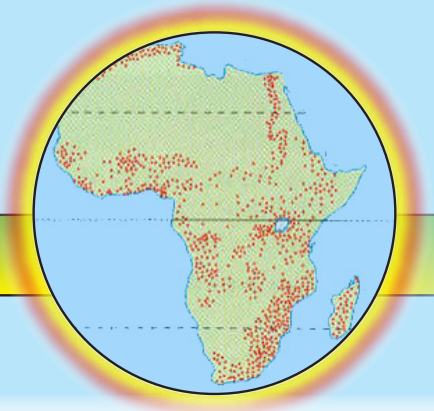










Unit 4



POPULATION, ECONOMY AND NATURAL RESOURCES OF AFRICA

Unit Outcomes

After completing this unit, you will be able to:




-  describe the size, growth and distribution of population of Africa;
-  discuss determinants and characteristics of African population;
-  analyse the extent of migration and level of migration in Africa;
-  explain the concept of economic growth and development and describe the characteristics of African economy;
-  assess the present features of African socio-economic development;
-  distinguish indicators of development and analyse the challenges and prospects of African economic development;
-  recognize major resources its exploitation and development; and
-  appraise resource utilization and conflict management.

Main Contents

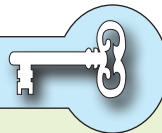
- 4.1 ASPECTS OF POPULATION, ECONOMY AND NATURAL RESOURCES OF AFRICA**
- 4.2 CONCEPT OF ECONOMIC GROWTH AND DEVELOPMENT**
- 4.3 NATURAL RESOURCES OF AFRICA AND ITS POLITICS**
 - ⇒ *Unit Summary*
 - ⇒ *Review Exercise*
 - ⇒ *Glossary*











4.1 ASPECTS OF POPULATION, ECONOMY AND NATURAL RESOURCES OF AFRICA

At the end of this section, you will be able to:

-  explain population size and growth in Africa;
-  describe population distribution of Africa using map; and
-  discuss the regional variation of population of Africa.

Key Terms



- | | |
|--|---|
|  Fertility |  Life expectancy |
|  Mortality |  Sex structure |
|  Migration |  Age structure |
|  Natural increase |  Dependency ratio |
|  Population growth rate |  Pull and push factors |

Start-Up Activity

- 1 How do you compare Africa with other continents in terms of population size?
- 2 Is Africa a continent with high or low population?
- 3 What is the negative effect of rapid population growth in developing countries?

4.1.1 Population Size, Growth and Distribution

A Size

How large is Africa's Population?

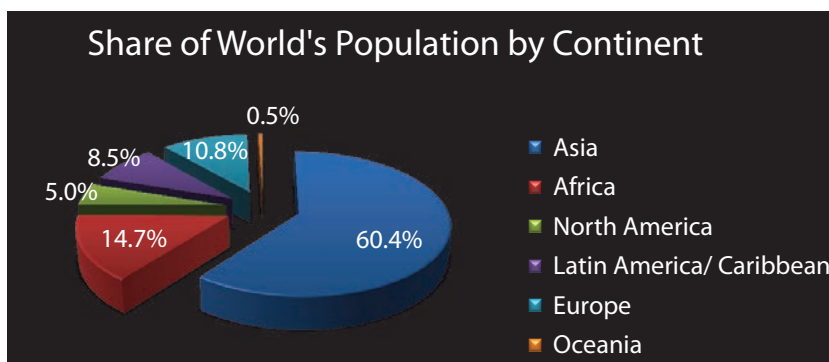
What percent of the world's population is constituted by Africa's population?

Africa has one of the world's largest populations. The continent is the world's second most populous next to Asia. According to the World Population Data sheet, by the mid of 2009, the continent had a total population of 999 million (nearly 1 billion). This makes up nearly 14.7 % of the world's total population. As the table below depicts, Africa's population is nearly 1/4th of that of Asia, the most populous, and 28 times that of Oceania, the least populous.

Table 4.1: World population distribution

No	Region	Population (in millions)	Percentage of world total
1	Asia	4117	60.4
2	Africa	999	14.7
3	North America	341	5.0
4	Latin America/ Caribbean	580	8.5
5	Europe	738	10.8
6	Oceania	36	0.5
7	World Total	6811	99.9

Source: UN World Population Data Sheet, 2009



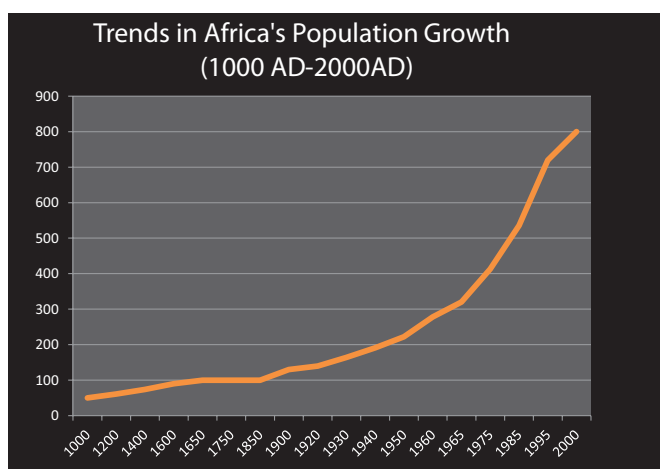
B Growth

What is population growth? What are the components of population change? How fast is Africa's population growing?

Africa has one of the world's fastest growing populations. The continent has been experiencing rapid changes in its population size as a result of many factors including the interactions between fertility and mortality. Despite the gradual decline in the birth and death rates, the continent continues to experience high rate of population growth. As some historical sources indicate, Africa's population had been increasing very slowly until recent times. However, since the 1950, the continent's population began to increase very rapidly. As a result, the continent's population had almost been quadrupled between 1950 and 2000. The following Table 4.2 shows you the trend in the population size of Africa between the years 1000 A.D and 2000 A.D.

Table 4.2: Population growth in Africa from 1000 to 2000 A.D

Year (AD)	Population in million	Year (AD)	Population in million
1000	50	1930	164
1200	61	1940	191
1400	74	1950	222
1600	90	1960	278
1650	100	1965	320
1750	100	1975	413
1850	100	1985	536
1900	130	1995	720
1920	140	2000	800



As it can clearly be seen from the above table, Africa's population had been increasing very slowly until the early 1950s. The 1000 A.D. population of Africa had taken more than 650 years to double itself. Another nearly 300 years were passed until the 1650 population doubles again. Since the 1950's the continent's population began to grow faster and it took only about 25 years to double itself. Another population doubling has still been experienced in the last 25 years of the 20th century between 1975 and 2000. Since 2000 till 2009, another 200 million people were added making Africa's population nearly a billion.

The population growth rate of Africa is the fastest in the world. According to the 2009 world population data sheet, the continent had a rate of natural increase of 2.4%. The general growth rate, on the other hand, was 2.3%. This appears being

the highest rate in the world and twice as fast as the world's average growth rate. In terms of the period that Africa's population needs to double itself, the continent has the world's shortest doubling time of about 29 years. Such a rapid population growth rate and short doubling time is the result of the very high fertility rate that the continent has. Although birth rate is declining in the continent, it is still high as compared to the rest of the world. The declining mortality in the continent is also the highest in the world. The difference between the two has produced a very high rate of population growth and short period of doubling time in Africa.

Rate of Natural Increase (RNI) is the difference between Birth Rate and Death Rate expressed in percentage. On the other hand, General Growth Rate is the difference between RNI and Net-migration Rate expressed in percentage. The doubling time of a population is calculated by dividing 70 by the growth rate of the population.

Table 4.3: Demographic characteristics of the world by continents

No	Region	Birth Rate/1000 population	Death Rate/1000 population	RNI (%)	Doubling Time in years
1	Asia	19	7	1.2	58.3
2	Africa	36	12	2.4	29.2
3	North America	14	8	0.6	116.7
4	Latin America/ Caribbean	20	6	1.4	50
5	Europe	11	11	0	-
	Oceania	18	7	1.1	63.6
7	World	20	8	1.2	58.3

Source: UN World Population Data Sheet, 2009

Table 4.4: Demographic characteristics of Africa by major regions

No	Region	CBR	CDR	RNI	TFR	IMR	NMR
1	Sub-Saharan Africa	39	13	2.6	5.3	80	-1
2	Northern Africa	25	7	1.8	3.0	38	-1
3	Western Africa	40	14	2.6	5.5	80	-1
4	Eastern Africa	40	13	2.7	5.4	76	-1
5	Central Africa	42	14	2.8	6.1	95	0
6	Southern Africa	24	15	0.9	2.8	48	3
7	Africa	36	12	2.4	4.8	74	-1

Source: UN World Population Data Sheet, 2009

C Distribution

What is population distribution? What are the factors that affect the distribution of population? Which areas in Africa are most populous? Why?

Population distribution refers to the way people inhabit and occupy the earth's surface. As elsewhere in the rest of the world, Africa's population distribution is uneven. As a result, there are areas of high and low population density. Some parts of the continent, particularly the vast Sahara, have few permanent residents. While, others rank among the world's most densely populated areas. The Nile Valley of Egypt, the Atlantic coastal area that stretches from Côte d'Ivoire to Cameroon, Rwanda, Burundi, and South Africa's province of KwaZulu-Natal are among the most densely populated areas in the continent. The continent's average crude population density during the mid of 2009 was about 33 people/km².

Certain human and physical factors are responsible for such spatial variation in the distribution of population in the continent. Among the physical factors some are climate, relief, availability of water, fertility of soil, distribution of minerals and the like. On the other hand, the human factors that determine the extent to which humans inhabit a certain place include economic conditions, political situations and other social factors.



Figure 4.1: Africa density of population, 2008

However, there exists a significant regional variation in population density. As it can be seen from the following table, Eastern Africa has the continent's highest crude density of 49 p/km² followed by Western Africa with 48 p/km². Contrary to

this, central Africa has the continent's lowest crude density of 19 p/km² followed by Southern Africa (22 p/km²) and Northern Africa (24 p/km²).

Table 4.5: Population density by major regions of Africa

No	Region	Crude Population Density/km ²
1	Sub-Saharan Africa	34
2	Northern Africa	24
3	Western Africa	48
4	Eastern Africa	49
5	Central Africa	19
6	Southern Africa	22
7	Africa	33

Source: UN World Population Data Sheet, 2009

On country level, the most populous countries are Nigeria, Egypt, Ethiopia, the Democratic Republic of the Congo (DRC) and the Republic of South Africa (RSA). These countries all together account for about 43% of the continent's total population. In terms of population density, while some are heavily populated, others have very low population density. The following table gives you the ten most densely and most sparsely populated countries of Africa.

Table 4.6: The ten-top densely and sparsely populated countries of Africa

Ten Top Densely Populated Countries		Ten Top Sparsely Populated Countries	
Country	Density/km ²	Country	Density/km ²
Mauritius	625	Western Sahara	2
Mayotte	503	Mauritania	3
Seychelles	375	Botswana	3
Reunion	324	Namibia	3
Comoros	302	Libya	4
Burundi	298	Gabon	6
Rwanda	191	Central African Republic	7
Sao tome and Principe	169	Chad	8
Gambia	165	Mali	10
Nigeria	142	Congo	11

Source: UN World Population Data Sheet, 2009

Activity 4.1



Answer the following questions:

- 1 Which continent has a very short period of population doubling?
- 2 Rapid population growth rate has adverse effects on the quality of life of the people. Briefly explain.
- 3 Clarify the relationship between growth rate and period of population doubling in a given country.
- 4 Define the term "population stagnation."
- 5 Most African countries were in a better condition of life in the 1960s; but things have gone bad for the last three decades. Explain why.
- 6 Define the term "over population."
- 7 Which continents have had very low population growth rate?

4.1.2 Determinants of Population Change in Africa

Brainstorming



- 1 Do you remember what you learnt about population change in your previous grades?
- 2 Which demographic variables are responsible to bring population change in a given region or country?

The three components that determine population change are birth rate, death rate and migration. Population change in a given country is affected by:

- ⇒ *The difference between deaths and births also known as natural change*
- ⇒ *The balance between immigration (coming in) and emigration (going out) also known as net migration.*

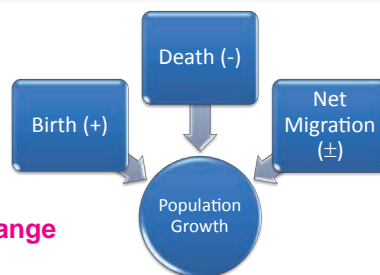


Figure 4.2: Components of population change

In Africa, the current population change (growth) is a function of fertility, mortality and migration. There is frequent migration of people within a country.

However, these days there are not significant migrant flows from country to country or from region to region due to lack of pulling factors. Since most African countries are in their lower stage of development, there are little or no opportunities to accommodate a huge influx of people from another country. Africa's migration pattern is highly related to political instabilities and natural catastrophes.

Fertility Patterns in Africa

What is fertility? What are the factors that affect the fertility rate of the African population?

Fertility refers to the occurrence of birth in the human population. It is a natural positive factor that tends to increase the human population size. Africa's fertility rate is the highest in the world. Birth rates are high in Africa because:

- ⇒ *people have less access to contraceptives;*
- ⇒ *people are backward and poverty stricken;*
- ⇒ *women are of low status;*
- ⇒ *many children are needed to work on the land;*
- ⇒ *children are considered as symbol of virility;*
- ⇒ *people are of low educational background; and*
- ⇒ *many religions encourage large families.*

According to the UN World population prospects of the year 2009, the average birth rate for Africa is estimated at 36/1000. This is the highest even for the standard of developing countries, which is (22/1000).

Brainstorming



- 1 What are the two major factors that affect population distribution?
- 2 Describe the three components of population change.
- 3 What are the two major factors that instigate migration in Africa?
- 4 What major reasons influence people to have more children in Africa?

Table 4.7: Patterns of rates and life expectancy by major regions in Africa (2009)

Region	Crude Birth Rate per 1000 population	Crude Death Rate Per 1000 Population	Rate of Natural Increase (%)	Infant mortality rate per 1000 live Births	Life expectancy at birth (years)
World	20	8	1.2	46	67
Developed	12	10	0.2	6	74
Developing	22	8	1.4	50	65
Africa	36	12	2.4	74	53
Northern Africa	25	7	1.8	38	67
Western Africa	40	14	2.6	80	50
Eastern Africa	40	13	2.7	76	50
Central Africa	42	14	2.8	95	49
Southern Africa	24	15	0.9	48	50

Source: Population reference Bureau, UNO (2009)

Activity 4.2



Discuss in group about the following issues.

