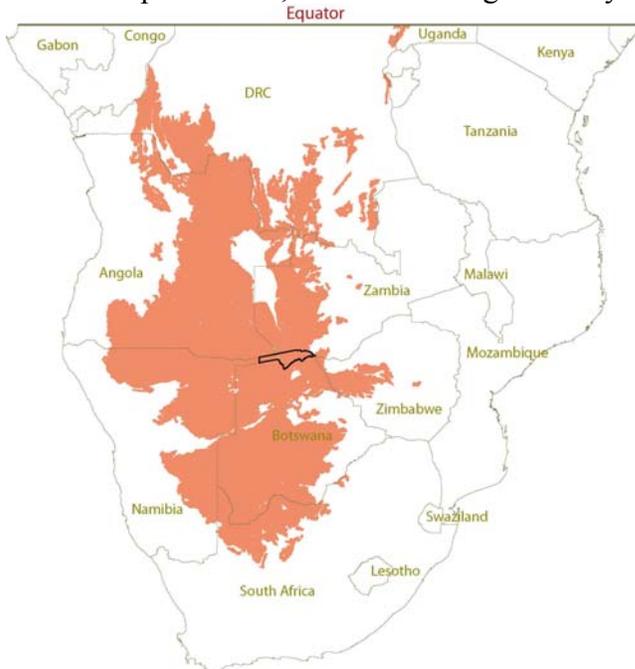


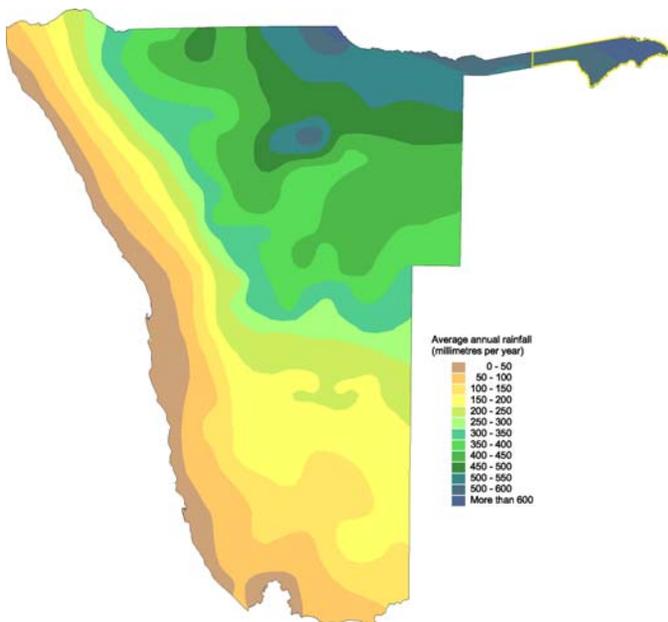
A digest of information on key aspects of Caprivi's geography

John Mendelsohn, 4 September 2007

Many of Caprivi's opportunities and constraints are direct consequences of its position, as a remote part of Namibia and especially and as a result of its very central location in southern Africa. The region lies almost exactly half-way between the equator and the southern tip of Africa, as well as being half-way between the east and west coasts.

