



a little goes a
long way

namaqualand, south africa



Situated in the Northern cape province of South Africa, Namaqualand is known for its open spaces and incredible array of endemic flora.

The sunny, mostly arid region of Namaqualand provides a surprisingly ideal habitat for many types of flowers that bloom by the thousands every spring. But for most of the year it is a dry, dusty, semi-arid desert where people sustain themselves through livestock farming or working on the large diamond and heavy-minerals mines that occupy most of the region's coastline.

Namaqualand's farmers produce some of the finest quality lamb in the country, but are faced with challenges such as water scarcity and land degradation. Erosion, overgrazed land, alien plant species and plowed wetlands are a common sight in the area. The degradation and poor land-use practices reduce the ability of Namaqualand's farmers to withstand the increased temperatures and aridity predicted for the area as the world's climate changes. Unfortunately for many, the mining industry is also downscaling in the region and former mine workers are returning to livestock farming—placing additional pressure on the land.

Under current climate change scenarios, Namaqualand is predicted to change from a semi-desert to a desert within the next fifty years, with lower and less seasonal rainfall, higher temperatures, higher wind speeds and more extreme climatic events predicted. Agriculture will be significantly impacted by climate change and it is predicted that Namaqualand farmers are likely to suffer reduced water availability, topsoil loss due to high winds, erosion caused by flooding, reduced soil moisture, and increased livestock losses due to heat exhaustion.

The area is also home to the indigenous Nama tribes that traditionally graze their livestock in the Kamiesberg Mountains, particularly in the highland wetlands which provide an important water catchment for the region. The Leliefontein Communal Area is a reserve first established with the introduction of Christianity by Methodist missionaries in 1816. The missionary station provided one of the few good grazing lands for the Nama since surrounding lands had been claimed by colonists or invaded by non-native poplar trees that had been planted for shade and construction material. The sporadic rainfall and semi-arid climate make the wetland resources of the Leliefontein Communal Area especially valuable, for both biodiversity and people.

Conservation South Africa (CSA), an affiliate of Conservation International, works with partners to increase the resilience of Namaqualand's farmers to climate change through improved ecosystem management, which also contributes to sustainable development and to the protection of the region's unique biodiversity. This work is one component of CSA's ongoing efforts to implement the Namaqualand Wilderness Corridor – a stewardship corridor that stretches from the Kamiesberg Mountains (a crucial water catchment for the region), through a communal conservancy, private farm land, the Namaqua National Park and DeBeers owned land along the coast of the Atlantic Ocean. CSA's activities support:

- Improving water management through rainwater harvesting and implementing water-use efficiency measures
- Ensuring appropriate livestock numbers
- Establishing grazing rotations
- Appropriately managing wetland, river and water catchments
- Implementing fire management plans
- Ensuring erosion control
- Conserving natural areas
- Providing small grants to enterprises that support sustainable land use or conservation
- Restoring degraded areas

One example of CSA's work ...involves facilitating the restoration of wetlands in the Kamiesberg Mountains and the spring in the Leliefontein Community. CSA supported the local farmers group to restore their wetland by eradicating non-native species, removing waste from the spring's wells, building fences, and planting native wetland species. The results were impressive. A total of 52 poplar trees were removed and infrastructure was repaired to generate tremendous water, biodiversity and community benefits. In all, 26,000 liters of water are now available per day for use by the local community instead of the alien trees. The 224 households that rely on the spring use 558.6 liters per hour during the driest months of December and January. Nine wetland species have been rediscovered in the wetland after the removal of the alien trees, and the community now saves \$13,000 a year on water.

As a result of the arid conditions, Namaqualand is also an area where food security is already tenuous and likely to become more strained as a result of global climate changes. Combining local farmer knowledge with relevant external knowledge, CSA strives to enable Namaqualand farmers to adapt to climate threats by adopting holistic livestock farming practices. In this way, crucial ecosystem services will be secured, reducing the risk of these farmers to current and future climatic changes, while at the same time conserving the magnificent biodiversity of this region.



demonstrating how **healthy ecosystems** **benefit human well-being** in Namaqualand, South Africa

human well-being

- Access to clean drinking water
- Reduced risk of disastrous impacts on livestock and people in case of drought



ecosystem services

- Maintenance of water quality
- Improvement water availability



healthy ecosystems

- Removal of alien species
- Removal of grazing pressure