- 1 Africa's population growth rate is the highest in the world. What will happen if Africa's population growth rate continues in such a manner?
- 2 Some developed countries' population growth rate is stagnant. The old age population number is growing from time to time. What sort of implication will this bring upon the socio-economic condition of these countries?

Although fertility is high in Africa, it still varies from country to country or region to region. Currently African countries having birth rates below 30/1000 include:

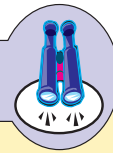
- ⇒ Mauritius 14/1000
- ⇒ Tunisia 17/1000
- ⇒ Morocco 21/1000
- ⇒ South Africa 23/1000
- ⇒ Botswana 24/1000
- ⇒ Egypt 25/1000
- ⇒ Seychelles 18/1000
- ⇒ Reunion 18/1000
- ⇒ Libya 24/1000
- ⇒ Namibia 25/1000
- ⇒ Algeria 23/1000
- ⇒ Lesotho 27/1000

Other African countries comprise rates ranging from 31/1000 in Swaziland to 50/1000 in Guinea Bissau and Nigeria.

N.B. Ethiopia's CBR was about 39/1000 in 2009.

Table 4.7 shows the status of Africa in terms of crude birth and death rates and life expectancy vividly. Central Africa, for instance, had the highest birth rate 42 births per 1000 population followed by Eastern and Western Africa each of which was having 40 birth per 1000 population.

Focus



Birth rate is defined as the number of live births per 1000 population in a year. For example, when we say the birth rate of Africa is 36/1000, we mean that 36 births will occur for every 1000 people, on the average, every other year.

Death rate is the number of deaths per 1000 population in a year. For example, Africa's death rate is 12/1000. This is to say that 12 deaths will occur for every 1000 people on the average every other year.

The difference between birth rate and death rate is conceived as a difference influenced by natural change. The natural change for Africa can, therefore, be computed as:

$$\begin{aligned} & 36/1000 - 12/1000 \text{ or } (36/1000 \text{ (birth rate)} - 12/1000 \text{ (death rate)}) \\ & = \frac{24}{1000} \times 100 = 2.4\% \end{aligned}$$

2.4% is the natural increase for Africa

There is an inverse relationship between the level of economic development and the fertility rate. In Africa, the regions that have a relatively better economic progress are likely to have low rate of fertility.

Mortality Patterns in Africa

What is mortality? How does it affect the population of Africa? What are the factors that affect mortality in Africa?

Simply defined, mortality refers to the occurrence of death in the human population. As was shown in Table 4.7 Africa's mortality rate is the highest in

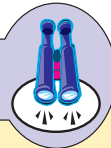
the world. It is also the highest even from the perspective of the developing regions. The continent had a crude death rate of 12 deaths per 1000 population. When regional comparison is made, death rate ranges from 7/1000 in Northern Africa to 15/1000 in Southern Africa. In terms of infant mortality rate, which is the death of infants under one year per 1000 live births, the continent still has the world's largest rate of 74 deaths per 1000 live births. Infant mortality rates also vary from region to region. Accordingly, Central Africa has the highest rate of 95/1000 followed by Western Africa 80/1000 and Eastern Africa 76/1000 live births. The lowest Infant Mortality rate is in Northern Africa which only 38/1000.

Africa's high death rate is attributed to the following major factors:

- ⇒ *Low standard of living*
- ⇒ *Low access to health facilities*
- ⇒ *Poor sanitary practices*
- ⇒ *Civil war and political instability*
- ⇒ *Wide spread of famine caused by recurrent drought*
- ⇒ *Poor nutrition, and*
- ⇒ *High incidence of disease and infections*

Africa's death rate is declining since world war II due to development in medical technology, and sanitary practices, and the discovery of medicines and vaccines for tropical diseases. However, the continent's crude death rate remains being the highest in the world.

Focus



Infant mortality rate is generally regarded as a prime indicator of socioeconomic development. Infant mortality has declined from 138/1000 in 1950 to 88/1000 in 1975 – 80; and now, it is down to 74/1000.

There is disparity in life expectancy between rich and poor countries. But this has shown a significant converge over the last 50 years despite widening wealth gap between them.

Focus



Life expectancy at birth: is the average number of years a newborn infant can expect to live under current mortality levels.

Table 4.8: Level of life expectancy for selected developed and developing countries

Country	Years	Country	Years
Japan	83	Swaziland	46
Australia	81	Ethiopia	53
France	81	Mozambique	43
Italy	82	Angola	46
Sweden	81	Malawi	46
Switzerland	82	Zambia	43

Source: *World Population Data Sheet, 2009*

What would you conclude about Africa's population from the point of view of its birth and death rates?

The current birth and death rates of Africa reflect a very young (and economically dependent) population of low life expectancy. Almost all sub-Saharan countries have a population of under 15 years of age rated in percent at more than 40. This has resulted in high dependency ratio in the continent. The average life expectancy for the whole continent is 54 years. (Table 4.9)

Table 4.9: Life expectancy at the regional level

Region	Life expectancy
World	68
Developed	77
Developing	55
Africa	54
Sub-Saharan Africa	50
Northern Africa	69
Western Africa	51
Eastern Africa	49
Central Africa	51
Southern Africa	49

Source: *World Population Data Sheet, 2009*

Africa's life expectancies are the lowest in the world. There is though, a wide disparity of this fact from regions to regions within Africa ranging from 69 years for Northern Africa to 49 years for Eastern and Western Africa.

Migration

What is migration? Why do people migrate?

Migration is a socio-cultural components of population change. It has both negative and positive impacts based on its net effect. A negative net migration rate tends to reduce the population of region. On the other hand, a positive net migration rate tends to increase population size.

The third component of population change is migration. It is an important control of population change next to fertility and mortality. Migration is the movement of people from their home place to another one. The most important aspects in the study of migration are its motives. The motives leading to migration in Africa include:

- ⇒ prevalence of diverse and wide range of climatic zones
- ⇒ presence of diverse and multitude natural resources
- ⇒ coincidence of the continent's large size
- ⇒ pervasiveness of varying economic activities ranging from agriculture to trade: and existence of divergent level of economic and social development.

4.1.3 Characteristics of African Population

Brainstorming



- 1 What does characteristics of population mean?
- 2 What are the major characteristics of African population?

The structure or composition of African population falls under two categories classified thus on grounds of biological and cultural characteristics. Biological characteristics include race, ethnicity, sex and age. The cultural characteristics comprise education, health, nutrition, religion, occupation, and the like.

Biological Characteristics

Age structure

How do you describe the age composition of Africa's population?

Africa is a continent which one can deduce, could be characterized by young population (See **Table 4.10**). This can be easily identified from the median age. If the median age is low, it implies that the population is young; for example, Africa's median age is 18 years. In contrast, if the median age is high, the population is likely to be adult and old age group; for example the median age for Europe is 37 years. Low median age reflects high fertility and high population growth rates whereas high median age prevails in a population where population growth rate is low and slow (See **Figure 4.3**).

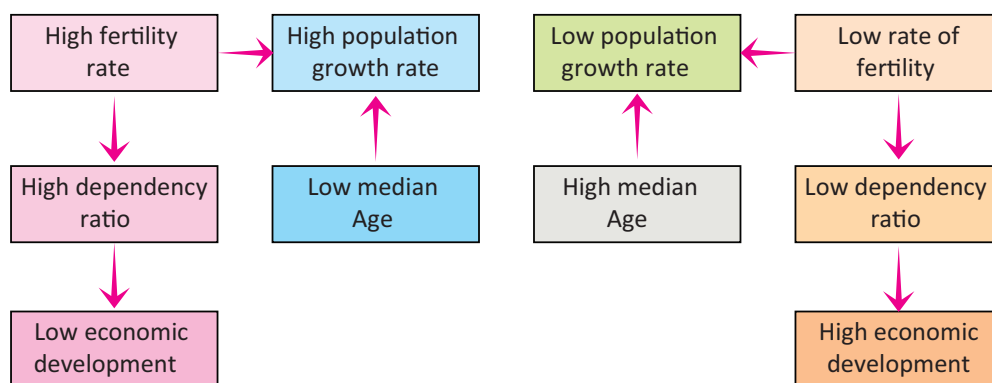


Figure 4.3: The adverse consequence of low median age on economic development

Table 4.10: Africa's Population by age and major regions

No	Region	0-14	15-64	65+	ADR
1	Sub-Saharan Africa	43	54	3	85.19
2	Northern Africa	33	62	5	61.29
3	Western Africa	44	53	3	88.68
4	Eastern Africa	44	53	3	88.68
5	Central Africa	45	52	3	92.31
6	Southern Africa	33	62	5	61.29
7	Africa	41	56	3	78.57

Source: UN World Population Data Sheet, 2009

Activity 4.3



- 1 Which continent is characterized by the highest percentage of young population?
- 2 Which continent comprises the lowest percentage of young age population and highest old age population.
- 3 Explain briefly the impact of having high percentage of young population on socio-economic changes.
- 4 Discuss the benefits and problems of young dependent population and adult (economically active) population.
- 5 Why is a large elderly dependent population generally viewed as a problem?

As it is shown in **Table 4.10**, Africa is the only continent which comprises high young population, but very low old age population. In developing continents like Africa, the level of fertility is very high; and so the rate of population growth is high, too. This is readily attributed to their predominantly youthful age structure. As high fertility persists, the pressure on scarce resources for development increases. The demand for food, education, health facilities, employment opportunities, housing and other services also increases. In order to maximize these needs so as to meet the demand of the growing population, physical and institutional infrastructures have to be increased abundantly.

Persisting high rate of population growth constantly dwarfs whatever is achieved in the economic sector. Resources which could be used for development purposes, could be shifted to the provision of basic supply for the additional members.

Activity 4.4



Discuss in group how to get rid of population pressure caused by high fertility rate.

The Demographic structure of a given country (region) is best illustrated by the use of population pyramids (like the one in **Figure 4.4**). Population pyramids are used to portray the proportion of males and females in different age groups. In **Figure 4.4** below, each bar represents a five year age group apart from the upper most bar which illustrates the population above 85 years. The male population is shown on the left of the vertical axis; and that of the females, on the right.

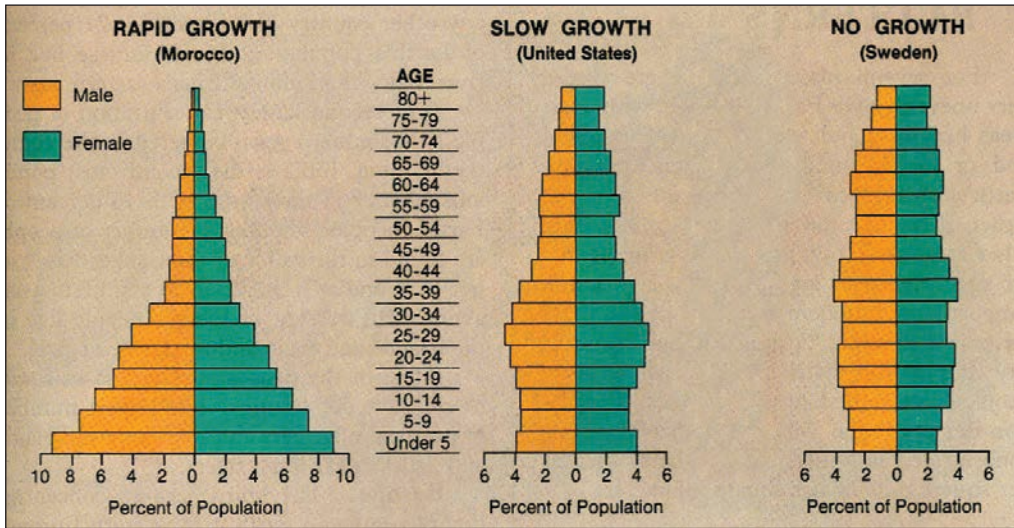


Figure 4.4: Population Pyramid

As it is portrayed in the figure above, the population pyramid for Sweden:

- ⇒ is a narrow pyramid indicating equal numbers in each age group.
- ⇒ reflects a low birth rate and a low death rate indicating a steady and static population growth.
- ⇒ illustrates that more females live over 75 years than males do.
- ⇒ gives a picture of the fact that a large proportion of the population is in the pre- and post-reproductive age groups and that a small number is in the 15 – 64 age group, which is the one that produces children and most of the national wealth.
- ⇒ This can be shown in the dependency ratio expressed as:

Economically dependent	Children (0 – 14) and elderly (65+)
Economically active	Working age (15 – 64)

Let us take hypothetical countries called “X” and “Y” to calculate dependency ratio.

Country	Non-economically active (0 -14)	Economically active (15 – 64)	Old age populations
X	13,387,000	31,616,000	7,307,000
Y	15,431,000	20,200,000	2,145,000

i The dependency ratio for country x is:

The number of dependent population under-15 years = 13,387,000

Number of old age (dependent) population > 64 = 7,307,000

Number of independents 15 – 64 = 31,616,000

$$\text{Age dependency ratio} = \frac{13,387,000 + 7,307,000}{31,616,000} \times 100$$

Therefore, the age dependency ratio of country “X” is 65.45%

This simply means, for every 100 people of working age, there are 65.45 people who depend on them.

ii Country Y’s dependency ratio is:

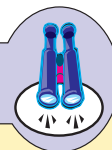
$$\frac{15,431,000 + 2145,000}{20,200,000} \times 100$$

The dependency ratio is, therefore, 87%.

The above dependency ratio is explained as for every 100 economically active people. The case country “Y”, for instance, can be stated as: there are 87 persons that depend up on 100 persons. This dependency ratio is the highest in the world.

When we see the age dependency ratio, of Africa by its major region, central Africa has the highest ADR of 92.31% followed by western and eastern Africa each of which having (88.68%) and northern and southern Africa having 61.29% each. The overall ADR of Africa was 78.57% and that of sub Saharan Africa was 85.19% in 2009.

Focus



The following are among the major characteristics of the African Population

- ⇒ High fertility and mortality rates;
- ⇒ Generally young population;
- ⇒ Triangular population pyramid indicating the prevalence of high fertility and mortality rates;
- ⇒ High age dependency ratio and youth dependency ratio and low old dependency ratio;
- ⇒ Low life expectancy; and
- ⇒ High population growth rate.

