



## Key messages

- The devolved nature of the Country Climate Change Fund mechanism allows communities to manage their water security through locally-led investments. This not only enhances accountability and sustainability, but also encourages the use of local knowledge and traditional governance institutions that the community understands and accepts.
- Addressing sustainability is crucial when implementing water security projects in arid and semi-arid lands to ensure communities have continuous and long-term access to water. Interventions that promote sustainability should be considered throughout the life cycle of investments, including after implementation.
- Climate information should be used to support climate-resilient interventions, integrating seasonal forecasts, climate projections and a review of the impacts of weather events on an investment's efficacy. This allows for the re-evaluation of investments and enables future actions to be based on real impacts in the locality.
- Regular monitoring and evaluation is essential to track the sustainability of community investments and identify medium- and long-term challenges that need attention.
- Building and maintaining working relationships between county-level, community-level and site-level committees supports the functioning of water investments over time.
- A dedicated budget allocation for operations and maintenance is essential to sustain the functionality of water investments.

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## Ten years on: Enabling the success of locally-led water investments in Kenya's arid and semi-arid counties

**The County Climate Change Fund (CCCF) mechanism in Kenya, developed in 2011, enabled the implementation of 114 locally-led public good investments that were intended to build climate resilience. Of these, 95 were water infrastructure projects established across five arid and semi-arid counties (Garissa, Isiolo, Kitui, Makueni and Wajir). These investments were initially successful, providing access to reliable water supplies and supporting agricultural activities, such as livestock rearing. Ten years later, are these investments still providing a reliable water supply and other benefits to the communities they serve? Sometimes yes, but not always. This brief looks at the factors that support the longevity of the investments, to provide recommendations for ensuring the sustainability of locally-led climate investments and informing plans to scale out the CCCF to other counties.**

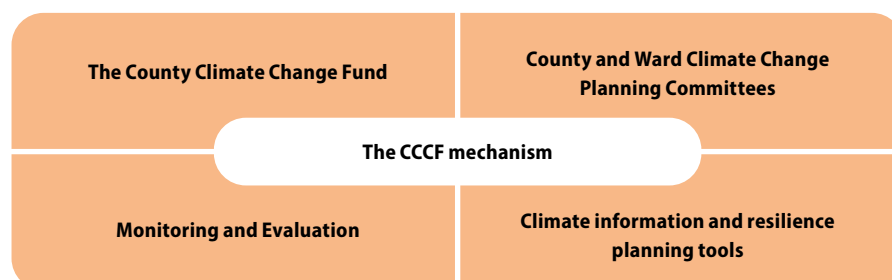
### Introduction

The CCCF mechanism was designed and developed in 2011 by the Adaptation Consortium.<sup>1</sup> The mechanism comprises four interconnected components: the fund itself, county- and ward-level committees, tools, and monitoring and evaluation (see Figure 1). Through these components, local governments allocate their funding and can access climate finance from different sources, including international organisations, philanthropists, multilateral development banks and the private sector.

The mechanism is designed to enable community-driven identification and prioritisation of climate investments using

climate information and resilience planning tools, and to facilitate the flow of climate finance to establish the investments. To achieve this, it is operationalised and governed by legal and regulatory frameworks at the county level. It is also aligned with national priorities set out in Kenya's National Adaptation Plan and Nationally Determined Contribution to the Paris Climate Agreement, which enables county governments to strengthen and reinforce national climate change policies while delivering on local adaptation priorities. Furthermore, the mechanism promotes learning and reflection to track progress, inform necessary adjustments and guide future investments.

