



SOCIAL STUDIES

Grade 6 Student Textbook

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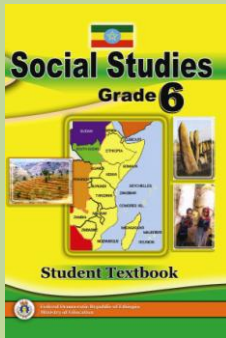
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UNIT

1

THE LOCATION, SETTLEMENT AND PEOPLE OF EASTERN AFRICA

Unit Outcomes

After studying this unit you will be able to:

- Identify the location of Eastern African countries;
- Appreciate ancient civilization and heritages in Eastern Africa;
- Be aware of the difficulties of conserving heritages;
- Recognize the effects of climate and natural resources on settlement and livelihood in Eastern Africa.

Competencies: After studying this lesson, you will be able to:

- Describe the relative location of Eastern Africa.
- List the countries of Eastern Africa.

Key Terms

↪ Location

↪ Relative location

In grade five, you had lessons dealing with the location and countries of the Horn of Africa, the Earth and its surroundings, Our Environment and Public Agenda. This year, you are going to learn more about the Location, Settlement and Peoples of Eastern Africa, Earth, Our home, Our Environment as well as Public Agenda.

◆ Relative Location

- What is relative location?
- Determine the relative location of your residence in relation to others.
- Is it necessary to use a reference point to determine the relative location of an object or a place?
If your answer is yes, explain how necessary it is.

Relative location: It is the location of a place determined in reference to adjacent land masses and water bodies. It is best explained in terms of cardinal points with regard to the adjacent land masses and water bodies. Cardinal points include North, East, South and West. These points determine general direction. Between cardinal points, there are sub divisions that help explain correct or precise direction. These include NE, SE, NW and SW. Identify these sub divisions from Fig 1.1. The subdivisions are also known as subsidiary points. Between the cardinal and subsidiary points, there are further sub divisions which include NNE, SSE, NNW and SSW, etc. They show much more precise directions.

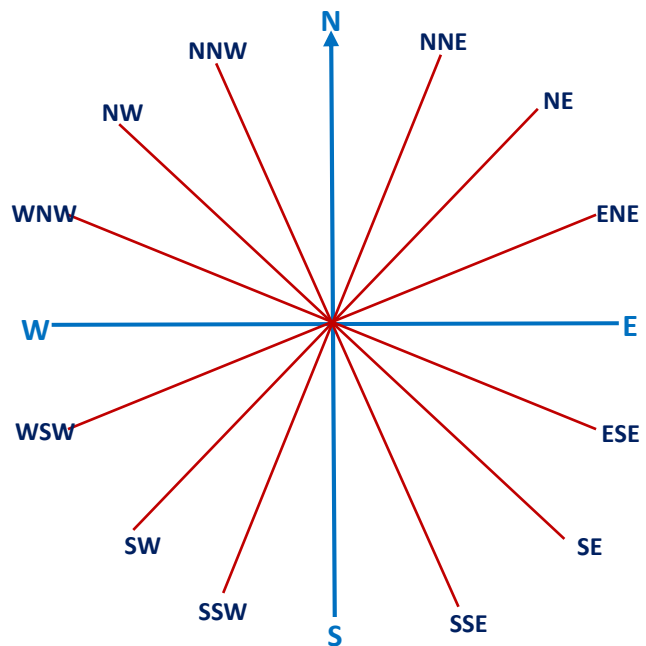


Fig. 1.1 Cardinal Points

- What is the relative location of Eastern Africa?

Eastern Africa is located to the **north** of southern Africa, to the **south** of the Red Sea, to the **South east** of northern Africa, to the **east** of central Africa and to the **west** of Indian Ocean (See Fig. 1.2).

Figure 1.2 shows the regional divisions of Africa. Eastern Africa is clearly shown in yellow shade.

Eastern Africa is divided into three sub regions. They are:

- The Great Lakes Region, which includes Uganda, Kenya, Tanzania, Rwanda, and Burundi.
- Horn of Africa, which consists of Ethiopia, Eritrea, Djibouti, and Somalia.
- The Indian Ocean islands, which are composed of Comoros, Reunion, Seychelles, Mauritius, Madagascar, and others.

However, more recently, countries like Malawi and Mozambique are included in this region (Look at Fig. 1.2. It shows the regional divisions of Africa). How are the sub regions of Eastern Africa distinguished from one another? The distinguishing factors that make one sub region different from the other are based on types of vegetation, availability of water and topography.

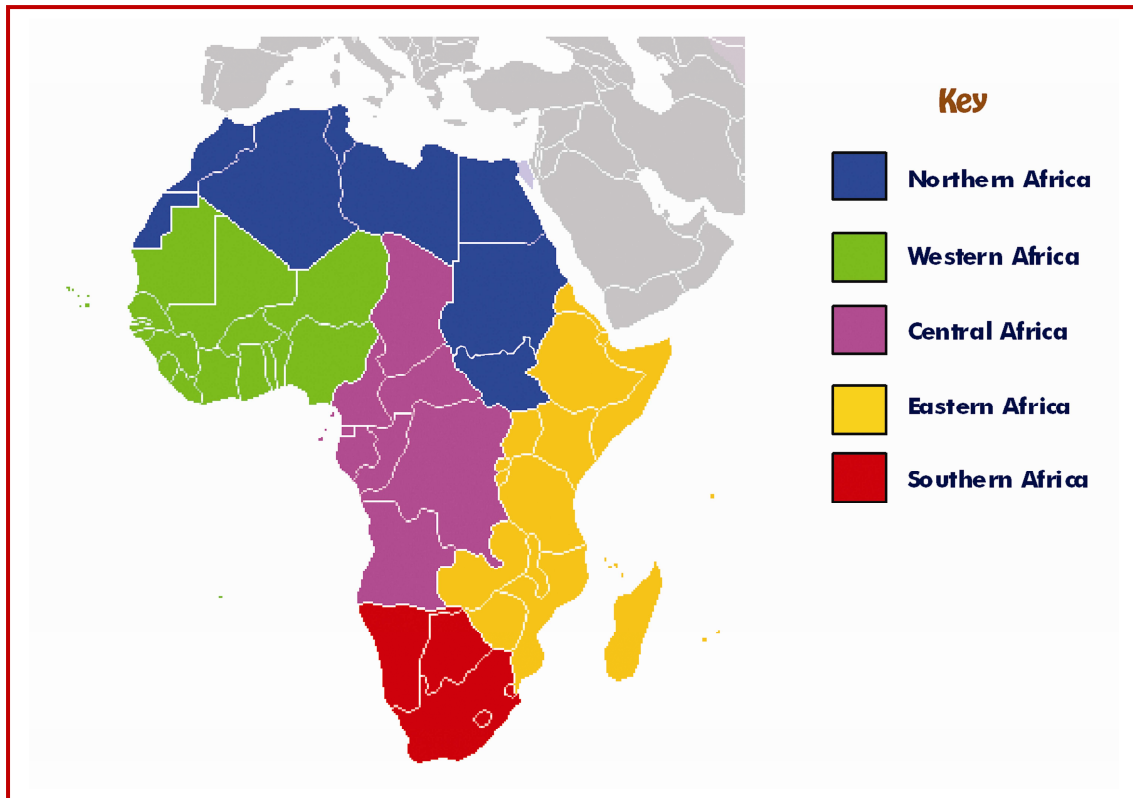
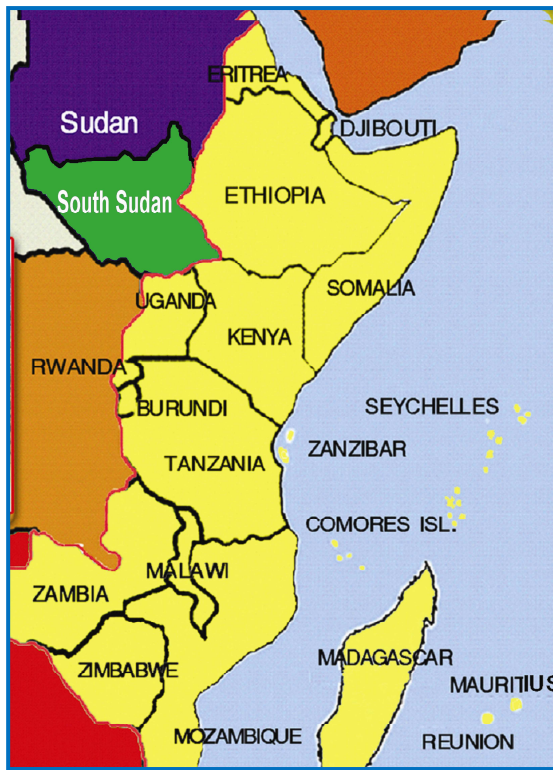


Fig. 1.2 Regional Divisions of Africa

Source: Geography student textbook, Grade 11, 2001

Study the following map carefully. They show major areas included in Eastern Africa. Fig. 1.3 (a) shows the Horn of Africa which includes Ethiopia, Eritrea, Djibouti, Somalia and the Great Lakes Region which includes Uganda, Kenya, Tanzania, Rwanda and Burundi.



Key

parts of Eastern Africa

Fig.1.3 (a) Major Parts of Eastern Africa



Fig.1.3 (b) Political Map of Africa

As shown in Fig.1.3, 'a' and 'b', you can study the relative location of Eastern Africa in relation to land masses and water bodies. Thus, the relative location of a place, country or region is explained in terms of adjacent landmasses and water bodies. In the absence of water bodies, relative location can also be explained in relation to neighboring countries. In order to explain relative location, you need to have a well known reference point. Cardinal points such as North, South, East and West are also important to explain relative location as indicated in Fig 1.1.



Location means the position an object or a place occupies.

Lesson

1.1

Review

Activity A

A. Questions based on facts:

- Determine the location of your school.
 - Label the reference points.
- Where do you find your house?
 - Determine the important reference points that help you fix the relative location of your house.

B. Things to do:

- By referring to Fig 1.2 describe the general boundary of Eastern Africa.



◇ Countries of Eastern Africa

- How many countries are included in Eastern Africa?
- Mention the islands included in Eastern Africa.

The continent of Africa could be divided into many parts based on regional classification (see Fig. 1.2). Therefore, Eastern Africa is one of these regions. It includes Ethiopia and other Eastern African countries. In grade five, you had lessons on the countries of the Horn of Africa. Do you remember their names? They are Ethiopia, Djibouti, Somalia and Eritrea. In the same way, can you list names of countries of Eastern Africa? They are Eritrea, Ethiopia, Djibouti, Somalia, Kenya, Uganda, Burundi, Rwanda, Tanzania, and some other countries which are located in the extreme south along the eastern coast of Africa. Eighteen countries are included in Eastern Africa. (See Table 1.1). Countries of Eastern Africa stretch from Eritrea in the north up to Mozambique in the south (See Fig. 1.3(b)).

Table 1.1 Countries of Eastern Africa

- Burundi	- Ethiopia	- Uganda	-Madagascar	- Reunion	Mozambique
- Djibouti	- Somalia	- Rwanda	- Malawi	- Mauritius	Zambia
- Eritrea	- Kenya	- Tanzania	- Comoros	- Seychelles	Zimbabwe

Lesson

1.1

Review

Activity B**A. Questions based on Facts:**

- Make a list of the names of the countries of Eastern Africa.

B. Things to do:

- On the outline of map of Africa given in fig 1.4:
 - show the water bodies that surround Eastern Africa;
 - indicate countries of Eastern Africa;
- Look at Fig 1.3 (b), which islands are located to the north west of Madagascar?

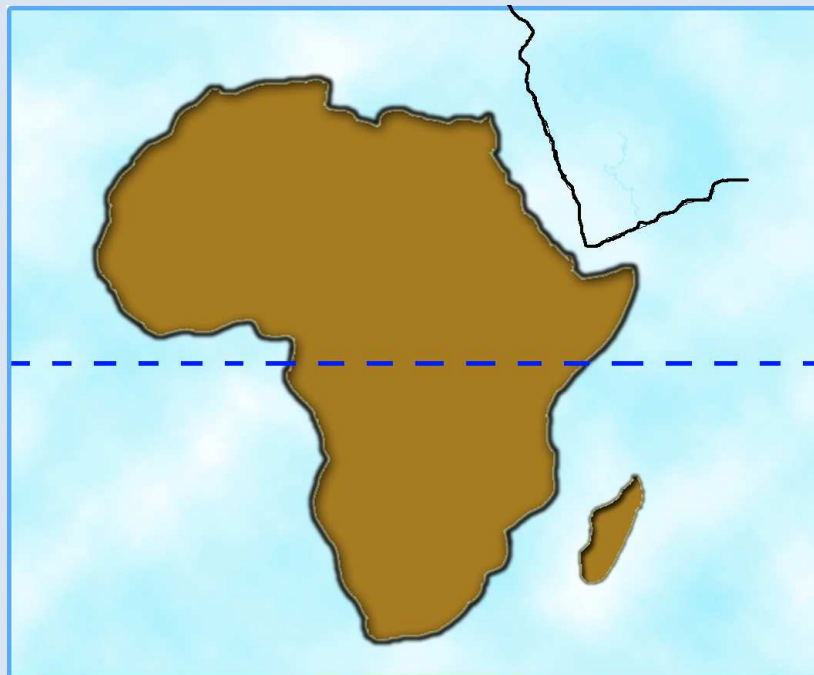


Fig 1.4 Outline map of Africa

Competencies: After studying this lesson, you will be able to:

- Distinguish the time and major features of Nubian civilization from Aksumite civilization.
- Identify the major heritage of ancient civilization of Eastern Africa.

Key Terms

- ↔ Heritage
- ↔ Civilization

◆ The Ancient Civilizations of Nubia and Aksum

- What is civilization?
- Using the historical map of Africa, (Fig 1.5) show the location of Nubia and Aksum.

In the past, there were two great civilizations in Eastern Africa. One of them was known as Nubian civilization. Nubia was part of the present Republic of the Sudan (see Fig 1.5). The second civilization was centered in Aksum, Ethiopia. Thus, in this section you are going to learn about these two civilizations.

1. Nubian/Kush Civilization and Heritage

- Where is Nubia located?
- What is Heritage?

Nubia is located to the west of the Red Sea and to the North West of Meroe and Ethiopia. It roughly occupies both sides of the Nile River valley that lies between Khartoum and Aswan-Egypt. Today, the region in Northeastern Sudan is known as the Nubian Desert.



Fig. 1.5 Historical Map showing the relative location of Nubia and Aksum

- Explain the relative location of Nubia in relation to the Red Sea, Meroe and Aksum.
- State the relative location of Aksum in terms of the Red Sea, Adulis, Yeha and Nubia.

◆ The Kush State

- What does the word Kush remind you with regard to languages spoken in Ethiopia?

Once upon a time Nubia was under the Egyptian rule. In due course of time, the Nubians revolted against the Egyptians and became independent in the 8th century B.C. Then, they built a very powerful state called **Kush**. The first capital of Kush was called **Napata**. Between 726B.C. and 666BC, the Kush became very powerful. During this period, they ruled over large territory including Ancient Egypt.

The Nubian Desert, which is found in Northeastern Sudan now, was part of the ancient region of Nubia. Many temples were constructed in the desert before 600 A.D. Prior to the conversion of the inhabitants of Nubia to Christianity, the temple in Fig 1.6 was devoted to a lion god.



Fig. 1.6 Temple in the Nubian Desert

◆ Meroetic Civilization

- Where was Meroe located?

After 666 B.C, the Kush expanded their territory towards the South. The capital city was also shifted to the Eastern bank of the Nile. It was then called **Meroe**. Meroe was located 150 kilometers north of Modern Khartoum. In the new territory, the Kushite civilization lasted for more than one thousand years. This civilization was then commonly known as the **Meroetic Civilization**.

The Kushite people of Ancient Sudan built pyramids to house the bodies of dead kings (See Fig. 1.7). The pyramids were located in Meroe. The Kushite civilization developed from about 1000 B.C to 350 A.D. But, their culture was totally influenced by the Ancient Egyptians.

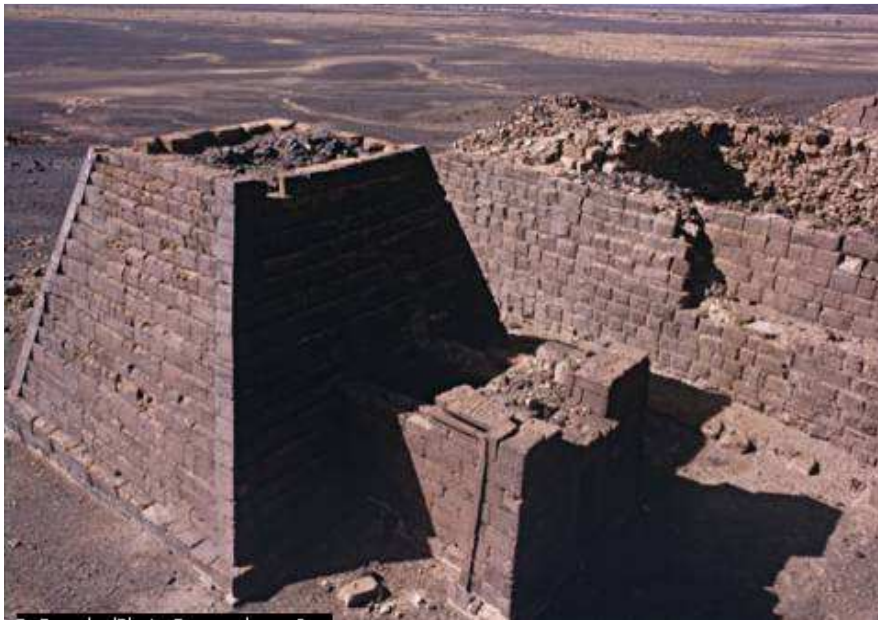


Fig. 1.7 Remains of Pyramids in Sudan

Meroe was well known for its iron technology. It had large deposit of iron ore. The people of Meroe smelted iron by using charcoal. They used to make different artifacts (like Fig 1.8).

Trade was the most important economic activity of people in Ancient Meroe. In this regard, the port of Adulis served as an outlet for the Meroetic trade. The export of Meroe included ivory, slaves, animal skins, ostrich feathers, iron tools and gold.

Beginning from the 200 A.D., Meroe declined. The main reason for its decline was the rise of a rival state called Aksum. In the middle of the 4th century A.D, Aksum invaded Meroe. During the invasion, the city of Meroe was burnt and this led to the down fall of the Ancient kingdom of Kush.



Fig. 1.8 Silver Nubian Crown

Lesson

1.2

Review

**Activity A****A. Questions based on facts:**

- What were the most important contributions of the ancient civilization of Nubia to Eastern Africa?
- How did the rise of Aksum bring the decline of Meroe?
- How did Nubia become independent?
- Where did the Nubian civilization emerge?
- Name the first capital city of the Kush state.

B. Things to do:

- Write a short note on the most important achievements of the Nubian civilization.

2. The Aksumite Civilization and Heritage

- What does the name Aksum remind you in today's Ethiopia?

Aksum civilization was another ancient civilization in Eastern Africa. The name Aksum refers both to the state and its capital city. The civilization of Aksum emerged around 200 B.C.

The Aksumite society was made up of peasants, landlords, merchants and slaves. At first the economy of Aksum was based on agriculture. But later on trade became the most important source of income to the rulers.

Aksum had strong contact with different parts of the world. This contact was mainly strong with South Arabia and the Greco-Roman World. As a result of this contact, Aksum became one of the first places in the world where both Christianity and Islam were introduced.

The breakdown of Meroe made Aksum the single powerful state in Eastern Africa. Thus, Aksum controlled the former provinces of Meroe. Beyond the Red Sea, the Aksumites also ruled over South Arabia. Aksumite power began to decline since the late 7th century A.D. But the weak state of Aksum survived in the region upto the middle of the 12th century.

The Aksumite civilization had produced a lot of heritages. Most of them are still available. Ancient Aksumites developed alphabets. They were called the Sabeen Alphabets. These alphabets are still used in the Semitic languages of Ethiopia.

In order to promote trade, the Aksumite kings produced their own currency. They made coins of gold, silver and bronze (Fig 1.9).



Fig. 1.9. Coins of Aksum

The Aksumites also built houses, palaces and temples from stones. Moreover, they produced beautiful stone obelisks. The obelisks were carved out of a single and large rock. These are found a few kilometers away from the present city of Aksum. Such monuments were used to mark royal tombs and were erected at grave yards.

Among the Aksumite obelisks, three of them are of the finest style. The largest obelisk is 33 meters tall. But, since, ancient time it lay broken into three pieces. The second largest obelisk is 25 meters tall. However, it was taken to Rome during the Italian occupation, in 1937 G.C. Then, in 2005 it was brought back and erected in its place of origin. The third largest obelisk is still standing. It is 24 meters tall.

a) Broken Aksumite obelisks



b) Standing Aksumite obelisks

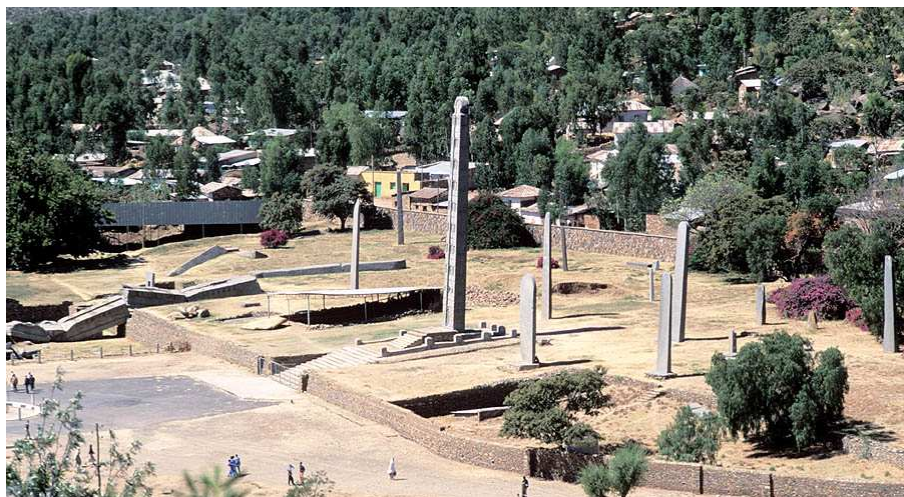


Fig. 1.10 Aksumite obelisks

Lesson

1.2

Review

**Activity B****A. Questions based on facts:**

- Where do you find Aksum?
- Did Aksum have any medium of exchange? Mention them.
- Which languages of Ethiopia use the Sabian alphabets at present?
- Compare the differences and similarities between the Nubia and Aksum civilizations.
- List the heritages of the civilizations of both Aksum and Nubia.
- State the contributions of the Aksumite civilization to Eastern Africa.
- What was the most important factor that contributed to the rise of the Aksumite civilization?

B. Things to do:

- Draw a sketch map of Africa and show the location of the Aksumite civilization.
- Write a short note on the most important achievements of the Aksumite civilization.

The Protection and Preservation of Heritage Sites and Problems Encountered

Competencies: After studying this lesson, you will be able to:

- State the problems that heritage sites face.
- Explain the methods used in some areas to protect historical sites.

