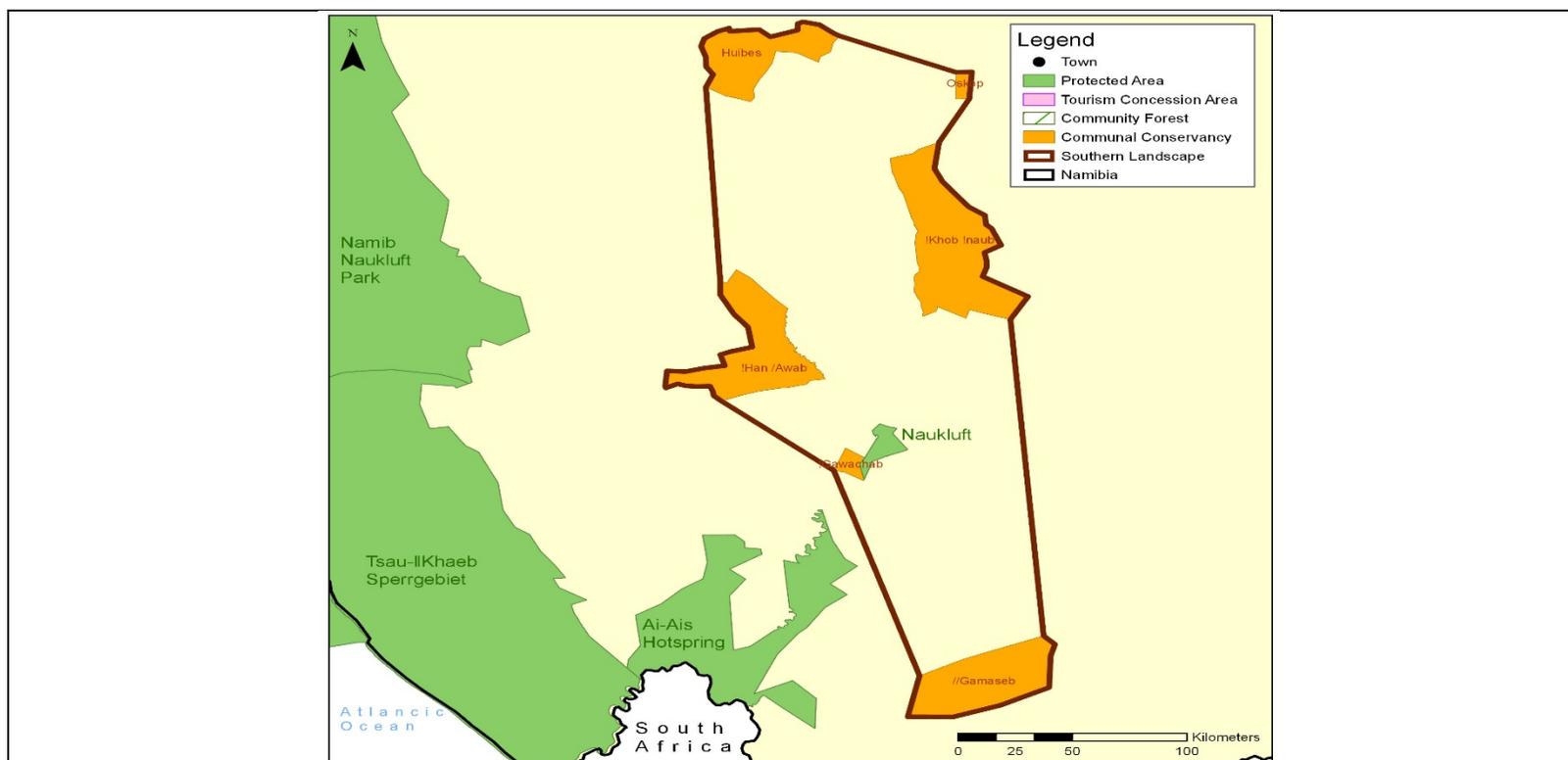


## Southern Landscape



**Location & size:** The Southern Landscape straddles the //Karas and Hardap Regions in southern reaches of Namibia. It covers //Gamaseb, !Khub !Naub, !Han /Awab, //Huibes and Oskop Conservancies which are situated in Warmbad, Bethanie, Berseba (all //Karas) and Gibeon (Hardap) communal areas. The landscape is 36,344 km<sup>2</sup> in size. While they do not share immediate boundaries with the landscape, world-renowned protected areas occur in Hardap and //Karas Regions i.e. Ais Ais Hotspring Game Park which houses the world-famous Fish River Canyon, Sperrgebielt/Tsau//khaeb NP that protects succulent vegetation biome, and the Namib Naukluft Park which accommodates Namibia's second World Heritage Site of Namib Sand See and Sosussvlei with the country's highest sand dunes.

**Population:** An estimated population of 31, 914 people reside in the landscape with estimated 5,502 households (average household size 4). Over a half living in urban areas (54%) compared to only 46 percent in rural areas where population density is the lowest in the country at 0.7 persons per square kilometre due to arid to desert conditions characterised by dry/arid climate uninhabitable by human beings. Males make up slightly more than half of the population (50.9%), compared to 49.1 percent for females. People of the age group of 15-59 make up a whopping 60% of the population. The landscape is occupied by predominantly Nama-speaking communities while Afrikaans is widely spoken.

