



## TOPOGRAPHY

The main international boundary dividing the Kakwa into **Uganda**, the **Congo** and the **Sudan**, is a natural water-parting area known as the *Congo-Nile Divide* (or *Nile-Congo Watershed*). From here, the Kakwa rivers flow in opposite directions: *east* into the **River Nile** (in Uganda and the Sudan), and *west* into the **River Congo** (in the **Democratic Republic of the Congo**). The tri-point (the point where all the three countries meet) is marked by mountains **Ati** and **Asipi**. These mountains form part of the source of the **River Kaya** which flows **east** into the River Nile.

The average general altitude of Kakwa's territorial expanse is fairly high above sea level. The landmass displays a multiplicity of complex geological, hydrological (or water), and edaphic (or soil factors). Much of the area is a fairly uniform plateau punctuated here and there by low-lying valleys. There are also numerous hills and mountains, especially in **Yei County** and in **Ko'buko District**.

### Kakwa Territories

The whole Kakwa territories span from about **3° North** to **4° 1"** (North), and to about **29° 2" (East)** to **31° 2" (East)** covering portions of the three countries of **Uganda**, the **Sudan** and the **Democratic Republic of the Congo**. The largest land mass is that of the **Yei County**, followed by that of the **Kakwa County**, while **Ko'buko District** is the smallest of the three. The division of the Kakwa into the three nation-states of **Uganda**, the **Congo** and the **Sudan**, came into being following the *Berlin Conference* of **1884-1885**. This conference, attended by the European powers: **Britain**, **Belgium**, **Portugal**, **France**, **Germany**, and **Spain** with the **United States** as *an observer*, resulted in the consolidation of European hold on, and subsequent division of Africa into *European spheres of influence*. As a result, the Kakwa were colonized by **King Leopold II** (and later by the Belgians—known as *Tuku-tuku*, or *Tamba-Tamba*, a nick-name given to these Europeans by the natives in imitation of the sound of the White men's guns when fired). After the death of the **Belgian King**, the Uganda Kakwa were ruled by the British. In the **Sudan**, the British ruled the Kakwa in concert with the **Turkish-Egyptians** until the *Anglo-Egyptian Condominium* of 1899.

### Kakwa Climate and Weather

Climate is generally defined as the average weather conditions over a long period of time usually 30 years). Weather is defined as the condition of the atmosphere at any given time and place. In the higher latitudes of the temperate regions, **60** to **90** degrees north or south of the Equator, the climate is

characterized by the four seasons: winter, spring, summer or the fall. In the lower equatorial regions, however, there are only two seasons: "dry" and "wet" although in much of the tropics the climate is always wet and hot.

In terms of hydrology, much of the Kakwa land mass is well drained. For instance, the **Kakwa County** is well-drained by the mighty **Kibi**, and a number of smaller but permanent tributaries, such as **A'bu**, **Keri**, **Kenya**, **Kaliga**, etc. All these rivers arise from the *Congo-Nile Divide* in the east and northeast. They eventually flow west to become Africa's largest river, the **Congo River**, before it empties into the Atlantic Ocean. The River **Kibi** virtually encircles the **Kakwa County**. The **Yei River** rises from the *Nile-Congo Divide* marking the Congo-Sudan border close to the **Aloma Hills** It flows northwards and meets the Nile on its northern journey. In Uganda, the rivers **Kaya**, **Da'bara**, **Kosu**, **Kabure**, **'Duwa-duwa**, **Katu**, **Ore**, **Apa**, **Kosi** etc, all flow from the west to the east into **Suburi** or **Supuri**, the name of the Nile in Kakwa.

