

GRADE – 11 GEOGRAPHY HANDOUT

FOR SECOND SEMESTER LESSONS



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PART OF UNIT THREE

❖ Drainage systems of Africa

• The major Rivers and Drainage systems of Africa.

- Zambezi, Nile, Limpopo, Congo, Orange, Niger, Volta, Gambia and Senegal are major rivers of Africa.
- The four drainage systems of Africa are:
 - **Atlantic Ocean Drainage system**
 - The largest in catchment area, annual discharge and drainage density. 90% of surface flow of water.
 - Congo, Niger, Volta, Gambia, Orange, Senegal rivers.
 - **The Mediterranean Drainage system**
 - Nile River is the only major river (White Nile from Lake Victoria and Blue Nile from Tana).
 - **The Indian Ocean Drainage System**
 - The second largest in catchment area, density and annual discharge.
 - Zambezi, wabishebelles and Juba rivers.
 - **The Closed (Inland) Drainage system**
 - Known by multi-flow directions.
 - Covers 32% of total area and 4% of total annual runoff.

Rivers	Length(km)	Catchment area(km ²)	Main tributaries
Nile	6,650	2,862,000	White and blue Nile, Sobat, Atbara
Zaire(congo)	4380	3,700,000	Kassai, Ubang
Niger	4000	1,112,000	Benue
Zambezi	2700	1,300,000	Cubango, Cuango
Ghanale(juba)	1600	168,000	Dawa, weybi, Mena, Welmel
Wabeshebelles	2000	205,000	Erer, Fafen, Ramis

- Awash and Gibe (Omo) rivers, Okovangoswamp (Botswana), Suddbasin (sudan), Danakil basin (Ethiopia) and Lake chad basin(the largest in Africa).

- GENERAL CHARACTERISTICS OF AFRICAN RIVERS

- Steep long profile
- Steep courses of rivers
- Niger is the only river descends slowly from FoutaDjalou (high lands of Guinea).
 - Waterfalls and Rapids
- Nile, Congo, Niger and etc.
 - Seasonal fluctuation
- Periodic changes in volume.
- Nile and Niger rivers.
- Congo River is the only river with insignificant fluctuation in Africa.
 - Deltaic mouths and mangrove swamps.
- Limit navigability of the rivers.
 - Exotic nature.
- Loss of their volume by evaporation and sea pages.
- African rivers cross arid deserts and swamps before end.

Eg. Nile R. (64% loss annually)

Senegal (54%)

Orange (55%)

- LAKES AND SWAMPS OF AFRICA

- **Lakes of Africa**

- Natural lakes
- Anthropogenic (artificial) lakes
 - **Natural lakes**
- Formed by tectonic, volcanic and denudation process.
- Involves : A. Rift valley and
 - Non-rift valley lakes
- Rift valley lakes
 - Found in East African rift valley.

EG.Tanganyika, Malawi, Kivu and etc.

- Non-Rift valley lakes.

- Classified as : High land lakes

Glacial lakes

Ox-bow lakes

Inland (Coastal swamps)

Eg.Victoria, Tana, Chad and etc.

- **Anthropogenic lakes**

- Built along major rivers.
 - Used for HEP and Irrigations.

Eg.

Lakes	Dams	Rivers	Location
Nasser	Aswan high dam	Nile	Egypt
koka	koka	Awash	Ethiopia
Volta	Akosombo	Volta	Ghana
Kaindji	kaindji	Niger	Nigeria
Kariba	kariba	Zambezi	b/n Zambia and Zimbabwe

NB: Volta is the largest artificial lake of Africa (Black, White and Red

Volta).Drains 2/3 of Ghana.

- **SWAMPS OF AFRICA**

- Low-lying land with full water permanently.
 - Mostly develop in depressions and areas with seasonal flooding along major rivers.

Eg.Suddswamp (along Nile River) and kumalando (along congo Basin) and etc.

