



## **SOCIAL STUDIES TOPICAL BREAK DOWN TERM I PRIMARY SEVEN**

### **TOPIC 1: THE CONTINENT OF AFRICA**

- ✓ Meaning of a continent
- ✓ Other continents of the world
- ✓ Position and size of the world
- ✓ Importance of the Greenwich meridian
- ✓ How to use latitudes and longitudes to locate places
- ✓ Examples of time change in the world
- ✓ Important geographical facts about Africa
- ✓ Other features associated with the continent of Africa

### **TOPIC 2: PHYSICAL FEATURES OF AFRICA**

- ✓ Relief regions of Africa
- ✓ Highlands and mountains in Africa
- ✓ Types of mountains in Africa
- ✓ Formation of mountains
- ✓ Advantages and disadvantages of mountains
- ✓ The coastal plain
- ✓ The African plateau
- ✓ The rift valley of Africa
- ✓ The drainage system of Africa
- ✓ River development projects in Africa
- ✓ Swamps

### **TOPIC 3 : VEGETATION IN AFRICA**

- ✓ Types of vegetation in Africa
- ✓ Examples of natural vegetation, forests
- ✓ Factors that influence people's lives

- ✓ How people influence natural vegetation
- ✓ Ways of conserving vegetation
- ✓ Effects of vegetation on population distribution
- ✓ Wildlife in Africa
- ✓ Major national game parks in Africa
- ✓ Tourism in Africa

## TOPIC 4: THE CLIMATE OF AFRICA

- ✓ Weather
- ✓ Factors affecting climate
- ✓ Prevailing winds in Africa
- ✓ Global warning
- ✓ Climatic regions of Africa
- ✓ Effects of climate on people's lives
- ✓ How people's activities influence climate

## AFRICA AS A CONTINENT

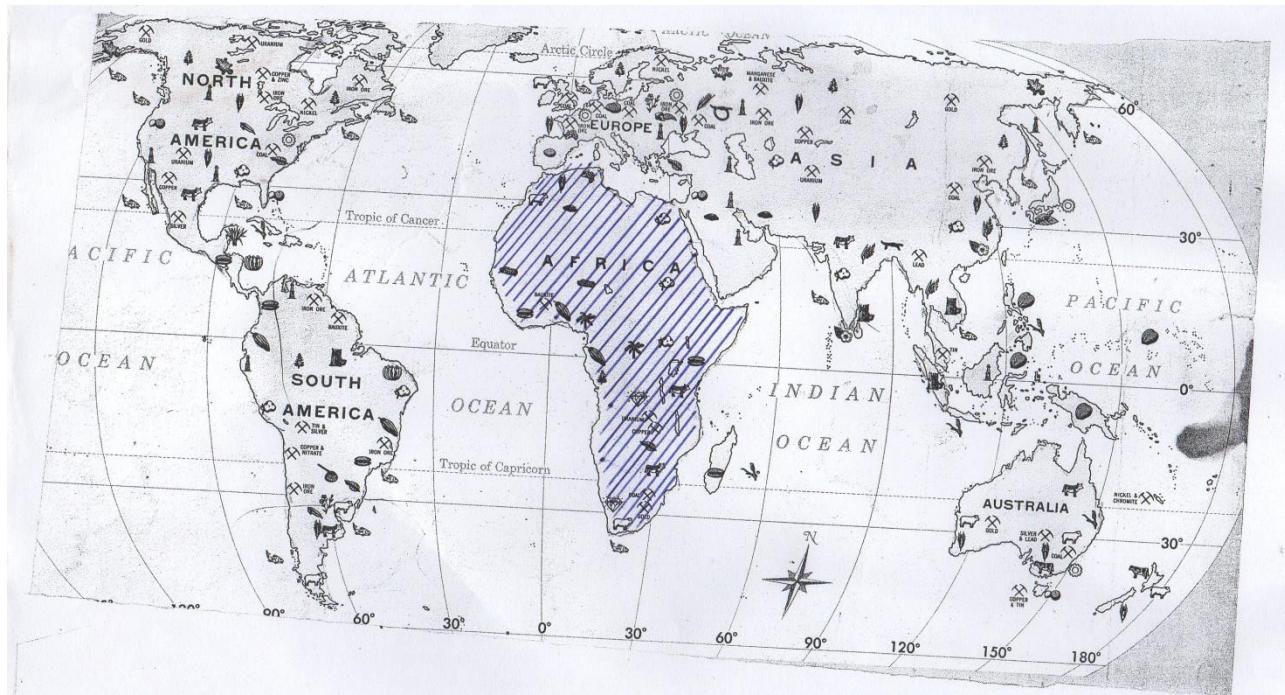
Africa is one of the seven continents of the world

A continent is a large mass of land on the earth surrounded by large water bodies called oceans or seas.

## AFRICA ON THE WORLD MAP

Fountain SST pupils book 7 pg 3 (Old edition) or functional SST Bk 7 Pg 3

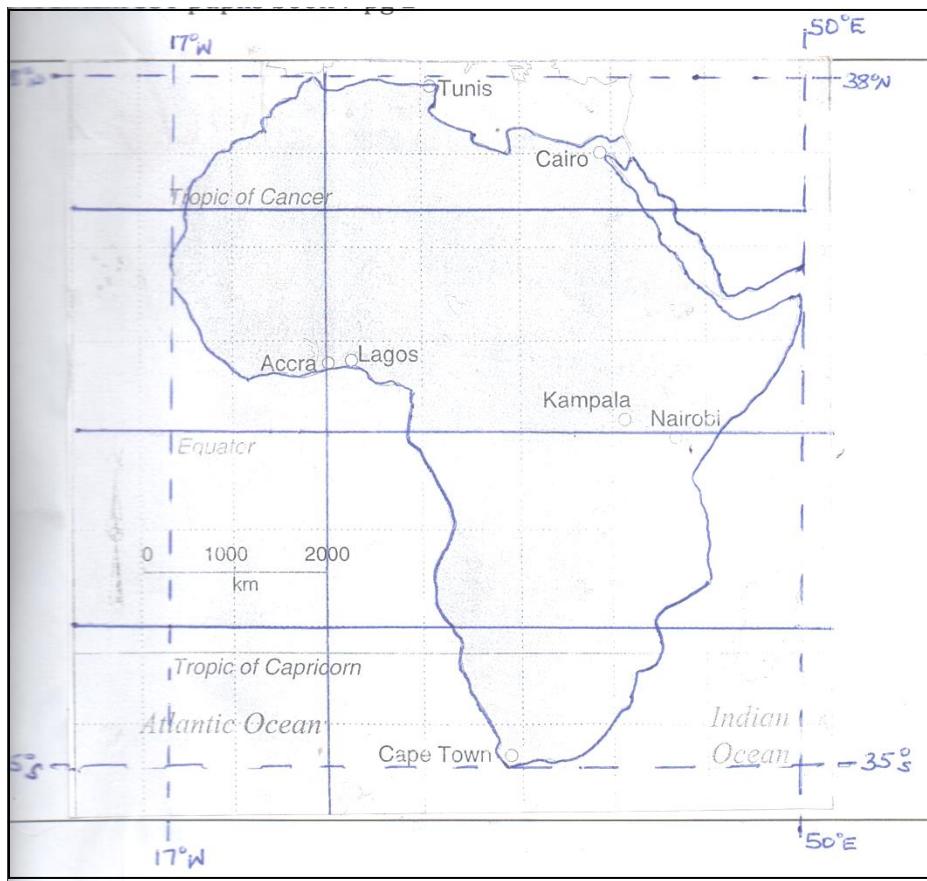
## LOCATION OF AFRICA ON A WORLD MAP



A part from Africa, other continents that make up the world are:

- ✓ Asia
- ✓ Europe
- ✓ North America (Latin America/ New world)
- ✓ Australasia/ Australia/Oceania
- ✓ The largest continent of the world is Asia
- ✓ Africa is the second largest continent on the world map
- ✓ Australia is the smallest continent. It is considered as a continent and a country as well. Australia is well known for its Kangaroos for tourism.

### **POSITION AND SIZE OF AFRICA**Map fountain SST pupils book 7 Pg 2



African countries crossed by the prime meridian are:-

- ✓ Ghana
- ✓ Mali
- ✓ Burkina Faso
- ✓ Algeria

In Africa, the prime meridian crosses the capital city of Ghana called Accra.

The prime meridian is called so because

- ✓ it is the principle line of longitude
- ✓ other lines of longitudes are marked/numbered from it

The prime meridian is called the Greenwich meridian because it crosses a city in England called Greenwich.

### **IMPORTANCE OF THE GREENWICH**

- ✓ It helps to determine international time zones of the world
- ✓ It helps to tell how far a place is from  $0^{\circ}$  at the Greenwich
- ✓ It divides the world into East and West i.e East or West of the Greenwich
- ✓ Time zone is an area with the same time in the world.

### **Note**

- ✓ The last line of longitude is called international date line and is marked  $180^{\circ}$
- ✓ The International Date Line determines the dates of different countries of the world.
- ✓ As regards determining time, places east of the prime meridian are normally ahead or late in time compared to places west of the Greenwich meridian.
- ✓ Places West of the Greenwich meridian are behind or before in time than places in the East.
- ✓ Every  $15^{\circ}$  from the Greenwich meridian, there is an hour difference in time.

### **HOW TO USE LATITUDES AND LONGITUDES TO LOCATE COUNTRIES**

When locating countries, we use latitudes and longitudes. These can be done by identifying the last latitudes on either extreme borders of a country and the last longitudes at either ends.

The indentified space between these latitudes and longitudes clearly shows the country being located.

### Example 1

#### Locating Algeria

Algeria lies wholly to the North of the equator.

It neither lies in the East nor in the West. Part of it is in the East while the other is in the West of Greenwich. That is why some longitudes used to locate it bear degrees east ( $^{\circ}\text{E}$ ) and others degrees West ( $^{\circ}\text{W}$ ) of the Greenwich.

The last latitudes at either opposite boundaries of Algeria are  $18^{\circ}\text{N}$  and  $37^{\circ}\text{N}$ . The last longitudes on either opposite ends are  $8 \frac{1}{2}^{\circ}\text{W}$  and  $12^{\circ}\text{E}$ .

How to use latitudes and longitudes to locate countries.

- ✓ Determine the last two opposite latitudes and the last two opposite longitudes and longitudes on either extreme end.
- ✓ The space between these latitudes and longitudes show the country required for location.
- ✓ Latitudes and longitudes on a map are not numbered consecutively as 0, 1, 2, 3, -----. They are commonly numbered as 0, 10, 20, 30, 40 ----- or 0, 5, 10, 15, -----. Therefore you have to determine the degrees of the latitudes and longitudes which are not indicated.

#### Examples of time change in the world

- a) If it is 2:00pm in Uganda, it is midnight in Sydney. This is because Australia is farther East of the Greenwich thus ahead in time.
- b) If it is 2:00pm in Uganda, it is midday in London as Uganda is farther east of the Greenwich than Britain, therefore, ahead in time.
- c) If it is 2:00pm in Uganda, it is early morning in USA (New York) because Pakistan is farther East of the Greenwich than Uganda.

#### Sample question on time

It is 3:00pm at the Greenwich. What time will it be in Uganda which lies  $45^{\circ}\text{E}$  of the Greenwich.

$15^{\circ}$                   1 hr

$45^{\circ}$       45/15hrs

$45^{\circ}$       3hrs

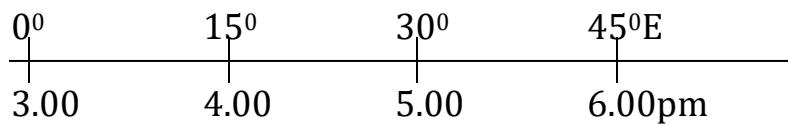
nine difference is 3:00hrs

nine in Uganda will be

3:00pm + 3hrs

= 6:00pm

One time in Uganda is 6:00pm when it is 3:00pm at GMT or



Procedure

### **Step 1:**

Identify any two parallel longitudes or latitudes eg  $20^{\circ}\text{E}$  and  $30^{\circ}\text{E}$ .

Latitudes eg  $20^{\circ}\text{E}$  and  $30^{\circ}\text{E}$

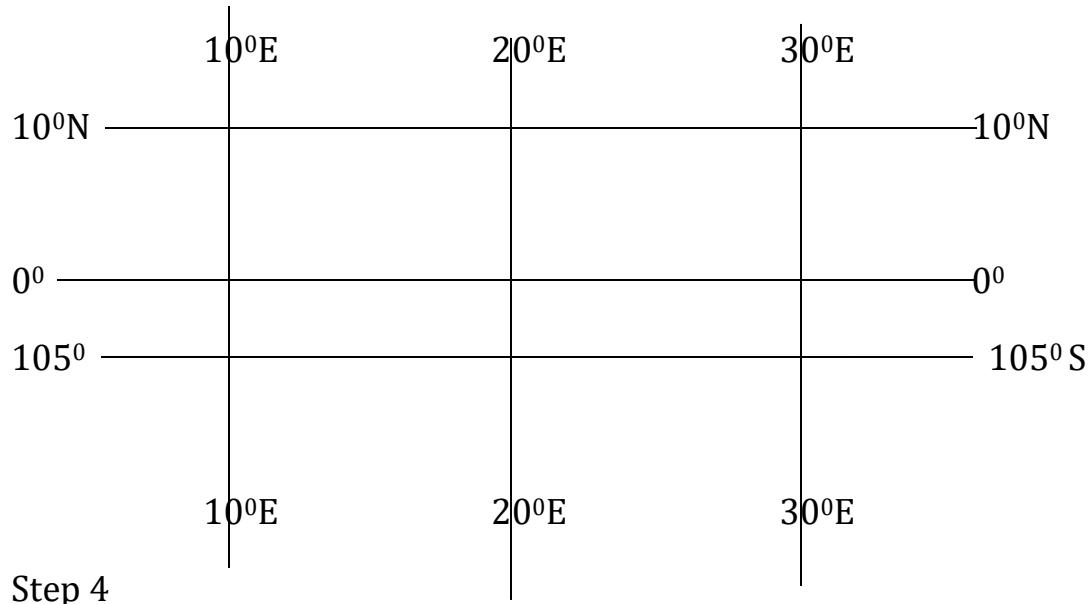
### **Step 2**

Find the degrees between the gaps of the longitudes specified eg

There are  $10^{\circ}$  between  $20^{\circ}\text{E}$  and  $30^{\circ}\text{E}$

### **Step 3**

Find the length in mm or cm between the specified lines eg. There are 30mm or 3cm between  $20^{\circ}\text{E}$  and  $30^{\circ}\text{E}$



Divide the answer you got in step 3 with that of step 2, to determine how many millimeters can make a degree.

Since there are  $10^{\circ}$  between  $20^{\circ}$  and  $30^{\circ}$

so  $10^{\circ} = 30\text{mm}$

$$\begin{array}{r} 10 = \underline{30} \\ 10 \end{array}$$

Therefore  $1^{\circ} = 3\text{mm}$

Therefore every 3mm make  $1^{\circ}$

## COUNTRIES IN AFRICA



The shortest distance between the Africa continent and Europe is separated by the strait of Gibraltar.

A strait is a narrow water passage between two land masses.

The Island countries of Africa include

- ✓ Madagascar (largest)
- ✓ Comoros
- ✓ Seychelles (smallest)
- ✓ Re – union
- ✓ Mauritius
- ✓ Cao Tome and Principe
- ✓ Capeverde

## **CENTRAL**

- ✓ Car (central African Republic)
- ✓ Zambia
- ✓ Malawi
- ✓ DRC
- ✓ Angola
- ✓ Cameroon

## **NORTHERN**

- ✓ Morocco
- ✓ Egypt
- ✓ Algeria
- ✓ Libya
- ✓ Tunisia

## **WESTERN**

- ✓ Nigeria
- ✓ Ghana
- ✓ Sierra Leon
- ✓ Gambia
- ✓ Liberia
- ✓ Guinea
- ✓ Guinea Bissau
- ✓ Cote divolie
- ✓ Senegal
- ✓ Mali
- ✓ Burkina faso
- ✓ Niger
- ✓ Benin
- ✓ Togo
- ✓ Mauritania

## **SOUTHERN**

- ✓ Namibia
- ✓ Botswana
- ✓ Lesotho

- ✓ Swaziland
- ✓ S. Africa

## EAST AFRICA

- ✓ Uganda
- ✓ Kenya
- ✓ Tanzania
- ✓ Rwanda
- ✓ Burundi

## NORTH EASTERN (HORN OF AFRICA)

- ✓ Sudan
- ✓ South Sudan
- ✓ Ethiopia
- ✓ Eritrea
- ✓ Djibouti
- ✓ Somalia

## ISLAND COUNTRIES OF AFRICA

- ✓ Madagascar
- ✓ Seychelles
- ✓ Comoros
- ✓ Mauritius
- ✓ Cape verde
- ✓ Sao Tome and Principe

## GEOGRAPHY OF AFRICA

Africa is divided into 7 geographical regions namely

- ✓ Eastern Africa
- ✓ Western Africa
- ✓ Northern Africa
- ✓ Central Africa
- ✓ N. E (Horn of African continent)
- ✓ Southern Africa

## Important facts about Africa

- ✓ Africa's neighbouring continents are Europe and Asia
- ✓ The African continent lies between  $16^{\circ}\text{W}$  and  $51^{\circ}\text{E}$  and also between  $38^{\circ}\text{N}$  and  $34^{\circ}\text{S}$
- ✓ Africa has the largest number of countries ie 55 countries but 54 are fully recognized by UN

**Note:** Morocco is not a member of the AU because it withdrew from the OAU

- ✓ It has the largest and hottest desert, Sahara desert in the world.
- ✓ Africa has the largest man made lake in the world ie Lake Kariba in Ghana.
- ✓ Africa has the shortest group of people called pygmies who live in Ituri forest in DRC
- ✓ In terms of mineral wealth, Africa produces large quantities of gold, diamonds, copper.
- ✓ Historically, Africa's interior was not known by the Europeans for long. They called it a dark continent. This was because Europeans knew little about its interior.
- ✓ However, the interior of the African continent came to be known after the work of exploration by European explorers like Dr. David Livingstone, Mungo park, John Speke, John Lander, Richard Lander.
- ✓ Africa has the longest river in the world ie. River Nile
- ✓ The highest mountain in Africa is Mt. Kilimanjaro
- ✓ Victoria is the largest Lake in Africa and 2<sup>nd</sup> in the world.
- ✓ The largest falls in Africa are the Victoria Falls on river Zambezi on the border of Zambia and Zimbabwe.