Activity 4.5



- 1 Which dependency ratio represents typically developing countries?
- 2 Which of the two countries represent developed countries?
- 3 What demographic factors contribute to the high dependency ratio?
- 4 Explain briefly the correlation between dependency ratio and economic development.
- 5 Which country of the above two is most likely to represent Africa's dependency ratio?

Sex Structure

Sex ratio is an important demographic characteristics. It refers to the proportion of males to females in the overall population of a given area. Sex ratio is expressed in terms of the number of males for every 100 females.

$$\text{Sex Ratio} = \frac{\text{Male Population}}{\text{Female Population}} \times 100$$

Sex ratio is an important indicator of the economy of a given country and is useful for regional analysis. The proportion of the two sexes in the population of a region has impact on other demographic elements such as marriage rate, occupational structure, growth, etc.

With regard to sex ratio, Sub-Saharan Africa sex ratio is below the world's average which is less than 98%. This means there are 98 males per 100 females, which is equitably balanced. Most Sub-Saharan African countries, however, have sex ratio of far less than 100. That is to say, there are greater number of women than men. Such an event is associated with a huge loss of men population due to war and migration. In some countries of the region, though, male births consistently exceed female births due to combined biological and social reasons. Some among such countries are equatorial Guinea, Uganda, Gambia and Kenya.

The context of high sex ratio in these countries is attributed to the prevalence of a large number of immigrants. The fact that these countries exceptionally comprise high sex ratio for reasons of immigration indicates that migration is age and sex selective. If there is a large influx of population to a given country, then that country will have high sex ratio. High sex ratio means a large proportion of active population age group will be added to that country.

In countries where there is a strong rural to urban migration, the population structure of the areas affected can be different.

Activity 4.6



Give brief answer for the following questions

- 1 What are the reasons for the declining trend of death rate both in developed and developing countries?
- 2 Explain briefly the Socio-economic implication of a high rate of young population of a given country.
- 3 Mortality is showing a declining rate in all countries of the world. But in some developing countries it is rising. Explain why?
- 4 How do you define sex ratio?
- 5 What sort of impact does a high sex ratio have on a given country?

4.1.4 Migration and Urbanization in Africa

Brainstorming



- 1 What does the word migration mean?
- 2 What are the two types of migration?

Migration

The two major types of migration which bring about population change and effect its distribution are:

A Internal migration

B International migration

A *Internal Migration*

What is internal migration?

When people move from one part of a country to another part, we say internal migration has taken place. Internal movement of this kind is practised in many parts of Africa. Internal migrations are caused mainly by economic reasons.

Internal migrations are of two types, namely,

⇒ *permanent and*

⇒ *temporary.*

Permanent migration refers to peoples movement from their original place of residence to another where they establish a new residence on a permanent basis.

Another form of permanent internal migration is the urban to rural migration. This one is also known as the return migration. In such migration, people who are unable to find job that can sustain their family in the city move back to their old places. Such people include retired people from civil service and those who worked and lived in cities for a long period of time.

Temporary migration involves the movement of people whereby they leave their original residence for another for a short period of time, and then come back to their original place. Such migration is often practised only periodically. For example, people move from one area to another to find seasonal job. The Migration of labourors from the densely populated highland regions of Ethiopia to the middle Awash valley during the seasons of sugar cane plantation and harvesting is a clear illustration of this trend. Similarly many young people migrate from east and west Gojjam, Tigray, Wollo and Gondar to nearby towns to avail themselves at employment opportunities accessible only seasonally.

Temporary migration can also take place on annual or diurnal basis. Many people move from small towns to large cities in Africa every day seeking employment or running into other purposes.

Another internal migration is related to a rural-rural one. This type of migration is attributed to pushing and pulling factors. Examine the illustration below.

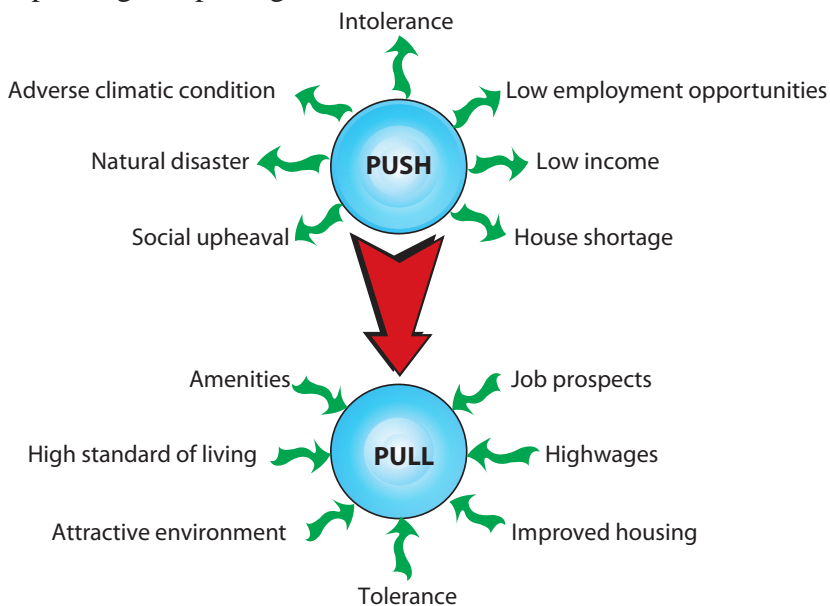
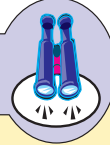


Figure 4.5: Push and pull factors of migration

Focus



Internal migration takes the following forms:

- ⇒ Rural-urban
- ⇒ Rural-rural
- ⇒ Urban-rural
- ⇒ Urban-urban

Migration may emanate from a combination of reasons. These include: aversion of residence: This is to mean that people may migrate if they dislike certain things about their residence. Such unfavorable conditions are referred to as pushing factors or repellent reasons for migration.

- ⇒ *people may migrate to a new place because they think certain conditions about that place are all active and welcoming. These are known as pulling factors.*

B International Migration

What is international migration?

When people move from one country to another, wherever this may be in the world, we say International migration has taken place. International migration happens in various forms and has a long history. Several migrations took place before the colonial era. The most important movements were accompanied by Slave Trade whereby Africans were enslaved and taken to the America's and Middle East. This form of emigration persisted for about 300 years.

The other wave of migration was that of people from the Middle East and South Asia to Africa. These were the first Arab (Semites) migrants to Africa before the slave trade. These people inhabited North Africa starting from the 7th and 8th centuries and spread their language, religion and culture all over Northern Africa and the Sahara. These people are known as the Berbers and comprise 25% of the total population of Africa.

Activity 4.7



Give short answers for the following questions:

- 1 Which type of migration brings about population change in African urban areas?
- 2 Explain the influence of international migration on brain drain.
- 3 Migration is age selective. Which age and sex group migrate from Ethiopia to the Middle East? Explain the pushing and pulling factors in connection with this question.

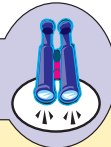
- 4 What is the difference between internal and international migration?
- 5 What was the first form of emigration from Africa?

Brainstorming



- 1 Discuss in group the advantages and disadvantages of emigration for the destination and origin countries
- 2 What relationship does globalization have with migration?

Focus



Brain-drain is the movement of highly educated people such as engineers, researchers, lawyers, university instructors, medical doctors, etc from their country to countries abroad (overseas) where working conditions and payments are thought to be better.

Intra-continental migration: this is movement of people within the same continent, in the present case, within African countries. This kind of migration is usually done by labourers and is known as labour migration.

Labour migrants are motivated by ample remunerations provided by establishments engaged in plantation agriculture and discovery of mineral deposit. These conditions have brought about the divergence in economic growth among African countries.

The places involved in plantation agriculture and the mining sector that attract a large number of people from different parts of Africa include the:

- ⇒ *Cacao belt of Ghana and Western Nigeria.*
- ⇒ *Citrus and Vine plantation of Algeria, Tunisia and Morocco.*
- ⇒ *Tobacco plantation of Zimbabwe and Zambia.*
- ⇒ *Sisal, Coffee and tea regions of Kenya and Tanzania*
- ⇒ *Copper belts of Shaba (DRC) and Zambia.*
- ⇒ *Gold and diamond mines of the Republic of South Africa.*
- ⇒ *Oil fields of Nigeria and North Africa.*
- ⇒ *Cotton region of the Gezira plain of the Sudan.*

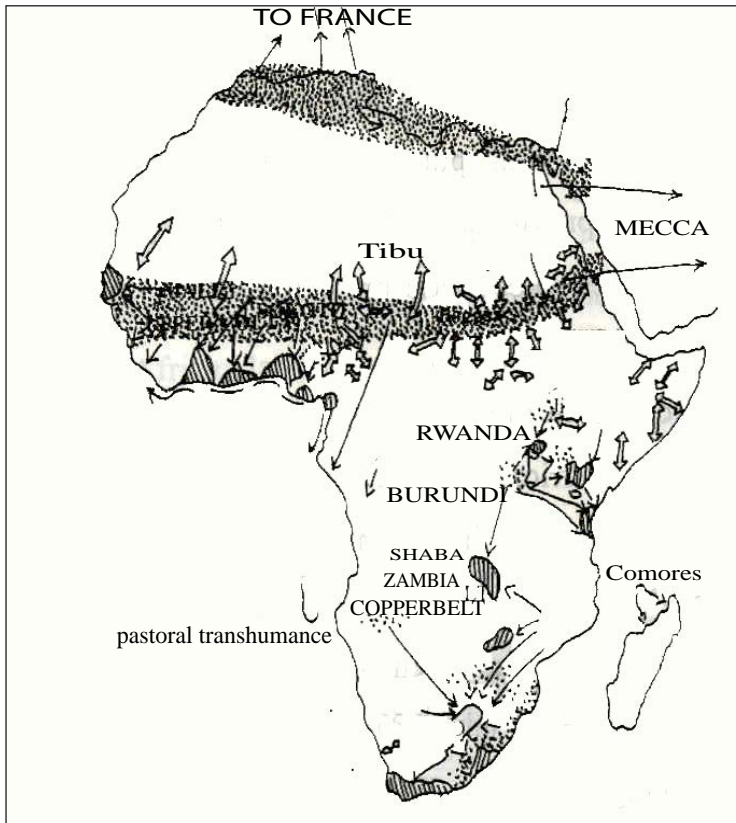


Figure 4.6: Steams of Labour migration in Africa

Summary Table of International Migration in Africa

Table 4.11: Immigration (In-migration) and Emigration (out migration)

Immigration	Source area from	Period	Outcomes
1 The Arabs	Middle East and South Asia	7 th and 8 th century A.D	Spread their religion and language all over northern Africa and Sahara. They comprise about 25% of the total population of Africa
2 Europeans (White)	European metropolis and South Asia	During the colonial period	The maghreb countries (morocco, Algeria, Tunisia) Zimbabwe, Zambia East Africa, South Africa became colony
3 Technical experts and entrepreneurs emigration	Europe, Asia, USA (out migration)	After independence	Motivated by economic progress, the growing period for specialized labour investment coming of many technical experts and entrepreneurs

Emigrants	Source area from	Period	Otcomes
4 The white people	Africa	1950s and 1960s	Many African countries gained their independence during this time ⇒ Africans began ruling themselves ⇒ The white people were forced to leave Africa
5 Africans	Africa	Since the 20 th century specially after independence	Economic growth demanded Africans to go abroad to study in Europe and USA. Substantial proportion have never returned ⇒ This is known as brain- drain

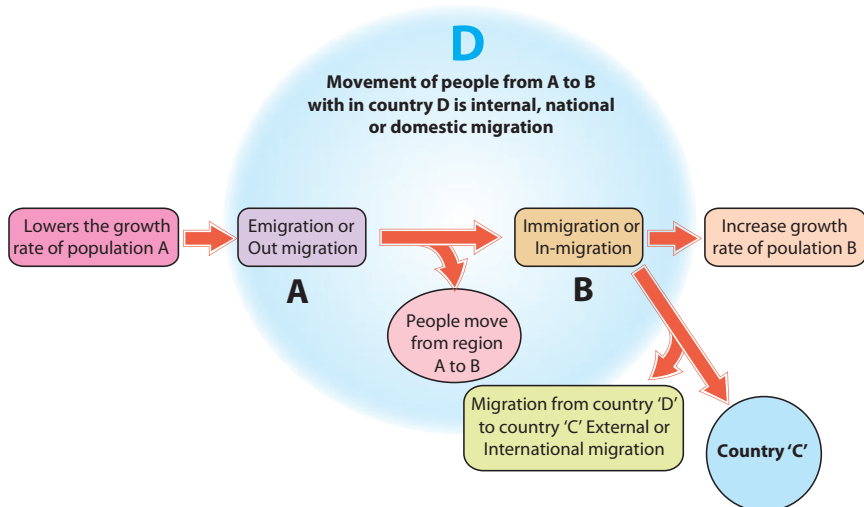


Figure 4.7: Migration in country D

Table 4.12: Advantages and disadvantages of migration to the losing and receiving countries

Advantages	Disadvantages
Losing Country	
⇒ Reduces pressure on jobs and resources (example food). ⇒ Loses people of child bearing age causing decline in birth rate	⇒ Loses people in working age group ⇒ Loses people most likely to have some education and skills ⇒ Mainly males leave causing a division in families ⇒ Left with an elderly population and so a high death rate.

Advantages	Disadvantages
Receiving Country	
<ul style="list-style-type: none"> ⇒ Over comes labour shortage ⇒ Prepared to do dirty unskilled jobs ⇒ Prepared to work long hours for low salaries ⇒ Cultural advantages and links ⇒ Some highly skilled migrants ⇒ In a developing country these migrants could increase the number of skilled workers. 	<ul style="list-style-type: none"> ⇒ Pressure on jobs but most likely to be the first unemployed in a recession. ⇒ Low quality over crowded housing lacking in basic amenities ⇒ Ethnic groups tend not to integrate ⇒ Racial tension ⇒ Limited skilled/educated group ⇒ Lack of opportunities to practice their own religion, culture, etc. ⇒ Language difficulties

Urbanization

Brainstorming



- 1 What does the word urban mean?
- 2 What is urbanization?
- 3 Try to recall what you learnt in grade ten about urbanization and give answers to these two questions.