### **Kakwa Mountains and Hills**

A mountain is generally defined as a feature of the Earth's surface that rises high above the base and has generally steep slopes and a relatively small summit area. Mountains rarely occur as isolated individuals. Instead, they are usually found in roughly circular groups or massifs or in elongated ranges. As a general rule, mountains represent portions of the Earth's crust that have been raised above their surroundings by up warping, folding or buckling, and have been deepened or carved by streams or glaciers into their present surface form. Hills on the other hand, are land forms characterized by roughness and strong relief. However, the distinction between hills and mountains is usually one of relative size or height but the terms are loosely and inconsistently used. The Kakwa landscape is characterized by numerous broken lines of hills and mountains. The mountains are generally convex in shape giving the impression of being volcanic. Apparently, the surfaces have arisen due to exfoliation and peeling off of scale or layers of the gneiss (the coarse grained metamorphic rock of quartz, feldspar and mica) due to erosion. Such mountains and hills are known to geologists as inselbergs. The most prominent of these hills are the **Bala Hills** located in the **Yei County**. The highest mountain in the land is **Gumbiri** which rises to slightly over 1,500 meters above sea level.

**Mount Liru** in **Ko'buko District**, along with its "twin brother", **Lunyaŋi**, rises to roughly **4,553** feet or **1,388** meters above sea level. The two mountains can easily be distinguished from one another: looking from the northwest or west shows that **Liru** is clothed with thick green vegetation while **Lunyaŋi** is mainly bare at its apex (see also the tops of these web pages). **Liru** is not at the exact centre of the Kakwa territories geographically. In fact, thanks to the arbitrary boundaries created by the colonialists, the southern and southeastern portion of **Liru** is found in the **Lugbara** areas of **Aringa** and **Terego**. However, **Mount Liru** is the focus of nearly all myth and genealogy in much Kakwa society.

### **Seasons in Kakwa**

A season is the variation of, and interaction between, the sun which designates "dryness" and the rain which designates "wetness." The Kakwa territories being about 4 degrees north of the Equator and within the lower latitudes, experience both semi-tropical and sub-equatorial climatic regimes. The Kakwa call the "dry" season **meli** and the "wet" season, **za'be**. These spells divide the year into roughly two halves. It is, however, worth noting that the dry season does not necessarily mean absence of moisture in the air, or that during the wet season there is no temperature rise. The two seasons simply conform to the well-known occupational as well as the often anticipated physical characteristics of the landscape in relation to the moisture or heat. In other words, the lives of the Kakwa people are tuned to the rhythms of the year in

terms of the seasons.

### **Pete-zi ti Yapa-zi ti Kiŋa (The Names of the Months)**

- **Kirongole** (the month of January)
- **Pudo** (the month of February)
- **Dirili/Kulumu** (the month of March)
- **Poŋu** (the month of April)
- **Koduse** (the month of May)
- **Kuma** (the month of June)
- **Yobuwata** (the month of July)
- **Za'be/Kiseri** (the month of August)
- **Ayize** (the month of September)
- **Sunguru (Piro)** (the month of October)
- **Rarawu** (the month of November)
- **Sopa na so** (the month of December)

It is worth mentioning that each month is named in accordance with the ecological and seasonal changes that naturally take place in the surroundings due to the earth's rotation. Also, during the months of March and April **nyunyumi** (the Pleiades), set about an hour after sunset around this season. Other seasonal celestial bodies include: **Lelego lo Mekora** 'The Morning Star'; **Kasiri lo ŋoŋodu** 'Meteorites' or 'Shooting stars', **Lelego** 'bright Star', **kolo** 'sun', **yapa** 'moon', and **kasiri** 'stars.'

### **Kudu**

Rain is known as **kudu** in Kakwa. Like other tropical areas, most of the precipitation in the Kakwa territories occurs in the form of rain caused by the blowing of the southeast trade winds from across the Indian Ocean. The rain season commences in early March and continues into the later days of November. After the first rains, lush and luxurious vegetation growth occurs. This early vegetation is known as **leme**, and it is composed mainly of grasses, sedges and shrubs. **Leme** provides a much needed and favourable fresh feed and browsing for the goats, sheep and the cows, and a favourable shelter to the multitudes of other animals and insects found in the Kakwa territories.

