Primary 6 Social studies

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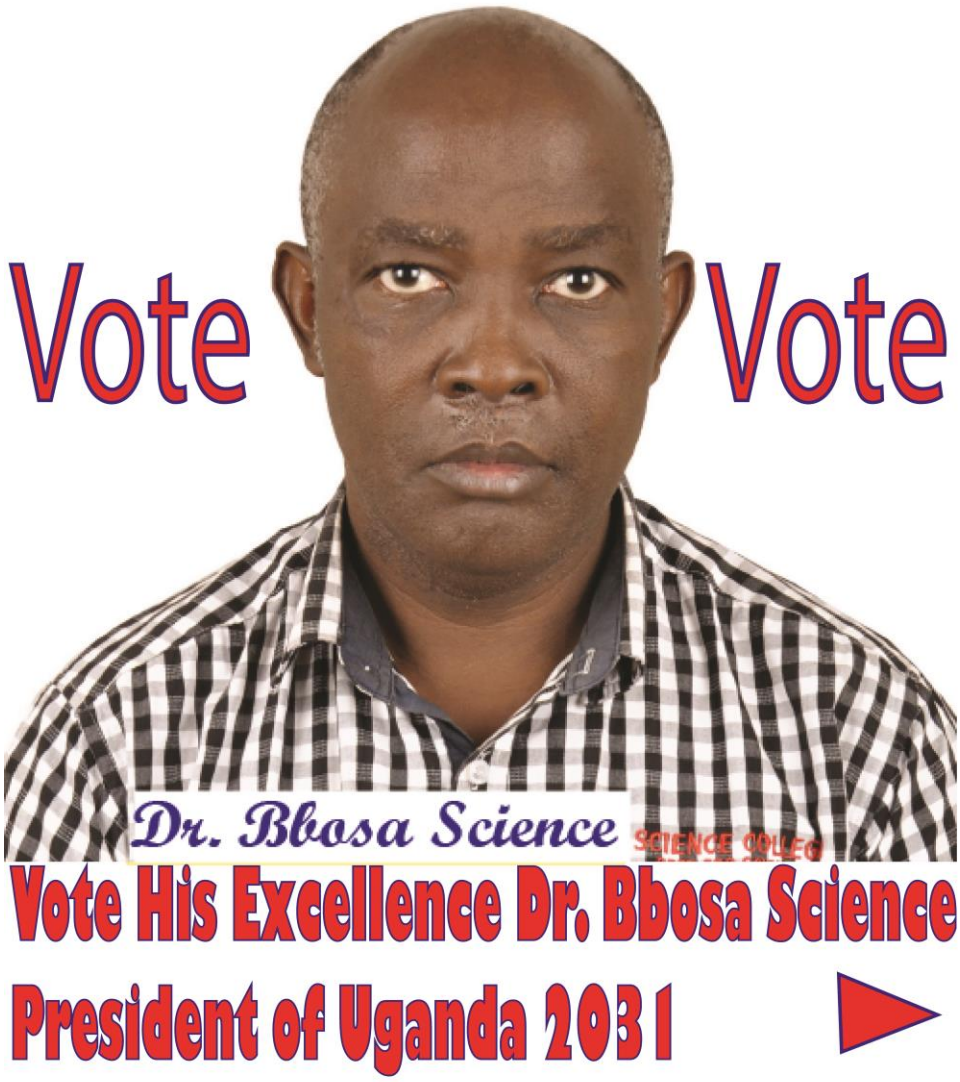

Term 3

Theme: LIVING TOGETHER IN EAST AFRICA

Topic 2/2: Responsible living in the East African Environment

Uses of the Environment in East Africa

In East Africa, the environment consists of **natural resources** (gifts of nature) that people use to satisfy their needs and develop the economy.

Land Resources

Coffee

Hospital

Land is the most important resource because all other activities take place on it.

(i) **Agriculture:** Used for growing food crops (maize, beans) and cash crops (coffee, tea, cotton).

(ii) **Settlement:** People build homes, schools, and hospitals on land.

(iii) **Transport:** Roads, railways, and airports are constructed on land to move goods and people.

(iv) **Industrialization:** Factories are set up on land to process raw materials.

Water Resources (Lakes and Rivers)

Fishing

Murchison Falls

East Africa is blessed with water bodies like Lake Victoria and the River Nile.