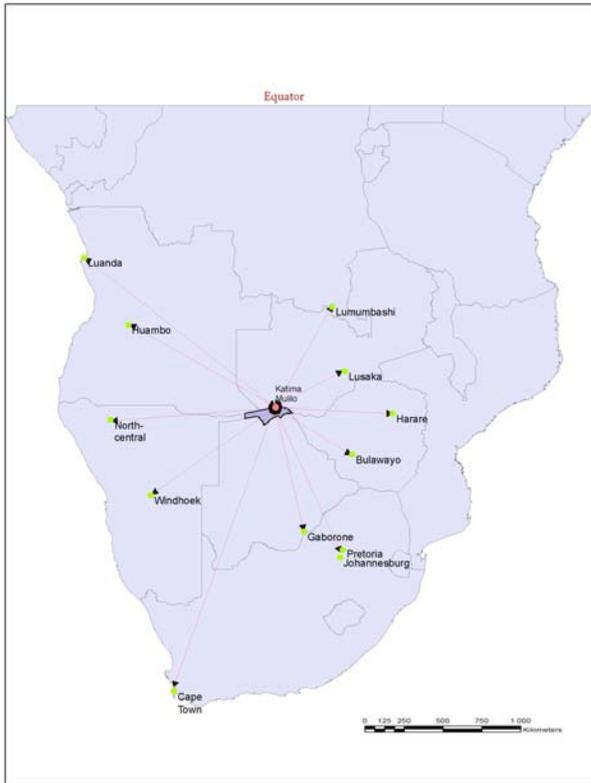


From a topographical and geological point of view, Caprivi lies almost at the bottom of a vast sand pit, more formally known as the Kalahari Basin ([Kalahari basin.jpg](#)). Much of the Basin is filled with sand deposited there by wind and this means that soils are generally poor in nutrients and capacity to hold water. Except if the sandy soils are managed intensively with the addition of expensive fertilizers, crop yields are thus usually low. Higher yields are obtained on more localized small patches of alluvial clays along rivers or water courses that flowed during much wetter periods long ago.



Despite this, crop yields in Caprivi are certainly higher than elsewhere in Namibia, not least because Caprivi receives more rain than other regions ([average rainfall.jpg](#)). This has led to the hope that agriculture in the region can be developed to such an extent that produce can be exported to other countries. For example, it is on this hope that many of the rice and sugar cane projects have been based. But yields in Caprivi are substantially lower than those obtained in many areas of neighbouring countries, especially Zambia, Zimbabwe and Angola.

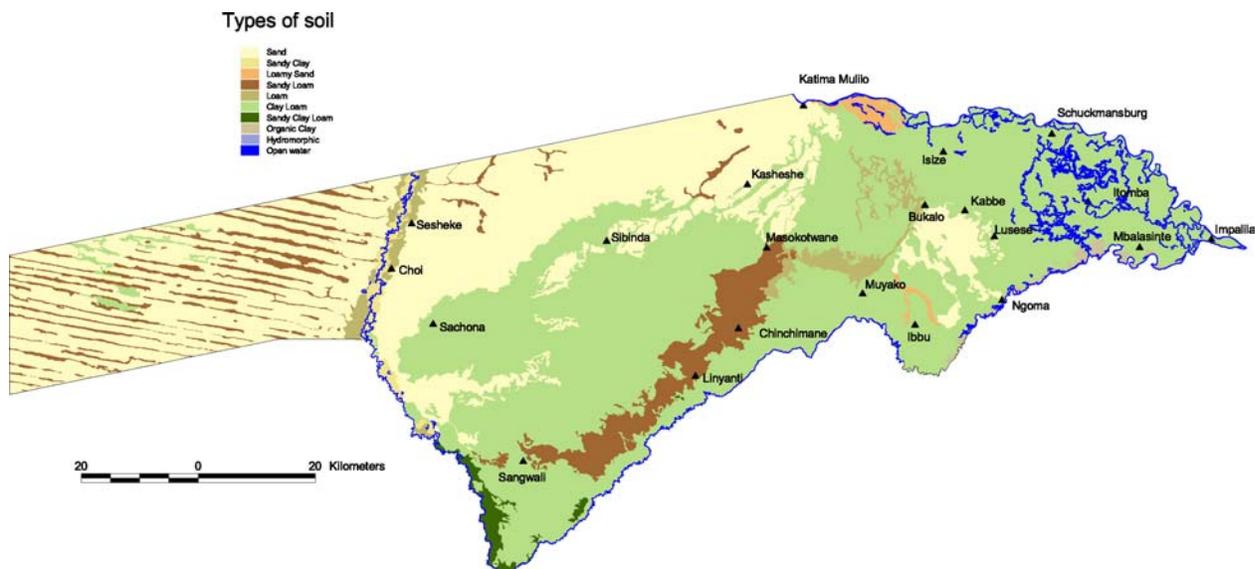
Moreover, the long distances between Caprivi and potential markets where consumers are concentrated in neighbouring states means that exports would incur high transportation costs ([caprivi distances to markets.jpg](#)). This, together with moderate yields means that export produce from Caprivi could seldom be offered at competitive and profitable prices.



