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Primary 5 Social studies

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Term 1

Theme: LIVING TOGETHER IN UGANDA

Topic 2/5: Physical Features in Uganda

Learning Outcomes:

The learner is able to explore, understand and appreciate the value of one's immediate and distant environment for better health and harmonious living.

Physical Features of Uganda



1. Mountains

- (i) **Mount Rwenzori (Mountains of the Moon)** – Found in western Uganda along the border with the Democratic Republic of Congo. It has snow-capped peaks, including **Margherita Peak**, the highest in Uganda.

- (ii) **Mount Elgon** – Located in eastern Uganda, shared with Kenya. It is an extinct volcano and one of the largest in the world.
- (iii) **Other ranges** – Such as the **Kigezi highlands** in southwestern Uganda.

2. Lakes

- (i) **Lake Victoria** – The largest lake in Uganda and Africa, shared with Kenya and Tanzania. It is the source of the River Nile.
- (ii) **Lake Kyoga** – Found in central Uganda, shallow and swampy.
- (iii) **Lake Albert** – Located in western Uganda, along the border with the Democratic Republic of Congo.
- (iv) **Lake Edward and Lake George** – Found in western Uganda, connected by the Kazinga Channel.

3. Rivers

- (v) **River Nile** – The longest river in the world, starting from Lake Victoria in Jinja. It flows northwards through Uganda into Sudan and Egypt.
- (vi) **River Katonga** – Connects Lake Victoria to Lake George.
- (vii) **River Kafu** – Flows through central Uganda.

4. Plateaus and Plains

- (i) Uganda is mostly a **plateau** with an average height of 1,000–1,500 meters above sea level.
- (ii) **Plains** include the Acholi plains in the north and the Busoga plains in the east.

5. Valleys and Swamps

- (i) **Albertine Rift Valley** – Found in western Uganda, part of the East African Rift System.
- (ii) **Swamps** around Lake Kyoga and Lake Victoria provide water, papyrus, and fish.

Importance of Physical Features

- **Mountains** – Provide water sources, cool climate, and tourism opportunities.
- **Lakes and Rivers** – Supply fish, transport, water for farming, and hydroelectric power (e.g., Owen Falls Dam on River Nile).
- **Plateaus and Plains** – Good for farming and settlement.
- **Valleys and Swamps** – Support biodiversity and provide building materials like papyrus.

Exercise 1

1. Name two mountains found in Uganda.
2. Which mountain in Uganda has snow-capped peaks?

3. What is the largest lake in Uganda and Africa?
4. Which river starts from Lake Victoria in Jinja?
5. Name two lakes found in western Uganda that are connected by the Kazinga Channel.
6. What is the average height of Uganda's plateau above sea level?
7. Mention one plain found in northern Uganda.
8. Which valley in western Uganda is part of the East African Rift System?
9. Give two uses of swamps in Uganda.
10. Why are rivers important to the people of Uganda?

Formation of Physical Features in Uganda

1. Mountains

Mountains of Rwenzori – Formed by **folding and faulting** of the Earth's crust. The movement of plates pushed rocks upwards to form high ranges.

Mount Elgon – Formed by **volcanic activity**. It is an extinct volcano that erupted millions of years ago.

2. Lakes

Lake Victoria – Formed by **down warping** (depression of the Earth's surface) which collected water.

Lake Kyoga – Formed by **flooding** from River Nile, filling a shallow depression.

Lake Albert, Edward, and George – Formed in the **rift valley** due to faulting.

3. Rivers

River Nile – Formed as water collected from Lake Victoria and flowed northwards through valleys.

Other rivers like **Katonga** and **Kafu** formed by drainage systems flowing through depressions.

4. Plateaus and Plains

Uganda's **plateau** was formed by **uplift of land** during tectonic movements.

Plains such as Acholi and Busoga were formed by **erosion and deposition**, leaving flat land.

5. Valleys and Swamps

Albertine Rift Valley – Formed by **faulting** when blocks of land sank between parallel faults.

Swamps – Formed in low-lying areas where water collects, especially around lakes and rivers.

