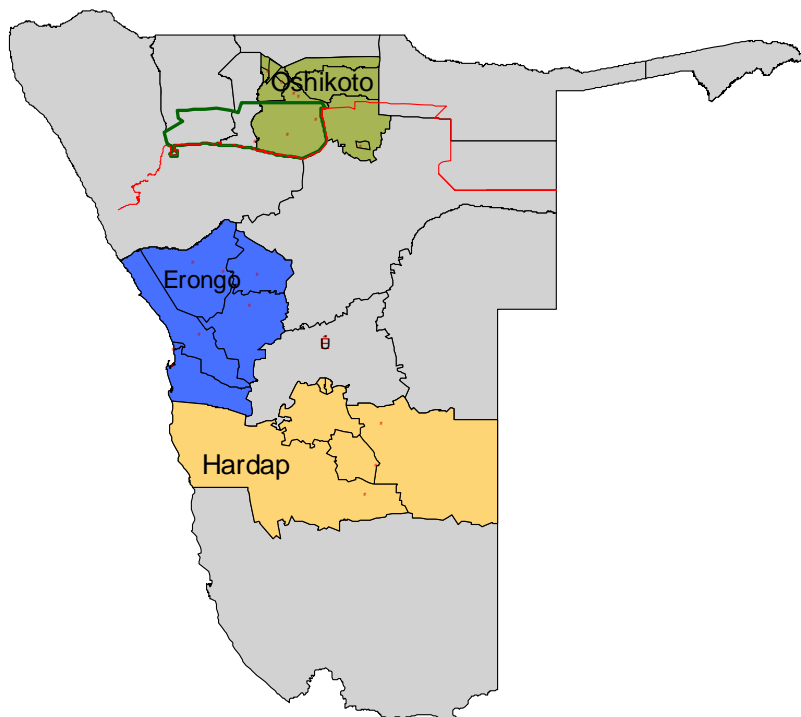


1. BACKGROUND TO NAMIBIA

Namibia, the driest country in Africa south of the Sahara, is typified by one word: aridity. The most extreme aridity occurs along the western coast, in the Namib Desert, and the climate grows more moderate towards the north-east where average annual rainfall is up to 600 mm. Typical of arid climates is very high variability of rainfall, which also makes agricultural production very variable. The only rivers that flow permanently are found on the northern and southern borders; all others in the country are ephemeral and hold water typically for only a few days or weeks each year. Soils are typically shallow, in many areas sandy, and generally they are poor in nutrients except for a few alluvial soils. By comparison the Benguela Upwelling System in the Atlantic Ocean to the west is highly productive and is the basis of the important fisheries industry.

Much of the country's economy is based on primary industries: fishing, mining and agriculture. Fish harvesting and processing is focussed at two ports, Luderitz and Walvis Bay, and accounts for about 10% of the GDP. Mining is dominated by diamond mining in the south on land and offshore, while other important deposits are gold, uranium, zinc and salt. Mining contributes about 15% of Namibia's GDP. Agriculture takes place in two quite different modes: commercial production (focussed on livestock) carried out on freehold ('commercial' land), and subsistence farming (both livestock and crops) carried out on communal land, most of which is in the northern part of the country. Agriculture, although so heavily dependent on rain that is so unreliable, accounts for about 12% of the GDP.

These primary industries, as well as large areas of state land for conservation and the tourism which derives from it, all depend directly on natural resources: water, land, vegetation, and the wildlife and livestock that these support. About 40% of Namibia's population lives in urban areas. The remainder comprises the rural population, the majority of whom are located in the 'north', north of the Red Line Veterinary Cordon Fence depicted on the map below. For all Namibians, but most especially for rural Namibians, the ecological integrity of the land they live on is crucial to their existence and livelihoods.



The country is divided into 13 regions, and the capital, Windhoek, is located approximately in the centre of the country. The three Regions that were assessed in this study were Erongo, Hardap and Oshikoto Regions.

Erongo Region

The Erongo Region is home to 120 800 Namibians, which is equal to 6.7% of the total population of Namibia. 68% of the population lives in urban areas, which are the towns of Arandis, Henties Bay, Karibib, Omaruru, Swakopmund, Uis, Usakos and Walvis Bay (Figure 1). There is a wide diversity of people living in the region with different living standards, for example subsistence-based Topnaar and other communal farmers on one hand, and commercial magnates associated with mining and fishing enterprises on the other.