**A continent:** This is a mass of land on the surface of the earth.

- ✓ It is the only continent crossed by the prime meridian, Equator, Tropic of cancer and Capricorn.

Under physical features

Other features associated with the continent of Africa

Besides large water bodies, there are important features close to Africa. These include:

- ✓ Straits
- ✓ Gulf

- ✓ Isthmuses
- ✓ Capes

**A strait** is a narrow water passage between two land masses.

Examples of straits in Africa

- ✓ The strait of Gibraltar in the extreme North – Western part
- ✓ The strait of Babel Mandeb in the North Eastern part

Africa is separated from Europe by the strait of Gibraltar.

**A Gulf** is a large area of sea which is partly enclosed by land.

**Examples of gulfs in Africa**

- ✓ Gulf of Aden
- ✓ Suez
- ✓ Gulf Aqaba
- ✓ Gulf of Gabes
- ✓ Gulf of sirte
- ✓ Gulf of Guinea

**An Isthmus**

Is a narrow piece of land connecting two land masses which would otherwise be separated by water.

The African continent was originally joined to Asia by a strip of land called the Isthmus of Suez. The Isthmus was later dug into the Suez Canal. A canal is a long narrow stretch of water.

This canal was opened in 1969. It joins the Red Sea to the Mediterranean Sea. The main purpose of its construction was to shorten the distance between Europe and Asia.

**Peninsula:** This is a long piece of land that is almost surrounded by water.

The African continent is separated from Europe by a strip of water known as the strait of **Gibraltar**. This strait joins the Mediterranean Sea to the Atlantic Ocean.

A cape is a piece of land which jets into the sea. Examples of capes are:-

- ✓ Cape verde

- ✓ Cape of good hope
- ✓ Cape of Delgado
- ✓ Cape Agulhas
- ✓ Cape Bonn
- ✓ Cape Blanc to the North
- ✓ Ras – Ben to the North

Cape: large piece of land that sticks (stretches) out into the sea.

## AFRICA'S PHYSICAL FEATURES

Physical features are natural land forms of a given area. The general physical features of Africa include:-

- ✓ plateaus
- ✓ highlands and mountains
- ✓ low lands (plains)
- ✓ deserts
- ✓ swamps
- ✓ peninsula
- ✓ gulfs
- ✓ isthmus
- ✓ rivers
- ✓ lakes
- ✓ rift valley

These features are sub divided into two

### **Drainage features**

These are features which contain water eg

- ✓ Lakes
- ✓ Rivers
- ✓ Oceans
- ✓ Seas
- ✓ Swamps

### **Relief features**

These are features that give shape to the surface of the earth. These are

- ✓ Plateaus
- ✓ Plains
- ✓ Gulfs
- ✓ Mountains and highlands
- ✓ Valleys

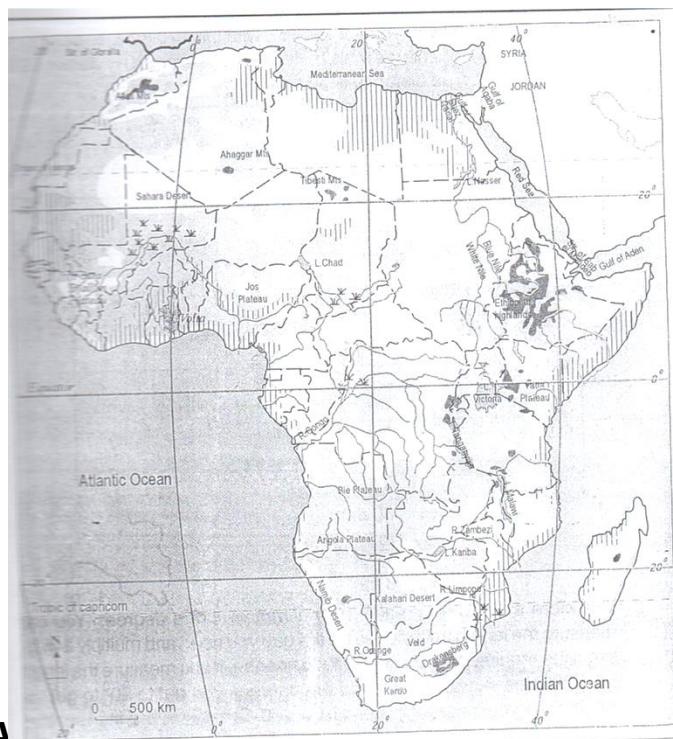
## **RELIEF REGIONS OF AFRICA**

Relief means the nature or shape of a given landscape.

Africa consists of the following five relief regions

- ✓ coastal plains
- ✓ high and low plateaus
- ✓ highlands
- ✓ rift valley
- ✓ mountains

## **A MAP SHOWING THE RELIEF REGIONS OF AFRICA.**



### **HIGHLANDS**

The mountains of Africa were formed through three processes.

- ✓ by volcanicity
- ✓ by faulting
- ✓ by folding

## Volcanic mountains

They were formed through the process called Volcanicity

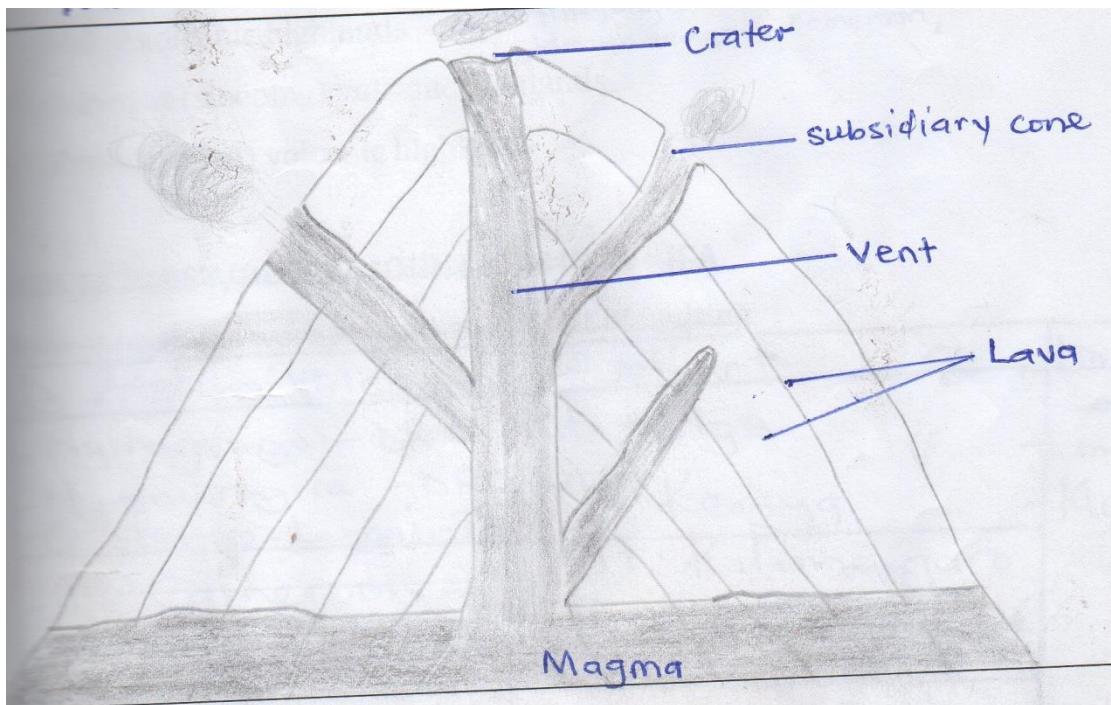
**Volcanicity** is the process by which features are formed both on the earth's surface and below the earth's crust by forces due to pressure.

Examples of volcanic mountains in Africa include:

### a) Mt. Kilimanjaro

- ✓ Is the highest mountain in Africa
- ✓ It was formed through the process of volcanicity
- ✓ It is said to be a snow capped mountain because its peak is above the snowline/4500metres.
- ✓ Mt. Kilimanjaro forms a natural boundary between Kenya and Tanzania.

## FORMATION OF VOLCANIC MOUNTAINS



**Crater:** Very large hole in the earth as a result of volcanic eruption.

**Lava:** Solidified magma

**Magma:** Hot liquid rock under the earth's crust

**Vent:** Large opening through which magma flows to the earth's surface.

**Plug:** A resistant rock that remains standing after the surrounding rocks have been washed away. It is formed when magma cools down before reaching the earth's surface. An example of a plug is the Tororo rock.

### Examples of Volcanic Mountains

- ✓ Mt. Kilimanjaro
- ✓ Mt. Kenya
- ✓ Mt. Elgon
- ✓ Cameroon mountains
- ✓ Oldonyo lengai
- ✓ Drakensberg mountains
- ✓ Ethiopian highland
- ✓ Tibest mountain in Chad

### Types of volcanic mountains

There are three classes of volcanic highlands

- a) Active volcanic highlands eg Nyiragongo, Nyamuragira, Mufumbiro, Oldonyo lengai, Cameroon
- b) Dormant (sleeping) volcanic highlands
- c) Extinct (dead) volcanic highlands

Active volcanoes	Extinct	Dormant
- Nyiragongo - DRC - Nyamuragira - DRC - Oldonyo - Lengai - TZ	Mt. Elgon Mt. Kenya	Longo not Moroto
- Mt. Cameroon - Mt. Mufumbiro	Mt Kilimanjaro Ethiopian highlands Tibest - Chad	

## FAULT MOUNTAINS

These are mountains which were formed as a result of faulting.

The major fault mountains in Africa include:

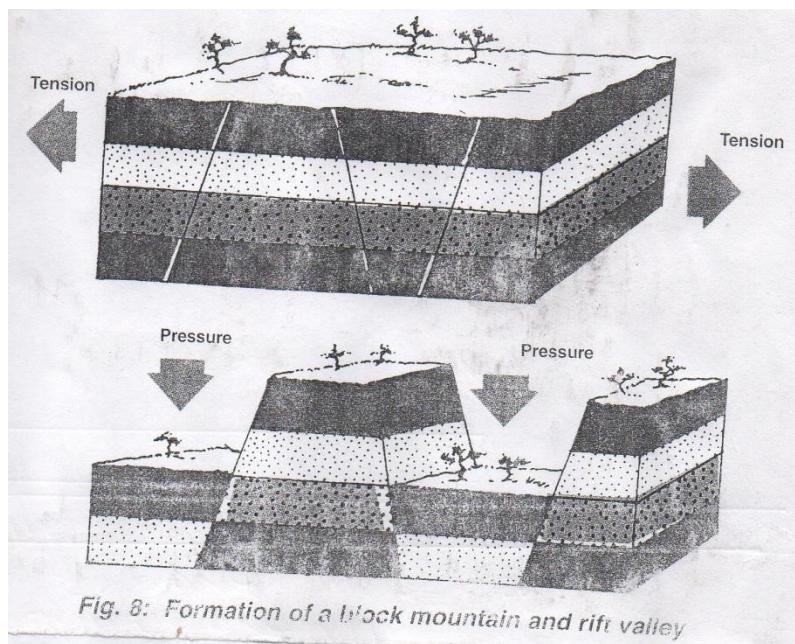
### **Mt. Rwenzori**

- ✓ The third highest in Africa
- ✓ It was named mountain of the moon by HM Stanley because its peak was glittering like a rising moon.
- ✓ Uluguru mountains – Tanzania
- ✓ Usambara mountains – Tanzania
- ✓ Kipengere ranges – Tanzania
- ✓ Mbizi – Tanzania
- ✓ Pare mountains – Tanzania
- ✓ The great Karas – Namibia

NB: Faulting is the process by which features were formed on the earth's surface due to tensional and compressional forces.

## **FORMATION OF BLOCK MOUNTAINS**

Mk SST Bk 6 Pg 10 (Old edition)



## **FOLD MOUNTAINS**

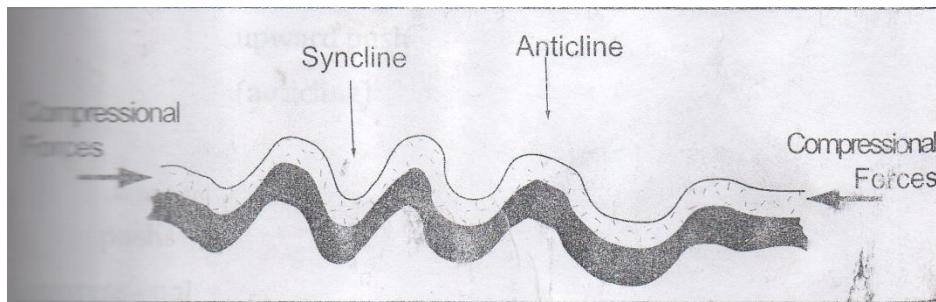
Fold Mountains were formed due to a process called folding.

Folding is the process by which great masses of sedimentary rocks were acted upon by the earth's movements due to forces of compression to form different features.

Folding as a process resulted into down ward (Syncline) and upward push (anticline)

The upward push resulted into mountain ranges while the down ward push resulted into valley formations.

## FORMATION OF FOLD MOUNTAINS



### Fold Mountains in Africa include:

- ✓ Atlas mountains found in the North Western Africa (in Morocco and Algeria)
- ✓ Table Mountains in Southern Africa (Cape ranges)

### ADVANTAGES /IMPORTANCE OF MOUNTAINS

- ✓ Volcanic mountains have fertile soils which favour crop farming.
- ✓ Highlands attract tourists who in turn pay foreign exchange to a country.
- ✓ Mountains contain rocks which have important minerals
- ✓ They are sources of water
- ✓ Mountains help in the formation of relief rainfall and cool temperatures that support human activities like farming and settlement.
- ✓ Mountains act as natural political boundaries between countries
- ✓ Mountains act as recreational centers eg Mountains climbing.

### DISADVANTAGES OF MOUNTAINS

- ✓ Active volcanic mountains can lead to violent volcanic eruption
- ✓ They make road and railway construction more difficult
- ✓ Mountains act as hiding places for rebels and dangerous wild animals which can harm man.
- ✓ Mountains act as natural barriers to air transport
- ✓ Highlands can lead to land and mudslides during heavy down pours which displace people and lead to loss of lives.

### Problems faced by Mountain dwellers

- ✓ Difficult road and railway transport
- ✓ Too much coldness
- ✓ Soil erosion
- ✓ Mudslides – large amount of mud sliding down a mountain.
- ✓ Landslides – large amount of earth (soil) and rocks falling down a cliff/side of a mountain.

## Possible solutions to the above problems

- ✓ Construction of winding roads
- ✓ Promoting air transport
- ✓ Promoting animal transport
- ✓ Resettling people in flat areas
- ✓ Terracing/contour ploughing/ strip cropping
- ✓ Planting trees

## THE COASTAL PLAINS

This refers to a low lying region near the coasts.

**Coast:** An area of land next to the sea.

**Plain:** A large flat area of land with very few trees on it.

African coastal plain varies in width. Most of the areas are narrow and rise quickly to join plateaus inland. At the East African coast are the coral reefs which cause lack of good natural harbours for ships.

On some parts of the coastline, sand blown by wind can deposit itself and separate the ocean water from the mainland. The water is trapped on land to form a lagoon lake.

A lagoon is a lake of sea water separated by sand, mud or silt.

There are many lagoons on the West coast of Africa because it is irregular in shape with shallow waters (indented)

### N.B: Coral reefs

These are rocks formed by the remains of the Dead Sea creatures (polyps) found at the bottom of the sea.

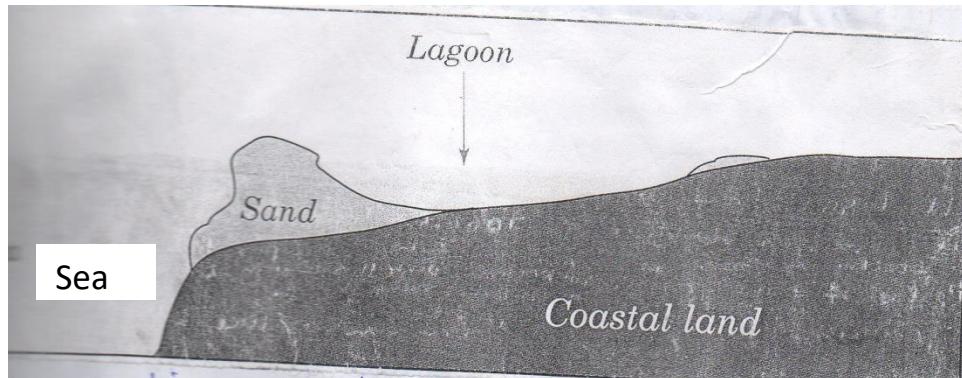
### Economic importance of coral reefs

- ✓ They are used to make cement (limestone)
- ✓ They attract tourists
- ✓ They provide habitats for marine creatures
- ✓ They are used for scientific research

## Dangers of coral reefs

- ✓ They cause ship accidents
- ✓ They damage water vessels

## LAGOON



## African countries with lagoons include

- ✓ Ghana
- ✓ Benin
- ✓ Cote Divoire
- ✓ Nigeria

## Cities in Africa on lagoons include

- ✓ Abidjan in cote Divoir
- ✓ Durban in South Africa
- ✓ Lagos in Nigeria

## Economic importance of harbours

- ✓ Source of foreign exchange
- ✓ Handle imports and exports
- ✓ Provide employment to people

## Economic activities at the coast

- ✓ Fishing
- ✓ Tourism
- ✓ Transport
- ✓ Mining
- ✓ Trade
- ✓ Oil refining

## THE GREAT RIFT VALLEY

Rift valley: is a long wide depression between escarpments.