Urban is defined as relating or belonging to town or city. Urban centres are settlements where the majority of the population is engaged in non-agricultural occupation.

Urbanization refers to an increase in the proportion of people living in towns and cities. It is a major aspect of socio-economic change.

Africa is the least urbanized of all the continents in the world. As compared to the other regions of the world, the continent has the least number of urban populations. On average, it is only 38% of the continent's population that lives in urban areas. However, as a result of the existing very high rate of rural-urban migration and high fertility in the urban areas, the continent has the world's highest rate of urbanization, which is about 5.4% per year. Furthermore, the continent is characterized by low level of urbanization. The living conditions, social services, housing conditions and transport and communication facilities are very low in the urban areas of the continent. It is also true to say that the continent has the world's least number of urban dwellers and urban centres.

The extent of urbanization shows great regional variation in Africa. As it can clearly be observed from the table below, Southern Africa is the most urbanized region with 56% of its population living in urban areas in 2009 followed by Northern Africa (50%). Contrary to this, Eastern Africa is the least urbanized region having only 22% of its population residing in the urban areas. In terms of rate of urbanization, there exists regional variation too. The highest in this regard is that of Eastern Africa (6.8%) followed by Western Africa (5.5%).

Table 4.13: Percentage of Urban Population in Africa by Major Regions (2009)

No	Region	Percentage Urban
1	Sub-Saharan Africa	35
2	Northern Africa	50
3	Western Africa	42
4	Eastern Africa	22
5	Central Africa	41
6	Southern Africa	56
7	Africa	38

Source: UN World Population Data Sheet, 2009

Rapid urbanization is causing several challenges in Africa. It creates problems on employment opportunities, housing conditions, provision of social services such as education and health services, and social security in the urban areas. It has also resulted in unplanned development of urban centres in many African countries. Consequently, many urban areas of the continent have poor road networks, sewerage channels and unplanned settlements which resulted in the development of slum or squatter settlements. Rapid urbanization in Africa is also affecting the rural economy. This is due to the high rural-urban migration that takes the rural labour force out to the urban areas leaving the farms in the rural areas for the children and old. In addition, it has also facilitated the expansion of social evils like crime, prostitution and the like.

Urban Growth and Major Urban Centres in Africa

The movement of people to cities in Africa began in early 20th century. Since then, many cities have expanded at a rate of 25 percent every ten years (decade). The movement from rural areas to towns and cities is dubbed as rural – urban

migration. Figure 4.8 shows that in most African countries movement to the cities is partly due to rural push and partly due to urban pull.

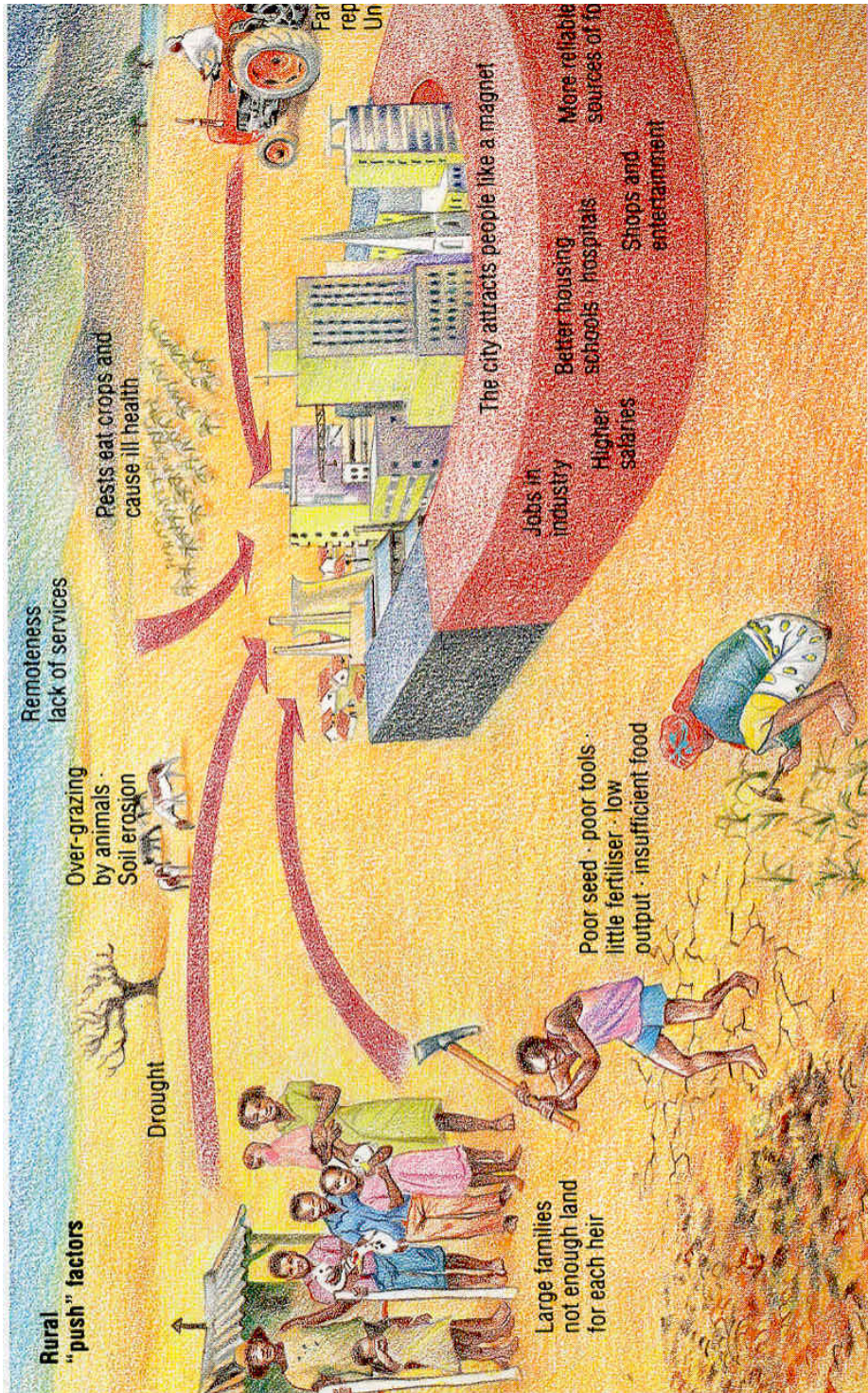


Figure 4.8: Rural push factors and urban pull factors



Activity 4.8

- 1 Write out the definition of each of the following
 - a Urban
 - b Urbanization
- 2 One feature of cities in the developing world is that they are growing very rapidly in terms of population as people move to them from surrounding rural areas.
 - a What is this movement called?
 - b Give three reasons why people may have to move away from the country side.
 - c Name four problems that are likely to occur in urban areas when large numbers of people move in to them
- 3 Name a country which attracts migrants from the surrounding regions of Southern Africa.
- 4 Which regions of Africa have a high rate of migration?
- 5 The movement of professionals and highly educated persons from Africa to over seas countries is called _____.

Urbanization is increasing in both developed and developing countries. Cities in most developing countries are encircled by a number of problems. The following figure portrays some of the major problems affecting Urban centres.

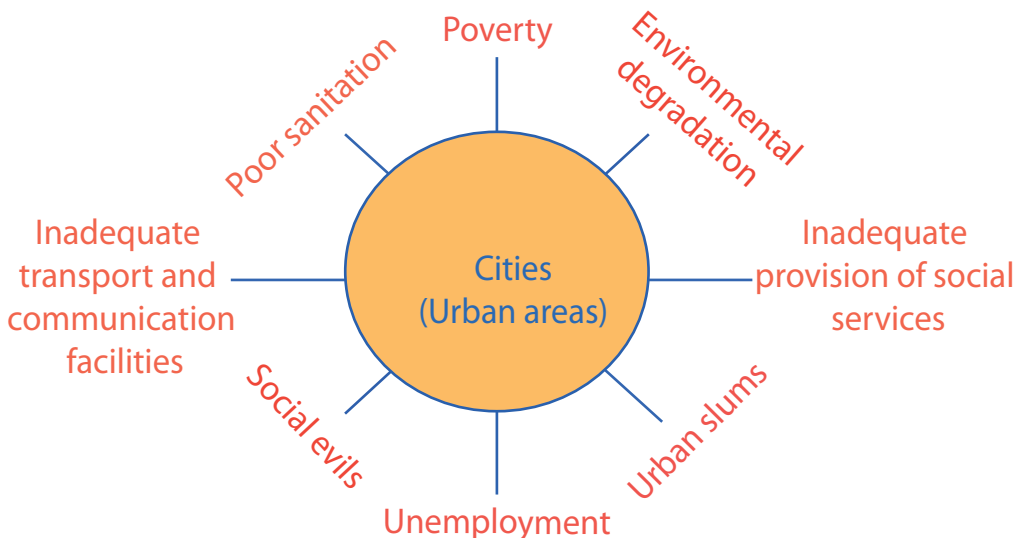


Figure 4.9: Cities (urban areas) surrounded by problems that retard their growth (in developing countries)

Current Urban Challenges

The outcome of rapid urbanization in Africa is that they pose challenges to the growing cities. Cities serve as major growth engines by providing opportunities for employment, education, technology, etc. These conditions, in turn, transfer markets for industrial and agricultural products; consequently, urbanization leads to further expansion of the cities where by their peripheral areas end up in changes of land use. The conversion of farm lands and watersheds for residential purposes has negative results in food security, water supply and the health of the people.

The adverse effects of urbanization in Africa are absence of employment opportunity, unreliable food security, shortage of water, scarcity of shelter and inefficient waste disposal, etc.

Table 4.14: Sub-Saharan urban population Growth to 2025 (millions)

Year	1990	2010	2025	% Growth (90 – 25)
Sub – Saharan Africa	527	937	1362	258%
Urban population	149	387	705	473%
Urban % of total	28%	41%	52%	

Source: 5.2 Venard, *urban planning and Environment in Sub – Saharan Africa UNCED paper no 5 (ATES)*

Rapid growth in urban populations means growth in the size and number of urban places. It has been estimated that Africa will have eleven mega-cities (i.e., cities having five million inhabitants) and about 3000 cities with populations of more than 20,000 by the year 2020. See **Table 4.15** below.

Table 4.15: Sub-Saharan City growth to 2020

Size	1990	2020	% change
More than 5 million in habitants	0	11	1100%
1 to 5 million	18	59	328%
500,000 to 1 million	26	75	288%
100,000 to 500,000	180	585	325%
20,000 to 100,000	790	2,200	278%
All cities	1,014	2,930	289%

Source: 5.2 Venard, *urban planning and Environment in Sub – Saharan Africa UNCED paper no 5 (ATES)*

Unlike other regions of the world, urbanization in Africa has not contributed significant economics of scale and value added productive chains, to the growth in GDP. South East Asia and Africa have had similar rates of urbanization (4 – 5 % per annum) for the period 1970 – 95. However, while East Asia outshined by about 3.7% per annum whereas sub - Saharan Africa’s GDP declined by 66%.

Many unique factors including immigration of destitute citizens affected by wars, drought and famine, have contributed to this phenomenon in urban Africa. What is more, difficult transitions from neo-apartheid colonial regimes to fragile self governance and crushing external debt (81% of GDP in Africa compared to 33% in East Asia) have added up to this problem.

Activity 4.9



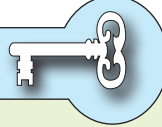
- 1 State the major causes for urbanization in Africa.
- 2 Much of urbanization growth takes place in the absence of industrial expansion. Do you agree? Give your reasons.
- 3 What are the disadvantages of converting farm land into built up areas in Africa?
- 4 Urban poverty is much more costly than rural poverty. Explain the reasons.
- 5 Define the term “slum.”

4.2 CONCEPTS OF ECONOMIC GROWTH AND DEVELOPMENT

At the end of this section, you will be able to:

-  describe the concept of economic growth and development;
-  analyze the economic growth and development trend of Africa;
-  realize the characteristics of African economy;
-  explain how and why most countries of Africa may be judged as less developed;
-  discuss the present features of African socio-economic development;
-  organize data of socio-economic growth and development and forecast the socio-economic challenges and prospects of Africa; and
-  predict the socio-economic challenges and prospects of Africa based on the organized data.

Key Terms



- ↪ Economic growth
- ↪ Economic development
- ↪ GDP
- ↪ Per capital income
- ↪ Standard of living
- ↪ Developing
- ↪ Developed

4.2.1 What is Economic Growth and Development?

Brainstorming



- 1 What is economic growth?
- 2 What is economic development?
- 3 Do you think that economic growth and development are the same? Why?
- 4 How do we distinguish a developed economy from developing one?
- 5 How do you describe the trend of economic development in Africa?

“Economic growth” and “development” are terms that we use to refer to the state of economic conditions in a certain society. Even if both are used to describe existing economic conditions, they still differ from each other in the ways they are employed. The term “economic growth” is used to describe the increase in the total amount of production and wealth of a given economy. As it is related to wealth, it focuses on explaining how fast the production and wealth of a country increases. Economic growth is usually quantitative as it is related to increasing production of goods and services, thereby allowing a state conceive how much income it has generated. On the other hand, economic development refers to growth in structural and technological change. Because of this, development is both quantitative and qualitative in that it involves increment in production, service provision and income implies, improvements in the over all living conditions of the population. That is why most agree to the idea that a growing economy can definitely promote development.

Focus



Growth versus Development

Economic growth may be one aspect of economic development but is not the same

- ⇒ **Economic growth** is a measure of the value of output of goods and services within a certain period of time.
- ⇒ **Economic Development:** is a measure of the welfare of human beings in a certain state.

Naturally, the agricultural sector absorbs the majority of the labour force as it is the main sector of production in the early stages of development. With the advent of growth, the manufacturing and service sectors become dominant. Consequently, diversified economic conditions with higher division of labour develop. Hence, we can say that development is the promotion of more intensive and more advanced economic activity with such inputs as education, improved tools and techniques of production, more available financing, better transportation facilities, and other booming businesses.