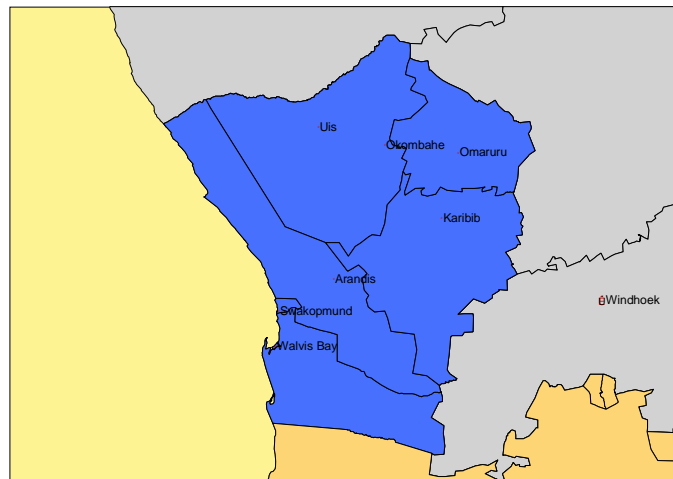


Figure 1.1: Erongo Region.

Erongo Region lies partly on the Namibian highlands and partly encompasses the central Namib Desert. It hosts the highest mountain in Namibia, the Brandberg, as well as other mountains such as the Spitzkoppe and Erongo Mountains. The region boasts four westward-flowing ephemeral rivers: Ugab, Omaruru, Swakop/Khan and the Kuiseb. 31% of Erongo Region is covered by State-owned nature parks and recreational areas, while 34% consists of commercial farms and 33% of communal farms. Farming in this region is mostly concerned with small stock and, on a smaller scale, game.

In terms of infrastructure development, Erongo Region is well equipped and it is economically the second-most developed region in Namibia. It is home to the fishing and fish processing industry based at Walvis Bay. In addition, Rossing Uranium Mine, Navachab Gold Mine and coastal salt operations are significant mining enterprises.

Erongo's coastal desert setting results in many environmentally sensitive areas, hence the existence of sustainable development programmes such as the Coastal Zone Management Programme and Local Agenda 21. The Walvis Bay Lagoon and associated areas are an internationally recognised wetland, with large number of sea- and shore-birds, including significant numbers of globally near-threatened species, that use the site as feeding and resting grounds.

HIV is a serious problem for the region's development, with incidence rates of 29% and 17% in Walvis Bay and Swakopmund respectively (NDP2, 2001).

Hardap Region

The Hardap Region in southern Namibia makes up xx% of the surface area of the country, and hosts only about 4% of the national population. The name 'Hardap' reflects the importance of the Hardap Dam to the whole region, because of its great agriculture (irrigation farming) and tourism potential. The Namib Naukluft Park makes up 15% of the total area, commercial farming 75%, and communal farmland 10% (Namibia Development Consultants). The region is characterized by agro-ecological and socio-economic diversity and its main activity is sheep farming.

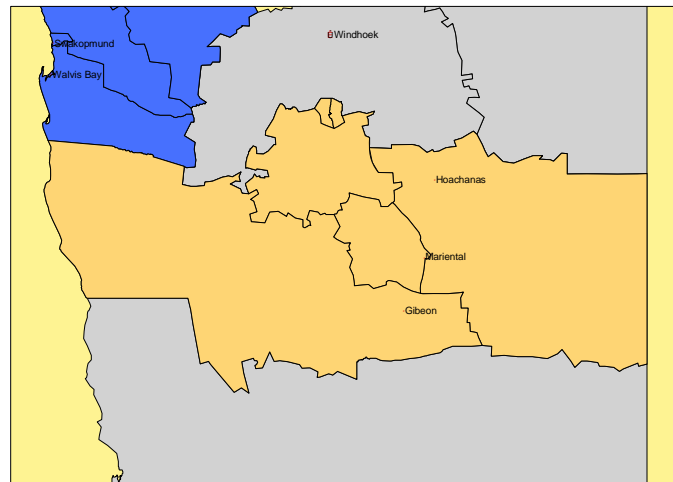


Figure 1.2: Hardap Region

The region has a large variety of landscapes, including the greater part of the central Namib dune sea in the west, the well-defined escarpment of the Naukluft Mountains, a section of the Fish River, and the Kalahari Desert in the east.