**Figure 1: Components of the CCCF mechanism**

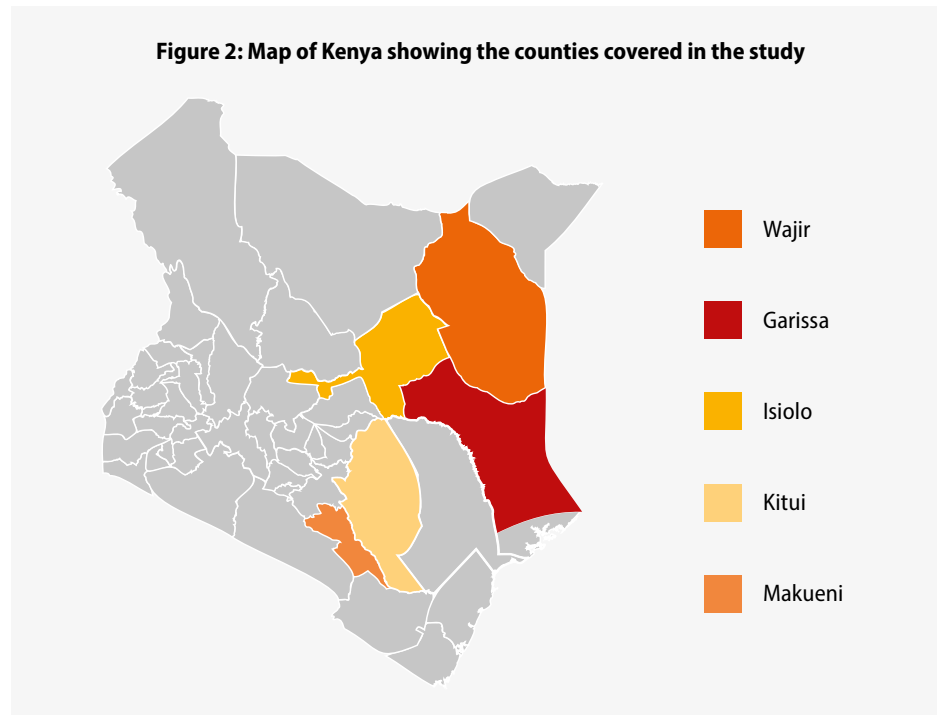


This policy brief outlines the key considerations for supporting locally-led climate investments that strengthen communities' resilience to climate change in Kenya's arid and semi-arid lands (ASALs). The findings are based on evidence from two studies: (1) an initial study conducted in 2019<sup>2</sup>; and (2) a follow-up longitudinal study conducted in 2023<sup>3</sup>. These studies assessed the functionality and governance of 62 out of the 95 investments established between 2013 and 2018 in five Kenyan ASAL counties (see Figure 2).

### Context and background

Kenya is highly vulnerable to climate change, in large part because the livelihoods and economic activities of most Kenyans are based on climate-sensitive natural resources. Building resilience to climate change is therefore high on the agenda, both at the national and county government levels.

Kenya's Climate Change (Amendment) Act (2023) mandates county governments to mainstream climate change into planning and development, and to address climate change at the local level. To achieve this, the Ward Climate Change Planning Committees (WCCPCs) are the main platform for local citizen engagement. They consult with the community to identify and prioritise interventions, to initiate intra-ward meetings where decisions are reached and to write proposals for agreed funding interventions. In addition, they perform a governance function by representing the community during procurement processes, overseeing service provider delivery and confirming the completion of an intervention. The county Climate Change Planning Committees support the WCCPCs with technical know-how about the viability of the investments, and once agreements are reached



with the communities, the county finances the investments' implementation (see Figure 3).