Economic development is characterized by the following:

- ⇒ *The increased utilization of the natural resources of a state in order to raise people's standard of living and to improve the quality of life.*
- ⇒ *The production of more and more goods and services that enter into markets for sale. For example, we know that people always eat, but as they have meals away from home and pay for restaurant services, the restaurant sector grows up.*
- ⇒ *The growth in GDP (for instance, the sector listed earlier on in turn, is measured as part of the gross domestic product (GDP) i.e., the total of all goods and services produced within a country.*
- ⇒ *Division of Labor: the process of development includes specialization in specific area of labour, which consequently leads to "division of labour." As people take on specialized economic functions, the scale of production increases and the output of each person rises. This type of organizational change is an important part of development as technological progress and mechanical invention or scientific discovery.*

⇒ *Significant changes in the technical and institutional arrangements by means of which out put is produced and distributed.*

In general, development is understood as a complex and continuous process that involves people on one hand, and the factors of production and organization on the other. In other words, development is a process by way of which members of a society increase their personal and institutional capacities to mobilize and manage resources and to produce sustainable goods and services for their improved life.

Economic growth may not necessarily mean economic development. However, a growing economy paves the way for development. As we know countries of the world are categorized into two as developed and developing. But the question is how do we determine whether a certain economy is developed or not? What are the factors that determine the level of the economic development of a certain society? There are indicators of economic development that can help us answer these questions which we shall see them later.

4.2.2 Economic Growth And Development Trend In Africa

How do you describe the trend in Africa's socio-economic development?

Africa is generally regarded as a developing continent. Many countries in it have very low GDP and per capita income. As a result, the majority of the African people ache from the pain of low standard of living. Historically, the primary economic sector in general and agriculture in particular has been the dominant economic activity in the continent. The very low national wealth of African countries that resulted in low per capita income has always been the factor that determined the low standard of living of the continent's population. Consequently, low GDP, low income per capita, poor housing conditions, poor transport, inefficient communication networks, low educational and health coverage, widely spread unemployment, high mortality rate soaring human fertility and indecent life characterize the living conditions of millions of peoples in Africa. The following discussion gives you some idea about the trend of economic development that Africa has come through since its earliest record of history.

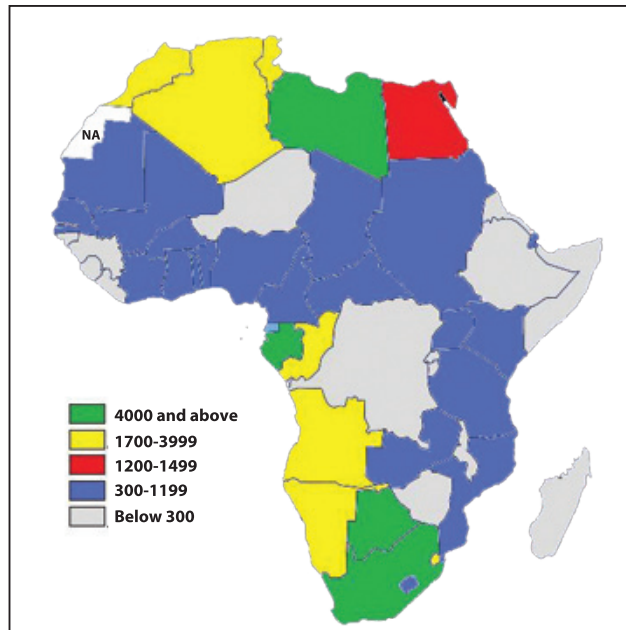


Figure 4.10: Africa by GDP per capita in USD Source: Data from Encarta 2009

- ⇒ Subsistence economy that is principally based on crop production and animal husbandry has dominated the economy of Africa since prehistoric times.
- ⇒ Long-distance trade networks that promoted the exchange of raw materials and some specialized local goods between a few African states were developed in pre-colonial times.
- ⇒ As overseas demand for certain African agricultural and mineral products increased during European colonization, the colonizers began constructing new transportation networks and introduced technological innovations and new crops; this trend has continued since the 15th century.
- ⇒ One-way trade systems in which Africa's wealth of raw materials were exported to enrich foreign assets, with little regard for development within Africa, was what European colonies in Africa were involved in by the mid-20th century.
- ⇒ As decolonization began in the late 1950s, the traditional rural economic sector supporting the majority, and a relatively modern sector that was based in cities and at mining and plantation sites, began to dominate.
- ⇒ After independence, African governments began to take development initiative to improve the standard of living of their population. As a result, industries producing consumer goods and other service providing sectors such as education and health care began to grow.

- ⇒ Rapid population growth in the second half of the 20th century, especially in the 1980s and 1990s, retarded, once again, the development of many African economies.
- ⇒ Now, despite all the efforts made by African governments, the different economic sectors, especially the primary and secondary sectors are far from being integrated. Traditional subsistence activities are still dominant. Similarly, despite increasing levels of industrialization in many countries of Africa, the continent's raw materials continue to be produced primarily for export.

African countries Human Development Index (HDI) values. The darker colors show the relative poverty of African countries.

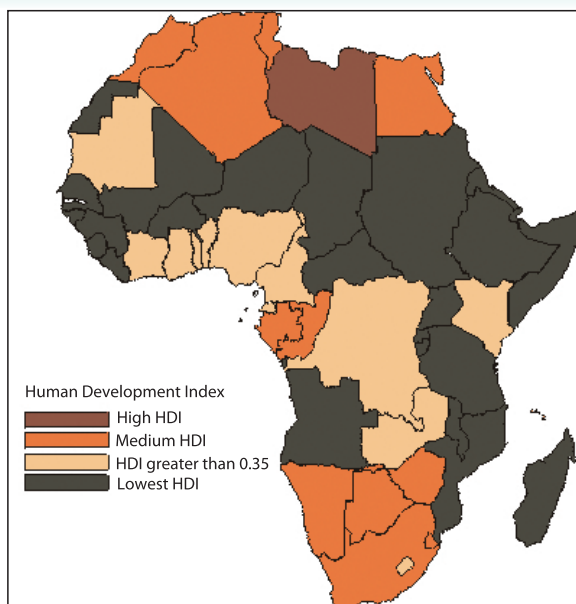


Figure 4.11: Africa by HDI

The modern economic sector of Africa was developed largely by Europeans during the colonial era and was geared toward the export of raw materials. Industrialization was and still minimum. Following independence, many African governments introduced industrialization programs with varying success. At present, many African states face the challenge of expanding their economies to fulfil the needs of their people while maintaining their profitable export-oriented activities.

Utilization of Natural Resources in Africa

How far are Africa's resources utilized? What are the factors that influence the degree of utilization of Africa's resources?

Africa is generally considered as a continent with untouched natural resources. The continent is rich in terms of all sorts of resources ranging from varied soil

types to diverse climate, enormous mineral wealth, energy sources, wildlife and huge human power.

Despite the continent's richness in resource potential, Africa falls far behind from fully exploiting its resources. Though soils with varying quality and diverse climate are common in Africa, agriculture is still less productive and at subsistence level. The huge energy potential of Africa in terms of hydro-electric power, solar energy and fossil fuels is also practically untapped. Minerals are also not well extracted even in areas where the extraction of such minerals as gold and diamond is said to be well developed. The wealth is rather more of a cause for conflict and civil war than for development. Pertaining to the huge manpower, We can safely make a sweeping statement that it is still less employed in highly productive activities; we reckon that the majority of Africans are engaged in subsistence agricultural activities.

Indicators of Development

How do we determine whether a certain socio-economic system is developed or developing? What are the major indicators of development?

Needless to say that development is a measurable concept. But, yes, It can be measured by using different indices that are called indicators of development. The component parts of the set of indicators indicate the level of development that a given society achieves. However, before rushing to these indicators, let us take up the following activity.

Activity 4.10



In a small group, discuss on the following questions and share your ideas with your classmates.

- 1 When do you say that an economy is developed or developing?
- 2 Do you know any factors that are capable of indicating how well an economy is developed? Mention as many indicators as you can if you think you know some.

Major Indicators of Development

Can you mention some of the socio-economic conditions that can tell about the level of development of a certain society?

The level at which a certain economy is said to be developed is directly linked with three most important conditions that are considered as major indicators of development. These are the Gross Domestic Product (GDP), the Per capita income (GNP per capita) and the Standard of living of a certain population.

Activity 4.11



Answer the following questions.

- 1 What is GDP?
- 2 What is GNP? What about GNP per capita?
- 3 What are the indicators of good standard of living?

- a **Gross domestic product (GDP):** GDP refers to the total value of goods and services produced in a country over a period of time. It can be calculated by either adding up the value of all goods and services produced, or the expenditure on goods and services at the time of sale, or producers' incomes from the sale of goods or services. However, measuring GDP precisely is quite cumbersome. This is partly because every country has an unofficial economy that is often called a black economy that includes businesses that are not reported to government. Furthermore, GDP measures a country's economic activity regardless of who owns the productive assets in that country. For example, the output of Holland-owned companies based in Ethiopia is considered part of Ethiopia's GDP rather than part of the Holland GDP. The amount of GDP an economy has as well as the major sectors of contributors to the GDP of a country are important indicators of development. Another term, *Gross National Product (GNP)* is also used to measure a nation's wealth. GNP refers to the total annual flow of goods and services in the economy of a nation in monetary value. It includes income from within and out side of the state.
- b **Per capita income:** This one refers to the average amount of money that an individual is expected to have as a result of the state's GNP. It is computed by dividing the GNP of a country by the total number of its people. As it is a crude measure, per capita income does not tell who exactly gets how much. However, it indicates how much each individual in a state can potentially get if the total GNP of the state is evenly distributed among all people.

Though not an actual income of an individual, we can generally deduce that the higher the per capita income of a nation is, the higher standard of living and vice-versa.

- C** **Standard of living:** This is the threshold of material security measured by the availability of resources for an individual, family, or society. It is perhaps the best measurement of the quality of life of people in a given society. The standard of living that people have in a state is directly related to both GDP and per capita income. Hence, in economies we say that where we have higher GDP and per capita income, people have better standard of living. Contrary to this, people in countries with low GDP and per capita income have low standard of living.

These three factors are strictly interrelated to one another. Thus, a higher GDP means higher per capita income. Likewise, a higher per capita income means better living condition. In well developed economies, there is high GDP, per capita income and standard of living. Consequently, the things that are essential to satisfy the needs of the population are readily available. The following chart shows you how each of these concepts influence the other.

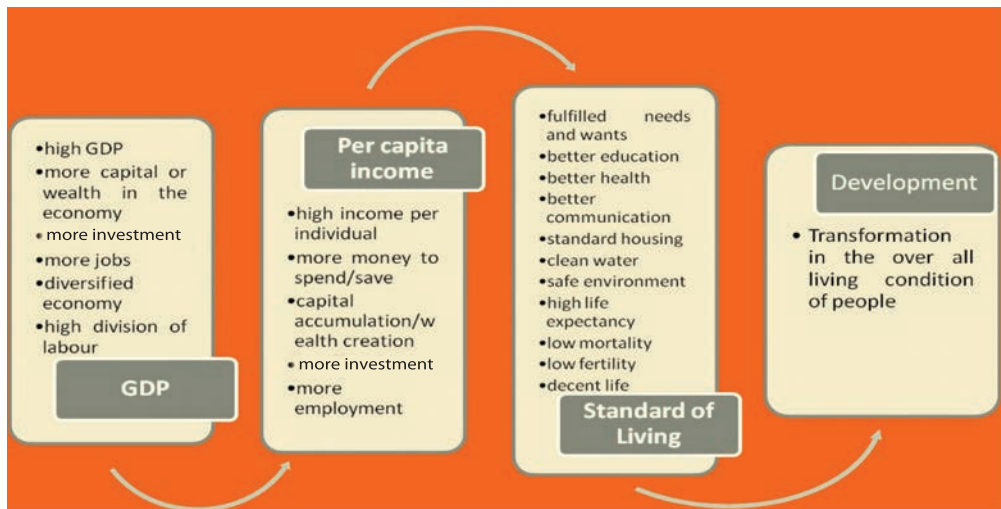


Figure 4.12: The major indicators of Development

The following table gives you a highlight of the basic features that characterize developing and developed countries.

Table 4.16: Characteristics of Developing and Developed Countries

Developing	Developed
Per capita incomes are low, and capital is scarce.	Per capita incomes are high and capital is readily available.
Wealth is unevenly distributed within individual countries, Example, Colombia, 2.6% of population owns 40% of the national wealth.	Wealth is comparatively evenly distributed, Example, Canada, 10% of population owns 24% of national wealth.
Primary industries dominate national economies.	Manufacturing and service industries dominate national economies.
High proportion of population engaged in subsistence agriculture.	Farming is commercial, efficient, and mechanized.
Populations are rural; but cities are growing rapidly.	Populations are urban, cities growing slowly.
Birth and death rates are high and life expectancy is low. There tends to be a high proportion of children.	Birth and death rates are low and life expectancy is high. High proportion of people over 60 years old.
Inadequate or unbalanced diets resulting from a low consumption of protein; hunger and malnutrition is common.	Adequate supplies of food and balanced diets; overeating sometimes a problem.
Diseases, especially infectious and parasitic diseases, are common. Health care is poor.	Low incidence of disease; good medical services available.
Overcrowding, poor housing, few public services, bad sanitation and poor social conditions.	Social conditions generally good.
Poor educational facilities, high levels of illiteracy and low levels of scientific and technological development.	Education opportunities excellent, high level of literacy, advanced science and technology.
Women may be held in an inferior position in society.	Women are increasingly treated on equal terms with men.

4.2.3 Characteristics of African Economy

What are the major characteristics of Africa's economy?

Africa is the least developed of all the continents in the World. Its economy is primarily dependent on the primary economic sector. The lion's share of

the continent's population earns its livelihood from such activities as shifting cultivation, crop production and animal husbandry. Hence, agriculture is by far the most important economic activity in the continent employing the majority of the labour force and being the main source of foodstuffs, industrial raw materials, and exportable items which provide the main source of foreign currency. Extraction of minerals, catching fish and other marine creatures and fetching gums from forests, which constitute the primary economic sector, are also major economic activities in which many Africans are engaging in.

The secondary and tertiary economic sectors are less developed in the continent, since these are recent developments. Most of the manufacturing industries are cottage types; the majority of the modern manufacturing industries are light industries that focus on the production of consumer goods. Heavy industries that could produce machineries, air crafts, ships and automobiles are almost non-existent in the continent, except a few. Regarding the service sector, it is still far behind a higher level of development. Transport and communication networks are underdeveloped. Trading undertakings, both inter and intra-continental ones, are again, far less developed. Education and health care services are poorly developed and so is tourism.

Generally, the following are the major characteristics of the economy of Africa.

