



Scaling up ecosystem-based approaches to managing climate-intensified disaster risks in vulnerable regions of South Africa (Eco-DRR)

Project Summary

March 2026



Overview

South Africa is already feeling the effects of climate change. Temperatures are rising, rainfall is becoming more unpredictable, and the country has warmed by about 2°C per century. Extreme weather events are happening more often, heatwaves are becoming more frequent, dry spells are lasting longer, and heavy rainfall is increasing. As a result, ecosystems are being damaged, landscapes are changing, and wildfires are becoming more common. According to the IPCC's Sixth Assessment Report, these extreme events are expected to become even more frequent and severe, and slow-onset events like drought will become more likely.

Ecosystem-based Adaptation (EbA) and Ecosystem-based Disaster Risk Reduction (Eco-DRR) support long-term planning for Climate Change Adaptation and Disaster Risk Reduction and are cost-effective, complementary approaches that protect ecosystems, built infrastructure and communities.

The **“Scaling up ecosystem-based approaches to managing climate-intensified disaster risks in vulnerable regions of South Africa”** (Eco-DRR) project aims to improve the resilience of communities that are vulnerable to climate change exacerbated floods, droughts and wildfires.

This aim will be achieved through catchment-based restoration activities that enhance the ability of ecosystems to protect built infrastructure and communities from these hazards; support locally led adaptation and natural resource-based livelihoods; improve community level disaster preparedness and response; and mainstream Eco-DRR considerations into settlement policy and planning. The project will simultaneously develop the evidence base for Eco-DRR interventions, and work towards the implementation of effective Eco-DRR practices at scale. The development of pathways to enhance public sector spending and upscale private sector investments will seek to enable the expansive use of Eco-DRR measures through sustainable and scalable processes that integrate science and local and indigenous knowledge systems.

The project signifies a transformative stance on environmental and natural resource management in South Africa, advocating for the integration of climate, biodiversity, and human welfare interventions to amplify both socioeconomic and biodiversity gains through public-private partnerships. A conscious intention in the project is to ensure that gender is mainstreamed throughout the project cycle.

The project leads are the South African National Biodiversity Institute (SANBI), the Department of Forestry, Fisheries and the Environment (DFFE) and the South African Local Government Association (SALGA), the latter on behalf of the National Disaster Management Centre (NDMC), and the project will be implemented in partnership with Provinces and District Municipalities in the targeted areas.

The project commenced implementation in July 2025. It has a grant value of USD 40.1 million from the Green Climate Fund (GCF), and an implementation period of 8 years.

Project intervention sites

The project will be implemented in four District Municipalities across four Provinces in South Africa – namely Alfred Nzo, Ehlanzeni, Ngaka Modiri Molema and Sekhukhune District Municipalities. See Figure X.

