



ACDI Strategy



Who we are ACDI's purpose and identity

The African Climate and Development Initiative (ACDI) is an institute at the University of Cape Town (UCT). Since its inception in 2011, ACDI has grown to be a world-leading research institute that contributes to shaping science, policy, and practice on climate resilient and low carbon development across Africa and globally. In line with UCT's Vision 2030, we are committed to building a fair and just society that is rooted in Africa with global reach.

ACDI's vision is a world where all people thrive within healthy ecosystems.

Our mission is to build evidence, capacity, and agency across Africa to shape discourses, set agendas, and catalyse action for equitable, climate-resilient development.

ACDI's work centres around three themes, namely: (1) Climate risk diagnosis, (2) Climate governance, and (3) Climate resilient development. These are discussed in more detail in Section 3. ACDI works on these themes through engaging in transdisciplinary and interdisciplinary research, developing and facilitating training and capacity building initiatives, synthesis of data and information, and convening diverse stakeholders to deliberate key issues and influence climate and development discourses and decisions.

At ACDI, we value:



Climate and development challenges we are addressing

The 2020s represent a decisive decade for climate action. The trajectory of greenhouse gas emissions during this period will be instrumental in determining whether global warming can be limited to below 2°C. Simultaneously, the scale and effectiveness of adaptation efforts will shape our ability to secure a livable and sustainable future. As climate-related loss and damage intensify, the demand for solutions-oriented research has never been more urgent.

Africa stands at the center of this global challenge. As the fastest-urbanizing region and a key driver of future demographic trends, the continent also faces some of the most severe climate impacts. Yet, despite the scale of these risks—and the immense opportunities for transformative climate action—African institutions have received just 1% of global funding for climate change research over the past 30 years. This stark disparity undermines opportunities to lead and implement the solutions urgently needed across the continent.

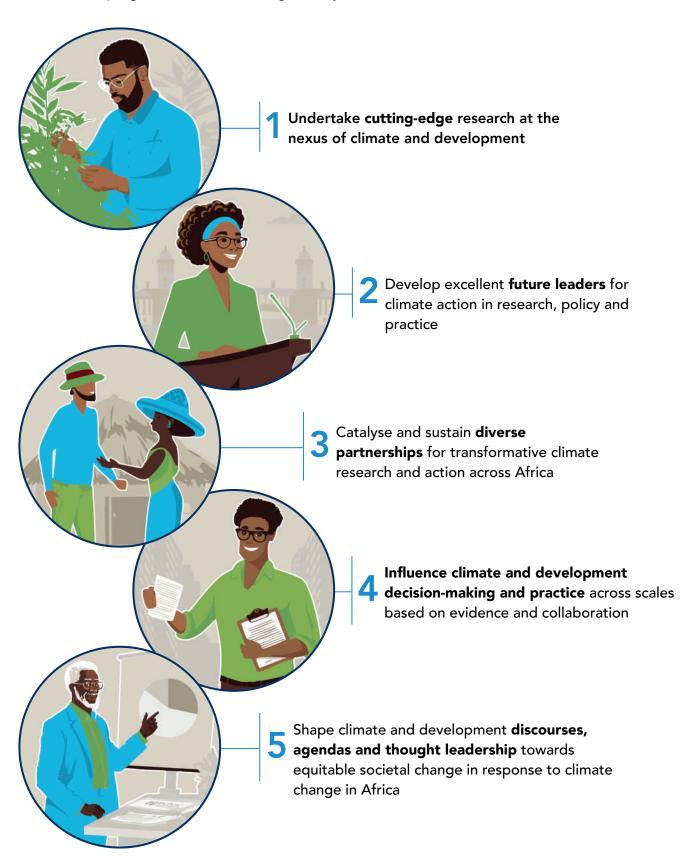
Widespread inequality, poverty, exclusion and marginalisation, especially from influential decision-making spaces and commercial markets, continues to undermine climate-resilient development in many African countries. However, the continent also presents unique opportunities to reimagine sustainable development and pioneer innovative, context-sensitive climate solutions. Africa's experiences in navigating these challenges and opportunities can offer critical insights for the rest of the world, demonstrating how more rapid, just, and equitable pathways for climate resilience can be realised.

ACDI is driving knowledge generation, collaboration, and action to support Africa in shaping a more sustainable and climate-resilient future.