(i) **Fishing:** Providing a source of protein (food) and income for fishing communities.

(ii) **Hydro-Electric Power (HEP):** Rivers with waterfalls (like the Nile) are used to generate electricity.

(iii) **Domestic & Industrial Use:** Water is used for cooking, cleaning, and in factory cooling systems.

(iv) **Transport:** Some water bodies act as "highways" for moving heavy cargo by boat.

Vegetation and Forests

Wood fuel

Timber

(i) **Wood Fuel:** Trees provide firewood and charcoal, which are the main sources of energy for most rural homes.

(ii) **Timber:** Hardwood and softwood are used for building, making furniture, and utility poles.

(iii) **Herbal Medicine:** Many plants provide leaves and bark used to treat diseases.

(iv) **Climate Modification:** Trees help in the formation of rain through transpiration.

Wildlife and Tourism

Bwindi impenetrable national park

Serengeti National Park

(i) **Foreign Exchange:** National parks (like Serengeti or Bwindi) attract tourists who bring money into the country.

(ii) **Employment:** Wildlife resources create jobs for tour guides, rangers, and hotel staff.

Minerals

(i) **Raw Materials:** Minerals like limestone are used to make cement for building.
(ii) **Income:** Exporting minerals like gold and diamonds earns the government taxes and foreign exchange.

Exercise 1

1. **Define** the term *natural resource* and give two examples found in East Africa.
2. **Explain** how the River Nile is used to support industrialization in East Africa.
3. **Identify** two ways in which vegetation helps people living in rural areas.
4. **State** two economic benefits of protecting wild animals in national parks.
5. **What** is the most important use of land for a farmer in your local area?

Environmental Protection & Sustainability

This lesson covers how we can meet our current needs without damaging the planet for future generations.

Sustainable Use of the Environment

(i) **Afforestation:** Planting trees in areas where there were none before (and **reforestation**, which is replacing cut trees). This prevents soil erosion and helps absorb CO_2.
(ii) **Proper Farming Methods:**

- **Crop Rotation:** Changing crops annually to keep soil nutrients balanced.
- **Terracing/Contouring:** Farming across slopes to stop heavy rain from washing away topsoil.
- **Organic Farming:** Avoiding harsh chemicals that can poison the ground and water.

(iii) **Alternative Energy:** Moving away from fossil fuels (coal, oil) to "clean" sources like **solar, wind, and hydroelectric power**, which don't run out or pollute the air.

Environmental Conservation

Conservation is about protecting what we already have.

(i) **Wildlife Protection:** Creating national parks and laws against poaching.
(ii) **Water Conservation:** Reducing water waste and protecting wetlands (which act as natural water filters).
(iii) **Soil Conservation:** Using mulch or cover crops to keep soil healthy and in place.

Waste Management

Modern waste management follows the **3 Rs**:

(i) **Reduce:** Buy less and use less packaging.

(ii) **Reuse:** Use items multiple times (like glass jars or cloth bags).

(iii) **Recycle:** Processing materials like plastic, metal, and paper into new products.

(iv) **Sewage & Sanitation:** Treating wastewater before it enters lakes or rivers to prevent diseases (like cholera) and protect aquatic life.

Exercise 2

1. **Define** afforestation and explain one way it benefits the environment.
2. **Identify** two alternative energy sources that can replace wood fuel.
3. **Explain** how crop rotation helps maintain soil fertility.
4. **Compare** the difference between *recycling* and *reusing* a plastic bottle.
5. **What** is the danger of dumping untreated sewage into a nearby river?

The negative environmental practices

Poor Farming Methods

Agriculture is a major driver of environmental damage in East Africa.

(i) **Monocropping:** Planting only one type of crop on the same piece of land every year, which exhausts soil nutrients.

(ii) **Farming on Steep Slopes:** Cultivating on hills without using terraces leads to heavy **soil erosion**, as rain washes away the fertile topsoil.

(iii) **Bush Burning:** Setting fire to bushes to clear land for farming kills useful soil organisms and pollutes the air.

(iv) **Overgrazing:** Keeping too many animals on a small piece of land, which removes all grass and leaves the soil bare and prone to erosion.

Deforestation

Charcoal burning

Overgrazing

This is the massive cutting down of trees without replacing them.

(i) **Charcoal Burning:** Trees are cut in large numbers to produce charcoal for cooking in urban areas.

