



Case study: Local government and civil society

# Climate change response in Alfred Nzo District Municipality

A close working relationship between Conservation South Africa and the Alfred Nzo District Municipality has allowed the municipality to become a leader in terms of planning for climate change adaptation. The partnership has generated an improved local understanding of the role of healthy ecosystems in climate change resilience. A climate change vulnerability assessment has been developed for the region, and its findings have been integrated into the municipal Integrated Development Plan. Through this work, the municipality is better equipped to face the ongoing challenge of a changing climate.

## Background

Alfred Nzo District Municipality (ANDM), in the Eastern Cape, borders the high mountainous regions of Lesotho (over 2 000 m) and extends to sea level on the Mbizana coast. It is one of the poorest municipalities in the Eastern Cape, with high unemployment meaning that a large proportion of the rural population depends on subsistence agriculture and social grants. It is nevertheless rich in cultural heritage, and in biodiversity value. The municipality is located in the Maputaland–Pondoland–Albany Hotspot and has exceptional biodiversity, particularly of endemic plant species. The area is characterised by high precipitation, including snowfalls on the mountains in winter and high summer rainfall. As a result, the area has the highest mean annual runoff in the country, feeding the great Mzimvubu River, which arises within the ANDM. The river is one of South Africa's largest, and last remaining, free flowing rivers.

Although much of the catchment remains in a natural condition, there is increasing conversion of natural cover to settlements, agriculture or more intensive livestock grazing. About 70% of the catchment area is made up of communal lands, with the remaining 30% under commercial farming. Land degradation is blamed for significant soil erosion, resulting in exceptionally high sediment loads in the rivers. The area also suffers severe infestation of alien invasive plants, with as many as 25 000 ha covered by black or silver wattle.

The ANDM is also particularly vulnerable to climate change, given its rural nature and the direct dependency of the population on ecological infrastructure. With the expected climate changes, the municipality will likely be more vulnerable to water stress, vegetation changes and more extreme events such as floods. Despite its vulnerability,



the municipality had no climate change policy, and only a limited number of climate change projects relating to installation of solar geysers and development of small parks.



## Action

Conservation South Africa (CSA) had been working closely with municipalities in the Namaqualand region to integrate climate change adaptation into their development plans. In 2013, CSA established a new regional office in Matatiele in ANDM, committing to be present in the landscape for at least 20 years. Interaction with CSA helped the municipality better understand Ecosystem-based Adaptation, which refers to how functioning ecosystems can help enhance natural resilience to climate change and help people adapt to its adverse effects. Ecosystem-based Adaptation was a way that the municipality could improve its climate change resilience, and better deliver on its requirements for climate change response policies.

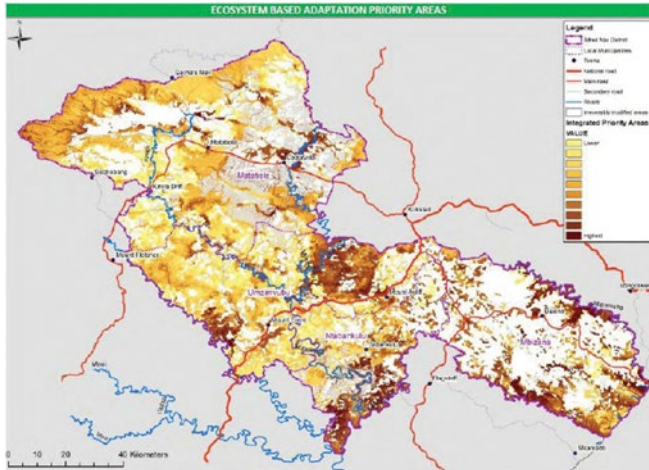
CSA signed a Memorandum of Understanding (MoU) with the district municipality and each of its constituent local municipalities, detailing the commitments made by each partner. One of the main commitments of the MoU was the establishment of a climate change committee, which provides the necessary structure to discuss and engage on climate change. The district municipality leads and chairs the committee, with attendance by representatives of various municipal departments, the relevant local municipalities and sector departments. Once the committee was established, CSA was able to assist with funding from the Critical Ecosystem Partnership Fund to appoint a service provider to conduct a climate change vulnerability assessment for the region.



### Climate change vulnerability assessment

A scientist from Nelson Mandela Metropolitan University was appointed to conduct the *Climate Change Vulnerability Assessment for Alfred Nzo Municipality*. This comprehensive assessment gave a complete overview of the climate change predictions for the district, the ecological vulnerabilities and the priorities for Ecosystem-based Adaptation (EbA). The assessment is characterised by a series of maps, which depict the climate change risk to water production, erosion, important wetland and mountain habitats, biodiversity and socio-economic factors.

By identifying EbA priority areas, the vulnerability assessment allows the district to concentrate on restoration and land management activities that will maximise the potential for natural ecosystems to contribute to building social and ecological resilience to climate change.



## Achievements

A climate change adaptation summit was held to identify how climate change projects could be included in the municipal Integrated Development Plan (IDP). The summit helped to prioritise existing projects and identify new projects that could contribute to climate change resilience. Existing IDP projects such as housing and waste management were then adapted to incorporate climate change considerations. The annual IDP for the municipality now includes reference to the findings of the vulnerability assessment and, more significantly, allocates a proportion of the environmental budget to climate change adaptation. On the foundation of this partnership, CSA has since been directly appointed by the ANDM to develop a comprehensive policy document on the climate change strategy for the district.





One of the most significant achievements of the partnership has been the improved understanding by municipal officials of the important role that healthy ecosystems play in addressing climate change. Officials previously saw little relevance of climate change to their work, for example in roads and infrastructure, or disaster risk management.

These municipal staff members are now active participants on the climate change committee, with an advanced understanding of how climate change is relevant to their projects. Such capacity building has allowed ANDM to be a leading municipality in the country in terms of planning for climate change adaptation.

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