Exercise 2

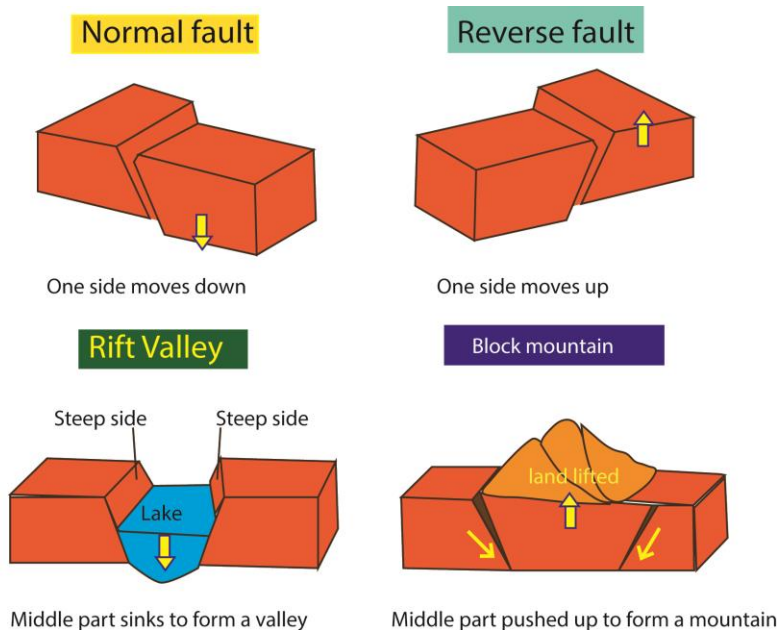
1. How was Mount Elgon formed?
2. Which process formed the Rwenzori Mountains?
3. Name the physical feature formed by faulting in western Uganda.
4. Which lake in Uganda was formed by down warping?
5. How was Lake Kyoga formed?
6. Name two lakes in Uganda that were formed in the rift valley.
7. What is the source of River Nile?
8. How were plains such as Acholi plains formed?
9. What causes swamps to form in Uganda?
10. Why is it important to study how physical features were formed?

Faulting

Faulting happens when the Earth's crust cracks due to forces inside the Earth.

The cracks are called **faults**.

Land can either **sink down** (rift valley) or **rise up** (block mountain).



1. Normal Fault

The ground cracks, and one side sinks lower than the other.

Example: The **Rift Valley** in western Uganda was formed this way.

2. Reverse Fault

The land is pushed together, and one block rises above the other.

Example: Some mountain ranges like the **Rwenzori Mountains** were formed by this process.

3. Block Mountains and Rift Valleys

When land between two faults sinks, it forms a **rift valley**.

When land between faults rises, it forms a **block mountain**.

Examples features formed by faulting in Uganda

- (i) **Rwenzori Mountains** – formed by faulting (block mountains).
- (ii) **Albertine Rift Valley** – formed when land sank between faults.
- (iii) **Lakes Albert, Edward, and George** – found in rift valleys created by faulting.

Types of Forces That Cause Faulting

Force Type	Effect on Land	Example in Uganda
Tensional Forces	Pull land apart, causing it to stretch and sink	Albertine Rift Valley, Lakes Albert & Edward
Compressional Forces	Push land together, causing it to rise or fold	Rwenzori Mountains (block mountains)
Lateral Forces	Slide land blocks sideways along fault lines	Minor horizontal faults in Uganda

Problems Caused by Faulting in Uganda

1. Landslides and Soil Erosion

Faulting creates steep slopes in mountainous areas like **Rwenzori**, which are prone to landslides.

These landslides destroy homes, farms, and roads.

2. Earthquakes

Fault zones are unstable and may experience **earth tremors or earthquakes**, damaging buildings and causing fear among residents.

3. Poor Transport

Rift valleys and escarpments make road construction difficult.

Steep terrain increases transport costs and limits access to remote areas.

4. Flooding and Drainage Problems

Depressions formed by faulting can collect water, leading to **flooding** during heavy rains.

Swamps and lakes formed in faulted areas may overflow.

5. Farming Challenges

Steep slopes and rocky soils in faulted areas make farming hard.

Cold temperatures in highlands reduce crop variety.

6. Diseases

Rift valleys and swamps attract **tsetse flies**, which spread sleeping sickness to animals and humans.

Stagnant water in faulted depressions can breed mosquitoes, increasing malaria risk.

Examples in Uganda

Location	Problem
Rwenzori Mountains	Landslides, poor farming
Albertine Rift Valley	Earthquakes, tsetse flies
Lakes Albert & Edward	Flooding, poor drainage

Exercise 3

1. What is faulting?
2. What is a fault?
3. Name one mountain in Uganda formed by faulting.
4. Which valley in western Uganda was formed by faulting?
5. What happens when land between two faults sinks?