Escarpment: Is a wide, steep slope on a hill/ mountain

Valley: Is a low land between hills

The great rift valley was formed by the process of faulting

- ✓ It begins from Jordan in Asia and ends in Mozambique
  - ✓ It covers a distance of 7000km long. It runs through 14 countries 5600km in Africa
  - ✓ It has 4 main arms
    - Ethiopia – Entering Ethiopia through Red sea
    - Western running through West Uganda, Rwanda, Burundi, Tz
    - Eastern: running through Kenya, Tanzania, Ethiopia.
    - The Malawian
- a) Eastern rift valley: crosses African countries like Ethiopia, Kenya, Tanzania
- ✓ Lakes in the Eastern rift valley include
- Turkana, Manyara, Baringo, Natron, Magads, Eyasi
- b) Western rift valley: crosses countries like Uganda, Rwanda, Burundi, Tanzania, Malawi
- ✓ Lakes in Western rift valley include Malawi, Tanganyika, Kivu, Albert, Edward, George
- c) Malawian rift valley: running through Malawi into Mozambique including Malawi

## Formation of the rift valley

Tensional forces: these pulled apart the either part of the earth's crust causing deep joints/cracks called faults.

As this continued, the middle part between the faults sunk resulting into a rift valley.

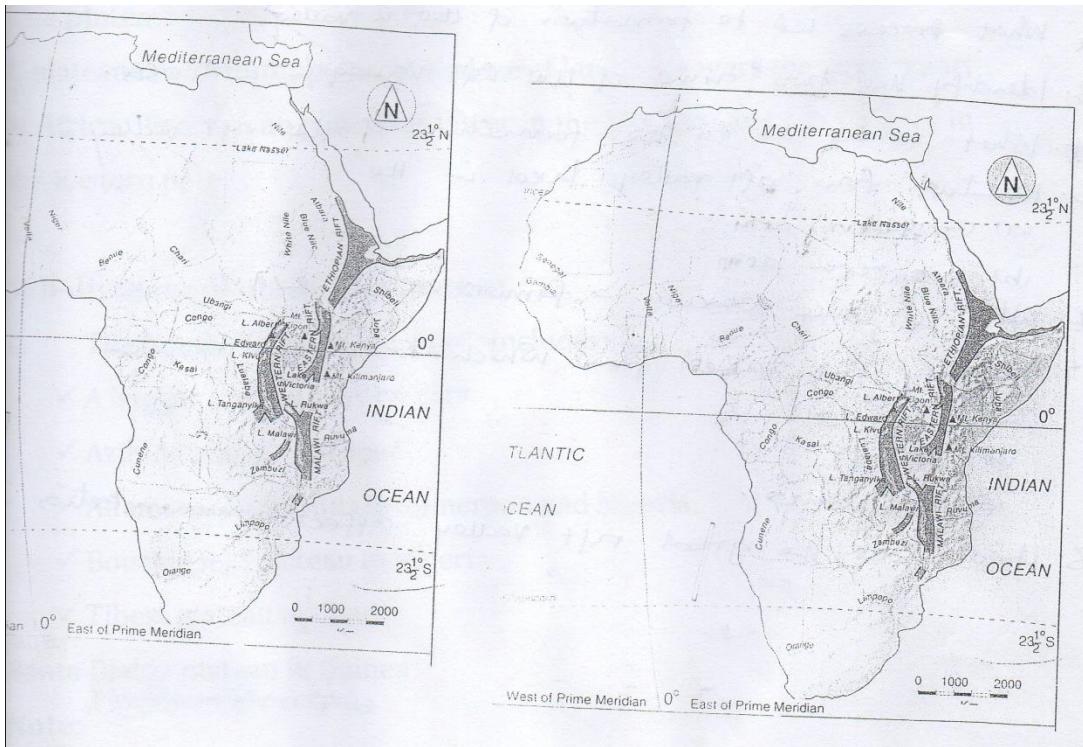
## **Influence of the rift valley on people**

- ✓ Has a flat floor for transport
  - ✓ Escarpments are communication barriers
  - ✓ Has cool climate which favours Agriculture
  - ✓ Has some rift valley lakes which provide salt, soda ash. (L. Katwe, L. Magadi, L. Natron) provides salt.
  - ✓ Attracts tourists

**Note:** The rift valley varies in width and depth at different points.

- ✓ In some places the escarpments rise to 1km above the floor.
  - ✓ Width varies from 30 – 40km
  - ✓ Highest floor is around L. Kivu which is 1500 metres above sea level
  - ✓ The lowest is around L. Tanganyika where it is 90metres below sea level.

# The four Arms of the rift valley in Africa



## **Activity**

1. Define R. Valley  
Escarpmment  
Valley
2. What process led to formation of the R. Valley
3. Identify the two arms of the Rift valley in E. Africa
4. What forces led to the formation of the rift valley?
5. Mention four rift valley lakes in the
  - a) Eastern arm
  - b) Western arm
6. Why is lake Nakuru a famous lake in East Africa?
7. Identify the lakes from which salt is mined in
  - a) Uganda
  - b) Kenya
  - c) Tanzania
8. How does the Great Rift Valley affect communication?

## **The Plateau**

A plateau is a flat – topped raised land. It covers the largest part of Africa. The African plateau is lower in the Western and rises higher in the Eastern parts.

Sub – divisions of the African plateau

1. The North West plateau which includes:
  - ✓ A haggar plateau in Algeria
  - ✓ Azibine plateau in Niger
  - ✓ Adamawa high lands in Cameroon and Nigeria
  - ✓ Bouchi (jos) plateau in Nigeria
  - ✓ Tibest plateau in Chad

## Fouta Djalon plateau in Guinea

### Note:

Atlas mountains are not part of this plateau but just raises from them.

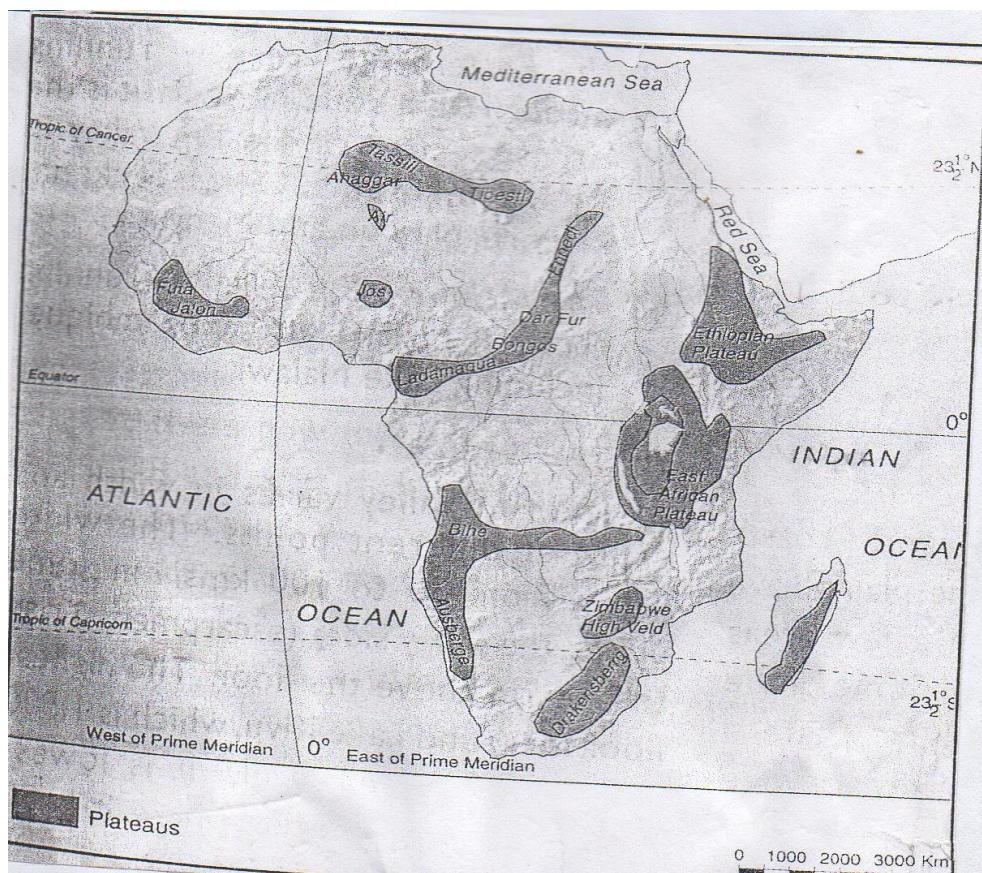
2. The South – east plateau which includes:

- ✓ Abysnia (Ethiopian) highlands
- ✓ Bie plateau in Angola
- ✓ Yatta and Nyika in Kenya (The Nyika plateau is called so because it's barren land)
- ✓ The East African highlands such as Kilimanjaro, Kenya, Rwenzori, Mufumbiro, Moroto, Elgon, etc

### Note:

The Drakensberg are not part of this plateau but they just form its edge

## A MAP SHOWING THE MAJOR PLATEAUS OF AFRICA.



## THE DRAINAGE SYSTEM OF AFRICA

Drainage is the ground water system of a given area.

It also means the way an area is served by the water system.

Africa's drainage system consists of a number of lakes, rivers, streams and wetlands.

## RIVERS

A river is a mass of flowing water in a defined direction across the land.

Note: Africa's rivers end in the form of Natural water.

The rivers of Africa are basically grouped into two types.

a) Delta mouth rivers

These are rivers which end up forming a delta before entering a sea or an ocean (mouth of a river)

**Note:**

Delta is a point where a river divides into small water channels before pouring its water into an ocean or sea.

### Mouth of a river

Is an opening where a river ends flow as it enters a seas or an ocean.

### Source of a river

Is the beginning point of a river.

### Load

A materials carried by flowing water or river

Deltas are normally formed in low lying plains formed by sediments like sand, stones, clay, mud or silt carried and deposited by a river.

### Sediments

The solid materials that settle at the bottom of a river.

Examples of delta mouth rivers in Africa include:

- ✓ River Nile – the longest in Africa 6500km long

- ✓ River Niger – 4000km
- ✓ River Rufiji
- ✓ River Zambezi – 3000km
- ✓ River Tana

b) Estuary mouth rivers

An estuary mouth river is a river that ends up pouring its water into the sea or ocean in a single water channel.

**Estuary:** Is a wide part of a river where it joins the sea Or wide mouth of a river.

Examples of estuary mouth rivers in Africa includes:

- ✓ River Congo – The largest river in Africa starts in Tanganyika
- ✓ River Ruvuma
- ✓ River Orange – 2100km
- ✓ River Gambia
- ✓ River Senegal – 1700km
- ✓ River Limpopo, etc - 1700km
- ✓ River Volta

### **Other terms connected to rivers**

1. Tributary

It is a small river that flows into the main river.

2. Distributary

It is a small river that branches off the main river.

3. Confluence

This is a point where two or more rivers meet and flow as one.

4. Course

This is the direction a river moves in.

5. Watershed

This is a line of highland separating two streams which flow into different rivers.

6. Bank

This is a side of a river

## 7. Meander

The curved bend of a river valley.

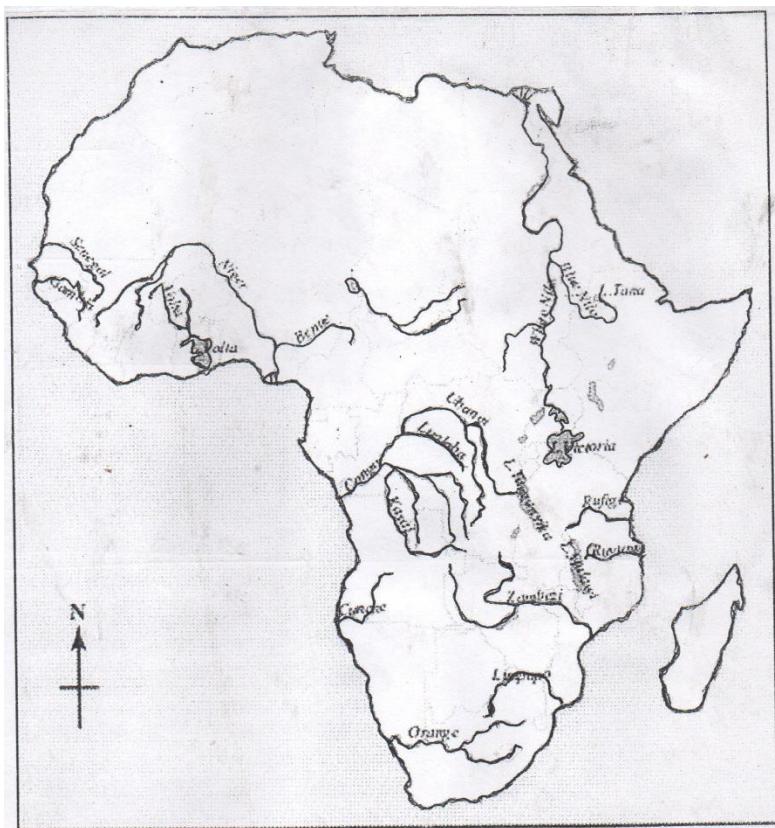
## 8. Cataract

Refers to a series of water falls on a river

## 9. River bed

The flow of a river.

## MAP SHOWING MAJOR RIVERS IN AFRICA



## The rivers in Africa

A river is a mass of flowing water in a defined direction. An area of land drained by the river and its tributaries and distributaries is called a **Drainage basin**. All rivers in Africa rise from high plateau and mountains. These receive plenty of reliable rainfall which keeps the rivers full.

Examples of rivers in Africa (case study)

## The Nile

- ✓ It is the longest river in Africa
- ✓ It runs out of Lake Victoria and flows through Uganda, Sudan to Egypt.
- ✓ It pours its water into the Mediterranean Sea.
- ✓ It forms a delta as it reaches the Mediterranean Sea i.e the Nile delta.

### NB

River Nile flows northwards because the plateau on which it flows is higher in the South and lower in the North.

## SECTIONS OF THE NILE

1. Victoria Nile – From lake Victoria to Lake Albert (is not navigable because it has waterfalls and rapids)
2. Albert Nile – From lake Albert to Nimule
3. White Nile – From Nimule to North wards (has floating vegetation called suds) which cause the river to slow down its speed.

## Tributaries of the river

The Nile is joined by the following tributaries

- ✓ Bahrel el Ghazel
- ✓ River Sobat from Ethiopia
- ✓ Blue Nile from Lake Tana in Ethiopia
- ✓ Atbara from Ethiopia
- ✓ River Achwa in Uganda

## Dams along the Nile

- ✓ Nalubaale
  - ✓ Kiira
  - ✓ Bujagali
- } In Uganda

- ✓ Jabel Aulia
  - ✓ El Rossires
  - ✓ Sennar
  - ✓ Aswan High Dam in Egypt
- } In Sudan

### **River Zambezi**

River Zambezi rises from Northern Zambia and the Angola plateau. It flows through Mozambique and forms its delts on the Indian Ocean Kariba dam is found on this river. Lake Kariba was formed as a reservoir located along Zambia- Zimbabwe border. A reservoir supplies water the constructed dam.

Other dams on the Zambezi are Cabora Bassa in Mozambique and Kafue in Zambia.

### **River Niger**

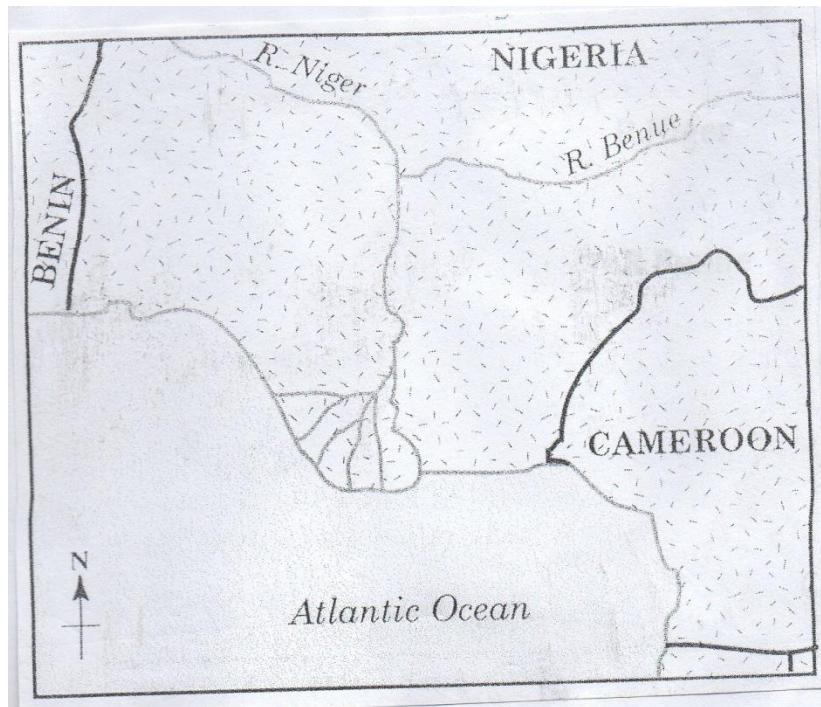
It starts from Fouta Djalon highlands in Guinea and Loma. Then flowing through Mali, Niger and Nigeria

- ✓ River Niger pours its water into the Atlantic Ocean.
- ✓ The Niger delta is of great economic importance to the economy of Nigeria. This is because it has many oil wells. It is dammed at Kainji to produce HEP. It also helps to provide water for irrigation, industrial use and for home consumption.
- ✓ River Niger is the only river in Africa that flows gradually to the sea. Most rivers flow through a series of steps with water falls and rapids.
- ✓ This always happens when there is change in the water levels. River Niger enters the Ocean in form of Deltas.

**NB.**

- ✓ River Niger flows from Fouta Djallon plateau in Guinea.
- ✓ River Benue flows from the Adamawa highlands in Nigeria and Cameroon

### A CROSS SECTION OF THE NIGER DELTA



### River Volta

It rises from Burkina Faso and flows southwards through Ghana and drains its water into the Atlantic Ocean. Its main tributaries are:-

- ✓ White Volta
- ✓ Black Volta
- ✓ Oti

Lake Volta is the biggest in Ghana. It was formed when river Volta was dammed at Akasombo dam to provide hydro electricity.

### River Orange

It rises from the mountain ranges in the East of South Africa. It flows westwards and pours its water into the Atlantic Ocean. Its tributaries are:-

- ✓ The vaal
- ✓ Modder and
- ✓ Caledon rivers

Some of HEP projects on river Orange are:-

- ✓ Verwoerd dam on Caledon tributary and
- ✓ Vaal dam on vaal tributary.

