater than funds committed by DFID, indicating the financial sustainability of these funds.



6. CONCLUSIONS

IMAGE:
TIM CRONIN/
CIFOR

Overall, we find that the characteristics of a climate finance delivery system clearly reflects the political and economic context, national development priorities and type of decentralisation process in each country. These will determine which institutions and organisations to work with (e.g. by creating new institutions or using current ones) and how the decision-making process is led, in particular how much power, responsibilities and resources are allocated or assigned to the community and other forms of local-level governments and organisations. National governments – including support recipient countries and donors – need to consider these circumstances and reflect them in their plans before taking any decisions on how to decentralise climate finance.

There are trade-offs between ensuring local-level participation at all levels and ensuring achievement of national long-term climate specific planning goals. Local participation allows investments to understand and include local political realities and knowledge, building on existing adaptive livelihood strategies. It is also critical for ensuring that changes in behaviour can happen and remain sustainable. It supports a more systemic approach to planning, bringing an increased likelihood of improved resilience outcomes. However, local priorities can focus on addressing current and urgent needs not necessarily directly linked to climate change, particularly when directed by the most vulnerable groups. This may lead to overlooking long-term structural issues that may be crucial for climate change resilience. This tension generates questions regarding the appropriate level of participation and decision-making for climate change investments, especially when referring to the most vulnerable. Enabling meaningful participation, while ensuring the consideration of complex structural issues, requires careful consideration. It also necessitates reflection on the roles that different levels of government should take. For example, while local governments may be best placed to enable participation and small-scale planning, national government institutions may need to guarantee that sub-national institutions will continue to mainstream climate change across all their planning processes, rather than just through the incorporation of climate change via specific projects or sectors. This may require medium-term sectoral planning to shape subsequent sub-national decision-making.

Donor support and engagement in the design of local-level climate finance delivery systems should not undermine recipient country management of funds. Donor financial and technical support in designing national climate funds has been a steering force for establishing national climate funds. The use of national

systems is critical for the long-term process and domestic sustainability of the climate finance systems. There is therefore a need to confirm that the management of funds will rely heavily on domestic decision-making. There is also a need to prioritise the use of current national financial systems and include strategies for scaling up domestic and private funding sources.

Across both Ethiopia and Kenya, the experience shows that there is a shortage of technical expertise at the local level to support local project design and implementation. Water engineers and skills in participatory planning are in short supply, and this can delay development of projects and slow progress. Therefore, additional investment needs to go into building expertise at sub-national levels (woredas and counties) to enable community responsive adaptation.

The concern local government officials have for the needs of the poorest and most vulnerable shouldn't be overestimated and should be counterbalanced with rigorous application of participation tools and monitoring by community members of community-based organisations (CBOs) to ensure they are carried out thoroughly. Otherwise, there is a risk that investment decisions will be taken, not on the basis of rigorous vulnerability assessments, but instead on the basis of political divisions among clans, ethnicities or other powerful groups. The longevity of the funds shouldn't depend on the political will of politicians to support them but longer-term targets identified at national level (e.g. through NDC). This means that CRGE fund managers should consider adopting the institutional structures that enable communities to channel ideas to government and monitor the quality of their implementation. For example, they could consider using some of the participation tools used by the CCCF in Kenya for identifying the investment focus of the CRGE projects (e.g. participatory capacity and vulnerability analysis (PVCA) and

resilience assessments). These tools could also be tailored at the sectoral level.

Governments should consider mechanisms that enable flexibility in the way financial resources are channelled. Funding for climate resilience projects, particularly for recovery or reconstruction efforts, might be required in circumstances such as unpredicted floods or unpredicted escalating drought impacts. This requires quick disbursement of funding to the local level.

Successful decentralised adaptation planning and investment prioritisation will depend on the authority of sub-national institutions such as counties or woredas. Sub-national government authorities must be able to spend adaptation finance at their own discretion and be trusted to decide how well local priorities raised through community consultation meet national policies and subsequently support their communities.

Bibliography

Literature review

Bangladesh Ministry of Food and Disaster Management (Disaster Management and Relief Division). (n.d.) 'Bangladesh Local Disaster Risk Reduction Fund Comprehensive Disaster Management Programme: Versatile financing for local level small to medium scale interventions for disasters and climate change risk reduction'. Bangladesh local disaster risk reduction fund comprehensive disaster management programme: Dhaka (http://www.preventionweb.net/files/globalplatform/entry_presentation~bdesh.pdf).

Bird, N., Tilley, H., Canales Trujillo, N., Tumushabe, G., Welham, B. and Yanda, P. (2013) 'Measuring the effectiveness of public climate finance delivery at the national level'. Overseas Development Institute (ODI): London (<https://www.odi.org/publications/7342-measuring-effectiveness-public-climate-finance-delivery-national-domestic-level>).

Bird, N., Asante, F., Bawakyillenuo, S., Trujillo, N.C., Eshetu, Z., Tumshabe, G., Yanda, P., Norman, M., Tagoe, C.A., Amsalu, A., Ashiabi, N., Mushi, D., Muhumza, T., Kateka, A. and Simane, B. (2016) *Public spending on climate change in Africa: experiences from Ethiopia, Ghana, Tanzania and Uganda*. London: ODI (<http://gliss.org/storage/app/uploads/public/573/7b0/35c/5737b035c2593887946338.pdf>).