6. What happens when land between two faults rises?
7. Give one example of a lake formed in a rift valley.
8. Which forces cause faulting inside the Earth?
9. Mention one problem caused by faulting.
10. Why is it important to study faulting in Uganda?

Influence of Physical Features on Climate in Uganda

1. Mountains

High mountains like **Rwenzori** and **Elgon** are cooler because temperatures drop with altitude.

They receive heavy rainfall on windward slopes due to **orographic rainfall** (air rises, cools, and condenses).

Leeward slopes (rain shadows) are drier.

2. Lakes

Large lakes such as **Lake Victoria** influence climate by increasing rainfall in surrounding areas.

They cause **convective rainfall** because water evaporates, rises, and condenses into rain.

Areas near lakes are generally wetter and more humid.

3. Rivers

Rivers provide moisture to nearby areas, supporting vegetation.

They also help moderate temperatures by cooling the environment.

Evaporation of water causes convective rainfall

4. Plateaus and Plains

Plateaus have moderate temperatures because of their elevation.

Plains, especially in northern Uganda, are hotter and drier since they lack large water bodies or high mountains to attract rainfall.

5. Valleys and Swamps

Valleys and swamps are usually humid and receive more rainfall.

They also act as water reservoirs, keeping nearby areas cooler.

Evaporation of water causes convectional rainfall

Exercise 4

1. Why are mountain areas in Uganda cooler than lowlands?
2. What type of rainfall is common on the slopes of mountains?
3. How does Lake Victoria affect rainfall in nearby areas?
4. Which physical feature causes convectional rainfall in Uganda?
5. Why are plains in northern Uganda hotter and drier?
6. How do rivers influence the climate of nearby areas?
7. What is the effect of swamps on the climate of Uganda?
8. Which side of a mountain receives more rainfall, windward or leeward?
9. Give one reason why areas near Lake Kyoga are humid.
10. Explain how plateaus influence Uganda's climate.

Influence of Physical Features

1. Influence on Vegetation

Mountains – Cool and wet conditions support forests and bamboo vegetation.

Plains and Plateaus – Grasslands and savanna vegetation grow well here.

Swamps and Valleys – Support papyrus, reeds, and water-loving plants.

Lakeshores – Encourage growth of lush vegetation due to high rainfall and humidity.

2. Influence on Animals and Birds

Mountains and Forests – Provide habitats for gorillas, monkeys, and forest birds.

Plains and Plateaus – Home to grazing animals like antelopes, zebras, and lions.

Swamps and Lakes – Attract hippos, crocodiles, and water birds such as herons and kingfishers.

Rift Valley areas – Rich in wildlife due to diverse vegetation and water sources.

3. Influence on Human Beings

Mountains – Provide water, fertile soils for farming, and attract tourists.

Lakes and Rivers – Supply fish, transport, and hydroelectric power.

Plains and Plateaus – Good for settlement and large-scale farming.

Swamps – Provide papyrus for building, water for domestic use, and fertile soils for crops.

Valleys – Support agriculture and settlement due to fertile soils.

Exercise 5

1. How do mountains influence vegetation in Uganda?
2. Which physical feature supports papyrus and reeds?
3. Name two animals found in Uganda's plains.
4. Why are swamps important for birds?
5. How do lakes influence human activities in Uganda?
6. Which physical feature provides habitats for gorillas?
7. Give one way rivers influence human life.
8. Why are plains suitable for settlement?
9. Mention one bird commonly found near lakes and rivers.
10. Explain how valleys influence farming in Uganda.

Problems Associated with Physical Features

1. Mountains and Highlands

- (i) Difficult to build roads and houses due to steep slopes.
- (ii) Landslides and soil erosion are common.
- (iii) Cold climate makes farming difficult in some areas.

2. Plateau

- (i) Some parts are rocky and infertile, making farming hard.
- (ii) Water shortage in dry seasons.
- (iii) Poor transport in remote plateau areas.

3. Lakes and Rivers

- (i) Flooding destroys crops and homes.
- (ii) Spread of waterborne diseases like bilharzia and malaria.
- (iii) Drowning accidents and crocodile attacks.
- (iv) Pollution from human activities.

