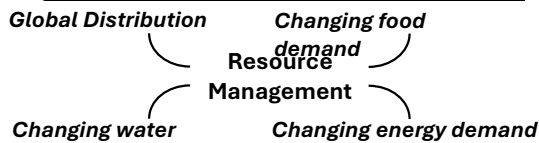


Term 2 Year 9 Geography

Resource Management

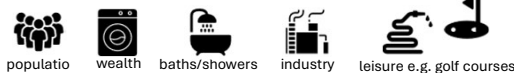
Changing Water Demand in the UK

The Big Picture

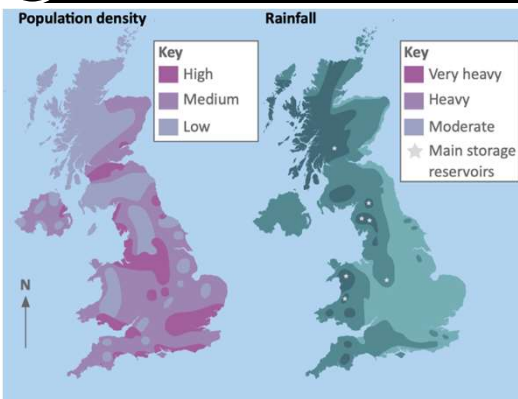


Changing Water Demand

Average household water use in the UK has increased by 75% since 1985. The average person uses 150 litres each day, compared with 47 litres in Africa. The growing demand is due to the increase in:



Water Deficit and



The UK receives enough rainfall to meet its demand for water. However, rainfall is uneven. Annual rainfall is highest in the west, whereas the east of the UK has a lower than average rainfall. 1/3 of the UK's population lives in the southeast, the driest part of the UK. Therefore, the west has a water surplus, whereas the east has a deficit, leading to

Need for Water Transfer

The UK has considered a national water transfer scheme to match supply and demand. However, due to the expense, community displacement and CO2 emissions it has not been put in place.

Key Terms

- Water deficit** – where water demand is greater than supply.
- Water quality** – the chemical, physical, and biological content of
- Water stress** – demand for water exceeds the available amount
- Water surplus** – where water supply is greater than demand.

Small scale water transfer occurs between Kielder reservoir, pumping water into the North Tyne River.

UK Water Quality

The Environment Agency manages water quality in the UK. Despite improvements since the Industrial Revolution only 27 per cent of water is classified as good.

Causes of Water

- Agricultural chemicals e.g. fertiliser
- Warm water from industrial cooling
- Oil from ships and boats
- Untreated waste from industry
- Sewage release

Effects of Water

- Aquatic life killed by pesticides
- Fertilisers cause algae growth, leading to eutrophication (insufficient oxygen in river)
- Wildlife poisoned by toxic waste
- Microbacteria from sewerage spreads disease affecting humans and wildlife

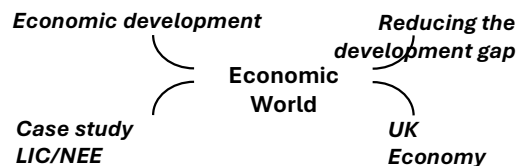
Managing Water Quality

- Strict legislation limits
- Waste water treatment plants remove solids, bacteria, algae and chemicals
- Pollution traps such as reed beds filter pollutants
- Sewers and water mains reduces overflow of current sewers, spills and accidents

Changing Economic World

Measuring Development

The Big Picture



Key Terms

- Development** – The progress of a country as it becomes more developed.
- Gross National Income** – The total national income divided by population.
- High income country** – A country with a GNI of more than \$13,205.
- Low income country** – A country with a GNI of \$1085 or less.
- Newly emerging economy** – A country with a GNI of between \$1086 and \$13,204.

High Income Countries

High income countries (HICs) – Over 80 countries where most people enjoy a good standard of living based on relatively high levels of income. Mostly located in northwest Europe and North America.

Low Income Countries

Low income countries (LICs) – Close to 30 of the world's poorest countries. Inadequate services and few opportunities for the majority of the population. Mostly located in Africa and the Middle East.

