



South Sudan



Secondary Geography 3

Student's Book



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South Sudan

SECONDARY

3

GEOGRAPHY

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UNIT 1: TRANSPORT, COMMUNICATION, TRADE AND ECONOMIC GROWTH

Introduction

1.1 Transport

What is transport?

Transport is the movement of human beings, animals and goods from one location to another.

Types of Transport

A mean of transport is the way used for movement by humans, animals and goods from one location to another.

Activity 1.1

What transport in your area is most common? Why is this?

The following are the main types of transport.

- a. Road
- b. Air
- c. Sea
- d. Rivers
- e. Canals
- f. Railway
- g. pipeline

Which is the most common in South Sudan and why?

Major types of transport in South Sudan

- a. Road transport
- b. Rail transport
- c. Air transport
- d. Pipeline



Figure 2.0 road means of transport.



Figure 1.1 pipeline



Figure 1.2 air travel.



Figure 1.3 railway transport



Figure 1.4 sea travel.



Figure 1.5 river transport.

Do you know of any other type of transport?

Activity 1.2

- 1 Which means do you use to go to school?
- 2 From the pictures above, which mode of transport poses an opportunity for development in South Sudan

1.2 Transport or transportation

Activity 1.3

What is transportation?

- a List the transport modes that you have used and describe what you were able to achieve.

Transport or transportation

Transport or transportation is the movement of humans, animals and goods from one location to another. Modes of transport include air, land, rail, road water, cable, pipeline and space.

1.3 Communication

What is communication?

Communication refers to all the means that people and machines use to make contact and share information.

These include:

- a. Newspapers
- b. Email
- c. Telephones
- d. Television
- e. Radio
- f. Mobile phones

Can you think of any others?



Figure 1.5 a radio.



Figure 1.6 a telephone.



Figure 1.7 a mobile phone

What do you think modern transport and communication facilities in integrated economic development?

Activity 1.4

In groups

1. Discuss the most common means of communication in your home area.
Present and share your answers with the class.
2. How have modes of communication changed over time? What are the benefits and challenges of these changes?

Communication plays a major role in the economic uplift of a country as it promotes internal and external trade, economic use of natural resources, mobility of skilled labour-force, diversification of markets, provision of fuel, reduction in employment, increase in agricultural and industrial production etc.

1.4 Trade

What is trade?

Trade is the act of buying, selling or exchanging commodities. This can be either wholesale or retail within a country or between countries:

Domestic trade; foreign trade.

Trade is essential for satisfaction of human wants, Trade is conducted not only for the sake of earning profit but it also provides service to the consumers.

Trade is an important social activity because the society needs uninterrupted supply of goods forever increasing and ever changing but never ending human wants.

Types of Trade

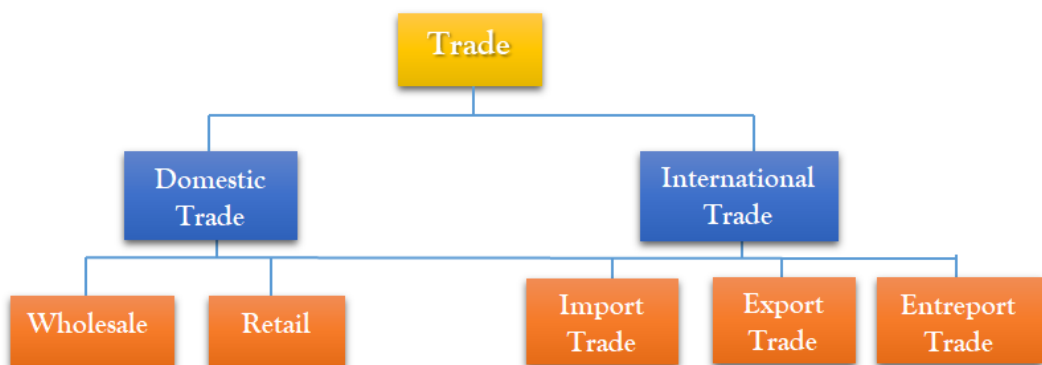


Figure 1.7 different types of trade.

Trade can be divided into following two types:

1. Domestic trade.
2. International trade.

Domestic trade

Domestic trade is also known as Home trade. It is conducted within the political and geographical boundaries of a country. It can be at local level, regional level or national level.

Domestic trade can be further sub-divided into two groups,

1. **Wholesale Trade:** It involves buying in large quantities from producers or manufacturers and selling in lots to retailers for resale to consumers. The wholesaler is a link between manufacturer and retailer. A wholesaler occupies prominent position since manufacturers as well as retailers both are dependent upon him. Wholesaler act as an intermediary between producers and retailers.



Figure 1.8 a wholesale shop.

2. **Retail Trade:** It involves buying in smaller lots from the wholesalers and selling in very small quantities to the consumers for personal use. There are different types of retailers small as well as large. Small scale retailers include hawkers, peddlers, general shops, etc.

The modes of transport used in this type of trade will depend on the type of goods that are being transported, perishable goods may need to reach their destinations faster therefore air transport may be used, road may also be used as long as it is equipped with refrigeration services, communication may be through telephone, mail, or email.



Figure 1.8 a retail shop.

International Trade

International trade also called as foreign trade. It refers to buying and selling between two or more countries. For instance, If Mr. X who is a trader from Mumbai, sells his goods to Mr. Y another trader from New York then this is an example of foreign trade.

International trade can be further sub-divided into three groups.

1. Export Trade

When a trader from home country sells his goods to a trader located in another country, it is called export trade. For Example a trader from India sells his goods to a trader located in China.

2. Import Trade

When a trader in home country obtains or purchase goods from a trader located in another country, it is called import trade. For example a trader from India purchase goods from a trader located in China.

3. Entrepot Trade

This trade involves when goods are imported from one country and then re-exported after doing some processing, it is called entrepot trade.

The mode of transport depends on different which include the distance, the type of commodities and availability of the transport system. Good and services can be transported through road, air or sea communication through email and telephone.

Activity 1.5

1. Define trade.

In groups

1. Discuss the two types of domestic trade.
2. What do you understand by the term Export trade?
3. Which type of trade is used the most in your locality?
4. Create your own model or diagram to describe different aspects of trade.

1.5 Global trade trends

In the context of the global crisis international merchandise trade registered its greatest since the Second World War.

The past one hundred years have brought about incredible changes in nearly every industry and area of society.

International trade is no exception. The way that business is done on a global level is now faster, more efficient, more reliable, and more cost effective.



Figure 1.9 pictures showing how trade is evolving.

It's interesting to delve into how international business has evolved, because having a broad understanding of your industry can help provide greater perspective when making important decisions.

The following are differences to show how global trade has changed.

- ❖ Better domestic and international transportation.
- ❖ Advancements in communications, logistics and supply chain technologies.
- ❖ Improved geo-political relations and more open trade.
- ❖ Increased ability to maximize a company's global potential.

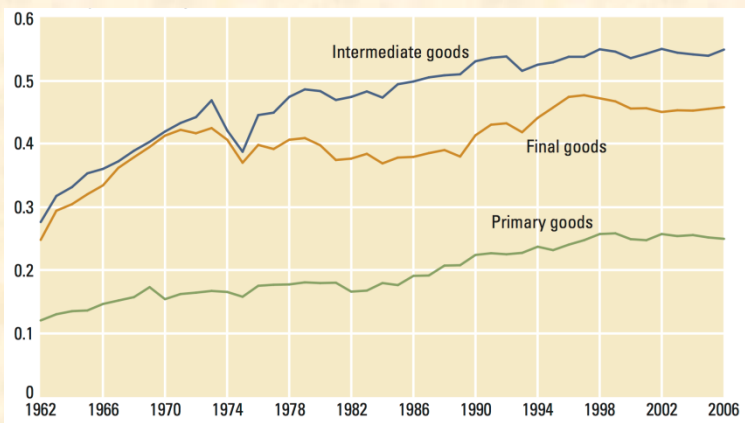
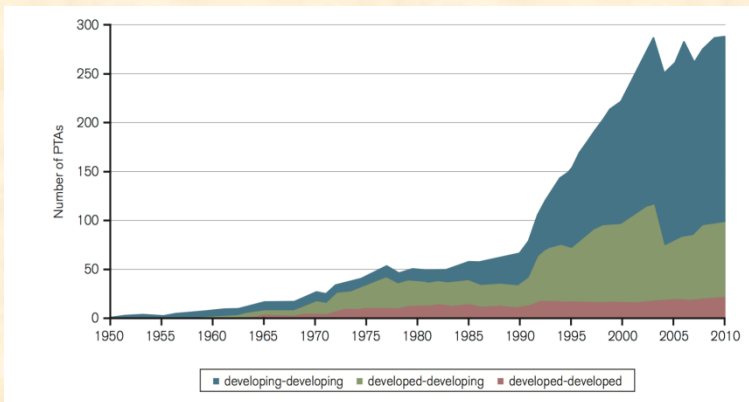
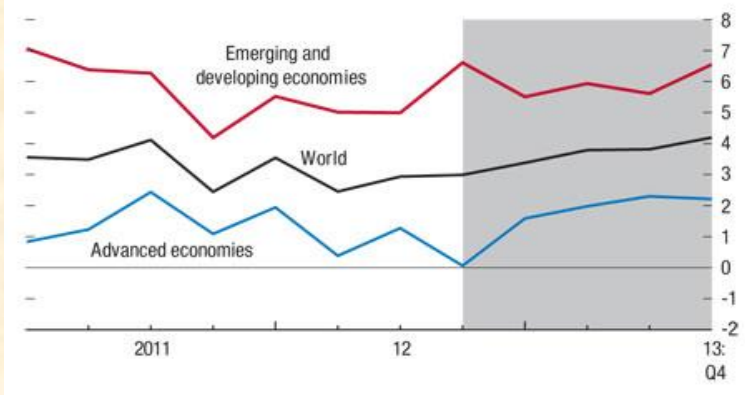


Figure 1. Global GDP Growth
(Percent; quarter over quarter, annualized)



From the graphs above, what does this data tell you about trade? Why do you think those changes have occurred?

1.6 The key global trade routes

A trade route is a logistical network identified as a series of pathways and stoppages used for the commercial transport of cargo.

The term can also be used to refer to trade over water bodies of water. Allowing goods to reach distant markets, a single trade route contains long distance arteries, which may further be connected to smaller networks of commercial and noncommercial transportation routes.

Trade routes have developed since ancient times to transport goods from places of production to places of commerce.

Scarce commodities that were only available in certain locations, such as salt or spices, were the biggest driver of trade networks, but once established, these roads also facilitated cultural exchange including the spread of religion, ideas, knowledge, and sometimes even bacteria.

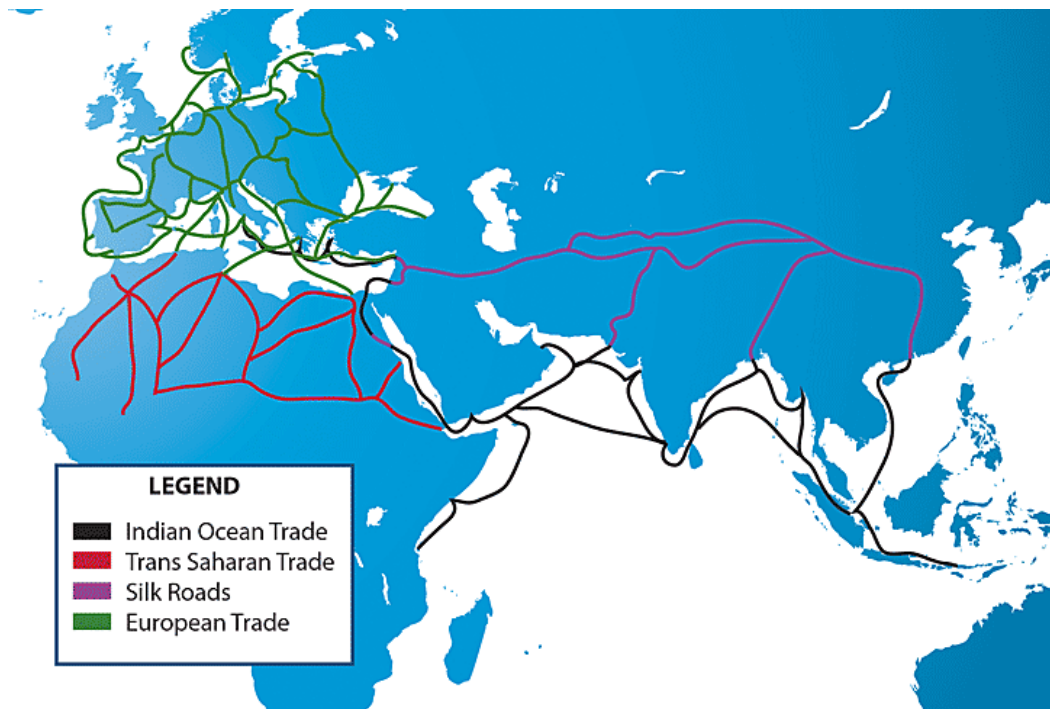


Figure 1.10 trade routes map.

Activity 1.6

As you read the descriptions of these 7 trade routes make a note of 3 to 5 key words for each route.

1. Silk Road the most famous trade route in the world

The Silk Road is the most famous ancient trade route, linking the major ancient civilizations of China and the Roman Empire. Silk was traded from China to the Roman Empire starting in the first century BCE, in exchange for wool, silver, and gold coming from Europe.

Beside spreading trade, the Silk Road also became a vital route for the spread of knowledge, technology, religion, and the arts, with many trading centers along the route such as Samarkand in modern-day Uzbekistan also becoming important centers of intellectual exchange.

2. Spice route bringing flavor from east to west

Unlike most of the other trade routes in this list, the Spice Routes were maritime routes linking the East to the West.

Pepper, cloves, cinnamon, and nutmeg were all hugely sought-after commodities in Europe, but before the 15th century access to trade with the East was controlled by North African and Arab middlemen, making such spices extremely costly and rare.

With the dawning of the Age of Exploration (15th to 17th centuries), as new navigation technology made sailing long distances possible, Europeans took to the seas to forge direct trading relationships with Indonesia, China, and Japan.



Figure 1.11 spices for trade.

Some have argued that it was the spice trade that fueled the development of faster boats, encouraged the discovery of new lands, and fostered new diplomatic relationships between East and West (it was partly with spices in mind that Christopher Columbus set out in 1492 and ended up finding America).

The Dutch and English especially profited from the control of the spice trade in the East Indies modern-day Indonesia, especially the area known as the Moluccas, or Spice Islands, which were the only source of nutmeg and cloves at that time.

Wars were fought, lands colonized, and fortunes made on the back of the spice trade, making this trade route one of the most significant in terms of globalization.

3. Incense route starring the domesticated camel



Figure 1.12 incense trader.

The Incense Route developed to transport frankincense and myrrh, which are only found in the southern end of the Arabian Peninsula (modern Yemen and Oman).

Frankincense and myrrh are both derived from tree sap that is dried in the sun. These nuggets of sap can then be burned as incense or used as perfume, and were also popular in burial rituals to aid embalming.

The domestication of the camel around 1000 BCE development allowed the Arabians to begin to transport their valuable incense to the Mediterranean, an important trade hub.

Frankincense and myrrh became a significant commodity for the Romans, Greeks, and Egyptians indeed it was said that the Roman emperor Nero had a whole year's harvest of frankincense burned at the funeral of his beloved mistress.

The trade flourished, and the overland route was, at its height, said to have seen 3000 tons of incense traded along its length every year.

Romanian historian Pliny the elder wrote that it took 62 days to complete the route, although it is clear that at times the exact route shifted when greedy settlements pushed their luck and demanded taxes that were too high from the caravans coming through.

4. Amber road trading beads

Amber has been traded since 3000 BC, with archaeological evidence revealing amber beads from the Baltic having reached as far as Egypt. An Amber Road linking the Baltic with the rest of Europe was developed by the Romans, who valued the stone as both a decorative item and for medicinal purposes.

Large deposits of amber are found under the Baltic Sea, formed millions of years ago when forests covered the area. The amber washes ashore after storms, and can be harvested from the beaches across the Baltic, which is how many local amber traders built their business.



Figure 1.13 beads for trade

However, during the crusades in the 12th and 13th centuries, the Baltic became an important source of income for the Teutonic Knights, who were granted control of the amber-producing region. The Knights persecuted the local Prussians brutally, and anyone attempting to harvest or sell amber was put to death.

Today traces of the old Amber Road can be found in Poland, where one of the major routes is known as the “Amber Highway.”

5. Tea route the precipitous tea-horse road

This ancient route winds precipitously for over 6000 miles, through the Hengduan Mountains, a major tea-producing area of China, through Tibet and on to India. The road also crosses numerous rivers, making it one of the most dangerous routes.

The main goods traveling the route were Chinese tea and Tibetan warhorses, with direct trades of tea-for-horses and vice versa being the main goal of merchants plying the route.

Parts of the route were used starting c.1600 BCE, but the entire route began to be used for trade from about the seventh century CE, and large-scale trade was taking place starting in the Song dynasty (960–1279).

At least one piece of research suggests that in the period 960–1127 some 20,000 Tibetan warhorses were traded along the route every year in exchange for an eye-watering 8000 tons of tea.