- ⇒ *It is largely dependent on the agricultural sector. In almost all countries of the continent, agriculture is the:*
 - ☞ *backbone of the economy;*
 - ☞ *main source of employment, industrial raw materials, foodstuff and exportable items;*
 - ☞ *main source of foreign currency; and*
 - ☞ *major contributor to the GDP of almost all countries.*
- ⇒ *Other primary economic activities like fishing, forestry, mining, bee keeping and poultry, though all important, are less developed.*
- ⇒ *The economy of many African countries is at less level of industrialization. Manufacturing industries are few in number and are confined to few urban centres.*
- ⇒ *Inter continental, intra-regional and intra-continental trade is at low level. Commerce between African countries and regions is neutralized by similarity of products, lack of common currency, lack of foreign currency and poor communication networks of all kinds. Africa's*

international trade is dominated by the exportation of raw materials and importation of manufactured goods to and from the developed nations. This, in turn, makes Africa's trade balance feeble.

- ⇒ *Communication facilities, including land, air, and sea transport, telephone, fax and telegram are all poor, causing low level of socio-economic and political interconnections among the countries and peoples of the continent.*
- ⇒ *The various economic sectors of the continent run short of capital, skilled human power and efficient technology. As a result, most of the sectors remain dependent on insufficient local capital investment, traditional know-how of production and backward traditional technology.*
- ⇒ *As a result of low GDP and meager per capita income, the majority of the people live in poverty. Many countries also fail to provide basic social services such as education and health. Consequently, widely spread mass poverty, illiteracy and poor health conditions prevail in many countries.*

4.2.4 Present Features of Africa's Socio-economic Development

Brainstorming



- 1 How do you describe the existing socio-economic conditions of Africa?
- 2 Do you think that the existing situations are sufficiently enough for Africa to attain a better economic development in the near future?
- 3 What do you think would happen to Africa if the current conditions persist?
- 4 Do you think that African states and governments should develop new plans for their socio-economic development? Why?
- 5 What contributions could NEPAD have to Africa's development?

The overall socio-economic development conditions in Africa seem to be vague and unpredictable. While few countries of Northern and Southern Africa such as Egypt and the Republic of South Africa have better levels of socio-economic development, the majority of the states are characterized by very low socio-economic conditions. GDP is very low as the economy of the majority of the states in the continent is based mainly on the primary sector the outputs of which fail to be far from subsistence. Consequently, the share of individuals of

the national wealth, i.e., the concept per capita income, is precisely meager to enable Africans lead a better standard of living. As a result, poor and substandard housing conditions, inadequate provision of health and education services, poorly developed social infrastructure such as transport and communication facilities, malnutrition, illiteracy, and widely spread unemployment have become commonly observed phenomena in the continent.

Particularly, the countries in Sub-Saharan Africa are much affected by the conditions just stated above. Their tropical location coupled with intermittent inter- and intra-state conflicts, poor governance, corruption and poor infrastructure have made the region's backward socio-economic conditions. Though the continent is believed to have huge potential of natural resources that range from soils with varying quality to high labour potential, just a little of these resources has actually been utilized to improve the existing socio-economic conditions. Furthermore, the effects of colonialism have also played their part on the current socio-economic conditions of many formerly colonized states. The dependency of the colonies on their ex-colonizers in terms of trade relations and other socio-economic and political issues is exerting a lot of impact on their development.

Because of all the above situations, Africa stands at the fore front of low level of socio-economic development in the world. It is in fact, the least developed continent having the majority of its population living in a desperate situation. The majority of African's do not have better access to health and education services or to a better housing or rewarding employment. Fertility is high and population is growing rapidly despite the relative decline in morality rates in many countries. Though on a rise, life expectancy at birth is still very low and is the lowest as compared to the rest of the continents in the world. Adult illiteracy rates are high and even most school age children fail to get access to primary education. Clean water, adequate power supply and safe and healthy environments are far placed from the people. Leaving rural areas aside, they are even not adequately provided in the urban centres.

Lack of capital, lack of skilled human power and lack of advanced technology together with conflicts and civil war, corruption, bad governance and high foreign debt are among the factors that negatively influence socio-economic developments in Africa. To day, inter and intra-state conflicts and civil wars are easy to observe in the continent. Corruption is widely spread from top government officials to lower level office holders. Diverting Africa's limited capital resource from investment on social infrastructure to individual's pockets is common place.

Lack of good governance has resulted in lack of accountability. Formulating and executing development policies and programs as well as passing fundamental decisions on matters that could make life better in the continent have all become unworkable.

Debt crisis is another serious challenge of development in Africa. Due to their internationally disadvantaged status, nearly all African countries had to borrow money from foreign lenders to cover the difference between their export earnings and their spending for imports. The amount of accumulated external debt owed by Sub-Saharan African countries has risen from less than \$6 billion in 1970, to \$80 billion in 1985, to \$230 billion in 1999. Interest payments to foreign creditors siphon away precious foreign exchange earnings. Such pressures on export earnings have led African governments to make stringent cuts in imports because of high tariffs and complete prohibitions.

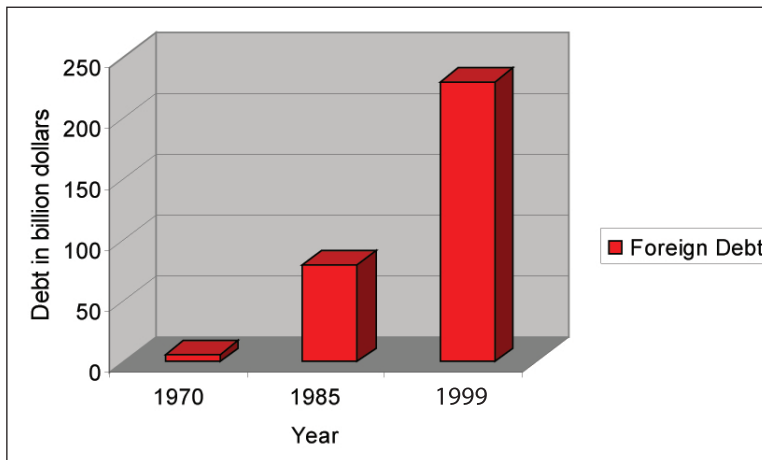


Figure 4.13: External Debt owned by Sub-Saharan African Countries

As was the case during colonial rule, Africa's role in the world economy remains to produce raw materials for use in developed nations. Investment by international corporations and most foreign governments has concentrated on expanding production of exportable mineral and agricultural raw materials. The emphasis on exports has left inadequate resources for developing domestic industry or changing the traditional, underdeveloped system of African smallholder food production. Neglecting their food-producing sectors has led African countries to increase their dependence on raw-material exports and has required many to import food to feed its people.

The continent's trade position has faced further dire challenges since the 1960s. The prices of manufactured goods and fuels imported by African countries

increased substantially, while the prices of almost all products of African mines and farms declined or fluctuated. This downturn meant that African countries not only had made them do with fewer needed imports, but also go into international debt to meet their financial requirements. Oil-exporting countries were able to avoid this pitfall for a time, but they too were beaten down by the collapse of world oil prices in the 1980s and 1990s. Africa has also been put at a disadvantage by the protectionist trade policies of industrialized countries, which accepted unprocessed raw materials tax-free but imposed substantial tariffs on imported products that have actually been made from their own raw materials.

4.2.5 Challenges and Prospects of Economic Development in Africa

Brainstorming



- 1 What are the major problems of economic development in Africa?
- 2 How far are these problems serious in the continent?
- 3 Do you think that there are prospective opportunities for Africa's development?
- 4 What, do you think, are the roles that continental and regional organizations can play in the development of the continent?

Despite its second position in the world in terms of territorial and population size, Africa is the world's poorest continent with stagnant socio-economic conditions. The continent's economy has been suffering from serious challenges since earliest times. Lack of capital, skilled human power and modern technology are the major problems hampering its development. In addition to these, political instability, civil war, lack of good governance and the resultant widely spread corruption, maladministration, poor infrastructure and the subsequent poor regional inter-connectedness, poor export performance, declining industrial outputs, environmental degradation and many other cultural factors have influenced negatively the work habit of the majority of Africans, which, in turn, have posed as dominant factors impeding its economic development. As a result, the per capita income of the majority of Africans becomes very low negatively affecting the standard of living of the continent's population. Social services are poorly developed. Health problems including HIV/AIDS and illiteracy are common. Saving and local capital accumulation are extremely limited. Hence,

the economy of the majority of the countries in Africa is dependent on foreign aid and debt. This has created intense pressure on Africans development.

Another significant challenge for Africa's development is rapid population growth. The continent's population is increasing rapidly. As a result, Africa has the world's fastest population growth rate. According to the 2009 World Population Data Sheet, the continent's population has been growing at the natural rate of 2.4%. The rate has even been higher in Sub-Saharan Africa with 2.5%. If this rate continues in the future, the continent's population would double in not more than 30 years. With such a rapid increase in population size, Africa's economy finds it difficult to meet the necessities of its people. Economic development is far behind from the rate at which the population of the continent is increasing. As a result, the limited capital of many African countries is shifting towards making Africans lead a subsistence life that is far from global standards. The imbalance between population growth and economic development in the continent is also becoming a source of conflict in many of its countries and regions. Resource competition and the increased need for means of subsistence is becoming a cause of inter-state and intra-state conflicts. This condition is adversely affecting the economy of many African states as it forces governments to shift their limited resource to war related expenses.

Though the current socio-economic conditions of Africa are under extreme pressure as a result of the problems stated above, the future of the continent seems to be promising some how. This is due to the establishment of so many continental, regional and sub regional organizations that are meant to facilitate socio-economic development in the continent. These organizations have different purposes. While some are of general purpose organizations, others are of specific ones.

Activity 4.12



- 1 Do you know any one of the organizations that have been established in Africa for purposes just cited above?
- 2 Which one of these organizations is multi-purpose? What about the ones with specific purposes?
- 3 What, do you think, are the roles that these organizations play in promoting socio-economic development in Africa?
- 4 Do you think that the presence of these organizations can possibly change the socio - economic conditions of Africans in the near future? Why?

The African Union (AU), the former Organization of African Unity (OAU), is the only continental organization in Africa. With its new organizational structure, the AU is meant to promote peace, unity and cooperation in the continent. The organization is also meant to resolve conflicts between nations and to pacify hostilities. Besides these, it is meant to coordinate political, economic, cultural, scientific, medical, and defense policies among member states. The organs of AU primarily the African Development Bank, the African Court of Justice, the Pan African Parliament and the Security Council are working on the promotion of peace, security, good governance, inter connectedness and development.

The African Union is the largest international economic grouping on the continent. Its goals include the creation of a free trade area, a customs union, a single market, a central bank, and a common currency, thereby establishing economic and monetary union. The current plan is to establish an African Economic Community with a single currency by 2023. The African Investment Bank is meant to stimulate development. The AU plans also include a transitional African Monetary Fund leading to an African Central Bank.

In addition to AU, other regional and sub-regional organizations are also striving hard to improve socio-economic conditions in Africa. Among others, IGAD, NEPAD, SADC, COMESA and ECOWAS are the prominent ones. These organizations have varied purposes all of which boil down to promoting overall socio-economic development at regional and continental level. They work hard to improve trade and other socio-economic integration among member states. They labour to help member countries achieve better levels of development. They assist development efforts in different ways some of which include promoting peace, security and stable socio-economic conditions. They also provide financial, technical and technological support to member countries to help them mitigate their problems and foster development. The following map portrays the different regional organizations and their member countries.

N.B. Overlapping colours that form stripes indicate multiple membership of countries.

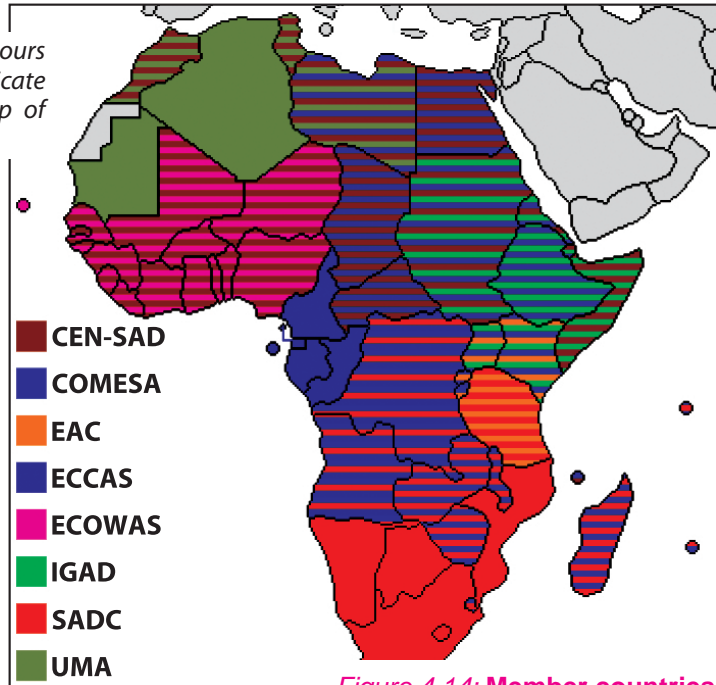


Figure 4.14: Member countries of the different regional organizations in Africa

- ➔ CEN-SAD: Community of Sahel-Saharan States
- ➔ COMESA: Common Market for Eastern and Southern Africa
- ➔ EAC: East African Community
- ➔ ECCAS: Economic Community of Central African States
- ➔ ECOWAS: Economic Community of West African States
- ➔ IGAD: Intergovernmental Authority on Development
- ➔ SADC: Southern African Development Community
- ➔ UMA: Arab Maghreb Union

In addition to these continental and regional organizations, other international organizations are also having impact on Africa's future development. For instance, the roles played by the different organizations of the UN like the ECA, UNESCO, UNICEF, WHO, ILO and FAO' among others, are significantly important. Generally, these organizations are working to improve overall development in areas including education, health, employment, agriculture, science and technology. Through financial and technological assistance, these organizations are promoting the socio-economic development of the continent.

By promoting inter-continental and international integrations and cooperation, these organizations are expected to foster Africa's socio-economic development. They are also meant to improve Africa's position in the world's socio-economic order. The organization work to make Africa beneficiary from the world's economic conditions by creating situations that favour African countries, especially in the world trade. Through financial, technological and material assistance, they are trying their level best to change African's socio-economic conditions. If these efforts are supported by progressive governmental policies and programs, Africa's future socio-economic development seems to be some how promising as the continent possesses huge but untouched natural and human resources.