Cambodia Climate Public Expenditure and Institutional Review (CPEIR). (2012) *Final Report: Capacity Development for Development Effectiveness*. Various locations: CPEIR.

- Davey, K. (2003) 'Fiscal Decentralization'. New York: United Nations Public Administration Network (<http://unpan1.un.org/intradoc/groups/public/documents/UNTC/UNPAN017650.pdf>).
- Hesse, C. (2016a) 'Decentralising climate finance to reach the most vulnerable'. London: IIED (<http://pubs.iied.org/pdfs/Go4103.pdf>).
- Hesse, C. (2016b) How devolved climate finance can deliver climate resilience at local level. London: IIED (<https://www.iied.org/how-devolved-climate-finance-can-deliver-climate-resilience-local-level>).
- Hesse, C., King-Okumu, C. and Williams, M. (2016) 'Local climate finance funding community-prioritised adaptation'. London: IIED (<https://www.iied.org/local-climate-finance-funding-community-prioritised-adaptation>).
- International Food Policy Research Institute. (2015) *2014–2015 Global Food Policy Report*. Washington D.C.: International Food Policy Research Institute (<http://dx.doi.org/10.2499/9780896295>).
- Junghans and Dorsch. (2015) 'Finding the Finance: Financing Climate Compatible Development in Cities'. London: CDKN (https://cdkn.org/resource/finding-finance-financing-climate-compatible-development-cities/?loclang=en_gb).
- Local Climate Adaptive Living Facility (LoCAL). (2017) *The Local Climate Adaptive Living Facility (LoCAL)*. Benin: LoCAL (<http://www.local-uncdf.org>).
- Soanes, M., Rai, N., Steele, P., Shakya, C., MacGregor, J. (2017), Sharma K.P. (2014) *Water-statistics and information*. Kathmandu: Jalsrot Vikas Sanstha/Nepal Water Partnership 'Delivering real change: getting international climate finance to the local level'. Working paper. London: IIED (<http://www.empresaclima.org/assets/uploads/2017/03/2.-Delivering.pdf>).

Trujillo, N.C., Amsalu, A., and Tagoe, C.A. (2016) 'Chapter 12: Lessons for the local delivery of climate change finance in Public spending on climate change in Africa: Experiences from Ethiopia, Ghana, Tanzania, and Uganda. (<https://www.odi.org/sites/odi.org.uk/files/resource-documents/11245.pdf>).

UNDP, UNCDF and UNEP. (2013) 'Financing local responses to climate change. Implications of decentralisation'. New York: UNDP, UNCDF and UNEP (<http://bibliotecavirtual.minam.gob.pe/biam/bitstream/handle/minam/1903/BIV01674.pdf?sequence=1>).

Kenya

Adaptation (ADA) Consortium. (2017) 'Mainstreaming Climate Change into Planning: Lessons from Five Arid and Semi-Arid Counties. ADA 2nd Learning Event, 16–17th February 2017': Nairobi: ADA.

ADA. (forthcoming) *Finance for Resilience Building and Ecosystem Based Adaptation in Kenya: A comparative study of local and nationally managed funds*. Nairobi: Adaptation Consortium.

Barrett, S. (2015) 'Subnational Adaptation Finance Allocation: Comparing Decentralized and Devolved Political Institutions in Kenya', *Global Environmental Politics* 15(3): 118–139.

Cheeseman, N. (2016) 'Africa: Presidential Term Limits and the Third Term Tragedy'. *Presidential Power* (<https://presidential-power.com/?p=4874>).

Cheeseman, N., Lynch, G. and Willis, J. (2016) 'Decentralization in Kenya: The governance of governors', *Journal of Modern African Studies* 54(1): 1–35.

- CFU (2017) Climate Funds Update Website (www.climatefundsupdate.org) [accessed in June 2017] (also used for Ethiopia study).
- Christian Aid. (2009) Christian Aid Good Practice Guide: *Participatory vulnerability and capacity assessment* (PVCA). London: Christian Aid (<http://programme.christianaid.org.uk/programme-policy-practice/sites/default/files/2016-03/christian-aid-good-practice-guide-PVCA-oct-2009.pdf>).
- Data.worldbank.org. (2017) *Improved water source (% of population with access)|Data*. Washington D.C.: World Bank (<http://data.worldbank.org/indicator/SH.H2O.SAFE.ZS?locations=KE>) [Accessed 25 Aug. 2017].
- Finch, C. and Omolo, A. (2015) 'Building Public Participation in Kenya's Devolved Government'. World Bank and Kenya School of Government Working Paper Series 1. Washington D.C: World Bank (<http://documents.worldbank.org/curated/en/458231467997561854/Building-public-participation-in-Kenya>).
- Government of Kenya (GoK). (2012) *Public Finance Management Act (2012)*. Nairobi: GoK.
- GoK. (2016) *Climate Change Act (2016)*. Nairobi: GoK.
- Government of Makueni County. (2013). *Makueni County Integrated Development Plan: 2013- 2017*. Nairobi: GoK.
- Government of Makueni County (2015). *The Public Finance Management Act, Makueni County Climate Change Fund Regulations, 2015*. Government of Makueni County, p.17, iv.
- Greene, S and Hesse C, (2016), "Participatory Resource Mapping". International Institute for Environment and Development.

