

Mozambique in a Changing Climate: Collaborative learning for a just water management transition

Invitation for Collaboration

The Dutch Climate Research Initiative (KIN) is looking for (lead) partners to collaborate

This Invitation for Collaboration outlines the framework for a collaborative deep dive and transition analysis for just water management in the context of climate change in Mozambique. The impacts of climate change in Mozambique are severe: water scarcity, floods, and changing rainfall patterns. There is a countrywide need for a shift in water management and improved resilience in both rural and urban areas. The goal of the proposed collaboration is to provide insight and overview of Mozambique's vulnerabilities to climate change impacts and the (additional) challenges this brings for water management. In addition, it is meant to identify possible pathways for transitioning to a just, sustainable and resilient strategy for water management that helps address the development needs of the country.

1.1 Introduction

Mozambique is one of the most climate-vulnerable countries in the world. It faces a variety of climate change impacts, such as rising sea levels, increased frequency and intensity of tropical cyclones, droughts, flooding, and heatwaves. This threatens agriculture, water resources, infrastructure, livelihoods, and the country's development as a whole. Poverty, limited institutional capacities and economic uncertainty pose general challenges for Mozambique's development, and add to vulnerability in relation to climate change. Knowledge related vulnerabilities are limited access to knowledge, dissemination and implementation of expertise, modern technology, resources, and adaptive infrastructure. Consequently, Mozambique faces significant challenges in achieving climate resilience and sustainable development.

Mozambique has recognized the importance of addressing climate change and has developed a range of national strategies and policies to guide its response. These frameworks are critical for guiding Mozambique's adaptation and mitigation measures. While existing plans and sources¹ address the needs and possibilities for adapting to climate change, they do not always include more fundamental societal barriers and drivers of systemic change. In order to explore the threats and potential of transformative change across societal sectors in Mozambique, **the Dutch Climate Research Initiative (KIN) seeks to find partners to co-create and lead a collaborative deep dive and analysis on just water management transitions.**

¹ Among others: **Source:** Intergovernmental Panel on Climate Change (IPCC). (2018). *Global Warming of 1.5°C*. Available from: <https://www.ipcc.ch/sr15/>; **Source:** Republic of Mozambique. (2013). *National Climate Change Adaptation and Mitigation Strategy 2013-2025*. Available from: https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/68/216; **Source:** Republic of Mozambique. (2015). *Nationally Determined Contributions of Mozambique (NDCs)*; **Source:** Republic of Mozambique. (2015). *National Adaptation Plan (NAP) for Mozambique*; **Source:** United Nations Framework Convention on Climate Change (UNFCCC). *Climate Justice overview*; **Source:** World Bank. (2016). *Mozambique: Climate Change Vulnerability Assessment*; **Source:** Intergovernmental Panel on Climate Change (IPCC). (2023). *Sixth Assessment Report (AR6)*.

