



Call for Applications: ASCEND Postdoctoral Research Fellowship

Building Climate-Resilient Education Systems: Adapting School Infrastructure to Climate Change in Sub-Saharan Africa

Application Deadline: Sunday 19 January 2025 or until the position is filled

Call for applications

The African Synthesis Centre For Climate Change, Environment and Development (ASCEND) at the University of Cape Town (UCT) is seeking a Postdoctoral Research Fellow (PDRF) to work on assessing the exposure of schools and school children to climate risks.

This PDRF is a unique and excellent opportunity to expand your network with researchers and decision-makers, as well as deliver cutting-edge research to inform policy and practice. ASCEND provides specialised infrastructure for hosting collaborative synthesis teams that accelerate solutions-oriented research for climate action across Africa and globally.

Synthesis team project description

The PDRF will join the [Building Climate-Resilient Education Systems synthesis research team](#) hosted by ASCEND. The team has up to 15 members from research, policy, and practitioner backgrounds who will travel to ASCEND for up to four in-person working meetings over 2 years. The PDRF will be based full-time at ASCEND as a core member of the team, working closely with the team's co-leads to deliver actionable research.

The overall aim of the project is to support policymakers to update current school infrastructure planning models to prioritise the greatest climate risks and the most exposed schools, as well as support the most effective climate-proofing interventions.

Project research will address the following key objectives:

1. Assessing the impact of, and the mechanisms by which, climate change affects student learning outcomes and education systems in sub-Saharan Africa
2. Identifying the most climate-vulnerable schools and school-aged populations, with a view to developing an interactive map to improve targeting of climate interventions;
3. Improving understanding of the feasibility and effectiveness of adaptation options for education, with a focus on school infrastructure.

Roles and responsibilities of the Postdoctoral Research Fellow

The PDRF will be highly motivated to work as part of a transdisciplinary research team, grow their research expertise, engage with climate change researchers and decision-makers, and generate peer-reviewed publications.

The PDRF will be based at ASCEND at UCT and advised remotely by **Dr Taskeen Adam and Dr Björn Haßler** at [Open Development and Education](#). ASCEND will also appoint a mentor to the PDRF based locally to provide professional development support in consultation with the academic mentors at Open Development and Education. ASCEND will support, when possible, travel for short visits to work with the academic mentors at their host institutions.

The PDRF will also be part of a larger cohort of PDRFs at ASCEND working on climate change and development-related topics with other synthesis teams.. The PDRF will participate in career development activities organised by ASCEND for the wider cohort of ASCEND PDRFs to develop transdisciplinary skills, share knowledge on what works for actionable research, and foster interdisciplinary collaboration.

Other responsibilities of the PDRF will be discussed and assigned collectively with the Building Climate-Resilient Education Systems synthesis team. It is expected that these responsibilities will result in specific outputs, such as policy briefs and toolkits.

Resources provided by ASCEND

The PDRF will be given the necessary resources for their work, including:

- Desk and office space
- IT and communication infrastructure
- Career and professional development activities as part of larger ASCEND PDRF cohort.

Value and tenure:

- The value of the fellowship is ZAR 450,000 – 480,000 per year for up to 2 years, with potential extension for a 3rd year based on performance and funding availability.
- Application for tax exemption of the fellowship stipend will be made by the University.

Academic / experience criteria:

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Required

- A PhD, awarded within the previous five years, in a related discipline (e.g. climate change, environmental science, education). In special circumstances, such as post-PhD caring duties or health-related issues, longer periods will be considered.
- Experience of, or genuine interest in, assessing the impact of, and the mechanisms by which, climate change affects student learning outcomes and education systems in sub-Saharan Africa.
- Experience of, or genuine interest in, improving targeting of climate interventions and understanding of the feasibility and effectiveness of adaptation options for education, with a focus on school infrastructure.
- Excellent technical ability to code in R, Python, and/or other (statistical) programming languages.
- Experience using geospatial software (e.g., QGIS, ArcGIS), for climate/weather forecasting and/or use other geospatial datasets.
- Experience of handling large datasets.
- Excellent data visualisation skills.
- Demonstrated ability to conduct systematic literature reviews and familiarity with various systematic review methodological approaches.
- Demonstrated ability to produce peer-reviewed research articles in international journals.
- Excellent written and verbal communication skills in English.
- Desire and ability to work in an interdisciplinary, multinational, hybrid research team setting.
- Ability to work with cloud-based tools (such as Google Workspace)

Desired

- Experience in machine learning, and interest in using new AI tools and software
- Interest and experience in engagement with decision-makers, including in education.
- Familiarity with, or interest in, analysis of education data.
- Ability or interest in using collaborative software development tools (such as Visual Studio).
- Experience in giving oral presentations and interest in public communication of science.
- Experience of, or interest in, source control of software and working in collaborations using GitHub and RStudio.

- Familiarity with OpenStreetMap data, the Humanitarian Data Exchange, and <https://globaldatalab.org/>.
- Interest in co-supervising a new PhD at the University of Dar es Salaam in the area of primary data collection/analysis of indoor environmental data using low-cost sensor networks.

Conditions of award:

- Applicants may not previously have held a full-time permanent academic post.
- The successful applicant will be required to register as a Postdoctoral Fellow at the University of Cape Town and will be expected to commence the required research at a mutually agreed date that is ideally **no later than end of XYZ 2025**.
- The successful applicant will be required to be a full participant in the Climate-Resilient Schools Synthesis Research Team.
- The successful applicant will be required to comply with the university's approved policies, procedures and practices for the postdoctoral sector.

Application requirements:

Applicants should submit as a single PDF: (i) an application letter no longer than 2 pages that includes a description of research interests, research expertise, and explanation on how they can work as part of the transdisciplinary synthesis team in line with the project objectives described above; (ii) a CV including a publication list; (iii) copies of academic transcripts and/or certificates; (iv) an example of written work; (v) email addresses of two references who have been directly involved in their PhD and/or previous postdoctoral research.

Applicants must submit the PDF application document to ascend.info@uct.ac.za . Please type "Baobab PDR Application: Building Climate Resilient Education Systems" as the email subject line.

Closing date

Midnight (GMT+2) on Sunday 19 January 2025 or until the position is filled.

Selection process

Eligible and complete applications will be considered by ASCEND and we will communicate with short-listed applicants. ASCEND in consultation with the synthesis team academic mentors will conduct interviews of the short-listed applicants.

If you have not heard from ASCEND within two months of the deadline, please assume your application has been unsuccessful.

Contact details for enquiries about the PDRF and ASCEND: farai.kapfudzaruwa@uct.ac.za

Additional information on ASCEND can be found at: <https://ascendclimate.org/>

The University of Cape Town reserves the right to

- *Disqualify ineligible, incomplete and/or inappropriate applications;*
- *Change the conditions of the award or to make no awards at all*