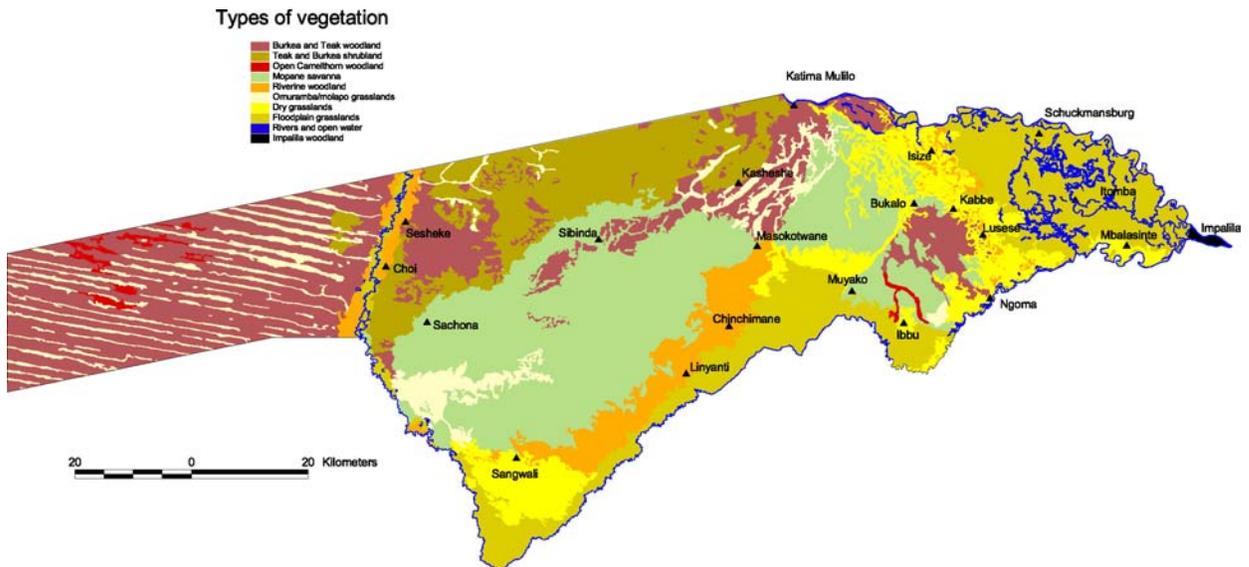
[caprivi distances to markets.jpg](#): this map shows that all reasonably lucrative markets where there are concentrations of potential consumers are at least several hundred kilometers away from Caprivi. I do not have the data to hand to provide an overview of population density across southern Africa, but the maps and data I have seen are clear in showing that very few people live in areas surrounding the Caprivi, indeed anywhere within the Kalahari Basin.

Returning to the effects of the predominant influence of the region lying near the bottom of the Kalahari Basin, characteristics of both the region's soils and vegetation are due to features associated with the geology and drainage of the Basin.

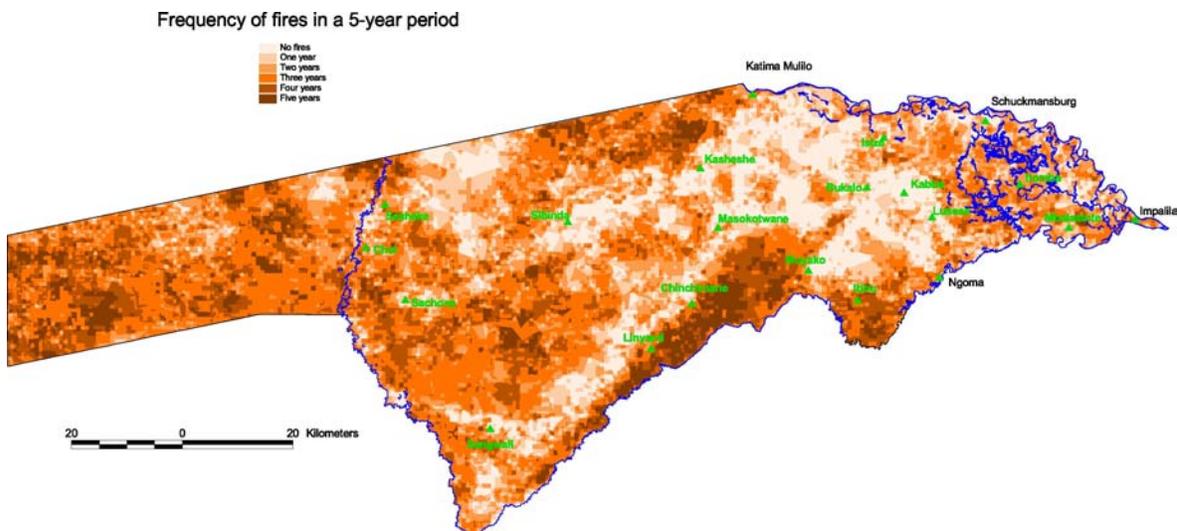
Thus, much of Caprivi is covered in sands, in particular west of the Kwando and north of the Kongola-Katima road ([soil types.jpg](#)). Elsewhere, soils are more influenced by the