Hesse, C. (2016) *Decentralising Climate Funds (DCF): Decentralising climate finance to reach the most vulnerable*. London:

International Institute for Environment and Development (IIED).

International Institute for Environment and Development (IIED).

(2014) 'The Tracking Adaptation and Measuring Development (TAMD) Framework'. London: IIED (<https://www.iied.org/tracking-adaptation-measuring-development-tamd-framework>).

International Finance Corporation. (2013) *Kenya Enterprise Survey* Washington D.C.: World Bank. (<https://www.enterprisesurveys.org/>[/media/GIAWB/EnterpriseSurveys/Documents/Profiles/English/Kenya-2013.pdf](https://www.enterprisesurveys.org/)) [Accessed 13 Jul. 2017].

Kenya Institute for Public Policy Research and Analysis. (2016) *Kenya Economic Report 2016*. Fiscal Decentralization in Support of Devolution. Nairobi: Kenya Institute for Public Policy Research and Analysis.

Kenya School of Government. (2014) 'Building Public Participation in Kenya's Devolved Government: Overview of key challenges and opportunities for enhancing participation in newly devolved institutions and systems: A summary of the working paper series. Building Public Participation in Kenya's Devolved Government'. Nairobi: Kenya School of Government.

Kiiru, J. (2017) *Wajir county set to access kes143m for climate change adaptation and resilience building*. Nairobi: ADA consortium (<http://www.adaconsortium.org/index.php/309-wajir-county-set-to-access-kes143m-for-climate-change-adaptation-and-resilience-building.html>) [Accessed 8 Sep. 2017].

Ministry of Agriculture, Livestock and Fisheries, Ministry of Environment and Natural Resources. (2014) *Kenya Climate Smart Agriculture Framework Programme 2015–2030*. Nairobi: Government of Kenya.

Ministry for Development of Northern Kenya and Other Arid Lands. (2012) *Vision 2030: Development Strategy for Northern Kenya and Other Arid Lands*. Nairobi: Government of the Republic of Kenya.

Ministry of Devolution and Planning. (2013) *Second Medium Term Plan 2013–2017, Kenya Vision 2030*. Nairobi: GoK.

Ministry of Environment and Mineral Resources. (2013) *National Climate Change Action Plan*. Nairobi: GoK.

Ministry of Environment and Natural Resources. (2015) *Kenya National Adaptation Plan 2015–2030*. Nairobi: GoK.

Ministry of Planning and National Development, National Economic and Social Council. (2007) *Kenya Vision 2030*. Nairobi: GoK.

Mutua, K. (2016) *Makueni sets pace in Africa with climate change law*. Nairobi: Daily Nation (<http://www.nation.co.ke/counties/Makueni/Makueni-climate-change-law/1183294-3223706-adgnai/index.html>) [Accessed 8 Sep. 2017].

National Drought Management Agency (NDMA). (2013) *Kenya Drought Operations Plan 2013–2014*. Nairobi: GoK (pp.4–8).

NDMA (2014). *Ending Drought Emergencies: Common Programme Framework for Drought Risk Management*. Nairobi: GoK.

Symons, K. (2014) 'Anti-politics, Apocalypse and Adaptation in Kenya's National Climate Change Response Strategy', *Scottish Geographical Journal* 130(4): 266–278.

Transparency International. (2017) *Corruption Perceptions Index 2016*. Berlin: Transparency International (http://file:///C:/Users/Sam.Greene/Downloads/2016_CPIReport_EN.pdf) [Accessed 13 Jul. 2017].

Under2 Coalition: Subnational Global Climate Leadership Memorandum of Understanding. (2017) *Laikipia County Appendix Summary*. California: Under2 Coalition (<http://under2mou.org/wp-content/uploads/2015/05/Laikipia-County-appendix.pdf>) [Accessed 25 Aug. 2017].

United Nations Development Programme (UNDP). (2016) *Human Development Report 2016: Human Development for Everyone*. New York: UNDP.

Wajir County. (2013) *Wajir County Integrated Development Plan: 2013–2017*. Nairobi: GoK.

World Bank. (2017) *Economic Update: Kenya's Economy Strong in a Challenging Global Environment*. Washington D.C.: World Bank (<http://www.worldbank.org/en/country/kenya/publication/kenya-economic-update-economy-strong-challenging-global-environment>) [Accessed 12 Jul. 2017].

Ethiopia

Africa Climate Change Resilience Alliance (ACCRA). (2014) 'Planning for the future and adapting to climate change in Ethiopia: Lessons from ACCRA'. Briefing paper. Various locations: ACCRA (<http://careclimatechange.org/wp-content/uploads/2015/09/ACCRA-Planning-for-the-Future-and-Adapting-to-Climate-Change-in-Ethiopia.pdf>).

African Development Bank (AFDB), Organisation for Economic Co-operation and Development (OECD) and UNDP. (2017) 'African Economic Outlook. Special Theme: Sustainable Cities and Structural Transformation'. (https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AEO_2016_Report_Full_English.pdf) [Accessed July 27].