### River Ruvuma

It flows eastwards to the Indian Ocean.

It flows along the Tanzania – Mozambique border. Other rivers in Africa which end into the Indian Ocean are Rufiji and Pangan in Tanzania, Tana and Galana in Kenya.

River Gambia rises from Fouta Djalon Mountains. It ends into the Atlantic Ocean.

### River Congo

- ✓ It is found in the Equatorial forests of the Democratic Republic of Congo.
- ✓ It has so many tributaries. The two major tributaries are Ubangi and Kasai.
- ✓ River Congo carries the largest volume of water to the sea than any other river in Africa.

This is mainly because of two reasons.

- a) It has very many tributaries
- b) Its located in the equatorial forests which receive plenty of reliable rainfall all year round.

### Note

- ✓ The volume of water in rivers and lakes increases during heavy rains. The velocity of the river increases and this encourages more material to be carried away by the river.
- ✓ The material transported by a river is called load.
- ✓ The transported material of the river erodes its bank and bed.
- ✓ Most rivers in Africa are not good for navigation.
- ✓ This is because they have waterfalls and rapids.

### Formation of water falls

Waterfall is a place where a river flows over a large rock.

Waterfalls occur when there is a sudden interruption in the course of the river. They are formed when water meets a softer rock after flowing over a hard one. The softer rock is less resistant to erosion. It can easily be worn away leaving the hard one to form a fall. Waterfalls are used to generate HEP, for study purposes and tourism.

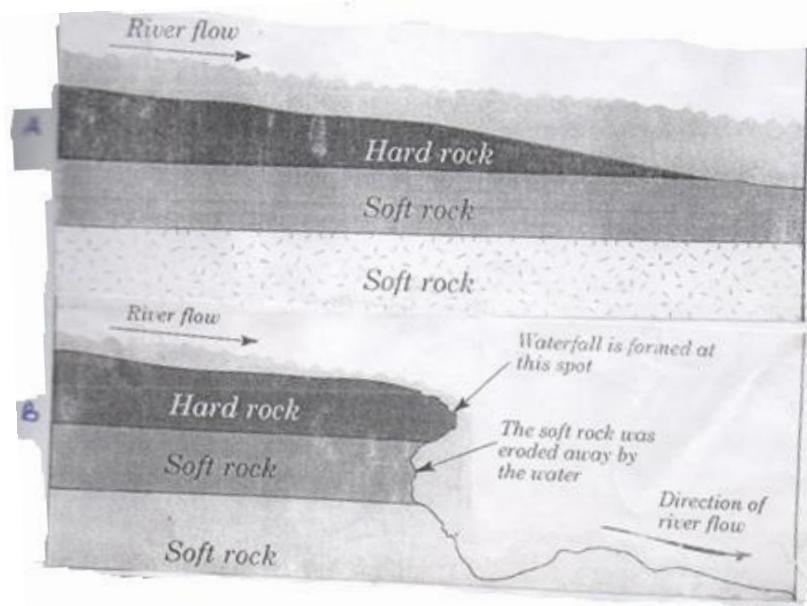
## STAGES OF A RIVER

### Upper stage

This stage normally occurs in the catchment areas of water shed.

At this stage, a river flows very fast over a steep slope where it forms a waterfall.

This site is a good site for developing a HEP station.



### Upper course

It is where a river originates. It can either be a plateau or a mountain or lake.

- ✓ The river is very steep
- ✓ The river has a lot of power to erode materials
- ✓ It has a narrow steep sided V. shaped valley called a goge.

## **Middle course**

- ✓ There is massive transportation of different eroded materials.
- ✓ Deposition of eroded materials begin to take place especially towards its end.
- ✓ It begins to meander as the slope becomes less steep.
- ✓ Is joined by many tributaries.

## **Lower course**

- ✓ All eroded materials are deposited here.
- ✓ Ox bow lakes, deltas, floods and estuaries are formed
- ✓ Water moves slowly as the land is flat
- ✓ Flooding take place
- ✓ Forms meanders
- ✓ One river moves gently and slowly as the land is almost flat.

## **Note**

### **Rivers which pour their water in the Atlantic Ocean**

- ✓ River Niger
- ✓ River Senegal
- ✓ River Gambia
- ✓ River Orange
- ✓ River Volta

### **Rivers which pour their water in the Indian Ocean**

- ✓ River Zambezi
- ✓ River Rufugi
- ✓ River Ruvuma
- ✓ River Tana
- ✓ River Galana
- ✓ River Pangani
- ✓ River Limpopo

## **Importance of Rivers**

- ✓ Rivers are sources of water for irrigations, domestic and industrial use.
- ✓ Rivers provide cheap water for transport.
- ✓ Rivers are fishing grounds thus promoting fishing industry.

- ✓ Water falls along rivers may be used to set up HEP projects.
- ✓ Some rivers form boundaries
- ✓ Rivers from flood and alluvial plains which contain fertile soils which can be used to promote crop farming eg in the Nile region in Egypt.
- ✓ Water falls and rapids along rivers act as tourist attractions thus promoting the tourism industry.

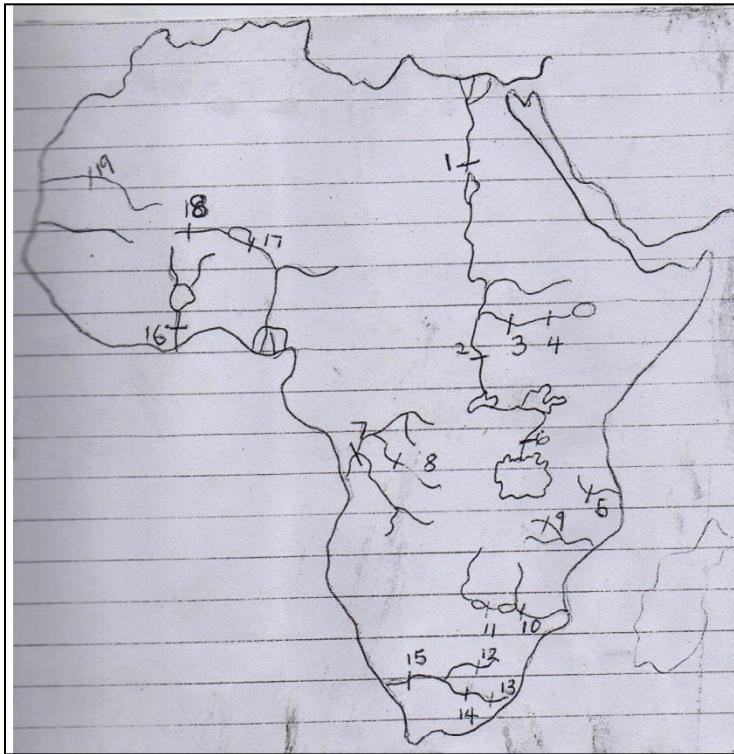
### **Reasons why some rivers are not good for navigation**

- ✓ Some rivers have dams
- ✓ Some have waterfalls
- ✓ Some rivers have suds
- ✓ Some are shallow
- ✓ Others are narrow
- ✓ Some rivers are seasonal

### **Disadvantages of rivers**

- ✓ Waterfalls along rivers hinder smooth navigation
- ✓ Rivers harbour dangerous aquatic animals to man's life eg mosquitoes, crocodiles, hippos, snakes, etc
- ✓ River floods may lead to destruction of property and loss of people's lives.
- ✓ River development projects along rivers may lead to displacement of people and destruction of the environment.

## River development projects in Africa



1. Aswan high dam
2. Jabel Aulia dam
3. Sennar dam
4. El Rossieres dam
5. Seven forks dam
6. Nalubaale power station
7. Inga dam
8. Nzilo dam
9. Kidatu dam
10. Cabora Bassa dam
11. Kariba dam
12. Vaal bank dam
13. Hendrick Verwoerd
14. Torquay dam
15. Vander kloof dam
16. Akasombo dam
17. Kainji dam
18. Sansading dam
19. Richard Toll dam

## MULTI – PURPOSE RIVER PROJECTS

These are projects set up on rivers to serve more than one purposes.

Rivers development projects are sometimes called multipurpose river projects.

**Multipurpose river** development projects are ways man has controlled rivers to provide him with different uses.

Man has made use of rivers through the following ways:

- ✓ Generate HEP along water falls
- ✓ Fishing
- ✓ Irrigation
- ✓ Tourism
- ✓ getting water for various uses

So man has tried to make use of rivers for his benefit and then avoid chances of rivers from being destructive to him.

### Examples of rivers development scheme/projects in Africa.

Rivers	Dams	Country	Purpose
White Nile	Aswan High Dam Jabel Aulia Rosseires	Egypt Sudan	HEP & Irrigation
Victoria Nile	Nalubaale Kiira Bujagali	Uganda	HEP
Blue Nile	Senar dam	Sudan	Irrigation
River Volta	Akasombo dam	Ghana	HEP
River Congo	Inga dam	DRC	HEP
River Lualaba	Nzilo dam	DRC	HEP
River Pangani	Pangani falls	Tanzania	HEP & Irrigation
River Rufiji	Kidatu dam	Tanzania	HEP & Irrigation
River Zambezi	Kariba dam	Zambia - Zimbabwe	HEP & Irrigation
River Kafue	Cabora Bassa	Zambia	HEP & Irrigation
River Orange	Vander Kloof	South Africa	HEP & Irrigation
River Vaal	Verwoerd dam Vaal dam		
River Tana	Seven forks projects	Kenya	HEP & Irrigation

River Niger	Kainji dam	Nigeria	HEP & Irrigation
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NB: The seven forks dam is composed of the following dams

- ✓ Gitaru
- ✓ Kamburu
- ✓ Masinga
- ✓ Kiambere
- ✓ Kindaruma
- ✓ Mutonga

### Importance of dams

- ✓ Are sources of water for irrigation and industrial use.
- ✓ Are sources of clean water for home use
- ✓ Act as fishing grounds
- ✓ Help to generate HEP for industrial development and export
- ✓ help to control flooding of rivers
- ✓ Attracts tourists who in turn pay income to a country

### SWAMPS

A swamp is water logged area with vegetation in it.

The major swamps of Africa include

- ✓ Yala in Kenya
- ✓ Kanyamboli in Kenya
- ✓ Lake Kyoga swamp in Uganda
- ✓ Okavango in Botswana – Largest in Africa

### Groups of swamps

- ✓ Papirus
- ✓ Mangrove (swamp forests) along the East Africa Coast and Niger delta
- ✓ Grass swamps

### Uses of swamps

- ✓ Are sources of water
- ✓ Are sources of raw materials for local crafts

- ✓ They provide a natural habitat for aquatic animals
- ✓ They also act as fishing grounds
- ✓ They help to modify climate
- ✓ Wet lands help in the treatment of sewage

## **Dangers faced by swamps**

- ✓ Swamp drainage
- ✓ Encroachment
- ✓ Pollution
- ✓ Lose government policies for protect wet lands

### **Note**

NEMA is responsible for the protection of wet lands in Uganda.

## **Disadvantages of swamps**

- ✓ Harbor diseases vectors
- ✓ Occupy land for human settlement
- ✓ Hinder road and easy railway construction

## **LAKES OF AFRICA**

A lake is a collection of water in the hollow surface of the earth.

Or A large area of water surrounded by land

Types of lakes

Africa's lakes were formed by the following agents

- ✓ By wind
- ✓ By the earth's movement eg volcanicity
- ✓ By deposition/river action
- ✓ Volcanic lakes

These were formed as a result of volcanic eruption leaving empty holes which resulted into lakes after water filling them.

Volcanic lakes are subdivided into three groups

### **Caldera lakes**

These are depressions filled with water on the sides/slopes of a dead volcanic mountain.

## Types of lakes

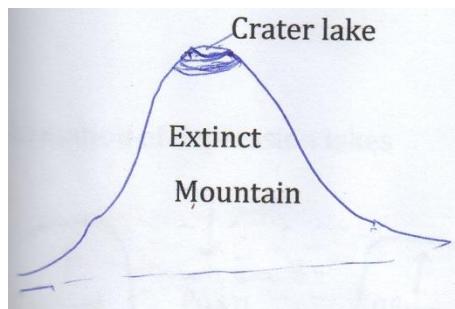
- ✓ Down warped lakes/basin
- ✓ Ox-bow lakes
- ✓ Volcanic lakes (Crater lakes, calderas, lava dammed)
- ✓ Man – made lakes
- ✓ Rift valley lakes/fault
- ✓ Lagoon lakes

## Examples of caldera lakes are:-

- ✓ Longnot in Kenya
- ✓ Ngorongoro in Tanzania
- ✓ Lengai in Kenya
- ✓ Lake Ngozi in Tanzania
- ✓ Lake Menangai in Kenya
- ✓ Lake Napak in Uganda

## Crater lakes

These are lakes that are formed as a result of volcanicity.



## Examples of crater lakes include:

- ✓ Mt Elgon crater lake
- ✓ Mt. Mufumbiro crater lake
- ✓ Lake Katwe
- ✓ Lake Kyamwiga
- ✓ Lake Nkugute
- ✓ Lake Nyungu – Uganda
- ✓ Lake. Nyakasura

- ✓ Lake Basumtwe in Ghana
- ✓ Panjam – Nigeria

## Lave dammed/blocked lakes

These were formed when lava cooled down and blocked a river valley of an existing river.

### Examples of lave blocked lakes include

- ✓ Lake Bunyonyi – has a famous bird sanctuary in Uganda
- ✓ Lake Mutanda
- ✓ Lake Bulera
- ✓ Luhondo, mulche and Ndalaga all in South West Uganda because of the effect of great volcanicity that took place there.
- ✓ Lake Kivu

## Depression lakes

These are lakes that are formed as a result of down warping.

They were formed as a result of earth movement which relate into the formation of business or depressions. The depressions got filled with water and so became depression lakes.

### Formation of depression lakes



### Example

- ✓ L. Victoria
- ✓ L. Kyoga
- ✓ L. Chad
- ✓ L. Nabugabo
- ✓ L. Bisina
- ✓ L. Kwania
- ✓ L. Opeta
- ✓ L. Wamala

- ✓ L. Amboseli
- ✓ L. Mburo
- ✓ L. Nakuwa

### **Characteristics of depression lakes**

- ✓ Are shallow
- ✓ They are wide
- ✓ Contain fresh water
- ✓ Contain swampy areas around them. This is because it is shallow.
- ✓ They are irregular in shape

### **RIFT VALLEY LAKES**

These lakes were formed on the floor of the rift valley as a result of faulting.

### **Examples of rift valley lakes**

- ✓ L. Tanganyika
- ✓ L. Albert
- ✓ L. George
- ✓ L. Edward
- ✓ L. Malawi
- ✓ L. Nakuru
- ✓ L. Naivasha
- ✓ L. Eyasi
- ✓ L. Natron
- ✓ L. Rukwa
- ✓ L. Barungo
- ✓ L. Manyara

### **Characteristics of rift valley lakes**

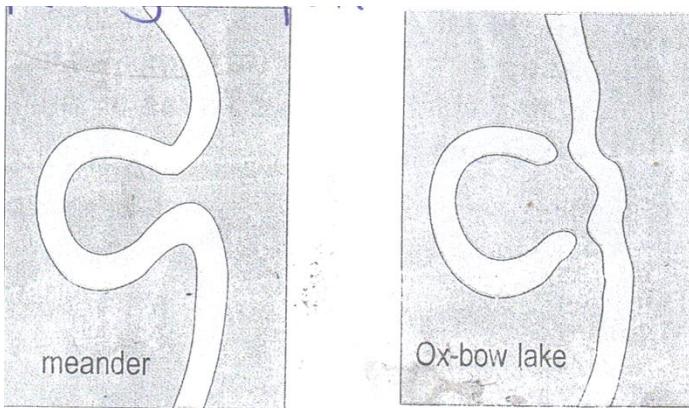
- ✓ Are deep
- ✓ Are long/ They are oblong
- ✓ Are narrow
- ✓ Some have salty water due to high evaporation
- ✓ They are also salty because they have inlets but no major outlets.

### **Ox-bow lakes**

They are formed as a mature river meanders or bends across a flood plain.

Ox bow lakes are found along river eg on

- ✓ R. Semiliki
- ✓ R. Ruizi
- ✓ R. Nyando
- ✓ R. Nzoia
- ✓ R. Kilombero



### Examples of Ox bow lakes

- ✓ L. Ruizi
- ✓ L. Utanga (on R. Rufiji)
- ✓ L. Semiliki
- ✓ L. Nyando
- ✓ L. Kanyampoli (on R. Vala in Tanzania)
- ✓ L. Gambi (R. Tana)
- ✓ L. Nzoia (Kenya)

### Formation of ox bow lakes

- ✓ River
- ✓ Meander
- ✓ Direction of river flow
- ✓ River flow diverts direction due to fast flow
- ✓ An ox bow lake formed
- ✓ River after off the road

### Lagoon lakes

A lagoon is lake sea water that is separated from the sea by sand, mud or rock. eg Lagos lagoon, Nokeu in Benin, Koule (Ghana) and Igele in Gabon.

Lagoons are formed by marine deposition.

This happens when the main sea water is separated from the sea by either sand, mud or silt deposits.

There are many lagoons along the West Africa coast due to the presence of shallow salty water.

The largest lagoon is the Keta lagoon in Ghana. There are many lagoons in West Africa because it is indented.

### **Man made lakes**

These are reservoirs of water constructed by man to serve him with different purpose. eg

- ✓ Irrigation HEP production
- ✓ HEP production
- ✓ Water for various uses

### **Types of man made lakes include**

- ✓ Dams
- ✓ Aquarium
- ✓ Valley dams

### **Examples of man made lakes in Africa**

- ✓ L. Kariba in Zambia – The largest in Africa (R. Zambezi)
- ✓ L. Volta in Ghana (R. Volta)
- ✓ L. Nasser in Egypt (R. Nile)
- ✓ L. Kainji in Nigeria (R. Niger)
- ✓ L. Cabo Bassa (Zambezi)
- ✓ Kabaka's lake in Uganda

### **Economic importance of lakes in Africa**

- ✓ Act as fishing grounds hence providing a lot of fish
- ✓ Are sources of water
- ✓ Lakes provide a cheap source of water transport

- ✓ Lakes act as a source of tourism
- ✓ They help to modify climate of an area to form convectional rainfall thus supporting agriculture.
- ✓ Lakes contain some wetlands around them which provide some areas for farming.
- ✓ Some lakes provide salt eg. L. Magadi in Kenya, L. Katwe in Uganda and L. natron in Tanzania.
- ✓ Some lakes act as reservoirs for HEP generating stations eg L. Nasser, L. Kariba, L. Volta.