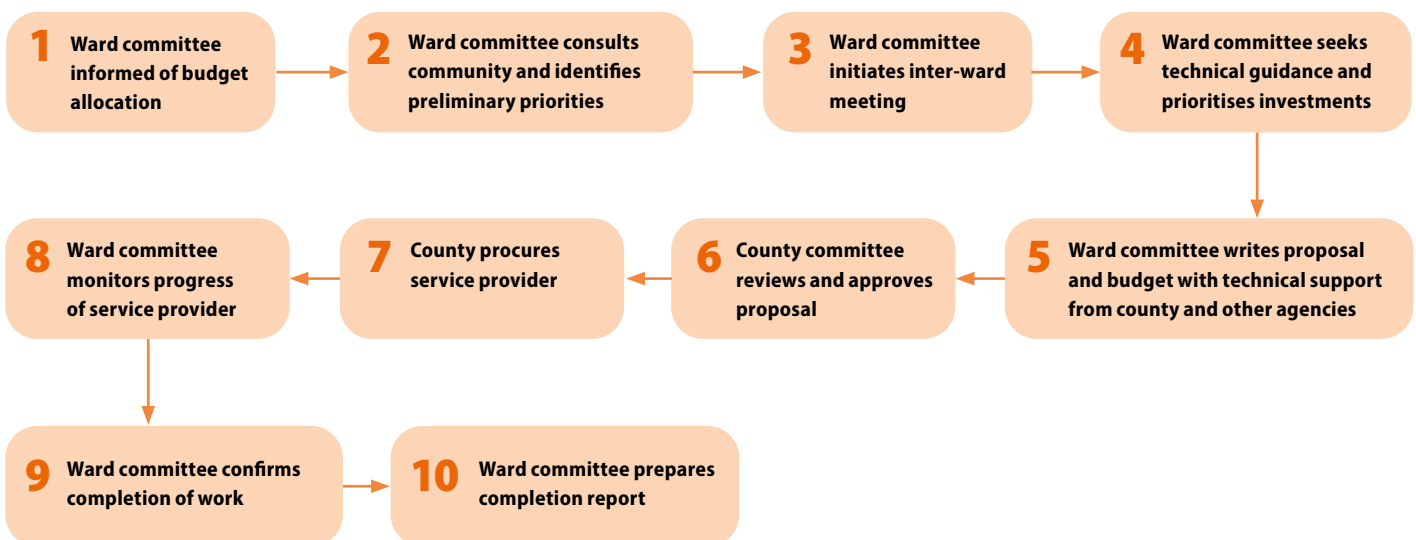
### Methodology

To inform the scaling of the investments in water infrastructure, a longitudinal study was conducted in September 2023 on the pilot CCCF investments in five of Kenya's ASAL counties: Garissa, Isiolo, Kitui, Makueni and Wajir. The 2023 study, a follow-up to an earlier functionality and governance study undertaken in 2019, focused on factors influencing the sustainability of the investments. The functionality of the water infrastructure in this pilot phase of implementation was thus used as the indicator of success (see Box 1).

The study identified and described the challenges communities face in managing these investments and the opportunities available to keep the investments operational. Specifically, the objectives were: to assess the technical and functional status of the assets or investments; to assess the governance, institutional and management context within which assets are operated; and to determine how that affects their functionality.

The longitudinal study involved key stakeholders such as the county Climate Change Planning Committee members, ward committee members, project site committee members, water users, and area leaders

**Figure 3: The CCCF process**



including ward administrators and area chiefs. The methods used to obtain information were focus group discussions with three groups per site (committee members, male water users and female water users), observation using checklists, and key informant interviews coupled with videography. Data was collected using a semi-structured interview guide (questionnaire) for the focus groups, checklists and cameras for observation, and video recorders for the interviews. Technical observations were done by water engineers from the county water department and climate change officers from the county Climate Change Unit.

## Results

The 2023 longitudinal study showed varying levels of sustainability since the investments were first implemented (between 2012 and 2018). As shown in Figure 4, the overall functionality of the investments in all counties except Garissa had declined since the 2019 study. Issues affecting functionality were similar across counties but differed between infrastructure types and sites.

The principle of subsidiarity was applied to the investments, meaning that communities were involved in identifying, designing, implementing and managing water infrastructure. With support from local leaders, this had fostered a sense of ownership. The communities could provide insights on what issues need to be addressed and could suggest possible solutions.

Nonetheless, transparency and accountability on the part of the local implementation committees was low in some cases, and

### Box 1: Definition of functionality status as used in the study

A **functional** water point is one that is operating as expected and serving the community well on the day of visit and within the last month.