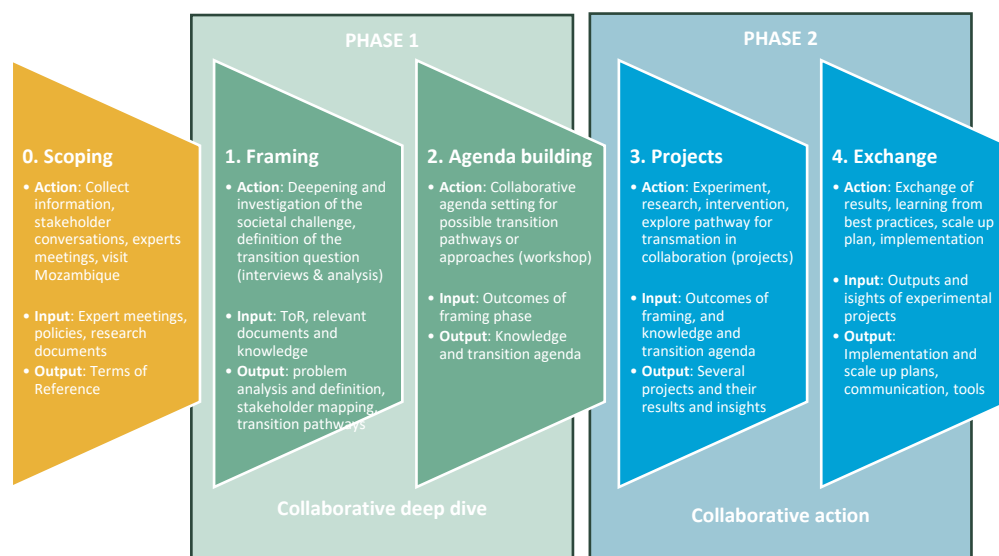
1.2 Background

The Dutch Climate Research Initiative (KIN) was founded in the Netherlands, in 2023, by the Dutch Research Council (NWO) and the Royal Netherlands Academy of Arts and Sciences (KNAW). KIN facilitates conversation and collaboration between researchers, policymakers, businesses and civil society organisations through programmes, networks and events. Together, we work towards a climate-neutral and -robust world. KIN focusses particularly on:

- **System transitions**¹, which requires a transdisciplinary lens;
- The **societal challenge** as a starting point for research and collaboration;
- **Co-creation**², to collaboratively learn, create and adapt;
- **Action perspective**, to accelerate the changes that need to be made.

KIN's Global Transitions programme contributes to accelerating systemic transitions for a climate-neutral and climate-just society in regions that have had little contribution to climate change but are most vulnerable to its impacts. KIN does this by identifying knowledge gaps and barriers to knowledge transfer in the local context and programming accordingly. KIN supports cooperation between different actors in the system, with extra attention to groups that are often not heard or are in vulnerable situations.

Currently, KIN has completed its scoping phase. Based on many stakeholder conversations, expert meetings and a visit to Mozambique, it was decided to narrow down focus on pathways for just water management. The current Invitation for Collaboration is meant to execute step 1 of phase 1 (as shown in the picture below). It is meant as input for step 2 of phase 1.



¹ See ANNEX

² See ANNEX

1.3 Objectives

The goal of the collaborative deep dive is threefold:

- To create **collaborative learning on systems and transitions thinking** and common understanding of the status quo as well as the transition goals related to just, sustainable and resilient strategies for water management.
- To **identify pathways and transition dynamics** for just water management in a changing climate. Focusing on understanding current systems and dependencies, identifying potential emerging alternatives and leverage points for transformation, and addressing challenges that may hinder or accelerate a successful transition.
- To advise on **actions, knowledge gaps and initiatives** that should be further developed to strengthen Mozambique's climate knowledge system related to just, sustainable and resilient strategies for water management, including capacity-building efforts for institutions and stakeholders at various levels.

1.4 Scope

The focus of the collaborative deep dive is on **transitions for just water management**. The overall goal is to reflect upon current water management structures, cultures and practices. And how they could or should transform to address climate change and its impacts. Analysing the challenges of water scarcity, floods, and changing rainfall patterns, and identifying strategies for sustainable water management and improved resilience in both rural and urban areas, through the lens of different (technical, social, economic, governance, etc.) disciplines. The deep dive focusses on water management related impacts of extreme weather events, such as cyclones, droughts, and flooding, and should explore desired transitions, particularly in vulnerable communities. The deep dive could include one or several of these challenges:

- Water management and spatial planning in urban areas in relation to weather extremes due to climate change;
- Water regulation for droughts in relation to food and nutrition security in rural areas;

The principle of **climate justice** will be central to the collaborative deep dive. This approach ensures that the voices and needs of vulnerable and marginalized communities are prioritized. The process should include questions related to how climate change disproportionately impacts the poor, women, youth, and indigenous peoples in Mozambique and stress that adaptation and mitigation actions should be inclusive and just. An important aspect is an embedded, cross cutting and intersectional lens on for example gender, social equity and justice.