(ii) **Encroachment:** People settle or farm in protected areas like forest reserves and wetlands.

(iii) **Impact:** Deforestation destroys wildlife habitats and reduces the amount of rainfall.

Pollution

Pollution is the introduction of harmful substances into the environment.

(i) **Water Pollution:** Dumping untreated sewage, industrial chemicals, or plastic waste into lakes and rivers. In Lake Victoria, this has led to "dead zones" where fish cannot survive.

(ii) **Air Pollution:** Smoke from old vehicles and factories, as well as burning rubbish, makes the air dangerous to breathe.

(iii) **Soil Pollution:** Using too many chemical fertilizers and pesticides poisons the ground and kills beneficial insects like bees.

Wetland Drainage

Wetlands (swamps) act as natural filters and sponges that prevent flooding. Draining them for building or farming (like growing rice) causes:

(i) Increased flooding in nearby areas.

(ii) Loss of water for both people and animals during dry seasons.

Over-harvesting

Taking more from nature than it can replace.

(i) **Overfishing:** Using illegal, small-holed nets to catch young fish, which prevents them from breeding and growing the population.

(ii) **Poaching:** Illegal hunting of protected animals like elephants and rhinos for their ivory or meat.

Exercise 3

1. **Name** two poor farming practices that cause soil erosion.
2. **State** three reasons why people in East Africa cut down trees in large numbers.
3. **Explain** how dumping plastic waste in a river can harm the environment.
4. **Identify** two negative effects of draining wetlands for construction.
5. **Why** is overfishing considered a negative practice for the future of the fishing industry?

The National Environment Management Authority (NEMA)

The **National Environment Management Authority (NEMA)** is the main government agency in Uganda responsible for protecting the environment. It was established in **1995** to make sure that the country's natural resources are used wisely and kept safe for future generations.

Main Roles of NEMA

(i) **Coordination:** NEMA works with other government departments, schools, and local communities to manage environmental issues together.

(ii) **Monitoring:** It keeps a close eye on activities like farming, building, and factory work to ensure they do not damage the land, water, or air.

(iii) **Regulation & Enforcement:** NEMA creates rules (laws) and ensures everyone follows them. For example, it can stop someone from building in a wetland or fine a factory for dumping chemicals into a river.

(iv) **Environmental Impact Assessment (EIA):** Before any big project (like a new road or factory) starts, NEMA must study it to see if it will harm nature. If it's too dangerous, the project might be stopped or changed.

(v) **Education and Awareness:** NEMA teaches the public—including students in primary schools—about the importance of planting trees, managing waste, and protecting our wildlife.

NEMA smart lighting

How NEMA Works with Schools

NEMA encourages young people to become "ambassadors of change" through several activities:

(i) **Environmental Clubs:** Supporting schools to start clubs where children learn how to plant trees and recycle waste.

(ii) **Greening Initiatives:** Providing schools with tree seedlings, energy-saving stoves, and tools for water harvesting.

(iii) **Competitions:** Organizing quizzes, poems, and art contests to help students express their ideas about saving the planet.

Challenges Faced by NEMA

(i) **Underfunding:** Not having enough money to hire enough rangers or buy enough vehicles to reach all parts of the country.

(ii) **Poverty:** Many people depend on cutting trees or farming in wetlands just to survive, making it hard to enforce protection laws.

(iii) **Corruption:** Sometimes powerful individuals or companies ignore NEMA's rules and continue to degrade the environment.

Exercise 4

1. **What** does the abbreviation **NEMA** stand for?
2. **In which year** was NEMA established in Uganda?
3. **Mention two** functions of NEMA in environmental protection.
4. **How** does an "Environmental Impact Assessment" help in protecting nature?
5. **Identify** one way NEMA involves primary school pupils in conservation.
6. **State one** challenge that makes NEMA's work difficult.

Climate Change: Consequences and Solutions

Climate change refers to long-term changes in the Earth's average temperatures and weather patterns. While some changes are natural, "irresponsible living"—such as burning fossil fuels and destroying forests—has accelerated global warming to dangerous levels.

Consequences of Irresponsible Living

When we fail to protect our environment, we face severe disasters that disrupt our lives and safety:

(i) **Floods and Mudslides:** Heavy, unpredictable rains lead to **floods** in low-lying areas and **mud/landslides** on steep, deforested slopes, destroying homes and crops.