A **partially functional** water point is one where some of the components are absent, broken or damaged, but there is still some water available to the community.

A **non-functional** water point is one where some or all of the components are absent, broken or collapsed, with the result that water is not accessible or available to the community.

A **not-in-use** water point applies to those water points that may not be in use due to seasonality and low rainfall, but they are intact and functional during the wet season.

resourcing at county-level institutions was too little to provide the necessary oversight. Both factors significantly impacted the sustainability of the projects. Relevant government institutions and county departments also did not provide sufficient oversight and support to the communities once the project phase had been completed, which limited the projects' sustainability.

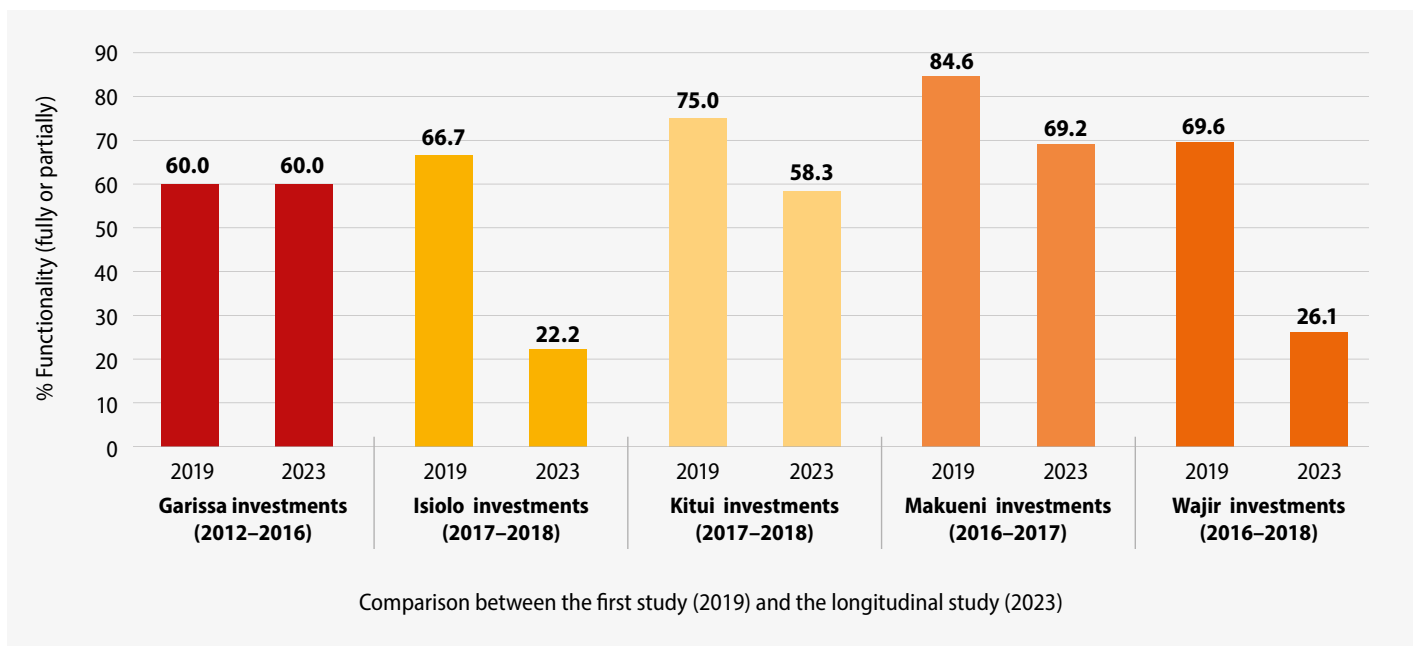
The main governance issues that emerged related to the capacity of the committees and teams to manage the water projects, including challenges in collecting and managing water revenues. It was also identified that there was poor coordination by the county government and a lack of clearly defined roles and responsibilities between the county government and communities. This led to misunderstandings concerning the responsibilities each actor had in ensuring the investment was in good working order and even the ownership of the investments in some cases.