Key Terms

↔ Movable Heritages

↔ Immovable Heritages

As mentioned earlier, Nubian and Aksumite civilizations had left behind a lot of heritages. Today, people can benefit from such heritages in many ways. Next, you will learn types, methods of protection and preservation of heritages and problems associated with heritages preservation.

◆ Types of Heritages

- What is heritage?
- Who makes heritages?

Heritages are both human-made and natural. The human-made heritages are the products of human activities. For example, churches, mosques, palaces, coins, obelisks, tools, weapons and written documents are produced by people. But, natural heritages are heritages found naturally. They include animals, water falls, lakes and rivers, forests as well as caves.

Human-made and natural heritages may be grouped into two. They include moveable and immoveable heritages. Some heritages can be moved from place to place easily. For example, ancient coins, weapons, tools or documents are easily movable. Among natural heritages, animals can be moved from place to place. On the other hand some of human made and most natural heritages are immoveable. To understand this you can see examples given in Table 1.2.

Table 1.2 Immovable Heritages

Human – made	Natural
Palace	Caves
Tomb	Water falls
Mosque	Lakes
Monastery	Mountains
Obelisk	Archeological sites
Lakes	

Places where immovable heritages are found are called Heritage Sites. Such heritage sites are affected by both natural and human made hazards. Some of the natural hazards are earthquake, volcanic eruption, wildfire, floods and land slides. On the other hand, human made hazards include robbery, intentionally setting fire, farming and grazing on heritage sites.

◆ Protection and Conservation of Heritages

- **Why do we need to protect and conserve heritages?**

Heritages and heritage sites need protection and conservation. Well protected and conserved heritages and heritage sites are reliable tourist attraction sites. Thus, such heritages and heritage sites are sources of income.

As heritages and heritage sites face problems caused by visiting people, they need protection and conservation. The problems faced may be robbery, pollution, destruction of materials and carving or scratching.

In general, the well being of historical sites could be maintained by keeping the sites clean and tidy, by organizing responsible individuals who are watchful to protect the sites and the materials. Moreover, historical sites and heritages may be protected and conserved by fencing the sites from being robbed and by keeping the movable heritages in museums, where well guarded display boxes are fixed.

Educating the visiting public

People often come to visit heritage sites. As heritage sites are invaluable for each region and the country at large, people who visit them must be trained. Moreover, the heritages signify the identity of the people who live around them. Thus, visitors have to be informed that the artifacts and the heritages sites they have come to visit have stayed longer because they have been preserved by people who live around them. Thus, visitors have to be educated strictly with regard to:

- Keeping heritages and heritage sites intact
- Throwing or putting any litter in waste baskets or in areas reserved for this purpose
- Avoiding bringing chemical products to heritage sites
- Avoiding bringing things that easily catch fire
- Keeping oneself well mannered to accept instructions given by concerned individuals before or while visiting heritage sites.

Case Study

Tiya Stone Monuments

Tiya is a group of finely shaped monolithic monuments. The site of the monuments is located south of Addis Ababa, in Gurage zone of the southern Nations, Nationalities and Peoples Regional State. The age of the monuments is estimated to be more than one thousand years. The Tiya site is fenced and well protected. Many foreign and domestic tourists visit the site annually.



Fig 1.11 Tiya Stone Monuments

Lesson

1.3

Review

Activity A

A. Questions based on facts:

- Mention major heritages of Ethiopia.
- What are the advantages of the Aksumite Obelisk and Lalibela Rock-hewn churches to present day Ethiopia economically, socially and politically?
- Name some of the natural and human-made hazards on heritages and heritage sites.
- What are cultural and natural heritages?
- Discuss the difference between moveable and immoveable heritages.

B. Things to do:

- Suggest ways of preventing some of the hazards on heritages and heritage sites.



There are different ways of protection and conservation of heritages. One is involving the stake holders in the protection and conservation. This could be done by preparing public information leaflets. You can supply the leaflets to the tourists upon their arrival. This is important for heritage sites that are not completely separated from residential areas. If, for example, you require a leaflet on how to behave at Aksum obelisk or other similar heritage sites the leaflet may look like the following.

Welcome Our Guests. We have a piece of information here. It gives you a list of not to do things in the site!

- ☞ Writing or scratching on heritages, trees or stone walls,
- ☞ Picking pieces of stones, bones or any other materials from the site,
- ☞ Taking photograph without permission,
- ☞ Leaving food remains,
- ☞ Throwing water bottles after using,
- ☞ Walking outside paved ways,
- ☞ Carrying weapons,
- ☞ What else: Yes! Yes!
- ☞ Toilet rooms are situated at convenient points,
- ☞ Be kind and be patient at check points!

Competencies: After studying this lesson, you will be able to:

- Identify densely and sparsely populated areas of Eastern Africa.
- Explain the causes and effects of population movement in Eastern Africa and Ethiopia.
- Distinguish factors for population concentration in the highlands of Ethiopia, Kenya and Tanzania.
- Identify the effect of rapid population growth in Eastern Africa.
- List effects of urbanization on society and culture.

Key Terms

↔ Distribution

↔ Urbanization

↔ Movement

↔ Early marriage

↔ Rapid growth

↔ Polygamy

◆ Population Distribution

- What does population mean?

In a given geographical space, we can find people living together. Such people may be the same or different in sex, age, colour, language spoken, work habit and standard of living. These distinguishing factors may make up a definite known population.



Population means number of people living in a particular area or place.

In Ethiopia, the population distribution follows varied patterns. There are places with scattered and dense population. For example, the Central Plateau lands are densely populated. However, the lowland areas have low or scattered population. On the other hand, urban areas are more densely populated than rural areas.

In Eastern Africa, its population is unevenly distributed. Compared with other sub-regions of Africa, Eastern Africa is most populous. According to 2009 population estimates, the region had a population of about 270 million people accounting for 30.6% of the continent's total population.

Population, in Eastern Africa, ranges from over 80 million in Ethiopia to 87,476 in Seychelles. Tanzania and Kenya are second and third most populous countries with 41 million and 39 million people respectively (See Table 1.3).

Table 1.3 Population Distributions in Eastern Africa

Name of region and Country	Area (km ²)	Population (2009 est.)	Density (per km ²)
Eastern Africa:	6,361,372	318,611,258	42.3
Burundi	27,830	8,988,091	322.9
Comoros	2,170	752,438	346.7
Djibouti	23,000	516,055	22.4
Eritrea	121,320	5,647,168	46.5
Ethiopia	1,106,000	80,237,338	71.2
Kenya	582,650	39,002,772	66.0
Madagascar	587,040	20,653,556	35.1
Malawi	118,480	14,268,711	120.4
Mauritius	2,040	1,284,261	629.5
Mozambique	799,380	22,894,000	28.6
Reunion	2,512	743,981	296.2
Rwanda	26,338	10,473,282	397.6
Seychelles	455	87,476	192.2
Somalia	637,657	9,832,017	15.4
Tanzania	945,087	41,048,532	43.3
Uganda	236,040	32,369,558	137.1
Zambia	752,614	12,935,000	17.2
Zimbabwe	390,759	12,521,000	32.0

(From Wikipedia, the free encyclopedia-a bit modified)

Study the Table 1.3 and answer the following questions.

- Which Eastern African country has the highest population?
- Which Eastern African country is most densely populated?
- Which Eastern African country is least densely populated?
- Which Eastern African country has the second highest population?

Generally, the highlands of Eastern Africa have low and mild temperatures as well as high rainfall than lowland areas and river valleys. Thus, they have dense population. But lowland areas and river valleys have low population densities. However, much of the population of Eastern Africa resides along coastal

areas which are engaged in light industries. Population density is the number of people living in one square kilometer area. See the population density for Eastern Africa in Table 1.3. Tourism is the main source of income in the coastal parts of most countries of Eastern Africa. Both agriculture and tourism account for nearly 50% of the gross domestic product of the region.

◆ Factors Affecting Population Distribution

- **Mention the factors that affect population distribution?**

Population distribution may be affected by two major factors. These are physical and human factors.

➤ Physical Factors

- **What are physical factors?**
- **Name some physical factors that affect population distribution.**

Usually human beings live close together in areas where the natural conditions offer a rich supply of food and other means of livelihood. But, in areas where difficult conditions prevail, human beings are not usually attracted to settle and reproduce their kind. The following are major physical factors that control population distribution:

Relief

High mountains and rugged terrains are unfavorable for settlement. Moreover, upper slopes of mountains do not encourage high population concentration. For example, in Ethiopia, Kenya and Tanzania such areas have low population concentration. This may be due to scanty vegetation cover as well as lack of thick organic matter in the soil. However, plateau lands are better settled than lowlands.

In contrast, the vast plateau lands of Eastern Africa encourage dense population distribution because of flat topography. This flat topography helps promote the development of agriculture and other economic activities.

Climate

Areas with high temperature and scanty rainfall have thin population. This is true of Eastern Africa. Mostly lowland areas are thinly populated. These places experience high temperature and low rainfall.

Sometimes, areas with high rainfall may not encourage high population concentration. For example, the equatorial rain forest area has low population density. It has dense vegetation cover and a variety of tropical diseases and poor soil.

Soil

The fertility of soil could encourage settlement while the infertility of soil discourages settlement. For example, alluvial soils or loess type soils give rise to dense agricultural population. Alluvial soil or alluvium is a river deposited fertile soil whereas, loess is a fine soil deposited by wind. In general, fertile soils function as a pull factor for population concentration. This condition encourages people's settlement permanently.



Lava or volcanic soils of the plateau lands and highlands of Eastern Africa have dense population. Similarly river valleys rich with alluvial soils are areas of population concentration. But, water logged and highly leached areas do not promote population concentration.

Water Supplies

Water is a basic factor affecting population distribution. The vast arid areas of Eastern Africa are almost uninhabited due to extreme lack of water supply. In Ethiopia, the Afar and Ogaden areas are thinly populated due to scarcity of underground water and scanty rainfall.

Prevalence of Diseases

Usually diseases can discourage dense settlement. In tropical Africa, certain areas are uninhabitable due to the prevalence of fatal diseases. For example, tsetse fly, which is prevalent in these areas, causes **trypanosomiasis** among cattle and **sleeping sickness** among people. In Eastern Africa, such diseases are common in the lowlands and coastal areas. Thus, such areas are less dense. Similarly, malaria has a devastating effect on human population in most parts of Eastern Africa. This disease is transmitted to human beings by the female anopheles mosquito (See Fig. 1.12).



Fig. 1.12 Female Anopheles Mosquito Sucking Blood

➤ Human Factors

- **What are the elements of human factors?**
- **How do they influence population concentration?**

Human factors influencing population distribution include economic, political and social factors.

Economic Factors

In most Eastern African countries, quarries and mines are run traditionally. Such areas have opened up job opportunities. Quarries and mines, in Eastern Africa, are found in rural areas. In order to earn their living, more and more people move from the countryside to such places. This movement creates imbalance on population distribution. However, in modern quarries and mines, most work is done with the help of machines. Hence there is no need for large labor force. It would also mean that such situation does not encourage large population concentration.

Political Factors

Political factors refer to policies set up by governments. For example, policies related to the construction of roads, buildings, the establishment of national parks and artificial lakes are important to mention. When such policies are implemented, people will be forced to abandon their original areas and settle either in inhabited places or in new areas.

Resettlement program makes people to move from one place to the other. This is done because of the loss of the natural resources in the place of origin. In general, the resettlement program is meant to save human lives and boost the level of productivity. However, without proper care such programmes may have negative effect on the host localities.

Social Factors

Early marriage and polygamy could increase the rate of reproduction. These factors have immense contribution to population growth and distribution.

Lesson

1.4

Review



Activity A

A. Questions based on facts:

- Explain population distribution.
- What are the factors that cause the imbalance of population distribution?
- Which areas are sparsely populated in Eastern Africa?
- Which areas are densely populated in Eastern Africa?
- List the physical factors that discourage population distribution in the highland and lowland areas.
- Discuss the effects of tsetse fly and female anopheles mosquito on population distribution.

B. Things to do:

- Conduct a field trip to nearby areas and identify the pattern of population distribution.
- Draw the sketch map of Eastern Africa:
 - Show the densely populated areas of Eastern Africa. When you plot the countries, you remember the lesson you have had on the population of Eastern Africa.

◆ Population Movement

- Why do you think that people move from one area to another?
- Pin point some factors that force people to leave their original areas.

Population movement may mean the movement of people to new lands. Such movement is caused by the aspiration of better income and the search for better life.



Population movement may mean the movement of people to other places to look for better income or life. Population movement can also be understood as migration.

➤ Rural-urban Migration

- What is the difference between rural and urban areas?
- Why are urban areas centers of attraction for rural dwellers?

In Eastern Africa, rural – urban migration is growing from time to time. Migration is usually caused by factors such as seeking for better jobs and life style. Generally, urban centers attract large numbers of rural migrants either as permanent settlers or as short-term workers.

➤ Rural-Rural Migration

- What are the pull factors for rural dwellers to move from one rural area to another rural area?

This movement of people is caused by the search for pasture and better agricultural land or life opportunity.

In Eastern Africa, human migration has started long ago. As a result of isolated development of groups of people, ethnic group appeared. Then, these people migrated from points of origin to different directions. For example, in the 16th century, the Oromo people moved from the South and South-East of Ethiopia to different directions of the country. The push factors could be internal conflicts over pasture and agricultural lands. In general, the movement of the Oromo people resulted in population pressure, cultural intercourse and living together harmoniously with all possible differences.

➤ Urban-Urban Migration

People move from one urban area to another urban area because of varied reasons. One could be better job opportunity. The other could be search for better education. People may also move from one urban area to another in search of better facilities that promote better way of life.

➤ Urban-Rural Migration

When people who live in urban areas get tired, they tend to move to rural areas where they can pass the rest of their lives among kinship.

Some people may move from urban areas to rural areas in search of large area of land to invest on agricultural activities, such as plantation agriculture, crop production and animal rearing on large scale. Generally, as people move from place to place, from country to country or from region to region, it is believed that they get fresh pasture or better income or better life opportunities.

Lesson

1.4

Review

Activity B**A. Questions based on facts:****Individual work:**

- Why do people abandon their original areas and move to new places?
- What happens to people if volcano erupts?
- What should people do if border conflicts break out in their living areas?
- Why do people move from place to place in Eastern Africa?

Group work:

- Discuss the causes for the variation of settlements.
- Exchange views with your group on the resources that usually attract people to settle.



◆ The Effects of Rapid Population Growth

- What happens if population in a given area grows within the shortest time possible?
- Name some factors that cause rapid population growth.

Population growth is increase in population number over time. It can be quantified as the change in the number of individuals in a population.

Rapid population growth rate has two major effects. First it can upset the environment. Second it creates shortage of food supply, education facilities and housing. It has also impact on job opportunities.

In some Eastern African countries, rapid rate of population growth is a critical issue. It results in pressure on social services.



Lesson

1.4

Review

Activity C**Questions based on facts:****Individual Work:**

- How does rapid population growth affect the environment?

Group Work:

- What will be the effect of rapid population growth on a scarce grazing land? Relate this to the Oromo people movement of the 16th century.
- Discuss why people migrate from rural areas to urban areas.



◆ Effects of Urbanization on Society and Culture

- What influence does urbanization have on society and culture?
- What makes urban dwellers different from rural dwellers?
- What change does urbanization cause on life style of people?

The positive effect of urbanization is that, it is about change in the life style of people. People in urban areas have different styles of life than people in rural areas. Because the livelihood of urban people is based on non-agricultural activities. Moreover, the land use plan in urban areas is entirely different from that of the rural areas. To this end, urban areas have better means of transportation and communication facilities, housing, water supply, energy supply and amusement centers. Generally, peoples' ways of life are based on modernity. Furthermore, urbanization is associated with the increase in the consumption of animal products, fruits, vegetables and industrial food stuffs.



Urbanization is the process of concentration of population in areas of non-agricultural activities.

The negative effect of urbanization causes loss of agricultural land. Everyday most of the fertile lands are overtaken by cities and towns. Moreover, the growing population of urban areas competes with the agricultural sector for scarce water resources. Therefore, a rapidly growing demand for water in urban areas will lead to the damming of large rivers to ensure continuous urban water supply. But, this will result in shortages of water supply for agriculture. This situation will slowdown the ability of farmers to increase food production.

In Eastern Africa, Rural-Urban migration is getting very acute. People usually migrate from the countryside to urban areas in search of better job, education, and sometimes a new way of life. Due to rapid rate of urbanization, in Eastern Africa, food supply will be at an acute state. This situation will lead to greater increase in food prices than ever before.

Eastern Africa is the least urbanized in the continent. Only 21% of the population live in urban areas. But the rate of urbanization is one of the highest in Africa.

As urban areas expand, people from different walks of life come to them. They come along with their indigenous cultures. However, in due course of time their cultures are intermixed with others. This, in the long run, forces people to associate them with the ever growing new urban culture which affects their indigenous culture. For example the type of clothing put on culturally is entirely replaced by new style of clothing in the urban area.

When urban areas expand, informal job opportunities become common. These job opportunities act as pull factor to attract the rural young to the urban areas. Housing becomes a problem for such people. Food prices increase from time to time. When such people are unable to compete they additionally live on robbery, burglary, and theft. Such unlawful acts harm urban dwellers. Because of increased influx of people from rural areas, shanty or slum quarters develop in the urban areas. These would be breeding places of unlawfulness.

Lesson

1.4

Review

**Activity D**

Questions based on facts:

Individual work:

- What does urbanization mean?
- What are the positive effects of urbanization?
- What are the negative effects of urbanization?
- Discuss the major differences between urban areas and rural areas?

Case Study**Addis Ababa**

Addis Ababa is the capital city of Ethiopia. Most young countrymen flock to Addis for better job opportunities. Dibaba Bedane is one of them. He moved to Addis Ababa from a nearby countryside. By the time he moved to Addis he was a sixth grader. He looked for a job with patience. He got a job as a mechanic at an automotive garage. He earned a little money. He continued working hard to get a higher pay. He learned very quickly how to fix vehicles and to repair different auto parts. He got promotion and his salary increased by one fold. Because of his hard work and determination, he soon became a professional in the automotive shop.

After a few years of working and saving some money he started running his own business as a professional auto mechanic and auto body repairman. However, all migrants are not as successful as Dibaba.

Nairobi

Nairobi is the capital city of Kenya. Young people from the surrounding countryside flock to Nairobi. Kibaki Jomo is one of them. He lived in Mathare, a slum in Nairobi. Here people live with frustration, resentment, anger, fear and hopelessness. Kibaki was no different. However, Kibaki engaged himself in dress making and tailoring. By so doing, he was able to sustain his life. He was a hard working person. Thus, he went on tailoring and became gainful. Finally, his life became a success. His wishes of going out of the slum area became realistic.

Competencies: After studying this lesson, you will be able to:

- Generalize the factors responsible for the variation of settlement and livelihood.
- Review how political instability and civil war can affect the population.

Key Terms

↔ Variation

↔ Rural

↔ Settlement

↔ Urban

↔ Livelihood

◆ Factors for the Variation of Settlement and Livelihood

- Climate and resources
- Political instability and civil war

➤ Climate and Resources

- Discuss how climate causes variation in settlement and livelihood.
- Give some examples of resources that cause variation in settlement and livelihood.

Climate is one of the factors that causes variation in settlement. For example, areas with mild temperature condition as well as seasonally regulated rainfall are favorable for settlements. Most of the time settled life is practiced based on agricultural or non-agricultural activities. Therefore, in agricultural societies, rural culture develops while non-agricultural areas promote urban culture.



Culture refers to the ways of life learned and shared by people in social groups.

The availability of resources such as fertile soil and mineral could also affect settlements. As you have learnt in the previous lesson, relief also decides the type of livelihood people should follow. For example, people living in highland areas depend on agriculture such as the growing of crops and the rearing of animals. On the other hand, people living in lowland areas mostly depend on the rearing of animals. This is true of people living in the lowland areas of Eastern Africa. They lead nomadic pastoralist ways of life.

Case Study

Konso

Konso is a special Woreda in SNNPR with an area of 2974 km². The Kongsos are Kushitic people. Their territories are in arid highlands of south western Ethiopia.

The Konso people are famous for their terracing practices. They dwell on intensive agriculture involving irrigation and terracing. The terraces are planted with sorghum and intercropped with a range of speices of plants including trees, most importantly Moringa oleifera (the cabbage tree). Maize and numerous varieties of sorghum are the staple crops. The cash crops produced are cotton and coffee. To protect the fields, the Kongsos maintain their cattle, sheep and goats in stalls (shelters) and feed them by hand or supervise their grazing. In general the Kongsos are hard working people.



Fig. 1.13 Konso Territories

Case Study

Comparison between an upland settlement in Ethiopia and a lowland coastal settlement in Kenya

In the highland areas of Ethiopia people practice a sedentary type of settlement. Such settlement pattern is influenced by availability of water, fertile soil, mild temperature condition and reliability of rainfall. People's livelihood is based on agricultural activities. Main crops produced include cereals such as barley, wheat, and finger millet. They also rear animals such as cattle and sheep, beasts of burden such as horses, mules and donkeys. Therefore, they are engaged both in the cultivation of crops and rearing of animals. This type of agriculture is called mixed farming. Hence, the livelihood of most people in the highland areas is based on mixed farming.

The Giriama are one of the nine ethnic groups that make up the Mijikenda. The Mijikenda occupy the coastal strip extending from Lamu in the North to the Kenya/Tanzania border in the South, approximately 30 km inland. The Giriama are among the largest of the ethnic groups. They inhabit the area bordering the coastal cities of Mombasa and Malindi, and the inland towns of Mariakani and Kaloleni. Thus, the Giriama people live along the coastal areas of Kenya. These areas experience high temperature, less rainfall and arid and fertile soil. The Giriama people practice mainly crop cultivation. They also keep small numbers of livestock, such as goats, cows, and sheep. The main crops cultivated by the Giriama include maize, sorghum, cassava, sweet potato, cow peas, water melon, pumpkin and fruit trees such as mango, cashew nut, pawpaw and coconut. These people live in huts (See Fig.1.14)



Fig. 1.14 Typical house of the Giriama

Lesson

1.5

Review

Activity A

Questions based on facts:

Group Work:

- Compare and contrast the livelihood of the Ethiopian highland settlers and the Giriama people in Kenya.
- Show the similarities and differences of the geographical landscapes occupied by the two people.
- What other opportunities do the Giriama have as compared with the Ethiopian up land dwellers whose livelihood is more or less dependent on agriculture?
- Compare and contrast the food habits of the two dwellers at two different geographical locations.



Instability and War

- What causes instability?
- Discuss why instability and civil war cause chaos in societies.

Effect of Instability and War

Urban areas in Eastern Africa are overcrowded by people who flee from neighboring countries due to political instability and civil war. For example, the political unrest in Somalia has caused people to look for shelter in Ethiopia and Kenya. More recently, people from Eritrea are forced to migrate to Ethiopia because of political unrest.

Case Study

Comparison of two areas where population has migrated because of disturbance

Ethiopia

The border dispute that took place in 1999, between Ethiopia and Eritrea resulted in the displacement of civilian population along the northern border area in Tigray and to a lesser extent, along the north eastern border in Afar region.

Over 350,000 people were displaced at the start of the war from areas along the common border of the Tigray and Afar regions. Additionally, 25,000 Ethiopians were deported from Eritrea and as the conflict went on, people residing close to the border lines were evacuated.