As sea routes became more popular, the significance of the road lessened, but during World War II it once again grew in importance as the Japanese blocked many seaports, and the Tea-Horse Road became an important route for supplies traveling between inland China and India.

6. Salt route via Salaria



Figure 1.14 salt heaps for trade.

Salt has long been a precious commodity—it’s been used to flavor and preserve food, and as an antiseptic, for example. But easily harvested salt was a scarce mineral in antiquity, and so areas rich in salt became important trading centers.

Routes connecting these centers to other settlements also became commonplace. Of the many such routes that sprang up, one of the most famous was the Roman via Salaria (Salt Route), which ran from Ostia, near Rome, across Italy to the Adriatic coast.

So precious was salt that it made up a portion of a Roman soldier’s pay, and it is from this that we get the word salary (from the Latin for salt, *Sal*) and the phrase “Not worth his salt” the latter because a soldier’s salt pay would be docked if he did not work hard.

Another important salt route across Europe was the Old Salt road which ran 62 miles from Luneburg in northern Germany, which was one of the most plentiful salt sources in northern Europe, to Lübeck on the north German coast.

During the middle ages this route became vital for providing salt for the fishing fleets that left Germany for Scandinavia, as the salt was used to preserve the precious herring catch.

It would take a cart delivering salt some 20 days to traverse the Old Salt Road, and many towns along the way grew wealthy by levying taxes and duties on wagons as they passed through.

7. Trans-Saharan trade route (trading across the desert)



Figure 1.15 tran-saharan trade route traders.

The Trans-Saharan Trade Route from North Africa to West Africa was actually made up of a number of routes, providing a crisscross of trading links across the vast expanse of desert.

These trade routes first emerged in the fourth century CE, and by the 11th century caravans made up of over a thousand camels would carry goods across the Sahara. Gold, slaves, salt, and cloth were the most important commodities on this route, but many other objects also found their way into the caravans, from ostrich feathers to European goods such as guns.

Activity 1.6

- 1 Describe five key global trade routes. Draw a map representing the 5 key global trade routes.
- 2 Organise a table or diagram that presents the key features of these trade routes. **(choose your criteria carefully)**

Modern Trade routes

Modern trade routes are divided into three groups namely:

Land Route
Shipping Route
Sailing Route

Land Route

This contains of highways an example being:

Trans-African Highway network

The Trans-African Highway network comprises transcontinental road projects in Africa being developed by the United Nations Economic Commission for Africa (UNECA), the African Development Bank (ADB), and the African Union in conjunction with regional international communities.

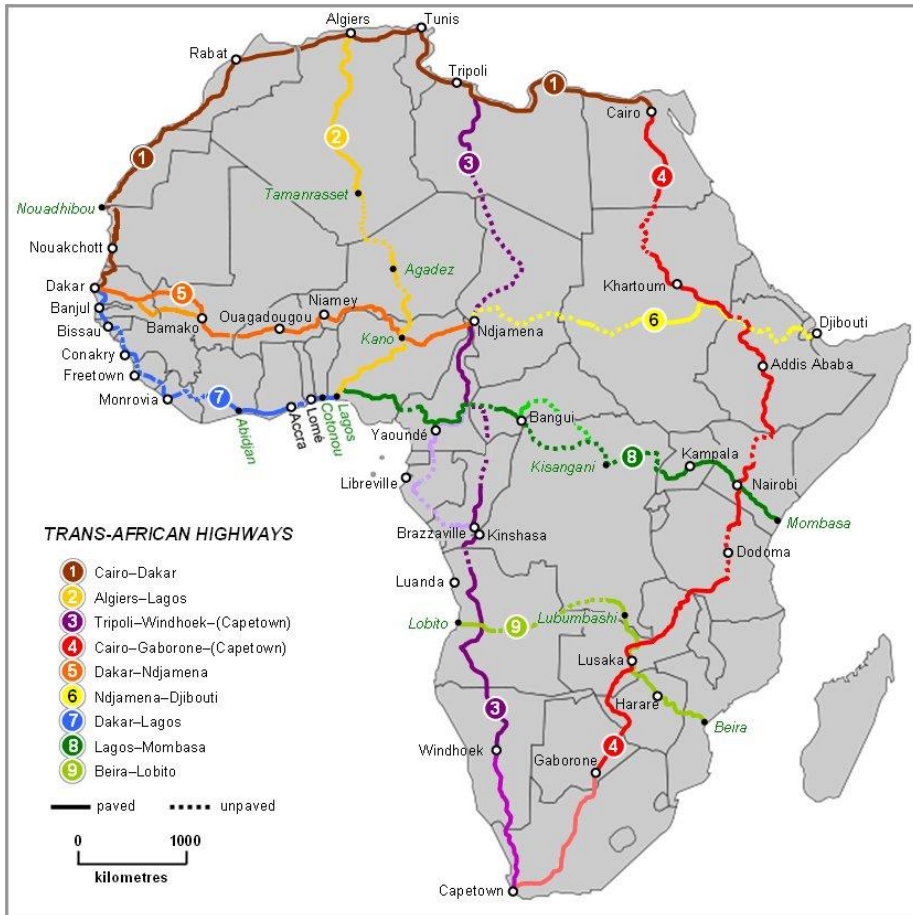


Figure 1.16 a map showing the Trans-African highway network

They aim to promote trade and alleviate poverty in Africa through highway infrastructure development and the management of road-based trade corridors. The total length of the nine highways in the network is 56,683 km (35,221 miles).

Progress check

Choose 2 routes and describe key features of the routes that help to explain why the route has been directed in this way.

Regional development

Regional development is the provision of aid and other assistance to regions which are less economically developed. Regional development may be domestic or international in nature.

The implications and scope of regional development may therefore vary in accordance with the definition of a region, and how the region and its boundaries are perceived internally and externally.

1.7 Transport and communication in South Sudan

Juba is a booming capital caught up in the midst of building, construction, renovations since being established as the seat of Government for South Sudan and the capital of Central Equatorial state. *“Clement.K.Mugo,2018”*.

Discuss to what extent you believe this to be true?

Juba is now being serviced by a selection of hotels and camps, including as well as bustling markets with banks, shops, restaurants and internet cafés.



Figure1.14 Nimule resort in South Sudan.

Transport and transportation infrastructure is still developing in many areas. However, this is changing across many significant towns with road transport is improving as areas get cleared of mines and security continues to improve on the growing road network.

Previously, air travel was associated with airlifts and food drops. This was primarily to support humanitarian operations that resulted in airfields all over South Sudan.



Figure 1.15 supreme airlines in year 2005

Since, the end of hostilities and signing of the CPA 2005, a number of private companies have begun flying to various locations inside South Sudan with Juba, capital of Central Equatoria State and seat of the Government of South Sudan, fast becoming a hub.

Outside of the capital, most towns – state capitals – have a variety of facilities available.

Juba - capital of Central Equatoria State and seat of the Government of South Sudan has a number of mobile phone service providers. They include the Zain and MTN South Sudan in 2018.



Figure 1.16 mobile phone service providers in South Sudan 2018.

However, the use of satellite phone services of Thuraya (a regional mobile satellite service provider) is far more extensive. It has a wider reach within the South due to improved satellite technology and is useful in many areas where there is no telecommunication set up.

Fixed lines are at present still considered a rarity in many areas.

Access to Internet services varies from state capital to state capital.

In Juba, Central Equatoria State, there are a number of cyber cafes from which one can access the Internet, Several hotels and tented camps also provide Internet services.

In Bor, Jonglei State there is one cyber cafe situated near the Bor Bus Park.

In Malakal, Upper Nile State there is one cyber cafe situated near the Malakal Port.

Transportation as an Economic Factor Contemporary trends have underlined that economic development has become less dependent on relations with the environment (resources) and more dependent on relations across space.

While resources remain the foundation of economic activities, the commodification of the economy has been linked with higher levels of material flows of all kinds.

Activity 1.7

Conduct some further research into communication facilities in two other African countries. Compare and begin to explain the difference (OR) suggest a plan for improving the systems in South Sudan.

1.8 The importance of transport Improvement

In two significant markets:

Commodity market

Improvement in the efficiency with which firms have access to raw materials and parts as well as to their respective customers. Thus, transportation expands opportunities to acquire and sell a variety of commodities necessary for industrial and manufacturing systems.

Labor market

Improvement in the access to labor and a reduction in access costs, mainly by improved commuting (local scale) or the use of lower cost labor (global scale).

Transportation provides market accessibility by linking producers and consumers so that transactions can take place.

Impact of transport on economic factors

An efficient transport system with modern infrastructures favors many economic changes, most of them positive. The major impacts of transport on economic factors can be categorized as follows:

Geographical specialization

Improvements in transportation and communication favor a process of geographical specialization that increases productivity and spatial interactions. This process is known in economic theory as comparative advantages.

Large scale production

An efficient transport system offering a cost, time and reliability advantage enables goods to be transported over longer distances. Thus, the more efficient transportation becomes, the larger the markets that can be serviced and the larger the scale of production. This results in lower unit costs.

Increased competition

When transport is efficient, the potential market for a given product (or service) increases, and so does competition. A wider array of goods and services becomes available to consumers through competition which tends to reduce costs and promote quality and innovation.

Increased land value

Land which is adjacent or serviced by good transport services generally has greater value due to the utility it confers to many activities.

Consumers can have access to a wider range of services and retail goods while residents can have better accessibility to employment, services, and social networks, all of which transcribes in higher land value.

In some cases, transportation activities can lower land value, particularly for residential activities. Land located near airports and highways, near noise and pollution sources, will thus be impacted by corresponding diminishing land value.

Economic Development

Transport also contributes to economic development through job creation and its derived economic activities. Accordingly, a large number of direct (freighters, managers, shippers) and indirect (insurance, finance, packaging, handling, travel agencies, transit operators) employment are associated with transport.

Producers and consumers take economic decisions on products, markets, costs, location, prices which are themselves based on transport services, their availability, costs, capacity, and reliability.

Activity 1.7

1. Choose one industry and draw a spider diagram to show improved transportation could boost it.
2. Describe barriers to improvement and suggest how these could overcome.
3. Describe what the impacts of improved communication would be to your community. Present your ideas in the form of a report to community leaders.

UNIT 2: EMERGING MARKET ECONOMIES

Introduction

What is an emerging economy?

An emerging market economy is one in which the country is becoming a developed nation. It is determined through many socio-economic factors. These countries experience an expanding role both in the world economy and on the political frontier.

2.1 Emerging economies of the world

Top 10 Ranked Emerging Markets 2012-2017

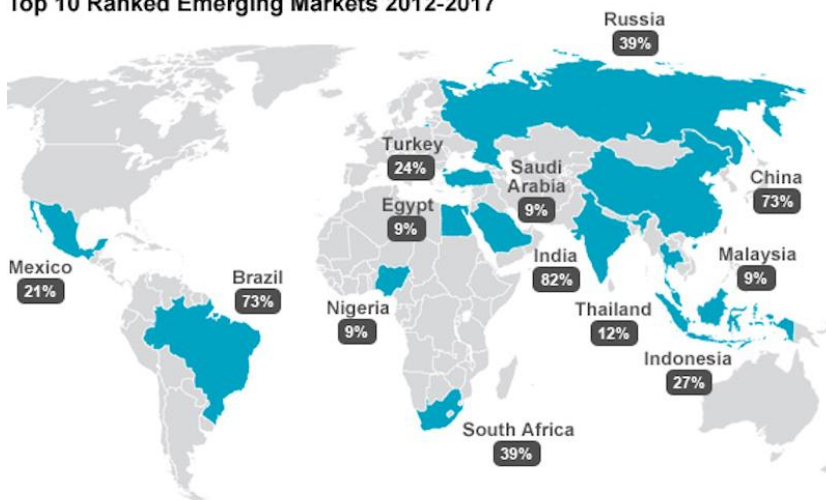


Figure 2.1 emerging economies of the world.

Some of the Emerging Markets economies in the world are Mexico, Brazil, China, India, Indonesia, Pakistan, South Africa, Turkey, Taiwan, Egypt and Thailand.

Activity 2.1

1. In groups, suggest the conditions for economic growth.

2.2 Reasons for Rapid development of emerging economies

Activity 2.2

In groups if possible

Discuss rapid development of emerging economies.

There are few reasons which have led to development of emerging economies which include the following.

Discovery of new or better economic resources

The discovery of fossil fuels such as oil and natural gas has contributed to the development of countries with emerging economies. Such resources earn these countries enough revenue to finance government infrastructural development such as the construction and renovation of roads, railway lines, schools and health facilities.

Technological advancement

Most countries under emerging economies have had technological advancements in the fields of communication, medicine, ICT, transport and industrialization. This has made these countries receive increased revenue in the production of goods and services leading to the development of their economies.

Reduced trade barriers

Trade barriers limit a country's ability to trade with neighboring countries due to high levels of taxation incurred on the borders. With reduced trade barriers, countries are now able to trade freely. This is one of the reasons behind the rapid economic growth of countries with emerging economies.

2.3 Ways in which natural resources are developed and can be used sustainably.

There are several ways in which resources can be developed and used sustainably which include:

- Preservation of the environment.
- Retaining the resources for future generation to enjoy.
- Recycling - this reduces waste
- Discovering of new types of energy while still developing and expanding existing sources that are more sustainable than fossil fuel.

Activity 2.3

In groups

Can you think of examples for each of these areas of development?

2.4 Types of economies

There are three major types of economies:

1. Traditional economy

The traditional economic system is the most traditional and ancient types of economies in the world. Vast portions of the world still function under a traditional economic system. In this economy, areas tend to be rural and closely tied to the land, usually through farming.

In general, in this type of economic system, surplus production of goods would be rare. Each member of a traditional economy has a more specific and pronounced role, and these societies tend to be very supportive and socially satisfied. However, they do lack access to technology and advanced medicine.



Figure 2.2. An example of a traditional market economy

Advantages of a traditional economy

- A traditional economy is more about producing basic goods. This economic system supplies sufficient amount of food to the people. It greatly reduces the amount of surplus or waste that typically would have occurred.
- In this particular economy, people can already recognize what their role in the society or community is. They need not to exert effort on a role which is not suitable for their skills and abilities thus no duplication of role or effort is evident on it.
- Since traditional economy is more on the culture and beliefs of the people, it will always sustain an environment friendly surrounding that aims to give the people their needs effectively and accordingly without affecting the nature of the environment.
- Traditional economies promote cooperation and harmonious relationships. They provide people with equal chances to practice working with other people harmoniously and with complete cooperation.

Disadvantages of a traditional economy

1. **It is a vulnerable type of economy:** A traditional economy is more vulnerable to changes in the weather conditions. This greatly affects the supply of the foods and services to the people.
2. **Resistance to change:** People in traditional economies tend to think that methods and procedures which were followed by their ancestors for generations are correct. This in turn leads to lower productivity thus leading to lower development of the society or country as a whole.
3. **Lower standards of living:** Due to lower productivity, people have lower standards of living than other economies which do not follow traditional economics.
4. **No specialization:** In this type of economy, people are required to do what they are told to do, and this lowers productivity.

2. Command economies

A command economy is a system where the government, rather than the free market, determines what goods should be produced, how much should be produced and the price at which the goods are offered for sale. It also determines investments and incomes. The command economy is a key feature of any communist society. **Cuba, North Korea** and the former **Soviet Union** are examples of countries that have practised command economies.

Characteristics of command economies

- The government creates a central economic plan. The five-year plan sets economic and societal goals for every sector and region of the country. Shorter-term plans convert the goals into actionable objectives.
- The government allocates all resources according to the central plan. It tries to use the nation's capital, labor and natural resources in the most efficient way possible. It promises to use each person's skills and abilities to their highest capacity. It seeks to eliminate unemployment.
- The central plan sets the priorities for the production of all goods and services. These include quotas and price controls. Its goal is to supply enough food, housing, and other basics to meet the needs of everyone in the country. It also sets national priorities. These include mobilizing for war or generating robust economic growth.

- The government has a monopoly over crucial businesses. These are in industries deemed essential to the goals of the economy. That usually includes finance, utilities, and automotive. There is no domestic competition in these sectors.
- The government creates laws, regulations, and directives to enforce the central plan. Businesses follow the plan's production and hiring targets. They can't respond on their own to free market forces.