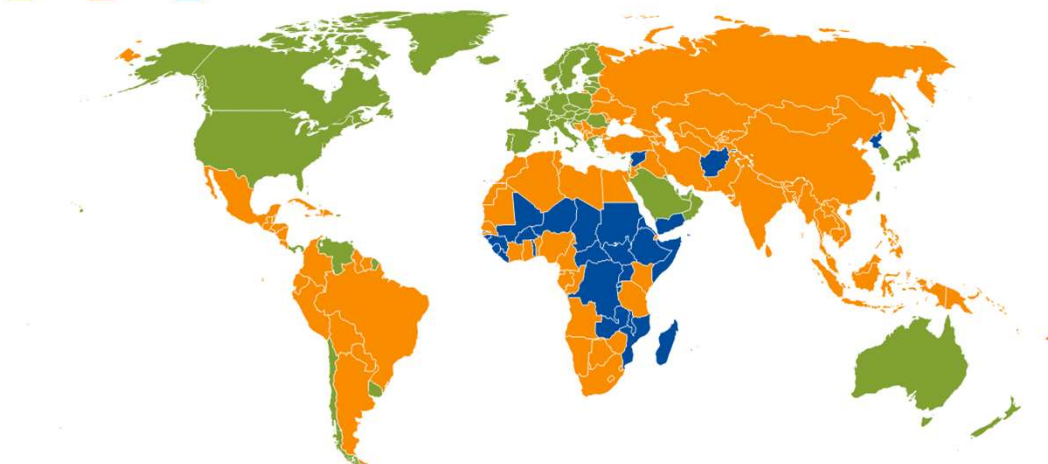
Newly Emerging

Newly emerging economies (NEEs) – Countries such as China, Brazil and India, which are experiencing rapid economic development often based on the development of industry where incomes are rising.

World Development

Classification of countries using World Bank data.

■ HIC ■ NEE ■ LIC



Map: Internet Geography • Source: World Bank • Created with Datawrapper



Changing Economic World



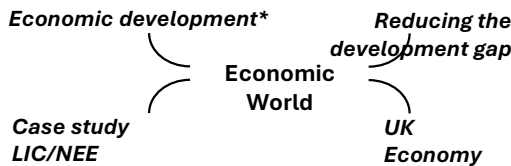
Measures of Development

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The Big Picture



HDI

The human development index was developed by the United Nations and is one of the most commonly used measure of development.

It is a composite measure using GDP data, life expectation and literacy rate.

It is calculated on an index.



Key Terms



Birth rate – Number of births in a year per 1000 of the total population.



Death rate – Number of deaths a year per 1000 of the total population.



Economic measures of development – Development measured using



Human development index – Measure using GDP, life expectancy and literacy.



Infant mortality – Average number of deaths of under ones per 1000 births.



Gross national income – The total national income divided by population.



Life expectancy – The average number of years a person might be expected to



Literacy rate – Percentage of people with basic reading and writing skills.



Social measures of development – Development measured using non-financial means.



Limitations



GNI

Average figures distort wealth inequality.



Death rate

High in LICs due to poverty & in HICs as population



Life expectancy

Can be skewed by high infant mortality.



Birth rate

Birth control policies can distort the data.



Infant mortality

Not all infant deaths recorded in LICs.



HDI

Does not take into consideration inequality.



Examples

Country	GNI	Birth rate	Death Rate	Infant mortality	Life Expectancy	Literacy rate	HDI
UK	45380	10	10	4	81	99%	0.93
Nigeria	2100	37	11	72	55	62%	0.54
Brazil	7720	13	7	13	76	93%	0.77
Mali	870	41	9	59	60	31%	0.43



Changing Economic World

Demographic Transition

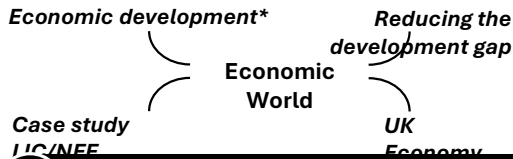


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The Big Picture



The DTM

The Demographic Transition Model attempts to show how population changes as a country develops. It does not take into account migration.



Key Terms



Birth rate – Number of births in a year per 1000 of the total population.



Demographic transition model – Population changes as a country develops.



Death rate – Number of deaths a year per 1000 of the total population.