(ii) **Desertification:** Rising temperatures and droughts cause fertile land to turn into **deserts**, making it impossible to grow food.

(iii) **Pollution (Land, Water, and Air):**

- **Air:** Smoke from factories and cars causes respiratory problems.
- **Water:** Dumping waste into rivers leads to **water scarcity** and harms aquatic life.
- **Land:** Improper rubbish disposal and chemicals ruin soil health.

(iv) **Diseases:** Climate changes help spread **diseases** like malaria (as mosquitoes move to warmer areas) and waterborne illnesses like cholera after floods.

(v) **Resource Depletion:** Over-using trees for fuel and over-fishing leads to the **depletion** of the natural resources we need to survive.

(vi) **Overproduction of Children:** Rapid population growth in poor areas can put too much pressure on limited land and resources, making it harder for families to adapt to climate shocks.

Solutions to Environmental Problems

We can take action to restore the Earth and protect our future:

(i) **Switch to Renewable Energy:** Use solar, wind, or hydroelectric power instead of wood fuel or coal to reduce CO2 emissions.

(ii) **Afforestation:** Planting trees helps absorb carbon dioxide and prevents soil erosion and landslides.

(iii) **The 3 Rs (Waste Management): Reduce** what you use, **Reuse** items, and **Recycle** materials like plastic and paper.

(iv) **Water Conservation:** Protecting wetlands and harvesting rainwater ensures we have clean water during droughts.

(v) **Family Planning:** Educating communities on manageable family sizes helps reduce the pressure on natural resources.

(vi) **Education:** Teaching others about climate risks helps everyone prepare for disasters like floods.

Exercise 5

1. **Explain** how cutting down trees on a mountain can lead to a landslide during heavy rain.
2. **List** two types of pollution caused by irresponsible waste disposal.
3. **How** does desertification affect a farmer's ability to provide food for their family?
4. **Identify** one disease that becomes more common due to poor environmental management.
5. **Describe** one way using solar energy instead of charcoal helps the environment.

Environmental Degradation

Environmental degradation is the **deterioration of the environment** through the depletion of natural resources like air, water, and soil to the level when it can no longer support life. It occurs when we damage the planet faster than it can heal itself.

Common Types of Degradation

(i) **Soil and Land Degradation:** Loss of soil quality due to poor farming, overgrazing, and misuse of pesticides.

(ii) **Water Degradation:** Contamination of rivers and lakes by sewage, industrial waste, and plastic.

(iii) **Atmospheric Degradation:** The release of harmful gases from vehicles and factories that pollute the air we breathe.

(iv) **Loss of Biodiversity:** The destruction of natural habitats (like forests) leading to the extinction of plants and animals.

Main Causes

(i) **Human Activities:** This is the primary driver, including **deforestation** (cutting down trees), **overpopulation** (increased pressure on resources), and **unplanned urbanization**.

(ii) **Poverty:** Poor communities often have no choice but to exploit natural resources unsustainably, such as cutting trees for fuel.

(iii) **Natural Disasters:** Events like floods, droughts, and fires can also crush or change ecosystems.

(iv) **Industrialization:** Factories dumping chemicals and releasing smoke contribute heavily to air and water pollution.

Effects on Life

(i) **Impact on Health:** Pollution causes respiratory diseases (like asthma), while dirty water spreads illnesses like cholera.

(ii) **Food Insecurity:** Degraded soil produces fewer crops, leading to malnutrition and hunger.

(iii) **Water Scarcity:** As water sources become polluted or dry up, millions of people lose access to safe drinking water.

(iv) **Extreme Weather:** Degradation worsens the impact of disasters like floods, mudslides, and droughts.

Solutions and Mitigation

(i) **Environmental Education:** Teaching young people in schools to value and protect nature.

(ii) **Reforestation:** Planting trees to replace those that have been cut down.

(iii) **Afforestation:** Planting trees where they never existed to protect soil from erosion.

(iv) **Sustainable Practices:** Using the **3 Rs** (Reduce, Reuse, Recycle) and switching to clean energy like solar power.

(v) **Laws and Regulations:** Governments enforcing rules against illegal logging, poaching, and industrial dumping.

Exercise 6

1. **Define** environmental degradation in your own words.
2. **List** three human activities that lead to the loss of biodiversity.
3. **Explain** how poverty can act as a cause of environmental damage in rural areas.
4. **How** does water pollution directly affect human health and productivity?
5. **State** two ways primary school students can participate in preventing environmental degradation.