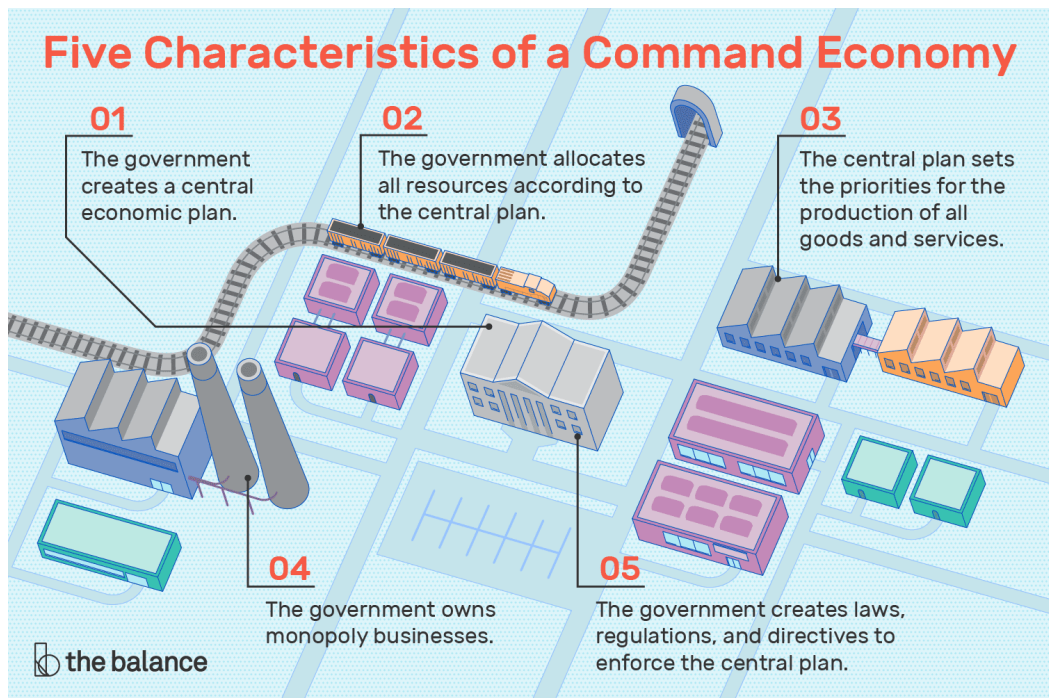


Figure 2.3. Characteristics of a command economy

Advantages of Command economies

The command economy does have several advantages including getting resources quickly and execute massive projects. The command economy is centered on the government regulating the economy through laws and regulations and this helps regulate the agitation around supply and demand. Advantages of command economy include:

- Resources are quickly and effectively mobilized on a large scale.

- Industrial power is created and massive projects completed while attaining imperative social goals.
- Individual self-gain is no longer the driving force of success among businesses. The greater good of the society is the focus of the economy. The society as a whole benefits from the success and not just a select few individuals.
- This type of economy is able to transform the society to conform to the government's vision for the country or society.

Disadvantages of Command economies

While the command economy has many advantages, there are also several disadvantages that discourage societies from adopting this form of economy. This form of economy discourages entrepreneurs from pursuing business ventures. The government holds a monopoly over the economy and keeps individuals from becoming overly successful. Other disadvantages of the command economy include:

- The needs of the society are often ignored for the betterment of the economy. Workers are not given options on where they can be employed or where they can move.
- The black market explodes in a command economy. Due to the governmental restrictions, goods and services that are not offered in the command economy begin being offered on the black market.
- The amounts of goods being produced are not balanced. One item will be mass produced whereas another will not have enough to support the economic needs. The government entity that controls the economy has difficulty obtaining up-to-date information about the needs of the consumers. Many times rationing becomes a way of life within a command economy.
- Exporting goods becomes problematic because it is difficult for the controlling entity to determine which products and prices will be most successful within the global market.

3. Market Economic systems

Unlike command economies, market economies have a much decentralized structure. A market is an institution that brings together buyers and sellers of goods or services, who may be either individuals or businesses. In this type of economy, there is a separation of the government and the market. This separation prevents the government from becoming too powerful and keeps their interests aligned with that of the markets. **Hong Kong** has been seen as an example of a **free market society**.



Figure 2.4. A market in Hong Kong, China

Characteristics of Market economic systems:

1. **Private Property:** Most goods and services are privately-owned. The owners can make legally-binding contracts to buy, sell, or lease their property. In other words, their assets give them the right to profit from ownership.
2. **Freedom of Choice:** Owners are free to produce, sell, and purchase goods and services in a competitive market. They only have two constraints.

These are the price at which they are willing to buy or sell and the amount of capital they have.



Figure 2.5. Characteristics of a market economy

3. **Motive of Self-Interest:** Everyone sells their goods to the highest buyer while negotiating the lowest price for their purchases. Although the reason is selfish, it benefits the economy over the long run. This auction system sets prices for goods and services that reflect their market value. It gives an accurate picture of supply and demand at any given moment.
4. **Competition:** The force of competitive pressure keeps prices low. It also ensures that society provides goods and services most efficiently. As soon as demand increases for a particular item, prices rise thanks to the law of demand. Competitors see they can enhance their profit by producing it, adding to supply. That lowers prices to a level where only the best competitors remain. This competitive pressure also applies to workers and consumers. Employees compete with each other for the highest-paying jobs. Buyers compete for the best product at the lowest price

Advantages of market economic systems:

- Since a market economy allows for free interaction of supply and demand, it ensures that the most desired goods and services are produced. Consumers are willing to pay the highest price for the things they want the most. Businesses will only create those things that return a profit.
- Goods and services are produced in the most efficient way possible. The most productive companies will earn more than less productive ones.
- It rewards innovation. Creative new products will meet the needs of consumers in better ways than existing goods and services. These cutting-edge technologies will spread to other competitors so they, too, can be more profitable. This illustrates why Silicon Valley is America's innovative advantage.
- Friendly competition between companies will encourage efficiency among employees to lower costs for production.
- As companies grow because of the market economy, foreign investors will begin to take an interest and help expand.
- Private companies take over activities and venues that were in the past public sector. This reduces the size, power and cost of state bureaucracies.
- Social and technical skills needed to function within a market economy system are quickly learned as is the knowledge to succeed.
- There is a larger variety of consumer goods available for a wide range of people ranging from middle-class to the very affluent.
- Encourages people to step up and try their hand in the market economy. Encourages entrepreneurs to start up a business and sell merchandise or offer services at competitive rates.

Disadvantages of market economic systems:

1. The exploitation of workers has a big disadvantage because of the working conditions, long hours for less pay for a very few to benefit. The large corporations have moved their production to countries where they can get cheap labor with few safety regulations for the workers.
2. Investment priorities and wealth becomes distorted. The wealthy keep getting wealthier and the public sector such as public education,

transportation routes and public health does not get the needed funds to keep evolving and providing for the public's needs.

3. Goods will be mass produced and therefore the cost will be driven lower. As a product becomes popular and overproduced, the manufacturers must unload the goods, even if that means lowering prices to where the general public can afford them.
4. Due to overproduction, industrial machinery will lay idle and there will be no production or profit for the manufacturer. Until the prices drop, the goods will remain unsold and people who cannot afford them have their needs unmet.
5. Unemployment rates go up due to the overproduction of goods. Workers are not needed to keep producing goods and therefore companies cannot afford to keep workers employed.

Activity 2.4

In groups

Compare and contrast the ways in which the different types of economies are organized.

Activity 2.5

In groups

1. Discuss the impacts of command economies and the most appropriate economy that would promote development in South Sudan.
2. Discuss the ways in which emerging economy growth relates to natural resources.
3. Imagine you are a business leader within one of these economies. Compose a short role play to show how you would try to convince other leaders to join you.

5. **Mixed Market Economies**

A mixed economic system is a system that combines aspects of both capitalism and socialism.

- **Capitalism** is an economic system in which capital goods are owned by private individuals or businesses.
- **Socialism** is a populist economic and political system based on the public ownership (also known as collective or common ownership) of the means of production. Those means include the machinery, tools and factories used to produce goods that aim to directly satisfy human needs.

A mixed economic system protects private property and allows a level of economic freedom in the use of capital, but also allows for governments to interfere in economic activities in order to achieve social aims. According to neoclassical theory, mixed economies are less efficient than pure free markets, but proponents of government interventions argue that the base conditions such as equal information and rational market participants cannot be achieved in practical application.

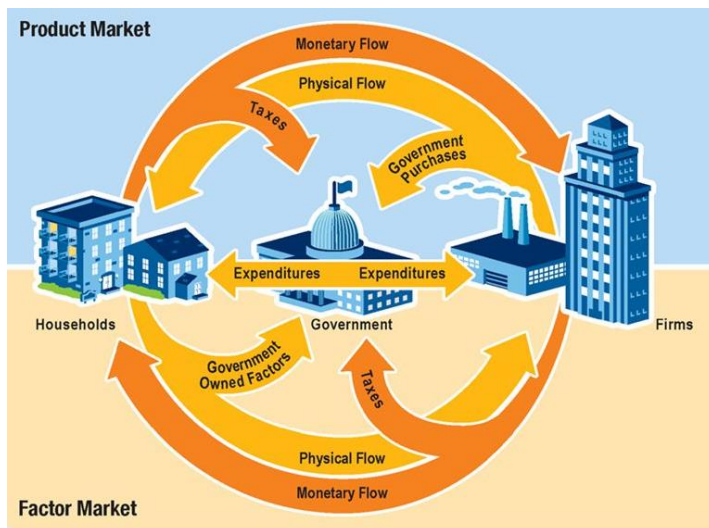


Figure 2.5. An example of a mixed market economy

Characteristics of mixed market economies

- Since a mixed economy includes a mix of both private and government control, it reflects characteristics of both capitalism and socialism. The balance between the two ideals can vary greatly between countries, sometimes leading to a lack of consensus on whether the economy is capitalist, socialist or mixed.
- A mixed economy typically offers a variety of freedoms, including the freedom to own the means of production, participate in managerial decisions, travel freely, buy and sell, hire and fire employees, and organize, communicate and protest peacefully. These freedoms exist alongside elements of what are widely considered socialist elements, such as state-owned means of production and infrastructure as well as public services, widespread distribution of welfare and transfer payments. The freedoms of a mixed economy are also accompanied by a multitude of laws and regulations affecting individuals and businesses alike.
- Most of the world's major economies are considered mixed economies. The appropriate level of governmental control depends on the priorities and will of the people. Most governments have a command role in defense, international trade and national transportation. Some mixed economies encourage the government to centrally manage health care services, welfare and retirement programs, while others prefer to leave these areas open to the free market. The ultimate goal of a mixed economy is to enjoy all the benefits of a capitalistic, market-based economy while still allowing for a strong government to provide a safety net and manage national resources.

Advantages mixed market economies

- It distributes goods and services to where they are most needed. It allows prices to measure supply and demand.
- It rewards the most efficient producers with the highest profit. That means customers get the best value for their dollar.
- It encourages innovation to meet customer needs more creatively, cheaply or efficiently.

- It automatically allocates capital to the most innovative and efficient producers. They, in turn, can invest the capital in more businesses like them.
- A mixed economy also minimizes the disadvantages of a market economy. A market economy could neglect areas like defense, technology, and aerospace. A larger governmental role allows fast mobilization to these priority areas.
- The expanded government role also makes sure less competitive members receive care. That overcomes one of the disadvantages of a pure market economy that only rewards those who are most competitive or innovative. Those who can't compete remain at risk.

Disadvantages mixed market economies

1. **It brings about the fear of nationalization:** As the private and public sectors coexists, the government would have the ability to own and nationalize any industry. This means that private entities will have to stay on the psychological apprehension that their business would be nationalized or taken over by the government.
2. **It could risk the government to go too far:** In a mixed economy, determining the exact role of the government in the private sector would sometimes become a guessing game that would result in unfair practices in both sides. It is believed that the government would manage the economy poorly, so its involvement is usually regarded as inappropriate.
3. **It observes lesser use of resources:** While the interest of the society is important in this system, it also hinders maximum use of available resources. This is primarily because of the government trying to mobilize resources to produce products and services that are generally beneficial for society, rather than doing it for the betterment of the economy.
4. **It can lead to higher taxes:** With more state intervention in the economy, it would mean that the government would invest more and would get their funds largely from tax revenues. More taxes would be required from the people, which can lead to negative consequences.

Basically, the success or failure of a mixed economy would still depend on how it is managed. However, based on the advantages and disadvantages listed above, we will be able to know whether it will do our country any good or just make situations even worse.

Activity 2.6

In groups, discuss.

What advantages does a mixed economy have over a pure market capitalist economy?

2.5 Ways in which emerging economies make best use of natural resources

“Every economic development depends on natural resources; without using the natural resources we would not be able to thrive, or even live on this planet”.

Discuss the extent to which you believe this statement to be true.

Without fertile soil we wouldn't be able to grow anything, and our crops would not be able to survive, no plants would be able to survive.

There are several ways in which emerging economies make best use of their natural resources which include:

Planting trees in home compounds

There is planting of trees which provide shade and perfect air conditioning for our homes. The trees ensure that there is clean air for us to breathe creating a perfect air conditioner. This helps to reduce electricity cost from the use of air conditioning appliances.



Figure 2.7 trees planted at home.

Ensure the recycling of wastes

These wastes include plastics, paper bags that have resulted to tones of garbage. Recycling entails re-manufacturing of already used materials. This reduces the amount of waste available reducing soil and water pollution.



Figure 2.8 materials to be recycled.

Use of alternative sources of power such as solar and wind energy

They use solar and wind sources of energy which are bio friendly particular because they do not produce harmful gases that damage or pollute the environment.

They are better compared to burning fossils such as coal and charcoal. They are also cheap to use, not easily depleted and are renewable.



Figure 2.9 solar energy plants.

Practice judicious ways of conservation energy

Such practices include switching off the lights when not in use, unplugging electrical appliances when not in use. Plugged-in appliances continue to use electricity even when not in use. Other practices include spending less time when taking hot showers.

Use earth-bags instead of plastic and paper bags

Most of the waste comes from excessive use of plastic bags. Carry an earth-bag each time you visit the grocery store. Products should also be wrapped in materials that can be recycled.

Practice conservation of wildlife

It involves the conservation of animals and plants outside the natural habitats. These include areas such as pollen banks , DNA banks, zoos, seed banks, botanical gardens, tissue culture banks among others.

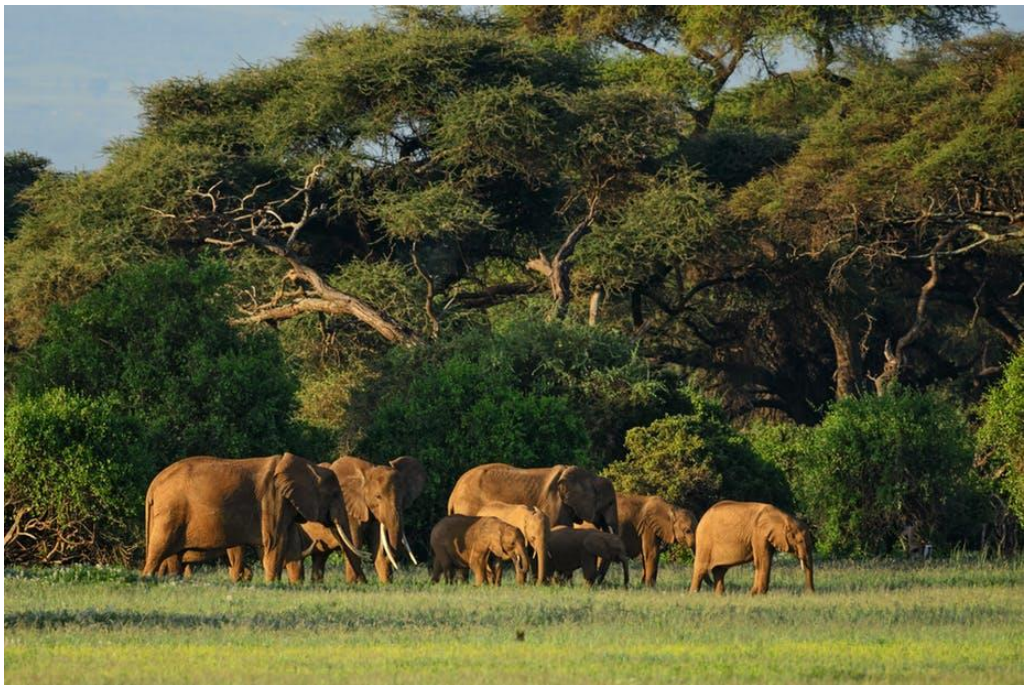


Figure 3.0 conservation of wild animals.

Activity 2.6

1. What do you understand by the term emerging economies?
2. Differentiate between emerging, traditional and command economies.

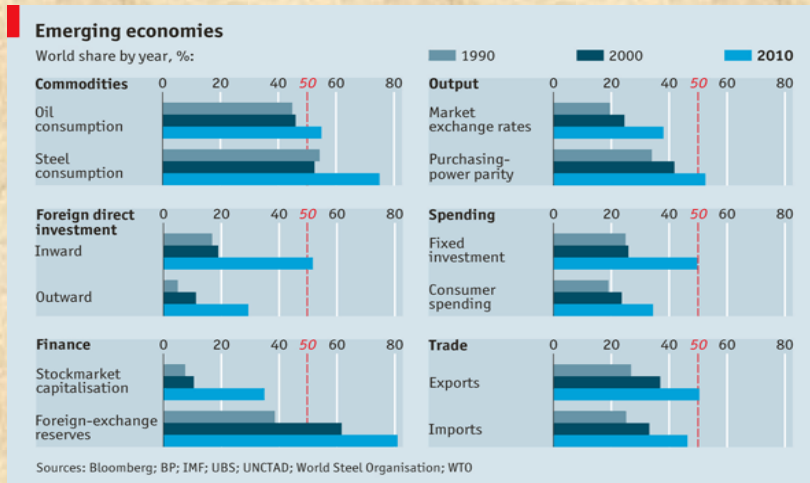


Chart 1

Emerging market growth is picking up

Gross domestic product, constant prices Percent change



International Monetary Fund, World Economic Outlook Database, October 2016

3. What can you say about economic growth from the above graph?

Activity 2.7

1. Produce a flow chart to illustrate the key features of emerging economies.
2. Read these quotes together and discuss to what extent you agree or disagree.