Somalia

Somalia has been without government for the past 18 years. In the conflict that went on, hundreds of thousands of Somalia fled their homes, including 700,000 from the capital Mogadishu. The number of internally displaced is now estimated to be as high as 1million, with hundreds of thousands more seeking refuge in neighboring countries.

Lesson

1.5

Review

Activity B**Individual work:**

- Compare and contrast the number of people displaced in the countries of the above case study.
- Explain, at length, the causes of displacement in the two countries.

Group Work:

- Study the map below and write down names of countries affected by civil war or instability.

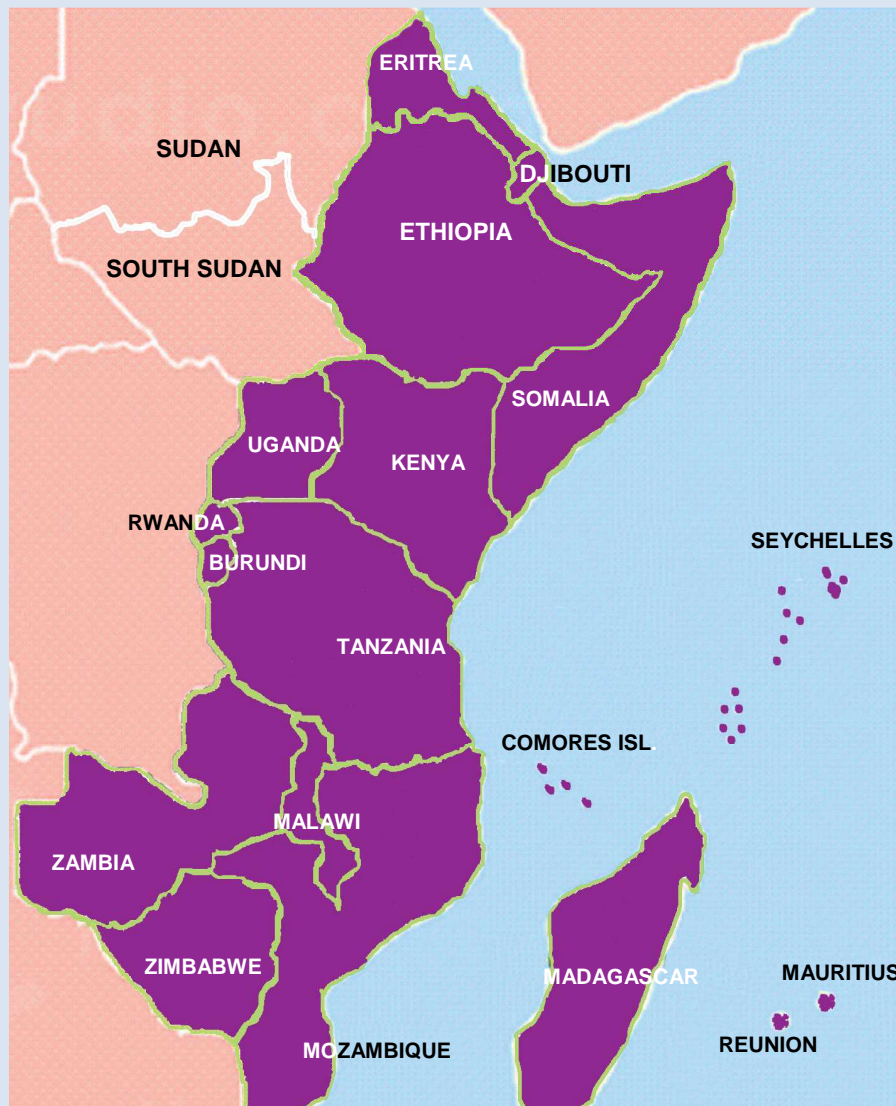


Fig. 1.15 Eastern Africa

Summary

- Relative location is determined in terms of well known reference points such as land masses and/or water bodies. It is also explained by using cardinal points, i.e. North, East, South and West or NE, SE, SW, and NW. Of course, the sub-divisions between the cardinal points and the subsidiary points are also used for exact identification of location on a map. The Red Sea, the Gulf of Aden, the Indian Ocean and the surrounding landmasses are used as reference points to know the location of Eastern Africa.
- Eastern Africa is divided into three sub regions, such as the Great Lakes Region, the Horn of Africa and islands in the Indian Ocean. The sub-divisions are based on different types of vegetation, availability of water, and topography. It also includes countries which are located far south along the eastern coast of Africa.
- Eastern Africa was the home of the Nubian and Aksumite civilizations. Both civilizations had rich heritages. Such heritages have immense value. However, they are endangered because of human-made and natural problems. Therefore, it is necessary that the heritages are protected and preserved.
- Population means number of people living in a particular area or place. Pattern of distribution of population differs from place to place. For example, the highlands of Eastern Africa with mild temperatures and higher rainfall have higher population densities. The lowlands and river valleys with higher temperatures and lower rainfall have lower population densities. However, in Eastern Africa, there is large concentration of population in the coastal areas, where light and tourist industries are available. Nevertheless, population of Eastern Africa compared to the rest of Africa is densely populated.
- In general, population distribution is affected by physical, human and social factors. These factors are responsible either to populate or depopulate given areas.
- Factors for the variation of settlements and livelihood include climate and resources, political instability and civil war.

Glossary

- **Civilization:** an advanced and organized state of human social development; a society, its culture and its way of life during a particular period of time or in a particular part of the world
- **Distribution:** the state of being scattered
- **Early Marriage:** getting married before mature age.
- **Heritage:** things such as works of art, cultural achievements, and customs that have been passed on from earlier generation
- **Immovable heritages:** stationary heritages
- **Intercropping:** growing leguminous plants in between other crops
- **Location:** Position or site
- **Livelihood:** a means of living; an income
- **Movable heritages:** displaceable heritages
- **Movement:** shifting position
- **Polygamy:** the act of having more than one wife
- **Rapid growth:** quick increase in number
- **Relative location:** the position of a thing determined in terms of a reference point.
- **Rural:** type of settlement where small number of buildings, agricultural functions, low density, close community, and small number of services dominate.
- **Sedentary:** permanently settled; of work-done in settled area.
- **Settlement:** the process of settling in a place
- **Terracing:** terraced ground or a terraced structure; terrace step like structure.
- **Stakeholder:** people involved in a particular organization or project.
- **Urban:** type of settlement where continuous built up area, with high population density and non-agricultural function prevails.
- **Variation:** difference

UNIT

1

Review Questions

I. Write True if the statement is correct or write False if the statement is incorrect.

- ____ 1. Relative location is determined in terms of prominent reference points.
____ 2. Nubia was part of Egypt.
____ 3. Once upon a time Nubia was under the Egyptian rule.
____ 4. Meroe was well known for its construction technology.
____ 5. Aksum was the second ancient civilization in Eastern Africa.

II. Match the items under column 'B' with the items under column 'A' and write the letters on the space given.

- | 'A' | 'B' |
|---|-------------------------------------|
| ____ 6. Migration of people to new lands | A. Water supply |
| ____ 7. Process of changing a rural area into town | B. Urbanization |
| ____ 8. Could promote settlement | C. Historical documents |
| ____ 9. Movable heritages | D. Kushitic people of ancient Sudan |
| ____ 10. Built pyramids to house the bodies of dead kings | E. Population movement |
| | F. Caves |
| | G. Cultural dunces |
| | H. High temperature |
| | I. Ancient Aksumite |

III. Choose the correct answer and write the letter of your choice in your exercise book.

- ____ 11. One of the following is the most populous country in Eastern Africa:
a) Seychelles
b) Tanzania
c) Kenya
d) Ethiopia
- ____ 12. Which of the following factors affects population distribution?
a) Relief
b) urbanization
c) unknown factors
d) a and b
- ____ 13. A process of development that relies upon non-agricultural activities is known as:
a) Rural development
b) urbanization
c) expansion
d) a and b
- ____ 14. One of the following is the least urbanized region of Africa
a) Northern Africa
b) Southern Africa
c) Eastern Africa
d) Central Africa

IV. Fill in the blank spaces with suitable words or phrases.

15. Places where immovable heritages are found are called _____.
16. Human hazards to heritages include _____, _____ and _____.
17. Number of people living in a particular area or place is called _____

V. Things to do**Group Work**

- Draw the sketch map of Eastern Africa and show:
 - The Great Lakes Region and the Horn of Africa
 - The Indian Ocean, the Red Sea and the Gulf of Aden
 - The largest island in the Indian Ocean.
 - Highly populated countries.
 - Least populated country or island.
 - The most populated island.

- Arrange a field trip within the proximity of your locality and study the following:
 - Settlement pattern.
 - Causes for the variation in settlement
 - Life style of people in the inhabited areas

Check List

Put a tick (✓) mark in each of the boxes for activities that you can perform

I can:

1. Define relative location.
2. Name countries of Eastern Africa.
3. Name water bodies bordering Eastern Africa.
4. Locate areas where ancient civilizations emerged in Eastern Africa.
5. Name the most important heritages of the Aksumite and Nubian civilizations.
6. Explain the economic, social and political importance of heritages.
7. Describe problems encountered with heritage sites.
8. Suggest ways of protecting and preserving heritages.
9. Discuss factors causing variation in settlement.
10. Explain the causes of variation in livelihood in Eastern Africa.

UNIT 2

THE EARTH, OUR HOME

Unit Outcomes

After studying this unit, you will be able to:

- Identify the continents, water bodies of the world and compare and contrast fresh water with marine water
- Describe the land features of Eastern Africa
- Identify the layers of the atmosphere and describe the components of lower layer of the atmosphere
- Sketch a map and use colors, signs and symbols to indicate different land features.

Do you remember that in Unit One you have learnt about the location, settlement and people of Eastern Africa. In this unit you are going to learn about the Earth, our home.

Competencies: After studying this lesson, you will be able to:

- List the continents of the world.
- Name the oceans of the world.

Key Terms

- ↔ Continent
- ↔ Fresh water
- ↔ Marine water

The Continents

- What does a continent mean?
- On which continent do you live?
- How many continents are there in the world?
- List the continents according to their size, largest first and smallest last.

Now relate your answers to the above questions with the information you have on Table 2.1. See how varied the continents are in size with regard to their area in square kilometers.

A continent may mean a very large extent of land. Its land masses are interconnected and have varied land features. There are seven continents in the world. Some continents are found separately while others are interconnected. Some continents are larger in extent while others are limited in size.

Table 2.1 The Seven continents of the world ordered by size

Rank	Continent	Square Kilometers
1	Asia	44,391,162
2	Africa	30,244,049
3	North America	24,247,039
4	South America	17,821,029
5	Antarctica	14,245,000
6	Europe	10,354,636
7	Australia	7,686,850

Lesson

2.1

Review

Activity**A. Questions based on Facts:**

Individual Work:

- Compare the continents of the world in terms of size?
 - a) Which continent is the smallest?
 - b) Which continent is the largest?

B. Things to do:

- Trace the outline map of the world and show the following continents (Refer to Fig.2.5).
 - Africa
 - Europe
 - South America
 - Asia
 - North America
- Draw the sketch map of Africa and show countries of Eastern Africa.

**Water Bodies**

- Mention some examples of water bodies.
- What sorts of water bodies are found in your surroundings?
- What is the difference between fresh water and marine water?
- Mention some uses of water?



Water is the most abundant compound on the Earth's surface. It constitutes about 70 percent of the earth's surface. In nature, it exists in liquid, solid, and gaseous states.

Table 2.2 Major water bodies of the world by area, maximum depth or length

Water body	Type	Surface area (in km ²)	Max. depth (in meters)	Length (kms)
Nile	River	2,800,000	-	6,695
Amazon	River	7, 000, 000	90	6, 400
Congo	River	4,100,000	230	4,324
Mississippi	River	2,979,000	-	3,730
Victoria	Lake	68,800	84	-
Malawi	Lake	29,600	706	-
Tanganyika	Lake	32,900	1470	-
Tana	Lake	3,600	9	-
Red sea	Sea	438,000	3,040	2,250
Mediterranean sea	Sea	2,512,000	5,150	-
Indian ocean	Ocean	73,556,000	8,047	-
Pacific Ocean	Ocean	169,200,000	10,911	-
Atlantic Ocean	Ocean	106,400,000	8,605	-

Water bodies are found in different places of the world. They occupy or cover different extent of land. These water bodies are oceans, seas, lakes, rivers, streams, ponds, and springs.

Water bodies are usually divided into two categories, namely **fresh water** and **marine water (salty water)**. This division is based on the salt content of the water bodies.

Table 2.3 Example of fresh and marine water bodies

Fresh water	Marine water
Lakes	Seas
Ponds	Oceans
Streams	
Rivers	

Fresh Water

- What does fresh water mean?
- Give some examples of fresh water in your locality.
- What advantages does fresh water have in your surroundings?
- Suggest what problem would confront your locality had it been deprived of fresh water.

Fresh water is a naturally occurring water on the Earth's surface. It is found in swamps, ponds, lakes, rivers, streams, and groundwater. Fresh water is characterized by having a low salt concentration—usually less than 1 percent. Plants and animals in fresh water bodies are adjusted to the low salt content. There are different types of fresh water bodies. They include:

- Lakes and ponds
- Streams and rivers

◆ Lakes and Ponds

Lakes:

- What are lakes?
- Name the largest lake in Africa.
- What is the largest lake in Ethiopia?

A lake is a body of fresh water, surrounded by land. On Earth a body of water is considered to be a lake when it is inland.

Pond

- What sort of water body is a pond?
- How are ponds formed?
- Are there ponds in your locality? If yes, how are they formed?

A Pond is a body of water surrounded by land. It is formed naturally or created artificially. A lake is larger and deeper than a pond.

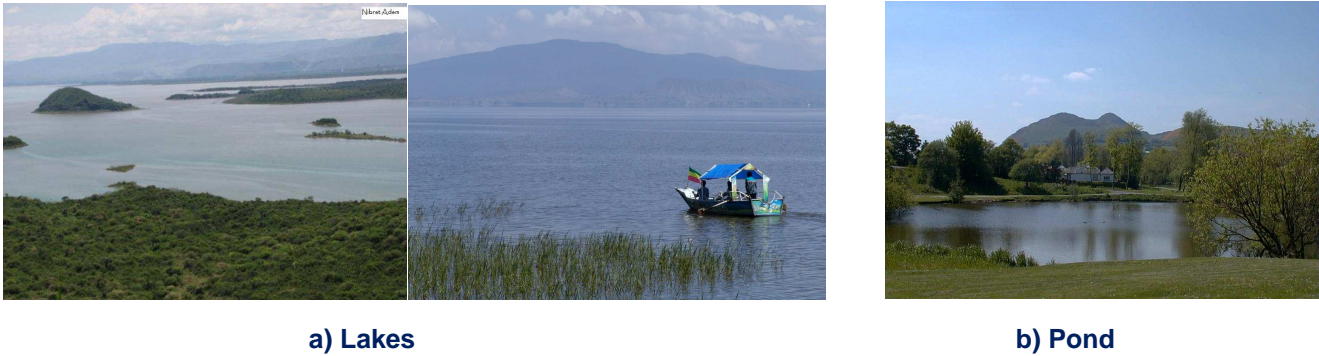


Fig. 2.1 Lakes and Pond

Lake Victoria

- Where is Lake Victoria found?
- Name the countries that the lake touches.
- From where does the lake get its water resource?

Lake Victoria is one of the African Great Lakes (See Fig.2.2). The lake was named after the United Kingdom's Queen Victoria, by John Hanning Speke, the first European to visit the lake.

The lake receives most of its water from direct rainfall. Its largest influent is the Kagera River. Kagera's mouth lies on the lake's western shore. The only river that leaves the lake is the White Nile .

The White Nile is known as the "Victoria Nile" as it leaves the lake. It leaves the lake at Jinja, Uganda, on the lake's northern shore.

Lake Victoria occupies a low lying area in the East African Plateau. It has an average depth of 20 meters. The lake is divided between three countries, namely Kenya (6% or 4,100 km²), Uganda (45% or 31,000 km²) and Tanzania (49% or 33,700 km²).



Fig. 2.2 Lake Victoria and Its Environs

Streams and Rivers

- What are streams and rivers?
- What significant difference is there between streams and rivers?
- Name some examples of streams and rivers in your locality.
- Explain the contribution streams and rivers provide to your surroundings.

Streams and rivers are bodies of flowing water in one direction. The two are the same in nature, but they differ in size. Streams are smaller compared with rivers. Streams and rivers are fresh water bodies.



a) Stream



b) River

Fig. 2.3 Running water ecosystem

River Nile

- Is there any river in Ethiopia that is related to River Nile? What is its name?
- What is the direction of flow of River Nile?
- Discuss the contributions of River Nile for the countries it drains.

Case Study

The Nile is one of the renowned rivers in Africa, particularly in Eastern Africa. It travels a long way from Lake Victoria to the Mediterranean Sea covering a distance of 6,695 kilometers.

The Nile gets its name from the Greek word "Nelios", meaning River valley. The two major rivers of the Nile Basin are the White Nile and the Blue Nile. The White Nile starts from Lake Victoria, Uganda. The influent Blue Nile starts from Lake Tana, Ethiopia (See Fig 2.4).

The Nile and its tributaries flow through 11 countries, namely Uganda, Northern Sudan, Southern Sudan, Egypt, Ethiopia, Eritrea, the Democratic Republic of Congo, Kenya, Tanzania, Rwanda, and Burundi.

The major cities that are located on the edge of the Nile are: Cairo, Gondokoro, Khartoum, Aswan, Thebes/ Luxor, Karnak, and the town of Alexandria, which lies near the Rozeta branch. The major dams on the Nile are Roseires Dam, Sennar Dam, Aswan High Dam, and Owen Falls Dam (See fig 2.4).



Fig. 2.4 The Nile River and Its Environs

Lesson

2.1

Review

Activity B

A. Questions based on facts:

Individual Work:

- What is the difference between a pond and a lake?
- Discuss the difference between streams and rivers.

Pair work:

- Name some examples of fresh water and marine water.
- Name the longest river in the world.

B. Things to do:

Group work:

Draw the sketch map of Eastern Africa and locate:

- Lake Victoria
- Lake Tana
- River Nile



Marine or Sea Water

- What is marine water and sea water?
- What makes marine water different from other water bodies?



Ocean is a large expanse of salt water. Oceans occupy huge regions of the Earth's surface. Their boundaries are usually established by continental land masses (See fig. 2.5).

Sea water is water from sea or ocean. The vast majority of sea water is salty (saline). However, sea water is not uniformly saline throughout the world. Where mixing occurs with fresh water runoff from river mouths or near melting glaciers, sea water can be substantially less saline.

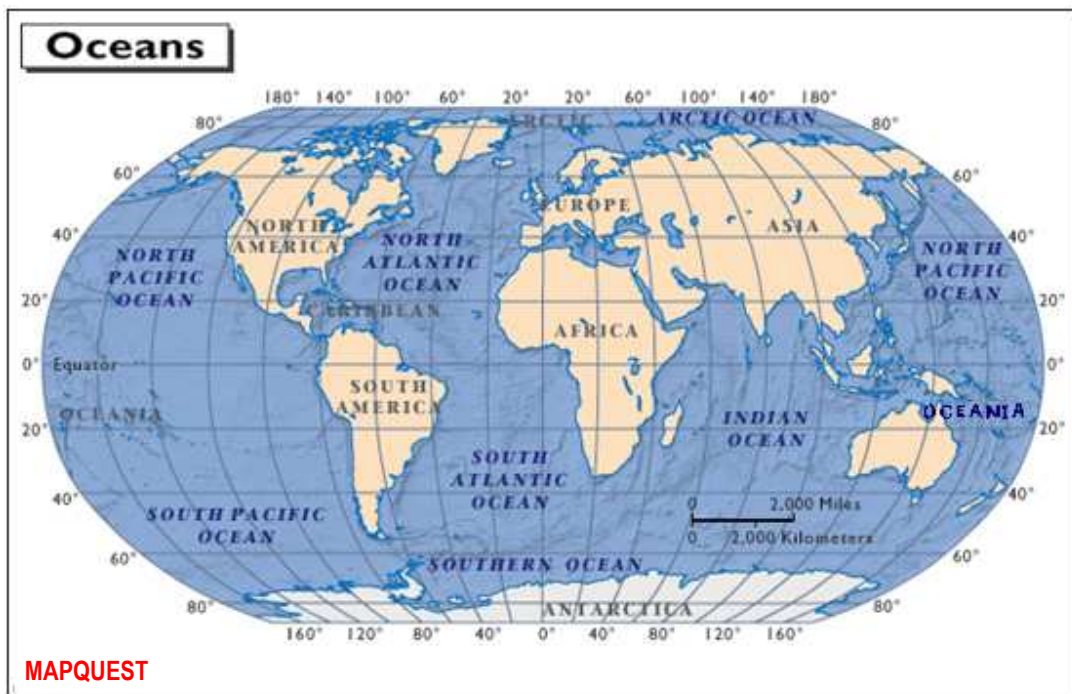


Fig. 2.5 Oceans of the World

The Dead Sea

- Where do you find Dead Sea?
- Why is it called Dead Sea?
- What particularities does Dead Sea have?

Case Study

Dead Sea is a salt lake in Middle East Asia. It is bounded on the west by Israel and the West Bank and on the east by Jordan. The Dead Sea forms part of the Israeli-Jordanian border. The surface of the Dead Sea is 418 m below sea level. This proves that the Dead Sea has the lowest water surface on earth. The sea is 80 km long and has a maximum width of 18 km. Its area is 1,020 sq km. The Dead Sea occupies the northern portion of the Great Rift Valley. By nature Dead Sea is a lake.

The Dead Sea is fed mainly by the Jordan River, which enters the lake from the north. Several smaller streams also enter the sea, chiefly from the east. The lake has no outlet, and the heavy inflow of fresh water is carried off solely by evaporation. Because evaporation is rapid in the hot desert climate.

Dead Sea is nearly nine times as salty as the ocean. The Dead Sea contains, at a depth of 305 m, some 27 percent solid substances. These substances include sodium chloride (common salt), magnesium chloride, calcium chloride, potassium chloride, magnesium bromide, and many other substances.



Fig 2.6 Dead sea

(Discuss these substances with your science teacher). Because of the density of solids in the water, the human body easily floats on the surface. The sea contains no life of any sort except microbes, because of the chemical substances found inside the sea.

The Dead Sea is economically important as a source of potash, bromine, gypsum, salt, and other chemical products, which are extracted inexpensively. The shores of the Dead Sea are of growing importance as a winter health resort.

2.1

Lesson

Review

Activity C**A. Questions based on facts:****Individual Work:**

- What is an ocean?
- What makes oceans different from seas?

Pair Work:

- Is there any similarity between oceans and seas? If yes, what is it?
- Compare and contrast Indian and Pacific Oceans.

B. Things to do:**Group Work:**

- Look for a globe or map of the world and identify the locations of Pacific and Indian Oceans.
- Indicate the continents that surround these two oceans.



Major Land Forms of Eastern Africa

Competencies: After studying this lesson, you will be able to:

- Identify the major physical features of Eastern Africa
- State the significance of the Great Rift Valley.

Key Terms

- ↔ Physical feature
- ↔ Rift valley

Physical Features of Eastern Africa

- What does physical feature mean?
- State the different physical features that you know.
- Discuss the physical features of Eastern Africa.