Six constituencies make up this region, namely Gibeon; Rehoboth Rural; Rehoboth West Urban; Rehoboth East Urban; Mariental Rural and Mariental Urban. Mariental is the seat of the Hardap Regional Council; with the other main urban centers being Mariental, Rehoboth, Aranos, Gibeon, Maltahope, Kalkrand, Stampriet and Gochas. There are other smaller informal settlements in the region. The Hardap Dam (close to Mariental) and Oanob Dam (close to Rehoboth) are important environmental nodes and play an important role in the region's economic development.

Regarding infrastructure, the national tarred road connects the Hardap Region with the Khomas and Karas regions to the north and south respectively. Electricity supply in the region reaches 30% of the region's population, but 56% have no access to electricity, which places pressure on the natural environment to meet energy needs.

The upliftment of the people with health for all, equal employment opportunities in a crime free and harmonious society, ensuring adequate infrastructure, affordable housing and potable water for all whilst protecting the environment, is the Region's Mission Statement. (NDP2, Volume 2, Regional Development Perspectives).

Main areas which were assessed during this study included Gibeon Urban and Rural, Mariental Urban and Rural as well as Hoachanas settlement.

Oshikoto Region

Oshikoto Region is bordered in the north by Ohangwena Region, to the east by Kavango Region, to the southeast by Otjozondjupa Region and to the west by Oshana and Kunene Regions. The climate and topography are relatively uniform, with extreme flatness in the north and increasing relief in the south where the Otavi mountain range is most prominent. The climate is sub-arid to arid. Vegetation includes areas of seasonally flooded grasslands with patches of Acacia and Mopane tree species, palm and dry bush savannah, which extends into the Kalkveld east of Etosha Pan. The Karstland covers the Otavi mountains with a variety of trees, shrubs and edible grasses, the only mountain savannah in Namibia. The Etosha Pan and the Otavi Mountains are known to be environmentally sensitive areas. The ephemeral wetlands of Etosha have important bird and game diversity. Sinkholes and caves provide a habitat for endemic species of botanical interest.

The region is characterized by a dualistic land tenure system: the northern part is communal while commercial farming is practiced south of the veterinary cordon fence. A portion of Etosha National Park is included in the region. Tourism is important to the economy at Etosha and on surrounding commercial farms.

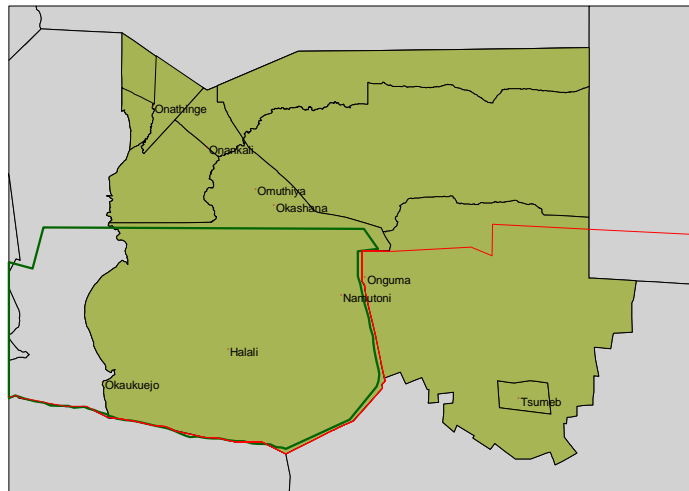


Figure 1.3: Oshikoto Region

The mining town of Tsumeb is the seat of the Oshikoto Regional Council, while the regional headquarters of some key line ministries are based north of the region in Ongwediva. The communal areas of the region have, in the past, been relatively neglected in terms of infrastructure, telecommunications, access to electricity, water and health services. Growth points such as Oniipa, Omuthiya and other small informal settlements are developing along the main Ongangwa-Tsumeb road.

The population was estimated at 151,800 (CBS 2000), about 8.5% of the national population, with average population density of 5.7 persons per square kilometer. Population is expected to grow to 175,200 by 2010 (CBS, 2000). 86% live in rural areas. Oshiwambo is predominantly spoken. San languages and Damara are spoken in the south. The Oshiwambo people in the region are part of the traditional Ndonga 'kingdom'. The San people are a marginalized group who own no land, having lost the land they once occupied in and around Etosha. They live as squatters on the outskirts of towns, on settlement farms or work as laborers on commercial farms.