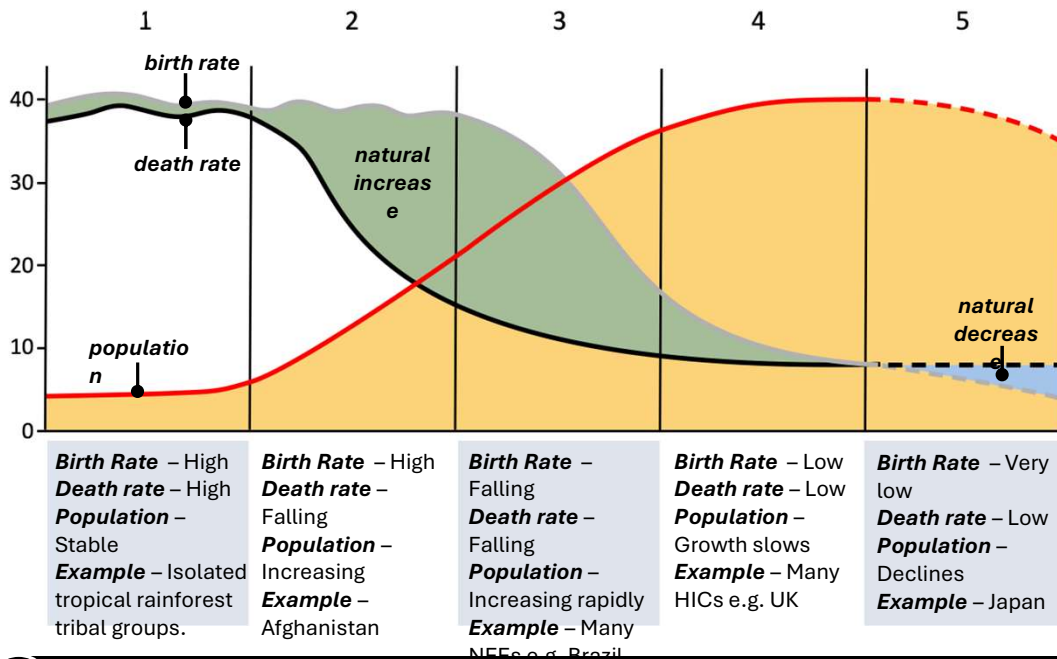
Natural increase – Population growth when birth rates are higher than death rates.



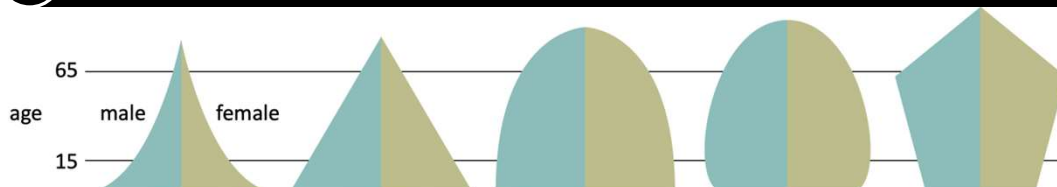
Natural decrease – Population decline when death rates are higher than birth rates.



Characteristics of the Demographic Transition



Population Pyramids and the Demographic Transition



Changing Economic World

Causes of Uneven Development



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The Big Picture



The Development Gap

There are significant variations in levels of development across the world. This is known as the development gap. Both physical and human factors have caused uneven



Physical Causes of Uneven Development

The physical geography of a country or a region can create several challenges for



Weather and climate

Extreme conditions such as heavy rainfall, droughts, extreme temperatures and tropical storms make economic development difficult.



Relief

Mountainous regions, such as Nepal, are often remote and have poor infrastructure which makes development very challenging.



Landlocked countries

Countries without a coastline lack the benefits of sea trade which has led to the economic growth of most developed nations.



Water shortages

Water is essential for life and development. Where there are shortages of water agricultural and industrial development is very challenging.



Economic Causes of Uneven Development

The two main economic factors causing uneven economic development are poverty and



Poverty

Development is slowed by a lack of money in a household, community or country. Improvements to living conditions, sanitation, education and infrastructure is prevented. Without basic investment development will be slow.



Trade

Trade involves the import and export of goods and services. LICs have limited access to trade and trading has often involved exporting low-value raw materials. HICs are more likely to export higher value processed goods. This trading imbalance has made HICs richer.