Making an impact

To make an impact, we prioritise five objectives. Each objective has several key results to guide and evaluate progress towards achieving the objectives





Undertake cutting-edge research at the nexus of climate and development

Key results:

- High-profile and new climate and development research topics advanced
- High quality publications in visible and well-recognised journals
- New methods, models, theory, data and frameworks for understanding issues at the nexus of climate and development created and advanced
- Funding secured to support ongoing and future cutting-edge research and dissemination of evidence and new knowledge



2 Develop excellent future leaders for climate action in research, policy and practice

Key results:

- Researchers and students emerging from ACDI are highly competent and taking opportunities to lead in enhancing climate action across Africa and globally
- Positions for early career researchers are created, with a focus on employing black South Africans
- An inventory of critical skills needed in the climate and development field developed
- ACDI Masters programme is aligned with current scientific debates and critical skills
- An international PhD programme on climate and development developed and attracting strong applicants
- Scope and potentially develop continuing professional development courses



Catalyse and sustain diverse partnerships for transformative climate research and action across Africa

Key results:

- Initiate and sustain engagements with key partner organisations including research organisations, universities, civil society, private sector and funders
- ACDI staff are regularly called on to provide expert advice and inputs by local, national and international actors in climate and development
- A series of events hosted in diverse formats to share perspectives and evidence on key topics
- Showcase examples of where ACDI has worked with partners in an innovative, collaborative and transformative way
- Principles developed for equitable partnerships in ACDI research



Influence climate and development decision-making and practice across scales based on evidence and collaboration

Key results:

- ACDI shares data and evidence to support policy and practice in South Africa and internationally
- Increased, tailored distribution of ACDI research to relevant stakeholders
- Research, practice and policy relevant outputs and processes are co-created using equitable approaches.
- Contribute to evidence-based decision making and catalysing action for governments, NGOs and marginalised communities across Africa
- ACDI website and newsletter recognised as a central platform for climate and development resources and information



5 Shape climate and development discourses, agendas and thought leadership towards equitable societal change in response to climate change in Africa

Key results:

- Thought leadership outputs (such as perspective pieces in leading journals, op-eds in leading newspapers and magazines) and other influential spaces
- b.ACDI is seen as the convenor and premier place for thought leadership discussions on climate and development issues
- c.ACDI shapes funding agendas to prioritise research on climate and development towards climate justice



Research Themes



CLIMATE RISK DIAGNOSIS

At ACDI we generate data, evidence and insights on the potential for adverse consequences from climate change for human and ecological systems. We investigate all dimensions of climate risk including:

- climate trends and extreme events, such as sea level rise, drought, heat, fire weather
- impacts of these hazards on people, places and ecosystems, including water security, health, flood risk, impacts on terrestrial and marine biodiversity
- the ways that adaptation, differential vulnerabilities and other factors can reduce climate risk
- societal and ecosystem responses that feed back to affect climate risk, such as geoengineering of climate, water supply augmentation, or nature-based solutions.

Our research is both historical and forward looking. We assess historical trends in climate hazards and their impacts, and where feasible, attribute the contribution of human-induced climate change to these observed changes. We also work on seasonal, decadal and multi-decadal timescales to forecast and project future changes in risk.



CLIMATE RESILIENT DEVELOPMENT

In response to the escalating urgency of climate change, ACDI has moved beyond merely diagnosing problems and assessing impacts toward actively cocreating, testing, and integrating solutions. Within this theme, ACDI is working to pioneering innovative approaches to address the multifaceted challenges posed by climate change.

We examine and explore development pathways as the trajectories of complex social-ecological-technical systems that evolve out of the cumulative effects of actions and inactions over time. Development pathways can be more or less climate resilient depending on the extent and distribution of climate impacts and emission of greenhouse gases produced. Central to ACDI's research on climate resilient development is how to (co)design, assess, sequence, evaluate, and scale a diverse range of context-sensitive adaptation and mitigation solutions across the public, private and civil society sectors, to actively reduce climate risks.

Our work spans behavioural, ecological, infrastructural, and institutional dimensions of climate action, weighing various portfolios of options across spatial and temporal scales to unlock transformative change. This inquiry includes investigating the potential limits of adaptation and the consequences of reaching those thresholds.

Strengthening capabilities amongst diverse actors to design, critically appraise and prioritise climate adaptation and mitigation actions, is central to ACDI's curriculum development, training programmes and innovation support.









CLIMATE GOVERNANCE

ACDI actively researches and engages in climate governance processes at sub-national, national, and international levels. Our approach is twofold:

- Analysing climate governance We critically examine governance processes, mapping the roles of key actors, institutions, power dynamics, and policy arrangements that shape climate action.
- Informing governance through evidence-based engagement As active participants in climate governance, we contribute to policy, practice and decision-making in areas such as climate risk, adaptation, groundwater management, energy transitions, and urban governance.

We seek to strengthen scholarship on climate governance with evidence and knowledge from experiences in Africa, and to advance theories and methodologies for the analysis of climate governance in the global South. Through our interdisciplinary and transdisciplinary scholarship, we cultivate inclusive learning spaces that elevate underrepresented voices, fostering more just and effective climate governance.

ACDI researchers engage in the UN's climate negotiations, the African group of negotiators and the implementation of the Paris Agreement through the nationally determined climate plans. We are also active in the national and local climate governance spaces of South Africa and many other African countries, notably Kenya and Ghana through the African Research Universities Alliance (ARUA). We design our research to support institutional changes needed to achieve the global temperature, adaptation and finance goals for sustainable development in Africa. Our research supports national, sub-national and urban climate governance processes in agenda-setting, evidence generation, and implementation.



