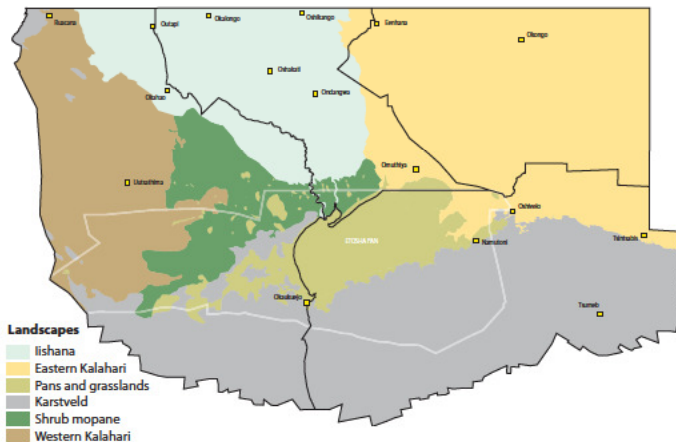


Landscapes of the Cuvelai-Etoshia Basin

Major Landscapes in the Basin

Each of the six major landscapes was formed by different processes of erosion and deposition. These processes have had very significant consequences on

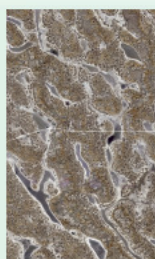
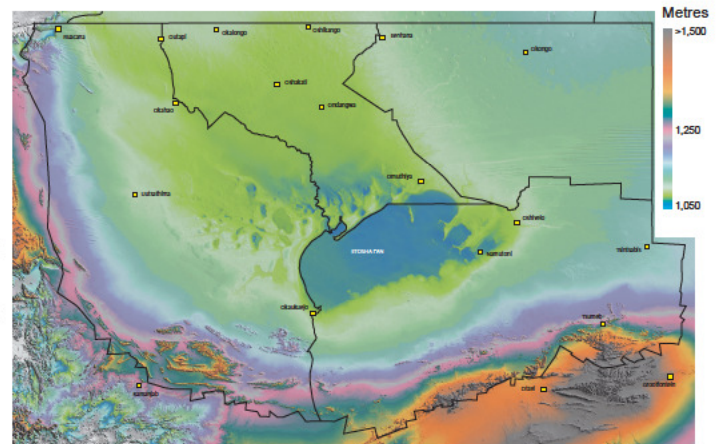
water drainage, topography, soil fertility and permeability, ways of using land for farming, and on the distribution and settlement patterns of people.



Elevations in the Basin

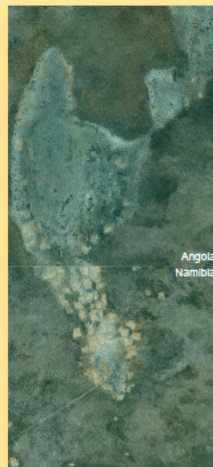
A deep bowl was formed here some 570 million years ago, and has since been filled and covered by sediments deposited by wind and water.

As a result, elevations in the Basin are gentle and the soils are sedimentary. Etosha Pan is the lowest part of the Basin.

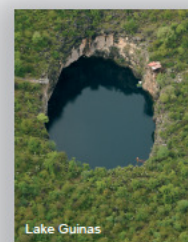
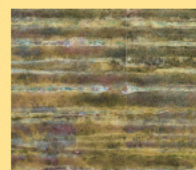


Iishana: Most people live in this vast wetland where there are sands on higher ground and clays in the lower channels. Particularly in the eastern areas, the clays and sands have been mixed to form the most fertile soils. The *iishana* in the eastern areas are much narrower than the broader western and saline channels.

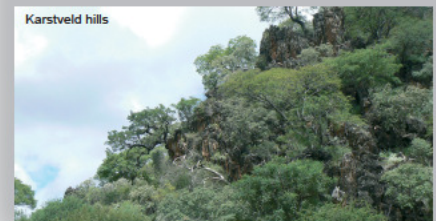
Most *iishana* converge on the Omadhiya Lakes. In the southern areas there are tens of thousands of small pans that are filled by local rain.



The Eastern Kalahari consists of tall woodlands on infertile sands which hold little water. However, there are many small pans with clayey soils that have more nutrients and moisture. Most people live clustered around the pans. Some pans, such as this one (left), straddle the border and have fewer residents on the Angolan side. Old sand dunes remain visible in some areas from times when the Basin was extremely arid (below).



Karstveld: Most of the surface of the Karstveld consists of soils eroded from limestone and dolomite rocks, many of which remain as hills along the southern edges of the Basin. Water has dissolved these rocks to form large underground caverns from which water is used to irrigate crops. Rocks above the hollows have collapsed in some places, such as at Lake Guinas and Lake Oshikoto.



The Western Kalahari is a much drier version of the Eastern Kalahari, both having been formed from wind-blown sands. As a result of lower rainfall, there are fewer pans and arable soils, water close to the surface is less available, woodland is shorter, and there are fewer people in this western area.



Shrub mopane is dominated by mopane which grows on a mix of clays deposited by water and wind-blown sands. The plants remain stunted as shrubs or small trees, perhaps because their roots can not reach nutrients and water beneath layers of ferrocrete rock that have formed near the surface.



The soils in this landscape are often salty as a result of high rates of evaporation.



Pans and grasslands: High concentrations of salt in Etosha and the surrounding pans and grasslands are due to the evaporation of water that has flowed for millions of years into these southern areas. The margins of many smaller pans are decorated by attractive drainage lines where water flows after heavy rain. This is Ngandjela Pan which has provided salt for domestic use and trade for hundreds of years.



This series of 10 posters about the Cuvelai-Etoshia Basin was compiled in 2011 by RAISON:

- 1 The Cuvelai-Etoshia Basin
- 2 Overview
- 3 People
- 4 Climate
- 5 Rainfall
- 6 Groundwater
- 7 Surface Water
- 8 Landscapes
- 9 Vegetation
- 10 Wildlife and Tourism

Photos: Iishana pans, western Kalahari, Ngandjela pan, Lake Guinas - Heige Denker; mopane leaves - Alice Jarvis; Iishana and eastern Kalahari satellite images - NASA; Karstveld, shrub mopane - RAISON.