“The intense media coverage of the problems in developed economies (better called ‘stagnant economies’ now) continues to mask the potential of the rest of the world. The irony is that 90% of the media’s 24/7 coverage is concerned with the West, whereas 90% of the opportunity is in emerging markets.” –
Stephen Jennings, CEO, Renaissance Capital investment bank

“Having spent 10 years studying emerging markets, I know that you have patterns repeated over and over again. A bubble is like a fire which needs oxygen to continue... when you see there is no oxygen, things change. _
Nouriel Roubini -American economist

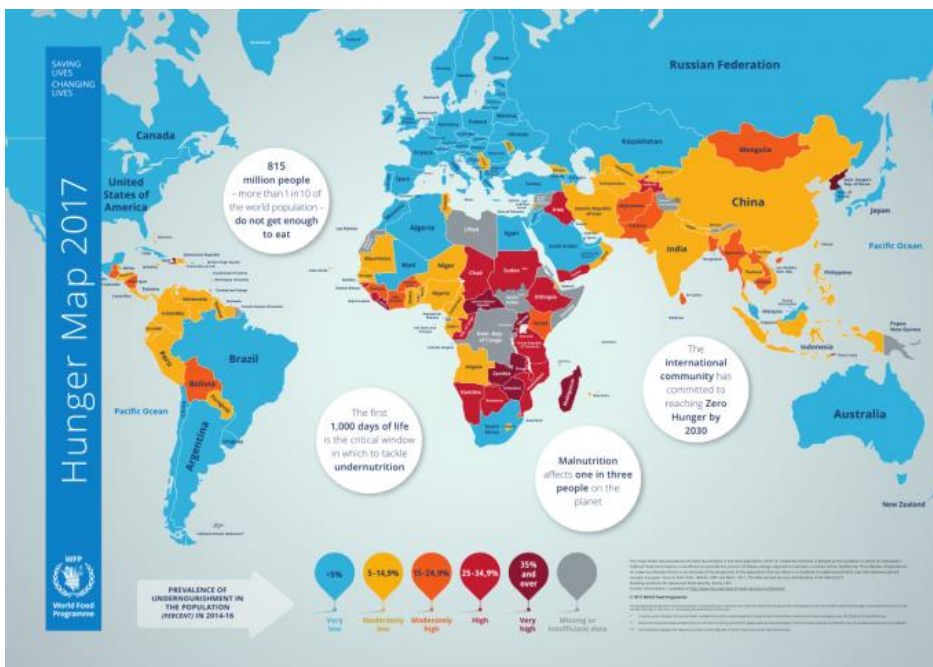
Dark economic clouds are dissipating into an emerging blue sky of opportunity._
Rick Perry- American politician

“I believe that we have reached a stage in life in the economic development of Africa where moving forward is perilous, moving backwards is cowardice and standing still is suicidal but we must persevere because winners do not quit and quitter never win.” _
Patrick L.O. Lumumba -Kenyan lawyer

UNIT 3: GLOBAL CHALLENGES AND THE WORLD AT RISK

Introduction

Global challenges are the major issues facing our planet. They are of a magnitude that no one institution or organization can address on its own. They require the pooling and sharing of knowledge across institutions, across disciplines and across continents.



3.1 Global Challenges

What are global challenges?

Among these issues of global concern are the social trends and the changes in the natural world which will impact our planet and its many populations in the near future.

3.2 Physical Risk/Natural hazards

A Physical hazard is a factor within the environment that can harm the body without necessarily touching it. Vibration and noise are examples of physical hazards.

A Natural hazard is a Natural phenomenon that might have a negative effect on people or the environment. Natural hazard events can be grouped into two broad categories.

Progress check

How many natural hazards can you remember from your work in S1? List as many as you can, giving details about how they affect the environment and human activity??

3.2a Causes of Natural hazards

- Some natural disasters are geological. This means that they are caused by natural events occurring within the Earth's crust.
- Some natural disasters are meteorological. This means that they are caused by extreme weather conditions in the Earth's atmosphere.
- Some natural disasters are hydrological. This means that they are caused by the amount of water present on the Earth's surface.
- Some natural disasters can be caused by a combination of natural factors. Humans can also play a role in causing natural disaster events.

Progress check

From your list of Natural disasters can you make links to their causes?

3.3 Types of Natural hazards and disasters

1. Hydro-meteorological hazards.
2. Geophysical hazards.

Hydro-meteorological hazards

A process or phenomenon of atmospheric, hydrological or oceanographic nature that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage they includes tropical cyclones, thunderstorms, hailstorms, tornados, blizzards, heavy snowfall, avalanches, coastal storm surges, floods including flash floods, drought, heat waves and cold spells.



Figure 3.2 a thunderstorm



Figure 3.3 a snow fall.

Geophysical hazards.

Geophysical hazard is potentially damaging natural event and/or phenomenon, which may cause the loss of life or injury, property damage, social and economic disruption, or environmental degradation. Examples are: Earthquakes, landslides, tsunamis and volcanic activity



Figure 3.4 a volcano eruption.



Figure 3.5 a tsunami.

3.4 The impact of natural disasters

Natural disasters affect society, either through damage to property or through loss of life. Natural disasters can have a life-altering impact on the individuals and families fortunate enough to survive them.

But the effect of natural disasters can be felt at the community, city and state level, or many times can impact an entire country.



Figure 3.6 A road destroyed by an earthquake in Spain

Natural events are often referred to as natural disasters when referring to the general phenomenon, but they are called natural disasters when referring to a specific event. If a natural event does not pose any risk to human property or lives, it is simply a natural event; hazards and disasters only occur in conjunction with human society.

How well the impact of a disaster event is absorbed has much to do with the intensity of the impact and the level of preparedness and resilience of the subject impacted.

The effects of natural disasters are many and varied. Some are short term effects that can be fixed with relative ease while others last for years.

Natural disasters have three general types of effects which include:

- Primary effects
- Secondary effects
- Tertiary effects

Primary effects

These are the direct result of the natural disaster, such as collapsed buildings and water damage.



Figure 3.7 a collapsed building due to an earthquake in Japan.

Secondary effects

These are the result of primary effects. Examples of secondary effects include power outages due to fallen trees or damaged building and fires from broken gas lines. In these examples, the fallen trees and the damaged building would be primary effects that caused the power outages and fires (secondary effects).



Figure 3.7 destruction caused by a fallen tree in U.S.A.

Tertiary effects

These effects are the long term effects of natural disasters. These include changes in the landscape and natural features, loss of habitat, and crop failure or reduction due to cooler temperatures or other interference.

Activity 3.1

In groups

1. Describe some examples of the Primary Secondary and Tertiary effects of natural disasters in South Sudan that you know of. What direct impact have they had on your own community?
2. Use the map to describe the areas with the highest level of Natural disaster risks.
3. Explain the types of Natural disasters that are likely to occur in the Highest risk areas and why this might be the case.

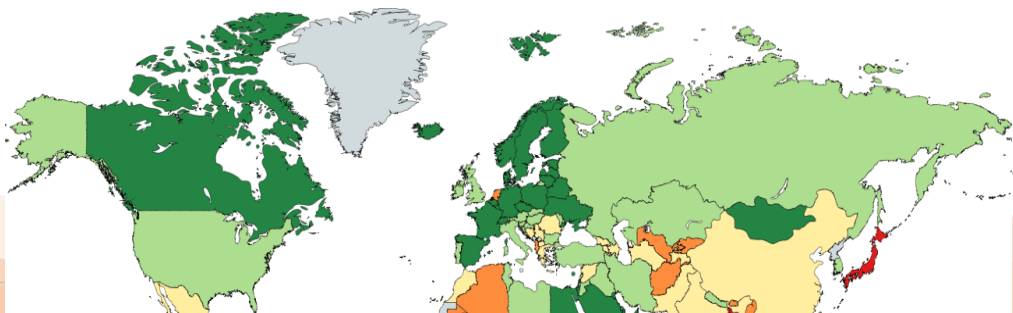


Figure 3.8 natural hazard effects based on the United Nations University World Risk in 2014.

Activity 3.2

In groups

The photographs below illustrate the effects of Natural disasters. Write your information page for this textbook (!) which describes the features of the effects of natural disasters.





3.5 Reasons why some places are more hazardous and disaster prone than others

Activity 3.3

In groups

1. Discuss why you think some places are likely to have a higher rate of hazardous disasters than others.
2. Why do you think Developing Countries are more vulnerable to Natural Disasters?

High income countries are better prepared to handle the impact of disasters as well as the aftermath.

In developing nations, natural disasters trap people in a cycle of poverty because they do not have the resources to rebuild their homes and meet other basic needs, making them less able to recover in the long run.

Certain factors present in poor communities will turn a natural hazard into a disaster:

- Poorly constructed buildings
- Poor sanitation
- Rapid population growth/high density population
- Limited resources for disaster response and rebuilding
- Lack of economic safety nets

Which factor do you think is the strongest in promoting a disaster?

3.6 Human factors that contribute to increased Natural disaster

“There are three problematic human activities and how they increase our risk for natural disasters.”

Activity 3.4

Discuss this views presented in the following section and write your own statement about the way human factors influence Natural disasters.

“Our human-related activity and our growing reliance on technology, and increasing levels of pollution actually lead to greater occurrence of natural disasters.” –The Culture JC general papers

Read these descriptions of natural disasters and discuss further your ideas in response to this view.

Climate change as a human factor contributing to natural disasters

Human activity is considered to be one of the main causes of climate change. People burn fossil fuels and convert land from forests to agriculture for example. Since the beginning of the Industrial Revolution, people have burned more and more fossil fuels and changed vast areas of land from forests to farmland.



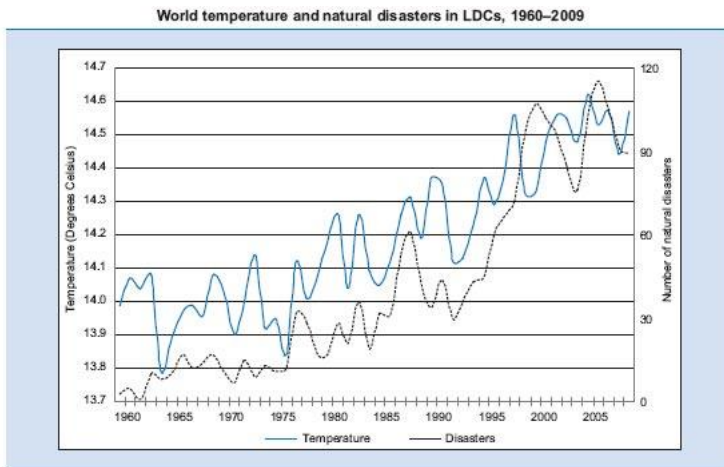
Burning fossil fuels produces carbon dioxide, a greenhouse gas. It is called a greenhouse gas because it produces a “greenhouse effect”. The greenhouse effect makes the earth warmer, just as a greenhouse is warmer than its surroundings.

Carbon dioxide is the main cause of human-induced climate change.

It stays in the atmosphere for a very long time. Other greenhouse gases, such as nitrous oxide, stay in the atmosphere for a long time. Other substances only produce short-term effects.

The link between Climate change and increasing natural disasters.

Climate change may not be responsible for the recent skyrocketing cost of natural disasters, but it is very likely that it will impact future crisis. Climate models provide a glimpse of the future, and while they do not agree on all of the details, most models predict a few general trends.



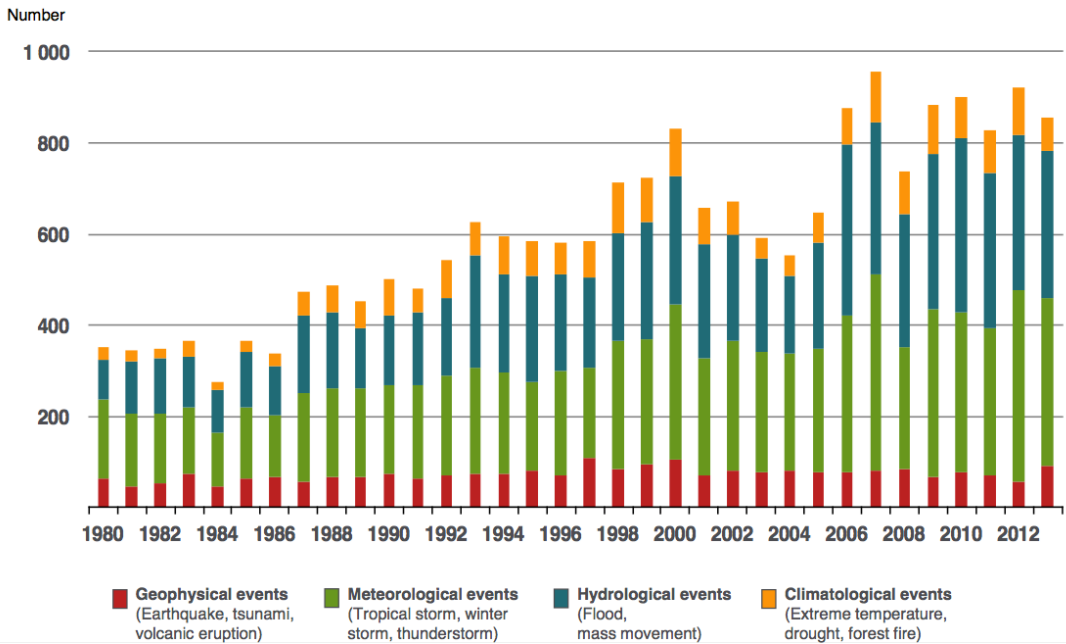
Source: Goddard Institute for Space Studies (GISS), NASA GISS Surface Temperature Analysis (GISTEMP) (<http://data.giss.nasa.gov/gistemp/>); and UNCTAD secretariat estimates, based on EM-DAT: The OFDA/CRED International Disaster database (www.emdat.net), Université catholique de Louvain, Louvain-La-Neuve.

Note: Sample comprised of 47 LDCs.

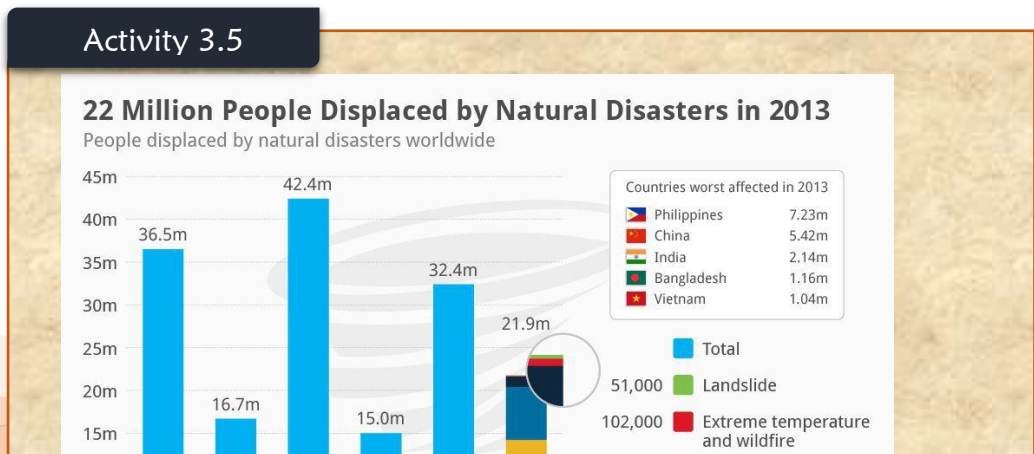
What does this graph tell you about the link between natural disasters and climate change??

First, according to the Intergovernmental Panel on Climate Change, an increase of greenhouse gases in the atmosphere will probably boost temperatures over most land surfaces, though the exact change will vary regionally.

More uncertain but possible outcomes of an increase in global temperatures include increased risk of drought and increased intensity of storms, including tropical cyclones with higher wind speeds, a wetter Asian monsoon, and, possibly, more intense mid-latitude storms.



What does this graph tell you about natural disasters and different events?



3.7 Preparing for Natural Disasters and preventing further harm.

Below are some measures that can be taken to protect communities from the threat of natural disasters.

- Develop and rehearse a family disaster management plan so that you know what to do if you are forced to leave home. This could include a communications plan this helps you to know how to contact each other if you become separated.
- When severe weather threatens, turn on your radio to a local station to stay informed of imminent danger.
- Put together **emergency supplies**, one set for your house and one for your car.
- Know how to turn off your utilities, and keep the necessary tools at hand. Make sure other members of your family know how to do this also. If you turned off your gas, do not turn it back on yourself. Call the gas company.

What do you think emergency kits and supplies should contain?!

When living in an area subject to flooding, the following steps can be taken to help protect a home from the next flood:

- i. Elevate the furnace, water heater and electrical panels in the home.
- ii. Install “check valves” in sewer traps to prevent flood water from backing up into the home.
- iii. Purchase flood insurance to protect your financial future. Typical homeowners insurance in some places doesn’t cover flooding losses.
- iv. Construct protection barriers to stop floodwater from entering the home.
- v. Find out where your community stores and distributes sandbags and know how to use them.
- vi. Develop a **flood response plan** based on your flood protection level, local warning procedures and the amount of warning time you will have to respond before the flood comes.
- vii. Be prepared to care for your animals in the event of an evacuation.
- viii. Know and rehearse your evacuation route.