Eastern Africa is the eastern most region of the African continent. It extends from Eritrea in the north east to Mozambique in the south east.

Eastern Africa includes many countries and islands of the Indian Ocean. The biggest island in this region is Madagascar. Look at the position of Madagascar carefully. The islands in Eastern Africa include Comoros, Mauritius and Seychelles. Reunion and Mayotte-French overseas territories are also considered part of Eastern Africa.

Generally, physical features include the ups and downs of the surface of the Earth. These include hills, ridges, mountains, and valleys, plains and undulating lands. In most cases, Eastern Africa is mountainous region. The mountains of Eastern Africa are given in Table 2.4.

Table 2.4 Major mountains of East Africa

Name	Height (in meters)	Location
Kilimangaro	5, 895	Tanzania
Mt Kenya	5,199	Kenya
Margherita	5,109	Uganda and Democratic Republic of Congo (DRC)
Ras Dejen	4,620	Northern Ethiopia
Mt Meru	4,565	Close to Kilimanjaro in Tanzania
Mt Elgon	4, 321	Uganda and Kenya frontier
Mt Ruwenzori	5,119	Uganda

All mountains mentioned in Table 2.4 are volcanic except Ruwenzori which is a block mountain. Volcanic mountains are formed due to the eruption of volcanoes. Block Mountains are the results of the formation of rift valleys which are created because of faulting. Furthermore, discuss with your teacher how a block mountain is formed.

A low lying land feature in Eastern Africa is found in Ethiopia. This area is known as the Danakil plain. It is found in the Afar region of Ethiopia. In this plain there is a depression known as the Kobar Sink. It drops as low as 120 meters below sea level.



Fig. 2.7 Kobar Sink

The Great East African Rift Valley

- Define a rift valley.
- What is the extent of the Great East African Rift Valley?
- Explain the countries that the Great East African Rift Valley touches.



Rift valley is a valley which has been formed by the sinking of land between two roughly parallel faults (cracks). Such a valley is long in proportion to its width.

◆ What is the East African Rift System?

The oldest and well defined rift occurs in the Afar region of Ethiopia. This rift is usually referred to as the Ethiopian Rift. Further to the South, a series of rifts occur which include a Western branch, containing the East African Great Lakes. There is also an Eastern branch that roughly bisects Kenya north-to-south on a line slightly west of Nairobi (See Fig.2.8). These two branches together have been termed the East African Rift, while parts of the Eastern branch have been termed the Kenya Rift or the Gregory Rift. The two branches are often grouped with the Ethiopian Rift to form the East African Rift System. The complete rift system extends thousands of kilometers in Africa alone and several thousands

more if we include the Red Sea and the Gulf of Aden as extensions. Thus, the rift valley extends from Syria in the Middle East to Mozambique in Eastern Africa covering a distance of 7200 kilometers. The biggest portion (some 5,600km) of the world's Great Rift Valley system is found within Eastern Africa.

- **How was the Rift valley formed?**

The rift valley was formed by the sinking of land between two roughly parallel faults or cracks; such a valley is long in proportion to its width.

The lateral movements of the crust of the earth in the opposite directions were responsible for the formation of the rift valley.

- **When was the Rift valley formed?**

The rift valley was formed many million of years ago. The Great Rift valley of East Africa is potentially important source of valuable natural resources. It is full of geysers, tremors, active volcanoes, fumaroles and attractive lakes. These features have economic contributions as they attract tourists, scientists and investors.

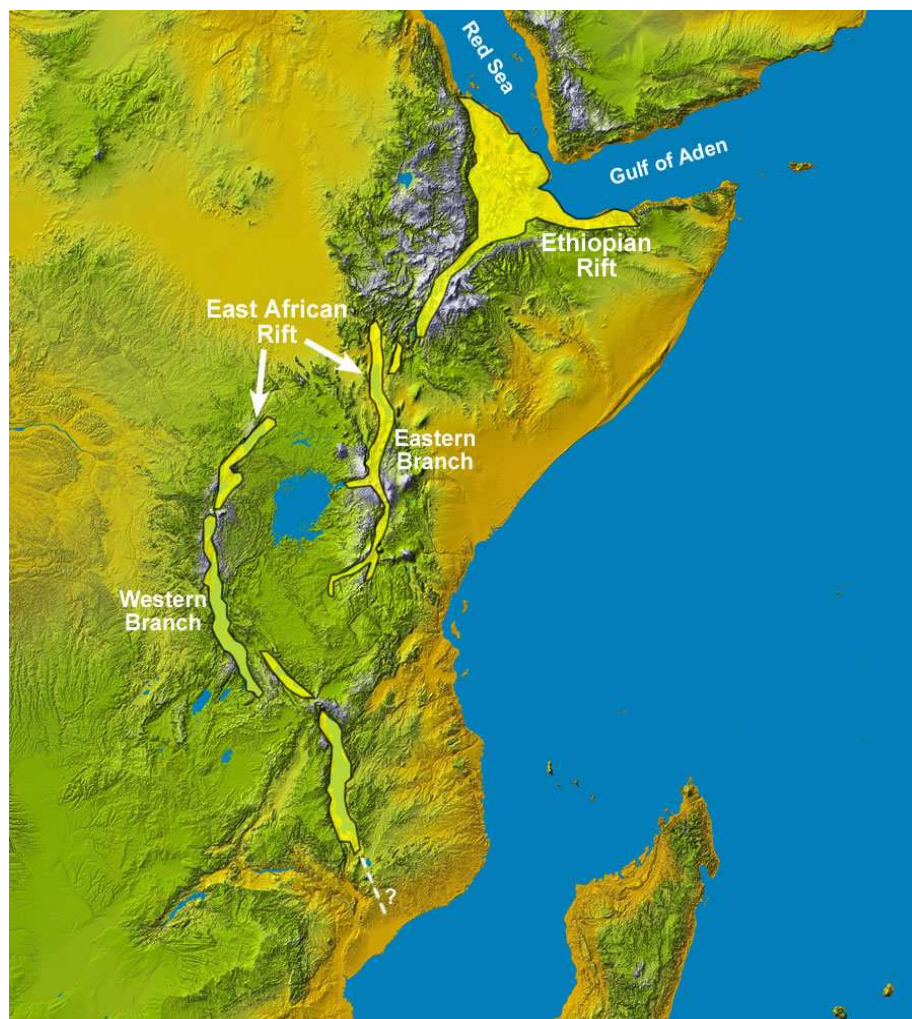


Fig. 2.8 The Great East African Rift Valley

Case Study

Erta Ale

There are a number of active volcanoes in the Great East African Rift Valley. The famous Erta Ale (Afar-smoking mountain) (See Fig. 2.9) is found in the Afar regional state of Ethiopia.



Fig. 2.9 Erta Ale Active Volcano

Erta Ale is an isolated basaltic shield volcano. It is the most active volcano in Ethiopia. It is a 50 km wide volcano and sinks more than 600 m from below sea level in the barren Danakil depression. Erta Ale is the most prominent feature of the Erta Ale Range. The 613 m high volcano contains a summit crater. Another larger depression elongated parallel to the trend of the Erta Ale range is located to the South East of the summit. The summit caldera is renowned for one, or sometimes two long-term lava lakes that have been active since at least, 1967, or possibly since 1906. Recent fissure eruptions have occurred on the northern flank of Erta Ale.

Lesson

2.2

Review



Activity

A. Questions based on facts:

Individual work:

- How long is the Great East African Valley in Africa?
- Name the branches of the Great East African Rift valley.

Pair work:

- Discuss the formation of the Great East African Rift valley
- What is the name of the lake that is found between the two branches of the Great East African Rift Valley?

B. Things to do:

Group work:

- Write down the names of countries that are found within the proximity of the rift system (use Fig. 2.8).

Competencies: After studying this lesson, you will be able to:

- Name the rivers, lakes and sea of Eastern Africa.
- Compare and contrast the properties of marine and fresh water.

Key Terms

- ↔ Water resource
- ↔ Property
- ↔ Maximum

◆ Lakes, Rivers and Seas of Eastern Africa

Eastern Africa has numerous lakes and rivers, while the number of seas in this region is highly limited. The most famous countries with water resources are Ethiopia, Kenya, Uganda and Tanzania.

Most of the lakes in Africa are found in Eastern Africa. These lakes are particularly known as the rift valley lakes. They include lakes Tanganyika, Malawi, Kivu, Edward, Albert, Turkana, Meru and the rift valley lakes of Ethiopia.

In terms of size from Table 2.2 you observe that **Victoria, Tanganyika** and **Malawi** stand first, second and third respectively. In respect to maximum depth, Lake Tanganyika is the leading followed by Malawi and Victoria. Lake Tana is the shallowest lake in Eastern Africa with a maximum depth of 9 meters.

In Ethiopia, there are numerous lakes. They are usually divided as rift valley lakes, crater lakes and highland lakes. As mentioned earlier, the biggest lake is Lake Tana which is well known as a highland lake.

The biggest lake, Lake Victoria, is found to the south of Ethiopia between the eastern and western branches of the Great East African Rift Valley. This lake is divided among three countries of East Africa, namely Uganda, Kenya and Tanzania. There are other smaller lakes in this part of the region. Lake Tanganyika, Meru, Albert, etc. are some of them.

The marine waters of the Region are Red sea and Indian ocean. The Indian Ocean occupies a large extent of the land on the eastern fringe of Eastern Africa.

◆ Fresh and Salty Water

In Eastern Africa, fresh water resources include rivers and lakes. These water bodies are composed of less salt content as compared to seas and oceans. Thus, rivers are used as the sources of water for home consumption in every part of Eastern Africa.

Lesson

2.3

Review



Activity

A. Questions based on Facts:

Individual work:

- Name the largest lake in Eastern Africa.

Pair work:

- List Lakes of Eastern Africa according to their depth, i.e from the shallowest to the deepest.

B. Things to do:

Group work:

- Draw the sketch map of Ethiopia and show:
 - Lake Tana and
 - Rift valley lakes

Competencies: After studying this lesson, you will be able to:

- Explain economic uses of water in Eastern Africa.
- Discuss the strategic importance of water.

Key Terms

↔ Navigation

↔ Rapids

↔ Braided channels

↔ Water falls

↔ Meanders

↔ Deep gorges

Water bodies and their economic uses

Economic uses

- Mention some home uses of water in your localities.
- Single out any river in your area which is used for irrigational purpose.
- What other contributions do water bodies have?
- Mention the name of a river used to generate hydroelectric power in your area or in Ethiopia.
- Mention some important aspects of water bodies in reference to agricultural activities.
- Discuss the contributions of water bodies in detail.

Water bodies have different economic advantages. Oceans, seas, lakes and rivers may be important for fishing, transportation and for generating power. Particularly, oceans, seas and lakes have massive service for promoting fishery. However, there are some rivers which are dependable sources of fish. Thus, such rivers encourage fishery. However, Fisheries on lakes and rivers may be more suitable for local consumption.

Oceans, lakes and seas are used for transportation. Seas and lakes may provide transportation services for relatively localized environments. Thus, some lakes are important for inland water way. For example Victoria serves this purpose in the lakes region of Eastern Africa. In Ethiopia, Lake Tana provides boat transport for more than seventy kilometers between Bahir Dar and Gorgora, Delghi, etc. Lakes are also important tourist attractions. On the other hand, oceans cover large areas and thus they provide intercontinental transportation services.

Almost all lakes in the world have the potential for fishing. Though there is unwise exploitation of fish, lakes are good sources of fish. For example, in Africa, Lake Victoria is known for its fish reserves.

Rivers that emerge from the foot hills of highlands are swift. They may have rapids and cataracts. These characteristics make the rivers fit to generate hydroelectric power. In Ethiopia, Awash, Fincha,

Wabeshebelle, Ghibe, Tekezze and Abay at Tis Isat are good examples for generating hydroelectric power.

Some rivers are used for fishing and transportation. Rivers used for transportation should be free from rapids, cataracts or waterfalls. All over the world there are big rivers that are used for transportation.

Rivers are also important for promoting irrigation agriculture. In many parts of Ethiopia, irrigation agriculture is possible because of water obtained from perennial rivers.

Eastern African Rivers are very important natural resources for the development of socio-economic and cultural activities in the continent. Some of their general uses are given below briefly:

◆ Irrigation Schemes

Eastern Africa has tremendous potential for the development of large-scale irrigation schemes. Several big dams have been built across the major rivers of the region for irrigational (plantation agriculture) purposes. For example, Koka dam, in Ethiopia, is designed primarily for generating hydroelectric power along Awash River. However, it is used for enhancing irrigation at the lower valley of river Awash.

◆ Hydroelectric Power Generation

Many rivers, in Eastern Africa, are used for generating hydroelectric power. For example, in Uganda along the Owen Falls near the city of Jinja, a dam has been built to generate hydroelectric power. In Ethiopia, there are many rivers along which dams have been built to facilitate the provision of hydroelectric power. Rivers Awash (Koka), Wabishebelle (Melka Wakena), Ghilgel Ghibe, Tekezze, and Abay (Tis Isat falls) are the leading examples.



(a) Tekezze



(b) Awash

Fig 2.10 Hydroelectric Power Station

◆ Navigation (Inland water way)

Rivers may be suitable for navigation if they are free from cataracts, rapids, and waterfalls. Some rivers are navigable in Eastern Africa, river Baro (Ethiopia) and river Tana (Kenya). Navigation services on lakes Victoria, Malawi, and Tanganyika are important today. The large artificial lakes of the continent, such as Kariba are navigable almost all the year round. However, most of Eastern African rivers are not navigable because of:

- the presence of waterfalls, rapids, meanders and braided channels;
- deltaic mouths and mangrove swamps;
- seasonal flow fluctuation; narrow and deep gorges;

Some rivers are transboundary (cross countries) in Eastern Africa. Because of this, countries which share the rivers usually reach a bilateral or multilateral agreement as to how to use the waters of the rivers fairly and equitably. Blue Nile is a good example in this aspect. Recently, countries along the Nile have agreed to have the Nile initiative agreement.

Case Study

Fishing in Djibouti

Fishing is conducted at small scale in Djibouti. The main objective of Djibouti fishery policy is to develop the resources and manpower of the country to promote the sustainable utilization of local fish stocks. Along with this aim the government provides support and development of infrastructure such as ports, cold storage and training facilities for fishermen. Most landings are made in Djibouti city and Tadjoura with smaller quantities landed at Khor Angar. More reef and demersal species tend to be landed at Tadjoura, where there are well developed reef structures offshore. However, fishing contributes only 2 percent share to the GDP of Djibouti.

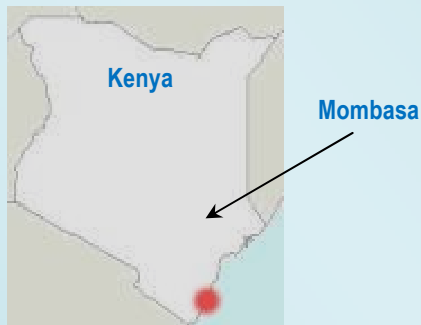


Fig 2.11 Djibouti

Cargo Ship in Mombasa

Mombasa is Kenya's second biggest city. Many cargo ships and a few passenger liners call in at Mombasa. Mombasa is one of the most important ports on the east coast of Africa North of Durban (South Africa). It has its own international airport operating flights from Europe and Asia as well as the rest of Africa.

Originally, Mombasa was built on an Island. Now, it is connected to the main land by a causeway, three bridges and two main ferries.



(a) Location of Mombasa



(b) Cargo ship

The most famous land mark of modern Mombasa, on Moi Avenue, is an arch of oversized (metal) elephant tusks. It was erected in 1956 for a royal visit of princess Margaret, Queen Elizabeth II's sister.



(b) Oversized Elephant Tusks

Fig 2.12 Mombasa

Lesson

2.4

Review

**Activity****A. Questions based on Facts:**

Individual work:

- What are rivers used for?
- List names of rivers used for hydroelectric power in Ethiopia.

Pair work:

- List some uses of water bodies in Eastern Africa.

B. Things to do:

Group work:

- Look at the physical map of Eastern Africa and identify the water bodies you have learnt that may be used for irrigation, transportation and recreation. (Complete the given table).

Water body	Irrigation	Transportation	Recreation

The Atmosphere

Competencies: After studying this lesson, you will be able to:


- Identify the layers of the atmosphere.
- Describe the components of the lower layer of the atmosphere.
- Draw and label the atmospheric layers.

Key Terms

- ↔ Atmosphere
- ↔ Troposphere

Atmosphere

- What is atmosphere?
- What are the components of the Atmosphere?
- Discuss, at length, the contributions of the earth's atmosphere.



Atmosphere is the air which surrounds the earth. It consists of a mixture of gases, mainly oxygen, nitrogen and carbondioxide in very much varied proportion. There are other gases such as Argon, Helium and rare gases.

Layers of the Atmosphere

- In general, how many distinct layers does the atmosphere have?
- Mention the two lower layers?

The atmosphere of the Earth may be divided into four distinct layers (See Fig.2.13). Each layer has its own distinguishing characteristics.

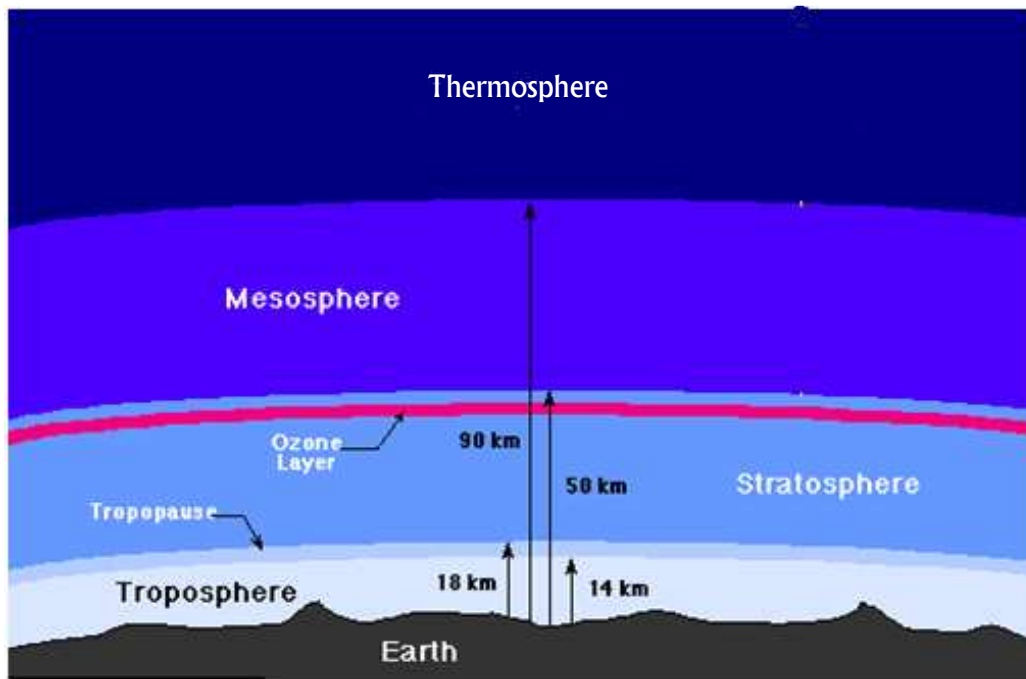


Fig. 2.13 The four Layers of the Earth's atmosphere

◆ Troposphere and its components

The troposphere is the lower portion of the atmosphere. It extends up to about 8 kilometers at the poles and 16 kilometers at the equator. It contains three-fourths of the atmospheric mass. It is the layer where clouds and storms form. In the troposphere there is a fairly uniform decrease of temperature with an increase in altitude. The zone marking the end of this temperature decrease is known as the tropopause. Moreover, the troposphere is a turbulent, dusty zone. It consists of gases, much water vapour and clouds. Some of the principal gases of the dry air in the lower atmosphere are: Nitrogen, Oxygen, Carbondioxide.

Lesson

2.5

Review



Activity

A. Questions based on facts:

Pair work:

- List the layers of the atmosphere?
- Explain the components of the Troposphere

B. Things to do:

Group work:

- Draw a diagram of the earth's shape showing the layers of the troposphere, stratosphere, mesosphere and thermosphere.

Competencies: After studying this lesson, you will be able to:

- Appreciate the significance of color on a map.
- Identify the major conventional signs and symbols used on a map.
- Use conventional signs and symbols to represent information on a sketch map.
- Make a simple map key.

Key Terms

↔ Color

↔ Signs and symbols

↔ key

The Use of Color on Maps

- Discuss what features are shown on maps by colors.

Map makers utilize color on a map to represent certain features. Color use is often consistent across different types of maps by different map makers or publishers. Map colors are always consistent on a single map.

Many colors used on maps have a relationship to the object or feature on the ground. For example:

- **Blue** - lakes, rivers, streams, oceans
- **Red** - major highways, roads, urban areas, airports, military sites, place names, buildings, borders
- **Green** - parks, forest
- **Brown** – relief features
- **Black** - roads, railroads, highways, bridges, place names, buildings, borders
- **Purple** – highways

As you can see, different maps can use colors in a variety of ways. It is important to look at the map key or map legend for the map you are using to become familiar with the color scheme.

If you take as an example a map with the scale of 1:50,000, the colors used on the map to indicate different human made or natural features may be explained as in Table 2.6:

Table 2.6 Colors of a map

Color	Feature
Green	Vegetation
Blue	Water body
Brown	Highland
Yellow	Lower plateaus
White	Highest Peaks
Red	Main roads

Major Signs and Symbols

- What are signs and symbols?
- Discuss the advantages of signs and symbols on physical maps.
- How are signs and symbols readable on maps with legends?



Sign and symbol mean the same. Each may mean a thing representing something else.

A map uses its own language. Map language is expressed with conventional signs and symbols. A map symbol is a diagram, sign, letter or abbreviation. Each symbol is explained using a key. A map key is also known as map legend. Thus, whenever you want to read a map, you have to refer to the key or legend. Unless you use the legend, you cannot read and understand the idea conveyed by the map.

You can also make a sketch map of your own area or school compound. When you make your own sketch map, you can use your own symbols. But meanings of the symbols used should be specified in the legend.

Symbols used should satisfy the following requirements:

- Each symbol should be uniform throughout the map;
- Symbols should be easy to read and understand;
- Space occupied, orientation and size of the symbols should be constant.

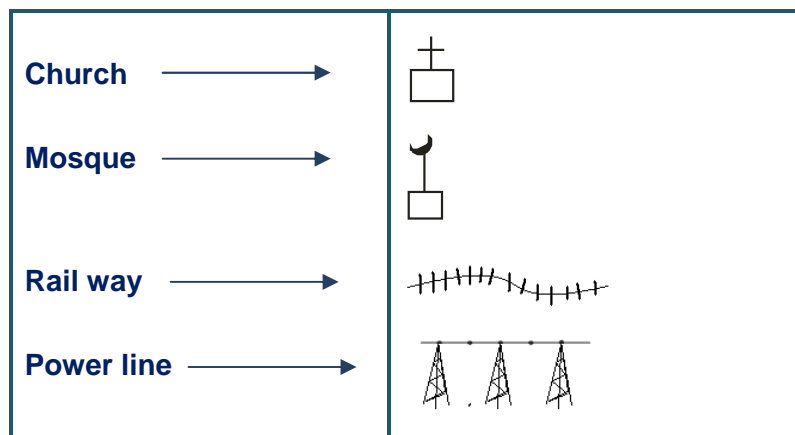


Fig. 2.14 Some signs and symbols used on maps.