From 1995 to 2005, Africa's rate of economic growth increased, by 5% in the average in 2005. Some countries experienced still higher growth rates, notably Angola, Sudan and Equatorial Guinea; all three of which had recently begun extracting their petroleum reserves or had expanded their oil extraction capacity. In Ethiopia, economic growth is being experienced. The country has been experiencing an average economic growth rate that exceeds 10% per year for the last five years. The country is also becoming one of the fast growing economies in Africa the situation is also being supported by the government's effort to increase resource exploitation to further boost economic growth.

Content Check







Define the following terms and concepts

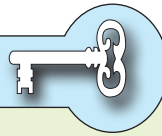
- | | | | |
|---|-------------|---|--------------------|
| a | development | c | GDP |
| b | growth | d | Standard of living |

4.3 NATURAL RESOURCES OF AFRICA AND ITS POLITICS

At the end of this section, you will be able to:

-  relate major resources of Africa to its exploitation and development of Africa;
-  state the actual mineral extraction methods of Africa;
-  relate the paradox between the potential and actual resources exploitation in Africa; and
-  defend for the advantages of peaceful mechanisms of conflict management around resource utilization in Africa against aggressive mechanisms.

Key Terms



- Natural resource
- Conflict
- Mining
- Mineral
- Regional organizations
- HIV/AIDS
- Debt
- NEPAD

As some sources indicate, Africa is a naturally endowed continent. Its landmass possesses huge reserve of different kinds of minerals including precious gem stones such as diamond and gold, and petroleum. Its varied topography makes the continent rich in terms of climatic resources and biodiversity. The geology of the continent is also a cause for the presence of various soil types with varying degree of fertility. Water resources are abundant in forms of rivers, lakes and swamps, though there are still many areas with serious shortage of water. The world's second largest population of the continent is also a source of huge human power. Africa's tropical location also makes it potentially conducive for the continent to possess tremendous solar energy. However, all these resources do not seem to serve the cause of the continent's development. Instead, they are becoming causes of conflicts and war.

4.3.1 Major Resources of Africa

Brainstorming



- 1 What are the resources that Africa is believed to be rich with?
- 2 What, do you think, are the roles that these resources could play in the development of Africa?
- 3 Do you think that Africa is benefiting from these resources properly? Why?

As has been stated earlier, Africa is believed to be rich in terms of human and material resources. The physical environment coupled with the continent's varied geology makes Africa prosperous in terms of resources of various nature. Among others, the mineral, agricultural, water and human resources of the continent are of paramount importance for its future development.



Activity 4.13

- 1 What are the mineral resources that Africa is well known for globally?
- 2 Which of the countries of Africa are leading producers of these minerals?
- 3 What are the major agricultural resources that Africa contributes to the world market?
- 4 Account for the resource potentials of Africa's rivers and lakes.
- 5 How, do you think, can Africa's human resource be exploited to the extent that it contributes to the continent's development?

Mineral Resources of Africa

What are the minerals that Africa is well known for in the world market?

Africa's geology consists of various types of rocks and fuel oil. This makes the continent rich in mineral resources. Geographically, Northern Africa is rich in petroleum resources. West and Central Africa are also major regions with huge petroleum reserves. Metallic minerals and other gem stones are abundant in Southern Africa.

As some estimates indicate, Africa has 90% of the world's cobalt and platinum, 50% of the world's gold, 98% of the world's chromium, 70% of the world's tantalite, 64% of the world's manganese and one-third of the world's uranium. The DRC alone has 70% of the world's coltan (ore of Tantalum) and more than 30% of the world's diamond reserve. Guinea is the world's largest exporter of bauxite (ore of aluminum).

North African countries constitute one of the world's major centres of oil production. Libya, Algeria and Nigeria are among Africa's leading producers of crude petroleum. Algeria has a huge reserve of natural gas, as well. North Africa is also rich in phosphate deposits and production, Morocco being the world's leader in its output. Coal, iron ore, uranium, platinum, lead, zinc, and cobalt are also available in Northern Africa, though to a lesser extent.

Significant amount of oil reserve is also found in Western and Central Africa. With Nigeria being Africa's top petroleum producer. Other important oil-producing countries of the region include Angola, Gabon, and the Republic of the Congo. These regions also possess some of the world's most significant sources of cobalt, manganese, potash, bauxite, and copper. Guinea alone has about one-third of the world's reserves of bauxite. Other minerals of significant economic importance

in the regions are iron ore, gold, diamond, tin, uranium, phosphate, columbite, and titanium.

Likewise, Southern Africa is one of the world's richest source of gold, diamond, and several other rare metals. Among the countries of the region, the republic of South Africa alone has the largest and most diverse mineral economy. As a result, the country is a leading producer of gold and uncut (raw) diamonds. Zimbabwe is also an important producer of gold. Botswana and Namibia produce significant amount of diamond. Chromium, cobalt, antimony, uranium, lithium, nickel, manganese, asbestos, platinum, titanium, and vanadium are also important minerals produced in southern Africa.

Minerals account for about half of the export earnings of 12 African countries. Nearly 90 percent of the exports in Angola, Nigeria, Algeria, Libya, and Zambia come from minerals. As a result, Africa plays a significant role in the world's mineral economy. It produces about:

- ➔ three-quarters of the world's cobalt;
- ➔ half of the global supply of platinum, chromium, and diamonds;
- ➔ one-third of all gold, manganese, and uranium;
- ➔ one-fifth of all bauxite; and
- ➔ one-tenth of the world's petroleum.

Table 4.17: Major minerals produced in Africa and the leading producers of the continent

Mineral	Africa's Global share	Leading producers in Africa
Diamonds	77%	Zaire, Botswana, RSA,
Gold	55%	RSA, Ghana, Zimbabwe
Copper	20%	Zambia, DRC, Zimbabwe, RSA,
Bauxite	19 %	Guinea, Ghana and Sierra Leone
Iron ore	4%	Liberia, Mauritania, Morocco, Tunisia, RSA, Zimbabwe and Swaziland
Chromites	41%	RSA and Zimbabwe
Manganese	27%	RSA, Gabon
Petroleum	10%	Nigeria, Libya, Algeria, Egypt and Angola
Tin	13%	DRC(Katanga area) and Nigeria
Cobalt	76%	DRC and Zambia
Coal	6%	RSA , Zimbabwe, Nigeria, Zaire, Zambia, Mozambique, Malawi and Tanzania

Source: FAO, production year book.

Agricultural Resources

What are the major agricultural resources of Africa? Can you list some of the tropical crops that Africa is known for?

Agriculture is the backbone of many African countries. Apart from being the main source of foodstuffs and employment, the sector is a dominant source of agricultural outputs that enter into world market. Africa's physical diversity has made the continent an ideal environment for the production of certain agricultural products that are vitally demanded in the world market. The continent is rich in terms of certain tropical crops such as coffee, cocoa, tea, sugarcane, rubber, palm oil, sisal, cotton and ground nuts. The economy of many African countries is primarily agricultural. They are dependent on the exportation of these tropical crops. Crop production absorbs much of the continent's labour force; and the exportation of crops contributes a lot to the GDP of the exporting countries.

Table 4.18: Leading producers of Tropical crops in Africa and Africa's share to the World's production

Crop	Leading producers in Africa	Africa's Global share
Cocoa	Ghana, Cote D'Ivoire, Nigeria, Liberia, Togo, Cameroon	53%
Coffee	Cote D'Ivoire, Ethiopia, Uganda, Kenya, Cameroon, Tanzania, DRC, Angola	20%
Tea	Tanzania, Kenya, Ethiopia, Mozambique, Zimbabwe, Congo, Mauritius	13%
Palm oil	Nigeria, Ivory Coast, and Zaire	16%
Sugar cane	Sudan, Kenya, Uganda, Ethiopia	7%
Rubber	DRC, Ghana, Cote D'Ivoire, Cameroon, Gabon, Sierra Leon, Kenya and Tanzania	6%
Sisal	Tanzania, Kenya and Madagascar	29%
Cotton	Sudan, Nigeria, Ethiopia, Mali, Congo and Egypt	7%
Ground nuts	Nigeria, Senegal and Zaire	29%

Water and Associated Resources

Do you think that different kinds of resources can be obtained from water bodies? Mention some examples.

Though the provision of clean water is a critical problem in many countries of Africa, the continent is still rich in terms of water resources. Thousands of rivers that altogether comprise the four major drainage systems of Africa flow over the vast landmass of the continent. The rivers that drain many areas of the continent include some of the world's greatest rivers namely Nile, Congo, Niger and Zambezi. There are also many lakes, a lot of which are concentrated in the Great East African Rift Valley, a site also containing varied biodiversity. The rivers and lakes have tremendous potential in terms of fishing, hydroelectric power generation, irrigation, and mineral extraction.

The rivers and lakes of Africa, as well as the adjacent seas and oceans make the continent rich in terms of fish resources. Major grounds for marine fish such as tuna, sardines, and hake are found some distance off from West African coasts stretching from Morocco to Senegal, and Angola to Namibia. The Nile, Niger, Congo, and Senegal rivers and Lakes Victoria, Tanganyika, Malawi, and Chad are also major sources of freshwater fish. Nile perch is the most common freshwater fish targeted in angling.

Morocco, Egypt, South Africa, Ghana, and Nigeria were the top African countries in total fish catch in 1999. Morocco, Namibia, South Africa, Senegal, and Libya exported the most fish in the same period. Morocco is also leading in fish-processing industries, producing more canned fish, fish oil, and fish meal than any other African country.

Africa's many large rivers provide the continent with a vast hydro electric power potential, which, in fact, has scarcely been exploited. Several major dams including the Aswan High Dam on the Nile River, the Akosombo Dam on the Volta River, and the Kariba Dam and Cabora Bassa Dam on the Zambezi River have been constructed since 1960. In Ethiopia, the major rivers of the country mainly rivers Tekeze and Ghibe have already been dammed for this purpose. The country has also inaugurated a new dam construction project on the Abay river recently.

Irrigation is another potential to be exploited from Africa's rivers and lakes. As these water bodies contain fresh water, they can potentially be exploited for agricultural purposes. As many areas in Africa are rainfall deficient, the rivers and lakes that form the drainage systems of the continent can be used for the production of agricultural products. For instance, the Nile River supports the lives of millions of people in Sudan and Egypt by providing irrigable water to

these countries. Similarly, the Awash River in Ethiopia makes such a benefit available to the people of this country. There are many irrigation schemes along the Awash River basin including the Upper and Lower Awash agro-industries and the different sugar cane plantations in the region. However, the huge irrigation potential of many rivers and lakes in Africa is not yet fully exploited. Despite such available potential, decline in agricultural productivity is a common phenomenon in many African states. As a result, the continent often suffers from recurrent famine.

Another most important stockpile associated with water resources in Africa is mineral. The shores and beds of lakes and banks of rivers are of substantial source of minerals. In many countries of the continent, construction materials such as sand, gravel and boulders are being exploited from rivers and lakes. Gold and other precious metals are also being extracted from rivers in traditional ways in many countries. For example, many people in Ethiopia extract gold from the Baro River in the Gambella Regional State. Similar traditional gold mining practices are also being performed in many African countries.

Human Resources

Why do we say that Africa is rich in terms of human power?

Africa is the world's second most populous continent. According to the 2009 World Population Data Sheet, the continent is a home for about 1 billion people. Of this number 41% is under 15 and 3% above 65 years of age. The rest 56% is in the productive age. This makes the continent rich in terms of human resource potential. This indicates, firstly, the fact that about 56% of the total population is currently actively productive: and, secondly, the future potential of labour is relatively high since the 41% population of under 15 would soon join the labour force. Yet, we can say that the human resource potential of the continent has never been exploited to its full extent. In simple words, it fails to contribute to the development of the continent since much of the labour force, including the economically active, are unemployed or idle and even underemployed.

4.3.2 Natural Resources Exploitation and Mineral Extraction Methods in Africa

How are resources being extracted in Africa? To what extent is Africa's resource extraction sector developed?

As we have seen so far, Africa has tremendous potential of natural resources. However, the degree of exploitation of these resources of the continent appears

being very low. This is partly due to the prevalent lack of good governance, corruption, maladministration and lack of citizens' participation in resource development programs. In addition to this, lack of capital, skilled human power and technology have also contributed for the limited development of the resource exploitation sector in the continent. As a result, most resource extraction techniques are traditional in their nature. This in turn affects the level of productivity. Forest resources extraction, fishing, cultivation, and other sectors of the economy that are linked with natural resources are dominantly traditional in their nature.

The mining sector is also affected by these problems. As a result, the huge mineral potential of many African countries remains useless for most of them as it fails to guarantee the peoples' development. This is due to the backward mining technology that most of the peoples in these countries follow. Mineral extraction in many African countries is traditional and less productive. The people near by mineral deposits utilize different traditional techniques to take different kinds of minerals out from the soil. *Placer mining*, *strip mining* and *quarrying* are among the most common mining methods in Africa. *Placer Mining* is the extraction of mineral deposits from excavations of sand, gravel, clay, or silt. *Minerals mined* in this way include gold, platinum, tin, and diamonds. Placer mining is most common among societies living near river valleys, where such minerals as mentioned above are brought to the surface by erosion. *Strip Mining* is uncovering and removing coal, metal, or a mineral that is near the surface of the ground. And *quarrying* is open excavation from which any useful stone is extracted for building and engineering purposes, and the operations required to obtain rock in useful form from a quarry.

Some countries that are rich in natural resources, i.e. those that receive more than 25 percent of their government revenues from natural resources extraction, actually tend to have high and growing levels of poverty, extreme income inequalities, greater risk of conflict, and high levels of corruption.

4.3.3 Resource Utilization and Conflict Management

As has been elaborated in preceding discussions, Africa is naturally endowed with varied resources that could potentially contribute a lot to the continent's development. However, the degree of exploitation of these resources is practically insignificant. The huge mineral potential of the continent is untouched. The

water resources are untapped. Even in areas where the extraction of minerals is better developed, the resource is becoming more of a cause of conflict than of a socio-economic development. As you might have heard from different sources of information, Africa is the only continent that is well characterized by political unrest, conflicts, civil war and related humanitarian crisis including huge displacement of people. As a matter of fact, the continent is considered as the world's largest refugee camp since millions of Africans live in refugee camps as a result of displacement for reasons of conflicts and civil war.