- Alemu, K.T. 2015. 'District Level Decentralization and Public Service Delivery in Ethiopia: Cases from Amhara Region'. *International Journal of African and Asian Studies* 10: 24–38.
- Bekele, Y.W. and Kjosavik, D.J. (2016) 'Decentralised Local Governance and Poverty Reduction in Post-1991 Ethiopia: A Political Economy Study', *Politics and Governance* 4(4): 1–15.
- Conway, D. and Schipper, E.L.F. (2011) 'Adaptation to Climate Change in Africa: Challenges and Opportunities Identified from Ethiopia', *Global Environmental Change* 21 (1): 227–37 (doi:<https://doi.org/10.1016/j.gloenvcha.2010.07.013>).
- DFID. (2017) 'Climate High Level Investment Programme (CHIP). Annual Review - Summary Sheet'. London: DFID (<https://devtracker.dfid.gov.uk/projects/GB-1-202597>).
- Eshetu, Z., Simane, B., Tebeje, G., Negatu, W., Amsalu, A., Bernahu, A., Bird, N., Welham, B. and Canales, N. (2014) *Climate Finance in Ethiopia*. London: ODI (<https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8995.pdf>).
- European Commission. (2014) 'Ethiopia and Client Partners Joint Communique – Lima Declaration'. Brussels: European Commission (<http://ec.europa.eu/transparency/regdoc/rep/3/2015/EN/3-2015-4557-EN-F1-1-ANNEX-1.PDF>).
- Federal Democratic Republic of Ethiopia (FDRE). 2011. 'Ethiopia's Climate-Resilient Green Economy Strategy'. Addis Ababa: Federal Democratic Republic of Ethiopia (<http://www.undp.org/content/dam/ethiopia/docs/Ethiopia%20CRGE.pdf>).
- FDRE. (2015) 'Intended Nationally Determined Contribution (INDC) of the Federal Democratic Republic of Ethiopia'. Addis Ababa: Federal Democratic Republic of Ethiopia (<http://www4.unfccc.int/ndcregistry/PublishedDocuments/Ethiopia%20First/INDC-Ethiopia-100615.pdf>).

- FDRE. (2016). *Growth and Transformation Plan III (GTP II) 2015/16–2019/20*. Addis Ababa: Federal Democratic Republic of Ethiopia (<https://europa.eu/capacity4dev/file/30510/download?token=efsF8UiP>).
- Jaramillo, J., Muchugu, E., Vega, F.E., Davis, A., Borgemeister, C. and Chabi-Olaye, A. (2011) 'Some like It Hot: The Influence and Implications of Climate Change on Coffee Berry Borer (*Hypothenemus Hampei*) and Coffee Production in East Africa', *PLOS ONE* 6 (9): e24528.
- Jirata, M., Grey, S. and Kilawe, E. (2016) *Ethiopia Climate-Smart Agriculture Scoping Study*. By Rome: Food and Agriculture Organization of the United Nations (FAO).
- Jones, L. and Carabine, E. (2013) 'Exploring Political and Socio-Economic Drivers of Transformational Climate Policy: Early Insights from the Design of Ethiopia's Climate Resilient Green Economy Strategy' London: ODI (<https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8617.pdf>).
- Kaur, N. (2013) 'Ethiopia: Can It Adapt to Climate Change and Build a Green Economy?' 25 March. London: IIED (<https://www.iied.org/ethiopia-can-it-adapt-climate-change-build-green-economy>).
- Ministry of Environment and Forests (MEF) and Ministry of Finance and Economic Development (MOFED). (2013) 'Project Concept Note and Proposal Preparation Guideline and Templates. Climate Resilient Green Economy (CRGE)'. Addis Ababa: Ministry of Environment and Forests; Ministry of Finance and Economic Development (<http://www.moa.gov.et/documents/93665/2027219/Final+Draft+CRGE+Project+Preparaton+Manual.pdf/aab85d9b-fb2e-409c-8258-3b2475efdd2c>).

- Multi-partner Trust Fund office (UN). (2012) 'Ethiopia's Climate Resilient Green Economy (CRGE) Facility Terms of Reference'. New York: United Nations (<http://mptf.undp.org/factsheet/fund/3EToo>).
- Niang, I., Ruppel, O. C., Abdrabo, M. A., Essel, A., Lennard, C., Padgham, J. and Urquhart, P. (2014) 'Africa', in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel of Climate Change*, edited by V. R. Barros, C. B. Field, D. J. Dokken, M. D. Mastrandrea, K. J. Mach, T. E. Bilir, M. Chatterjee, et al., 1199–1265. Cambridge, UK, and New York: Cambridge University Press (<https://www.ipcc.ch/report/ar5/wg2/>).
- Simane, B. and Bird, N. (2017). 'Enhancing Adaptation and Mitigation Activities through Effective Climate Change Financing Policy in Ethiopia', in W.L. Filho, S. Belay, J. Kalangu, W. Menas, P. Munishi and K. Musiyiwa. *Climate Change Adaptation in Africa: Fostering Resilience and Capacity to Adapt* (435–45). London: New York: Springer International Publishing: (https://link-springer-com.ezp.sub.su.se/content/pdf/10.1007%2F978-3-319-49520-0_26.pdf).
- Snyder, K.A., Ludi, E., Cullen, B., Tucker, J., Zeleke, A.B. and Duncan, A. (2014) 'Participation and Performance: Decentralised Planning and Implementation in Ethiopia', *Public Administration and Development* 34: 83–95.
- Suryabhadgavan, K.V. (2017) 'GIS-Based Climate Variability and Drought Characterization in Ethiopia over Three Decades', *Weather and Climate Extremes* 15(2017): 11–23.