## **Problems facing lakes in Africa**

- ✓ Water hyacinth (Water weed)
- ✓ Water pollution (dumping of wastes)
- ✓ Drought
- ✓ Siltation

## **FISHING IN AFRICA**

### Sources of fish (Fishing grounds)

- ✓ Lakes
- ✓ Rivers
- ✓ Swamps
- ✓ Ponds
- ✓ Oceans
- ✓ Seas

### **Methods used to catch fish**

- ✓ Using baskets
- ✓ Using hooks
- ✓ Using fishing nets (Gill net method)
- ✓ Using spears

### **Problems facing the fishing industry**

- ✓ Fish poisoning
- ✓ Poor storage facilities
- ✓ Poor transport

- ✓ The water weed

## Problems faced by fishermen in Uganda

- ✓ Dangerous marine animals
- ✓ Drowning
- ✓ Fish poisoning
- ✓ Over fishing
- ✓ Poor storage facilities
- ✓ Pirates

## Methods of preserving fish

- ✓ Smoking
- ✓ Salting
- ✓ Tinning
- ✓ Sun drying

Qn. Why isn't there fish and any other living organisms in L. Katwe?

It is too salty to support fish growth.

## IRRIGATION SCHEME

1. An irrigation scheme is an area where crops are grown under the artificial supply of water from a natural source.
2. Irrigation is the artificial supply of water from a water body to a garden.

### 3. What are the reasons for irrigation?

- i) To increase production of crops
- ii) To prevent crops from drying
- iii) To grow crops throughout the year
- iv) To put the would be useless land to use
- v) To increase crop yields

### 4. What are methods of irrigation?

- i) Canal method/Gravity irrigation
- ii) Over flow method (sprinkler)
- iii) Using a watering can

5. Advantages of irrigation farming
- crops are grown throughout the year
  - Crops give high yields
  - Dry land is put to use

### Examples of irrigation schemes of Africa

Irrigation scheme	Country	Source of water	Crops grown
Gezira scheme	Sudan	Blue Nile	Cotton
Richard Toll	Senegal	River Senegal	Groundnuts
Awash valley	Ethiopia	River Awasha	Rice
Mwea Tebere	Kenya	River Thiba, Nyamindi	Rice
Kilombero valley	Tanzania	River Kilombero	Sugarcane
Doho	Uganda	River Manafa	Rice
Mubuko	Uganda	River Mubuku	cotton
Shabelle	Somalia	River Shabelle	Bananas
Voal	S. Africa	River Vaal	Groundnuts
Lake chad	Chad	River Chad	Oats

### GEZIRA IRRIGATION SCHEME

Gezira irrigation scheme is located in Sudan between Blue Nile and White Nile.

- ✓ Gezira scheme was started in 1925 by the British.
- ✓ It is the largest irrigation scheme in Africa. Its size is 80,000 hectares.
- ✓ Gezira is managed by the **Sudan Gezira Board**
- ✓ The farmers in Gezira are called **Tenants**.
- ✓ Sennar dam on Blue Nile helps to provide water for irrigation by raising the level of water to the canal level.
- ✓ **Canal method** is the common method of irrigation in Gezira
- ✓ Another method of irrigation is sprinkler.

# THE GEZIRA IRRIGATION SCHEME

## Key

XXXX – Gezira irrigation scheme

N – Sennar dam

SS – water suds

A – Aswan high dam

X – Jabel Aulia dam

K – Kenana irrigation scheme for sugarcane.

## Reasons why Gezira was established in that area

- ✓ Presence of water from Blue Nile
- ✓ The area was fertile for farming
- ✓ The area was gently sloppy/flat
- ✓ The area was a desert
- ✓ It was sparsely populated

## Crops grown in Gezira irrigation scheme

- ✓ Cotton – The major cash crop
- ✓ Groundnuts

- ✓ Maize
- ✓ Millet
- ✓ Beans
- ✓ Wheat
- ✓ Sorghum

### **Functions of Sudan Gezira Board**

- ✓ It provides seeds to tenants
- ✓ Provides fertilizers to tenants
- ✓ provides machinery to tenants
- ✓ Gives technical advise

### **How does Gezira irrigation scheme benefit the people of Sudan**

- ✓ It is a source of employment
- ✓ It is a source of food
- ✓ It is a source of foreign income from cotton export
- ✓ The scheme helps to provide social services to people
- ✓ The scheme provide farmers with clean water
- ✓ It helps to conserve the environment

### **Problems faced by Gezira irrigation scheme**

- ✓ Pests that attack crops
- ✓ Canal silting
- ✓ Diseases like Bilhazia
- ✓ Price fluctuation of cotton in the world market
- ✓ Dangerous weed

### **Solutions for the above problems**

- ✓ Spraying to control pests

- ✓ By dredging the silted canals
- ✓ By spraying molluscicides
- ✓ By Diversification
- ✓ By spraying herbicides

MAP OF THE NILE VALLEY (Sharing – Pg – 22)

Questions: (Functional Pg – 160)

1. Name the extension of Gezira irrigation scheme.
  - b) Mention the cash crop grown in the Gezira extension
2. Mention the cash crop grown in Kenana scheme.
  3. Which dam helps to supply water to Gezira irrigation scheme?

## **THE CLIMATE OF AFRICA**

This is the average weather condition of a place studied for a long period of time.

Climatology is the scientific study of climate

Climatologists study the different aspects of climate especially rainfall and temperature.

Other aspects of climate include wind, sunshine, humidity, cloud cover, atmospheric pressure.

## Factors affecting climate

1. ALTITUDE: This refers to the height of land above sea level the higher the altitude, the cooler the temperature becomes.

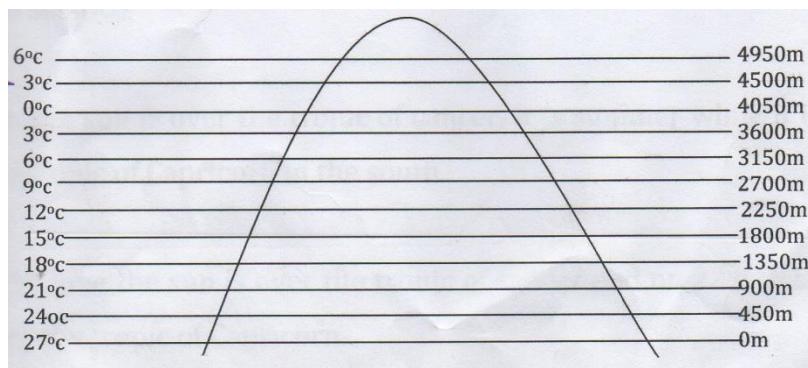
e.g. in highlands the temperatures are normally cool while in lowlands the temperatures are warmer.

The sunrays heat the earth's surface which in turn passes on the heat to the air. At sea level, more heat is retained.

High areas have thin layer of air which allows heat to escape very easily.

Temperatures decrease by  $1^{\circ}$  for every 150 metres rise in altitude. This is called lapse rate. This explains why highlands are cooler than lowlands.

## Effects of altitudes on climate



## 2. LATITUDE/DISTANCE FROM THE EQUATOR

Latitude means the distance of a place north or south of the equator in degrees.

Latitudes near the equator are called low latitudes while those far from the equator are called high latitudes.

Low latitude areas receive vertical sunlight thus throughout the year.

- ✓ Places far from the equator are cooler because they receive slanting sunlight.
- ✓ Temperature decreases from the equator towards the poles because of the reduction in the amount of sunlight received.

- ✓ Africa is always warm/hot and temperatures change by a few degrees because the sun is over throughout the year.
- ✓ On 21<sup>st</sup> March and 23<sup>rd</sup> September, the sun is over the equator and this period is called equinox.

During the equinox, the lengths of the days are equal to those of the night hours.

On 21<sup>st</sup> June and 22<sup>nd</sup> December, the sun is over in the tropics and this is called solstice.

When the sun is over the tropic of cancer, it is summer while it is winter in the tropic of Capricorn in the south.

Note

On 21<sup>st</sup> June the sun is over the tropic of cancer and on 22<sup>nd</sup> December it is over the tropic of Capricorn.

### 3. WINDS

Prevailing winds are winds which blow frequently over a given area.

The effect of wind over an area depends on the nature of the region from which it blows.

When the winds blow from sea (on shore winds) to land they usually bring rain.

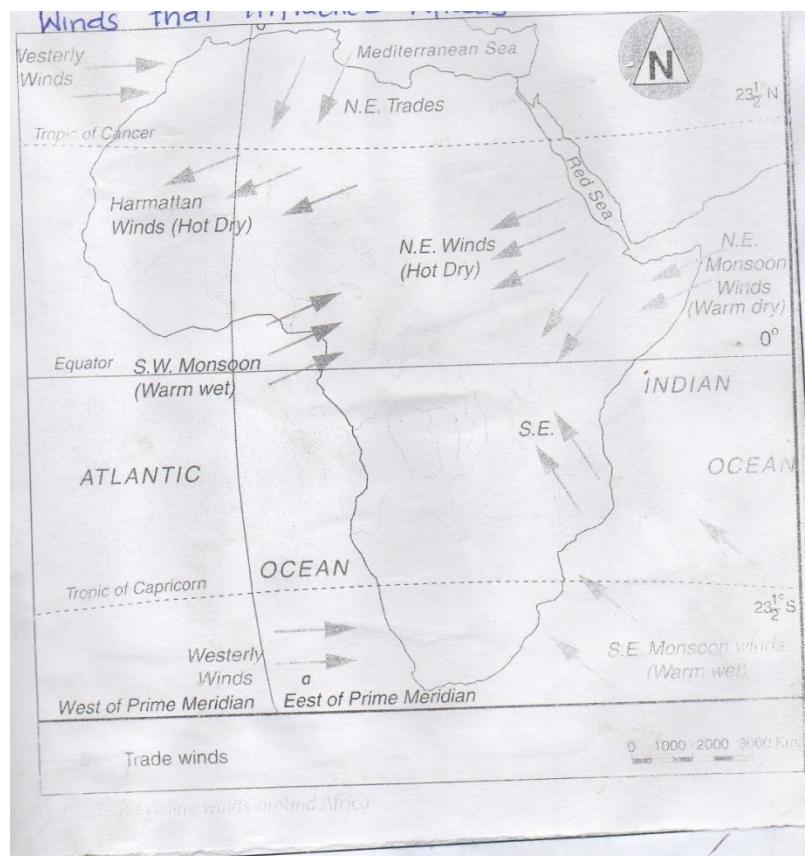
Winds which blow from land to sea (off shore winds) are usually dry and bring no rain.

#### **The main winds that affect Africa are:-**

- a) North east and South East Monsoon winds. They blow from the Indian Ocean and are responsible for rain in Eastern Africa.
- b) North East trade winds blow from Arabia and bring no rain to North eastern and North Africa.
- c) Harmattan winds – These blow from the Sahara desert and bring dry conditions to West Africa.

- d) Westerlies from the Polar Regions are responsible for rain in the Mediterranean lands during winter.
- e) South West monsoon winds – Blow from the Atlantic Ocean and bring rain to the coastal areas of West Africa.

### **Winds that influence Africa's climate**



### **Global warning**

Global warning refers to the constant rise in temperatures throughout the world. The atmosphere keeps the earth warm because it traps the heat. This is called the Green house. Effect Green house gases prevent heat from escaping into the atmosphere.

The heat which is trapped will cause a rise in world temperatures. Hence destroying the ozone layer.

### **Gases responsible for global warning**

#### **Carbondioxide**

This is the largest percentage of green house gases. Carbondioxide is produced by burning of oil and by moving vehicles on roads. The burning of wood also produces carbondioxide.

### **Nitrous oxide**

Shares the smallest fraction, it is given off by care exhaust and jet engines.

### **Methane**

This is produced by decomposing substances.

Other gases are called chlorofluoro carbons that are released when operating refrigerators, and during the manufacturing of foam materials.

### **Carbon**

Caused by burning of forests

Causes of global warning

- deforestation
- swamp drainage
- over grazing
- over stocking
- over cultivation
- industrial pollution

### **Effects of global warning**

- It causes rise in water levels in seas and oceans because additional water will come from melting snow, ice caps and glaciers. This can cause flooding.
- There will be changes in climate that will affect reliability of rainfall. Some places will become drier and others will become wetter.
- Global warning causes the water in seas and lakes to expand as it is heated. This can eventually cause floods.
- There is damage done in the ozone layer.

## Solutions to global warning

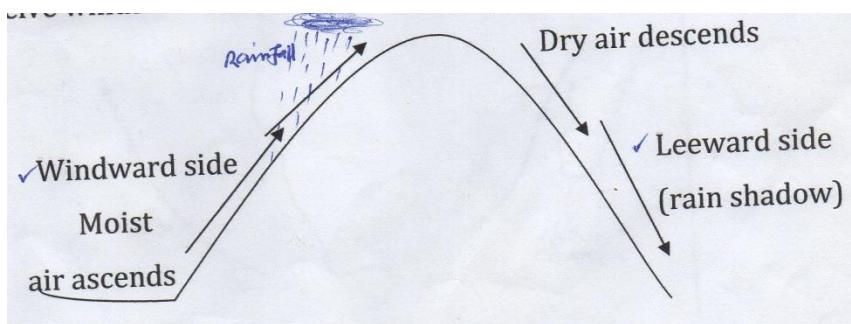
- Afforestation should be encouraged
- Wet lands must be protected
- There must be government policies and laws against the sources of dangerous gases.

## 4. RELIEF

The slopes of highlands facing the wind direction get more rainfall than those on the opposite side of the mountain.

This is because the wind that blows across the land to mountainous areas are forced up the mountain on reaching condensation level they drop their moisture as rain.

The slope facing the wind direction are called wind ward side while those of the opposite side are called lee ward side and are always dry as they receive winds without moisture (dry winds)



## 5. OCEAN CURRENTS

An ocean current is a mass of water continuously flowing in a particular direction. Their movement is caused by wind.

### Types ocean currents

#### a) Cold Ocean currents

They flow from a cold area to a warm one.

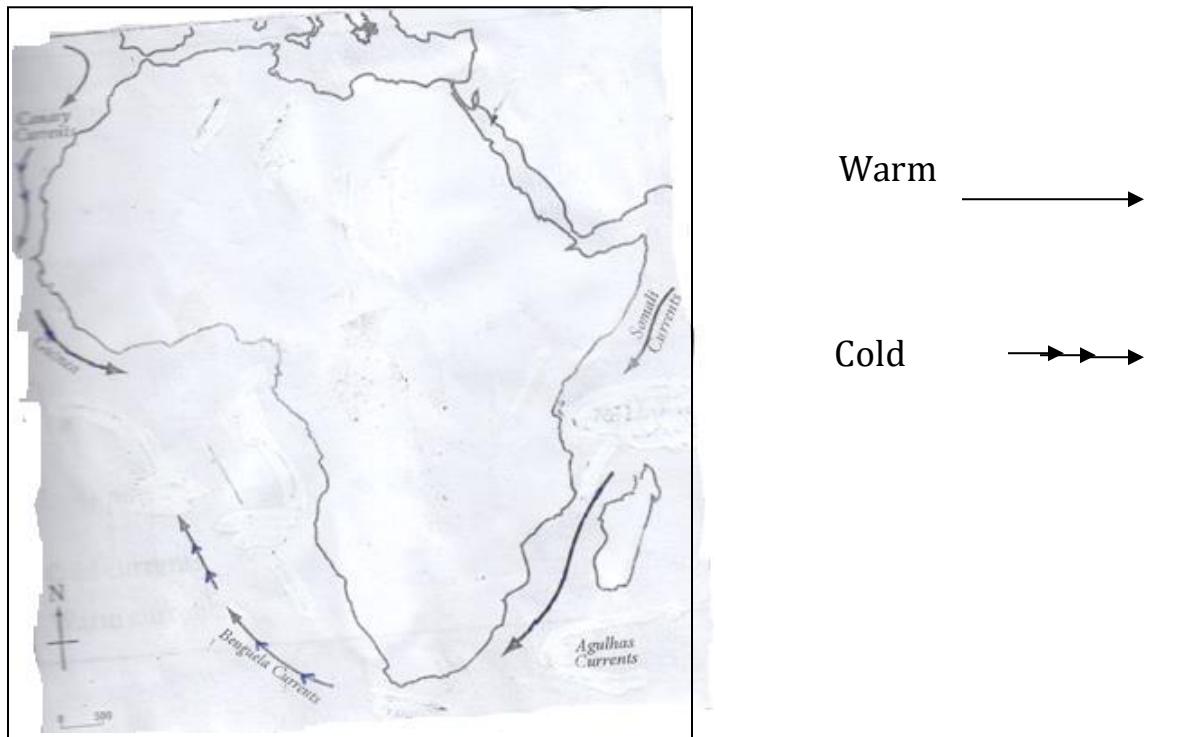
Cold ocean currents make the areas they blow to cold. They do not cause any rainfall but instead mist and fog.

## b) Warm ocean currents

They flow from warm areas to cold one.

Warm ocean currents make the nearby areas warm. The winds which come with warm ocean currents bring rainfall.

### AFRICA'S PREVAILING OCEAN CURRENTS



### Note

- Cold ocean currents are sometimes called off shore currents
- They blow from the polar region towards the equator

Examples of cold ocean currents are

- i) Benguela Ocean currents off the coast of Namibia
- ii) Canary Ocean currents

Warm Ocean currents flow from the equator to the poles.

Examples of warm ocean currents are

- i) Guinea ocean currents – bring rain. The winds which come with it bring rain to West Africa and Congo basin.

ii) Mozambique ocean current

This warm air flows through the Mozambique channel ie between Mozambique and Madagascar.

- c) The Somali Ocean current from the Gulf of Aden to the Somali coast. They bring rain to the coastal areas of the East Coast of Africa.