- **THE USES OF AFRICAN RIVERS AND LAKES**

- HEP generation
- Africa has about 40% world's HEP potential, but only 5% actually utilized.
 - Irrigation

- Fishing
- There are about 2000 fish species in Africa.
 - Navigation or Inland water ways
- The features of African rivers hinder navigation mainly.
- Niger, Nile, Senegal, Gambia, Chad, Victoria, Tana and Malawi are used for transport.
 - Tourism and Recreation
 - Fresh water supply
 - Sources of minerals and construction materials.

- **The Hydro politics of The Nile River**

- There are Lower (Sudan and Egypt) and Upper (Ethiopia, Kenya, Uganda, Rwanda, Burundi, DR. Congo, Eritrea and Tanzania) Nile riparian countries.
- The great area of interest is utilization of Nile river resource.
- Egypt and Sudan are most benefited.
- Nile Basin Initiatives (NBI) established in 1999 for the purpose of equitable utilization of Nile River.

- **The Aswan High Dam**

- Constructed in 1960-67 to create artificial lake.
- The lake is 10 km wide and 500 km in length, of which 350 km in Egypt and 150 km in Sudan.
- Stores 160 bn m³ water.
- Used for protecting floods, HEP (10 bn kWh/ day), irrigation and reducing salt in agricultural field.

- **NATURAL VEGETATION AND WILD ANIMALS OF AFRICA**

- Africa is the home land of diverse species of wild animals.

3.5.1. Major Vegetation Zones of Africa

- There are five vegetation zones in Africa.
 - **Tropical rain forests**
- Broad leaf evergreen forest.
- They have little under growth.
- Confined to Eastern, Western and Central Madagascar.

- Congo is the most extensive area.
- High species diversity dominated by hard wood trees.Eg. Mahogany, Ebony, Rose wood
- Equatorial rain forest known by Arboreal.

- **Tropical Grass land (savanna)**

- Composed of grasses and trees.
- Covers extensive areas b/n tropical evergreen and desert vegetation.
- Extensively in wet summer and dry winter.
- They have adaptation mechanisms to survive in dry season like: storing water, having long roots, small and thorny leaves.
- Known by Herbivores and Carnivores.
- Classified into three parts.

- **Park (wetter) savanna**

- Largely dominated by trees and some grasses.
- Found in W/Africa, N/Congo, S/ Sudan, and Central Malawi.

- **High (true) savanna**

- Made up of more grasses with scattered trees.
- Found in Zimbabwe, Malawi, S/Kenya, E/Tanzania and W/Africa.

- **Thorn scrub (drier) savanna**

- Largely made up of short grasses with widely scattered trees.
- Common in semi-arid areas of Sahel region.
- Extends from Senegal to Ethiopia, N/Kenya, Angola and Botswana.

- **Desert and Semi-desert vegetation**

- Above **3000** species are found, of which **20%** are endemic (largely in North Africa).
- Xerophytes are common vegetation.
- Known by burrowing animals.

Eg.Cactus, thorn bushes and coarse grasses in Sahara and Namib deserts.

- They have adaptation mechanisms to resist harsh climatic conditions.

Eg. Having long roots, storing water in stems, roots and fruits

Being dormant during dry season

Few leaves, small size, waxy, needle shaped, spongy and thorny leaves.

- **Afro-montane(Afro-alpine)**

- Highly modified by altitude (grow up to 3000m).

Eg.Asta and Gibera in Ethiopia (above 3000 m).

Bamboo forests (2000-2500 m)

Temperate evergreen (coniferous) in moderate altitude.

- **Mediterranean Vegetation**

- Common in N-Western and S-Western the continent.

Eg.Corkoak, maquis, wild olives.

- **Mangrove vegetation**

- Common in swampy areas of Africa along major rivers and lakes.
- Contains both grasses and trees.
- Major rivers, lakes and swamps by Aquatic animals.
- Birds like flamingos, pelicans, guinea fowl and etc. found in south and east Africa.