World Bank Group. (2016) '5th Ethiopia Economic Update. Why so Idle? Wages and Employment in a Crowded Labor Market'. <http://documents.worldbank.org/curated/en/463121480932724605/pdf/110730-WP-P155867-PUBLIC-WBEEUdraftforlaunchdecemberfull.pdf>.

World Bank. (2010) *Economics of Adaptation to Climate Change*. Washington D.C.: World Bank (https://siteresources.worldbank.org/EXTCC/Resources/EACC_FinalSynthesisReport0803_2010.pdf).

Appendix

Interviews Methodology (Kenya)

Interviews used a semi-structured interview methodology, using questions developed by the research team in advance of the field work. A total of 22 interviews took place. At the national level, there were seven interviewees, including five from government departments, one from a Kenyan Research Institute and one from an international NGO. Interviewees were facilitated by Adaptation Consortium staff or through recommendations emerging from the interviews themselves.

In Makueni, seven interviews were arranged by ADSE, of which five were with government, one with an NGO and one with a contractor who implemented a CCCF project. In Wajir, eight interviews were arranged by ALDEF, of which five were with government, one was with the director of a community radio station supported by STARK+ and two were with NGO staff.

Wajir County Integrated Development Plan details

Investment of CCCFs provides direction to broad strategies designed to increase access to water and improve functionality of community water necessary for sustainability. CCCFs then ensure water pans have troughs for livestock as well as kiosks for domestic use. The Wajir county committee follows by funding training for water user committees and community members. This centres on water pans on and sustainable management of water sources.

While the Wajir CIDP allocates funds for excavating water pans, the CCCFs' prioritisation process has enabled communities to identify the pans requiring this. The strategy has been to deliver

multiple small-scale projects in a short period of time for greater impact, gaining value from limited resources. Technical officers have been able to recognise how investments fit into existing strategies and prevent tensions forming between community and government. Because the CCCFs' priorities have taken a systemic approach, it is likely that water investments will have co-benefits for sectors including livestock, agriculture and health.

Budget allocations for activities in the CIDP are echoed by the CCCF. Livestock sector plans have allocated Ksh 240 million to excavate water pans for livestock use and a further Ksh 5 million for improving grazing management systems. The total of Ksh 245 million represents over 10% of a Ksh 2333.8 million livestock budget.

The construction of kiosks to access for water for domestic use reflects the national policies recognised in the CIDP, including the constitution, Vision 2030 and Ending Drought Emergencies documents. The latter, in particular, recognises the need to extend water access and incorporate community-led decision-making, a goal contributed to by increased domestic water access.

Kenya portfolio

Makueni and Wajir CCCFs investments to date

MAKUENI						
WARD	PROJECT SITE	PROJECT TYPE	PROJECT DESCRIPTION	PROJECT COST	COMPLETED	PROJECT BENEFICIARIES
Mtito Andei	Ngai Ndethya	Sand dam construction	Construction of a sand wall and sanitation facilities	4,104,334.50	Dec 2016	432 H/hlds.
Mbitini	Masue	Rock catchment	Construction of gutters, collection tanks (150,000m ³) and service kiosks (2no.)	5,429,287.50	July 2017	1226 people

MAKUENI CONTINUED						
WARD	PROJECT SITE	PROJECT TYPE	PROJECT DESCRIPTION	PROJECT COST	COMPLETED	PROJECT BENEFICIARIES
Kilungu	Kwa lai	Sand dam construction	Construction of a sand wall and sanitation facilities	2,151,526.00	Dec 2016	346 H/hlds
Nguu Masumba	Kwa Kilii	Sand dam construction	Construction of a sand wall	4,423,900.50	Dec 2016	338 H/hlds
	Kwa Mutuku	Earth dam construction	Construction of earth dam, cattle trough and sanitation facilities	2,275,443.00	Dec 2016	446H/hlds
Kithungo Kitundu	Kya aka	Sad dam construction	Construction of a sand wall and draw off pipes	1,058,580.00	Dec 2016	298H/hlds.
	Ngutioni	Sad dam construction	Construction of a sand wall and draw off pipes	934,032.00	Dec 2016	155 H/hlds.
Kiima kiu/ kalanzoni	Kaseve	Pipeline distribution	Pipeline construction (2),water tanks stallation (10,000m ³ & 5000m) and water kiosks (2)	2,485,617.56	Jan 2017	408
WAJIR						
WARD	PROJECT SITE	PROJECT TYPE	PROJECT DESCRIPTION	COST	COMPLETED	PROJECT BENEFICIARIES
Bananey	Buruka	Rehabilitation of Water Pan	Pan Desilting and expansion, perimeter fencing, installing 10,000m EWT tank, piping system, trough and stand point (as per the attached Bill of Quantities and structural designs)	3,783,920.00	December 2016	
Arbajahan	Adan Awale	Rehabilitation of Water Pan	Pan Desilting and expansion, perimeter fencing, installing 10,000m EWT tank, piping system, trough and stand point (as per the attached Bill of Quantities and structural designs)	3,924,100.20	December 2016	