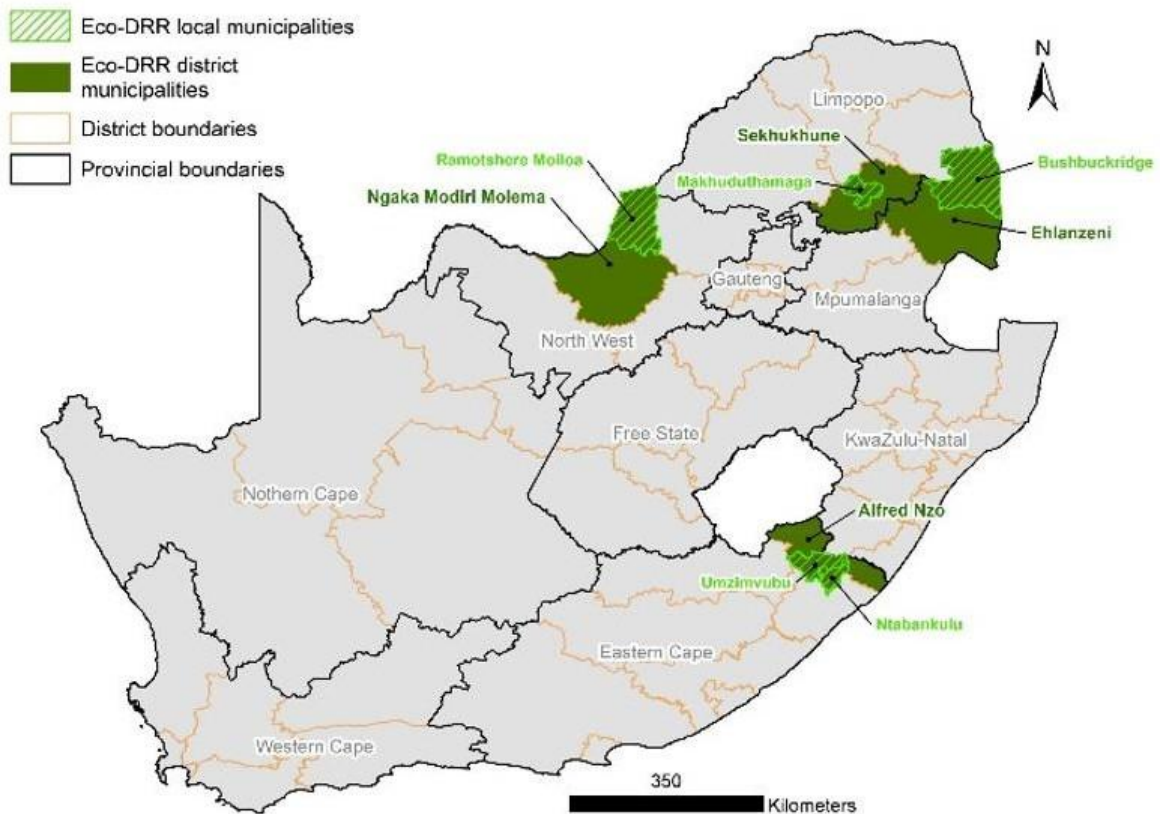


Figure X: Map of South Africa, showing the District Municipalities and Local Municipalities where the Eco-DRR project will focus. This will include large-scale and transformative biophysical interventions in Alfred Nzo District Municipality and Ehlanzeni District Municipality, and smaller interventions in other two District Municipalities. All four District Municipalities will benefit from improved disaster preparedness, and the integration of ecosystem-based approaches into asset management, settlement planning and disaster risk reduction.

Project Components

The project will be implemented through three interrelated Components, as follows:

Component 1: The incorporation of Eco-DRR strategies into integrated landscape management enhances the resilience of ecological infrastructure and climate-vulnerable communities.

Component 1 focuses on the mainstreaming of disaster risk and climate change considerations into landscape management approaches, and the implementation of EbA and Eco-DRR measures in Alfred Nzo, Ehlanzeni, Ngaka Modiri Molema and Sekhukhune District Municipalities. These efforts will enhance the ability of ecosystems, catchments and landscapes to act as natural buffers and provide essential protection services against droughts, floods, and wildfires, thus reducing community vulnerabilities to climate change. This Component will support transformative approaches to landscape management and generate learning that can support both replication and upscaling. The Component will also explore how gender-inclusive and sustainable ecosystem-based livelihoods can be enabled or improved in targeted landscapes in support of locally-led adaptation.

Component 2: The incorporation of Eco-DRR into transformative disaster preparedness and response reduces the adverse impacts of climate-induced hazards on built infrastructure and climate-vulnerable communities.

Component 2 aims to enhance the resilience of communities and critical built infrastructure against climate-induced hazards by capacitating local governments, municipalities and community-based organisations in all four target District Municipalities to develop and implement effective strategies, plans and responses, that are inclusive of Eco-DRR. This Component will be achieved using a comprehensive approach that includes supporting and capacitating local government and communities to incorporate Eco-DRR into disaster preparedness and response, implementing innovative approaches to improve the dissemination of early warning messages in support of Eco-DRR and by mainstreaming Eco-DRR into municipal spatial planning, asset management and associated budgetary processes.

Component 3: An enabling environment is created for investment in Eco-DRR through a strengthened evidence base and improved learning and knowledge management.

In Component 3, the evidence base that emerges from Components 1 and 2 of the project will be used to inform processes to enhance private and public sector investment in EbA and Eco-DRR. In so doing, this output will also contribute to ensuring a viable exit strategy for the project. This Component will also focus on strengthening the evidence base for Eco-DRR, to support learning and adaptive management and ultimately scaling.

Overall Intended Result

Ultimately, the overall intention is that 68,000 hectares of land in the identified target areas will be restored or better managed through the project. This will reduce flood damage, improve water quality, increase natural water storage and slow the spread of wildfires. Furthermore, the project will strengthen early warning systems for floods, droughts and wildfires. It will support municipalities, train local leaders and work with communities, including youth, persons living with disabilities, so people know how to respond when disasters strike, thereby building the resilience to climate impacts of more than 5.4 million people and enhancing social cohesion.