Knowledge and skills in technical management needed to be increased and, owing to regular changes in the membership of community committees, training needed to include frequent refresher courses.

Insufficient climate information and data to guide siting decisions and adequately climate-proof some investments contributed to the incorrect siting of several investments, the subsequent need for frequent repairs and in a few cases, a non-functional investment. Making use of Indigenous and traditional knowledge, experience and institutions around managing climate variability and extreme weather events could improve the effectiveness, value for money and sustainability of investments that build resilience.

At county level, there was no dedicated budget allocation for the operations and maintenance (O&M) of existing climate projects under the CCCF mechanism. Communities therefore found it challenging to access resources for routine O&M of the infrastructure.

Figure 4: Functionality status of the investments



The subsequent disrepair and periodic disuse often led to vandalism and was a serious challenge in sustaining the functionality of the projects.

## Policy recommendations

Policy-makers are called upon to review the policies, legislation and regulations that relate to the CCCF mechanism, as well as consider the following recommendations:

- Prioritise the rehabilitation of existing investments together with the scaling out of new ones. This will require appropriate regulatory frameworks to facilitate supportive resource allocation, particularly regarding the consistent allocation of budget for O&M of the water infrastructure investments and monitoring, evaluation, reporting and learning.
- Integrate local and Indigenous knowledge as well as accurate climate information, into the process of prioritising, designing and siting water investments.
- Make use of current laws in land ownership to help solve issues of land tenure for the investments and prevent conflicts of interest, such as water resources being administered as private property. For parcels of land where public investments are sited land rights need to be transferred through land easement processes and parcel allotment.
- Implement a landscape approach through a watershed, catchment or sustainable land management model to address some of the challenges identified, such as frequent siltation, which is a major cause of non-functionality. This may require transboundary (cross-ward, cross-county or even cross-country) collaboration.
- Continuously raise awareness and strengthen capacity under the CCCF mechanism because the dynamics of stakeholder participation in the local communities and implementation teams vary widely. Community participation in planning, implementation and maintenance of water infrastructure is key to its success and sustainability.
- Recognise traditional institutions, such as the Detha system, and Indigenous knowledge, to legitimise local action. This recognition enables communities to articulate their knowledge of resources and resilient livelihood systems in the face of climate variability in a way that policy-makers can understand and support.

## Endnotes

1. The Adaptation Consortium (ADA) was originally formed by the coming together of the Ministry of State for Development of Northern Kenya and other Arid Lands (MDNKOAL), the International Institute for Environment and Development (IIED), the Kenya Meteorological Department (KMD) and the Resource Advocacy Programme (RAP) to strengthen the work of the National Drought Management Authority. Other members joined according to the needs of each investment.)
2. Adaptation Consortium. (2022). *Improving functionality of water investments in the Drylands*. Nairobi, Kenya: ADA Consortium. Working Paper. <https://adaconsortium.org/wp-content/uploads/2022/09/1211-IIED-ADA-WP-A4-V5h-WEB.pdf>
3. Adaptation Consortium and Climate and Development Knowledge Network. (2024). A longitudinal study on locally-led water infrastructure investments in select arid and semi-arid counties in Kenya. <https://cdkn.org/project/building-water-resilience-kenyas-arid-and-semi-arid-land-areas>

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### About CDKN

The Climate and Development Knowledge Network ([www.cdkn.org](http://www.cdkn.org)) works to improve the well-being of the most climate-affected people in the global South, especially marginalised groups, through transformative climate-resilient action.

### About ADA

The Adaptation Consortium ([www.adaconsortium.org](http://www.adaconsortium.org)) works to build an effective and accountable mechanism for climate resilience in Kenya. It supports Kenya's county governments to mainstream climate change into development and planning through the County Climate Change Fund mechanism.

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