- **Factors Affecting Natural vegetation of Africa**

- Deforestation (most common), overgrazing, burning (wild fire), expansion of settlement and farm lands, fuel wood necessity and shifting cultivation.
- Deforestation has multifarious impacts.

- **Possible conservation Measures**

- **Afforestation**

- **Reforestation**

- **Agroforestry** (agro ecosystem)-: practice of integrating planting trees with farming may be for the purpose of fuel, forage, shelter, fruit and etc..

Eg.Banana in corn growing areas.

- **Social forestry** -: planting trees in urban areas.

- **Awareness**

- **Improving life style of the people**

- **Reducing poverty**

- **Importance of vegetation and wild animals of Africa**

- Sources of food.
- Maintain balance of nature
- Source of income and raw materials.
- Add aesthetic value to the env't.

- **Factors affecting wild animals of Africa.**

- Peoples kill wild animals for socio-cultural or economic purposes.
- Illegal hunting (poaching).
- Human encroachment into the habitat is due to increasing of human needs that may be resulted: deforestation, burning of vegetation, overgrazing, degradation, drought and etc.

- **Possible conservation measures**

- Conserving natural vegetation
- Establishing national parks, Game reserves and sanctuaries.
- Controlling illegal hunting
- Providing awareness
- Changing economic conditions of the people.

3.5. SOILS OF AFRICA

3.5.1. Major Soil types of Africa

- As of UN (FAO), there are several groups of soil in Africa due to diverse climate, vegetation and geology.

- **Pedalfers**

- The largest group in Africa.
- With deposits of Al and Fe.
- Pre dominated central Africa.
- Contains d/t soil types. I.e.
 - Ferrasols
- Found in savanna and Equatorial rain forest.
- Exposed to leaching process.
- High content of Fe, Al and clay.
 - Nitosols

- Develop in humid climatic regions.
- With deep profile and enough humus.
- The most productive (ideal for crop production).
 - Acrisols
- In hilly and wet areas of Tropical and Monsoon climates (west and East Africa).
- Weathered, acidic unproductive and shallow.
 - Lixisols
- In savanna and semi-arid areas of west, East and East-central Africa.
- More fertile than acrisols and ferrosols.
 - Plinthosols
- Common in gentle slope areas enhance, soft and laterite (savanna and rain forest).
 - Luvisols
- Developed in Mediterranean climate.
- Known by mineral reserves and fertility.
 - Planosols
- Water logged plains of S/Africa.
- Used for grazing.
 - Fluvisols
- Develop in flooded plains, valleys and marshes.
- Young, fertile, brown in color and used for large scale irrigation.

• **Pedocals**

- Contain the ff soil types.
 - Vertisols
- Black basaltic and clay in character.
- Common in Sahel region.
- Sticky (rainy season) and crack (dry season).
- Used for grazing and cultivable with irrigation.
 - Calcisols

- In Sahara and Namib deserts.
- Poor in humus and used for grazing.
 - Solonchacks
- Found in river basins, lakes, depressions and coastal areas.
- Saline in nature.

- **Hydromorphic soils**

- Gleysols
- Found in depressions and low-lying areas (extensively in Niger delta, Congo and interior of Angola).
- Used for production of rice, sugarcane, yam, vegetables.

➤ **Azonal soils**

- Weak and shallow in nature.
 - Arenosols
- Found in humid tropical Africa, Sahara, South west and coastal plains of Africa.
- Mainly used for grazing and farming.
 - Regosols
- In arid areas of West Africa to east (Ethiopia and Somalia).
- Used for grazing.
 - Leptosols
- Found in dissected uplands of the Sahara, south, central and East Africa.
- Cultivable with terracing.
- Devoted to transhumance, forestry and tourism.
- Young, shallow and stony soils.
 - **PROBLEMS AND CONSERVATION MEASURES OF SOILS IN AFRICA**
 - **Problems of soils in Africa**
- Soil erosion and environmental degradation seen as major factors.