Revision Exercise

1. Name any one product that can be made from used plastics bottles.
   (i) Toys
   (ii) Pencil and pen case
   (iii) Carpets and door mat
   (iv) Tables and chairs
2. Write any one way in which people can reduce the destruction caused by storms.
   (i) **Plant Trees:** Trees act as windbreaks to slow down strong winds and their roots hold the soil to prevent erosion.
   (ii) **Build Strong Houses:** Use quality materials and ensure roofs are firmly latched down to resist being blown away.
   (iii) **Clear Drainage Channels:** Keep gutters and trenches clear of rubbish so rainwater can flow away easily without causing floods.
   (iv) **Avoid Deforestation:** Protecting existing forests helps regulate the local climate and reduces the intensity of storms.
   (v) **Early Warning Systems:** Listen to weather forecasts on the radio to prepare before a storm hits.
3. In which one way is an active volcano dangerous to people livings around it?
   (i) **Lava Flows:** Hot, molten rock can burn down houses, farms, and forests in its path.
   (ii) **Volcanic Ash:** Thick dust can collapse roofs, ruin crops, and cause breathing problems for people and animals.
   (iii) **Poisonous Gases:** Volcanoes release harmful gases that can make the air dangerous to breathe.
   (iv) **Mudflows (Lahars):** Melted ice or heavy rain mixed with ash can create fast-moving mud rivers that bury entire villages.
   (v) **Volcanic Bombs:** Large rocks thrown out of the vent can hit buildings or people.

4. State any one way in which human activity has reduced the amount of rainfall received in some parts of Uganda.

   (i) **Deforestation:** Cutting down trees reduces **transpiration** (the process where plants release water vapor into the air to form rain clouds).

   (ii) **Wetland Drainage:** Reclaiming swamps for farming or building destroys natural water reservoirs that provide the moisture needed for local rain.

   (iii) **Bush Burning:** Frequent fires destroy vegetation and release smoke that can interfere with how clouds form and drop rain.

   (iv) **Overgrazing:** When too many animals eat all the grass, the bare ground heats up quickly, causing moisture to evaporate before it can help form rain.

5. Mention any one way in which industries can reduce water pollution in an area.

   (i) **Treating Waste Water:** Using specialized tanks to clean chemicals and dirt out of water before pumping it into rivers.

   (ii) **Recycling Water:** Reusing the same water for different factory processes instead of drawing fresh water and dumping the old.

   (iii) **Proper Waste Disposal:** Ensuring solid waste and oils are taken to gazetted dumping sites rather than being washed into nearby streams.

   (iv) **Building Away from Water:** Setting up factories at a safe distance from lakes and rivers to prevent accidental spills.

6. State one reason why you would not advise fishermen to use herbs a method of fishing.

   (i) **It kills young fish:** The poison kills small fish before they can grow and breed, which reduces the future fish population.

   (ii) **It pollutes the water:** The toxic substances from the plants stay in the water, making it unsafe for people and animals to drink.

   (iii) **It is dangerous to eat:** People who consume fish caught with poison can suffer from food poisoning or other serious health issues.

   (iv) **It is illegal:** In Uganda, using poison or herbs to fish is a crime, and fishermen can be arrested or fined by the **Fisheries Department**.

7. How does afforestation reduce landslides on mountain slopes?

   (i) **Strong Roots:** Tree roots act like "anchors" or "glue" that hold the soil firmly together so it doesn't slide away.

   (ii) **Water Absorption:** Trees soak up excess rainwater from the ground, preventing the soil from becoming too heavy and muddy.

   (iii) **Breaking the Force:** Leaves and branches break the speed of falling rain, so it hits the ground gently instead of washing the soil down the slope.

8. State any one advantage of having Environment Management Club in a school.

(i) **Practical Learning:** Pupils learn hands-on skills like **planting trees**, making compost, and recycling waste.

(ii) **Spreading Awareness:** Members teach other students and the community how to protect nature and keep the school clean.

(iii) **Developing Leaders:** It helps students become **responsible citizens** who care for their surroundings from a young age.

(iv) **Beautifying the School:** The club helps in planting flowers and grass, making the school environment look neat and attractive.

9. (a) Name any one common natural disaster in Uganda.
flooding

(b) Mention any two human activities that cause disaster in Uganda.