Activity 4.14



- 1 Do you know any African country where resource utilization is a cause of conflict and civil war? If yes, identify the countries and discuss what causes the conflict or the civil war.
- 2 Have you ever seen or heard of a conflict caused by resource exploitation, such as land utilization, for grazing in your area? If yes, how did the people solve their problem (if at all they have solved it)?
- 3 What, do you think, should be done to manage conflicts that arise from resource utilization at local and or continental level?

The major source of conflict in many resource exploitation areas of Africa is related to inappropriate use and allocation of resources. If we consider many of the conflicts and civil wars in Africa, their causes are deep rooted in resource allocation and utilization. In most of the cases, governments fail to provide better opportunities for the residents of the areas where resources, especially minerals, are being exploited. To add fuel to the problem, many governments do not even make the inhabitants of resource extraction areas beneficiaries of the exploited resources. Thus, while many Africans live in extreme poverty expensive resources get tapped and exported to rich countries. This causes conflict. In demand of having their opportunities fulfilled, peoples of such areas confront their governments. When the government fail to properly address the issue, the conflict intensifies and people die ultimately, the case worsens and civil war occurs.

The conflicts that have made Africa an extensive battle field of civil wars are in one way or another associated with unfair utilization and allocation of resources. The Civil wars in Southern Sudan, Liberia, Democratic republic of Congo, Angola, and Rwanda are fought because of inappropriate resource utilization and allocation, besides seeking political power.

Activity 4.15



- 1 Have you ever heard about the issue of “blood diamond” in Liberia? What is it supposed to mean?
- 2 What are the causes of the civil wars in Angola and the Democratic Republic of Congo?

Civil war is the exception rather than the rule across much of the developing world. The combination of weak governance structures and resources that offer the promise of windfall gains to those who control production and export is the major cause of violent conflict. In the post–cold-war era, revenues from natural resources have replaced superpower funding as the fuel of war. Between 1990 and 2002, the world saw at least 17 such conflicts in which wealth from natural resource was a primary factor. Diamonds in Angola and Sierra Leone, timber and diamonds in Liberia, gems in Afghanistan, and copper, gold, cobalt and timber in the Democratic Republic of the Congo have all been at the centre of civil conflict. In the case of the Democratic Republic of the Congo, such a cause of conflict has been accompanied by incursions supported by neighboring states.

In this manner, financial flows that could have been used to support human development have frequently been diverted into funding civil wars, with governments, rebels and assorted warlords seeking control over oil, metals, minerals and timber. The wealth from the second largest oil reserves in Africa (Angola) and the fourth largest diamond reserves in the world was used to fuel a civil war that killed and wounded nearly 1 million people and left other 4 million internally displaced between 1975 and 2002. Today, Angola ranks 160 among 177 countries on the Human Development Index (HDI), with a life expectancy of about 40 years only. The following table gives you a highlight on the duration and causes of civil conflicts in selected countries of Africa.

Table 4.19: Conflicts associated with natural resources in Africa

Country	Duration of Conflict	Resources
Angola	1975-2002	Gems, Opium
Angola, Cabinda	1975-	Oil, Diamonds
Congo	1997	Oil
DRC	1996-97, 1998-2002	Copper, Coltan, Diamonds, Gold, Cobalt
Liberia	1989-1996	Timber, Diamonds, Iron, Palm Oil, Cocoa, Coffee, Marijuana, Rubber, Gold
Morocco	1975-	Phosphates, Oil
Sierra Leone	1991-2000	Diamonds
Sudan	1983-2005	Oil













Source: Adopted from Bannon and Collier, 2003.

Unit Review



UNIT SUMMARY

- 🌍 Africa and other developing regions make up an increasing share of world population. The world population has shown a tremendous increment from 1950 to 2000. Africa, Asia and Latin America contribute the highest proportion to this share.
- 🌍 According to the 2050 world population projection a high population concentration shifts to developing countries.
- 🌍 The projections suggest that the share for developed countries declines from 18 percent in 2008 to less than 14 percent in 2050.
- 🌍 The growth rate of population is a vital demographic feature that can help us understand the population change that a given society has undergone and will undertake in the future.
- 🌍 Africa is the only continent whose population is growing faster than any other continents on earth.
- 🌍 There is not an even distribution of population in the world. Deductively, Africa's population distribution is uneven.
- 🌍 The unevenness of African population distribution is attributable to human and physical factors.
- 🌍 The three major components that bring about a change in matters related to population in any country are fertility, mortality and migration.
- 🌍 Africa's rapid population growth and backward Socio-economic development have turned Africa into the world's lowest social amenities. As a result, poor health, inadequate education, deficient nutrition and inferior housing facility widely tangle the people of the continent.
- 🌍 Africa's rate of urbanization is the highest in the world.
- 🌍 Currently, the uncontrolled and rapid urbanization has depopulated the rural areas. This has crippled agricultural production, especially the production of food crops.
- 🌍 Generally speaking, rapid urban growth has become a major cause of growing poverty both in rural and urban areas in Africa.

-  The term Economic Growth is used to describe the increase in the total amount of production and wealth in the economy of a given society.
-  Economic development refers to growth with structural and technological change. It includes the concept of overall transformation in the living condition of the people of society.
-  The level of developed of a certain economy is directly linked with three most important conditions that are generally considered as major indicators of development. These are the Gross Domestic Product (GDP), Per capita income (GNP per capita) and Standard of living of a certain population.
-  High GDP, Per capita Income and standard of living indicate higher level of development. The reverse indicates under development.
-  Low GDP, low income per head, poor and inadequate housing conditions, poor transport and communication networks, low educational and health coverage, widely spread unemployment, high mortality rates of all sorts, high human fertility and indecent life characterize the living conditions of millions of peoples in Africa.
-  Africa is generally considered as a continent with untouched natural resources. However, the continent fails to fully exploiting its resources.
-  Dependency on agriculture, low level of industrialization, poor inter- and intra-regional trade performance, poor transport and communication network, low GDP and per capita income characterize Africa's economy.
-  Lack of capital, skilled human power and modern technology; rapid population growth, HIV/AIDS and other factors are among the challenges that affect Africa's development.
-  Many African countries have extremely high foreign debt.
-  The different continental and regional organizations in Africa are believed to be motors of change in Africa's socio-economic condition.
-  Africa is rich in terms of natural and human resources. However, the degree of exploitation of these resources is found to be very low. As a result, what the people of Africa benefit from the immense resources of their continent appears being insignificant.
-  In most of the cases, places of mineral extraction are areas of violence, conflict and civil war. There have been many conflicts among Africans that were caused by mining related factors.



REVIEW EXERCISE FOR UNIT 4

I *Write True if the statement is correct and False if the statement is wrong*

- 1 Population growth rate for developed countries is higher than developing countries.
- 2 In developing countries, there is usually a mismatch between population growth rate and economic development.
- 3 Migration has nothing to do with natural increase in population.
- 4 Internal migration, in many African countries, takes place between relatively poor and relatively rich areas.
- 5 Africa's mortality rate is declining and has become the lowest in the world.

II *Matching: Match Column A with Column B*

- | <u>A</u> | <u>B</u> |
|---------------------------------------|---|
| 6 Population pyramid with narrow apex | A Migration from Ethiopia to U.S.A |
| 7 Low rate of fertility | B Belongs to developing countries |
| 8 Short population doubling period | C Migration from Ethiopia to South Africa |
| 9 Intra-continental migration | D Belongs to developed countries |
| 10 Inter-continental migration | E High population growth rate |

III *Write short answers for the following questions*

- 11 What is economic growth?
- 12 Define economic development.
- 13 What are the major indicators of development?
- 14 Identify the leading producers of the following items in Africa.

a diamond	d coffee
b gold	e tea
c petroleum	f cacao
- 15 What are the factors that affect Africa's economic development?

Glossary

Aerial photograph - Photograph of things including the earth, taken from a plane.

Age Dependency ratio - the ratio between working age and non-working age population.

Age structure - the pattern that results from the distribution of population into different age categories.

Approach - is a method used to make scientific thinking by any field of study.

Altimeter - a device used in an aircraft to measure how high it is from the ground.

Applied geography - is the application of geographical knowledge and skills to the solution of economic and social problems and in the realms of planning.

Census - a periodic counting of a population, in which certain facts on age, sex, occupation, and the like are recorded.

Confluence - the place where two rivers meet together and become one larger river.

Contour - a line on a map connecting all points with the same, known altitude above a specific datum loosely termed sea level.

Contour interval - the altitude (height) difference between two successive contour lines.

Data - are varieties of information needed for investigation of a given problems. Basically, there are two broad groups of data sources, namely primary and secondary sources.

Deforestation - the process of indiscriminate destruction of the natural vegetation covers of an area without adequate replacement.

Delta - An area of low flat land sometimes shaped approximately like a triangle where a river divides into several smaller rivers before flowing into the sea.

Determinism - is a school of thought which believes in that the history, culture, life style and stage of development of a social group or a nation are exclusively or largely governed by the physical factors of the environment.

Demography - the scientific study of how births, deaths, and migration affect the composition, size, and distribution of populations.

Distributary - An individual channel into which a river may split, as in a delta, which does not rejoin the main stream but reaches the sea independently.

Divide (watershed) - a line on the map separating two river basins.

Drainage basin - the area drained by a single river system.

Drainage pattern - the layout or plan made by rivers and their tributaries on the landscape.

Environment - the conditions that you live or work in and the way that they influence how you feel or how effectively you can work.

Geography - is the study of the spatial variation of phenomena on the earth's surface on one hand and the two-way relationship existing between human kind and the environment on the other hand.

Geo-sphere - Area that belongs to the planet earth.

Geodetic control network - Geodetic survey used to provide the overall control, or framework, for mapping

GIS - Geographical information system.

GPS - Geographical positioning system.

Gradient - the rate of change in altitude of a slope expressed basically as a proportion between vertical change per unit length horizontally.

Ground survey - to measure and record the details of areas of land especially on a map.

Infant mortality rate - the number of deaths among infants under one year of age per 1,000 live births in a given year.

Interdependence - dependent on each other.

Interdisciplinary - the relationship among various disciplines e.g. the relationship between geography and other disciplines (between geography and economics, geography and biology, etc.).

Interpolation - a technique which is employed to draw contour lines in a given area with the help of individual spot heights.

Intervisibility - two places (points) mutually seen.

Misfit stream - the remaining part of a captured river (Victim stream).

Modeling - in digital geographic information system logical sequence of analytical operations used to produce information.

Mortality Rate - the relative frequency of deaths among members of a population segment.

Natural science - is a field of study which includes physics, biology, mathematics, geology, chemistry, etc.

Overlying analysis - As used in the computation of the coefficient of areal correspondence, mapping of two distributions at the same scale and placing of the outline of one over the outline of the other.

Phenomena - something that exists and can be seen, felt, tasted.

Preventive checks - moral restraint such as late marriage, avoiding sexual conduct before marriage, etc proposed by Malthus as controls of fast population growth.

Pollution - damage to the environment caused by waste levels that overload natural recycling systems or by synthetic materials that cannot be broken down by natural process.

Population density - the average number of people per square kilometer area.

Population distribution - the proportions of people in world countries, provinces, regions, cities, etc.

Population policy - a policy designed to control and plan population growth based on the socio-economic and political conditions of a country.

Population pyramid - a graphic representation of the age and sex structure of a given population.

Positive checks - the catastrophes (such as poverty, famine, war, diseases, etc) proposed by Malthus as consequences and controls of fast population growth.

Possibilism - is a school of thought which believes that human society cannot fully tame nature and is not always victorious.

Profile - The outline produced when a plane of a section cuts the ground along a curved line like a road, river, or railway.

Quantitative revolution - is a shift (change) of approach from descriptive to inquiry methods by adopting statistical techniques.

Region - a particular area or part (of the world, of the body, etc) or any of the large official areas into which a country is divided.

Regional approach - it deals with all aspects of a given area and compares that area with others i.e. it deals with the complete geography of specific areas.

Relief - landform - (mountain, plateau, plain, etc.)

Remote sensing - Gathering data by means of a sensor that is not in contact with the objects in the scene being observed. Includes aerial photographs images from radar and other airborne sensors and satellite images.

River capture - the diversion of the head waters of a river system into the basin of a neighbour river with a greater erosional activity which is following at a lower level.

Rural - country side or non-urban place a settlement is a whole inhabitants depend on agriculture for their livelihood.

Satellite imagery - Remotely sensed image captured by instruments taken aloft in a space craft, with or without a human crew.

School of thought - is (a group of people who share) a set of ideas or opinions about a mater.

Science - is the systematic study of the structure and behaviour of the physical world, involving experimentation and measurement and the development of theories of describe the results of these activities.

Scope - is the range of facts ideas, contents covered by a given discipline, programme, discussion, class, etc.

Settlement - any place where people live-a house hamlet, village, town and city.

Sex ratio - the number of males per 100 females.

Sex structure - the pattern that results from the distribution of population according to sex.

Site - is the exact location or land area of settlement or building, the actual float of land on which the village or town is built.

Slope - a surface which lies at angle to the horizontal so that some points on it are higher than others.

Social science - the study of all the features of society.

- A field of study which deals with politics, economics, sociology, philosophy etc.

Spatial - an belonging to space/understanding of where things are in relation to other things.

Spatial interaction - the relationship that exists (phenomena) in relation to space.

Spatial phenomena - position, size, shape of things.

Spot height - lesser survey points which have been measured to determine their position and especially height.

Sterioscope - Simple instrument that permits the simultaneous viewing of a stereo pair of aerial photographs so that the desired three dimensional effect is achieved.

Systematic approach - is the study of the spatial organization or location aspect of a specific phenomenon and its interaction with other phenomena.

Surface - Variation in elevation representing differences in the value of (physical or statistical) variable over a region.

Total fertility rate - the average number of births a woman will have in her life time.

Tributary - a stream or river which joins a larger one.

Urban - non-rural area example town, city, etc.

Urbanization - the process whereby large number of people leave the countryside and small towns in order to settle in cities and surrounding metropolitan areas.

Vertical exaggeration (V.E) - a deliberate increase in the vertical scale of a section or profile in comparison with the horizontal scale in order to make the section clearly perceptible.

Water-shed - a line separating two or more river basins.

GEOGRAPHY

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