drainage courses of rivers, both those rivers that flow today and others that meandered across Caprivi hundreds of thousands of years ago. For example, the more clayey soils south of the Kongola-Katima road were formed when ancient river courses flowed across that area. In fact, there is evidence that it was the Zambezi that flowed across that area on its way to what is now the Makgadikadi Pans in Botswana. It was only comparatively recently that the Zambezi changed and turned its course eastwards towards Victoria Falls, Zimbabwe and Mozambique. The clayey soils along river courses are more fertile and hold more moisture than the sands, and this is why many people grow maize in molapo fields in eastern Caprivi.



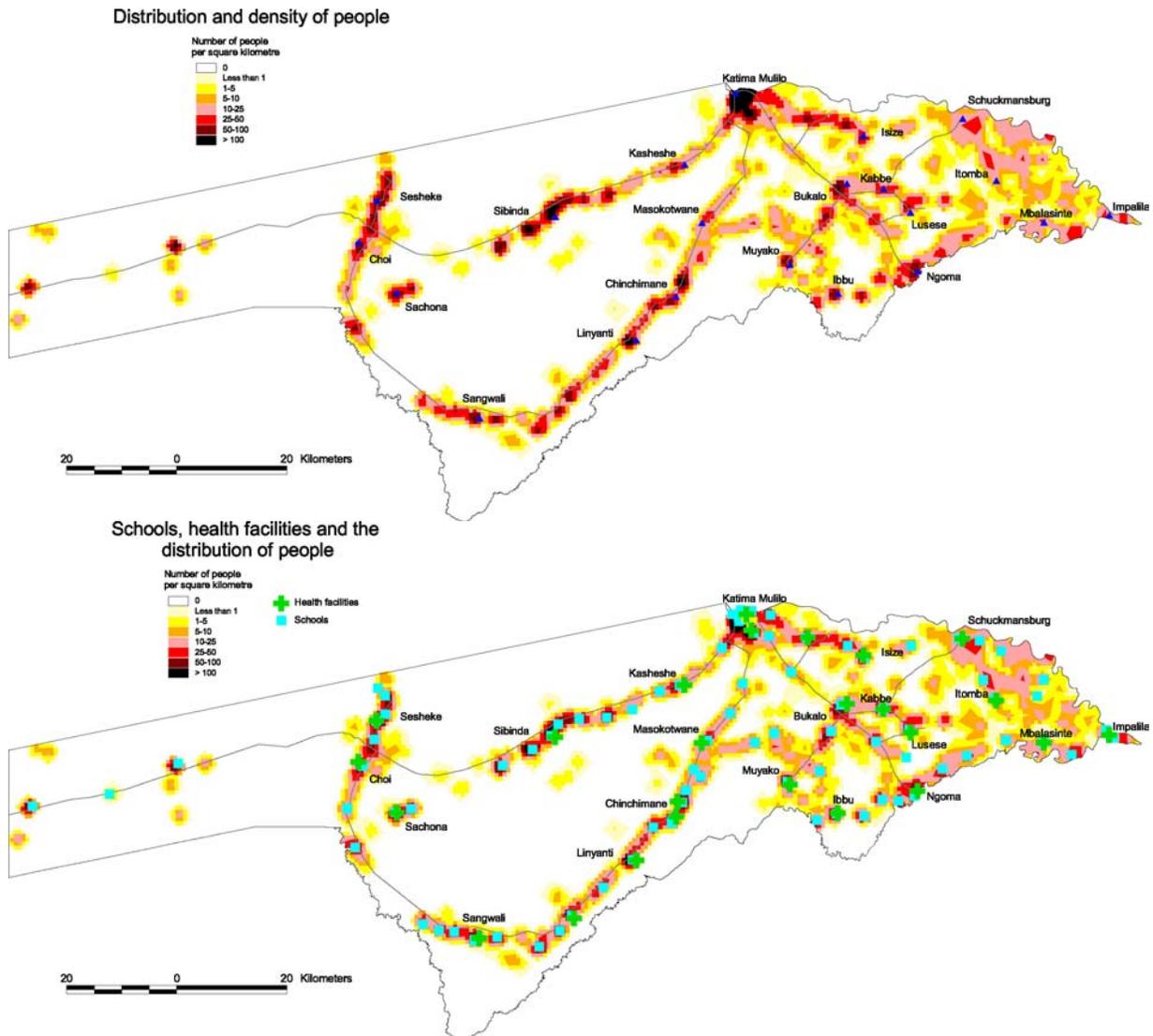
Few trees can grow in soils that become water-logged and this is why grasslands predominate on floodplains along the major rivers and in eastern Caprivi. Mopane is the dominant tree on clayey soils found on ancient floodplains that have now dried up, whereas such characteristic trees as Angolan (Kiaat) and Zambezi Teak, Burkea and Silver-leaf Terminalia grow commonly on Kalahari Sands ([vegetation types.jpg](#)).