In Kakwa culture, both the cultivation season and the rain season are also referred to as **za'be (ja'be)**. Precipitation from in forms such as **toro** or 'hailstones', is usually minimal. Whereas, over the years no records of the climatic variations in the Kakwa land has been kept, Whitehead (1939), did find that the **Yei** area has a yearly total rainfall of **1,426 mm** while nearby **Loka** has 1,364 mm. In the rest of the Kakwa land, however, the annual rainfall totals lie between **1,200 mm** and **1,500 mm**. These totals are ideal for continuous agriculture exercise for the majority of the year. The months of peak rainfall are **July** and **August**, where the accompanying severe thunderstorms, cause the numerous rivers and streams to flood their banks, sometimes causing severe soil erosion and transportation problems. It is fascinating to compare the rainfall models today with those that occurred in the last century.

### **Rain Types in the Kakwa Territories**

The Kakwa people distinguish assorted types of rains:

- **To'bu** (rain that causes various species of white ants to emerge from their nests or colonies)
- **Wiwiye** (rain for sowing seeds)
- **Kudu lo roto ni kapira** (rain that sheds-off flowers)

- **Kudu lo lalayini kulinyi** (rain that washes out soot)
- **Kudu lo jiye ku kolo ito** (rain that occurs when it is also shining); and
- **Lilima** (drizzle or light rain).

### Kakwa Major Rivers

The Ugandan rivers in **Ko'buko District—Da'bara, Katu, Ore, Apa and Kochi** — all flow from west to east, and they eventually empty into **Supuri** (or the River Nile). On the other hand, the Kakwa County rivers such as, **A'bu Kibi, Keri, Kenya** and **Kaliga** flow westwards from the *Congo-Nile Divide* as they eventually empty into the **Congo** Africa's largest river. The source of the Congo is the **Kibi River** which drains much of the County. Also, most of the rivers on the Sudanese side flow from a westerly to a northeasterly direction into the Nile (see maps of the Kakwa territories above).

### Kakwa Soil Types

The Kakwa term for soil is **kujo** (*kujoto plural*) and sometimes **kure**. An area of exceptionally healthy and loamy soil is described as **kujete**. In its elementary scientific definition, soil is the unconsolidated rock material or substance containing a mixture of organic matter capable of supporting flora and fauna. The presence of soil in any location is a result of the interaction of many variables such as:

- the initial material (bedrock)
- the landform
- the climatic elements
- living organisms
- management or cultural practices, such as agriculture, forestry and animal husbandry; and
- organic matter (really humus) acts as a soil conditioner; this improves soil physical and water holding capacity and the biological (including its microbial population).

Generally-speaking, the complex of the Kakwa soil types consists of the **schists, gneiss** and **quartz**. These different reddish-brown soils have been grouped together under the general terminology *laterite* (or murrum). In Kakwa, such soils are known as **urugu**. They occur abundantly in the better-drained parts of the territories. The combined alternate action of temperature and rainfall is largely responsible for the development of the laterite soils. Seasonal water-logging and drying under such conditions, results in intense lateritic weathering. The actual composition of murrum is a cluster of the sesquioxides of iron together with quartz and clay forms. Its reddish colour is mainly due to the iron oxide which tends to solidify the red earth forming a dry and hard reddish-brown pan. In this form, murrum becomes a sort of limestone which is quarried and used as an excellent gravel for surfacing roads. The Kakwa people also use murrum for plastering, smearing or decorating walls, floors, pottery, and crafts.

Because of its abundant rainfall, the **Yei County** is located in an area of relatively high agricultural potential compared to the rest of the Kakwa lands. A fairly detailed description of the soils here has been given for the Zande area surrounding Yambio in the Western Equatoria Province of the Sudan. In fact, the **Yambio Agricultural Research Station**, was set up here in order to study, among other things, local systems of agriculture and methods of improving them. The variation of rainfall patterns in some parts of the **Yei County** has created differences in soil fertility throughout the area. In terms of their potential for cultivation, six "zones" have been theoretically distinguished. These range from *Zone Two* where the rainfall is highest and the soils best, to *Zone Three* where the potential for agriculture is least. This last zone is commonly characterized by infertility, over-cultivation, lack of water, presence of the tsetse fly, the absence of roads, and thin gray soils.