Historical Causes of Uneven Development

Most HICs have a long history development based on agricultural and industrial growth and international trading. In recent years, rapid industrialisation has supported development in countries such as China and India. Many LICs are yet to experience this economic growth.

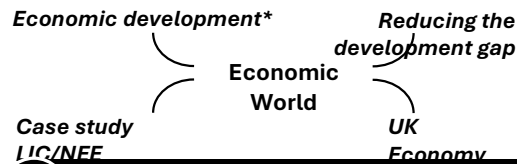
Many LICs were colonised by countries such as the UK, France, Portugal and Spain. These countries exploited natural resources and over 10 million people were transported from Africa to North America and forced into slavery. It was during this colonial era that global development become even more uneven.

Changing Economic World

Consequences of Uneven Development

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The Big Picture



Consequences

Uneven development has led to disparities in wealth and health as well as high levels of international migration.

Key Terms

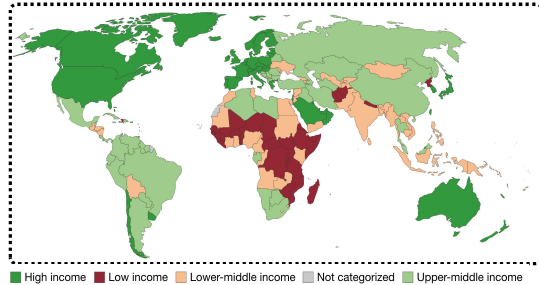
- Chronic diseases** – A disease or condition that lasts for 3+ months and may get worse.
- Disparity** – A significant difference e.g. between two countries.
- International migration** – Crossing international borders to settle.
- Uneven development** – Development takes place at different rates in different regions.

Disparities in Wealth

There is a significant imbalance between the rich and poor with many people in LICs in poverty.

Overview

- The highest levels of wealth are experienced by the most developed countries. Wealth is commonly indicated by the gross national income.
- About 35% of total wealth is held in North America.
- Africa's share of global wealth is around 1%.
- China and India are two of the fastest growing economies.



Disparities in Health

Countries with a low level of development tend to experience poor healthcare.

LICs

Many people in LICs have limited access to doctors, health clinics or hospitals. They experience high infant mortality and low life expectancy. 40% of deaths are in children under 15. In LICs malaria and tuberculosis account for 1/3 of deaths.

HICs

Many people in HICs have good access to medical services. Therefore, life expectancy is longer. 70% of deaths are people aged over 70. 1% of deaths are in children under 15. In HICs, chronic diseases such as cancer, heart disease and dementia are the main causes of deaths.

International Migration

Uneven development leads to unequal flows of people between places. Economic migrants move voluntarily in search of a better life. Refugees are forced to flee disasters or persecution. By mid-2020 280.6 million people were living in countries where they were not born. International migration from poor countries reached its highest in 2015 due to conflict in North Africa and Syria when 14 million people were forced to leave their homes. Considerable migration has occurred within Europe recently due to the war in Ukraine. Skilled migrants are often highly sought after. The UK employs computer engineers from India and doctors from Poland.

Changing Economic World

Reducing the Development Gap



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The Big Picture



Investment

Countries, organisations (e.g. the World Bank) and transnational corporations (TNCs) invest in low-income countries (LICs) to increase profits. Investments lead to improvements in:

- infrastructure (e.g. road networks and airports)
- services (water, sanitation and electricity)
- dams and reservoirs (for hydro-electric power)



Industrial

Industrial development brings employment opportunities in construction, manufacturing and service industries. Increased individual wealth leads to improvements in health, education and service provision through the payment of more taxes.



Intermediate

Intermediate technology is often used to support local development projects. These are projects usually aimed at improving water supplies, health and agriculture. The development gap is reduced through improvements at the local level.



Fair Trade

Fairtrade involves paying farmers a fair price for their products and investing in local communities. Fair-trade also promotes fair wages for farmers and their workforce.



Microfinance

Micro-finance loans offer financial support to community groups or individuals to start a small business. If businesses are successful, they will create jobs and increase people's income.



Key Terms



The Development Gap – the difference in levels of development between the richest and poorest countries in the world.



Investment – Money from companies or governments into industrial development.