DISASTER RISK EQUATION

The risk of a disaster increases as the frequency or severity of hazards increases, people’s capacity to cope (ability to cope with the consequences) is decreased.

Disaster- when a hazard actually seriously affects human.

Risk- the likelihood that the human will be affected by a hazard.

Vulnerability-how susceptible a population is to the damage caused by a hazard.

$$\text{RISK(R)} = \frac{\text{Hazard (H)} \times \text{Vulnerability (V)}}{\text{Capacity to cope (C)}}$$

Activity 3.6

1. Write a **flood response plan** that could be a model for communities who are situated in high flood risk localities.
2. Construct an agenda for a community meeting that will help people to understand your proposed **flood response plan**.

UNIT 4: URBANISATION AND GROWTH OF MEGA CITIES

Introduction

4.1 Urbanization

What is urbanization?

Urbanization refers to the population shift from rural to urban areas.



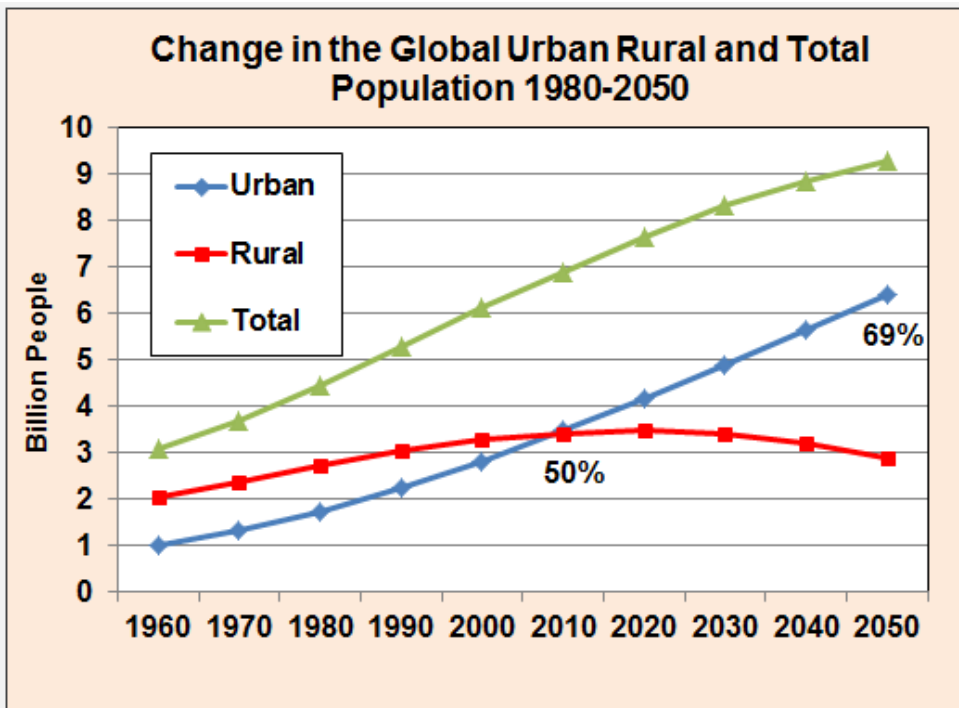
Figure 4.1 an urban city (Juba South Sudan).

The urban settlement differs from the rural one in the following ways:

- a) **Their economies**—they make a living from manufacturing and services rather than agriculture.
- b) **Their sizes** – they are larger in population and extent.

- c) **Their way of life.** For example, they need money for upkeep and daily expenses.

Towns and cities are growing in number and size all over the world today. The rate of urbanization has increased such that half the world's population is now living in urban areas.



4.1a Factors affecting rate of Urbanization

The rate of birth to death rate.

i Birth rate

The birth rate is the total number of live births per 1,000 of a population in a year or period.

ii Death rate/Mortality rate

Death rate is the ratio of deaths to the population of a particular area or during a particular period of time, usually calculated as the number of deaths per 1,000 people per year.

If there are more people being born than there are dying then the population will increase or if more people are dying than the people being born the population will decrease.

Urban to rural development

Urban development means more rural to urban migration where rural development means more urban to rural migration.

Transport advances

Means that the city is not only the easier to access but also increase its attraction.

General improvements

Any general improvements of an area will attract people whether it be urban or rural. For example

- High rates of urbanization are occurring in LICs because of the following:
- Most new economic development in these countries are concentrated in the big cities.
- Push and pull factors are leading to high rates of rural-urban migration.
- Cities are experiencing high rates of natural increase in population.
- Urbanization is much slower in HICs because a large proportions of the populations is already living in towns and cities.

Which of these factors do you think is the most significant and why?

4.2 Migration

What do you understand by the term Migration?

This is the movement of people from one place of residence to another.



Figure 4.2 People migrating in South Sudan.

Migration causes a reduction of population in the place of origin and an increase of population in the area of destination.

Emigrants: people who move out of their own country to settle in another.

Immigrants: people who have come to a different country in order to live there permanently.

4.2a Causes of Migration

Activity 4.1

What experiences if any, do you have of migration?

Main causes of migration can be categorized into two namely:

Push factors

Pull Factors

Push factors

These are factors that force people out of their places of settlement they include:

- a) Pressure on land due to increase in population which cause people to move to other areas where land is available.
- b) Land becoming too poor to support crops which cause people to move to other areas where fertile land is available.
- c) Unemployment and underemployment which cause people to move to other areas to seek jobs or better paying ones.
- d) Insecurity such as tribal clashes and terror gangs which cause people to other safer places.
- e) Persecution of specific religious groups due to their faith which causes them to move to areas where they can practice their faith freely Example. Jews from Europe to Israel.
- f) Political persecution Example. many Ugandans moved to neighbouring countries during the reign of Iddi Amin.
- g) Occurrence of natural calamities such as diseases, floods and severe droughts forcing people out of their place of residence Example. in monsoon Asia.
- h) Government policy where people are moved from one area to give room for development Example. Hydro-Electric Power. Projects and mining such as of titanium, gold, etc.

Pull Factors

These are the positive conditions which attract a people to a new place.

- a) Attraction of urban life where there is electricity, piped water, entertainment and social amenities.
- b) Availability of employment such as in urban areas where there are many industries and businesses or in rural areas with estates and plantations.
- c) Opportunities for better education Example. in urban areas with many education institutions.

- d) Security
- e) Plenty of land
- f) fertile land
- g) Higher standard of living Example. in urban areas

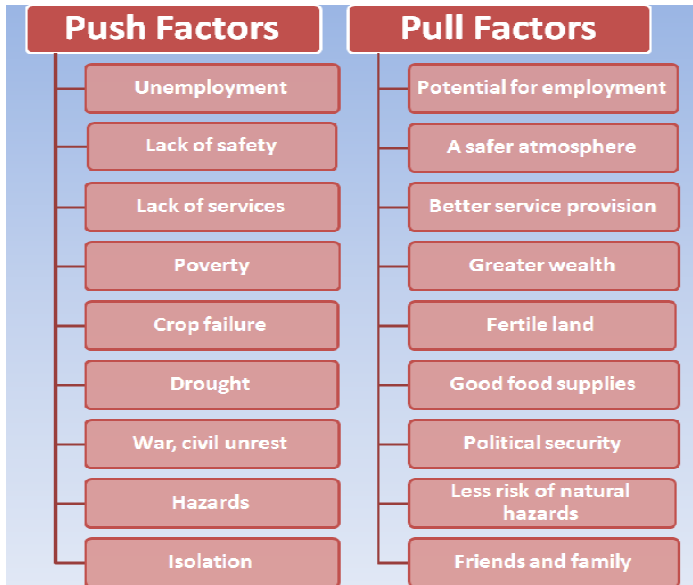


Figure 4.3 push and pull factors that cause migration.

4.2b Types of Migration

There are two basic types of internal migration namely:

1. Internal migration
2. External migration

1. Internal migration

This refers to movement of people within a country.

Types of Internal Migration

1a Rural to urban Migration

This is movement of people from rural areas to urban areas.

It involves:

- a. Youth who have completed various levels of education moving to urban areas to seek employment in white collar jobs.
- b. People moving to urban areas in search of alternative ways of earning a living due to shortage of land in rural areas, unemployment and low prices for agricultural produce.
- c. Traders relocating to urban areas where there is a larger market as the people in rural areas have low purchasing power.
- d. People moving to urban areas where there is adequate social amenities such as hospitals, entertainment, electricity and generally exciting life.
- e. Youth seeking for further education who join universities and colleges many of which are located in urban areas.
- f. Transfer of people employed in rural areas to urban areas.

1b Rural to Rural Migration

This is movement of people from one rural area to another.

It involves:

- a. People moving to plantations and other large farms seeking employment.
- b. Movement of nomadic pastoralists from one place to another in search of water and pasture.
- c. People moving to other parts of the country to buy land and settle there.
- d. Movement of people into settlement schemes. To ease pressure on land.
- e. Movement of public and private employees on transfer from one rural area to another.

1c Urban to Rural Migration

Movement of people from urban areas to rural areas.

It involves:

- a Transfer of people employed in urban areas to rural areas.
- b Movement of people from urban areas to search for jobs in rural areas.
- c People moving from urban areas to rural areas to settle permanently after retirement.
- d People moving away from stressful urban life to suburbs to be commuting daily to work.

1d Urban to Urban Migration

This is Movement of people from one urban area to another or from one part of urban area to another.

It involves:

1. Employed persons who are transferred from one town to another.
2. people moving from one part of town to another due to:
 - Transfer to a new work station.
 - In search of affordable housing.
 - In search of better employment.
 - In search of better business opportunity.

External Migration

This involves movement of people from one country to another.

It involves:

- a People who seek employment abroad for a short period who end up settling permanently.
- b Refugees who are forced out of their country by factors such as war.
- c People seeking political asylum due to political persecution in their country.
- d Government employees such as ambassadors who are in assignment abroad.

*What have you seen or read about recently in relation to external migration?
What do you think will happen in the future?*

4.2c Effects of Migration at the Place of Origin

Activity 4.2

In groups

Explore this information about rapid urbanization create a Fact Sheet to illustrate the key points.

Positive Effects

- Improved agricultural production in rural areas when people move out creating more room for cultivation.
- Increase in purchasing power in rural areas when migrants remit money back home.
- Relief to a country which is faced with unemployment when people get employed outside the country.

Negative Effects

- Lowering agricultural production when able bodied people go to town leaving the women, elderly and children who are unable to manage farms effectively.
- Underemployment in rural areas due to lowered agricultural productivity.
- Break up of families and lowering of social morals since majority of migrants are men which causes imbalance of female-male ratio.
- Lowering of population density in the area of origin.
- Lowering of fertility due to long separation between a man and wife.
- Lower rate of industrialization due to transfer of skilled man power to other countries (brain drain).

4.2d Effects of Migration at the Place of Destination

Activity 4.3

In groups

Below is a list of positive and negative effects of migration at the place of destination. Group them into negative and positive effects

- Contributes to national peace when people from different parts of the country settle together.
- There is a gain in population.
- Shortage of social amenities such as schools, hospitals, water and transport.
- Development if the migrants are involved in gainful employment which results into increased production.
- Social evils such as crime, prostitution and drug peddling when people fail to secure employment.
- Shortage of housing and high house rents leading to growth and expansion of slums.

4.2e Effects of Migration on the Individual migrants

Positive Effects

- Improved living standard of the worker resulting from savings made from income gained after employment.
- Acquisition of skills and change in attitude due to exposure which may cause some town dwellers to change their way of life and become more sophisticated.

Negative Effects

- Lower fertility rates when some people who have migrated to towns take long time before marrying as they try to achieve various goals in their lives.

- Immorality may arise when urban migrants lose touch with their cultural values.
- Marriage breakages may occur when spouses are separated for long periods of time.

Progress check

In relation to the above positive and negative effects, describe how migration has affected the people of South Sudan.

4.3 Urbanization process

An urban settlement first appears as a result of agglomeration. That is the concentration of people and economic activities at favorable locations such as close to a mineral resource, river crossing points or a well or spring. As towns grow they expand outward by a process known as suburbanization.

The creation of these new suburbs made up of houses, entertainments places and services is encouraged by:

- Improvements in transport that allow people to move easily between the new suburbs and the town centre.
- The arrival of more people mainly from rural areas
- Overcrowding, congestion and rising land prices in the older parts of the town.
- A general decline in the quality of the residential environments near the centre.

As a result of agglomeration and suburbanization, some towns grow into each other sometimes join together into one vast continuous built area known as a conurbation.

As cities and conurbation continue to grow people and business move further out either to smaller towns and cities or rural areas. This process is known as counter urbanization.

4.3a. The Problems of Rapid Urbanization

Activity 4.5

In groups

Discuss the problems facing rapid urbanization.

The world is rapidly becoming urbanized, and the pace of urbanization is greatest in LICs. For example, the population of the city of Sao Paulo in Brazil we have seen that each year the population increases by approximate 0.062 Million people.

To conclude it, the population of Sao Paulo in 2018 is estimated to be 21,242,939 Million. The population in the year 2018 for Sao Paulo is 21,242,939 Million.it is now the second largest urban area in the Americas.

Here as elsewhere the developing world, this rapid and often unplanned growth has created a range of problems, mainly because of the speed at which it has occurred.

Housing

The growth of LICs has been caused by people moving from rural areas or other parts of the country. When they arrive, there is nowhere for them to live, especially as many are looking for cheap, low-cost housing. Millions of people live in what where meant to be temporary housing have now become shanty towns or squatter settlements.

Even for those with money, the demand for housing exceeds supply. As a result, housing is expensive relative to people's wages and salary.

In general, because of poor transport, the most sought after housing is close to the city centre with its shops and places of work.

Access to water and electricity

It is commonly the case that the provisions of basic services do not keep up with the growth of population.

As a consequence, not all parts of the built-up area are provided with running water, sanitation or electricity. Many people have no option but to rely on fires for cooking and lighting and on polluted steams for water and sewage disposal.

Traffic congestion and transport

The provision of proper roads and public transport is another aspect city life that lags behind the growth in population. As a result the transport systems in cities are overloaded and overcrowded, and traffic congestion is a major problem for everyone – rich or poor.

The high numbers of vehicles also causes high levels of atmosphere pollution in cities, many of which suffer regularly from smog (a mix of smoke and fog).

Health

There are not enough doctors, clinics or hospitals to deal with the rapid increase in population.

With large parts of the mushrooming city having little or no access to clean water or sanitation, diseases and infections, such as typhoid and cholera, spread quickly. Atmosphere pollution leads to widespread respiratory problems.

Education

Rapid population growth also means a lack of schools. Although most cities manage to provide some primary education not all children go on to secondary school. This is because of the cost and because many children have to work to help support the family.

Employment

Although people are attracted to cities for work, many are unable to find decently paid jobs and so become part of the massive informal sector, surviving as best as they can.

This includes selling goods on the street, working as cleaners, shoe shiners or cooking and selling food for home or by the roadside. Even where there is paid

work in new factories, these are often many kilometres away from the shanty areas where most newcomers live.

Social problems

Given how close to each other people live and the poor conditions experience by sometimes millions of city dwellers, it is not surprising that they also suffer from high crime rates, drugs trafficking and theft. The poorest areas are often inhabited by violent street gangs.

4.4 Mega Cities

From the previous lesson describe what you understand by the term megacities.

A Megacity is a very large city, typically with a total population in excess of 10 million people.

A Megacity can be a single metropolitan area or two or more metropolitan areas that converge.

In 1970 there were just four of these but by 2010 there were 24 of them.

The following is a list of some Megacities in the world with their total population and continent.

Megacity	Country	Continent	Population
Tokyo	Japan	Asia	38,140,000
Shanghai	China	Asia	34,000,000
Jakarta	Indonesia	Asia	31,500,000
Delhi	India	Asia	27,200,000
Seoul	South Korea	Asia	25,600,000

Guangzhou	China	Asia	25,000,000
Beijing	China	Asia	24,900,000
Manila	Philippines	Asia	24,100,000
New York City	United States	North America	23,876,155
Mumbai	India	Asia	23,600,000
Shenzhen	China	Asia	23,300,000
Sao Paulo	Brazil	South America	21,242,939
Mexico city	Mexico	North America	21,157,000
Lagos	Nigeria	Africa	21,000,000
Keihanshin	japan	Asia	20,337,000
Cairo	Egypt	Africa	19,128,000

What have you heard about any of these Megacities recently? Which one would you like to visit and why?

Progress Check

Identify any other megacities in the world you know.

The four main factors for the growth of megacities:

Economic development

This is the drive of all economic growth and urbanisation. Presumably mega cities are produced by a fast and sustained rate of economic growth.

Population growth

Given the size of these cities, there must be high rates of population growth. Large volumes of rural-urban migration among young adults, plus high rates of natural increase are needed to explain the size of these cities.