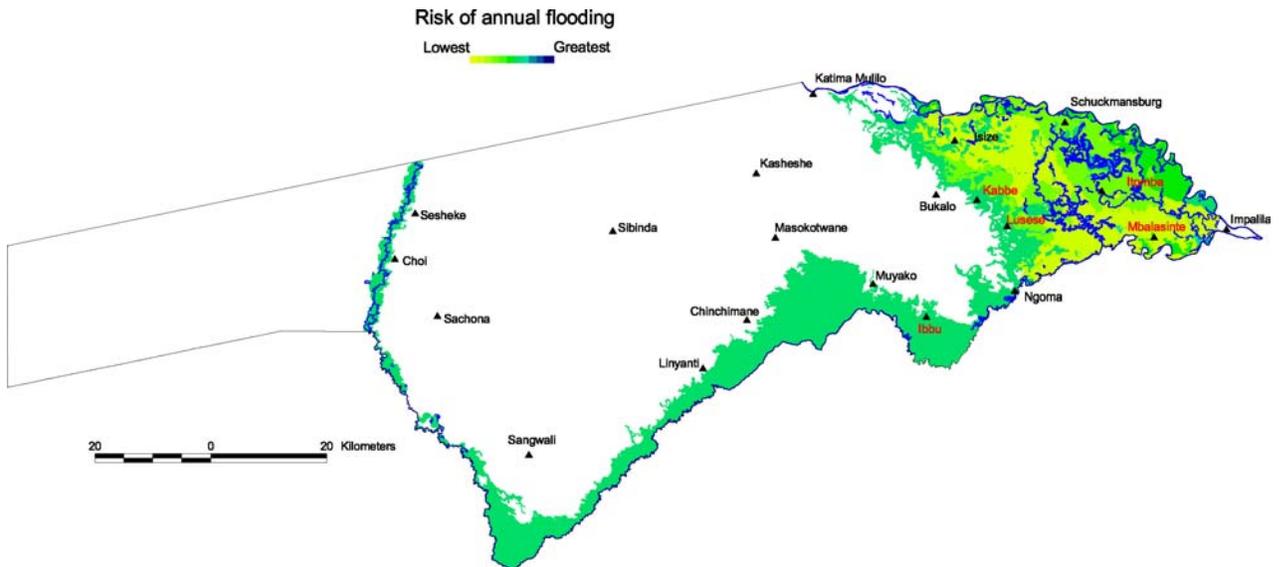
Angolan and Zambezi Teak trees have produced much valuable timber over the years, but most of big trees are now gone as a result of logging. While the harvesting of trees for commercial timber is no longer allowed in Namibia, huge areas of these woodlands continue to be lost as a result of frequent burning ([frequency of burning.jpg](#)), especially in the Caprivi State Forest and West Caprivi or Bwabwata Game Park. Sadly, neither the Ministry of Environment & Tourism or Ministry of Agriculture, Water & Forestry which are, respectively, responsible for these two areas do much to control the fires. Large areas of forest and woodland have already been converted into shrub-lands and most remaining large trees will disappear if the frequent burns are allowed to continue. In addition, the fires kill young saplings of these valuable trees and so there is no regeneration of the forests and woodlands.