(i) **Wetland Drainage:** Filling in or farming in swamps (wetlands) removes the "sponges" that naturally soak up excess rainwater.

(ii) **Deforestation:** Cutting down trees on hills and near rivers means there are no roots to hold water or leaves to slow down heavy rain.

(iii) **Poor Waste Disposal:** Dumping rubbish like plastic bags into drainage channels and trenches blocks the flow of water, causing it to overflow into streets and houses.

(iv) **Unplanned Construction:** Building houses and roads in areas where water is supposed to pass (waterways) or on steep slopes forces rainwater to find new, destructive paths.

(v) **Poor Farming Methods:** Farming along riverbanks or up-and-down steep hills makes it easy for rain to wash soil into rivers, making them shallow and prone to bursting their banks.

(b) Give one way of controlling disaster in mountain areas.

(i) **Practice Afforestation:** Planting trees on slopes prevents **landslides** because roots hold the soil together.

(ii) **Construct Terraces:** Building "steps" on steep land slows down running water, which stops **soil erosion**.

(iii) **Avoid Building on Slopes:** People should not build houses on very steep or unstable land that is prone to sliding.

(iv) **Protect Forest Cover:** Stopping people from cutting down trees on mountain tops keeps the soil firm and regulates rainfall.

(v) **Create Awareness:** Teaching local communities the dangers of **bush burning** and overgrazing on hills.

10. State any one way in which the use of biogas leads to conservation of natural vegetation.
Use instead of firewood and charcoal reducing deforestation

11. How is proper disposal of plastic and polythene bags useful to the environment?

(i) It **prevents blockage of drainage channels**, which stops flooding.
(ii) It **keeps the soil healthy** for crops because plastics do not rot and can stop water from reaching plant roots.

12. How does afforestation influence the climatic condition of a place?
(i) **increases rainfall** through transpiration (trees releasing moisture into the air)
(ii) **cools the area** by providing shade and absorbing heat.

13. Mention any one human activity that affects wild life.

(i) **Poaching:** Illegal hunting of animals for meat, skins, or tusks.

(ii) **Deforestation:** Cutting down trees destroys the homes (habitats) where animals live and find food.

(iii) **Encroachment:** Moving into protected areas like national parks for farming or building houses.

(iv) **Pollution:** Dumping waste in the environment can poison animals or make them sick

14. (a) State any two ways in which human activities can negatively affect the climate in an area.

(i) **Deforestation:** Cutting trees reduces **transpiration**, which leads to less rainfall and hotter temperatures.

(ii) **Bush Burning:** Releasing smoke and carbon dioxide into the air traps heat, causing **global warming**.

(iii) **Wetland Drainage:** Destroying swamps removes moisture from the local atmosphere, making the area **drier**.

(iv) **Industrial Pollution:** Fumes from factories and old vehicles pollute the air and contribute to **unpredictable weather** patterns.

(b) Give any two reasons why farmers should know the weather patterns in their area.

(i) **Plan Planting Time:** To know exactly when the rains will start so they can plant their seeds.

(ii) **Choose Crops:** To pick crops that grow well in that specific weather (e.g., drought-resistant crops for dry areas).

(iii) **Apply Chemicals:** To avoid spraying fertilizers or pesticides right before heavy rain washes them away.

(iv) **Protect Harvests:** To know when to harvest and dry their crops before the rain spoils them.

15. (a) Name any one place at school where waste materials can be deposited.

(i) **Dustbins:** Containers placed around the compound for daily rubbish.

(ii) **A Rubbish Pit:** A deep hole in the ground where waste is thrown and sometimes burned or buried.

(iii) **Recycling Bins:** Special containers for sorting items like **plastic bottles** or paper so they can be reused.

(iv) **A Compost Pit:** A place for fruit peelings and grass cuttings to rot and become **manure** for the school garden.

(b) State any two problems caused by poor waste management in schools.

(i) **Spread of Diseases:** Rotting rubbish attracts flies and rats, which spread illnesses like **cholera** and **diarrhea**.

(ii) **Bad Smells:** Decaying waste makes the school environment stinky and uncomfortable for learning.

(iii) **Blocked Drains:** Rubbish like plastic bags blocks water pipes, causing **flooding** and stagnant water where mosquitoes breed.

(iv) **Accidents:** Sharp objects like broken glass or rusty tins left lying around can cut and injure pupils.