1.5 Deliverables:

The result should include but does not have to be limited to:

- **Problem analysis and definition:** A deep dive into the societal challenges relating to water management in the context of climate change, through a systemic lens. What are the enabling and restraining political, cultural and social structures and practices? Which are unsustainable or unjust elements in the current system? What are barriers for transitions to take place? What are enablers of the current unsustainable situation? Which dependencies can be seen? The analysis could consist of a situational analysis and a "transition readiness" assessment to establish a foundation for understanding the current status quo for Mozambique's vulnerabilities, challenges, resilience and competencies to identifying gaps in current knowledge systems and required action.

- **Transition pathways:** An identification of desired futures and (back casting) possible pathways to move forward in the field of water management: Which transitions are needed and why? What are guiding principles and inspiring futures? What are intermediate steps and goals? Which alternatives, actions or research questions should be explored to move ahead? What is needed in terms of governance and resources? What should be in place to ensure inclusive participation?
- **Dynamic Stakeholder analysis:** A stakeholder mapping and analysis of actors working in the field of water management in the context of climate change to identify key opportunities for collaboration, as well as barriers to action. This should include governmental bodies, non-governmental organizations (NGOs), local community representatives, private sector players, and international development partners. This should include the identification of possible 'problem owners' or 'front runners' within the desired transition in the field of water management (these can be seen as actors who want to drive the transition but who need knowledge collaboration).
- **Collaborative and interactive learning:** The process of working towards transition pathways for just water management is a deliverable by itself. In documented collaborative learning sessions both the consortium and other stakeholders are stimulated to learn from other's perspective, contributing to common understanding of the status quo and to set shared transition goals.

These deliverables should be synthesized in a knowledge product, that is suited for distribution among a broad audience. The product should be freely available and accessible. The deliverables should serve as input for the agenda setting workshop which leads to phase 2 of the programme.

1.6 Conditions

A **collaborative learning process** will be integral to the collaborative deep dive and analysis to ensure that the perspectives of local communities, stakeholders, and decision-makers are included. This will involve:

- Facilitating multi-stakeholder dialogues or workshops to foster collaboration, share knowledge, and ensure that the analysis is grounded in local realities.
- Using participatory tools to ensure inclusive representation, especially of marginalized groups, such as women, youth, and indigenous and other disadvantaged populations.
- Engaging with local communities, particularly those vulnerable to climate change, to understand their experiences and needs.
- Documented and data-driven sessions that enable learning wider than those who joined the dialogue and workshops.
- A target audience of the collaborative deep dive that is diverse and should include stakeholders active in the field of water management, climate adaptation and mitigation and disaster management, such as: national and local decision-makers, civil society organizations, Mozambican scientists, finance institutions, youth representatives, the private sector and KIN.

The collaborative deep dive and analysis will be conducted by a **consortium** of interdisciplinary experts from research and practice with local and international experience. This consortium will be coordinated and led by one of the Mozambican consortium partners. KIN will support the consortium and offer guidance where needed, through the KIN Global Transitions Programme Committee and other experts from its network. The consortium should include but is not limited to:

- At least two Mozambican Research Institutions and one Mozambican NGO: To ensure local relevance, engagement, and expertise on the ground.
- An interdisciplinary team: Including experts in transition science, climate science, social sciences, policy, politics, economics, climate financing, water management, and climate justice.
- Optional: a maximum of two partners from the Netherlands with expertise in transitions, climate change adaptation and mitigation and/or water management, to bring in an additional and comparative perspective. KIN may support in finding these partners if needed.