Signs and symbols could be fixed for different features on maps.

Ranges of colors and various types of signs and symbols are used on maps to represent reality. The real thing on the ground cannot be depicted on a map as it is. Some sort of selection and reduction is necessary. To reduce the size, scale is employed. To make these effective, colors, signs and symbols are used on maps.

Lesson

2.6

Review

**Activity****A. Questions based on Facts:**

Individual work:

- Why are signs and symbols used on maps?

Pair work:

- Discuss why colors are used on maps.

B. Things to do:

Group work:

- Draw the sketch map of your area and indicate important places using colors, symbols and legend.

Summary

- A continent is a very large extent of land whose landmasses are interconnected.
- There are seven continents in the world.
- Water bodies of the world may be divided into two, namely fresh water and salty water.
- Lakes, ponds, rivers and streams are fresh water resources while seas and oceans are salty water resources.
- Salty water is also known as marine or sea water.
- Water from different sources may have various economic advantages.
- Ocean, sea, lake, and river water may be used for fishing, and transportation. Rivers may be more suitable for promoting irrigation agriculture and generating electric power.
- Eastern Africa is found in the eastern fringes of the African continent lying from north east to south east occupying the north east and south east border line of the continent.
- Eastern Africa contains the highest mountains.
- The Great East African Rift Valley extends from Syria in the Middle East to Mozambique in Eastern Africa.
- Water resources in Eastern Africa have various contributions, such as for home consumption, irrigation, fishing and generating hydroelectric power.
- Atmosphere is the gaseous envelope that covers the earth. It is composed of layers with transitional zones.
- Conventional signs and symbols are important while making sketch of maps or conventional maps.

Glossary

- **Atmosphere:** the air that covers the earth
- **Braided channels:** water ways with branched grooves
- **Continent:** a large extent of land
- **Color:** a visible quality that objects have, produced by the way they produce light.
- **Deep gorges:** narrow valleys with steep sides
- **Fresh water:** water with little or no salt content
- **Influent:** in flowing river; tributary
- **Key:** an explanation of the symbols used on a map
- **Lakes:** water bodies surrounded by land
- **Marine water:** salty water
- **Maximum:** the greatest amount, size, intensity, etc.
- **Meanders:** a curve in the course of a river which continually swings from side to side
- **Navigation:** the action process or art of finding the position and direct the course of a ship, an air craft, a car etc.
- **Physical feature:** natural feature or landscape
- **Property:** a thing or things owned; quality or characteristics something has.
- **Rapids:** parts of a river where the water flows very fast, usually over rocks.
- **Rift valley:** land feature which is the result of faulting
- **Rivers:** flowing water bodies
- **Seas:** one of the smaller divisions of the oceans, especially if partially enclosed by land, e.g. Mediterranean Sea; a large expanse of inland salt water, even if completely landlocked, Caspian Sea: the name is also loosely applied to the great mass of salt water which covers much of the earth's surface.
- **Signs and symbols:** marks an image that represent somethings.
- **Troposphere:** the lower layer of the atmosphere
- **Water resource:** water available in given natural environment.
- **Waterfalls:** sudden falls of water, usually caused by beds of hard rocks in rivers' courses.

UNIT

2

Review Questions

I. Write "True" for correct statements or write "False" for incorrect statements.

1. Water is the most abundant compound on the Earth's surface.
2. Marine water is fresh water.
3. Rivers are bigger than streams.
4. Lake Tanganyika is the largest lake in Africa.
5. Blue Nile, being the prominent tributary of the Nile, provides it with the largest amount of water and fertile soil.

II. Match the items under column 'B' with the corresponding explanations under column 'A'.

Column 'A'

- _____ 6. enters the Mediterranean Sea
- _____ 7. water from a sea or ocean
- _____ 8. has a length of about 6,400 km
- _____ 9. has a length of about 3,730km
- _____ 10. has the second largest flow next to Amazon in the world

Column 'B'

- A. River Amazon
- B. River Congo
- C. River Nile
- D. River Mississippi
- E. Salt water
- F. Stream
- G. River Awash
- H. Fresh water
- I. River Tekeze

III. Choose the correct answer and write the letter of your choice on the space provided.

- _____ 11. The largest of the following African lakes is:
- a) Tanganyika b) Meru c) Victoria d) Turkana
- _____ 12. Which one is the world's largest fresh water lake?
- a) Lake Superior c) Bering Sea
- b) Lake Victoria d) Caspian Sea
- _____ 13. Salt lake in South Western Asia:
- a) Jordan river c) Dead sea
- b) Great Rift Valley lake d) West bank
- _____ 14. One of the following is a large body of salt water:
- a) Sea b) Lake c) Pond d) a and b
- _____ 15. Which one of the following is different from the others in its formation
- a) Kilimanjaro b) Ruwenzori c) Ras Dejen d) Mt.Elgon

IV. Give short answers to the following questions:

1. What does atmosphere mean?
2. In which layer of the atmosphere do you find the ozone layer?
3. What color do map makers use to show water bodies on maps?
4. What are map languages?

Check List

Put a tick (✓) mark in each of the boxes for activities you can perform

I can:

1. List the continents of the world.
2. Name the oceans of the world.
3. Identify the major physical features of Eastern Africa.
4. State the significance of the Great Rift valley.
5. Name the rivers, lakes and sea of Eastern Africa.
6. Compare and contrast the properties of marine and fresh water.
7. Explain some economic uses of water in Eastern Africa.
8. Discuss the strategic importance of water.
9. Identify the layers of the atmosphere.
10. Describe the components of the lower layer of the atmosphere.
11. Draw and label the atmospheric layers.
12. Appreciate the significance of color on map.
13. Identify the major conventional signs and symbols used on a map.
14. Use conventional signs and symbols to represent information on a sketch map.
15. Make a simple map key.

UNIT

3

OUR ENVIRONMENT

Unit outcomes

After studying this unit, you will be able to:

- Identify types of vegetation, their distribution and major factors that affect natural vegetation and wild animals in Eastern Africa.
- Realize the causes and effects of human interference on the environment
- Recognize conservation methods and importance of national parks
- Show an interest in preventing damage to the local environment.

Do you remember what you learnt in Unit Two of this textbook? You learnt about earth, our home. In this unit you are going to learn about our environment.

Competencies: After studying this lesson, you will be able to:

- Relate the presence of wild animals to the distribution of natural vegetation.
- Realize that animals adapt and evolve to suit their habitat.

Key Terms

↔ Natural vegetation

↔ Primeval

↔ Wild animals

↔ Primate

Types and Distribution of Natural Vegetation and Wild Animals

- Define natural vegetation.
- Give local examples of natural vegetation.
- What are the features that determine distribution of natural vegetation?
- Explain why vegetation type differs from place to place.
- What are wild animals?
- Indicate the types of wild animals available in a given natural vegetation.

Eastern Africa is endowed with different types of vegetation and wild animals. This is the result of the physical environment and the prevailing climate. In this regard there are different types of natural vegetation in Eastern Africa. The natural vegetation includes forests, grasslands and semi-deserts and deserts.

- List features of the natural environments in Table 3.1. Use the knowledge you learnt in grade five in unit three.

Table 3.1 Features of different natural environment

Forest	Grassland	Semi-desert

Forests

- What are forests?
- What makes them different from grassland vegetation?
- Discuss, in groups, the different types of trees available in forests (focus on your local or nearby areas where forest vegetation is prevalent).
- First guess the types of forests available in Eastern Africa and then cross check your answer with the readings on the forest types of Eastern Africa.

◆ Coastal Forest

In Eastern Africa coastal and mountain forests prevail. The coastal forests of Eastern Africa include a tropical moist forest region along the east coast of Africa. The forests extend in a narrow band. They lie along the coast of the Indian Ocean. They stretch from southern Somalia in the north, through coastal Kenya and Tanzania to the mouth of the Limpopo River in southern Mozambique.

Montane Forest

- Where do we find montane forests in Eastern Africa?
- Mention some names of montane forests?
- What advantage do forests have for the local community?
- How do the people look after the forests?

Montane forest is found in southern Sudan (adjacent to Eastern Africa), Kenya, Uganda and northern Tanzania. This forest is situated on continuous and isolated mountain ranges. The forest region consists of more than twenty-five montane forest patches (or elevational islands) of various sizes.

The **Montane forest** lies starting from an altitude of 1300m up to 4000m. On wetter slopes, there are broadleaf and evergreen trees (See Fig.3.1). The montane forest is composed of species which are not found in the lowland forest.

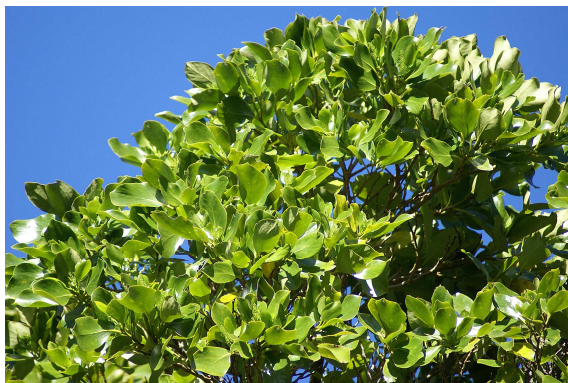


Fig. 3.1 Broadleaf and Ever green tree



Fig. 3.2 Coniferous forest of podocarpus

The uppermost belt of the Montane Zone is composed of giant heaths (Ericaceous) up to about three meters tall and covered with lichens (See Fig.3.3).

On drier slopes, a coniferous forest of junipers and podocarpus occurs (See Fig. 3.2). At the upper margins of the montane forest, bamboos may occur in patches or as a nearly continuous belt.

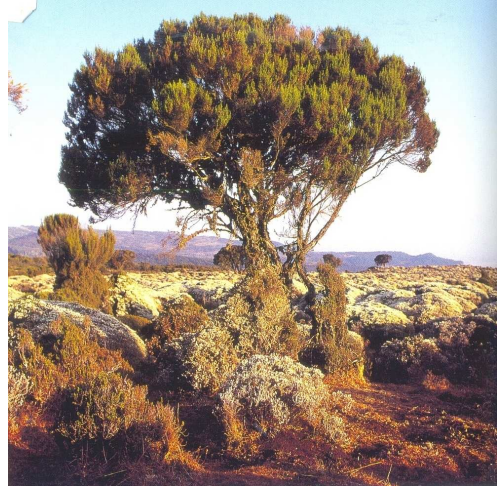


Fig. 3.3 Heather

Lesson

3.1

Review



Activity A

A. Questions based on facts:

Individual Work:

- What can you conclude about coastal forests in terms of the environment?
- Compare and contrast coastal forests and forests on wetter slopes of mountains.
- What type of vegetation is the upper most montane zone composed of?

Pair Work:

- Discuss the main differences among forests of lowest elevation, wetter slopes and drier slopes on mountains of Eastern Africa.
- In Which areas are coastal forests found in Eastern Africa?

B. Things to do:

Group Work:

- Collect information on types of forests in your area.
- Find out what causes the differences in the types of forests in your area and prepare a report for class presentation.

Case Study

Desert in Ethiopia

Ethiopia consists of varied natural environments. Some of them are semi-desert and desert environments. The Danakil Desert is one of the desert environments.

The Danakil Desert is located in the border-triangle between Ethiopia, Eritrea and Djibouti. It is one of the most remote and most extreme regions of the world. It is also one of the lowest points in Africa. It is 120 meters below the mean sea level at Kobar Sink. This desert is centered on the Danakil Depression. It is bounded on the north by the Danakil Alps, a range of hills separating the desert from the Red Sea. This desert is characterized by black lava formations, smoking volcanic cones, hot springs and sulfur fields. It is one of the hottest places on earth, with average day time temperatures around 27°C. The high temperature reaches 50°C. The region receives an average annual rainfall of less than 200 mm. Here, the vegetation type is scanty composed of scrub vegetation and stunted bushes and tufty grasses.

The desert contains small deposits of manganese and potash, but the principal resource is rock salt. There are numerous salt lakes in the desert. The largest is Lake Asale, near the Eritrean border. Its height is 120 m below sea level.

Danakil is a name given to the natives of Afar. The Afar are herding people. They speak Cushitic language related to Somali.



Fig. 3.4 Lake Asale



Danakil is an Arabic word. It is a name given to the natives of Afar. The Afar are herding people. They speak Cushitic language related to Somali.

Case Study

Grassland in Kenya (Masai Mara)

Kenya has forested and grass covered areas with other varied types of vegetation. One of the grass and different other types of vegetation covered area is known as Masai Mara.

The Masai Mara consists of rolling open grasslands with woody thickets, and patches of acacia woodland. There are tree-lined rivers, and isolated rocky outcrops known as *kopjes*. Masai Mara is bounded on the west by an escarpment. The other side slopes down to Lake Victoria. On the east, it is marked by the hills bordering the Eastern Rift of the Great Rift Valley. Across the border, in Tanzania, the Serengeti National Park is located. Masai Mara Game Park is a protected area in southwestern Kenya, on Kenya's southern border with Tanzania. First it was protected in 1948. In 1984 it was officially declared as a national reserve. The Masai Mara, which covers an area of 1,510 sq km, is one of Kenya's best known and most visited parks. The Masai Mara is of vital importance to the Serengeti environment. This environment is defined by the area used by the region's migratory herds of wildebeests or large African Antelopes (See Fig.3.5).



Fig. 3.5 Wildebeest

The wildebeests give birth on the open plains of the southeastern Serengeti. Here, annual rains from about November to May produce a rich growth of lush grasses. However, these grasses soon dry. As a result, the wildebeests are forced to move west across the Serengeti. Then they move northward into the Masai Mara, in search of grazing land. In essence, the wildebeests follow the rains and the associated lush grasses. In doing so, they generate one of the most spectacular wildlife in the world. From July to August, nearly two million animals move across the open dusty plains of the Masai Mara in seemingly never-ending droves. The herds turn around and disperse southward back into the Serengeti in October and November.

The herds of wildebeests and zebra are preyed on by lion, spotted hyena, leopard, and cheetah (See Fig.3.6). The Masai Mara supports the largest lion population in Kenya and is one of the best places for visitors to see cheetah.



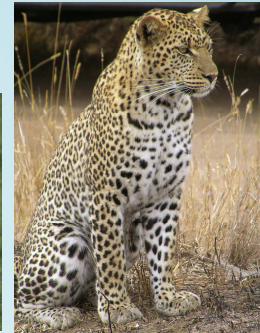
Lion



Spotted Hyena



Cheetah



Leopard

Fig. 3.6 Predatory Animals in Masai Mara

Wildebeest, zebra and Thomson's gazelle (See Fig.3.7) migrate into and occupy the Mara reserve from the Serengeti plains to the south. Finally, they move to Loita plains in the pastoral ranches to the north-east from July to October or later. Herds of all three species are also resident in the reserve.



Thomson's Gazelle



Burchell's Zebra



Grévy's Zebra

Fig. 3.7 Preyed Animals

Other mammals in the reserve include elephant, buffalo, giraffe, Thomson's hartebeest and hippopotamus (See Fig.3.8).



Elephant



Buffalo



Giraffe



Thomson's hartebeest



Hippopotamus

Fig. 3.8 Other Mammals of Masai Mara

Tourism can be a threat to the park's ecosystem. In the early 1990s park administrators closed parts of the park to visitors. This measure was taken simply to allow the vegetation to recover from excessive vehicular traffic. Excessive crowding of tourist vehicles around predators such as lion and cheetah has also been credited with changing the animals' behavioral patterns.

Case Study

Mountain Forest in Uganda

Uganda has mountain forest which gives shelter to endangered mammals. These mammals are known as gorillas. For example the huge primeval (ancient) forest in the Virunga Mountain range is one of the most biologically diverse areas on earth. It has an environment that defines the very essence of the continent. Therefore, it has been designated as a World Heritage Site.

There are many other mammals primate in the park including chimpanzees, black and white colobus, red colobus and blue monkeys, and grey-cheeked mangabey monkey (See Fig.3.9).



Chimpanzee



Colobus Monkey



Mangabey

Fig. 3.9 Some Primates of the Ugandan Mountain Forest

Lesson

3.1

Review

**Activity B****A. Questions Based on Facts:**

- Name the endangered animals that inhabit mountain forest in Uganda.
- Which mountain range is one of the most biologically diverse areas on earth?
- Name the predatory animals available in your areas.
- How do they live in those areas?

Pair Work:

- Discuss why Virunga mountain range is designated as a world heritage site.
- List the primates available in Uganda's mountain forest.
- Discuss on the advantage and disadvantage of herbivores and carnivores living together in a given environment.
- How does tourism become a threat to a park's environment?
- Discuss how you can protect a given environment in your area and present your findings to class.
- What do you do if an illegal hunter kills an animal in a given national park.

B. Things to do:**Group Work:**

- Collect as many pictures of wild animals as possible and make an album so that you present it to the pedagogical center of your school.
- Read more on the Danakil desert and report your findings to the class.

Pair Work:

- Make further readings and prepare a report about Virunga mountain in Uganda.

Animals and their adaptation to their habitats

- Why is it that in forested areas tree climbing animals are common?

Montane Forest: Animal Adaptations

- Where do you find montane forest in Eastern Africa?
- What sorts of animals live in this environment?
- Discuss how animals adapt themselves to montane forest.

There are numerous creatures living in montane forest of Eastern Africa. As a result, there is a great deal of competition for food, sunlight and space. Animals living in this forest have developed special features in order to survive. This is called **adaptation**.

Montane forest of Eastern Africa is inhabited by tree climbing animals, such as monkeys, chimpanzees and gorillas (See Fig.3.10). There are also birds that inhabit the forests. All animals in this forest live on various fruits. Some animals live on smaller animals and insects they find in the forest. The animals have developed body structures that help them manipulate in this forest. On wetter slopes, there are flesh eating animals like leopard. All these animals have well specialized body to adapt themselves to conditions in the montane forest region.



Gorilla



Chimpanzee

Fig. 3.10 Gorilla is a Montane Mammal

Savanna grassland

- What sort of grassland is there in your locality?
- Discuss the types of animals available in your local grassland.

The savanna grassland is another region where animals have adapted themselves to live in it. The animals that inhabit the savanna grassland are mammals, reptiles and birds. The bodies of these animals are suited to the physical conditions in the region. There are also birds that are well suited to adapt to the region. These birds live on fruits, crops and insects available in the region. Thus, due to adaptation all animals show interdependence, interconnectedness and interrelationship to sustainably inhabit the environment. This is purely the result of their adaptability to the region.

Desert and Semi desert:

- Discuss what desert and semidesert environments are.
- How do plants adapt themselves to these regions?
- How do animals withstand the severity of the desert and semi desert regions?
- Give examples of wild animals that live in desert and semi desert regions.

Plants and animals inhabit the desert and the semi desert regions. Plants in the desert or semi desert regions need special ways of getting water. Their leaves and roots are special. Deserts are home to many reptiles, insects, birds and small animals (See Fig.3.11). Few large animals have adapted to desert life. In order to survive, desert animals have developed a number of ways of adapting to their habitat. The most common adaptation in behavior is staying in the shade of plants or rocks. Some animals stay underground to protect themselves from the heat of the day. Many desert animals are inactive during the day time. They become active and hunt at night when it is cool. Some animals get all the moisture they need from the insects, plants and seeds they eat, and do not need to drink water. Most desert animals pass little moisture out of their bodies. They do not have sweat glands. They pass only small amounts of concentrated urine. Fat increases body heat, so some desert animals have concentrated the body's fat in one place, such as a hump or tail, rather than having it all through the body (See Fig 3.11).



Snake



Mammal (Camel)

Fig. 3.11 Desert and Semi desert animals

Camels are one of the few large mammals that survive in the desert, and have many special adaptations that help them.

Lesson

3.1

Review

**Activity C**

Questions based on facts:

Individual work:

- Why do some animals live in water bodies?
- Why do some others live in tropical forests of Eastern Africa?
- Compare and contrast grassland and desert habitats.
- What sorts of mammals are found in the mountain forest of Uganda?
- Which mountain range forest, in Uganda, has been designated as a world heritage?
- Mention the primates that inhabit the mountain forest of Uganda.

Pair Work:

- What will happen to the wild animals if their habitats are destroyed?
- Discuss the location of montane forests in Eastern Africa.

Group Work:

- Compare and contrast gorillas and chimpanzees.
- Discuss the adaptability of animals to every ecoregion of Eastern Africa.
- Discuss how protecting montane forest, grassland, desert and semi desert ecoregions is possible.
- You remember that you learnt about animals that inhabit the forest, the savanna grassland and desert or semi desert region, in this unit. Now try the following exercise.

Look at the table below and list the wild animals found in each ecoregion.

Desert in Ethiopia	Grassland(Kenya-Masai Mara)	Mountain forest-Uganda

Factors that Affect the Distribution of Natural Vegetation and Wild Animals in Eastern Africa

Competencies: After studying this lesson, you will be able to:

- Identify the major factors which affect the distribution of natural vegetation.
- Explain that wildlife is affected if the environment is damaged by increased human presence.
- Appreciate the aesthetic value of natural vegetation and wild animals in Eastern Africa.
- Explain that income secured from tourism can contribute to the protection of wild animals and their habitat.

Key Terms

↔ Biodiversity

↔ National park

↔ Sanctuary

↔ Soil erosion

↔ Game reserve

↔ Species

Key Natural and Human Factors that Affect Distribution of Natural Vegetation and wild animals

- Pin point some natural factors that help grow plants in your surroundings.
- List the possible human factors that affect the flourishing of vegetation in your locality.
- What measures should people take in order to keep plants grow well in your surroundings?
- Discuss, in pairs, the natural factors that affect the distribution of natural vegetation in general.
- Present local examples with regard to maintaining the growth and destruction of natural vegetation.
- Discuss the economic use of natural vegetation in your local area.

◆ Natural Factors

Natural factors are naturally found phenomena. They include:

- Soil type
- Climate
- Altitude

These factors are interconnected. They are put here separately to indicate that each can be used as a cause to explain the existence of a given living organism or thing in a certain locality. For example the

availability of fertile soil could be the result of vegetation cover. Vegetation and its type could be related to the type of climate which is the reflection of altitude variation.

Thus, natural vegetation differs due to variation in soil, climate and altitude. If you remember the different types of vegetation you learnt previously, they are the reflections of soil type, climate and altitude. Luxuriant plant growth and vegetation distribution are the results of fertile soil, high rainfall and moderate altitude.

Due to natural imbalance, the vegetation cover may be endangered. For instance, when drought occurs, vegetation cover is affected. Ultimately the land becomes bare. Bare land is exposed to erosion. Erosion in the long run degrades the landscape. If this happens continuously, then the land becomes barren. Barren land is usually less fertile. Thus, it is abandoned by both humans and animals.

◆ Human Factors

Human factors are usually expressed in terms of human interference. In Eastern Africa, natural regions are commonly affected by:

- expansion of tourism
- human settlement
- rapid coastal development
- expansion of farmlands

In several areas, such as the Nairobi and Mkomazi parks, large mammal populations have become more compressed and animal and plant species diversity has decreased. Rapid biodiversity loss in some of Kenya's protected areas is also closely linked with the expansion of tourism, rapid coastal development, and spread of human settlements since the 1970s. The large mammal population of Uganda's Murchison Falls National Park came under heavy pressure during the years of civil strife, leading to huge species decline and vegetation cover change. Wild animals are forced to leave their habitat due to decreasing forest cover.