4. Rift Valley

- (i) Earthquakes and volcanic activity may occur.
- (ii) Hot climate in some parts makes farming difficult.
- (iii) Poor transport due to steep escarpments.
- (iv) Tsetse flies in valley areas spread diseases to animals.

Exercise 5

1. Mention two problems faced by people living in mountain areas.
2. Why is farming difficult in highland areas?
3. Give one problem associated with plateaus in Uganda.
4. What happens when lakes and rivers flood?
5. Name one waterborne disease caused by lakes and rivers.
6. Why is transport difficult in the rift valley?
7. Mention one danger of living near rivers.
8. How do landslides affect people in mountain areas?
9. Which insect in the rift valley spreads diseases to animals?
10. Explain one way pollution affects lakes and rivers.

Possible Solutions to Problems Caused by Physical Features

7. Mountains and Highlands

Problem: Landslides, soil erosion, and cold climate.

Solutions:

- Plant trees to prevent soil erosion.
- Build terraces for farming on slopes.
- Construct strong roads to ease transport.

8. Plateau

Problem: Infertile soils and water shortage.

Solutions:

- Use fertilizers and manure to improve soil fertility.
- Dig boreholes and wells to provide water.
- Improve road networks for easy transport.

9. Lakes and Rivers

Problem: Flooding, waterborne diseases, drowning, pollution.

Solutions:

- Build dams and dykes to control floods.
- Drain stagnant water to reduce mosquitoes.
- Educate people on safe swimming and fishing.
- Enforce laws against pollution.

10. Rift Valley

Problem: Earthquakes, hot climate, poor transport, tsetse flies.

Solutions:

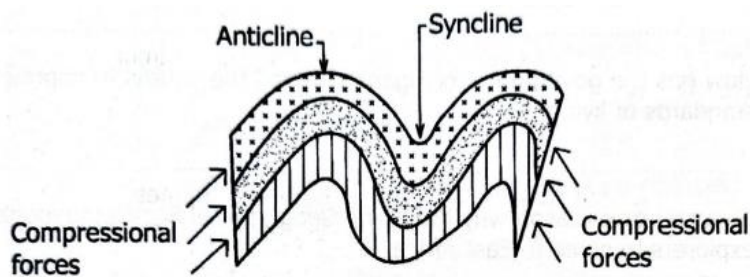
- Build earthquake-resistant houses.
- Irrigate crops to deal with dry conditions.
- Construct better roads across escarpments.
- Spray and clear bushes to control tsetse flies.

Exercise 6

1. What farming method can reduce soil erosion on mountain slopes?
2. How can farmers improve infertile soils on plateaus?
3. Mention one way to control floods caused by rivers.
4. Why should stagnant water near lakes be drained?
5. Give one solution to drowning accidents in rivers.
6. How can pollution of lakes and rivers be reduced?
7. What type of houses should be built in earthquake-prone areas?
8. How can farmers in the rift valley deal with dry conditions?
9. Which insect spreads diseases to animals in the rift valley, and how can it be controlled?
10. Why is tree planting important in mountain areas?

Revision Questions

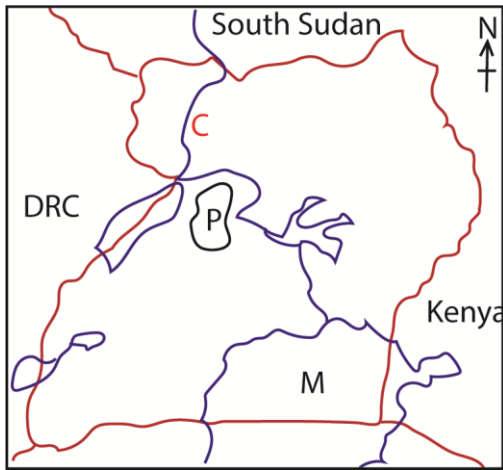
- Write one social value of rivers to people.
 - Farming** – Rivers provide water for irrigation, helping crops grow.
 - Food** – They supply fish for communities.
 - Transport** – Rivers act as natural routes for boats and trade.
 - Daily Use** – Rivers give water for drinking, cooking, and washing.
 - Culture & Recreation** – Rivers are used for fishing, cultural practices, and leisure activities.
- In which one way is an active volcano dangerous to people living around it.
May release hot ash and lava destroying life and property.
- Name the arm of the Great Rift Valley which passes through Uganda
Western arm/Albertine Rift Valley
- Name the type of mountain formed as a result of the process below