6. Human/Man's activities

Man has influenced climate through the following ways

- deforestation
- over grazing
- swamp reclamation
- bush burning
- over cultivation
- afforestation
- re - afforestation
- Encroachment on natural vegetation

7. Distance from water large water bodies

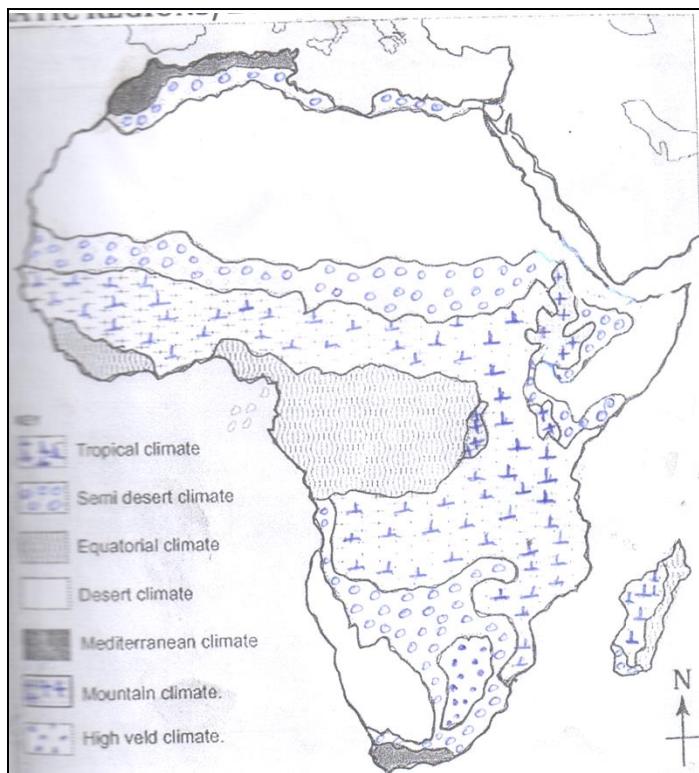
8. Vegetation

**Note**

- ✓ Deforestation as a human activity leads to poor vegetation cover which in turn affects rainfall patterns ie reduced chances of receiving rainfall. As a long term process, it results into desertification.
- ✓ Over grazing: This refers to feeding too many animals on the same piece of land over a long time leaving the land bare. This exposes to the agents of soil erosion and loss of soil fertility. This practise also leads to limited chances of receiving rainfall.
- ✓ Over cultivation: This is the cultivation of land over and over without allowing it to rest. This leads to soil exhaustion hence soils becoming unproductive.
- ✓ Swamp reclamation: This refers to the draining of swamps for farmland and settlement. This causes change in rainfall patterns as the water bodies disappear hence affecting the natural water cycle.

- ✓ Afforestation: Is the deliberate planting of trees to create a forest where it did not exist before. It creates rich vegetation which influences rain formation. It also checks on soil erosion and trees also act as windbreaks.

## CLIMATIC REGIONS/ZONE OF AFRICA



The already mentioned factors are responsible for the different climatic conditions in Africa.

### Equatorial climate

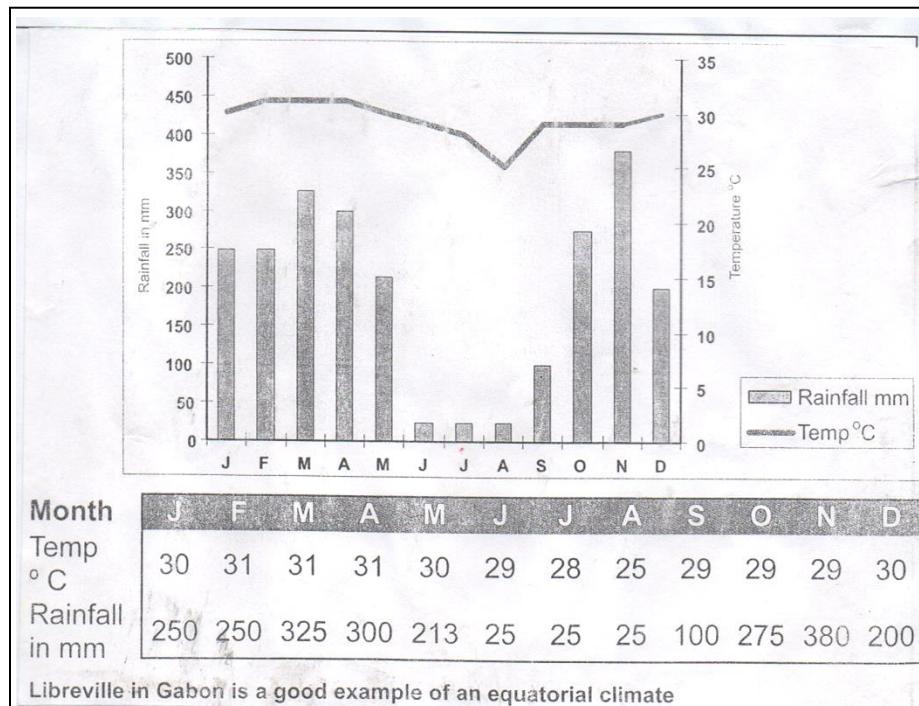
This climate is experienced that north and south of the equator ie in areas between  $5^{\circ}\text{N}$  and  $5^{\circ}\text{S}$ .

### Characteristics of equatorial climate

- ✓ The temperatures are high all the year round ie  $25^{\circ}\text{C}$  and above.
- ✓ Plenty of rainfall ie more than 2000mm annually.
- ✓ receives rainfall in the afternoon with thunder storm
- ✓ There are two periods of very heavy rainfall which come soon after the overhead sun in March and again in September. There is no dry season.

- ✓ Equatorial climate is best described as hot and wet throughout the year.

**Graph showing equatorial region/climate** (Ref: A new primary SST for Uganda Bk 7 Pg 14)



### Activities carried out in equatorial climate

- ✓ Lumbering
- ✓ Crop farming (farming)
- ✓ Junting
- ✓ Tourism
- ✓ Mining
- ✓ Fishing
- ✓ Trading
- ✓ Craft making

### Tropical/Savanna climate

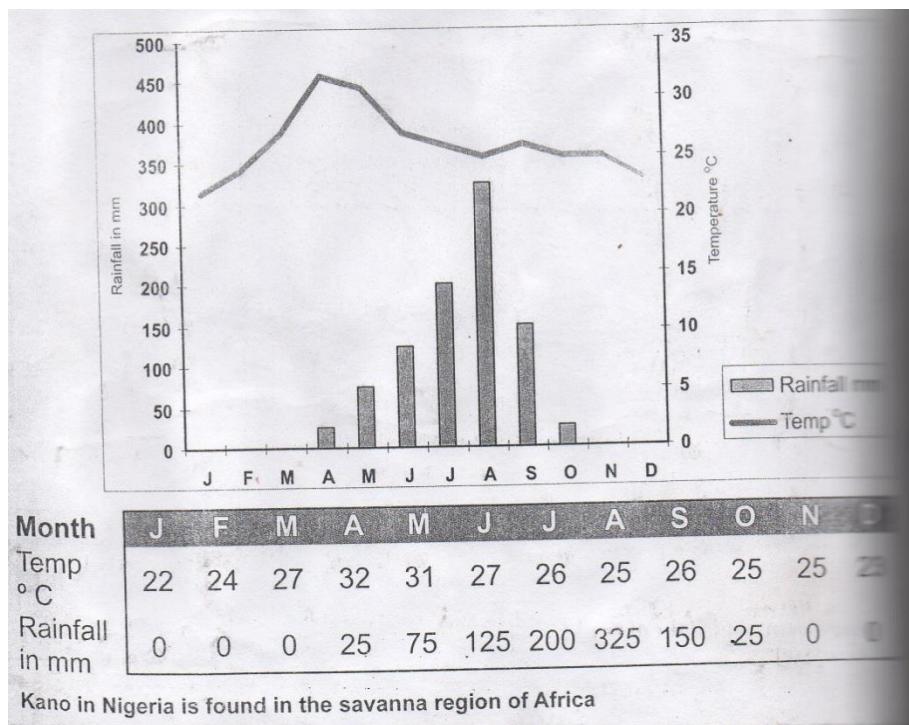
It is sometimes called the savanna type of climate. Tropical climate is found on either side of the equatorial belt. ie between the tropic of cancer and Capricorn.

## Characteristics of tropical climate

- ✓ It experiences two marked seasons ie rainy and dry season. The rainy season concedes with the overhead sun.
- ✓ It is hot for most of the year
- ✓ Tropical region experiences low humidity and dry seasons caused by strong winds which blow from the deserts.
- ✓ The rainfall in tropical region ranges between 1000 – 1500mm.
- ✓ Tropical climate is best described as wet and dry.
- ✓ The higher the rainfall, the lower the temperature.

## Tropical or Savanna climate

This climate is found on either side of the equatorial belt. It has two marked seasons, a rainy season and a dry season.



## Economic activities

- ✓ Crop farming
- ✓ Lumbering

- ✓ Craft making
- ✓ Mining
- ✓ Tourism
- ✓ Transport
- ✓ Pastoralism

## Semi desert climate

This is experienced in areas between  $15^{\circ}\text{N}$  and  $20^{\circ}\text{N}$  and  $18^{\circ}\text{S}$  and  $23 \frac{1}{2}^{\circ}\text{S}$ .

- ✓ Semi deserts are also hot and dry
- ✓ They receive little and unreliable rainfall
- ✓ Experiences hot summers with mild to cold winters.

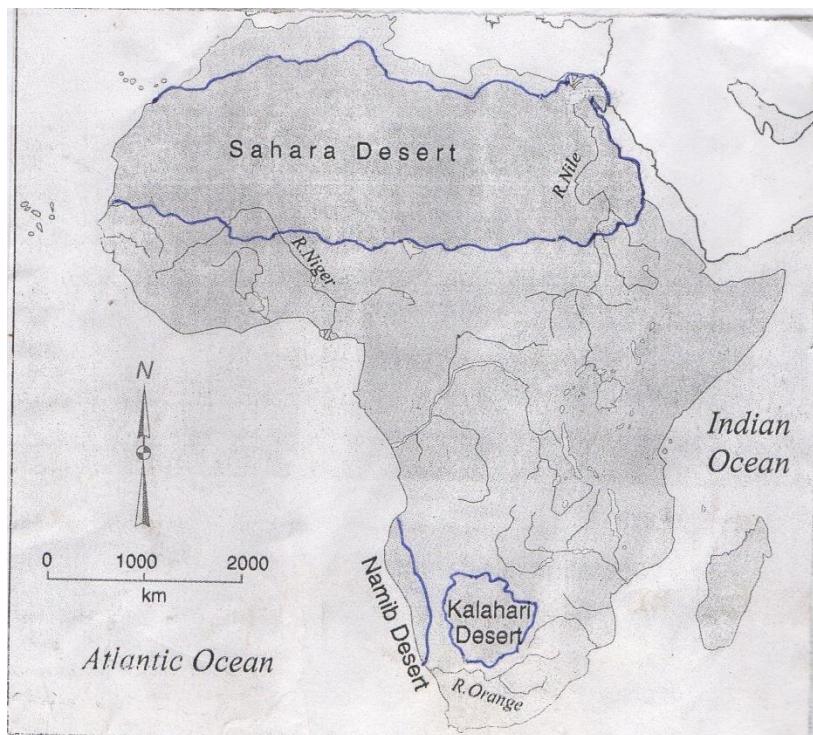
African countries that experience semi desert climate include:

- ✓ Niger
- ✓ Northern Nigeria
- ✓ Northern Sudan
- ✓ Mali
- ✓ Burkina Faso
- ✓ North Eastern Uganda

## DESERT CLIMATE

- ✓ In Africa, deserts are located in the North (Sahara) and South west Africa (Namib and Kalahari desert)
- ✓ People in deserts put on white clothes to reduce heat from the sun
- ✓ People in desert build flat topped houses in order to control the much heat.

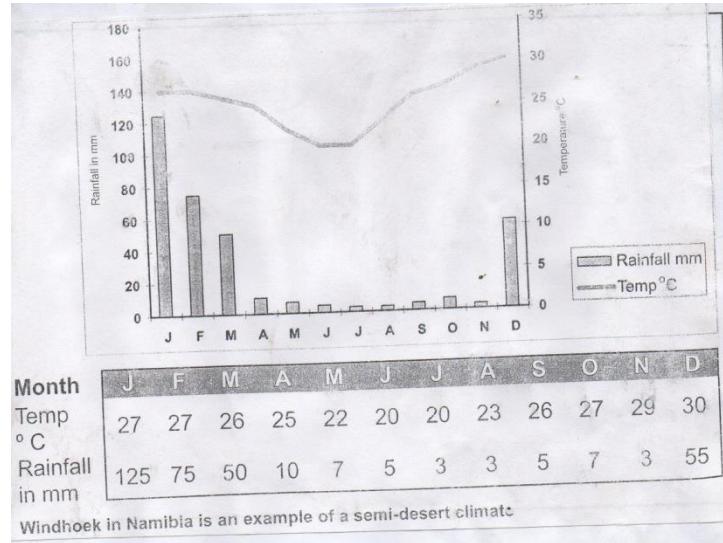
## DESERTS OF AFRICA



### Characteristics of desert climate

- ✓ Temperatures are very high during day and low at night. Average temperatures are about 50°C during day and 40°C at night due to clear skies.
- ✓ Experiences hot and dry conditions because winds to such areas are very dry.
- ✓ The annual rainfall is below 250mm

**Graph showing desert region/climate** (Ref: A new primary SST for Uganda Bk 7 Pg 14)



## **Montane/mountain climate**

This is experienced around the mountainous and highland areas.

The altitude changes and affects temperature in the highland areas.

### **Characteristics of Montane climate**

- ✓ Cool temperatures. These favour human settlement
- ✓ Heavy rainfall on the windward side. This supports crop farming.

Areas like Ethiopia, Kenya, Kilimanjaro, Kigezi highlands experience Montane climate.

- ✓ Rain is experienced on the windward side
- ✓ Lee ward side is dry
- ✓ Temperatures decrease with increase in height.

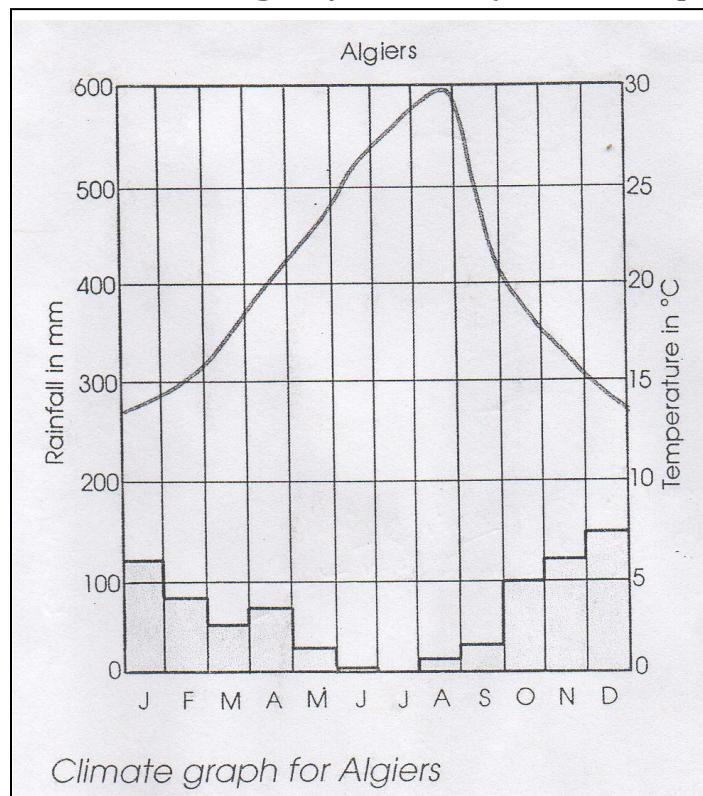
## **Mediterranean climate**

This is found in areas bordering the Mediterranean sea and the cape region of South Africa.

### **Characteristics of Mediterranean climate**

- ✓ It experiences two distinct seasons namely summer and winter.
- ✓ It has hot and dry summers ( $10 - 17^{\circ}\text{C}$ )
- ✓ It experiences cool and wet winters ( $4^{\circ}\text{C} - 10^{\circ}\text{C}$ )
- ✓ It has moderate temperate temperature ranging between  $21^{\circ}\text{C}$  and  $27^{\circ}\text{C}$ .
- ✓ The average rainfall is about 750mm a year.
- ✓ NB. This climate favours the growth of citrus fruits eg Oranges, Lemons, Tangerines, Grape fruits, Limes
- ✓ Rainfall in Mediterranean lands is received during winter and is brought about by the Westerlies. (Winds that blow from the West)

**Graph showing Mediterranean region/climate (Ref: A new primary SST for Uganda Bk 7 Pg 15**



### **Temperate climate**

This is found in the plateau areas of South Africa in the cape region.

It experiences cool temperatures with cool summers and cold winters.

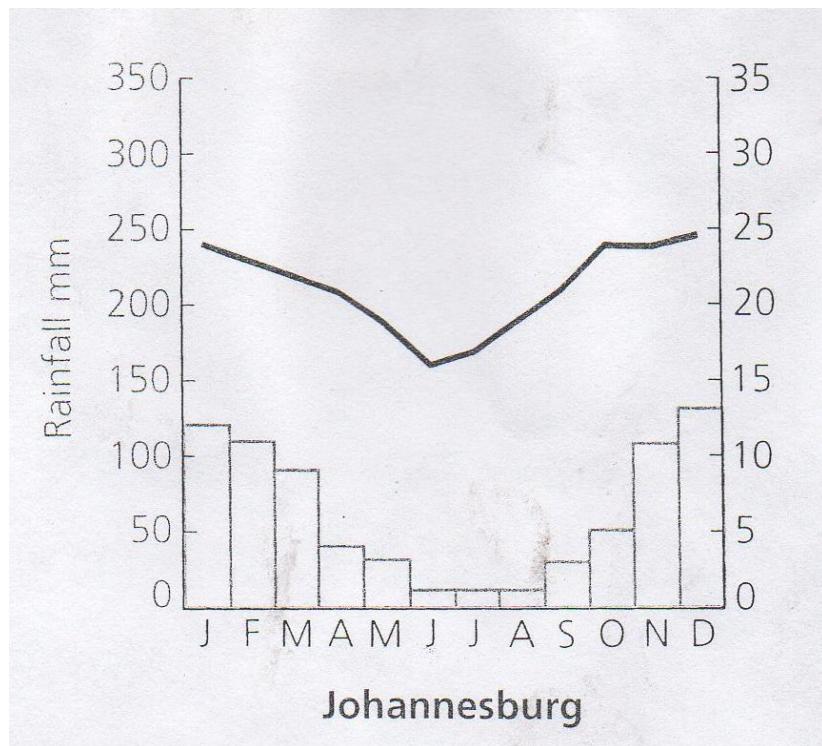
It is best described as mild winter and hot summers.