Economies of scale

There are advantages to be gained from cramming as much as possible into Megacity rather than into a number of smaller cities. Since distances within a mega cities are less than between smaller cities, there are financial savings (economies of scale) to be made in terms of transport. Communication between people and businesses will be easier (another economy).

Multiplier effect

Having cities, success leads to more success. Once a large city is prospering, it gathers a momentum which will carry it forward. So it will lead to more prosperity and growth.

There are more jobs so more people come which means there are more people who need goods and services, which creates more jobs and so the cycle goes on.

Shanty Towns

The speed of urbanization in LICs is fast and continues to accelerate. Most people who migrate to LIC cities come from poor rural areas in search of work.

There are no houses for them and end up settling in shanty towns. Shanty towns (also called slum, squatter settlements, favelas) are settlements of poor who live in improvised dwellings made from scrap materials-often plywood, corrugated metal and sheets of plastic.

Shanty towns are usually built on the periphery edge of cities, often they do not have proper sanitation, electricity or telephone services.

Activity 4.6

1. What do you understand by the term urbanisation?
2. Explain ways in which urban settlements differ from rural settlements.

In groups

3. Discuss three factors that affect the rate of urbanisation.
4. Name two factors that cause migration.
5. Which are the two basic types of internal migration?
6. What do you understand by the term external migration?
7. In groups discuss the positive and negative effects of individual migration.
8. Describe four factors that contribute to the growth of megacities.

UNIT 5: TRAVEL AND TOURISM

Introduction

Activity 5.1

- What is travel?
- Have you ever travelled?
- Which is the furthest place you have ever travelled?
- Which means did you use to travel?

5.1 Travel

Travel is the movement of people between relatively distant geographical locations, and can involve travel by foot, bicycle, automobile, train, boat, bus, airplane, or other means, with or without luggage, and can be one way or round trip.



Figure 5.1 air transport

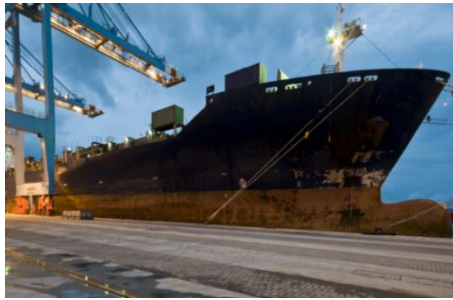


Figure 5.2 water transport



Figure 5.3 bus travel.

Travel can also include relatively short stays between successive movements.

5.2 Tourism

What is tourism?

Tourism is travel for pleasure or business; also the theory and practice of touring, the business of attracting, accommodating, and entertaining tourists, and the business of operating tours.

5.3 Tourist attractions of a country

Activity 5.2

In groups discuss

1. What do you understand by the term tourist attraction?
2. Outline the features of possible tourist attractions in South Sudan.

Field trip

If possible visit a nearby place of interest in your area for example the river, park or a mountain and observe and discuss the features, which can be improved to make the place a tourist attraction.

A tourist attraction is a place of interest where tourists visit, typically for its inherent or exhibited natural or cultural value, historical significance, natural or built beauty, offering leisure, adventure and amusement.

These may include:

- a. National park.
- b. Game Reserve.
- c. National museum.
- d. Beaches.
- e. Island resorts.
- f. Mountains and hills.



Figure 5.4 flamingos in Lake Nakuru, Kenya.

Tourism may be international, or within the traveler's country. The World Tourism Organization defines tourism more generally, in terms which go beyond the common perception of tourism as being limited to holiday activity only , as people "traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes".

Tourism can be domestic or international, and international tourism has both incoming and outgoing implications on a country's balance of payments.

5.4 Global Trade in Travel and Tourism

Today, tourism is a major source of income for many countries, and affects the economy of both the source and host countries, in some cases being of vital importance.

The travel and tourism industry is one of the world's largest industries with a global economic contribution (direct, indirect and induced) of over 7.6 trillion U.S. dollars in 2016. The direct economic impact of the industry, including accommodation, transportation, entertainment and attractions, was approximately 2.3 trillion U.S. dollars that year.

A number of countries, such as France and the United States, are consistently popular tourism destinations, but other, less well-known countries are quickly emerging in order to reap the economic benefits of the industry.

5.5 Countries that benefit from Tourism and Travel

Tourism is one of the most exciting and progressive industries and it is also one of the largest industries in the world. The tourism business has a larger output than other industries, such as Agriculture, Communication Service.

Despite continuing economic problems worldwide, the tourism industry is going strong. Developing countries are becoming popular destinations. Tourism products must be sustainable and generate work for locals in order to serve inclusive development.

According to the latest annual report by the World Travel & Tourism Council, tourism's contribution to global gross domestic products grew by 3.2 % in 2012.

This was higher than the entire world economy's rate of growth. Especially in developing countries, which include: Latin America, Asia, and sub-Saharan Africa were among the fastest evolving destination markets, as the World Travel & Tourism Council reports.

According to World Economic forums Travel and Tourism competitiveness report the following countries have been ranked to be the beneficiaries of travel and tourism.

- a) South Africa
- b) Seychelles
- c) Mauritius
- d) Namibia
- e) Kenya
- f) Cape Verde
- g) Botswana
- h) Tanzania
- i) Rwanda

j) Zambia

5.6 Economic Importance of travel and tourism

Sources of foreign exchange earnings

Tourism industry is the main influential type of industry in the world. Nepal has also taken tourism industry as its major sector of income in the fiscal year 2009/11.

Employment Opportunities

Tourism industry is also one of the influential sectors. It generates employment opportunities. It provides employment to unskilled, semi-skilled and skilled manpower. Guide, load man etc. are the personal or labour required in Tourism industry.

Sources of public as well as private income

Tourism industry is the source of income for both public also well as private sector government charges tax, sales tax, service tax etc.

Which is known as government revenue is the income of public. And handicraft, arts etc. are the things that attract tourist and most of them buy them and the seller makes some profit which is called private income.

Cultural Exchange

Tourism industry facilitates cultural exchange tourist carry over various cultural concepts of other countries where they visit. Local people can learn their language, art, skill, culture etc. and vice versa.

Publicity of nation

Nepal is a small country, difficult to be located in the world map. Tourism helps to publicize the country in different parts of the world. It helps to publicize Nepalese art, skills tradition, cultural beauty and hospitality to the world.

5.7 Advantages and Disadvantages of a tourist industry

Activity 5.3

In groups

In the paragraph below, read and sort out the advantages and disadvantages of a tourist industry.

It brings in money this is probably the main advantage of tourism and the reason why it has been promoted so much in recent years in developing countries especially.

The commercialization of culture can undermine the soul of a tourist destination. Local traditions that have a rich cultural heritage are reduced to wearing costumes and putting on acts for the tourists in return for money.

Money can end up being directed to tourist areas when it could be used more effectively elsewhere in a country. The locals who don't live in specific tourist areas miss out and suffer relative decline.

It can provide economic incentives for a place to preserve, regenerate, and provide upkeep in their urban and wildlife areas.

It raises the profile of the place generally. Tourism gives the locality a chance to show itself off and raise its profile in the world.

It provides jobs for the locals. Hotels, bars, transport, shops, and restaurants all need staffing. Tourism can provide much-needed employment for people.

Tourists can often lack respect for local traditions and culture, not following local dress standards, getting drunk in public or behaving rudely or inappropriately towards locals.

Activity 5.4

In groups

1. Discuss and outline a tourism possible development plan for South Sudan.
2. State areas that the South Sudan government should improve on to sustain tourism.

5.8 Ways in which a country can develop its tourist industry

1. Building great roads, railway networks and airports.

Good road infrastructure is vitally important for the dispersal of tourists beyond major gateways if we want to continue to grow tourism. For foreign and domestic tourists alike, a bumpy ride with potholes, a punctured tire and aching back only to reach a game park is no good.



Figure 5.5 A road in China.

2. Aggressive tourism marketing strategies.

The East African affairs, Commerce and Tourism ministry should pursue aggressive online and other marketing strategies to promote South Sudan as a must-visit location.

Productions in the country. Aggressive marketing is absolutely critical to be seen as well as heard.

3. **Grow domestic tourism**

Domestic tourism offers significant scope for economic growth. The government should adapt measures to generate greater value from domestic travel and tourism in country by promoting affordable and accessible travel and tourism opportunities.

This can be done by unlocking growth points like school based tourism, targeting Co-operatives, sports tourism etc.

4. **Introduce tax measures to stimulate sector**

New hotels across the country are needed to achieve the proposed 75,000 increase in bed capacity.

Specific tax breaks for key international players willing to invest in tourism industry would be necessary if the new investment is to materialize.

This can also include lower rates of corporation tax and preferentially lower rates of VAT.

5.9 Contrasting tourist Destinations

Activity 5.5

In groups

1. Compare and contrast tourist attraction between Kenya and South Sudan and appreciate the diversity of tourist interest.
2. Discuss ways in which countries respond to their own situations to develop their own advantages.

Activity 5.6

1. What do you understand by the term travel?
2. Define:
 - a. Tourism.
 - b. Describe a tourist?
3. Name four types of tourist attraction of a country.
4. State and explain four importance of travel and tourism.
5. State four advantages of a tourist industry.
6. State three disadvantages of a tourist industry.
7. Discuss three ways in which a country can develop its tourist industry.

UNIT 6: FORESTRY USE AND CONSERVATION

Introduction

Read the following quotes

The environment and the economy are really both two sides of the same coin. If we cannot sustain the environment, we cannot sustain ourselves (Wangari Maathai)

The forest is a peculiar organism of unlimited kindness and benevolence that makes no demands for its sustenance and extends generously the products of its life activity; it affords protection to all beings, offering shade even to the axeman who destroys it.”- (Gautama Buddha)

What we are doing to the forests of the world is but a mirror reflection of what we are doing to ourselves and to one another. - (Mahatma Gandhi)

You cannot protect the environment unless you empower people, you inform them, and you help them understand that these resources are their own, that they must protect them (Wangari Maathai)

“A nation that destroys its soils destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people.”

- (Franklin D. Roosevelt)

What do you feel about these quotes? What would you like to say about forest conservation in South Sudan?

6.1 Forestry

What is forestry?

Forestry is the science and craft of creating, managing, using, conserving, and repairing forests and associated resources to meet desired goals, needs, and values for human and environment benefits.

Activity 6.1

Group discussion

1. Is there a forest around where you live?
2. Which state in south Sudan has a lot of forest cover?
3. What is the percentage of forest cover in south Sudan?



Figure 6.1 forest surrounding Mount Kinyeti in south Sudan.

6.2 Types of Forests

There are two major types of Forests:

Natural Forests
Man-made forest

Natural Forests: these are forest that grows naturally on their own.

Man-made: these are forests that are planted by human beings.

Natural forests divided into three types that are classified according to latitude, they include the following:

1. Tropical
2. Temperate
3. Boreal forests

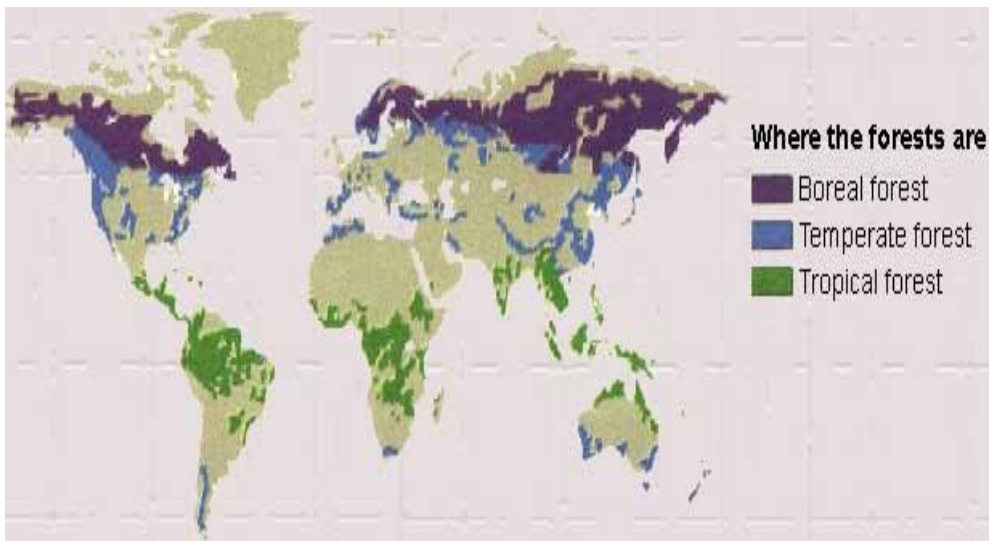


Figure 6.2 locations of types forests around the world.

Most of the forests occupy approximately one-third of Earth's land area, account for over two-thirds of the leaf area of land plants, and contain about 70% of carbon present in living things.

They have been held in reverence in folklore and worshipped in ancient religions.

However, forests are becoming major casualties of civilization as human populations have increased over the past several thousand years, bringing deforestation, pollution, and industrial usage problems to this important biome.

1. Tropical Forests

Tropical forests are characterized by the greatest diversity of species.

Diversity means a mixture of different things.

They grow near the equator, within the area bounded by latitudes 23.5 degrees north and 23.5 degrees south. One of the major characteristics of tropical forests is their distinct seasonality winter is absent, and only two seasons are present (rainy and dry).

The length of daylight is 12 hours and varies little.



Figure 6.3 The Amazon Tropical forest, South America

Characteristics of tropical forests

- Temperature is on average 20-25° C and varies little throughout the year: the average temperatures of the three warmest and three coldest months do not differ by more than 5 degrees.
- Precipitation is evenly distributed throughout the year, with annual rainfall exceeding 200 cm.
- Soil is nutrient-poor and acidic. Decomposition is rapid and soils are subject to heavy leaching.

- Canopy in tropical forests is multilayered and continuous, allowing little light penetration.
- Flora is highly diverse: one square kilometer may contain as many as 100 different tree species. Trees are 25-35 m tall, with buttressed trunks and shallow roots, mostly evergreen, with large dark green leaves. Plants such as orchids, bromeliads, vines (lianas), ferns, mosses, and palms are present in tropical forests.
- The Fauna include numerous birds, bats, small mammals, and insects.

More subdivisions of this group are determined by seasonal distribution of rainfall:

Evergreen rainforest- no dry season.

Seasonal rainforest- short dry period in a very wet tropical region **the forest exhibits definite seasonal changes as trees undergo developmental changes simultaneously, but the general character of vegetation remains the same as in evergreen rainforests.**

Semi evergreen forest- longer dry season (the upper tree story consists of deciduous trees, while the lower story is still evergreen).

Moist/dry deciduous forest /monsoon- the length of the dry season increases further as rainfall decreases (all trees are deciduous).

Progress check



Discuss and present an info graphic to describe the characteristics of tropical forests.

2. Temperate forest

Temperate forests occur in eastern North America, northeastern Asia, and western and central Europe. Well defined seasons with a recognized winter characterize

this forest biome. Moderate climate and a growing season of 140-200 days during 4-6 frost-free months distinguish temperate forests.



Figure 6.3 Temperate forest.

Characteristics of Temperate forest

- Temperature varies from -50°C to 100°C .
- Precipitation (75-150 cm) is distributed evenly throughout the year.
- The soil is fertile, enriched with decaying litter.
- The canopy is moderately dense and allows light to penetrate, resulting in well-developed and richly diversified understory vegetation and stratification of animals.
- The flora is characterized by 3-4 tree species per square kilometer. Trees are distinguished by broad leaves that are lost annually and include such species as oak, hickory, beech, hemlock, maple, basswood, cottonwood, elm, willow, and spring-flowering herbs.

- Fauna is represented by squirrels, rabbits, skunks, birds, deer, mountain lion, bobcat, timber wolf, fox, and black bear.

Further subdivisions of this group are determined by seasonal distribution of rainfall:

Moist conifer and evergreen broad-leaved forests

Wet winters and dry summers (rainfall is concentrated in the winter months and winters are relatively mild).

Dry conifer forests

Dominate higher elevation zones; low precipitation.

Mediterranean forests- precipitation is concentrated in winter, less than 100 cm per year.

Temperate coniferous

Mild winters, high annual precipitation (greater than 200 cm).

Temperate broad

Leaved rainforests: mild, frost-free winters, high precipitation (more than 150 cm) evenly distributed throughout the year.

3. Boreal forests (Taiga)

Boreal forests, or taiga, represent the largest terrestrial biome. Occurring between 50 and 60 degrees north latitudes, boreal forests can be found in the broad belt of Eurasia and North America: two-thirds in Siberia with the rest in Scandinavia, Alaska, and Canada.

Seasons are divided into short, moist, and moderately warm summers and long, cold, and dry winters. The length of the growing season in boreal forests is 130 days.



Figure 6.4 Boreal forests.

Characteristics of Boreal forests

- The temperatures are very low.
- Precipitation is primarily in the form of snow, 40-100 cm annually.
- The soil is thin thus it has poor nutrient and acidic.
- There understory limitation because of low light penetration by the canopy.
- Flora consist mostly of cold-tolerant evergreen conifers with needle-like leaves, such as pine, fir, and spruce.
- Fauna include woodpeckers, hawks, moose, bear, weasel, lynx, fox, wolf, deer, hares, chipmunks, shrews, and bats.

Activity 6.2

What do you understand by the term forestry?