(v) **Ugly Environment:** Litter makes the school compound look dirty and disorganized

(c) Why is recycling important in environmental management?

(i) **Reduces Waste:** It keeps rubbish out of **rubbish pits** and landfills, preventing them from filling up too fast.

(ii) **Saves Natural Resources:** Using old materials to make new things means we don't have to cut down more trees or mine more minerals.

(iii) **Prevents Pollution:** It stops plastic and metal from littering the soil and water, which keeps the environment clean for animals and people.

(iv) **Saves Energy:** Making products from recycled materials usually uses less electricity and heat than making them from scratch.

16. Mention one way on which drought affect cattle keepers in East Africa.

(i) **Lack of Pasture:** Grass dries up and dies, leaving cattle with nothing to eat.

(ii) **Water Scarcity:** Water holes and rivers dry up, making it hard for cows to find water to drink.

(iii) **Death of Livestock:** Many animals die from hunger, thirst, and diseases caused by a weak immune system.

(iv) **Loss of Income:** Cattle keepers lose money because they cannot sell healthy animals, milk, or beef.

(v) **Migration:** It causes **nomadic pastoralism**, where keepers must travel long distances into other areas to find green grass and water.

17. State any one way in which vegetation is controlling soil erosion.

(i) **Roots as Anchors:** Tree and grass roots hold the soil particles firmly together so they aren't easily washed away.

(ii) **Breaking Rain Force:** Leaves and branches act like an umbrella, slowing down raindrops so they hit the ground gently.

(iii) **Slowing Runoff:** Plants on the ground act as barriers that slow down flowing water, giving it time to soak into the soil instead of carrying it away.

18. (a) Name the source of solar energy.

Sun

(b) Name any two uses of solar energy.

(i) **Lighting:** Powering bulbs in homes, schools, and on streets at night.

(ii) **Cooking:** Using solar cookers to prepare food without needing firewood or charcoal.

(iii) **Heating Water:** Solar heaters provide warm water for bathing and washing.

(iv) **Powering Appliances:** Running TVs, radios, and charging phones.

(v) **Water Pumping:** Using solar-powered pumps to get water from boreholes for farming.

(c) Give any one advantage of using solar energy over hydro-electricity.

(i) **Free and Available Everywhere:** You can get solar power anywhere the sun shines, even in remote villages where power lines (poles) haven't reached.

(ii) **No Monthly Bills:** Once you buy the solar panel, you don't have to pay a company like **Umeme** every month for the electricity you use.

(iii) **Low Maintenance:** Solar panels have no moving parts and are easier for a home or school to look after compared to a huge dam.

(iv) **Reliable during Drought:** Hydro-electricity can fail if water levels in the river drop, but solar power keeps working as long as there is daylight.

19. Give any one reason why some wild animals are killed in the National Game Parks.

(i) **Poaching:** People hunt them illegally for valuable parts like **ivory (tusks)**, skins, or horns to sell.

(ii) **Bushmeat:** Some people kill animals to get meat for food.

(iii) **Problem Animal Control:** Rangers may kill an animal if it becomes very dangerous and starts attacking people or nearby villages.

(iv) **Culling:** Sometimes the government kills a few animals to prevent **overpopulation**, which protects the grass and water for the other animals.

20. Apart from cultivation, state one other way in which people misuse swamps in Uganda.

(i) **Building houses and factories:** Filling swamps with soil (reclamation) to create land for construction.

(ii) **Dumping rubbish:** Using wetlands as places to throw plastic bags, sewage, and industrial waste.

(iii) **Brick making:** Digging up the clay soil, which leaves behind deep pits and destroys the swamp's structure.

21. (a) Give any two disasters which can affect the settlement in an area.

(i) **Floods:** These destroy houses, roads, and bridges, forcing people to move to higher ground.

(ii) **Landslides/Mudslides:** Heavy soil slides down mountain slopes, burying homes and villages.

(iii) **Drought:** Lack of water and food makes an area difficult to live in, leading to migration.

(iv) **Earthquakes:** Shaking of the ground can collapse buildings and kill people.

(v) **Fires:** Large bush or forest fires can quickly burn down settlements and property.

(vi) **Strong Storms/Wind:** Heavy winds can blow off roofs and bring down trees on houses.

(b) Mention any two ways in which government can assist the people affected by natural disasters.