WAJIR CONTINUED						
WARD	PROJECT SITE	PROJECT TYPE	PROJECT DESCRIPTION	COST	COMPLETED	PROJECT BENEFICIARIES
Laghboghol South	Laghboghol	Rehabilitation of Water Pan	Pan Desilting and expansion, perimeter fencing, installing 10,000m EWT tank, piping system, trough and stand point (as per the attached Bill of Quantities and structural designs)	3,745,640.00	December 2016	
Eldas	Dadhantalai	Rehabilitation of Water Pan	Pan Desilting and expansion, perimeter fencing, installing 10,000m EWT tank, piping system, trough and stand point (as per the attached Bill of Quantities and structural designs)	3,748,979.68	December 2016	
Gurar	Bamba	Rehabilitation of Water Pan	Pan Desilting and expansion, perimeter fencing, installing 10,000m EWT tank, piping system, trough and stand point (as per the attached Bill of Quantities and structural designs)	3,700,115.80	December 2016	
Sarman	Basanicha	Rehabilitation of Water Pan	Pan Desilting and expansion, perimeter fencing, installing 10,000m EWT tank, piping system, trough and stand point (as per the attached Bill of Quantities and structural designs)	3,799,987.60	December 2016	
Khorofharar	Wajir Bor	Rehabilitation of Water Pan	Perimeter fencing, installing 10,000m EWT tank, piping system, troughs and stand point (as per the attached Bill of Quantities and structural designs)	3,786,066.00	December 2016	

WAJIR CONTINUED						
WARD	PROJECT SITE	PROJECT TYPE	PROJECT DESCRIPTION	COST	COMPLETED	PROJECT BENEFICIARIES
Wargadud	Wargadud	Rehabilitation of Water Pan	Perimeter fencing, installing 10,000m EWT tank, piping system, troughs and stand point (as per the attached Bill of Quantities and structural designs)	3,799,987.60	December 2016	
Elben	Elben	Rehabilitation of Water Pan	Perimeter fencing, installing 10,000m EWT tank, piping system, troughs and stand point (as per the attached Bill of Quantities and structural designs)	3,900,036.00	December 2016	
Lakole	Lakole	Rehabilitation of Water Pan	Perimeter fencing, installing 10,000m EWT tank, piping system, troughs and stand point (as per the attached Bill of Quantities and structural designs)	3,781,839.82	December 2016	
Korondille	Yatta	Installation of Solar panels	Installation of solar panels, submersible and its accessories	4,215,046.00	December 2016	
Adimasajida	LMD	Installation of Solar panels	Installation of solar panels, submersible and its accessories	3,699,750.00	December 2016	
All wards	Wajir County ALDEF K	Capacity building of communities	Building resilience to effect of climate change through strengthening of natural resource governance in Wajir County	2,875,000.00	March 2017	
All wards	Wajir County- Radio community		Radio session of talk show/messaging airtime	1,200,000.00	March 2017	

COUNTY	WARD	PROJECT NAME	COST (KSH.)	COST (USD)	DIRECT BENEFICIARIES	INDIRECT BENEFICIARIES
Wajir	Bananey	Rehabilitation of Buruka Water Pan	3,783,920	36,404	5600	2000
	Arbajahan	Rehabilitation Adan Awale Water Pan	3,924,100	37,752	21750	3500
	Laghboghol South	Rehabilitation Laghboghol Water Pan	3,745,640	36,035	44,500	6700
	Eldas	Rehabilitation Dadhantalai Water Pan	3,748,979	36,075	49000	13300
	Gurar	Rehabilitation Bamba Water Pan	3,700,115	36,605	26174	12000
	Sarman	Rehabilitation Basanicha Water Pan	3,799,987	36,566	26064	7200
	Khorofharar	Rehabilitation Wajir Bor Water Pan	3,786,066	36,432	70,980	600
	Wargadud	Rehabilitation Wargadud Water Pan	3,799,987	36,566	29,949	8400
	Elben	Rehabilitation Elben Water Pan	3,900,036	37,529	27000	600
	Lakoley	Rehabilitation Lakoley Water Pan	3,781,839	36,392	21500	3800
	Korondille	Installation of Solar panels at Nyata Borehole	4,215,046	40,560	36216	48,000
	Ademasajida	Installation of Solar panels at LMD Borehole	3,699,750	35,602	26216	38,600
CAPC	All Wards	Capacity building of communities on climate resilience through strengthened natural resource governance	2,875,000	27,665		
	All Wards	Radio Session of Talk show/messaging	1,200,000	11,547		
TOTAL (KSH)			49,960,465	480,756	384,949	144,700