Some scientists believe that the global climates are changing. This change causes global warming. They believe that the change is caused by human activity. Other scientists believe the changes being measured are only fluctuations in the atmospheric conditions. They ascertain that these changes have always occurred.



Global warming describes and explains the pattern of increasing global temperatures.

In Eastern Africa, in most cases, grasslands are homes for big animals such as leopards, lions, cheetah, and numerous grass eating animals. Their number used to increase in the past. With the elapse of time,

human population number showed a dramatic change. This caused the rise in demand for extra land. Thus, habitats of wild animals started to be encroached by ever growing rural population. Farmers began clearing the wild animals' habitat bit by bit to secure farmland for growing crops that would satisfy their need for food and grazing grounds for their cattle. This human interference has increased from time to time contributing to the decrease in the animals' habitat. Trees have been cut and grass lands burnt to get extra land for farming. These activities have cumulative effect in threatening the wild animals as time goes by. Consequently, the coexistence of grass eating and flesh eating animals has been disturbed. To this end, some animals like leopards and other big cats have abandoned their habitats and migrated to some other places where they could get free shelter and food. Moreover, illegal hunting has reduced the number of leopards in the wooded grasslands.

Lesson

3.2

Review

**Activity A***Questions based on facts:***Individual work:**

- What are the important natural factors that determine forest distribution?
- Explain, at length, the human factors that affect distribution of plants and wild animals .
- When is vegetation cover usually endangered?

Pair Work:

- Discuss how you can check human intervention that negatively affects the distribution of vegetation and wild animals
- Exchange views on how human activity plays a prime role on global climate change.
- Discuss what views some scientists hold with regard to on going global climate change.

Group Work:

- Collect information about vegetation depletion and wild animal migration.
- Discuss how natural factors affect the distribution of vegetation and wild animals.

Wild Animals: World Heritage

As mentioned earlier, wild animals in Eastern Africa are found both in forests and grasslands. These animals are important and attractive for the region. This has made the region a dignified tourist attraction center. Some countries of the region have well organized and maintained national parks, game reserves and sanctuaries. Such countries include Kenya, Tanzania, Uganda, Rwanda and Ethiopia.

Most often protected areas are visited by tourists. As a result, the protected areas in Eastern Africa have become renowned wild animal reserves where pass time visit and research based activities are carried on. Thus, the areas have been designated as world heritage.

◆ Endangered Species

Nature relies on delicate balances of plant and animal life to remain healthy. When one part of that balance is altered, our plants and animals can be put in danger. Although change is a natural part of our evolving world, changes that occur at a pace that is too rapid has a disastrous effect on individual species of plants and animals.

Habitat loss at an unexpected pace is the primary cause of the endangerment of species in Africa. As the rainforests are cut for wood and exploited for other natural resources, hundreds of species are put in danger of existing no more. Many animals also suffer due to overexploitation or poaching.

Some of the endangered mammals of Eastern Africa are:

- elephant

- cheetah

- gorilla

- leopard, etc

Case Study

Forests of Uganda and Rwanda are inhabited by gorillas. These gorillas have lived in these forests since the time the forests flourished. Before human population showed dramatic change in the two countries, gorillas inhabited the forests peacefully. With the elapse of time, due to deforestation and illegal hunting, the number of gorillas has decreased continuously. This has made them endangered animals in that part of the continent of Africa.

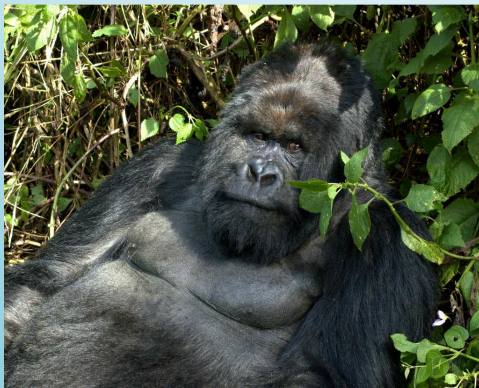


Fig 3.12 Gorilla

Gorilla Safaris are found in Uganda, Rwanda and Democratic Republic of Congo whose jungles provide the perfect habitat for the endangered gorilla population. There has been an increase in the gorilla population in recent years. However, they are still one of the world's most endangered species. Thus, they are in desperate need of conservation.

◆ What is WWF?

- WWF means **world wildlife fund**. WWF is one of the world's largest and most respected independent conservation organizations.
- It is an independent foundation registered under Swiss law
- WWF is a global organization acting locally through a network of over 90 offices in over 40 countries around the world.
- On-the-ground, conservation projects managed by these offices are active in more than 100 countries.
- The central secretariat for the network called WWF International is located in Gland, Switzerland.
- WWF's first **office** was founded on 11 September 1961 in the small Swiss town of Morges.



Fig 3.13 Logo of WWF

Lesson

3.2

Review



Activity B

A. Questions based on facts:

Individual work:

- In which countries of Eastern Africa do we find gorillas?
- Discuss the negative impact of human interference in a given natural environment.

Pair Work:

- Exchange views with your group members to define what heritage is.
- Discuss how wild animals become world heritage.
- How are wild animals endangered?

Group Work:

- What does WWF stand for?

B. Things to do:

Individual Work:

- Compare and contrast cheetah and leopard.

Pair Work:

- Draw the sketch map of Eastern Africa.
- Show different wild animal habitats on the map.

Group Work:

- Make the sketch map of Eastern Africa and show the countries that own gorillas.

Human Interference and Disturbance to Our Environment

Competencies: After studying this lesson, you will be able to:

- Evaluate the different human causes of damage to the natural environment.
- Identify the effect of human interference in natural vegetation.

Key Terms

- ↔ Drought
- ↔ Famine
- ↔ Migration

Causes

- What are the pull factors for human interference and disturbance to our environment?
- Discuss, at length, the actual activities that result from human interference.

Rapid population growth in Eastern Africa has called for additional land for agricultural purposes. People are likely to encroach protected areas and clear vegetation cover. Any move to use natural resources unwisely has a devastating effect on the environment in due course of time.

Rural population's life is entirely dependent on farming and rearing animals. Domestic animals need enough space for grazing. Gradually, the area used to graze animals may be overgrazed and over browsed. In the long run overgrazing and over browsing inflict problem to the area. Thus, the widening pasture land from time to time forces wild animals to abandon their habitats.

People may simply cut trees for building construction. Unwise use of the forest resources affects the given environment constantly. Ultimately, the environment becomes barren. There arises climate change. Cattle may be starved due to lack of forage. The soil could be exposed to wind erosion.

When earlier settlement areas become unyielding due to unwise use of resources, people are forced to abandon their permanent settlement and migrate to other resourceful areas. Unless their awareness as to how to use resources in the host places is not raised, it is likely that they repeat the same deadly mistake. Migration could also be caused by unrest or climate changes in their previous settlement areas.

Effects

When the vegetation cover in a given area is unwisely used, it is likely that soil erosion occurs. In the long run soil erosion may result in barren land unless some sort of controlling mechanism is introduced. When vegetation cover is depleted, the underground water level decreases. This results in shortage of water supply. The local climate may be disturbed and drought may set in. Drought results in famine. Famine causes migration.

Lesson

3.3

Review



Activity A

Questions based on Facts:

Individual work:

- What is the impact of rapid population growth on land use?
- Why do people tend to encroach protected areas in their region?

Pair Work:

- Discuss the disadvantage of unwise use of resources.
- What will happen to a forested area if people constantly cut trees?

Discuss this question in terms of:

- Destroying animal habitat
- Losing upper fertile soil

B. Things to do:

Group Work:

- Collect information on vegetation cover in your area.
- Discuss what will happen to the vegetation cover if population grows rapidly in the area.
- Read on conservation and suggest possible ways that help conserve vegetation and wild animals in your area.

Competencies: After studying this lesson, you will be able to:

- Explain methods of conserving soil.
- Explain how to conserve water.
- Discuss how to purify water.

Key Terms

- ↔ Afforestation
- ↔ Reforestation
- ↔ Agro forestry
- ↔ Terracing
- ↔ Contour ploughing
- ↔ Crop rotation
- ↔ Water harvesting
- ↔ Saplings
- ↔ Deforestation
- ↔ Pollutant

Methods of conserving water and soil

- What is conservation?
- Why do you conserve natural resources?
- Discuss the methods used to conserve water and soil?

◆ Reforestation

Reforestation is planting trees in areas where forests have been removed. Reforestation is vital on once lost forest lands and along river banks where river line forests were available.

◆ Afforestation

Afforestation refers to the activity of growing saplings on areas where there has never been forest cover. Usually afforestation is conducted along marshy areas to withstand water logging. It is also done in areas where grass cover predominates. Afforestation is important along sides of agricultural lands where trees are grown to control incoming wind which affects the farm land.

◆ Agro-forestry



Agro forestry is a collective name for land use systems and practices in which woody perennials are deliberately integrated with crops and/or animals on the same land management unit. (See fig 3.14)



◆ Terracing

Terracing is one of the methods of soil conservation. In terracing the bed like structures are easily observable on hilly areas (see Fig. 3.15).



Fig. 3.15 Terraced Area

◆ Contour Ploughing

Contour ploughing is a **farming** practice of across a slope following its elevation. The rows formed slow water run-off during rainstorms to prevent soil erosion and allows the water to settle into the soil. (See Fig 3.16)



Fig. 3.16 Typical Contour Ploughing

◆ Crop Rotation

Crop rotation is one of the oldest and most effective cultural soil fertility controlling strategies. It means the planned order of specific crops planted on the same field. It also means that the succeeding crop belongs to a different family than the previous one. The planned rotation may vary from 2 to 3 years or longer period.

Advantages of crop rotation

Corp rotation:-

1. Prevents soil depletion
2. Maintains soil fertility
3. Reduces soil erosion
4. Controls insect/mite pests. Crop rotation as a means to control insect pests is most effective when the pests are present before the crop is planted.
5. Reduces reliance on synthetic chemicals
6. Reduces the pests' build-up
7. Prevents diseases
8. Helps control weeds

◆ Reduce Over use of Chemical Fertilizer

When soil is tilled year in and year out, the soil nutrient may be lost due to exhaustion. Exhausted soil is less productive. To make the soil better productive, chemical fertilizers are used to provide the soil with

soil nutrient. Nowadays, as studies indicate, it is better to reduce the use of chemical fertilizers as much as possible. Instead it is better to use organic fertilizers to make the soil productive and reduce chemicals that harm the soil and mix with river water via run off. Organic fertilizers are cow dung, compost or any dried up and decayed animal and plant remains.

◆ Water Harvesting

Water harvesting is the collection of water for different activities including, drinking and agriculture through different means. These means include:

- Rain water harvesting
- Ground catchment Systems
- Roof catchment systems

Water Purification

Water purification is the process of changing water from a non-drinkable state to drinkable state. This is done when the water is polluted or determined to be potentially dangerous to health. This unfortunately happens more and more as ever larger amounts of chemicals find their way into our water sources. The damage that these chemicals and contaminants can do to us is both wide ranging and frightening. There are, however, an ever increasing number of water purification systems available. Thus, there are water filters that are designed to filter out various contaminants from calcium to metals. There are also a wide variety of substances that can be added to water to counteract the pollutants in the water.

◆ Pollutant Reduction

Pollutants may be understood as air and water pollutants. Especially, in the urban areas, water pollutants are well observable. Something that causes pollution is called pollutant. A chemical or waste product that contaminates air, water or soil is called pollutant.

Air Pollutants:

- What are air pollutants?
- What causes air pollutants?

Most air pollution comes from human activities: burning fossil fuels natural gas, coal, and oil to power industrial processes and motor vehicles. Fig 3.17 illustrate the pollution of air from vehicles in cities.



Fig. 3.17 Automobile Traffic Pollution

Water Pollutants:

- What are water pollutants?
- What cause water pollutants?

Water pollutants result from many human activities. Pollutants from industrial sources may pour out from the outfall pipes of factories or may leak from pipelines and underground storage tanks (See Fig.3.18). Polluted water may flow from mines where the water has leached through mineral-rich rocks or has been contaminated by the chemicals used in processing the ores. Cities and other residential communities contribute mostly sewage, with traces of household chemicals mixed in. Sometimes industries discharge pollutants into city sewers, increasing the variety of pollutants in municipal areas. Moreover, some water bodies like ponds and springs should be kept clean by keeping their surroundings clean. Any contaminated or polluted water that drains to these water bodies should be controlled. Garbages from home must be accumulated in areas far away from all water bodies such as ponds, springs, rivers, lakes, etc. People who live near or pass by the water bodies, especially ponds and springs should be trained not to clean up there. Industrial waste is commonly seen mixing with rivers around Addis Ababa. For example river Akaki is polluted by such wastes.



Fig. 3.18 Industrial Waste



Liquid waste that runs into a stream from a factory can kill animals and cause health problems for humans.

In general, pollutants may not be entirely avoided. However, they can be reduced by introducing mechanisms that help reduce waste products from industries and motor vehicles. Carbon emission from vehicles should be reduced by introducing new technology. Pollutants from cities or other resident areas can be managed by preparing waste disposal areas.

Lesson**3.4****Review****Activity A****A. Questions based on Facts:****Individual Work:**

- What does deforestation mean?
- What are the consequences of deforestation?
- Compare and contrast reforestation and afforestation.

Pair Work:

- Discuss the advantages of agro forestry in general.
- Exchange views with regard to the introduction of agro forestry to your area and the advantage that may be obtained in that same area.
- Compare and contrast terracing and contour ploughing.

B. Things to do:**Group work:**

- Discuss for and against using more chemical fertilizers to maintain soil fertility.
- Debate the advantage of organic fertilizers over chemical fertilizers.
- Read on pollutant reduction methods and write a report on avoiding:
 - Air pollutants
 - Water pollutants and present your report.

National Parks and Their Importance in Ethiopia and Eastern Africa

Competencies: After studying this lesson, you will be able to:

- Explain the purpose and importance of National Parks.
- Locate Ethiopian National Parks on the map of Ethiopia.
- Identify major National Parks of Eastern Africa.

Key Terms

↔ Conservation

↔ Research

National Parks of Ethiopia and Their Importance

- What are national parks?
- What advantage do national parks have?
- Name some national parks of Ethiopia.
- Pin point some parks and indicate the type of wild animals protected there.

◆ The Importance of National Parks

National parks are important to conserve animal and plant species. As the parks remain in their natural environment, unique plants and animals are observable. As a result they attract tourists. The parks are of help to protect indigenous plants and animals. The stunning and scenic plants and animals are important for conducting research. The parks are very important in maintaining plants and animals unique to the surroundings. As the plants and animals are well preserved there, they serve as heritages of the country.

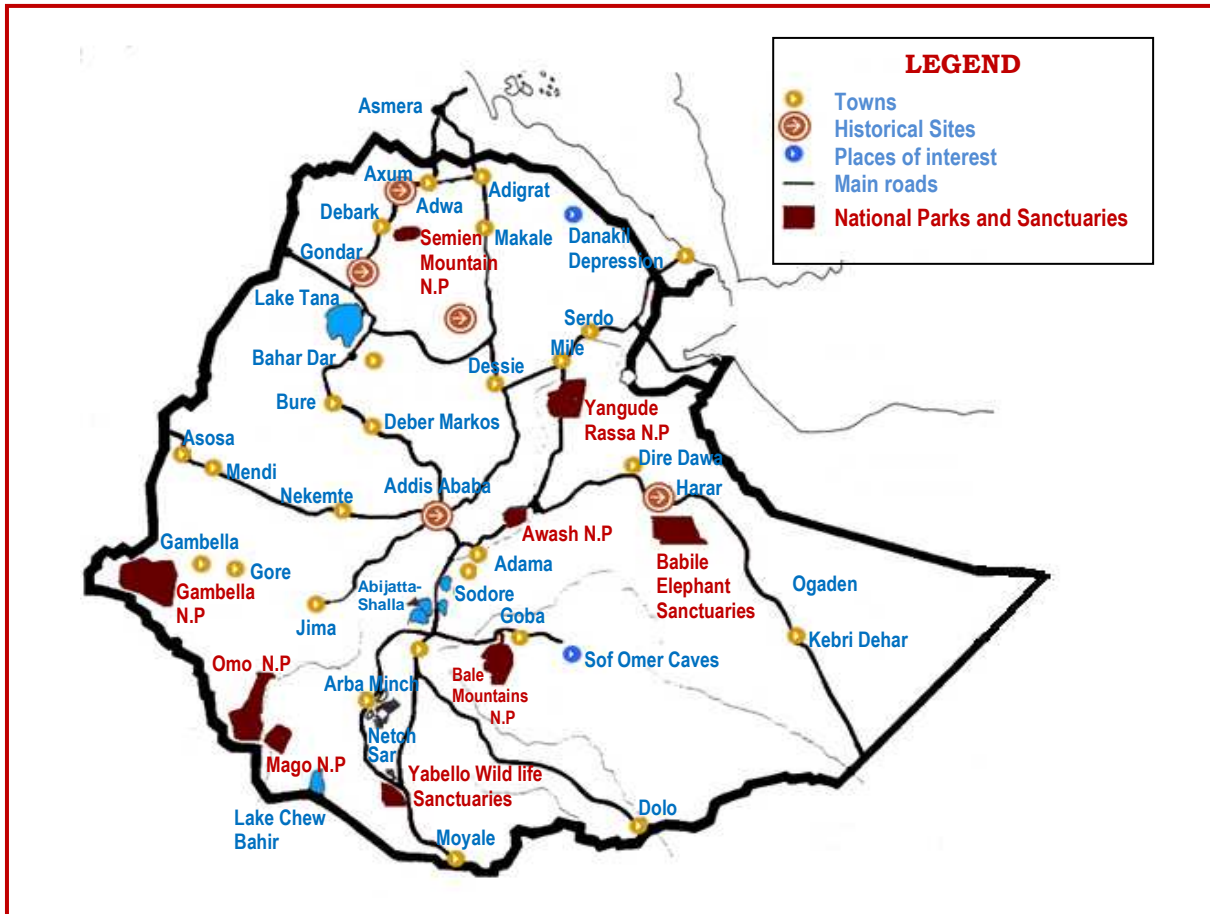


Fig. 3.19 National Parks of Ethiopia

In Ethiopia, there are 9 national parks (See Fig. 3.19). These national parks are considered to be tourist attraction centers. Along with the national parks, there are sanctuaries.

The nine Ethiopian National Parks are:

1. Semien Mountains National Park,
2. Abijatta-Shalla Lakes National Park,
3. Awash National Park,
4. Bale Mountains National Park,
5. Gambela National Park,
6. Mago National Park,
7. Netchsar National Park,
8. Omo National Park and
9. Yangudi-Rassa National Park

Three of the above national parks are treated below as examples.

i. Abijatta-Shalla National Park

This national park is found in the lakes region, particularly known as the rift valley. It is located 200 kilometers south of Addis Ababa. About 482 sq.km of the park is covered by water. It comprises the fluctuating shallow pan of Lake Abijatta and the deep, steep-sided Lake Shalla. Both lakes are saline. Several hot springs come up to the shore and flow into Lake Shalla. The park land has savanna and

acacia wood land vegetation. Thirty one species of mammal, including greater kudu, Grant's gazelle, Anubis baboon, grivet and colobus monkeys, black backed and common jackal are found. There are also numerous birds in this national park.



Fig. 3.20 Pelicans in Abyatta-Shall National Park

ii. Awash National Park

Awash national park is located 225 km east of Addis Ababa bordering the Awash River in the upper rift valley. The park is as wide as 756 sq.km. It consists of a variety of wild animals. They include Beisaspure oryx, greater and lesser kudu, Soemmering's gazelle, Thomson's hartebeest, lion, Defassa waterbuck, Salt's dik-dik and some others.

There are numerous birds in the park.



Fig. 3.21 Thomson's hartebeest in Awash National park

iii. Bale Mountain National Park

Bale Mountain National Park is located in south east Ethiopia. It touches the southern end of eastern edge of the rift valley mountain chain. It is 400 km away from Addis Ababa. The park comprises a variety of wild animals. It was originally established to protect two of the Ethiopia's endemic species: the mountain Nyala and the Semien fox.

There are a variety of birds in the park out of which sixteen are endemic species.



Fig. 3.22 Nyala in Bale National Park

◆ Sanctuaries

A sanctuary is an area where animals and birds are protected. It is a kind of park where animals or birds are looked after. Here killing is highly prohibited even if an individual has a license to kill animals or birds.

There are several sanctuaries in Ethiopia. Some of them are the Babilie Elephant Sanctuary, the Kuni-Mutar Mountain Nyala Sanctuary, the Sankale Thomson's Hartebeest Sanctuary and the Yabello Sanctuary.

Case Study

Mago National Park is one of the renowned National Parks of Ethiopia (See Fig.3.23).

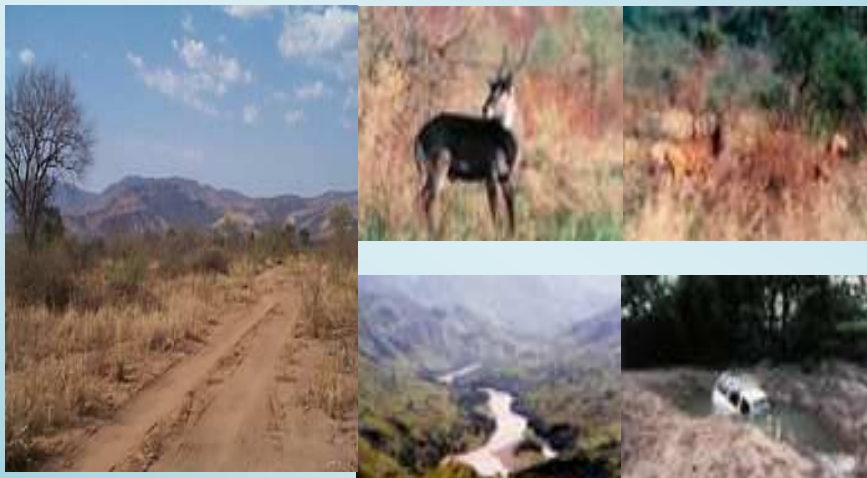


Fig. 3.23 Partial View of Mago National Park

It is located in the Southern Parts of Ethiopia. It is about 782 kilometers south of Addis Ababa. Its area is 2,162 sq.km. The park is divided by the Mago River, a tributary of the Omo River, into two parts. It is 115 kilometers north of Murele and 40 kilometers southwest of Jinka. 56 species of mammals, such as buffalo, giraffe, elephant, lion, cheetah, leopard, zebra, gerenuk, and oryx are found in the park.

The Mago National Park was established in 1979. Its territory embraces savanna, acacia forest, and the Neri Swamp. Its highest point is Mount Mago.

Case Study

The Nairobi National Park Orphanage

The Nairobi National Park Orphanage is a small sanctuary. It is located near the entrance of the national park which provides shelter to animals and birds that have been orphaned or injured (See Fig.3.24). The Nairobi National Park Orphanage gives guests a closer view of a variety of animals that they may not easily see on the small tour of the national park. The animals seen include lions, cheetah, leopards, and hyenas among others. Birds sheltered include crowned cranes.