Block mountain

- Name one resource from lakes
 - Fish** – Lakes provide fish such as tilapia and Nile perch, which are food and a source of income.
 - Water** – Used for drinking, cooking, washing, and irrigation.
 - Transport** – Boats and ferries use lakes as routes for moving people and goods.
 - Hydroelectric Power** – Water from lakes (e.g., Lake Victoria) helps generate electricity.
 - Tourism** – Lakes attract visitors for activities like fishing, swimming, and sightseeing.
 - Building Materials** – Papyrus and reeds from lake shores are used for making mats, baskets, and roofing.
 - Salt** – Some lakes (like Lake Katwe) provide salt through evaporation.
 - Cultural Value** – Lakes are important in traditions, stories, and ceremonies.
- Name any one type of grassland that covers a large portion of Africa
Savanna

7. Give any one factor that brings about difference in the vegetation distribution in mountainous regions
 Rainfall
 Variation of temperature
8. Which mountain forms a natural boundary between Rwanda and Uganda?
 Mount Muhabura
9. Name any one river that follows out of Lake Kyoga
 R. Nile
10. Use the sketch map of Uganda to answer the questions that follow

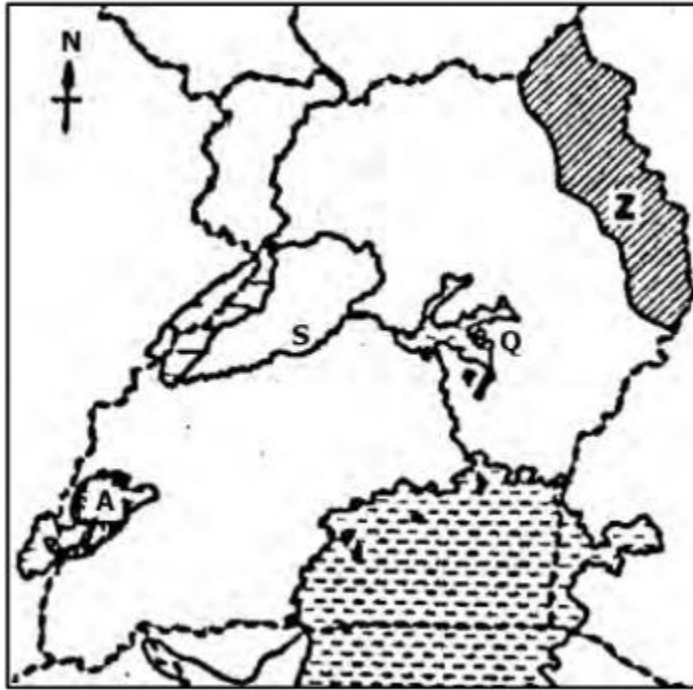


- (a) Name the natural forest in the area P
 Budongo Forest
 - (b) Mention any two reasons why the area around Lake Marked M is suitable for farming
 Reliable rainfall
 Fertile soil
 favorable temperature
 - (c) Use letter C to show Allbert Nile on the map.
11. Study the diagram below of a landscape and answer the questions that follow



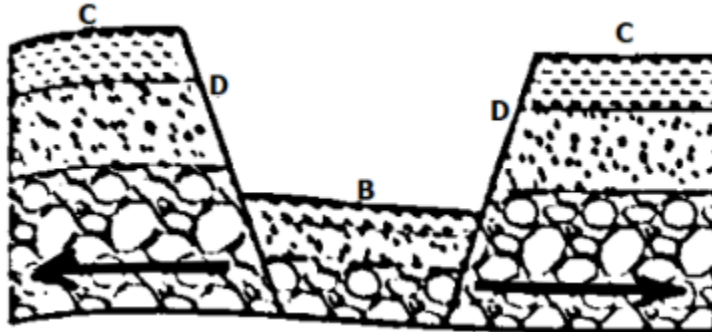
- (a) How can farmers of area marked A control soil erosion
 Terracing
 Strip cropping
 Planting trees
- (b) State one challenge faced by people living in area marked B
 Flooding, water borne diseases, high temperature