7 Calculated at exchange rate of \$1: 103.94 Ksh

COUNTY	WARD	PROJECT NAME	COST (KSH.)	COST (USD)	DIRECT BENEFICIARIES	INDIRECT BENEFICIARIES
Makueni	Kiima Kiu-Kalanzoni	Kwa Atumia Earth Dam	2,744,611	26,411	5152	2576
	Mbitini	Masue Rock Catchment	5,779,319	55,613	3660	1830
	Nguu-Masumba	Kwa Mutuku Earth Dam	2,519,724	24,237	2100	1500
	Kilungu	Kwa Lai Sand Dam	2,299,050	22,123	3000	1500
	Nguu-Masumba	Kwa Kilii Sand Dam	4,818,574	46,368	3780	1890
	Kithungo-Kitundu	Ngutioni Sand Dam	1,140,012	10,970	1800	900
	Kithungo-Kitundu	Kya Aka Sand Dam	1,217,681	11,717	3900	1950
	Mtito Andei	Ngai Ndethya Mega Sand Dam	4,476,639	43,078	6000	3000
	Kiima Kiu-Kalanzoni	Kwa Atumia Earth Dam	3,285,220	31,613	5152	2576
TOTAL MAKUENI			28,280,830	272,139	35,492	17,746

Ethiopia

Interviews methodology:

Interviews used a semi-structured methodology, using questions developed by the research team in advance of the field work. The interviews were carried out with officials and experts from relevant ministries and sector offices both at the national and woreda levels, along with an expert from an NGO. About 21 people were interviewed: eight from government at the national level, one from an NGO, six experts from woreda sector offices and three cooperative members in Bishoftu. In addition, we undertook field visits to the sites where the projects have been implemented and talked to local people, both in Dire Dawa and Bishoftu.

Implementation of the FTI projects

The projects were implemented by existing staff within the woredas, with no project staff employed to carry them out. The FTI project in Dire Dawa was focused on increasing crop and livestock productivity through a number of targeted and multi-sectorial activities. The woreda assigned an expert mainly responsible for directing and following up implementation of the FTI project. Other woreda experts included crop, livestock and NRM specialists also supported the project activities. Development agents in the kebeles where the project was implemented acted as important personnel working closely with participants of the project.

The cooperatives in Bishoftu town were engaged in solid waste collection, using tractors, three-wheel vehicles, push carts and eighteen horse-drawn carts. The project provided financial support for the purchase of materials used by the cooperatives for waste collection. Two tractors, three three-wheel vehicles and four push carts were purchased and provided to the

cooperatives on a loan basis. The cooperatives were required to pay back the money they took on loan. Those who owned tractors obtained an average monthly income of 80,000 birr, while those with three-wheel vehicles earned 30,000 birr, with a monthly repayment of 15,00 birr and 4,000 birr respectively, seeming to represent a feasible strategy for sustaining solid waste management and urban greening activities. In addition, the project purchased safety materials (such as gloves and boots), built shade for compost making and provided training to the cooperatives on material sorting and safety rules and measures. The solid waste collected was transported to two transfer sites where sorting took place.

FTI Projects list

PROJECT	IMPLEMENTING INSTITUTION	REGION
Urban Open Space Greening in Butajera City Administration in Kebele 02 around Tefetro Sheleko.	Ministry of Urban Development	SNNPR
Urban Open Space Greening in Hawassa City Administration around Textile factory	Ministry of Urban Development	SNNPR
Improving Income Status of women to create carbon sinks through reducing deforestation rate in erer and sofî woreda	Ministry of Environment and Forestry	Harari
Solid Waste Composting in Hawassa City Administration	Ministry of Urban Development	SNNPR
Solid Waste Composting in Butajera City Administration in Kebele 02 around Tefetiro Shelko	Ministry of Urban Development	SNNPR
Participatory Forest Management in Awale, Adada and Belewa rural kebeles of Dire Dawa Administration	Ministry of Environment and Forestry	Dire Dawa
Accelerating the National Biogas Program Ethiopia	Ministry of Water, Irrigation and Energy	Benshangul Gumuz, Gambella
Promoting Solid Waste Compost Utilization to reduce Methane emission in Harar City	Ministry of Urban Development	Harari
Improving solid waste collection in Gambella Town	Ministry of Urban Development	Gambella
Forest development along the upper and lower stream of Assosa in kebele 01, 02, 03 and 04.	Ministry of Urban Development	Benshangul Gumuz
Creating Climate Change Resilient Communities via innovative way of bamboo forest management in Selga 22 and Menaga Selga Kebeles	Ministry of Environment and Forestry	Benshangul Gumuz
Greenery Development of Millennium Public Park	Ministry of Urban Development	Dire Dawa
Solid Waste Management in Logia Municipality	Ministry of Urban Development	Afar
Afforestation/ Reforestation in Karamara Hill/Hadaw Kebele	Ministry of Environment and Forestry	Somali
Combating Forest and Land Degradation Induced by Charcoal Production and Firewood Collection in K/Bayah Woreda of Somali Regional State	Ministry of Environment and Forestry	Somali
Improving Solid Waste Collection System of Jigjiga City	Ministry of Urban Development	Somali
Solid Waste Segregation in Two Condominium Houses Sites of Addis Ababa (Mikiland and Gofa Sites)	Ministry of Urban Development	Addis Ababa