1. Name three types of forests.



2. In groups discuss the type of the forest in the picture above.
3. Where are you likely to find the above type of forest?
4. Which are the characteristics of the type of the forest?

Other types of forest include:

Mediterranean forests

They are located at the south of the temperate regions around the coasts of the Mediterranean, California, Chile and Western Australia. The growing season is short and almost all trees are evergreen, but mixed with hardwood and softwood.

Coniferous forests

These types of forests are located in the cold, windy regions around the poles. They come in both hardwoods and conifers.

The hardwoods are deciduous meaning that they shed their leaves during fall. The conifers are evergreen and structurally adapted to withstand the long drought-like conditions of the long winters.

Montane forests

Also known as cloud forests because they receive most of their precipitation from the mist or fog that comes up from the lowlands.

Characteristics

They are usually found in high-elevation tropical, subtropical and temperate zones. Plants and animals in these forests are adapted to withstanding the cold, wet conditions and intense sunlight. Majority of trees found in these forests are mainly conifers.

Mangroves.

The term mangrove came from Spanish and is considered to have originated from Guarani.

Characteristics

Their main characteristics feature is the different species of mangrove trees which are usually found along the coast of salt water.

They are found between latitudes 25 N and 25. They occur in the tropical regions worldwide.



Figure 6.5 Mangrove forest.

Activity 6.3

Choose four types of Natural forests and design a poster which celebrates their features.

Man-made forest

Planted Forests

Planted forests are a type of managed forest in which the trees are planted as opposed to naturally regenerated.

In planted forests trees are of the same age, same species, and are intended to maximize the production of wood fiber.

Trees in a plantation forest are usually planted uniformly in rows to maximize the site's growing space and resources, to ensure uniform growth, and to facilitate the use of mechanized harvesting equipment.

Plantation forests help to meet the demand for wood in the world, thus reducing any pressure on natural forests.



Figure 6.6 a planted forest.

6.3 Effects of forests on climate and underlying geology

Being different from weather, climate refers to mean atmospheric conditions i.e. Temperature, humidity, wind, precipitation, etc. over multiple years. Forests influence climate through exchanges of energy, water, carbon dioxide, and other chemical species with the atmosphere.

Forests are distinctly different from other land surfaces in physical properties both above ground and below ground in terms of the ability of light absorption and reflectance, leaf and root biomass, surface roughness, and soil characteristics.

These properties have profound influences on the energy and water balances from the ecosystem to global scale.

Forests can hence affect micro-climate by altering solar radiation and precipitation redistribution through large forest canopies.



Figure 6.7 a cleared forest.

6.4 Trade in forestry products

Forests provide a wide range of economic and social benefits to humankind. These include contributions to the overall economy for example through employment, processing and trade of forest products and energy and investments in the forest sector.

They also include the hosting and protection of sites and landscapes of high cultural, spiritual or recreational value.

Economic benefits are usually measured in monetary terms and may include:

- Income from employment in the sector;
- The value of the production of goods and services from forests;
- The contribution of forestry as a sector to the national economy, energy supplies and international trade.

In addition, the economic viability or sustainability of the forestry sector can be assessed by measures such as the profitability of forest enterprises or the level of investment.

Progress check

Compare Man-made and natural forests. Identify their characteristics

6.5 Uses of forests

Activity 6.3

In groups,

1. Discuss the importance and uses of forests.
2. Which of these uses are common in South Sudan?
3. Explore if possible, changes in forestry and the use of forests.

People began life on this planet as forest dwellers.

They were food gatherers and depended on the forest for all their needs which included food, clothing, and shelter, today people depend on the forest for paper, timber, fuelwood, medicine, and fodder among many other uses.

Fuel wood

For the rural population, wood is an important source of energy for cooking and heating. They prefer smaller stems as these are easier to collect and carry.

The wood that they select should be easy to split and have low moisture content to dry faster. Some of the wood is converted to charcoal and used for cooking.



Figure 6.8 charcoal in sacks and firewood.

Fodder

Fodder from the forest forms an important source for cattle and other grazing animals in the hilly and the arid regions and during a drought.

There are many varieties of grasses, trees, and shrubs that are nutritious for the livestock.

Care is taken to see that trees poisonous to cattle are not grown. Trees that produce a large crown above the reach of cattle are preferred.



Figure 6.9 fodder.

Fencing

Fences created with trees and shrubs are preferred in developing countries as they are cheap to maintain yet give protection.

Species that have thorns or are prickly and have stiff branches and leaves that are not edible are preferred. These species should be fast growing, hardy, and long lived.

Wind breaks and shelter belts

They are generally established to protect or shelter nearby areas from strong winds.

Such trees are used to reduce wind erosion, protect growing plants and improve irrigation efficiency.

Windbreaks also protect structures and livestock, provide wildlife habitat, improve aesthetics, and provide tree or shrub products.

Windbreaks also control views and lessen noise. Trees grown for wind breaks should be bushy and sturdy to withstand strong winds, both hot and cold.



Figure 6.10 windbreaks.

Soil erosion check

Trees roots, leaves and canopy keep the soil in place, cover it with a protective layer of mulch, soften the impact of rain and reduce run off by water.

It also keeps the soil from heating up and drying out. Leaf fall also provides a soil cover that further protects the soil.

6.6 Forest products and their uses

Timber

Different species of trees are commercially exploited for timber in different parts of the world. It is used in timber-based industries such as plywood; saw milling, paper and pulp, and particle boards.

Bamboo

The main commercial uses of bamboo are as timber substitutes, fodder, and raw material for basket, paper and pulp, and other small-scale industries.

Cane

Cane or rattan are the stems of a climber plant and are used for a large number of household items. It is used to make walking sticks, polo sticks, baskets, picture frames, screens, and mats.

Fruit

Fruit trees are an important source of income and food for the rural household. In some areas fruit trees are commonly planted along the field borders. Mango, coconut, orange, pear, jackfruit and many others grow wild in the forest. These fruits are used to supplement food sources for those living around the forest.

Medicinal use

since time immemorial humans have been depending on the forest to cure them of various ailments.

Even today man is dependent on the forest for herbs and plants to fight against disease. Some of the medicinal plants found in the forest include the, neem. Leaves, bark, and other parts of many other trees also have medicinal value and are used to make various medicines.

Fiber

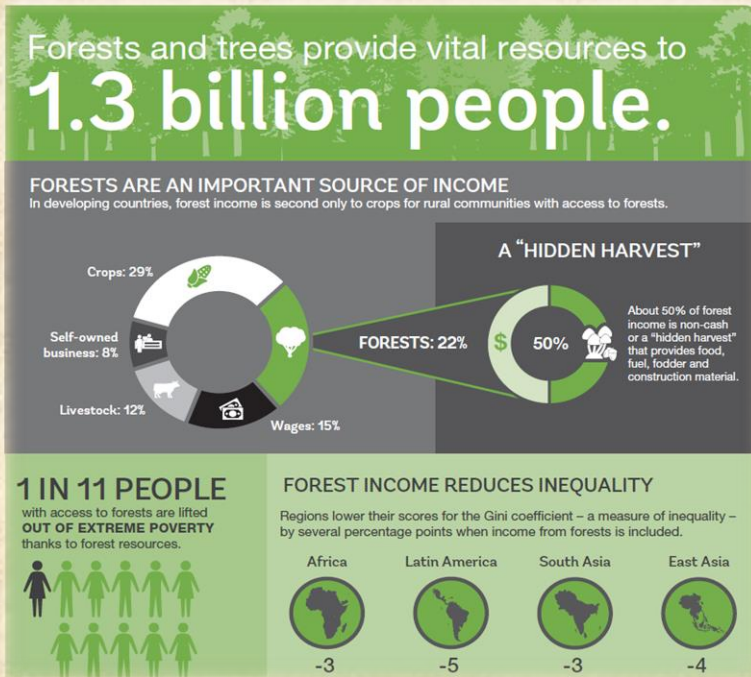
Plant fiber has many different uses. Soft fibres are derived from the stems of the plant. Hard fibre from the leaves of hemp and sisal are used to make fabrics for various applications. Coir, another form of fiber from the fruit of the coconut, is used to make ropes.

Essential oils

Tropical grasses such as lemon grass, citronella, and khus are the source of essential oils. Oil is distilled from the wood of various species such as sandalwood, agar, and pine. Oil is also derived from the leaves of certain plants and trees such

as eucalyptus, camphor, wintergreen, and pine. These oils are used for making soaps, cosmetics and pharmaceuticals.

Activity 6.4



What does this tell you about the importance of forests? Design 3 questions and ask your classmate to check the understanding of this analysis.

6.7 Sustainable use of forests

Sustainable forest management means using and caring for forests in ways that meet daily needs while protecting the forests for the future. It seeks to address forest degradation and deforestation while increasing direct benefits to people and the environment.

At the social level, sustainable forest management contributes to livelihoods, income generation and employment. At the environmental level, it contributes to

important services such as carbon sequestration and water, soil and biodiversity conservation.

Possible strategies to use the forests sustainably include:

- **Agroforestry** - Agroforestry is the growing trees and crops at the same time. This lets farmers take advantage of shelter from the canopy of trees. It prevents soil erosion and the crops benefit from the nutrients from the dead organic matter.



Figure 6.11 agroforestry.

- **Selective logging** - This is the practice of removing one or two trees and leaving the rest intact, trees are cut when they reach a particular height.

This allows young trees a guaranteed life span and the forest will regain full maturity after around 30-50 years.



Figure 6.12 selective logging

- **Education** - Education plays a big role in ensuring those involved in exploitation and management of the forest understand the consequences behind their actions.
- **Afforestation** -This is the planting of trees where they have been cut down this is to maintain the canopy.



Figure 6.12 afforestation.

- **Forest reserves** -a forest reserve is an area of the forest that is set aside by the government as national park, Game Park or the like of origin of forest reserve.

Imatong forest reserve is among South Sudan's forest reserve that provide a proper habitat for wild animals like monkeys, elephants and river hogs.

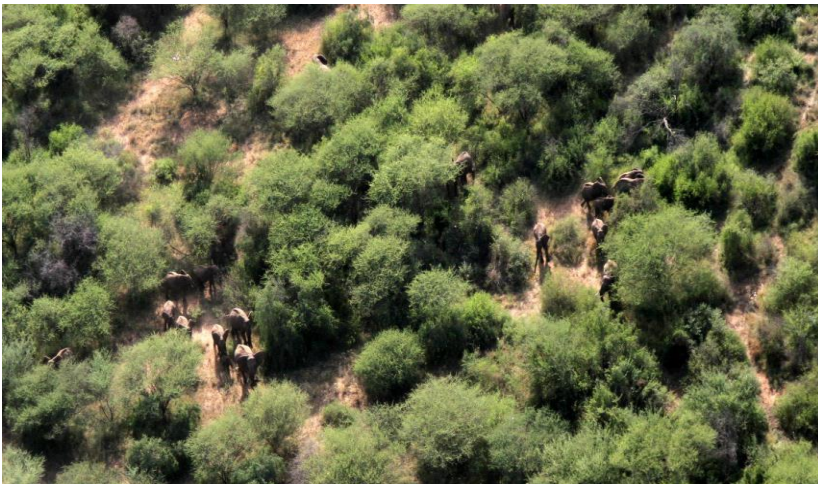


Figure 6.13 a forest reserve in South Sudan

Monitoring – This is the use of satellite technology and photography to check that any activities taking place are legal and follow guidelines for sustainability.

6.8 Forest Sustainability in British Columbia

British Columbia is the western-most province of Canada, bordering on the Pacific Ocean.

About one-half of British Columbia is covered in forest, and about one-half of this, or one-quarter of the entire province, is considered available and suitable for timber harvesting.

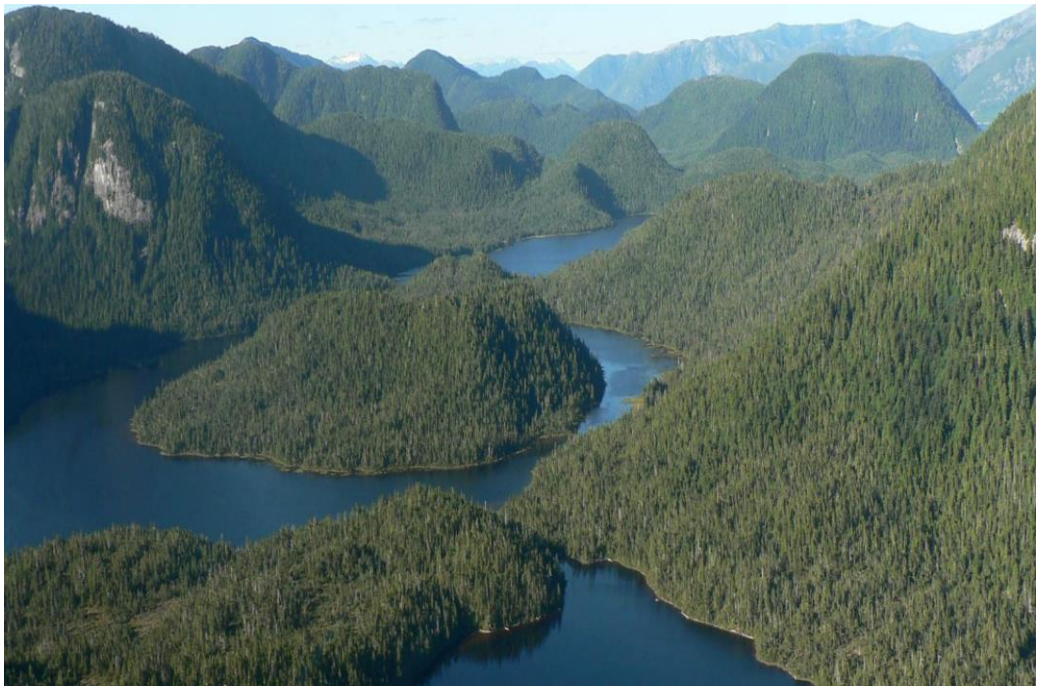


Figure 6.14 a sustainable wood forest in British Columbia.

British Columbia is an international leader in sustainable forest management.

About 95% of forests in British Columbia are publicly owned and priorities for these lands are developed through community based strategic and resource management planning.

In British Columbia the chief forester is required by law at least every 10 years to determine how much wood can be harvested from each of the province.

This is based on detailed technical analysis, public participation and consideration of forest values such as wildlife and fish habitat, soils, water and recreational opportunities.

The timber supply review is the foundation of British Columbia's sustainable forest management, considering ecological values while allowing long term economic benefits for communities.

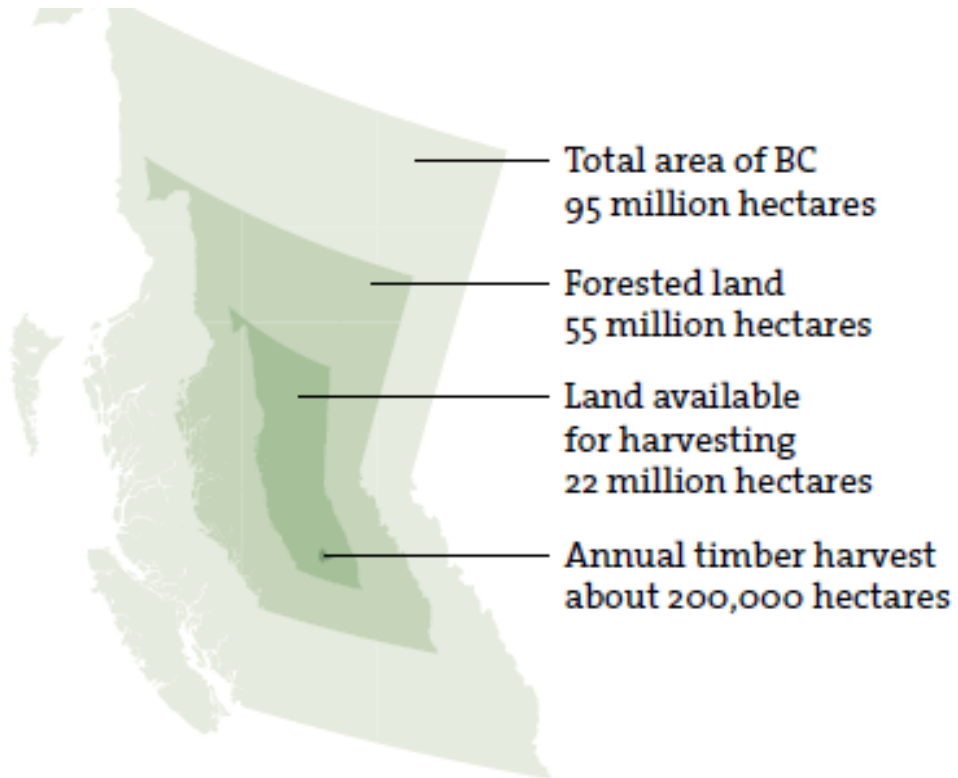


Figure 6.15 forest distributions in British Columbia.

There is also a requirement for silviculture prescription to be prepared before harvesting.

This prescription lays out the silviculture system and harvesting method to be used. It also provides a detailed plan for restocking to achieve a free growing stand 10 to 15 years after harvest.