Industrial development – Creating employment opportunities.



Intermediate technology – Simple, easy to use and maintain tech serving locals in LICs.



Fair trade – Producers in LICs are given a better price for the goods they produce.



Debt relief – HICs write off some LIC debt or lower interest rates.



Aid – Help given from one country to another; or one person to another, or



Microfinance loans – Small loans given to people in the LICs to start a small business.



Debt Relief

In the 1970s and 1980s, many countries borrowed a significant amount of money for large scale development projects. Some of these countries have fallen into considerable debt repaying loans or high rates of interest. Debt relief involves cancelling money owed, allowing more significant investment in development projects such as road building and



Aid

In this case, aid is usually in the form of financial assistance offered by countries, organisations and TNCs. Long term aid supports development projects such as improving sanitation, water supply and education. Short term aid is often given in response to natural disasters.



Tourism

Tourism brings in valuable foreign currency and brings a range of improvements including to the infrastructure, healthcare and education. Tourism brings employment opportunities in the service sector and raises incomes.



Changing Economic World

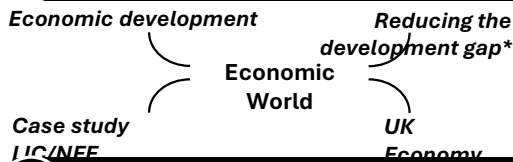
Reducing The Development Gap

Tourism in Jamaica

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The Big Picture



Key Terms



Multiplier Effect – Investment leads to increased prosperity. Money generated by an industry is spent on goods and services, increasing demand and economic activity.



Location and Background



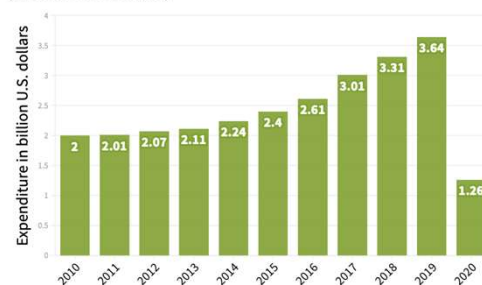
- Jamaica is a NEE.
- Jamaica is the fourth-largest island country in the Caribbean.
- It has a tropical climate with high temperatures throughout the year.
- Jamaica is famed for its beautiful sandy beaches and rich cultural heritage.
- It has excellent communications and is a popular destination for cruise ships.



The Growth of Tourism

- There has been an almost exponential growth in the number of visitor arrivals to Jamaica between 1994 and 2016. However, although visitor arrivals continued to increase in 2009, the change was not in line with previous years due to the recession, which reduced many people's disposable income.
- Total visitor expenditure increased from US\$1.3 billion in 1975 to US\$3.6 billion in 2019.

Expenditure by international tourists in Jamaica from 2010 to 2020 (in billion U.S. dollars)



The Development Gap

- Tourism is one of Jamaica's top sources of revenue. The industry contributes over 50% of the country's total foreign exchange earnings (approx. US\$2b).
- Thousands of Jamaicans work directly or indirectly in tourism. Tourism employs the second largest number of Jamaicans (approximately 200,000) directly in hotels, transport and attractions and indirectly (multiplier effect) in trading, manufacturing, agriculture and banking.
- Local farmers sell produce to hotels. For example, five farmers are the sole providers of Irish potatoes to the entire Sandals group, which comprises 11 resorts in Jamaica.
- There have been considerable investments in infrastructure to accommodate tourists. Port facilities have been expanded, as have airports and road infrastructure. The development of roads came later as cruise provision was prioritised. Some hotel owners were unhappy with this.
- Many people in key tourist areas, such as Montego Bay, have benefited from an improved quality of life due to tourism. However, pockets of poverty still exist.
- The environment has benefited from landscaping projects and the introduction of nature parks.



Changing Economic World

The Location and Importance of Nigeria

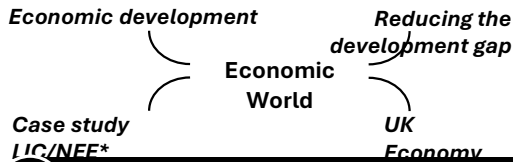


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The Big Picture



Nigeria

Nigeria is an NEE located in Africa. It is one of a number of countries experiencing rapid economic growth.