➤ **Soil Erosion**

➤ **Erosion- prone areas of Africa**

- Sahel region of west Africa and Namib desert (by wind erosion)
- Savanna (sub-humid) (by running water)
- Tropical rain forest with extensive cultivation (by running water)
- Tropical high lands and mountains of East Africa (by running water).

➤ **Causes of soil erosion**

- Back ward farming practices
- Over grazing and over exploitation domestically.
- Deforestation

➤ **Major consequences of soil erosion**

- Deterioration of farm and range lands.
- Decline cereal crops productivity.
- Migration of people.
- Downstream pollution and damage to settlement.
- Consume more national economic resources to control erosion.
E.g. Zimbabwe invests 3% of annual budget to replace
Nutrient lost by erosion.

• **Conservation measures**

- Terracing (building level surface across the slope)
- Agroforestry (agriculture with forest)
- Afforestation
- Reforestation
- Wind breaks and shelter-belt plantation
- Check dams (building small ditches)
- Strip cultivation (alternative strip or cropping according to their resistance)
- Contour ploughing

- Crop rotation
- Green manure(using compost or faeces of animals)
- Mulching (covering the soil with plant residues)
- Fallowing (leaving the farm land idle)
- Awareness of the people.

CHAPTER FOUR

POPULATION, ECONOMY AND NATURAL RESOURCES OF AFRICA

4.1. ASPECTS OF POPULATION, ECONOMY AND NATURAL RESOURCES OF AFRICA

4.1.1 Population Size, Growth and Distribution

A. Size

- ✓ 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.
- ✓ Africa's population is nearly 1/4th of that of Asia, the most populous, and 28 times that of Oceania, the least populous.

B. Growth

- ✓ 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 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%.
- ✓ 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.

C. Distribution

- ✓ 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.
- ✓ 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.
- ✓ 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.
- ✓ **Answer the following questions:**
 1. Rapid population growth rate has adverse effects on the quality of life of the people. Briefly explain.
 2. Clarify the relationship between growth rate and period of population doubling in a given Country.
 3. Define the term "population stagnation.
 4. 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.
 5. Define the term "over population

4.1.2 Determinants of Population Change in Africa

- ✓ 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.

1. Fertility Patterns in Africa

- ✓ 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).
- 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:

$$36/1000 - 12/1000 \text{ or } (36/1000 \text{ (birth rate)} - 12/1000 \text{ (death rate)})$$

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.

2. Mortality Patterns in Africa

- ✓ Mortality refers to the occurrence of death in the human population.
- ✓ 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.
 - 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.
- ❖ **Life expectancy at birth:**
 - ✓ Is the average number of years a newborn infant can expect to live under current mortality levels.
 - ✓ 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 less than 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.
- ✓ 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.

3. Migration

- ✓ Migration is a socio-cultural component 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

- ✓ 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.
 - **Age structure**
 - ✓ 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.
- ✓ 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.
- ✓ 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.
 - 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.
 - **Sex Structure**
 - ✓ 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.

- ✓ 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 is 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.

4.1.4. Migration and Urbanization in Africa

➤ Migration

A. Internal migration

B. International migration

A. Internal Migration

- ✓ When people move from one part of a country to another.
- ✓ Caused mainly by economic reasons.
- ✓ Of two types, namely, **permanent and temporary**.

- ✓ Permanent migration refers to people's 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 practiced only periodically.
 - For example, people move from one area to another to find seasonal job.
 - The Migration of laborers 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.

❖ **Push factors**

- ✓ Adverse climatic condition
- ✓ Social upheaval
- ✓ Intolerance
- ✓ Low employment opportunities
- ✓ Low income
- ✓ House shortage
- ✓ Natural disaster

❖ Pull factors

- ✓ Amenities
- ✓ High standard of living
- ✓ Attractive environment
- ✓ Job prospects
- ✓ High wages
- ✓ Improved housing
- ✓ Tolerance

B. International Migration

- ✓ When people move from one country to another.
- ✓ 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.

❖ Brain-drain migration

- ✓ 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 laborers and is known as **labor migration**.