(i) **Providing Emergency Relief:** Giving out **food**, clean water, blankets, and medicine to those who have lost everything.

(ii) **Providing Temporary Shelter:** Setting up **tents** or using public buildings like schools to house people whose homes were destroyed.

(iii) **Restoring Services:** Repairing damaged **roads, bridges, and power lines** so that help can reach the area.

(iv) **Resettlement:** Moving people from dangerous areas, like steep mountain slopes, to **safer land** provided by the government.

(v) **Financial Support:** Giving small grants or seeds to farmers so they can **replant crops** and start earning money again

22. Mention any human activity which causes the number of wild animals to reduce in National Game parts.

(i) **Poaching:** Illegal hunting of animals for their **meat, ivory, or skins**.

(ii) **Encroachment:** People entering the parks to **farm or build houses**, which takes away the animals' homes.

(iii) **Deforestation:** Cutting down trees inside or near the park, destroying the **natural habitat** and food sources.

(iv) **Pollution:** Dumping waste or chemicals that can **poison** the animals or their water supply.

23. Give any one reason why people should not settle in swamps.

(i) **Risk of Flooding:** Swamps are natural water collectors; houses built there are easily destroyed by **floods** during rainy seasons.

(ii) **Disease Outbreaks:** Stagnant water is a breeding ground for **mosquitoes** (malaria) and snails (bilharzia), which makes people sick.

(iii) **Poor Foundation:** The soil in swamps is soft and watery, causing buildings to **crack or sink**.

(iv) **Environmental Damage:** Settling in swamps destroys "nature's sponge," leading to **water scarcity** and the loss of fish and birds.

24. Write any one responsibility carried out by the National Environment Management Authority (NEMA).
To **ensure that the environment is protected** by making and enforcing rules against activities like building in wetlands or illegal tree cutting

25. (a) What do you call a place where weather is recorded?
Weather station

(b) Write any two elements of weather which are recorded at the place you have named in (a) above.

(c) Mention any one way the recorded information about weather benefit the people in the community.

(i) **Helping Farmers Plan:** It tells them the best time to **plant seeds** or harvest crops based on when rain is expected.

(ii) **Safety and Preparation:** It warns people about coming **storms or floods** so they can protect their homes and stay safe.

(iii) **Planning Travel:** People can decide when to travel safely, and pilots or sailors use it to avoid dangerous weather.

(iv) **Health Awareness:** It helps people know when to prepare for **disease outbreaks** (like malaria) that happen during specific weather seasons.

26. Name any one feature on a river that helps in generation of hydro-electric power.
Water fall/rapids

27. How are forests important to carpenters?
Provides timber for making furniture

28. Give any one danger of fishing using poison.

(i) **It kills all fish:** It destroys young fish and eggs, which means there will be no fish left to catch in the **future**.

(ii) **It is harmful to humans:** People who eat fish caught with poison can get **severely sick** or even die from the chemicals.

(iii) **It pollutes water:** The poison makes the water **unsafe** for people and animals to drink or use for bathing.

(iv) **It is illegal:** Fishermen caught using poison can be **arrested** and lose their fishing licenses.

29. What is the greatest cause of environmental degradation in most parts of Africa?
Deforestation
Overgrazing

30. (a) Write any two causes of famine in Africa

(i) **Prolonged Drought:** Long periods without rain cause crops to wither and die.

(ii) **Pests and Diseases:** Insects like **locusts** or diseases like **cassava mosaic** destroy large amounts of food in the garden.

(iii) **Civil Wars:** Fighting forces farmers to flee their land, meaning no food is planted or harvested.

(iv) **Poor Farming Methods:** Overusing the soil without adding manure makes the land too weak to grow healthy food.

(v) **High Poverty:** Many people cannot afford to buy seeds, fertilizers, or food when their own harvest fails.

(vi) **Poor Food Storage:** Much of the food harvested is wasted or rots because there are no proper **granaries** or silos.

(b) State two ways in which illiteracy may lead to poor farming practices.

(i) **Wrong chemical use:** Farmers cannot read instructions on **fertilizers** or pesticides, leading to soil damage.

(ii) **Missing modern tips:** They cannot read **weather reports** or new farming guides.

(iii) **Poor records:** They cannot track **harvests** or costs to improve their business.

(iv) **Sticking to old ways:** They may not know about better methods like **crop rotation**.

Thank you

Dr. Bbosa Science

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