Rainfall is experienced in winter.

### **Activities**

- ✓ Sheep rearing
- ✓ Crop farming
- ✓ Tourism
- ✓ Trading
- ✓ Craft making

## Graph showing temperate region/climate



### Effects of climate on people's lives

- a) Areas that receive reliable rainfall are good for both farming and human settlement. Other activities here may include fishing, lumbering.

Areas which support the above activities in Africa include:

- ✓ Note valley and delta regions
- ✓ Highland areas
- ✓ Lakes and coastal areas
- ✓ Equatorial and tropical regions

- b) Hot and damp areas may not support human settlement because they may harbor disease vectors.
- c) Areas that receive no or unreliable rainfall do not support crop farming but instead pastoralism is practiced.

- d) Desert and semi desert areas do not support sense population, agriculture and human settlement due to hot or hot temperature and little or lack of rainfall.
- e) In areas with hot climatic conditions people put on light clothes to reduce the much heat from the sun.
- f) In cold climate conditions people normally put on heavy (thick) clothes to keep themselves warm due to coldness.
- g) Lack of rainfall may lead to long drought and then starvation as people do not grow enough food.

In some dry areas, irrigation has been applied to make farming possible.

### **How people's activities can lead to climate change.**

1. The practice of deforestation leads to destruction of the rain/ water cycle hence change in rain patterns. As long term process, leads to desertification.
2. The practice of over grazing by man can lead to long drought then desertification.
3. The practice of swamp reclamation can lead to change in rainfall patterns causing limited chances of receiving reliable rainfall.
4. However, the practice of afforestation and re-afforestation creates rich vegetation which influences rainfall patterns/formation. This in turn brings more chances to modify climate.

## **WEATHER**

### **THE CLIMATE OF AFRICA**

1. **Climate** is the average weather condition of a place recorded for a long period of time.
2. **Weather** is the state of atmosphere recorded for a short time.
3. **The difference between climate and weather is that:**

Climate is the average weather condition of a place recorded for a long period of time while weather is the state of the atmosphere of a place for a short time.

Or

Weather is recorded for a short time while climate is recorded for a long time.

#### **4. Conditions of weather**

- Sunny
- Rainy
- Cloudy
- Windy
- Misty
- Foggy
- Hot or cold weather

#### **5. Elements of weather/climate**

- Rainfall
- Temperature
- Air pressure
- Wind
- Sunshine
- Fog
- Cloud cover
- Mist

#### **6. Factors of climate**

- Temperature
- Rainfall
- Mist
- Fog
- Air pressure
- Cloud cover
- Sunshine
- Wind

## **7. Terms associated with weather.**

**Isohyets:** These are lines drawn on a map to show places with the same rainfall.

**Isobars:** These are lines drawn on a map to show places with the same air pressure.

**Isotherms:** These are lines drawn on a map to show places with the same temperature.

**Isohels:** These are lines drawn on a map to show places with the same sunshine.

**Contour lines:** These are lines drawn on a map to show places with the same altitude.

## **8. What is weather forecasting?**

This is the prediction of future weather changes.

### **9. How is weather forecast important to:**

#### **a) Farmers**

- Helps farmers to know when to plant their crops.
- Helps farmers to know when to harvest their crops

#### **b) Sailors:**

- Helps them to know the right weather for sailing.

#### **c) Pilots**

- To know the right weather to fly a plane

### **10. Influence of weather to people during,**

#### **Wet or rainy days**

- ✓ People plant their crops
- ✓ People put on heavy clothes
- ✓ They weed their garden
- ✓ They spray the crops

#### **Dry/sunny season**

- ✓ They harvest their crops

- ✓ They dry their harvests
- ✓ They put on light clothes
- ✓ They prepare land for farming
- ✓ They irrigation their crops

## **Windy weather**

- ✓ Farmers winnow their seeds
- ✓ People sail
- ✓ People are helped to run the wind mills

## **Weather disasters and their effects to people.**

**Flood** is a large amount of water covering an area which is usually dry.

### **Causes of floods:**

- ✓ It is caused by heavy rainfall
- ✓ It is caused by poor drainage system
- ✓ People have settled in swampy areas
- ✓ It is caused by silting of swamps and rivers

### **Effects of floods to people**

- ✓ People's property are destroyed
- ✓ Leads to famine by destroying crops
- ✓ Leads to loss of lives
- ✓ Kills domestic animals
- ✓ Leads to spread of diseases
- ✓ Destroys the bridges
- ✓ They cut off road networks

### **Ways of helping flood victims**

- ✓ By giving flood victims food
- ✓ By giving flood victims clothes
- ✓ Resettling flood victims
- ✓ By providing medicine to flood victims

### **Ways in which floods can be controlled in Uganda**

- ✓ By conserving swamps
- ✓ Constructing drainage channels

**Drought** is a long period of sunshine.

#### **Causes of drought:**

- ✓ High rate of deforestation
- ✓ Swamp drainage
- ✓ Bush burning

#### **Effects of drought**

- ✓ Famine
- ✓ Shortage of water
- ✓ Shortage of pasture for animals
- ✓ Death of animals

#### **Solutions for drought/drought effects**

- ✓ Practicing irrigation farming
- ✓ Afforestation
- ✓ Avoid swamp drainage
- ✓ Constructing valley dams and boreholes
- ✓ By carrying out agro-forestry

**Landslide/mudslide** is a mass of soil or rock that falls down the slope of a mountain.

## **Causes of landslides**

- ✓ Heavy rainfall
- ✓ Over cultivation on mountain slopes
- ✓ Deforestation on mountain slopes

## **Effects of landslides**

- ✓ Loss of lives
- ✓ Displacement of people
- ✓ Destruction of property
- ✓ Famine

## **Solutions to the above problems**

- ✓ Avoid over cultivation on mountain slope
- ✓ Avoid deforestation on mountain slope
- ✓ Avoid settling on mountain slopes

**Hailstone** is a small ball of ice which falls like rain.

**Hailstorm** is a storm during which hailstones fall from the sky.

It is caused by heavy rainfall

## **Effects of hail stones**

- ✓ Destroys crops
- ✓ Kills animals
- ✓ Leads to soil erosion

The solution to the above problems is staying indoors.

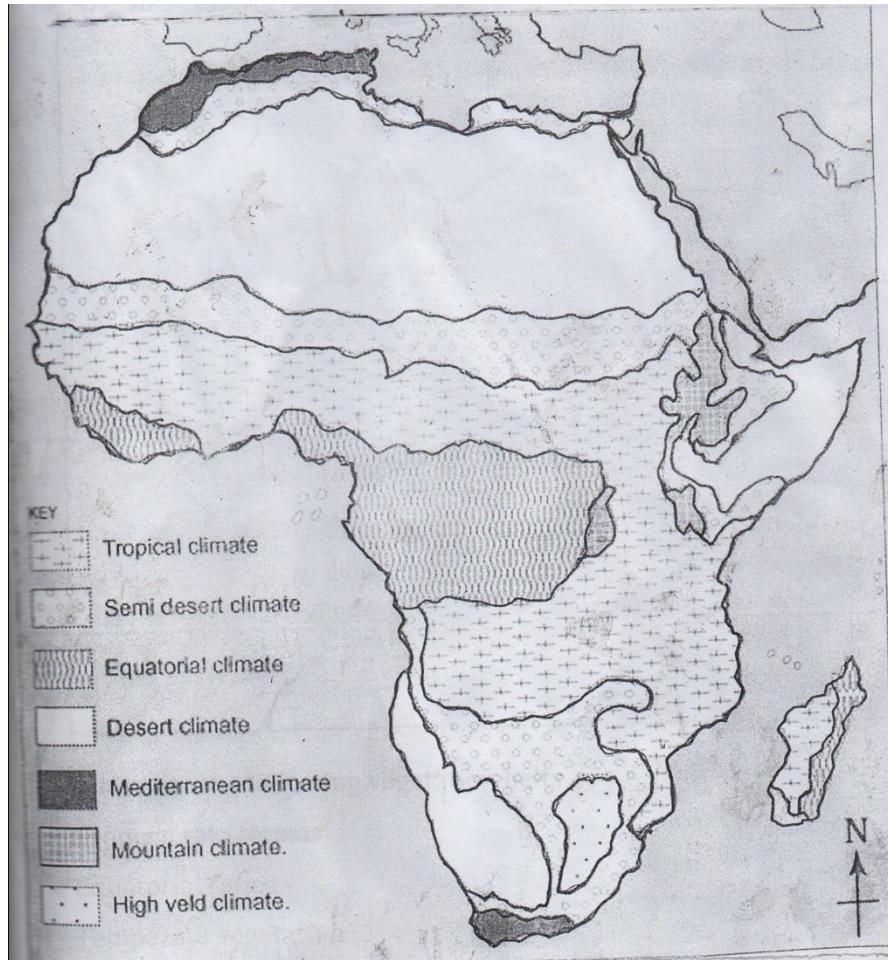
# VEGETATION OF AFRICA

Vegetation is the plant life cover that grows on the earth's surface. Vegetation is subdivided into natural and plantation vegetation.

## Natural vegetation

This means all plants that grow on the earth's surface by themselves.

### Map of Africa showing vegetation zones.



## Equatorial rainforests/tropical rain forests

These occupy areas along the equator from Sierra Leone and extended Eastwards to the Congo basin.

However, areas around Lake Victoria have modified equatorial rainforests.

Those along the coastal belt of East and West Africa have mangrove forests.

## **Characteristics of equatorial rainforests**

- ✓ They have tall trees due to competition for sun light. (phototropism)
- ✓ They have thick undergrowth that makes it almost impassable to reach the interior.
- ✓ They are ever green because do not shed off all their leaves during the year.
- ✓ They have climbing plants
- ✓ Trees have hard wood due to great heat experienced throughout the year.
- ✓ The common trees are mahogany, ebony, rose wood, iron wood, green heart, obeach, sepele.

## **Economic activities**

The main economic activities carried out include lumbering, tourism, mining, plantation farming, livestock farming, transport, crops grown include Cocoa, rubber, bananas, coffee, oil palm, tyres, rubber soles, rubber bands, raincoats, erasers.

## **Importance of forests**

- ✓ Are a source of timber for furniture, fuel, construction
- ✓ Help to conserve soil
- ✓ They also assist in rain formation through trans evaporation.
- ✓ Wind breaks

## **Unfavourable conditions in equatorial forests**

- ✓ Presence of fierce wild animals like lions
- ✓ Presence of a wide range of vectors like mosquitoes, snakes and tsetse flies
- ✓ Wet and hot conditions
- ✓ Poor transport and communication

- ✓ Presence of numerous vermin live insects, monkeys, squirrels and antelopes which limit crop growing.

## **Examples of life in the equatorial rainforests**

### **The Pygmies**

Ituri forests are the home of the pygmies

Pygmies are very short people. They live by hunting, collecting wild fruits and honey and on fishing

They use small bows and arrows for hunting and protection. They also trap animals by digging large pits.

The pygmies live in simple huts

Pygmy women are responsible for building huts, collection of wild roots and honey. These women cover their bodies with leaves. Men wear strips of skins and sometimes of cloth around their waists.

Men's work is hunting and collecting wild oil palm.

### **Factors affecting the use of forests in development**

- ✓ Hard wood trees are difficult to cut
- ✓ There are so many species in one area that is difficult to cut down one type.
- ✓ Too much heat and high humidity. The hot and wet environment encourages diseases, germs and pests.
- ✓ Transporting timber is difficult because hard wood is heavy.

## **TEMPERATE GRASSLANDS**

They are found in the eastern part of South Africa (high velds) so the local name for the temperate grasslands in South Africa is the velds.

## Economic activities

- ✓ Cro farming: Maize is mainly grown in an area called the maize triangle.
- ✓ Animal grazing: Mainly sheep rearing for wool production merino sheep in the great karoos for wool.
- ✓ The removal of wool from the sheep is called shearing. This is done in the season when sheep does not need wool.

### Note

Other temperate grasslands of the world include

- ✓ The prairies in North America for wheat growing
- ✓ The Pampas in South America for cattle ranching
- ✓ The steppes between Europe and Asia (Eurasia) for rice growing
- ✓ The downs in Australia for sheep rearing

## MEDITERRANEAN VEGETATION

This region extend from  $30_0N$  to  $45_0N$  and  $30_0S$  to  $40_0S$ . It covers the northern tip to Africa ie Tunisia, Algeria and Morocco in the South it covers the Southern most tip of South Africa.

- ✓ The region is between the hot desert and cool temperate region
- ✓ This region has warm wet winters and hot dry summers

The Mediterranean vegetation adapts itself conditions in a number of ways.

- ✓ The trees have large trunks to store water
- ✓ The leaves are small and leather like
- ✓ The roots are very long and therefore grow deep underground, crops grown can with stand harsh conditions eg rice, vegetables, citrus fruits like grapes, olives, lemons, oranges, tangerines, limes.

## MANGROVE FOREST

- ✓ They are found in low lands
- ✓ They grow in areas with water on the coast and along lakes and rivers
- ✓ They are mainly found along the Western part of Madagascar
- ✓ They can also grow in salty waters
- ✓ They have hard wood trees
- ✓ They provide water proof timber like bamboo which is used in ship building.

## MOUNTAIN/MONTANE VEGETATION

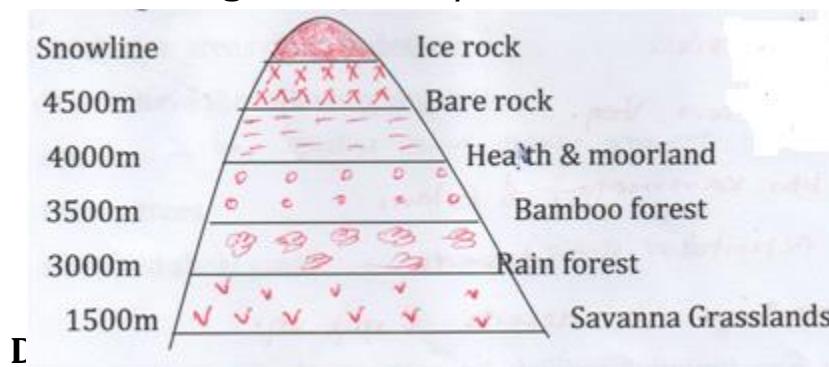
This region is found in the mountainous regions of Africa large forests and coniferous and ever green trees are found on top of the Drakensberg .

Mountains in South Africa and on mountains in East Africa like Kirimanjaro, Rwenzori, Kenya, Mufumbiro. Such forests grow in about 370m.

Between 3750m and 4000m is cold and dry region. Some tough grasses grow in it (moorland) on top of these mountains is a cold desert and no vegetation is found there, it is mainly rocky and beyond there is a permanent snow.

Examples of ever green trees are cedar, fir, pine, spruce.

### Mountain vegetation zone/belts



Hot desert fall into two groups

- a) Marine deserts

## b) Continental deserts

The Sahara and Kalahari are continental deserts caused by dry winds that flow overland.

Namib is a marine desert caused by dry winds that blow over the Benguela current off the Namib Coast.

### **Characteristics of deserts**

- ✓ Receive very little or no rainfall at all
- ✓ Are very dry
- ✓ Experience very high temperatures
- ✓ Have cold ocean currents along the shores with dry onshore winds.
- ✓ They lie in the offshore trade winds belt.
- ✓ Vegetation in the desert regions include cacti, baobab, thorny bush.

The trees have thick barks and leaves which help to reduce excess water loss through transpiration.

Oases are places in desert where water can be obtained

Around oases, crops like dates, palms, barley can be grown.

### **Semi desert**

These are found in areas close to deserts.

Semi deserts have the following vegetation

- ✓ scrubs – low bushes and trees growing in dry places.
- ✓ thorny trees
- ✓ scattered short grass – shrub (small bush)

### **Note**

In desert regions, people practice oil drilling (mining) and nomadic pastoralism. Nomads ie Tuareg and Berbers keep cattle, sheep, goats and camels.

### **Savanna grasslands in Africa**

- ✓ These are in areas next to forests where rainfall is inadequate.
- ✓ They are in areas with seasonal drought
- ✓ The height of the grass depends on the amount of rainfall. Where rainfall is high, the grass grows to a height of 2m and more.
- ✓ In Savanna, rainfall is over 760mm a year.

### **Location and appearance**

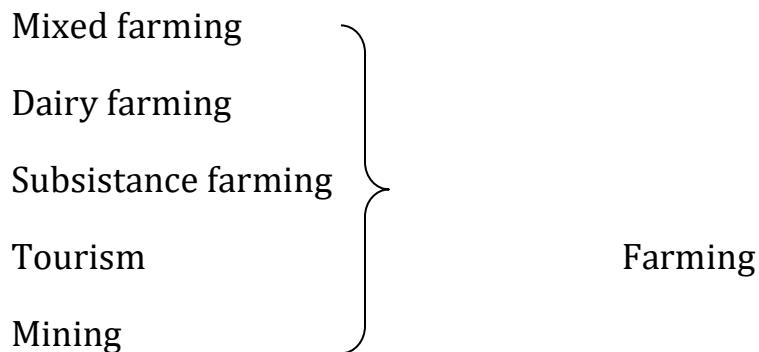
- ✓ It extends from ever green forests to 20°N and to the tropic of cancer and Capricorn.
- ✓ The grass is tall with scattered trees. It becomes shorter and scrubs like in areas next to deserts.
- ✓ Trees (woodlands) are found in areas next to equatorial rainforests.
- ✓ Next to deserts are thorny trees, bushes and short shrubs
- ✓ Most of the grass withers and turn brown in the dry season. Bush fires are common, roots are not burnt but remain dormant in the soil. The new shoots and leaves spear when it rains.