Fig. 3.24 Some orphaned or injured animals of the Nairobi National Park Orphanage Park

Table 3.1 Some National Parks of Eastern Africa

S. No.	National Park	Area km ²	Country
1	Nairobi	115	Kenya
2	Tsavo - East - West	13,000 7,800 } 20,800	Kenya
3	Uganda's Kabalega	3,895	Uganda
4	Serengeti	14,800	Tanzania
5	Gambela	5,060	Ethiopia
6	Yangudi Rassa	4,730	Ethiopia
7	Omo	4,068	Ethiopia
8	Bale Mountains	2,470	Ethiopia
9	Mago	2,160	Ethiopia
10	Abjatta Shalla lakes	887	Ethiopia
11	Awash	756	Ethiopia
12	Simien mountains	179	Ethiopia

Lesson

3.5

Review

**Activity****A. Questions based on Facts:**

Individual work:

- What are National Parks?
- Compare and contrast national parks and sanctuaries.

Group Work:

- Discuss why national parks are important to preserve and conserve wildlife?

B. Things to do:

Pair work:

- Draw the sketch map of Ethiopia and show major national parks.

Group Work:

- Draw the sketch map of Eastren Africa and depict national parks.

Summary

- Eastern Africa has different natural environments which include forests, grasslands and deserts as well as semi-deserts.
- There are coastal and mountain forests in Eastern Africa.
- Coastal forests extend in a narrow line along the coast of the Indian Ocean.
- Montane forest is situated on continuous and isolated mountain ranges in Eastern Africa starting from 1300m up to 4000m above sea level.
- Grasslands are available in Eastern Africa. Grassland occurs where there is sufficient moisture for grass growth.
- Grasslands are usually found between forests and deserts.
- There are wooded savannas where grass and trees are found growing mixed together.
- Animals adapt to their habitats in response to vegetation type and climate in those given regions.
- In a given region, there are different wild animals. In forest region, for example, tree climbing animals are prevalent.
- Distribution of natural vegetation is the function of natural and human factors.
- There are endangered species in Eastern Africa which include elephants, gorillas, cheetahs and leopards in general.
- Human interference in terms of unwise use of the natural resources affects the natural environment.
- Water and soil should be conserved for sustainable use.
- National Parks are essential to preserve and conserve wild life in Ethiopia in particular and Eastern Africa in general.

Glossary

- **Afforestation:** planting trees in places where trees have never been before.
- **Agro forestry:** planting trees along with crops.
- **Biodiversity:** refers to different types of plants in a given region.
- **Conservation:** the care and management of the natural environment; the act of protecting and preserving resources for sustainable use.
- **Contour ploughing:** sideways ploughing along the slope.
- **Crop rotation:** growing crops in turn on the same plot of land.
- **Deforestation:** ruthless removal of forests.
- **Drought:** an extended period of dry weather-lack of water.
- **Famine:** extreme hunger and starvation.
- **Game reserve:** animal protection where hunting is allowed with license.
- **Migration:** abandoning one's living area.
- **National park:** park owned by government.
- **Natural vegetation:** Plants found in nature.
- **pollutant:** substance that pollutes.
- **primeval:** very ancient.
- **Primate:** a member of the most highly developed order of mammals.
- **purification:** the process of making something pure, e.g. pure water.
- **Reforestation:** Planting trees to reclaim trees lost.
- **Research:** study.
- **Sanctuary:** an area where birds and wild animals are protected and encouraged to breed.
- **Sapling:** young trees.
- **Soil erosion:** the removing of the surface soil by natural agents.
- **Species:** a group of animals or plants with a genus (group within a family).
- **Terracing:** bed like structure built along slopy area.
- **Water harvesting:** collecting water.
- **Wild animals:** animals in the jungle.

UNIT

3

Review Questions

I. Write "True" for correct statements and "False" for incorrect statements.

- _____ 1. In Eastern Africa montane forest is found on continuous and isolated mountain ranges.
- _____ 2. The upper most of the montane zone is composed of giant trees.
- _____ 3. The Danakil desert is located in the border between Ethiopia, Eritrea and Djibouti.
- _____ 4. Erta Ale is found in the Afar Region.
- _____ 5. The hyena is one of the most common wild animals in Ethiopia.

II. Match the items under 'B' with the corresponding explanations under 'A'.**Column 'A'**

- _____ 6. desert domestic animal
- _____ 7. most biologically diverse area on earth
- _____ 8. animal with high towered neck
- _____ 9. grassland region
- _____ 10. fast running wild animal

Column 'B'

- A. Cheetah
- B. Giraffe
- C. Virunga mountain
- D. Savanna
- E. Camel
- F. Lion
- G. Wild ass
- H. Buffalo
- I. Hartebeest

III. Choose the correct answers for the following questions and write the letter of your choice on the space provided:

- _____ 11. One of the following is not a grass eating animal:
a) elephant c) Cheetah
b) wild ass d) Oryx
- _____ 12. The accommodation of a living organism to its environment is called:
a) familiarization c) sudden change
b) adaptation d) slow change
- _____ 13. One of the following is not a tree climbing animal:
a) cheetah c) gorilla
b) monkey d) chimpanzee
- _____ 14. Which one is most affected by drought?
a) Vegetation cover c) parent material
b) Soil d) water
- _____ 15. One of the following is an endangered mammal of Eastern Africa:
a) tiger b) gorilla c) hyena d) jackal

- _____ 16. Which one is a collective name for land use systems and practices in which woody perennials are deliberately integrated with crops?
- a) ecoregion
 - b) afforestation
 - c) agro forestry
 - d) crop rotation

IV. Fill in the blank spaces with suitable words or phrases.

17. One of the world's largest and most respected independent wild animals conservation organizations is known as _____
18. Rapid population growth is dangerous as it affects the _____
19. Drought results in _____ and _____.

V. Give appropriate answers to the following questions:

1. List the national parks of Ethiopia.
2. What are pollutants?
3. What is the advantage of water harvesting?

Check List

Put a tick (✓) mark in each of the boxes for activities you can perform

I can:

1. Relate the presence of wild animals to the distribution of natural vegetation.
2. Realize that animals adapt and evolve to suit their habitat.
3. Identify the major factors which affect the distribution of natural vegetation.
4. Explain that wildlife is affected if the environment is damaged by increased human presence.
5. Appreciate the aesthetic value of natural vegetation and wild animals in Eastern Africa.
6. Explain that income secured from tourism can contribute to the protection of wild animals and their habitat.
7. Evaluate the different human causes of damage to the natural environment
8. Differentiate the effect of human interference in natural vegetation.
9. Explain method of conserving soil
10. Explain how to conserve water.
11. Discuss how to purify water.
12. Explain the purpose and importance of National parks.
13. Locate Ethiopian National parks on the map of Ethiopia.
14. Identify major Natural Parks of Eastern Africa.

UNIT

4

PUBLIC AGENDA

Unit outcomes

After studying this unit, you will be able to:

- Participate in combating HIV/AIDS,
- Give examples of violation of children's rights and escaping mechanisms,
- Identify sub-regional organizations, member states and explain the partnership aims of Eastern African organizations.

Competencies: After studying this lesson, you will be able to:

- Realize the importance of community solidarity in combating HIV/AIDS.
- Develop positive attitudes on how to live and learn with peoples and their families affected by HIV/AIDS.
- Take responsibility to behave without stigma and discrimination and to give due care and support to people and families affected by HIV/AIDS.

Key Terms

- ↔ Orphan
- ↔ Stigma
- ↔ Discrimination

◆ Combating HIV/AIDS

- What is HIV/AIDS?
- What economic and social problems does HIV/AIDS bring to community?
- How do you protect yourself from HIV/AIDS?

The words HIV and AIDS are names given for a virus and a disease respectively. HIV is a virus which causes a disease called AIDS. In its full name, the epidemic disease is called HIV/AIDS. The virus (HIV) is transmitted in four major ways. These are:

- Sexual intercourse with a person affected by HIV/AIDS.
- Transfusion of infected blood (Transfusion means transferring the blood of one person to another for medical purpose).
- Transmission from mother affected by HIV/AIDS to her child before or after birth.
- Infected blood in or on needles, syringes or other skin piercing instruments.

HIV/AIDS is the epidemic causing high deaths in Ethiopia and other countries of Eastern Africa. It is the source of economic and social problems. It kills young, educated and skilled people. This affects the development of a country. The death of parents disrupts a family life. This creates many orphans or

children without parents. Such children become a burden to their community. They need care and support from their community. In the absence of care and support, the orphans turn to street life. This is again another aspect of social problem. In both cases, the community is the one to be affected. That is why the fight against HIV/AIDS needs active community participation.

◆ What Ways are Helpful to Fight Against HIV/AIDS?

There are some diseases which have no vaccine or medical treatment to cure them. For example, cancer and diabetes have no vaccine to cure them. Like cancer and diabetes, HIV/AIDS does not have medical treatment that reduces or slows down the growth of virus in the blood cells. But the best option is taking preventive measures against the epidemics. What preventives measures are there?

The fight against HIV/AIDS must begin from you, individual persons. You have to be careful in order to protect yourself from HIV/AIDS. Care must be taken when establishing sexual relationship. One such care is avoiding unsafe sexual practices. You must recognize that you are the most productive section of your society. Because of this, you must avoid sexual relationships before marriage. People who establish sexual relationship have to be loyal to their partners. They have to limit themselves to only one partner. Using condom is another preventive way.

From the above discussion, three preventive mechanisms can be summarized. One is totally avoiding sexual practice. The second is limiting oneself to only one partner and to be loyal to that partner. The third is using condom. The three mechanisms are generally called the ABC rules. The three letters stand for the three terms that describe each of the preventive mechanisms. Table 4.1 explains the meaning of the ABC rules.

Table 4.1 The ABC Rules for HIV/AIDS

A	Abstinence	This means no sex; keep away from the practice of sex
B	Be Faithful	Be loyal to sex partner
C	Condom	Using condom to practice safe sex

The fight against HIV/AIDS includes another important aspect. This is providing care and support for people affected by HIV/AIDS. Children who become orphans due to HIV/AIDS also need a community support. All these need public awareness about the epidemic. This includes knowledge about ways in which HIV/AIDS is transmitted or risk factors associated with HIV infections. People have to know clearly ways in which the epidemic is not transmitted.

- You cannot be infected by living or sitting together or shaking hands with people affected by the virus.
- Kissing, touching, sharing the same toilet rooms and drinking vessels and mosquitoes do not transmit HIV/AIDS.

Lack of knowledge about the nature of the epidemic is the source of stigma and discrimination. So, raising community awareness about the epidemic is important not to stigmatize and discriminate people affected by HIV/AIDS.

As responsible citizens, you are required to provide care and support to families or peoples with HIV/AIDS. The convenient ways of doing this is through the participation in HIV/AIDS clubs. Such can give care and support in an organized and planned way based on local situations. In general, however, you can help in washing household utensils and cleaning houses. You can attend and frequently visit so as to help them fight loneliness.

◆ Can You Tell How HIV/AIDS Affects Family Life?

The following case studies are from Uganda and Ethiopia. They are told by women who are affected by HIV/AIDS. They both have lost their husbands. After reading the case studies answer the questions that follow.

Case Study

Uganda

I was only 19 and newly married, when my son was born. After six months, my husband left us for the neighboring country in search of job. Over the last two years, I have not heard of him. The problem is, however, I learnt that both I and my son have HIV. It was like a death sentence for me. I was deeply worried about my life and the future of my son. I have no job. I do not think my husband can ever return back. Even if he returned, he could no longer be of any use to our family life, since he himself has caught the virus. Everything seemed dark. Thanks to the organization called fire light. It allowed me have a monthly pay. I also obtained a counseling service. I feel now confident and have good hope for the future!

Source: Google website

Case study

Ethiopia

My husband died four years ago. I am left with a ten years old son and 12 years daughter. They are both a grade three students. Two years after the death of my husband, I came to know that I have HIV. But my children are free of it. Until recently, I resisted taking medicine that prolongs life. For most of the times, I was sick. I could not conduct my daily duties properly. Few months ago, I was persuaded to take medicine. My health revived very soon. But our life is very hard. My children attend a private school. Our income comes solely from house rent. Whatever the case, we are living with hope.

Source: from personal acquaintance

Lesson

4.1

Review

**Activity***Questions based on Facts:*

- What is the difference between HIV and AIDS?
- Name the main mechanisms in which HIV/AIDS is transmitted from one person to another.

Things to do:

Draw a chart and explain the ABC rules for HIV/AIDS.

Activity*Exchange ideas on the following questions*

- Tell the differences in the stories told from Ethiopia and Uganda.
- Which part of the story from Ethiopia reminds the need to raise public awareness on HIV/AIDS? Why?
- In which of the two stories is there assistance made to families affected with HIV?

Competency: After studying this lesson, you will be able to:

- Explain the impact of rapid population growth in Eastern Africa.

Key Terms

- ↔ Malnutrition
- ↔ Less developed
- ↔ Disease
- ↔ Pollute
- ↔ Drought
- ↔ Famine
- ↔ Deforestation

◆ Rapid Population Growth

Debate in a classroom on the following question:

- Is large size family Advantageous or Disadvantageous? How and Why?

The question of rapid population growth is a source of constant worry in the present world. It is a serious problem particularly in less developed countries of Eastern Africa. Population growth means increase in the number of people in a given locality, country or region. But when we add the word "rapid", it means fast increase in the number of people. Why does rapid increase in the number of people become a source of constant worry? Look at table 4.2. It gives you Ethiopia's population sizes in different years.

Table 4.2 Ethiopia population

Year	Size of Ethiopia's Population
1984	42,184,952
1990	51,700,000,
1994	53,764,421
2003	70,678,000
2007	73,918,508
2008	80,713,434

Source: National Population Censuses of 1984, 1994 and 2007 (G.C)

The table shows rapid increase in the size of Ethiopia's population in the last twenty-five years. You can see how fast Ethiopia's population was growing. In a span of only twenty-five years, Ethiopia's population has doubled. Was there any increase in the size of our country? Not at all was there any

increase in the resources of our country? The answer is again no! Infact, the resources of our country were the same. That means we were accepting new additional people year after year in the same space and to share the same resources. What does that mean?

Increase in the number of people raises additional demands on various means of life. But means of life does not grow in the same rate as population grows. This is particularly true in the less developed countries. This rapid population growth becomes a source of many difficult questions. How do line following questions related to rapid population growth?

- Will there be sufficient food?
- Will there be enough schools and teachers to give good or quality education?
- Will there be any jobs for increasing number of people?
- Will there be enough housing and adequate medical services for them all?



Fig. 4.1 No place for children to learn

Rapid population growth is the source of several problems. These problems are presented as follows:

- a) Problem of rapid population growth and food shortage go together. Rapid population growth causes shortage of food. This is because food production doesn't grow in the same rate as population grows. Shortage of food leads to hunger and malnutrition. This in turn causes diseases to spread out.
- b) As human population grows, the need for water also grows. It is difficult to provide fresh and clean water for rapidly growing population. It costs millions of money. Governments in less developed countries do not obtain such a huge amount of money.
- c) People not only drink water, they also pollute it. Cities and rural villages with rapidly growing population are sources of water pollution. They dump daily large amount of waste products into lakes, rivers and oceans.

d) Apart from food and water, people also need space in which to live, work and amuse. In their search for spaces, people cut down forests. Cutting down forests means deforestation. This leads to the destruction of wildlife. The other effect of deforestation is exposing soils to erosion. This in turn leads to drought and famine.

In short, rapid population growth is a serious problem in developing countries of Eastern Africa. What is the solution to the problems of rapid population growth? Two solutions are often suggested. One is to increase the economic capacity of a country to enable it to support its population. The second is to limit rapid population growth. But realizing such solutions is difficult even in well developed countries.

Lesson**4.2****Review****Activity****A. Questions based on Facts:**

- What is the effect of population growth on water resources and vegetation?
- How does rapid population growth become a source of soil erosion?

B. Things to do:

- Draw a graph showing the size of Ethiopia's population for the years 1984, 1990, 1994, 2003, 2007 and 2008 and explain how it has increased since 1984.



Competencies: After studying this lesson, you will be able to:

- Explain what children's basic rights are.
- Discuss how these rights are violated in Ethiopia.

Key Terms

- ↔ Accident
- ↔ Violation
- ↔ Safety

◆ Children's Rights and Their Safety

Why does every community give special attention to children? The reason is that the future of a country depends on the children of today. Every community wants to see better society and country in the future. But the prospect of having better society and country in the future depends on the possible ways you and other children are prepared for tomorrow's responsibility. There are three important possible ways of doing this.

1. Protecting your rights
2. Ensuring your safety
3. Accomplishing your duties and responsibilities

➤ Protecting your rights

You are citizens of your country. You share the rights which are common to all citizens. But as children you also have special rights. The following are your most important basic rights.

- The right to get name and nationality from the time of your birth.
- You have to get opportunities and facilities that enable you to develop physically, mentally and socially.
- You shall enjoy the benefits of social security.
- You have to get free and compulsory primary education.
- Children who are physically, mentally and socially handicapped are entitled to special treatment, education and care.

- You have to get protection against all forms of neglect, cruelty and exploitation. You shall not be admitted to employment before reaching an appropriate age (See Fig 4.2).



Fig. 4.2 Early labour engagement is one form of children's rights abuse

Who protects your basic rights? The government of your country is responsible for protecting your rights. It may do this in many ways. The first is giving legal cover to the protection of your rights. In Ethiopia, for example, your rights are declared in the country's constitution. Article 36 of the 1995 constitution of the Federal Democratic Republic of Ethiopia deals with your rights. Can you mention the name of the ministry which is concerned with women, children's and youth affairs? This ministry makes sure that all things related to you are properly handled. They include your rights, education, special treatment of disabled children of your age and a fight against violation of your rights.

There are also international organizations concerned with children's rights of your age. Three of these organizations are the most important. They are called United Nations, UNICEF and UNESCO. Almost all countries of the world are members of the United Nations. This organization has issued a proclamation meant to protect your rights at international level. The proclamation was issued in 1959. It is called United Nations Declaration of the Rights of the Child. The content of the declaration is similar to the ones listed under your basic rights. Many member countries have officially accepted the declaration. They are obliged to ensure the rights decreed in the declaration are respected in their countries. That is why, in Ethiopia, your rights are incorporated in the country's legal document called the constitution.

UNICEF and UNESCO are agencies working under United Nations organization. In particular UNICEF is an international organization entirely concerned with your affairs. UNICEF means United Nations International Children's Emergency Fund. This organization has branches in a number of countries. It works to promote the protection of your rights.

UNESCO is also an abbreviated word. It means United Nations Educational, Scientific and Cultural Organization. This organization works to ensure better education for you, children. Both UNESCO and UNICEF have declarations dealing with your rights. Again the contents are the same as those already discussed. They all work hand in hand with governments of member countries to promote the protection of your rights.

Various kinds of child abuses are committed in eastern Africa. One is child trafficking in order to sell them as house servants or for sexual abuse. There is also abduction which is common in our own country. Below are given two case studies on abuses of children's rights from Ethiopia and Uganda. The case from Uganda is a current issue. But the case from Ethiopia is taken from historical record. They both illustrate various kinds of abuses of children's rights in Eastern Africa in the past or at present. After reading carefully, answer the questions that follow.

Case Study

Uganda

Civil war is causing widespread child abuses in Eastern Africa. At present there is an armed movement fighting against the legitimate Uganda government. This movement is called Lord Resistance Army (LRA). The movement is charged of committing two kinds of child abuses in Uganda. They are sexual abuse of children and employing children as soldiers. As you know, children below the age of 18 shall never be employed even for peaceful jobs. But the cases from Uganda are typical examples of abuses of children's rights. There is an international organization that punishes such criminal acts. This organization is called International Criminal Court (ICC). The ICC has held Joseph Kony, LRA leader, and his top four commanders as responsible for the crimes. So the court has issued arrest warrants for these criminals who hid now in the forests of Congo Democratic Republic.

Source: Mohamed Salih, "The Grater Horn of Africa" pp. 19-20

Case Study

Ethiopia

Six hundred years ago, there was a famous ruler in one of the states in eastern Ethiopia. He was famed for his justice. Even when his own children violate laws set for the people, he punished them as anybody. There was no consideration of the age a child involved. This was what happened at one occasion. While playing with peers, one of the ruler's children hit and broke the arm of a child smaller than himself. The ruler did not hear of this until sometime afterwards. When he heard the news, he became angry to his officials for concealing the matter from him. He called the injured child's family. He also gathered his officials. Then he ordered his son to be brought before him. The ruler felt that his own son deserved punishment on the principle of "an eye for an eye, a tooth for a tooth." The officials begged the ruler for mercy. The injured child's family also stated that it has no desire for revenge. But the ruler refused to accept all requests for mercy. Instead, he seized his son's arm and broke it with the blow of an iron bar. The boy cried out in pain. All present lamented the boy's hard lot. But the ruler merely says to his son, "Feel now yourself what you made the other boy feel."

Source: Richard Pankhurst, "The Ethiopian Borderlands." P 59.

Lesson

4.3

Review

Activity A

Discuss on the following questions

- The presence of peace in a given country can reduce the problem of child abuse. Do you agree or disagree? why?
- What international organization punishes crimes against human or children's rights?
- Tell the typical kinds of child abuses in Uganda.
- Why does employing children as soldiers become a child abuse?
- What is the basic principle in the law practiced in eastern Ethiopia in the past?
- The punishment which the ruler administered on his own son was a child abuse. Do you agree or disagree? Why?
- The ruler was a man of justice. Do you agree or disagree? Why?





Activity B

A. Questions based on facts:

- State some of children's (your) basic rights
- Why do physically disabled children need special care?
- What happens to children if they are employed before reaching mature age?
- What is the role of a community in the protection of your rights?
- Describe some of the ways by which your rights are protected.
- Why do societies give special attention to the growth and education of children of your age?

B. Things to do:

- List names of International Organizations that deal with your rights.
- Write the full name of each of the following organizations:
 - a. UNESCO _____

 - b. UNICEF _____

- Make further reading and compare and contrast these organizations in group with regard to maintaining your rights and present your findings to your class.

Competencies: After studying this lesson, you will be able to:

- Apply escaping mechanisms of child rights' violation
- Resist peer pressure

Key Terms

↔ Escape

↔ Strategy

↔ Assertive

↔ Abuse

↔ Pressure

↔ Organ

◆ How to Escape from Abuses and Violations

- Do you think the only way out is physical fitness to escape from abuses and violation?
If your answer is no, what else can you suggest?

As already stated, there are different organizations responsible for the protection of your rights. However, they have limited human power and resources. This situation doesn't allow them to give cover to the entire body of children of your age in a given country. Because of this, your rights can be violated in different corners and isolated places. The same is true even in urban areas, including capital cities. What should the solution be then? The solution requires active involvement of the community. Everything that happens in social life takes place within the community. It is possible to raise community awareness so as to stand against the violations of your rights.

You yourselves are also responsible for securing your rights. It is true that you are physically weak to protect yourself from abuses. But physical fitness is not always required for protecting your rights. There are different escaping methods (mechanisms). The first thing is to be alert and assertive of situations. Most violators are cheaters. They persuade using what you like to have, such as candy or other objects. Use of peers to persuade you for abusive purpose is also common. Different escaping mechanisms can be applied when you confront such problems. Depending on situations, you can try the following methods (mechanisms):

- ✓ Avoid accepting gifts from someone who is not familiar to you.
- ✓ Inform your parents immediately when you meet strange conditions.
- ✓ Whenever possible report to police or adults when violations occur.
- ✓ Whenever you are asked for hard labour, tell politely that you are not mature enough to do it.
- ✓ Say “no!” to peer pressure.
- ✓ Getting away from risky area also helps escape violations.