- ✓ Labor 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 :
 - 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.

❖ **Advantages Losing Country**

- ✓ Reduces pressure on jobs and resources (example food).
- ✓ Loses people of child bearing age causing decline in birth rate

❖ **Disadvantages Losing Country**

- ✓ 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 high death rate.

❖ **Advantages Receiving Country**

- ✓ Over comes labor 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.

❖ **Disadvantages Receiving Country**

- ✓ 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**

- ✓ 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 centers.
- ✓ 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%).
- ✓ 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 centers 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 labor 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 Centers 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).

❖ **Current Urban Challenges**

- ✓ The outcome of rapid urbanization in Africa posed 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.
- ✓ Unlike other regions of the world, urbanization in Africa has not contributed significant economies 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.

4.2. CONCEPTS OF ECONOMIC GROWTH AND DEVELOPMENT

- ✓ 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 overall living conditions of the population.
- ✓ That is why most agree to the idea that a growing economy can definitely promote development.
- ✓ 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 labor 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 labor 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 labor, which consequently leads to "division of labor."
- As people take on specialized economic functions, the scale of production increases and the output of each person rise.
- 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 output 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

- ✓ Africa is generally regarded as a developing continent.
- ✓ 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.
- ✓ 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.

❖ **Utilization of Natural Resources in Africa**

- ✓ The continent is rich in terms of all sorts of resources.
- ✓ 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 fulfill the needs of their people while maintaining their profitable export-oriented activities.
- ✓ 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.
- ✓ 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.

❖ **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.
- ✓ Agriculture is by far the most important economic activity in the continent employing the majority of the labor 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 craft's, ships and automobiles are almost nonexistent 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. F 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 centers.
- ✓ Intercontinental, 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, and lack of foreign currency and poor communication networks of all kinds.
- ✓ 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 socioeconomic 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 Socioeconomic Development

- ✓ 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.
- ✓ Africa stands at the fore front of low level of socio-economic development in the world.
- ✓ 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.
- ✓ Today, 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.
- ✓ The continent's trade position has faced further dire challenges since the 1960s.
- ✓ 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.

4.2.5. Challenges and Prospects of Economic Development in Africa

- ✓ 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 is extremely limited.
- ✓ 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.
- ✓ 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.
- ✓ 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 labor 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.
- ✓ 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.
- ✓ 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 socioeconomic 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 favor 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 socioeconomic development seems to be somehow promising as the continent possesses huge but untouched natural and human resources.

4.3. NATURAL RESOURCES OF AFRICA AND ITS POLITICS

- ✓ 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

- ✓ 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 natures.
- ✓ Among others, the mineral, agricultural, water and human resources of the continent are of paramount importance for its future development.
- ✓ 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 Colton (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 centers 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, columbine, and titanium.
- ✓ Likewise, Southern Africa is one of the world's richest sources 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.
- ✓ 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, and 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 labor force; and the exportation of crops contributes a lot to the GDP of the exporting countries.

❖ **Water and Associated Resources**

- ✓ 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.
- ✓ 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 labor is relatively high since the 41% population of fewer than 15 would soon join the labor 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 labor force, including the economically active, are unemployed or idle and even underemployed.

4.3.2 .Natural Resources Exploitation and Mineral Extraction Methods in Africa

- ✓ 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 nearby 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 is 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

- ✓ 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.
- ✓ 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.
- ✓ 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 fails 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.
- ✓ 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 were 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.