Fires are also extremely common on the floodplains, especially those of the Linyanti. While little is known about the impacts of the frequent burning of the marshes and surrounding grasslands, it is obvious that livestock farmers often lose access to grazing.

The fires sometimes cause other damage, including the loss of homes and lives. The Caprivi Land Board should do everything in its power to reduce or eliminate the fires, almost all of which are set in late winter and spring by local farmers and residents.

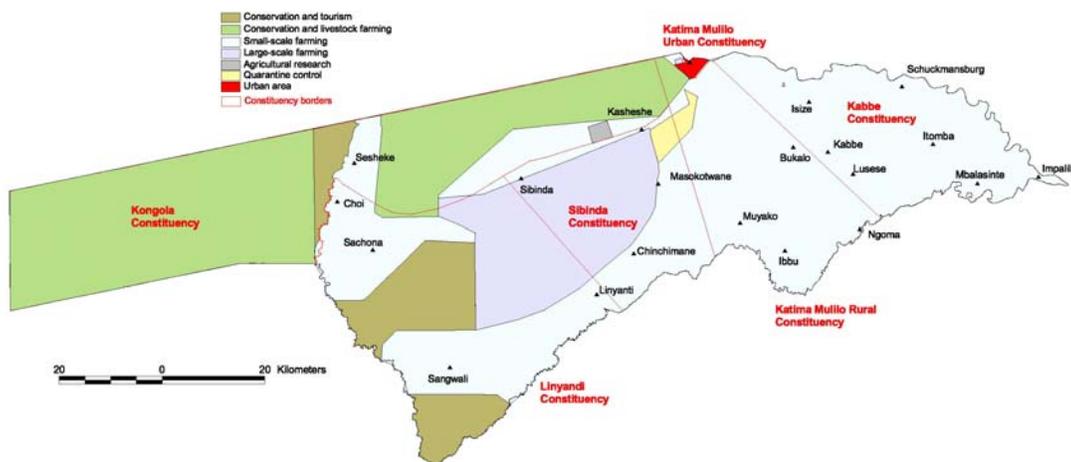


Two maps provide perspectives on the distribution of people, education, health and transport infrastructure ([population density.jpg](#), [schools and health facilities.jpg](#)). Most of Caprivi's population is concentrated in Katima Mulilo, along the main roads and in small villages spread across the eastern floodplains, where many people are at risk from frequent flooding ([risk of flooding.jpg](#)). The wisdom of having so many people living in these flood zones should be questioned by the Caprivi Land Board, especially since many people are apparently becoming reliant on flood relief. Such dependency on relief is both demeaning and expensive. Moreover, these floodplains could serve more useful purposes than the low production farming for which they are now used.