12. Study the sketch map of Uganda below and then answer the questions that follow



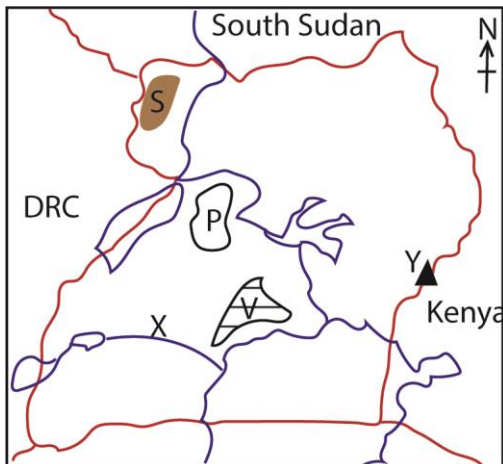
- (a) Name the national game park found in the area marked A
Queen Elizabeth National Park.
- (b) Why is the lake marked Q swampy with floating vegetation?
- (i) **Shallow depth** – Lake Kyoga is not deep, so water easily spreads into nearby lowlands, creating swamps.
 - (ii) **Flat terrain** – The land around the lake is flat, allowing water to stagnate and support swamp vegetation like papyrus.
 - (iii) **Heavy rainfall and flooding** – Rain and overflow from River Nile often flood the area, forming wetlands.
- (c) Name the river marked S.
R. Kafu
- (d) Why does the region marked Z experience semi-arid climate?
Receives low and unreliable rainfall
13. Mention any one benefit that people living near lake Katwe have
- Salt mining
- Tourism

14. The diagram below shows formation of a physical feature. Use it to answer the questions that follow.



- Name the process shown with arrow on the diagram
Earth is stretched by tensional forces
- Which physical feature is formed in the area marked B?
Valley
- What term is used to mean the slopes marked D on the diagram above?
Steep slopes
- State any one reason why area marked C is cooler than area marked B
C is at higher altitude than B

15. Study the sketch map of Uganda and use it to answer questions that follow



- Name the river marked X.
Katonga
- How was the mountain marked Y formed?
By volcanicity
- Give the major cash crop grown in the area marked S.
Tobacco

(d) Why does Robusta coffee grow well in the area marked V?

Fertile land, reliable rainfall, favorable temperature

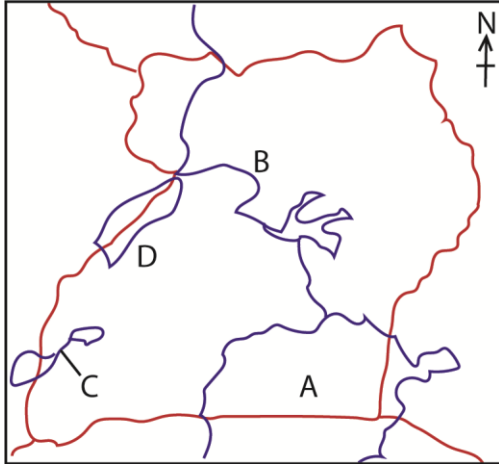
16. Which land form covers most area of Uganda?

Plateau

17. Give any one reason why the floor of the rift valley has high temperatures?

It is at low altitude

18. Study the sketch map of Uganda below and answer the questions that follow



(a) Name the feature marked with letters

B – R. Nile

C – Kazinga channel

(b) Why are many people living around the feature marked A

(c) Which mineral is mined in area marked D.

Crude petroleum oil

19. Mention any one problem people living in mountain areas face.

Land slides

Soil erosion

Difficulties in transport

20. (a) Into which Sea does R. Nile flow?

Mediterranean Sea

(b) State any two advantages of R. Nile to the people who live along it.

(i) **Water** – People use it for drinking, cooking, and washing.

(ii) **Farming** – Water from the Nile helps crops grow.

(iii) **Fishing** – Provides fish for food and selling.

(iv) **Electricity** – Dams on the Nile produce power for homes and schools.

(v) **Transport** – Boats use the river to carry people and goods.

(vi) **Tourism** – Visitors come to see places like Murchison Falls, bringing money to communities.

(c) Give any problem that people who live along R. Nile experience

- (i) **Floods** – Heavy rains make the river overflow, destroying homes and crops.
- (ii) **Diseases** – Stagnant water encourages mosquitoes, which spread malaria.
- (iii) **Dangerous animals** – Crocodiles and hippos in the river can attack people.
- (iv) **Accidents** – Boats sometimes overturn, causing people to drown.
- (v) **Crop destruction** – Floods wash away gardens and reduce food supply.

Thank You

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