In general, the kinds of violations of your rights are many. You have learnt them in the lower grades. Can you recall them? Discuss with your classmates about their present states. You can use your parents and any knowledgeable elder as a source of information.

◆ Violations Against Children Rights in Ethiopia

- Where do you think are your rights violated?
- Give example as to how your rights are violated?
- List harmful traditional practices related to violations of children's rights.
- Divide harmful traditional practices into practices related to marriage and child upbringing.
- Prepare a table that shows the two varieties of harmful traditional practices.

Most of the factors for violation of children rights in Ethiopia are related to economic and social backwardness. In economically backward countries most people are poor. As a result, families want to use this child labour to increase their income. This hinders children from going to school. Even those who have already gone to school do not complete their education. They are absent from schools whenever their family requires their labour.

Social backwardness is another source of violation of children rights. In socially backward countries most people are illiterate. Among such societies, there is a problem of harmful traditional practices. In grade five you have learnt about harmful traditional practices. These practices can be divided into two. Those related to marriage and those related to your upbringing. Try to name some of them with the help of your teacher.

There are also other kinds of violations against children rights. One of them is child labour abuse. Both in rural and urban areas, there are wide spread child labour abuses. Poor families allow their children to tend cattle for well to do families. But the payment is unfair. In urban areas also child labour is exploited. Children of your age are hired to do house hold activities, for meager payment.

Lesson

4.4

Review



Activity

A. Questions based on facts:

- How do you escape from abuses and violation?
- What does active involvement of community mean?
- List the mechanisms that help you escape from abuses and violations.

B. Things to do:

Group Work:

- Collect information from among your school mates or children of your village on mechanisms used to escape from abuses and violations and present your findings to class.

Competencies: After studying this lesson, you will be able to:

- Discuss how to react if something happens.
- Explain how to avoid accidents

Key Terms

↔ Technology

↔ Fire

↔ Insulator

↔ Electricity

↔ Explosive

↔ Chemical

↔ Poison

◆ Accident Prone Practices and Safety Measures

- Are there things that cause accident in your locality?
- How do you avoid such things in order to be safe?

Modern society has many aids in dealing with life situations. There are different products of technology. There are also useful natural things. They reduce the burden of humans. They also make life comfortable for humans. But at the same time, they could also be dangerous. They have the potential to destroy both human life and material resources. Whenever accidents occur, children may be number one victims. There are many sources of accidents both at home and schools. The same is true when traveling between home and school. There are also practices that may cause fatal accident. The most important sources of accident are electricity, poison, fire and explosives. Let us see the nature of these sources of accident and how you protect yourself from the accidents they cause.

Electricity



Fig 4.3 Equipment that works with electricity

Electricity is one of the modern technologies. It is a form of energy supplied in the form of electric current through wires for lighting, heating and driving machines. This important technology has the

potential to cause enormous destructions. Copper wires are used to carry electric currents from the source of electricity to a place where it is put into use. All metallic and wet materials, including human body are conductors of electric currents. So it is dangerous to touch uninsulated wires carrying electric currents. They can cause death. You must be careful about electricity. You must not use materials that operate with electricity in the absence of adults. Above all, you have to be careful not to touch bare wires. If in case bare wires are found, adults or responsible persons have to be immediately informed to maintain them.

Poison

Poison is a chemical substance that causes death or harm if it is swallowed or absorbed into the body. In modern society poisons are manufactured and used for different purposes. They are chemicals which exist in the form of solid, liquid or gas. People use chemicals for various purposes. Chemicals are poisonous when used outside the purposes for which they are made. They cause skin burning, blindness or death. In order to prevent such dangers, instructions are given on their packages or containers. The most common instruction says "keep away from children's reach". You must always respect such instructions and keep yourselves away from poisons and other chemicals.

Moreover, you need to be careful when coming across a poison. You should not try to check whether or not it is a poison either by tasting or touching, or smelling. Nor should you burn it so as to destroy. The smoke may cause a danger. You better ask adults about their elimination. But for most poisons, it is advised to bury them underground. When doing this use gloves or after completing the task wash your hands with soap.

Fire

Fire is a natural phenomenon. Early humans discovered fire long ago. The discovery of fire had considerably improved the life style of early humans. They used fire for heating, cooking, lighting and above all to chase away dangerous animals. The importance of fire has never diminished since its discovery. Modern society is equipped with more skills than early humans to handle and use fire carefully. But fire is a constant source of



Fig 4.4. Wild fire

enormous destructions to life and material resources. What are these dangerous sources of fire?

- Careless tossing of burning match sticks or smokes in a dry bush area. This causes forest fire.
- Keeping easily flammable materials around places where fire is used for domestic purpose. Petroleum products and dry woods are easily flammable materials. They easily catch fire.
- Kerosene burning stoves cause fire in residence and work places.

You must not operate kerosene burners or electrically operated things unless you are matured enough to do so. But if you are accustomed to use them, the following tips may be helpful for their safe use.

- Place the burner on a flat level floor before you lit it up.

- Make sure that it has enough fuel before you lit it up or never pour fuel while the burner is burning. Nor should you pick it up while burning.
- Never try to put off the burner by puffing air on it.
- Instead, reduce the candle clothes to the minimum. It would go off by itself. If not add some water!
- Make sure the burner is in the kitchen rather than in living room. If so, make sure that the room is sufficiently ventilated or open windows or door for few minutes.

This way you can use kerosene burners safely.

In case fire starts, the first step is escaping from its reach. If fire fighting brigade is within reach, it is better to make urgent call. In this case, it is advisable to have addresses of such institutions.

When using electrically operated tools, such as heaters or boilers make sure that

- There are no uninsulated wires,
- No damp or wet around,
- When pulling the plug from sockets, take care. Support the socket with one of your hands and pull plugs with another.

Explosives or Mines

Explosives are products of modern technology. They are also called mines. They have enormous destructive capacities. They are used as weapons of mass killing in wars. Ethiopia and the Horn of Africa were war torn areas in the past. These destructive weapons were widely used. The explosives were carelessly used and handled. Because of this one finds them scattered everywhere both in urban and rural areas. There are a lot of stories about explosion accidents. The victims were mostly children of your age. This is the result of unnecessary curiosity to find out about strange metallic objects. This dangerous act is practiced in a condition that increases casualties. One of your peers would hammer or strike the strange object. Others curiously watch gathering shoulder to shoulder. This is a dangerous practice. You should avoid touching strange objects. When you find one, you have to inform adults immediately.

Accomplishing your duties and responsibilities

- **What are duties?**
- **What are responsibilities?**

You, as citizens of Ethiopia, are entitled to accept certain rules and regulations. Such rules and regulations may be practiced in the community where you live. As part of the community, you have to respect and obey these societal rules and regulations. Besides, you have to respect others' rights in order to get your rights respected by others. You should respect all positive social norms in the community where you live. When you go to school, you come across rules and regulations that you should respect. Thus, you keep yourselves disciplined when you respect these rules and regulations of the school. When,

in due course of time, you get matured, you observe and respect your country's constitution. In general, as citizens, you have to respect the do's and do not's.

Lesson

4.5

Review

**Activity****A. Questions based on Facts:**

- Explain accident prone practices.
- What are the technology products that cause accidents?
- Explain how you accomplish your duties and responsibilities.
- List the dangerous sources of fire.
- Describe safety measures that you should take before accidents occur in using electricity and kerosene gasses.

B. Things to do:**Group work:**

Make further readings on accident causing technology products and suggest safety measures you should take and present your findings to class.

Competencies: After studying this lesson, you will be able to:

- Name each sub-regional organizations in Eastern Africa and explain their purposes.
- Indicate the geographical coverage of Eastern African Sub-regional organizations.
- Explain the need for partnership targets.

Key Terms

↔ Partnership

↔ Initiative

↔ Poverty

↔ Partnership targets

↔ Desertification

↔ Sub-region

◆ What do we mean by partnership issues?

Today's world is confronted by vast and complex problems. Some of the problems are specific to each country. But most are shared by peoples of many countries. The task of solving such problems is beyond the ability of a single country. Thus, their solution requires cooperation among countries affected by the problems. The problem could be environmental or natural, or societal related to peace violation. The joint effort to combat these problems or the capacity to deal with problems comes under partnership issues.

◆ What common problems do countries of Eastern Africa share?

The countries of Eastern Africa share many things in common. They share boundaries, population, mode of economic life and resources like rivers, lakes, natural vegetation and wildlife. They also share numerous problems. These include conflict, desertification, drought, famine and poverty. The task of finding solutions to such complex problems is beyond the capacity of a single country. The countries of Eastern Africa have to combine their efforts and resources in order to solve the problems. Similar effort is necessary to develop the resources they share. The end result of cooperation on both the problems and issues of development is for the common wellbeing of the peoples of the region. How can such cooperation be realized?

◆ Sub-Regional Organizations in Eastern Africa

- What are sub-regional organizations?
- For what purpose are they set up?

There are many ways of dealing with problems and development issues affecting more than one country. One way is forming sub-regional organizations. There are several such sub-regional organizations in Eastern Africa. Many of them are set up for specific purposes. One such organization is called Pastoral and Environmental Network in the Horn of Africa (PENHA). This organization deals with pastoral issues. Another example is an organization set up to enhance trade relationships among the countries of eastern and southern Africa. This organization is called the Common Market for Eastern and Southern Africa (COMESA). There are other sub-regional organizations in Eastern Africa dealing with broader issues of development, security and shared natural resources. Let us see two of such organizations in Eastern Africa.

Inter-Governmental Authority for Development (IGAD)

- **What was the objective of establishing IGAD?**
- **What was the initial name of IGAD?**
- **What is ICPAT?**

IGAD was formed in 1986. At the time of its formation, there was severe drought that affected all countries of Eastern Africa. One of the principal aims of the organization was to tackle the problem of drought. Its name was then Inter-Governmental Authority for Drought and Development (IGADD). Later on, the organization focused on broader issues of development. So it dropped “Drought” from its name. Initially IGAD member countries were six. They were Djibouti, Ethiopia, Kenya, Somalia, Sudan and Uganda. With the admission of Eritrea as an independent state, number of IGAD member countries has become seven. However, Eritrea has recently withdrawn from IGAD. Along with the development issues, the organization is working to promote security in IGAD region. With this aim the organization is launching, at present, a project against terrorism. This project is called IGAD Capacity Building Programme Against Terrorism (ICPAT).

IGAD is a sub-regional organization formed by seven member countries. These countries have their own territories. Their territories, in combination, constitute geographical coverage of IGAD. So geographical coverage of IGAD corresponds to the territories of the seven member countries.

IGAD member countries have come together in order to deal with certain issues of their common interests. The common issue for the IGAD countries is the problem of development. IGAD deals with this problem on the basis of carefully planned aims and objectives. The aims and objectives are targets intended to be achieved. IGAD countries are partners to one another. Their relationship is based on partnership. So the aims and objectives they intend to achieve are called partnership targets. Target is a result one tries to achieve.



Fig 4.5. Logo of IGAD

The Nile Basin Initiative

- Which country is the leading in the contribution of water to the Nile River.

Nile is the longest river in the world. The basin of this river covers the total area of more than three million square miles. This total area is shared among the eleven basin countries of Eastern Africa. They are Ethiopia, Burundi, Eritrea, Uganda, Tanzania, Rwanda, Kenya, Egypt, Northern and Southern Sudan and the Democratic Republic of Congo. These eleven countries are called the Nile Basin Countries (See Fig 4.7).

The Nile basin countries do not contribute an equal amount of water to the Nile. For instance, Egypt doesn't contribute any water to the river. Others' contribution is also very small. But Ethiopia is the most important source of the Nile water. It contributes a total of 86% of the Nile water. The remaining countries contribute only 14% of the water of the Nile.

There has never been equitable use of the Nile River water. Egypt is by far the major consumer of the water. Next to Egypt, Sudan is another country fairly using the Nile waters. But Ethiopia and the other countries are the least users. Since the 1990s, there has been an attempt to change this condition.

This attempt has been carried out through an organization known as Nile Basin Initiative (NBI). Several conferences of the NBI have been made since the 1990s. The latest took place in Egypt in 2009. At this conference a draft agreement regarding equitable and fair utilization of Nile waters was supposed to be signed. But Egypt and Sudan refused to sign the agreement. Subsequently, six countries have signed the agreement which makes it applicable according to the NBI rules.

Members of NBI have formulated vision and common projects. The most important are hydro electric power, water resources management, environmental conservation, capacity building and agricultural training. These are partnership targets for NBI countries.



Fig 4.6. Logo of NBI

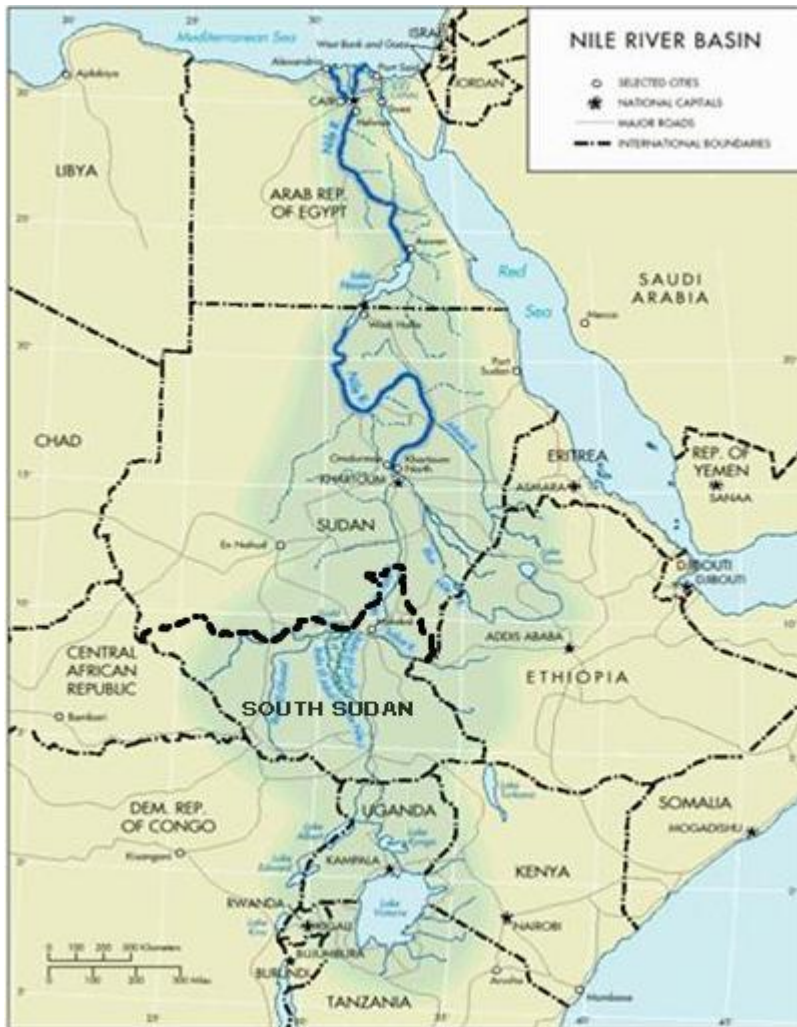


Fig. 4.7 Nile Basin Initiative Countries

◆ East African Community (EAC)

EAC is a regional intergovernmental organization in Eastern Africa. Initially, it was established by the governments of Kenya, Tanzania and Uganda in 1967. It then, included Rwanda and Burundi as members. When founded, EAC was meant to coordinate some of the economic issues and trade activities of the member states. These objectives have been broadened. Its aim is to promote cooperation and integration among member nations in such fields as science and technology, environmental and natural resource management, tourism and wildlife management as well as social and cultural activities. There are, in fact, the partnership targets for EAC countries.

◆ Common Market for Eastern and Southern Africa (COMESA)

COMESA is a broader and more active regional organization than EAC. In its geographical coverage COMESA combines two sub-regions of the continent, namely Eastern and Southern Africa. COMESA was set up in 1993 when nineteen Eastern and Southern African countries signed an agreement in

Kampala, Uganda. These countries, in their alphabetical order are Angola, Burundi, Comoros, Democratic Republic of Congo, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe. The aim of COMESA is to bring together the resources of member states in order to promote development efforts individually or collectively. Member states wanted to cooperate in such fields as: trade, custom, transport, industry and agriculture.

Lesson

4.6

Review

**Activity**

Attempt the following activity

A. Questions based on Facts:

- List the Nile basin countries.
- Name the two rivers which form the Nile.
- Which countries share membership both in IGAD and Nile Basin Initiative?
- What are partnership targets?
- What differences can you tell between EAC and COMESA?
- What is the objectives of EAC?
- Discuss the aim of COMESA.

B. Things to do:

- Draw a chart to show partnership targets of sub-regional organizations of Eastern Africa.
- After class discussion, hang your chart on the wall of your classroom. Your chart could look like the following:

Name of sub-Regional Organization	Partnership Targets

- Draw the sketch map of Africa and show:
 1. IGAD countries
 2. Nile basin initiative countries
- Write the expanded forms of the following organizations:
 1. COMESA _____
 2. PENHA _____
 3. IGAD _____
 4. EAC _____

Summary

- One of the problems confronting the countries of Eastern Africa is the spread of HIV/AIDS. The epidemic is the source of grave economic and social problems. It is causing high deaths in every section of the population. The death of parents leaves behind many orphans. These orphans need community support. The death of skilled people is an economic problem that hampers development. Both problems affect the community as a whole. Thus, the fight against HIV/AIDS requires active community participation.
- Rapid population growth is another source of problem in Eastern Africa. This problem is causing serious food shortage in the region. It is also a source of environmental degradation. Increase in the number of people raises demands on various necessities of life. People need additional space in which to live and work. To satisfy this need trees are cut down. Cutting down trees causes deforestation. This in turn causes destruction to wildlife. It also causes erosion and reduces agricultural productivity. The combined effects of these problems hamper the economic development of the countries of Eastern Africa.
- You are tomorrow's builders of your country. That is why every society gives special attention to you and to other children. This attention is mainly to prepare you for tomorrow's responsibility. One of the ways to make you an able child to accomplish for tomorrow's responsibility is providing you with better education. The other is protecting your rights. This includes ensuring your safety. The task of protecting your rights and ensuring your safety involves many bodies. These include national governments and international organizations. The most important international organizations are United Nations, UNESCO and UNICEF. The protection of your rights and ensuring your safety need active community participation and the involvement of you and other children.
- You should also respect societal rules and regulations and norms as well. You have to respect your country's constitution. You need to obey do's and don't's.
- The countries of Eastern Africa share numerous problems. These include problems of peace and security, development and unfair shares in some of the common natural resources. Finding solutions to such vast and complex problems is beyond the capacity of a single country. Therefore, the solution needs cooperation among all countries facing the problems. One way of cooperation is forming sub-regional organizations that work jointly to tackle the problems. Many sub-regional organizations are formed in Eastern Africa. The most important are IGAD and the Nile Basin Initiative. IGAD deals with broader issues of development in the region. But the Nile Basin Initiative is concerned with fair use of common resources for mutual benefit.

Glossary

- **Abuses:** Cruel treatments of persons or animals.
- **Accident:** an unpleasant event that happens unexpectedly.
- **Assertive:** expressing opinions or desires strongly with confidence.
- **Charge:** accusation, statement that a person has done wrong.
- **Civil war:** war between two sides in the same country.
- **Chemical:** substance obtained by or used in a chemical process.
- **Conceal:** hide, keep secret.
- **Desertification:** *the process of becoming desert.*
- **Deserve:** that ought to be, merit, just, be entitled to.
- **Discrimination:** unfair treatment of one person or group.
- **Disease:** illness of the body.
- **Drought:** a long period of time when there is little or no rain.
- **Electricity:** a form of energy.
- **Escape:** the action of getting free from difficult or dangerous situation.
- **Explosive:** easily able or likely to explode.
- **Famine:** lack of food during a long period of time.
- **Fire:** flames, light and heat.
- **Initiative:** a new approach to something; an attempt to resolve a difficulty.
- **Insulator:** device used to prevent heat.
- **Lament:** show great sorrow.
- **Less developed:** not yet well developed.
- **Loneliness:** remain alone, without companions.
- **Malnutrition:** poor condition of health caused by lack of food or lack of the right type of food.
- **Mercy:** holding our self back from punishing, from causing suffering to.
- **Organ:** an official organization that has a special purpose.
- **Orphan:** a child or animal whose parents are dead.
- **Partnership:** the state of being partner in business.
- **Partnership target:** partners' result expected to be achieved.
- **Persuade:** convince, cause somebody to do or stop doing something.
- **Poison:** a substance that causes harm or death.
- **Pollute:** to make something dirty or no longer pure.
- **Poverty:** the state of being poor.
- **Pressure:** strong influence to make somebody do something.
- **Revenge:** deliberate infliction of injury upon the person from whom injury has been received.
- **Safety:** the state of being safe or protected in a region.
- **Stigma:** sign of social unacceptability.
- **Sub-region:** part of a continent.
- **Technology:** the scientific study and use of applied sciences to produce something valuable with the help of machines.
- **Violation:** breaking rules or laws.

_____ 3. Modern technology that causes destructive accident is:

- | | |
|---------------|----------------|
| a) Pipe water | c) Electricity |
| b) satellite | d) Computer |

_____ 4. Causes harm or death when taken into body:

- | | |
|-----------|----------|
| a) Water | c) Blood |
| b) Poison | d) Salt |

IV. Give short answers to the following questions:

1. Identify some of the ways in which national government protects your rights.
2. Explain some of the ways in which you can fight against the violations of your rights.
3. Discuss the ways in which the following items cause accident.
 - Electricity
 - Poison

V. Things to do

A. Gather information and write a report on the following topic.

“Natural vegetation of your region”

When gathering information try to focus on the following issues:

- The nature of natural vegetation in the past.
- The wildlife that existed at that time.
- Does the wildlife exist today?
- What happened to it?
- What solutions do you suggest to conserve the natural vegetation?

B. Group discussion

1. Identify those issues which may affect everybody in your school or in your village.
Example: pollution, deforestation, road, drinking water, etc.
2. Discuss the issues for better understanding. It is possible to sort out the issues so as to avoid irrelevant ones.
3. Arrange the issues, giving priority to those that need urgent solution.
4. Suggest solutions that enable you to tackle the issues.

Check List

Put a tick (✓) mark in each of the boxes for activities you can perform

I can:

1. Define terms like malnutrition and famine.
2. Describe HIV/AIDS
3. List major ways in which HIV/AIDS is transmitted.
4. Identify mechanisms of the fight against HIV/AIDS.
5. Discuss the economic and social impacts of HIV/AIDS.
6. Explain the impact of rapid population growth on the natural environment of Eastern Africa.
7. Describe basic rights of children.
8. Identify some common violations against children's rights in Ethiopia
9. List organizations responsible for the protection of children's rights.
10. Explain some accident prone practices and mechanisms to escape from dangers.
11. Explain the purposes of sub-regional organizations in Eastern Africa.
12. Discuss partnership targets of sub-regional organization of Eastern Africa.