6.9 Sustainable use of forest in Gabon

Gabon is one of the smallest and least populous countries in Africa, but retains a large area of African rain forest. According to FAO (Food and Agriculture Organization) 2010, it is estimated that approximately 85% of Gabon forests remain and the deforestation rate is around 0.1 %annually. Forestry remains one of the pillars of Gabon's economic and social development.

Although Gabon's human population density is genuinely low, it is considered that about 25% of Gabon's populations live in rural areas and depend on forest goods for sustaining their needs, which include timber and non-timber forest products such as bush meat.

The government has introduced a system to institutionalize community forestry as a way of meeting local needs for timber and other forest products. This has helped have a healthy and sustainable forest industry in Gabon.

All forest concession holders in Gabon must prepare a forest management plan spanning 30 years, which divides and subdivides the concession into smaller annual harvesting lots.

Activity 6.5

In groups, using a maps apply the knowledge you have acquired on forestry to help develop forestry in south Sudan by developing a plan for sustainable development along with tourist use and habitats for humans and animals. Refer to either Kergulu, upper Talanga, maban or loka teak plantation. Each group to present their plans to the class.

Activity 6.6

- 1) Define the following terms.
 - i) Forest.
 - ii) Forestry.
- 2) Name three types of natural forests?
- 3) What are the causes of deforestation?
- 4) Outline the benefits of forest in south Sudan?
- 5) What are the negative impacts of deforestation?
- 6) Identify and explain problems facing forestry in south Sudan.
- 7) Define the following terms.
 - a) Agroforestry.
 - b) Monitoring.
 - c) Forest reserves.
 - d) Selective logging.
 - e) Afforestation.
- 8) Discuss the factors influencing distribution of natural forests.
- 9) Discuss the significance of forest products in south Sudan.
- 10) Outline how forests can be managed sustainably.

UNIT 7: SOUTH EAST ASIA

7.1 Introduction to South East Asia

Southeast Asia or **Southeastern Asia** is a sub region of Asia, consisting of the countries that are geographically south of China, east of India, west of New Guinea and north of Australia.

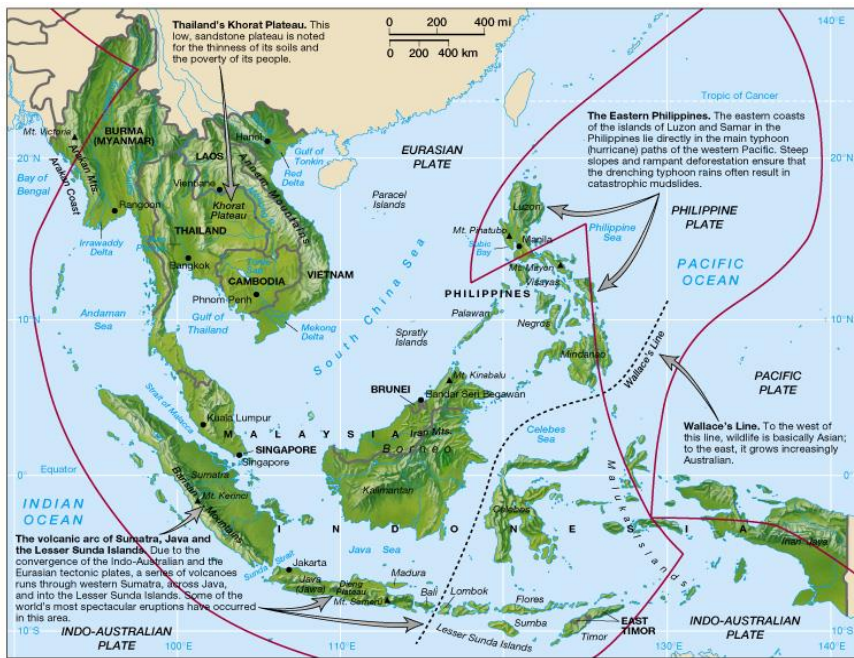


Figure 7.1 a map of south East Asia

Southeast Asia is bordered to the north by East Asia, to the west by South Asia and Bay of Bengal, to the east by Oceania and Pacific Ocean, and to the south by Australia and Indian Ocean.

7.2 Southeast Asia countries in the mainland Region

Mainly, Southeast Asia consists of two geographic regions namely:

- Mainland Southeast Asia
- Maritime Southeast Asia

Mainland Southeast Asia

Mainland Southeast Asia is also historically known as Indochina. It comprises of the following countries:

- Vietnam
- Laos
- Thailand
- Myanmar
- West Malaysia
- Cambodia



Figure 7.2 map of mainland Southeast Asia countries.

Maritime Southeast Asia

Maritime Southeast Asia is also historically known as the East Indies and Malay Archipelago, it comprises of the following countries:

- East Malaysia
- Singapore
- Indonesia
- Philippines
- East Timor
- Brunei
- Christmas Island
- Andaman
- Nicobar Island
- Cocos Islands



Figure 7.2 a map of maritime Southeast Asia

7.3 Importance of south East Asia

Asia is the most important region of our world for achieving global well-being. One reason is simply the region we call Asia is where most of us live. That has implications for both consumption and creativity.

The Asia-Pacific region requires about 40% of the world's bio-productive capacity. China being the second greatest consumer in the world, by using up 15% of the world's total bio-capacity. China currently needs an equivalent land area of two China's to meet its needs and absorb its waste.

If it were to follow USA's example, where the pro capita requirement is equivalent to 10 hectares, it would require the world's entire bio-capacity. Decisions made today about infrastructure and other aspects of economic development will determine the environmental demands and impacts of societies in Asia for decades to come.

7.4 South East Asia population

South East Asia is one of the highly populated part of the world.

A lot of underlying factors contribute to Asia's status as being the most populated.



Figure 7.2 south East Asia

Being so intrinsically tied in with the human geographical environment and social studies; it's really very hard to pin-point the main reasons.

The following are merely generic, logical answers that come to mind.

- Being the largest continent, the approximate ratio of people living here should hence be larger (directly proportionate, without considering social factors)
- The demography in Asia has, for the past 2 centuries or so, been one of an agricultural and not industrial type. Hence, the more children one has, the more helpers on the family farm.
- Certain cultures value the male gender more. Thus, they'd rather keep trying to conceive for a male despite the odds.
- Lack of family planning, education on contraceptives.....self-explanatory.

Sub-region and country	Population				Growth 2005-2050 (%)	
	1990	2005	2025	2050	Total	Mean annual
East Asia	1,343,912	1,522,472	1,653,595	1,591,242	+4.5	+0.2
Southeast Asia	440,574	557,669	686,251	766,611	+37.5	+1.3
East and Southeast Asia	1,784,486	2,080,141	2,339,846	2,357,853	+13.4	+0.3
o/w:						
China	1,149,069	1,312,979	1,445,782	1,408,846	+7.3	+0.3
Japan	123,537	127,897	121,614	102,511	-19.8	-0.9
Indonesia	182,847	226,063	271,227	296,885	+31.3	+1.1
as percentage of East Asian population						
China	85.5	86.2	87.4	88.5		
Japan	9.2	8.4	7.4	6.4		
as % of Southeast Asian population						
Indonesia	41.5	40.5	39.5	38.7		
<i>Source:</i> Appendix Table A.2.						

From the table above discuss factors that have led to increased population in South East Asia.

7.5 Factors enhancing South East Asia economic development

Labour supply

There is a plenty supply of workers in South East Asia with a steady stream of rural-urban migrants in search of work.

Which is due to the mechanization of agriculture leading to unemployment and under-employment in rural areas and concurrent growth in industrial work in urban areas.

Wages and unemployment

The rate of unemployment has fallen in recent years to just over 4%, but high rates in the past drove down wages.

This has increased profit margins and attracted inward Foreign Direct Investments American, European and Japanese companies open factories under license in China.

Strong leadership

Politicians from china are said to feel a greater responsibility to the nation than to themselves.

Strong leadership from the head of state has been a major factor contributing to economic success.

Free market economics

China first began moving away from a centrally planned economy towards a market-oriented system in 1978. Deng Xiaoping was Mao's successor and he sought to bring an end to China's relative economic Isolation.

Investment in infrastructure

The government has built many new roads, improved the rail system and made China's major rivers navigable all year round.

Education

Literacy levels of China have risen dramatically over the past 20 years and now stand at 95%. This has underpinned the economic development of the country.

7.6 Main Products from South East Asia

The country's main products include:

Oil and gas,

Asia accounted for more than 9.2% of the world's oil production in 2014. The region was led by China and India, the world's fourth and 20th biggest oil-producing nations, respectively.

In recent years, Asia's share of world oil production has been on a slow but regular decline. This is primarily a consequence of flat regional oil production during a period of rising overall global output.



Figure 7.3 an oil and gas company in South East Asia.

Electrical appliances

Rising affluence and consumer sophistication in developing Southeast Asia is contributing to the positive sales trends of the major domestic appliances sector like air conditioners, washing machines and refrigerators, in this region.



Figure 7.4 domestic appliances an air conditioner, washing machine and a refrigerator.

Plywood

Southeast Asia has extensive tropical hardwood resources and wood processing industries, and is a major supplier of hardwood logs and woodchips to Asian markets.

It is also a primary supplier of pulp, mainly to China, and plywood and furniture to global markets.



Figure 7.5 a plywood.

Rubber

China is the world's largest consumer of natural rubber followed by India and the United States. Increasing consumption of tyres and industrial rubber products is expected to boost the global demand for natural rubbers. Indonesia is the second largest rubber producer globally behind Thailand.

While the industry is faced with challenges such as low production and poor infrastructure, growing rubber demand from developing economies is expected to boost the market in 2015.



Figure 7.6 rubber trees and tyres made from rubber

Textiles

Indonesia's top export to the United States is apparel and household goods made from cotton, followed by rubber and non-wool or cotton apparel and textiles.



Figure 7.7 textile products.

7.7 Position of the South East Asia

The southeast region of the entire Asian continent is known as Southeast Asia. It is an exceptional part of the continent. Most of the areas are bounded by the sea.

The weather condition, environment and boundary of **Southeast Asia map** is surely of great importance. Here, we are about to discuss only the **geographical features** of this zone.



Figure 7.8 a map of South East Asia.

Activity 7.1

In groups

Indicate and describe South East Asia countries. How does their position geographically influence trade and well-being?

Activity 7.2

In groups

Discuss

1. Discuss four significant Products from South East Asia.
2. State four factors that have contributed to the population growth of Southeast Asia.
3. Discuss Factors enhancing South East Asia economic development.
4. Design either
 - a. Travel brochure for one country in South East Asia.
 - b. A job advert for a manager's role in one South East Asia country that entices applicants to this country.

UNIT 8: RURAL ECONOMY IN AFRICA

Introduction

8.1 Rural economy in Africa

The rural economy in Africa holds significant potential for creating decent and productive jobs and contributing to sustainable development and economic growth. It accounts for a significant share of employment and output in many developing countries but is widely characterized by severe decent work deficits and poverty, hosting nearly 80 per cent of the world's poor.

8.2 Land tenure

What is land tenure?

Land tenure is the relationship, whether legally or customarily defined, among people, as individuals or groups, with respect to land.

The Rules of tenure define how property rights to land are to be allocated within societies.

They also define how access is granted to rights to use, control, and transfer land, as well as associated responsibilities and restraints.

In simple terms, land tenure systems determine who can use what resources for how long, and under what conditions.

8.3 Land tenure intersecting interests

These include:

- Overriding interests.
- Overlapping interests.
- Complementary interests.
- Competing interests.

Land tenure is often categorized as:

- i. **Private:** this is when there is assignment of rights to a private party who may be an individual, a married couple, a group of people, or a corporate body such as a commercial entity or non-profit organization.
- ii. **Communal:** a right of commons may exist within a community where each member has a right to use independently the holdings of the community.
- iii. **Open access:** specific rights are not assigned to anyone and no-one can be excluded. This typically includes marine tenure where access to the high seas is generally open to anyone.
- iv. **State:** property rights are assigned to some authority in the public sector. For example, in some countries, forest lands may fall under the mandate of the state, whether at a central or decentralized level of government.

Activity 8.1

1. Define land tenure.
2. In groups discuss the categories of land tenure and share it with the class.

8.4 Agrarian social structure

What is agrarian social structure?

Agrarian social structure refers to the political movement in favour of change in conditions of propriety in land.

Activity 8.2

In groups

Discuss factors that sustain rural economy.

8.5 Agro-ecological knowledge

This is the knowledge applied to agricultural production systems.

Many farmers in rural areas do not have the most up-to-date information on how to grow food and keep animals efficiently and economically.

Improving their knowledge of new techniques and technologies, in addition to providing them with any physical resources necessary for implementation, can dramatically increase the farmers' level of productivity.

8.6 Importance of Agro-ecological knowledge for effective participation in rural economy.

The following are the importance of Agro-ecological knowledge.

- a. Helps in attaining a healthy and dynamic agricultural sector foundation of rural development by generating strong linkages to other economic sectors.
- b. Promotes the development of rural organizations such as community-driven cooperatives to enhance investment in essential infrastructure and services, and recognize the role of urban areas in fostering rural development.
- c. Develops many sustainable ways to add value to agricultural products locally, sub regionally and regionally to generate additional income.
- d. They learn how to expand access to markets by assisting rural producers, associations and firms, especially those from developing countries, to respond to market demand.

Activity 8.3

In groups

Discuss four importance of agro-ecological knowledge of the rural farmers.

8.7 Important roles played by women in rural economy

Women are the strongholds of the development of rural and national economies. They comprise 43% of the world's agricultural labor force, which rises to 70% in some countries.

Women's participation in agriculture is a topic of major concern in most developing countries of the world. While it is true that traditionally women are

mainly responsible for tasks around the home, there is enough evidence to support the fact that women also play a very important role in farming which includes:

a. Food production

Current literature provides ample evidence of the assertion that women in Africa play a major role in the small-scale agricultural production of crops for home consumption and for sale purposes.

b. Pre-planting and post planting activities

Women are involved in many pre-planting and post planting activities, such as felling trees, levelling the soil with their hands and applying fertiliser.



Figure 8.1 women watering crops

c. Food processing and marketing

Women produce most of the food that is consumed in African homes. In addition to production, they prepare practically all of the food for the table and they play a major role in the harvesting and storage of the crops that they work so hard to produce.

d. Harvesting and food handling activities

All women carry out almost all the harvesting and food-handling activities, such as winnowing, threshing and carrying produce.



Figure 8.2 a woman winnowing

Activity 8.4

In groups

Discuss and state the important roles played by women in rural economy of South Sudan.

Activity 8.5

1. What do you understand by the term land tenure?
2. State four land tenure intersecting interests.
3. State and explain three land tenure categories.
4. What is an agrarian social structure?
5. What do you understand by the term agro ecological knowledge?
6. Explain four importance of agro ecological knowledge.

Glossary

Physical hazard - a factor within the environment that can harm the body without necessarily touching it. Vibration and noise are examples of physical hazards.

Natural hazard - a Natural phenomenon that might have a negative effect on people or the environment.

Geophysical hazard - a potentially damaging natural event and/or phenomenon, which may cause the loss of life or injury, property damage, social and economic disruption, or environmental degradation.

Hydro-meteorological hazards- A process or phenomenon of atmospheric, hydrological or oceanographic nature that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage they includes tropical cyclones, thunderstorms, hailstorms, tornados, blizzards, heavy snowfall, avalanches, coastal storm surges, floods including flash floods, drought, heat waves and cold spells.

O/W - Of Which

Emigrants- people who move out of their own country to settle in another.

Immigrants - people who have come to a different country in order to live there permanently.

Travel - is the movement of people between relatively distant geographical locations, and can involve travel by foot, bicycle, automobile, train, boat, bus, airplane, or other means, with or without luggage, and can be one way or round trip.

Tourism- is travel for pleasure or business; also the theory and practice of touring, the business of attracting, accommodating, and entertaining tourists, and the business of operating tours.

Urbanization- Urbanization refers to the population shift from rural to urban areas.

MRT- Mass Rapid Transit.

Natural Forests- These are forest that grows naturally on their own.

Man-made- These are forests that are planted by human beings.

References

1. Irene Feige, 2007, Transport trade and economic growth.
2. Mark Mobius 2012, The Little Book of Emerging Markets,
3. Parthasarathi Shome, Pooja Sharma, 2015, Emerging Economies:
4. Subhash C. Jain, 2006, Emerging Economies and the Transformation of International Business, Edward Elgar Publishing Ltd.
5. Todd Sandler, 1997, Global Challenges, Published by the Press Syndicate of the University of Cambridge.
6. Giulio Sapelli, 2015, Global Challenges and the Emerging World Order, Springer International Publishing Switzerland.
7. Eugenie L. Birch and Susan M. Wachter, 2011, Global Urbanization, Published by University of Pennsylvania press.
8. Christopher G. Boone, Michail Fragkias, 2012, Urbanization and Sustainability, Springer International Publishing Switzerland.
9. Richard Sharpley, 2006, Travel and Tourism.
10. Charles R Goelder, Bernard Cohen, 1984, Tourism.
11. Jaboury Ghazoul, 2015, Forests, Published by Oxford University.
12. Arthur Cotterell, 2014, a History of Southeast Asia, Published by Marshall Cavendish Editions.



South Sudan

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