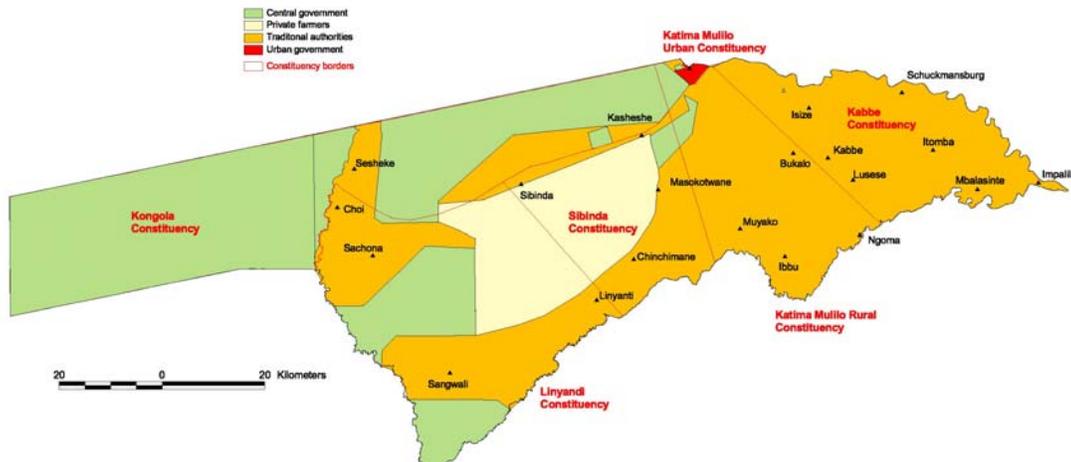


Two maps also provide perspectives on how access to land is controlled, and how land is used ([land control.jpg](#), [land use.jpg](#)). An interesting new development is the establishment and allocation of large commercial farms (at least, they are intended to be commercial) south of the Katima-Kongola road. I do not remember the details, but I think that 80 new farms, each covering 2,500 hectares, have been planned. The Ministry of Lands & Resettlement has completed the surveying and demarcation of the farms.

How is land used in Caprivi?

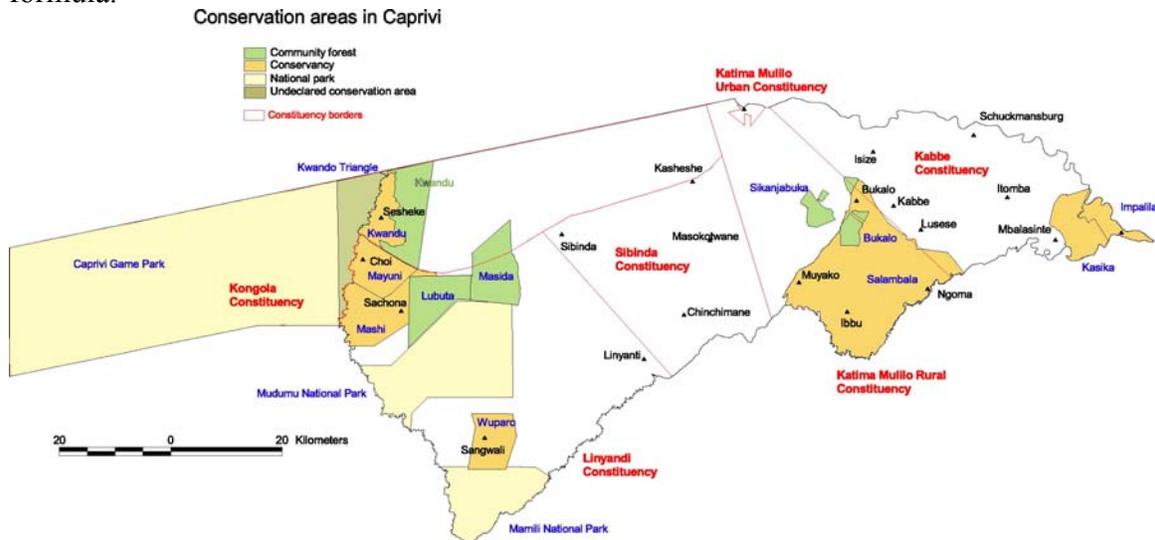


Who controls land in Caprivi?



Elsewhere, much of Caprivi is under the direct or indirect control of traditional authorities, who play a role in the allocation of land and access to natural resources,

