Restoring Landscapes in South Africa (ReLISA): Nature-based solutions for climate, biodiversity and people

A proposal for the South Africa country call of the German International Climate Initiative (IKI)

Duration: 01/2022 – 12/2026

Implementing Partners / Consortium:

- United Nations Environment Programme (UNEP) – Nairobi, Kenya (www.unep.org)
- Council for Scientific and Industrial Research (CSIR) – Pretoria, South Africa (www.csir.co.za)
- Endangered Wildlife Trust (EWT) – Johannesburg, South Africa (www.ewt.org.za)
- United Nations Development Programme (UNDP) – New York, USA (www.undp.org)
- UN Educational, Scientific & Cultural Organization (UNESCO) – Paris, France (www.unesco.org)
- C4 EcoSolutions (Pty) Ltd. – Cape Town, South Africa (http://c4es.co.za/)
- UNIQUE forestry & land use GmbH – Freiburg, Germany (https://www.unique-landuse.de)

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Executive Summary

Large-scale efforts to restore degraded lands are needed to adapt to climate change (especially with regards water resources), address biodiversity loss, and tackle high per capita GHG emissions whilst enhancing the resilience and livelihoods of poorer rural communities. Overstocking with livestock over the past 150 years was a key driver of land degradation. The cumulative effect of such drivers has been to greatly reduce carbon stocks, livestock and wildlife carrying capacity, biodiversity, infiltration of rainwater into aquifers, and baseflow of rivers.

Climate variability and weather extremes are already having profoundly negative effects on South Africa's water quality and availability, with significant impacts on the economy, jobs and livelihoods. In the past five years, intense dry periods have threatened national food security, led to extreme water shortages, and reduced agricultural yields and farmer income. Land degradation over millions of hectares of grassland, savannah and thicket, as well as on cultivated lands, intensify these impacts. To date, restoration interventions have been applied at the scale of thousands of hectares, and not at the scale (as required) of millions of hectares.

Poor rural communities have a particularly high dependency on ecosystem services derived from well-functioning ecosystems, and degradation reduces their resilience and increases their vulnerability to climate change. The need for effective restoration strategies that addresses both environmental and livelihood/equity challenges, especially in rural parts of South Africa, has been thrown into sharp focus by the COVID-19 pandemic, which has led to more than 3 million job losses and almost half of all South African households having insufficient food. Similarly, the recent droughts highlight the interconnected nature between rural and urban areas. Land restoration must be a part of 'Building Back Better'.

To date, most existing restoration initiatives in South Africa were initiated by government agencies or NGOs, with only the limited involvement of the private sector. Reasons include: (i) a lack of awareness of commercial impacts and dependencies on ecosystems; (ii) opportunities for bankable restoration activities are 'off the radar' – e.g. value chain development for sustainably produced goat meat, non-timber forest products and other commodities, and projects for voluntary carbon market projects, which could fund the upscaling of thicket or grassland restoration; and (iii) coordination failures have led to being 'locked-into' sub-optimal pathways ('business as usual'), with key actors (government, civil society, communities, the private sector) failing to/not being incentivized to coordinate the actions required for a transformational shift to large-scale restoration.

This project adopts a comprehensive and structured approach to address these aspects in a very implementation-focused manner. A key decision-making criterion in selecting sites and models for restoration activities of the proposed project is their potential for scaling-up and overcoming such obstacles. In this way the positive livelihood and environmental benefits of every Rand invested from project funds leverages restoration through business adoption in the service of the beneficiaries, particularly poor rural communities.

For this proposal, seven renowned institutions, each with a strong track record, formed a like-minded and complementary consortium aimed at applying innovative nature-based solutions for landscape restoration. For scaling during and beyond the project lifetime, the partners will: (i) develop and apply biophysical and economic valuation modelling ex ante to determine where there is the highest returns on investment (ROI) and opportunities to reduce income inequalities; (ii) consult with stakeholders (including the business and finance community) on final site selection to gain buy-in and create 'readiness' for restoration interventions; (iii) develop bankable business opportunities for the private sector; (iv) implement on-the-ground via restoration activities; and (v) and provide capacity building and knowledge products, so as to ensure project sustainability. These measures will drive a transformational change of South Africa's land use sector. The proposed activities of the concept note are grouped in four components (percentages indicate fund distribution), comprising seven different work packages:

1. Component: Biophysical/economic assessments and planning for restoration (30%)
   - WP1 (lead UNEP): Ex ante assessment of landscape restoration opportunities
   - WP2 (lead CSIR): Measurement, Reporting and Verification (MRV) and impact monitoring
2. Component: Leveraging private sector investments (15%)
   - WP3 (co-lead C4ES-UNIQUE): Business models and investment incubation
3. Component: Direct landscape-level interventions and on-the ground implementation (45%)
   - WP4 (lead EWT): Restoration of Biosphere Reserves
   - WP5 (lead UNESCO): Water Funds / Payments for ecosystem services / GCF concept note
   - WP6 (lead UNDP): Covid-19 / Green Recovery
4. Component: Dissemination and communication (10%)
   - WP7 (lead UNEP): Restoration knowledge hub, education and dissemination

This project and its landscape models will drive a transformational change of South Africa's land use sector. Effective restoration at scale helps to achieve South Africa's inclusive green economy (IGE, including reducing inequalities) and environmental targets, in particular the NDC, but also its NAP, NBSAP, South Africa's Land Degradation Neutrality Target, etc. Through dissemination activities, project outcomes and lessons learned can also serve as blueprints for transformation for areas in South Africa out with the on-the-ground implementation focus of the project, as well as internationally for similarly degraded savannah, thicket and grassland landscapes.

As such, this project will make meaningful contributions beyond the project scope – to the UNFCCC Paris Agreement, the new strategic plan of the CBD, and implementation initiatives such as the UN Decade of Restoration, the Bonn Challenge and the AFR100 initiative.