Key Terms



Economy – the production, consumption, and trade of goods and services.



GDP – the total value of all goods and services produced in a country.



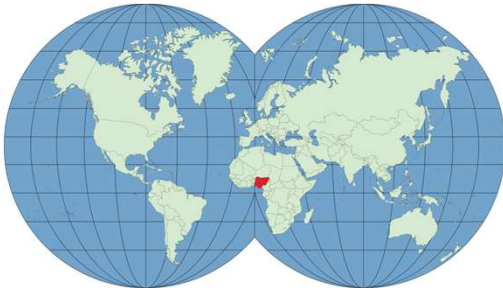
LIC – A low income country with a GNI per capita of less than \$1045.



NEE – A newly emerging economy with a GNI of between \$1046 and \$12 696.



What is Nigeria's location?



Nigeria is located in West Africa, sharing a border with Benin, Niger, Chad and Cameroon. To the south, it borders the Gulf of Guinea, part of the Atlantic Ocean. Nigeria is almost 4 times the physical size of the UK. Its population, at just over 200,000,000, is three times the size of the UK. Nigeria is the most populous and economically developed country in Africa. Its recent growth, based on the sale of oil, has led to the country's transformation from a LIC to a NEE.



Global Importance

- Nigeria had the 31st largest GDP in 2018.
- It is the world's 21st largest economy and has experienced recent rapid growth.
- Seventh largest population in the world.
- Nigeria is the 13th largest producer of oil.
- Lagos, Nigeria's largest city, is a thriving 'world city', with a strong financial and economic base.
- Nigeria has the second-largest film industry in the world.
- Nigeria plays an important role in United Nations peacekeeping.



Regional Importance

- The fastest growing economy in Africa.
- Nigeria has the highest GNP in Africa.
- Nigeria has the largest population on the continent.
- Nigeria has the third-largest manufacturing sector. The country also has the largest agricultural output and the highest number of cattle.
- Nigerian music is enjoyed throughout Africa. It is also a hub for literature boasting a range of popular writers.



Changing Economic World



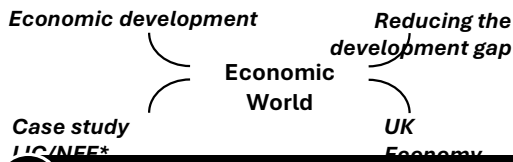
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Nigeria's Context

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The Big Picture



Key Terms



The Commonwealth – a voluntary association of 53 independent and equal sovereign states, which were mostly territories of the former British Empire.



Political Context

- European colonial powers drew up the political map of Africa in 1883. The continent was exploited for natural resources and slavery for many years.
- After independence from the UK in 1960, Nigeria experienced political instability for several years due to different factions fighting for control. Civil war ravaged the country between 1967 to 1970.
- In 1991 the capital moved from Lagos to the newly built city of Abuja. The country, regarded as stable since 1999, experienced free and fair elections in 2011 and 2015.
- Increased confidence in the country has led to considerable economic investment from China, the USA and South Africa.
- Nigeria is a member of the



Cultural Context

- Nigeria has a rich and varied culture due to its social diversity. Its film, music and literary sectors are thriving.
- Nigeria has experienced success within Africa by winning the African Cup of Nations three times.
- Nigeria has the second-largest film industry in the world, behind India. Nigerian cinema is known as "Nollywood".



Social Context

- The population of Nigeria is multi-cultural and multi-faith. It is a land of over 500 languages and hundreds of ethnic groups, such as the Hausa, Yoruba and Igbo.
- Although social diversity is a considerable strength of Nigeria, it has led to some regional conflicts. The fundamentalist group Boko Haram has



Environmental



- Nigeria spans several climatic regions. It experiences a tropical climate to the south, whereas, toward the north, it is much drier.
- Rainforest thrives in the equatorial climate in southern Nigeria. Tree crops in this area include cocoa, palm oil and rubber.
- To the north, savanna grassland replaces the rainforest. A range of field crops is typical here, including cotton and millet. Cattle also graze the savanna.
- Semi-desert exists in the very north of Nigeria. The nomadic grazing of cattle is



Regional Variations

- There are huge variations in wealth and development in Nigeria.
- Urban areas have a greater share of public services.