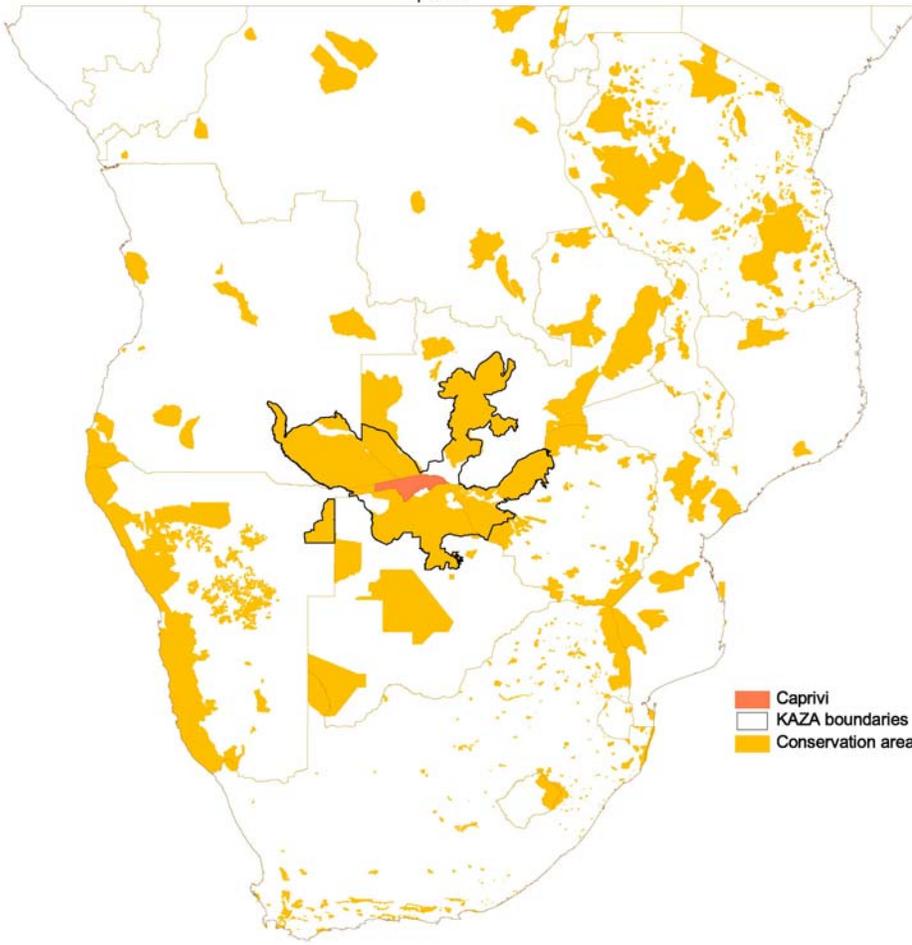
including grazing, firewood and building materials. These authorities, together with the Caprivi Land Board, need to reconsider the wisdom of having large areas being used for low input-low output farming where residents have no security of tenure, no access to bank loans and no possibility of developing property as fixed capital assets. As elsewhere, resources are depleted according to the normal “tragedy of the commons” formula.



In addition to the poverty that communal land tenure perpetuates, much of the land could be used for more economically and environmentally useful purposes, especially tourism and wildlife utilization, such as is now happening in many conservancies ([conservation areas in Caprivi.jpg](#)). Morgan, I do not have the Excel files with me here in Nairobi and so please contact Anna Davis to give you an annual breakdown on income to conservancies in Caprivi. It would be best to get a table that shows the type and amount of income for each conservancy per year since its establishment. These figures will make an impressive graph. I shall also email Anna to ask that she sends you and me these figures.

The kinds of incomes to both the region as a whole and to members of conservancies are impressive. They also show what gains can be achieved by capitalizing on wildlife and other tourism attractions in and around Caprivi. For example, by far the largest population of elephants in the world lives in this area of south-central Africa. Victoria Falls, Chobe, Moremi and other parts of the Okavango Delta are world famous draw cards that attract hundreds of thousands of high-paying visitors from around the world. Caprivi sits dead centre amongst all these very valuable resources. Moreover, Caprivi is in the centre of a large area consisting of many conservation and tourism areas gives it an opportunity of contributing to environmental protection in central southern Africa and of benefiting from this comparative advantages offered by the combined strengths of all these areas. Considerable agreement between the governments of Zambia, Zimbabwe, Angola, Botswana and Namibia has been reached to recognize these transborder resources in the form of the Kavango-Zambezi Trans Frontier Conservation Area, now known as KAZA ([conservation areas and kaza.jpg](#)).

Equator



- Caprivi
- KAZA boundaries
- Conservation areas in Africa