How and where we work

Anchored in the African context, ACDI works across scales from local impacts and actions to regional and global models and policy processes. ACDI research spans a range of urban and rural contexts and diverse ecosystems, waterscapes and landscapes. With a strong commitment to promoting transformation and social equity, ACDI invests in collaborative and equitable partnerships and in fostering scientific excellence across training, research, convening and influencing initiatives, as described below.

a. Education, training and capacity building

Our contribution to formal education focuses on students at the postgraduate level and on students pursuing professional and academic paths. As part of this we offer the following:

- Masters in Climate Change and Sustainable Development
- · Masters or PhD by full dissertation
- Postdoctoral fellowships

ACDI engages with other UCT departments/units who offer taught and research-based Honours, Masters and PhD programmes. This enables collaboration across disciplines in terms of supervision and teaching and provides our students with the opportunity to tailor their degrees, through elective choices, to their research and post-university interests and plans.

ACDI is committed to training and capacity building beyond the university, with many transdisciplinary projects focused on convening actors, co-producing, and sharing knowledge. For example, we host the TEA Learning Partnership, supporting over 30 universities across Africa, Asia, and the Indo-Pacific in developing innovative Master's programs and professional development courses to strengthen the sustainable energy workforce. This project is also helping to foster a growing network of southern expertise in the energy sector.

b. Transdisciplinary and interdisciplinary research

Interdisciplinary and transdisciplinary research is at the core of much of ACDI's work. We believe that tackling pressing complex social and environmental problems requires collaborative knowledge development processes that bring together perspectives from different disciplines and societal actors to propel innovative ways of thinking, problem-solving and system's change. These approaches are essential to developing robust evidence relevant to decision contexts, as well as sustainable, pluralistic and equitable solutions and development pathways. It is particularly important for us to foreground local perspectives that recognise contextual environmental and social dynamics. We view inter disciplinary and transdisciplinary approaches as essential, not only for creating a holistic systems perspective that addresses the complexity and uncertainty of climate change, but also for transforming the relationships, perspectives and capacities of the actors involved in these co-creation processes, ourselves included.

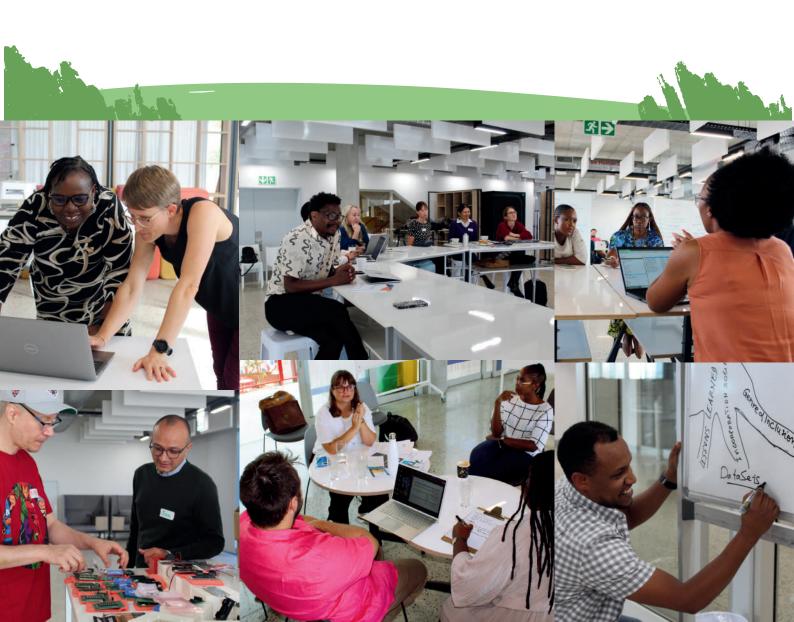
A key priority for ACDI has been to create an enabling environment for transdisciplinarity within its research projects, student training and partnerships as well as promoting it within the wider institutional culture of the university.

c. Synthesis, convening and influencing

A wealth of evidence and data already exists on climate change risks and on feasible and effective climate change response options, globally and in Africa. Unfortunately, these data and evidence often remain poorly integrated. The potentially transformative insights they hold for informing evidence-based climate change decision-making therefore remain largely unrealised.

The African Synthesis Centre for Climate Change, Environment and Development (ASCEND) is based within ACDI and aims to accelerate discoveries for more rapid, equitable, and sustained action on climate change and development. ASCEND does this by providing specialised infrastructure for teams of researchers, policymakers, and practitioners to integrate diverse data and knowledge in solutions-focused ways that enhance action on climate change.

Learn more about ASCEND at: https://ascendclimate.org/







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