The **execution** of the deep dive should take into account the following conditions:

- The assignment should be executed between July 2025 and January 2026.
- Steps could be planned as follows:
 - Preparation, shaping the consortium, guidance on transitions thinking (1 month)
 - Execution, quick scan, workshops, interviews (3 months)
 - Consolidation (1 month)
- The total budget for this assignment depends on the proposed activities and committed capacity. This will be specified in the proposal developed by the consortium. There is a budget of +/- €75k available for phase 1. (We expect the deep dive to take no more than 200 working days in total.)
- KIN will support the process in different ways:
 - The consortium will have regular meetings with KIN staff.
 - A guidance committee composed of experts from the KIN Global Transitions Programme Committee and from Mozambique will regularly reflect on the progress and act as a critical friend of the consortium.
 - KIN offers the consortium training opportunities organized by KIN partners to increase the transition expertise of the consortium.
- KIN promotes equal partnerships and cocreation. We aim to facilitate a collaborative process. We ask partners to have an open mind, to learn from other disciplines and to share their own visions and ideas to ensure a product that fits the context of Mozambique.
- The end product of the collaborative deep dive should be freely available and accessible for a broad audience.

1.7 Expression of interest and selection

We invite interested parties to submit an **expression of interest** before 14 July 2025. An expression of interest can be submitted by individuals working for a legal entity registered in Mozambique or The Netherlands. The expression of interest should include a motivation and competences letter (max. 1A4) and a curriculum vitae (max. 1A4). The motivation letter should at least answer the following questions:

- How is your expertise and experience linked to the thematic focus?
- How do you see your role in the consortium? (e.g. participant or in the lead)
- Who else should be in the consortium? (individuals or organisations)
- Whether and how you have particular experience with:
 - The inclusion of youth (early career researchers, students as well as younger generations in general) in the project. We invite all applicants to explicitly reflect on how they want to include these groups.
 - Using participatory tools to ensure inclusive representation, especially of marginalized groups, such as women, youth, and indigenous and other disadvantaged populations.

- Engaging with local communities, particularly those vulnerable to climate change, to understand their experiences and needs.

Based on the expression of interest, suggestions in the expression of interest and in conversation with its existing network, KIN will suggest the composition of a consortium. If appropriate, interested parties could be invited for an interview. KIN will bring together the composed consortium, together with the lead partner / coordinator, and facilitate the creation of a proposal. The proposal will include a description of the activities, deliverables, timeframe and budget (incl. VAT).

The proposal will have one coordinating party and will have to adhere to [ARVODI 2018](#) conditions.

ANNEX: KIN approach and definitions

In this document, when we talk about system transitions or climate transitions, we mean the big changes in how we live and work that are needed to stop climate change and to adapt to its effects.

To deal with climate change, we need deep changes in how we think, work, and organize. A system transition means many parts of a system need to change so that the whole system behaves differently. This goes beyond just using better technology. It also means changing laws, habits, money systems, and more. Just doing small things (like installing solar panels) is not enough and can even cause new problems.

Systems are complex. They have many connected parts and feedback loops, and they are hard to control or predict. That makes it hard to see exactly how to change a system or how to make the change go faster. Also, people and organizations often want to keep things the way they are. System changes can go against the interests of powerful groups.

To make change happen, different people and groups need to work together. This includes scientists from different fields and professionals who work on real-life problems. This way of working together is called transdisciplinary collaboration. We don't know the exact path to system change. But by working and learning together, we create new, useful knowledge. A transdisciplinary approach brings together different views and skills, which helps develop knowledge and practical solutions that can really help.

Transition: A big and lasting change from one way of doing things to another. For example, changing from using coal energy to using wind and solar power. A transition requires changes in culture, (institutional) structure and working methods at system level. This requires actions from various actors. Transitions take place within social-societal systems and are the result of the co-evolution of economic, cultural, technological, ecological and institutional innovations at various levels.

Systemic Change: A change that affects all the connected parts of a system. It's not just one small fix, but a full change in how everything works together.

Transdisciplinary collaboration: When people from different areas of knowledge (like science, business, and government) work together. They combine their skills and experiences to solve complex problems in real life.

Co-creation: A collaborative process in which different stakeholders jointly create value by combining their knowledge, ideas and resources.