PROJECT	IMPLEMENTING INSTITUTION	REGION
Organic waste composting in Addis Ababa City Administration	Ministry of Urban Development	Addis Ababa
Recreational Park Development for Adama City in kebele 01	Ministry of Urban Development	Oromia
Sustainable Greenery Project: for reducing GHGs emissions in the case of Shire Endaslase city.	Ministry of Urban Development	Tigray
Municipal Solid Waste Management to build clean and green city in Bishoftu	Ministry of Urban Development	Oromia
Mount Jemo Wechecha Ecosystem Rehabilitation Project	Ministry of Environment and Forestry	Addis Ababa
Improving Solid Waste Collection Coverage and Composting Project for Dessie City	Ministry of Urban Development	Amhara
Application of Prosopis Juliflora Cement Bonded particle boards for low cost house construction	Ministry of Environment and Forestry	Afar
Piloting Agriculture CRGE in the Rift Valley Ecosystem	Ministry of Agriculture	Addis Ababa
Integrated Forest Development & Management Project in Selected Weredas of Tigray Regional State	Ministry of Environment and Forestry	Tigray
Promotion of highland bamboo plantation for ecosystem restoration and livelihood improvement in the eastern escarpments of the upper rift valley Areas.	Ministry of Environment and Forestry	Oromia
Enhancing highland bamboo management and processing and improving livelihood of the community in Oromia region	Ministry of Environment and Forestry	Oromia
Technical Assistance and Capacity building on M&E, MRV and long term Investment plan for selected Agricultural Sector CRGE Fast Track Project Woredas	Ministry of Agriculture	Amhara, Oromia, Tigray, SNNPR, Afar, Somali, Gambella, Benshangul, Dire Dawa and Hariri
Development of baseline and mrv system for ghg emissions from the industry sector and implementation of pilot ghg reduction through energy efficiency	Ministry of Industry	Addis Ababa
Piloting CRGE strategy measures through agriculture sector climate proof and low carbon agricultural investments in 2 regions of Ethiopia	Ministry of Agriculture	Afar, Somali
Share the road:development of walking and cycling facilities for urban transportation of addis ababa	Ministry of Transport	Addis Ababa
Strengthening the monitoring Capacity of Petroleum Downstream Operations Regulatory Directorate	Ministry of Water, Irrigation and Energy	Addis Ababa
Natural Resources Rehabilitation and Conservation in Selected Woredas of SNNPS	Ministry of Environment and Forestry	SNNPR

PROJECT	IMPLEMENTING INSTITUTION	REGION
Strategic Support for Water Monitoring Systems	Ministry of Water, Irrigation and Energy	Benshangul Gumuz
Share the road - Development of Walking and Cycling Facilities for Urban Transportation of Addis Ababa	Ministry of Transport	Addis Ababa
Off-Street Parking as an instrument for Traffic flow improvement and Emission Reduction in Addis Ababa city	Ministry of Transport	Addis Ababa
Reducing land degradation and improving livelihoods in the highlands of the Amhara National Regional State	Ministry of Environment and Forestry	Amhara
Off-street Parking as instrument to improve traffic flow and emission reduction	Ministry of Transport	Addis Ababa
Improving the Livelihoods and Life Styles of Rural Community of the Emerging Regional States through the Dissemination of Solar Energy Technologies	Ministry of Water, Irrigation and Energy	Benshangul Gumuz, Somali, Afar and Gambella
Solar power for water supply and irrigation	Ministry of Water, Irrigation and Energy	Oromia, Tigray, amhara, SNNP, Benshangule, Gambella, Somali, Afar
Solar power for water supply and irrigation	Ministry of Water, Irrigation and Energy	Oromia, Amhara, Tigray, SNNP
Piloting CRGE strategy measures through agriculture sector climate proof and low carbon agricultural investments in 8 regions of Ethiopia	Ministry of Agriculture	Amhara, Benidhangul Gumuz, Dire Dawa, Gambella, Harari, Oromia, SNNPR, Tigray

BRACED aims to build the resilience of up to 5 million vulnerable people against climate extremes and disasters. It does so through a three year, UK Government funded programme, which supports 15 consortiums, across 13 countries in East Africa, the Sahel and Southeast Asia. Uniquely, BRACED also has a Knowledge Manager consortium.

The Knowledge Manager consortium is led by the Overseas Development Institute and includes the Red Cross Red Crescent Climate Centre, the Asian Disaster Preparedness Centre, ENDA Energie, ITAD and the Thomson Reuters Foundation. Reuters Foundation.

The views presented in this paper are those of the author(s) and do not necessarily represent the views of BRACED, its partners or donor.

Readers are encouraged to reproduce material from BRACED Knowledge Manager Reports for their own publications, as long as they are not being sold commercially. As copyright holder, the BRACED programme requests due acknowledgement and a copy of the publication. For online use, we ask readers to link to the original resource on the BRACED website.

The BRACED Knowledge Manager generates evidence and learning on resilience and adaptation in partnership with the BRACED projects and the wider resilience community. It gathers robust evidence of what works to strengthen resilience to climate extremes and disasters, and initiates and supports processes to ensure that evidence is put into use in policy and programmes. The Knowledge Manager also fosters partnerships to amplify the impact of new evidence and learning, in order to significantly improve levels of resilience in poor and vulnerable countries and communities around the world.

Published October 2017

- Website: www.braced.org
- 🐦 Twitter: [@bebraced](https://twitter.com/bebraced)
- 📘 Facebook: www.facebook.com/bracedforclimatechange

Cover image: Dieter Telemans

Designed and typeset by Soapbox, www.soapbox.co.uk