### **How trees survive the dry season**

- ✓ store water in their trunks/stems eg baobab trees
- ✓ some lose their leaves to reduce transpiration
- ✓ some have long roots to tap deep water

### **Human activities in the Savanna**

Cattle keeping : The Masai, Karamojong both live in Savanna grasslands.



## Importance of vegetation

### Factors that influence natural vegetation

The difference in vegetation types in different areas is determined by the following factors.

- ✓ Natural of the soil – well drained fertile soils support rich vegetation
- ✓ Relief of an area
- ✓ Man's/Human activities – some support vegetation ie afforestation, reforestation, swamp conservation while others destroy eg swamp drainage reclamation, deforestation.
- ✓ Climate areas with much rainfall support rich vegetation growth that those with no or little, tall.
- ✓ Altitude – places on very high altitudes are too cold to support plant life.

### How natural vegetation influences people's lives

- ✓ In areas with natural forests, people carry out lumbering, charcoal burning and collecting fire wood through deforestation.
- ✓ In semi and desert areas

- People carry out nomadic pastoralism
- Build flat roofed houses to regulate heat
- Animal rearing is carried out in Savanna grassland areas.
- In areas with thick natural forests, the development of roads and railway transport is very difficult. Such areas also receive convectional rainfall which influences vegetation cover and crop farming.

### **Ways how people influence/affect vegetation**

- ✓ Through deforestation to obtain open land for farming, settlement and industrial development.
- ✓ By draining wetlands
- ✓ By overgrazing. Un controlled grazing leaves the land bare exposing it to agents of erosion.
- ✓ By bush burning
- ✓ By encroaching on natural vegetation and clearing it for development of towns, villages, roads and industrial areas.

### **Effects of man's activities on the environment**

- ✓ Deforestation leads to desertification
- ✓ Swamp drainage leads to loss and lack of water, floods, change in off pattern.
- ✓ Over grazing loads to long droughts, erosion
- ✓ Bush burning that leads to destruction of the natural habitats of wild animals
- ✓ Pollution increase in green house gases
- ✓ Trees are cut for timber
- ✓ Swamps are drained for more farm land and settlement

### **Ways of conserving vegetation**

- ✓ By afforestation
- ✓ By re-afforestation

- ✓ By conserving swamps
- ✓ Avoid bush burning
- ✓ Controlled animal grazing
- ✓ Apply appropriate methods of modern farming eg terracing, strip farming and contour ploughing in order to prevent erosion.

### **Effects of vegetation on population distribution**

- ✓ There are few people living in the equatorial rainforests due to unfavourable conditions for settlement.
- ✓ Transport and communication facilities are too costly to construct because of the thick forests.
- ✓ Most people live on the Savanna grasslands where open space is favourable for settlement and farming.
- ✓ Desert areas are sparsely populated. The only places with average population are found around oases and along rivers. eg in Egypt and Sudan, the largest population of people is found along the Nile.
- ✓ The Mediterranean regions have high population densities. This is partly due to the vegetation which is not thick and is favourable for human life.
- ✓ Miombo woodlands are not suitable for human settlement because they harbor vectors like tsetse flies and mosquitoes.
- ✓ They are also too dry for farming activities.

### **WILDLIFE IN AFRICA**

Wildlife refers to flora and fauna in their natural environment. The African continent has a variety of wildlife. Many of the animals live comfortably in the Savanna and tropical forests.

A few live in water.

Some of the wild animals found in Africa are:

- ✓ elephants
- ✓ giraffes
- ✓ chimpanzees
- ✓ cheetahs
- ✓ zebras
- ✓ gorillas
- ✓ baboons
- ✓ leopards
- ✓ antelopes
- ✓ crocodiles
- ✓ hippopotami
- ✓ buffalos
- ✓ rhinos
- ✓ monkeys
- ✓ hyenas
- ✓ lions

Wild animals are largely protected in national parks.

## **GAME PARKS IN AFRICA**

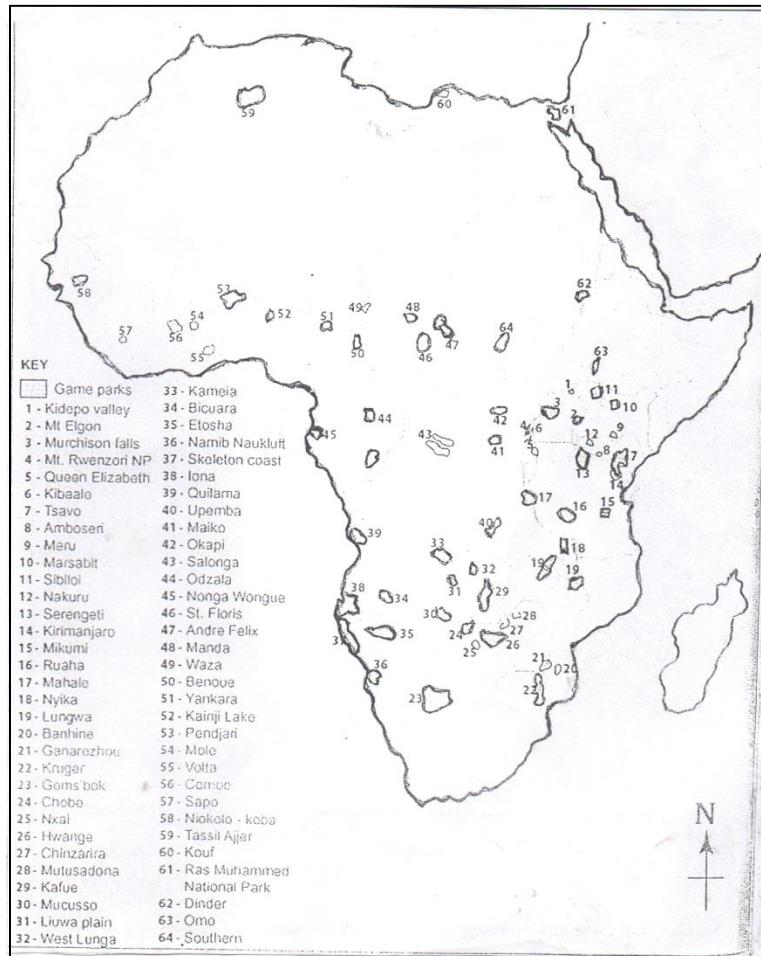
Game parks are gazetted areas for the preservation of wildlife. They are established by law in parliament.

Most of the game parks have a variety of vegetation and other features, grasslands, swamps, lakes, river, woodlands, forests and arid or dry conditions. Each of these types of vegetation forms a habitat for a community of plants and animals.

Most game parks in Africa are located in the savannah lands because it provides plenty of pasture and a natural habitat for most animals.

The parks form a complete ecosystem. - All plants and animals that live in a particular are together.

## Major National parks in Africa



## Importance of Game parks in Africa

- ✓ They help to create employment to people working in them and those who provide services such as transport, guidance, accommodation and entertainment.
- ✓ They promoted tourism through which a country earns foreign exchange.
- ✓ They help to create market for the locally manufactured goods especially handcrafts.
- ✓ They are used for educational purposes and scientific research.
- ✓ They are used to preserve different animal species.
- ✓ They promote relationship and co-operation between countries

- ✓ They are part of the heritage of the people of Africa.

## **Problems faced by wildlife**

- ✓ Poaching
- ✓ Insecurity
- ✓ Shortage of food/pasture
- ✓ Wild bush fires
- ✓ Pests and diseases

## **Measures to protect wildlife**

- ✓ Government should enact laws to protect animals and enforce those laws. Ban hunting as a sport.
- ✓ Wildlife clubs should be formed in schools to teach the school community and the public the usefulness of wildlife.
- ✓ Since people kill animals for food, alternative sources of meat should be sought like setting up ranches for cattle or other forms for livestock rearing.
- ✓ Swamps, forest and grasslands should be conserved.

## **TOURISM**

Tourism is the act/business of providing services to tourists.

Services provided include:-

- ✓ Accommodation
- ✓ Entertainment
- ✓ Transport
- ✓ Shopping
- ✓ Food

## **Tourist attractions**

There are a number of tourist attractions in Africa. They include:

- ✓ Physical features and scope like hot springs, waterfalls, mountains, etc
- ✓ Economic infrastructure eg HEP dams, mining centres, industrial areas.
- ✓ Cultural activities eg traditional dances, dresses, art and crafts, etc
- ✓ Wildlife conservation centres eg game parks, sanctuaries, zoos, etc
- ✓ Beaches
- ✓ Africa's climate
- ✓ Historical sites eg stone age sites, old forts, old palaces, burial places.

## **Types of tourism**

- ✓ Local tourism/domestic
- ✓ International tourism

## **Why tourism is regarded as an industry?**

- ✓ It earns income to the government.
- ✓ It creates employment.

## **Why is tourism regarded as an invisible export?**

- ✓ It does not involve physical exchange of goods but income is earned.

## **Examples of invisible exports**

- ✓ Electricity
- ✓ Communication
- ✓ Banking
- ✓ Insurance
- ✓ Labour
- ✓ Tourism

## **Examples of tourist attractions**

### **Climate**

High temperatures and plenty of sunshine throughout the year is a major attraction for people from temperate lands.

Tourists leave Europe in winter to enjoy the warm weather in Africa.

## **Beaches**

Coastal areas which have sand beaches attract large numbers of tourists because water is favourable for sports like swimming, sailing and water skiing.

## **Mountain scenery**

The beauty of mountain sides with scarps and cliffs attract tourists.

## **Wildlife**

Africa has many species of wildlife not common in other parts of the world.

## **Culture**

Local customs, dress, festivals, historical sites such as great palaces in Zimbabwe.

## **Factors that promote tourism**

### **Accessibility/Transport**

Areas which can be reached easily, especially by cheap means of transport attract a large number of tourists.

- Availability of tourist attractions
- Good government policies

### **Worldwide publicity**

People all over the world should be made aware of the tourist attractions that are found in a particular area.

### **Accommodation**

Availability of adequate accommodation for tourists eg food, lodges, hotels and rest houses is also an important factor.

### **Sensitization of indigenous people**

People living in areas where tourist attractions and facilities exist should be made to realize the importance of tourism.

### **Political climate**

Stability of the country favours tourism. Wars and violence discourage and keep away tourists. So governments should promote peace and stability.

### **Importance of tourism**

- ✓ It brings in a lot of foreign exchange
- ✓ Helps to create employment
- ✓ Creates a wide market for local crafts
- ✓ Promotes international co-operation
- ✓ Helps in the development of infrastructure
- ✓ It opens up remote areas for development.

### **Problems faced by the tourism industry**

- ✓ Unlimited poaching reduces the species of animals like leopards, rhinos, cheetahs.
- ✓ Insecurity which is common in Africa threatens and prevents tourists from visiting game parks.
- ✓ Poor managerial skills of workers in the tourism industry
- ✓ Prolong drought forces animals to migrate elsewhere in search for water and pasture.
- ✓ There are few trained personnel like game rangers and wardens and forest officers.

- ✓ Poor infrastructure in most African countries.
- ✓ Inadequate funds promote the tourism industry
- ✓ Under development aviation industry
- ✓ Inadequate advertisement in international media

### **Solution to the above problems of tourism**

- ✓ Countries should improve on security
- ✓ Measures to stop poaching should be put in place.
- ✓ Governments and the private sector should develop roads and hotels
- ✓ African countries should make world wide publicity of the tourism industry.
- ✓ People should be made aware of the value of conserving wild life.
- ✓ People should be educated to be friendly to tourists.
- ✓ New national parks should be opened.
- ✓ Bush burning should be discouraged
- ✓ Income generating projects should be provided to people especially those living near game parks to discourage poaching.
- ✓ There is need to improve on transport and accommodation facilities in Africa.

### **Causes of increase expansion of tourism**

- ✓ Improved transport and communication network.
- ✓ Improved peace and security in most parts of Africa increased game parks and other tourist sites.
- ✓ Improved and increased hotel and lodges
- ✓ Improved medical services in Africa
- ✓ Presence of rare endangered species in Africa eg mountain Gorillas in Bwindi
- ✓ Good government policies on tourism

### **Problems caused by Tourism**

- ✓ The construction of infrastructure is expensive.

- ✓ Un controlled tourism may damage the natural beauty of the countries
- ✓ Some fierce animals escape from Game parks and attack people and animals.
- ✓ Most successful hotels and lodges in Africa are run by foreigners.
- ✓ Large pieces of land are gazetted for game parks, game reserves and sites to attract tourists.
- ✓ Most natives in Africa cannot afford to use tourist facilities.
- ✓ Unfriendly countries can send spies to the tourist host countries.
- ✓ Some Animals escape from game parks and zoos and destroy farmer's crops.
- ✓ Tourism may change social behaviour and encourage social problem in the host countries.

### Possible solutions to problems caused by tourism

- ✓ Tourists should be informed about the culture and laws of the host countries.
- ✓ Government should also encourage their citizens to invest more in tourist facilities like hotels and transport.
- ✓ African natives should be taught and encouraged to use the tourists facilities in their localities and regions.
- ✓ The borrowed money to build infrastructure should be used wisely and honestly.
- ✓ Marked, viewing points should be established around places of tourist attraction. The earning from the industry should be accounted for and used before borrowing.

### Vocabulary

- ✓ **Game reserve** – An area of land set aside by government for future expansion into a game park.
- ✓ **Game rangers** – These are armed people who provide security to the wild animals against poachers.
- ✓ **Game warden** – A person who takes care of wildlife in a game park.

- ✓ **Bird sanctuary** – This is a place where endangered bird species are kept.
- ✓ **Animal sanctuary** – A place where endangered animal species are kept.

Note: The largest game parks in the following areas:

- ✓ Uganda – Murchison falls/Kabalega
- ✓ East Africa – Serengeti
- ✓ Africa – The great Limpopo Trans Frontier (shared by South Africa, Zimbabwe and Mozambique)

## **P.7 SST TOPICAL BREAKDOWN TERM II AND III**

### **PEOPLE OF AFRICA**

- ✓ Origin of different ethnic groups
- ✓ Movement of different ethnic groups
- ✓ Settlement patterns of ethnic groups
- ✓ Tribes belonging to different ethnic groups
- ✓ Reasons for the migration of ethnic groups
- ✓ Problems met by ethnic groups during movement
- ✓ Effects of ethnic groups

### **FOREIGN INFLUENCE IN AFRICA**

- ✓ Foreign groups in Africa
- ✓ Reasons for the coming of foreigners
- ✓ Problems faced by European explorers in Africa
- ✓ Effects of European explorers
- ✓ Reasons for the coming of Traders in Africa
- ✓ Effects of European Traders
- ✓ European colonialists in Africa, South Africa, Ghana, Senegal, Algeria, Angola, Egypt, DRC
- ✓ The scramble and partition of Africa
- ✓ Establishment of colonial rule in Africa Fragnophone and Anglophone states
- ✓ Methods of acquiring colonies in Africa such as – Treaty making
  - Violence
  - Exciting misunderstanding
- ✓ The beginning of the Great Trek in South Africa
- ✓ Effects of foreign influence
- ✓ Political effects (apartheid in South Africa)
- ✓ Economic effects
- ✓ Methods used by colonialists to administer the colonies such as direct rule, indirect rule or assimilation.

### **NATIONALISM AND THE ROAD TO INDEPENDENCE**

- ✓ Meaning of Pan – Africanism. Pan Africanists Nationalism, nationalists and Patriotism
- ✓ The work of Pan – Africanists and nationalists.

- ✓ Countries that were not colonized in Africa (Ethiopia and Liberia)
- ✓ Reasons for maintaining their independence
- ✓ Leading Pan – Africanists who fought for Africa's independence
- ✓ Methods of work by the Pan – Africanists and nationalists
- ✓ Problems Pan- Africanists and nationalists faced
- ✓ Multiparty system
- ✓ Advantages of multiparty system
- ✓ Disadvantages of multiparty system
- ✓ Single party system
- ✓ Advantages of single party system
- ✓ Disadvantages of single party system

### ***POST INDEPENDENCE AFRICA***

- ✓ Formation of OAU
- ✓ When and why it was formed
- ✓ Founder members
- ✓ Objectives of OAU
- ✓ Functions of OAU
- ✓ Achievement of OAU
- ✓ Failures of OAU
- ✓ Formation of AU
- ✓ Objectives of AU
- ✓ Challenges of AU
- ✓ Organs of AO
- ✓ Possible solutions to challenges of AU
- ✓ Regional bodies (Markets)
  - COMESA
  - SADC
  - IGAD
  - Advantages and disadvantages of economic co-operation
  - Ways of solving problems faced by economic groupings

### ***ECONOMIC DEVELOPMENTS IN AFRICA***

- ✓ Major economic resources in Africa
- ✓ Problems faced by utilization of resources
- ✓ Caring of our resources
- ✓ Major economic development in Africa

- ✓ Nigeria, Sudan, Libya, South Africa, DRC, Uganda  
Climate, mining, tourism, farming, industrialization
- ✓ Comparison with other countries in terms of economic development
- ✓ Challenges affecting economic development in Africa
  - Social
  - Economic
  - Political
  - Possible solutions to problems that affect economic development in Africa.

### ***MAJOR WORLD ORGANISATION***

- ✓ Formation of the United Nations
- ✓ Origin
- ✓ Objectives
- ✓ Members and organs of the UN
- ✓ Function
- ✓ Agencies
- ✓ Importance of the United Nations
- ✓ Agencies of the UN and their functions
- ✓ UN Human Rights charter
- ✓ The common wealth of Nations
- ✓ Membership
- ✓ Functions
- ✓ Challenges of the UN of the common wealth nations

### ***THE COMMON WEALTH ORGANISATION***

- ✓ Members of common wealth headed by a king
- ✓ Special members of common wealth
- ✓ Aims of the common wealth
- ✓ Benefits of common wealth to member states
- ✓ The activities of common wealth
- ✓ The challenges of common wealth
- ✓ Similarities between common wealth countries