**Landscape:**

**Landscape and soils:** Much of Hardap and //Karas is fairly flat but there is a stunning scenic beauty, especially along the escarpment, the coast, in the Namib, the Karas Mountains, the Kalk Plateau and the famous Fish River canyon and the Orange River.

The soils are coarse sands derived from the rocks of the Namaqualand belt of metamorphisation and granitisation. These soils are poor and characterised by low carrying capacity largely rendering crop farming impossible.

**Rainfall:** The area is in a transitional zone between the winter (northeast) and summer rainfall regions with the southern extreme receiving more winter rainfall than summer rains. It experiences extremely low rainfall (less than 100mm in the north to less than 50mm near the Orange River in the southwest) and varies considerably from year to year. The little rain that does fall is highly variable and unreliable. Maximum temperatures are exceptionally high (34-40°C) and are mostly experienced during summer with a general temperature decline as one moves westwards towards the Atlantic coast. This gives the landscape the best solar regime in the country with immense potential for investment into solar energy facilities. There are few frost days per year with an increasing occurrence towards the west (1-5 days per year).

**Vegetation:** As a result of low rainfall, vegetation is generally sparse, with few trees and a thin covering of grass. Plant cover varies in relation to rainfall, and so the northern areas of Hardap have more trees and grass than the western, coastal areas. Vegetation is dominated by short shrublands (including mega succulents such as including *Aloe dichotoma*, *A. ramosissima*, *A. pillansii* and *Pachypodium namaquanum*) with the Succulent Shrubland getting more prevalent as one moves south west. Winter rains and the generally arid conditions help contribute to the formation of the Succulent Shrubland, also known as the Succulent Karoo. This vegetation type is unique to southern Africa and has special value because of its high species endemism. The biome is also recognised as one of the biological 'hotspots' of the world and therefore has a global biodiversity significance. Grass production is highly dependent on rainfall resulting in both livestock and wildlife suffering when rains fail.

**Wildlife:** Larger species include oryx, springbok, greater kudu and Hartmann's mountain zebra while smaller antelopes such as klipspringer, steenbok and duiker are also found. After good rains, when there is sufficient grass, gemsbok and springbok are found in large herds of several hundred animals. Carnivores include side-striped jackals, brown hyena, mongoose, bat-eared fox and cats. The Orange River (which flows in //Karas Region but does not form part of the landscape) is rich in birdlife.

**Socio-economics & sources of livelihoods:** Farming with mutton sheep predominates, while, goats and limited number of cattle are also fairly abundant in the communal farmlands. Farmers also earn some income from pelt of the karakul sheep exported to Belgium. However the demands and prices for this product fluctuate due to pressure from animal rights lobbies. The low carrying capacities of the vegetation also mean that farms have to be extremely large to carry enough livestock to make farming economically viable. Farming is generally a difficult enterprise in this landscape and livestock densities are low throughout both regions as a result of the low vegetation cover and low productivity of farm land. Communal area farmers belong to highly organised and active farmers' associations all of which are affiliated to national farmers' union.

**Land tenure:** The land is entirely communal and is being administered by various traditional authorities.

**Wildlife and tourism**

Wildlife numbers are extremely low in communal areas because the populations concentrate on freehold land (where game farming and hunting enterprises are strongly established) and in protected areas. The world class tourism attraction in the regions notwithstanding, tourism development has lagged behind quite substantially (compared to more northern communal area regions such as Kunene, Erongo, Kavango and the Zambezi). There is indeed much potential for tourism development in the communal areas of Hardap and //Karas regions.

**Climate change vulnerabilities**

Temperatures are already extremely high in this landscape and are predicted to further increase because of climate change. These extreme temperatures combine with diminishing and erratic rainfall to threaten the species rich Succulent Karoo biome. Furthermore, the low carrying capacities of the vegetation also forces many small stock farmers to keep large herds in order to make farming economically viable. As a result, communal areas are severely overstocked with sheep, and this has led to degradation of pastures and bush encroachment and desertification.

**Infrastructure:** The landscape is traversed by a number well maintained gravel roads that are mostly in good condition due to low rainfall. A tarred major highway and a railway line both linking Namibia with South Africa as well as the road and railway line that link the historical harbour town of Lüderitz with the rest of the country also go through the landscape. Telecommunication infrastructure is also well-developed and accessible throughout the landscape largely because of presence of big mines in some remote parts of the //Karas region (outside the landscape). Rural electrification network is well distributed tapping into quite a number of high-voltage lines connecting the mines to the national grid. Like in most communal areas, MAWF oversees the rural water supply system in close collaboration with community-based waterpoint associations.

Although not strictly in the landscape, Lüderitz hosts a regional airport served by Air Namibia 4 times a week, while the urban centres of Mariental, Maltahöhe, Keetmanshoop and Karasburg as well as Namibia-South Africa border points of Noordoewer and Vioolsdrif all have registered aerodromes.