Grade 11 geo. Worksheet

I. Choose the correct answers from the given alternatives.

1. The largest rift valley lake in Africa is _____. A. Victoria B. Malawi C. Tanganyika D. Tana
2. Which one of the following is a factor that affects the natural vegetation of Africa?
A. Deforestation B. over grazing C. over cultivation D. migration
3. Eastern Africa has all types of climate except
A. Tropical B. highland C. desert D. Mediterranean
4. Which one of the following is among the main Mediterranean crops?
A. Orange B. wheat C. sugar D. groundnut
5. Which one of the African lakes has the maximum recorded depth?
A. Victoria B. Tanganyika C. Chad D. Tana
6. Which one of the following trees naturally grows in the equatorial rain forest zone?
A. Mahogany and olive C. marquis and olive B. Ebony and olive D. mahogany and ebony
7. Which one of the following African countries is not found in the Sahel region?
A. Chad B. Niger C. Mali D. Tunisia
8. Which one of the following is not true about the characteristics of the equatorial climate region?
A. The region is located within 50-60 N&S of the equator.
B. The annual range of temperature is low
C. The annual average temperature is high
D. The precipitation of the area mostly falls in the form of snow.
9. Which statement about the natural vegetation of Africa's is not correct?
A. Tropical Savanna is the most widely spread type of natural vegetation in the continent

- B. Afro-alpine vegetation is confined to the east African highland
- C. The equatorial rain forest of Africa is a low land forest
- D. Mediterranean vegetations are found in the northern and southern tip of Africa.
10. Which one of the following dam of Africa was built mainly for the purpose of irrigation?
- A. High Aswan B. Koka C. Inga D. Gilgel Gibe I&II
11. One of the following areas of Africa is known for its constantly hot and wet climate.
- A. Congo basin B. Bihe plateau C. Sahel region D. Somalia plateau
12. The Aswan dam is to Nile river as the Kariba dam is to
- A. Limpopo B. Niger C. Volta D. Zambezi
13. Afro-alpine vegetation
- A. Grows in deserts of southern Africa C. is dominate in Mediterranean coast
- B. Are located in the highlands of eastern Africa D. generate large income through export of timber
14. As a conservation measure which is the cheapest but the most effective one is
- A. Contour ploughing C. land rotation and stripe cultivation method
- B. Conservation of terraces on hillside D. construction of dams
15. Which one of the following type of natural vegetation covers the largest land area in Africa?
- A. Tropical rainforest B. semi desert vegetation C. savanna D. shrubs
16. Which river is known with highest hydroelectric power generation in Africa?
- A. Volta B. Congo C. Nile D. Niger
17. Temperature is as high as 270c; all months have abundant rainfall and high humidity in ____.
- A. Tropical region B. monsoon C. savanna D. equatorial rainforest
18. Which one of the following wild animals is mostly found in desert?
- A. Lion B. gazelle C. zebra D. birds

II. Fill in the blank spaces with the correct word.

19. Planting trees in areas where there was no original forest cover is called _____. 20. The Mediterranean type of climate in Africa is located in _____ & _____ tips.
21. The most dominate type of rainfall around the equatorial Africa is _____.

III. Write short and brief answer

22. Write at least three importance of wild animal for the people of Africa.
23. What are the major challenges that face on the wild animals of Africa? Write an example for each.
24. Write possible measures of conservation for the wild life resources of Africa.
25. Which types of soils are the most productive and ideal for crop production in Africa?
26. Which soil types of Africa is very laborious to work?
27. What is the main use of calcium carbonate in the soil?
28. Which soil groups of Africa have high content of iron and aluminum?
29. Which soil types of Africa are used for the production of rice, sugarcane, yam and vegetables?
30. Write at least three unique features of equatorial rainforest region.
31. Write and explain the three distinct layers of equatorial rainforests.
32. In which parts of Africa do we have Afro-montane or Afro- Alpine vegetation?
33. In which parts of Africa do we have Mangrove vegetation zone?
34. What are the impacts of human encroachment on vegetation areas, humans and the environment?
35. What should be done to minimize human impact on the natural vegetation of Africa?
36. What is deforestation, overgrazing & wild fire?
37. Which parts of Africa have Mediterranean vegetation?
38. What are the common trees of the Mediterranean vegetation in Africa?
39. In which parts of Africa do we have desert and semi desert vegetation? Why?

IV. Write answer for the following questions in lists

40. List factors that affect irrigation agriculture in Africa.

