

# DP IB Geography: SL



Your notes

## Population & Economic Development Patterns

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Your notes

## Global Population Distribution

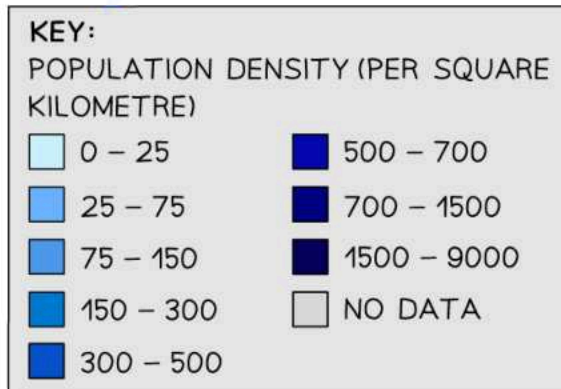
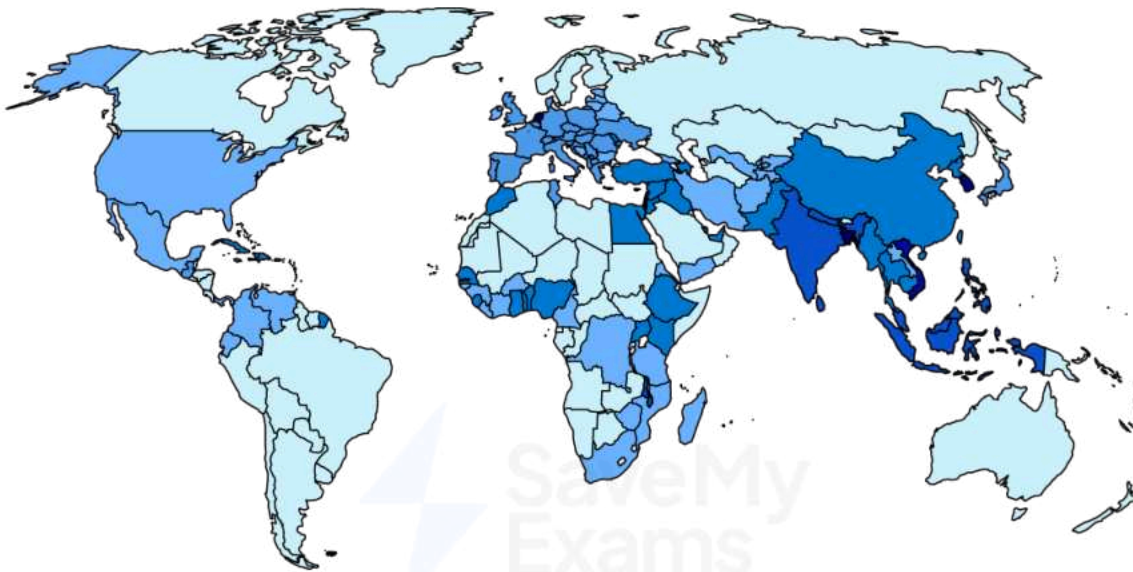
### Physical Factors

- **Population distribution** is the pattern of where people have organised themselves to live
  - Global distribution is uneven as less than a third of the earth's surface is land
  - 5% of that land supports 75% of the population
  - Much of the planet is unsuitable for human habitation, such as deserts, mountains, and icy wastelands
  - 80% of the population lives in the northern hemisphere
  - Most people live within 1000 km of the sea
  - 90% of the population live on low ground below 500 m above sea level
- **Density** is the number of people living in a certain area
  - Measured in population per km<sup>2</sup>
  - Approximately 55% of the world now lives in cities but this figure is projected to reach 65% by 2050 as urbanisation increases
  - Western Europe, Southeast Asia and the Northeast USA have high-density areas of over 200 people/km<sup>2</sup>
- **Change**
  - How the population increases or decreases over time
  - The population is **never static**
    - The distribution, density and number are constantly evolving due to various processes

### Global population distribution and density 2020



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**Note that the highest population densities are found in the northern hemisphere**



### Examiner Tips and Tricks

- If asked to describe population density and distribution in the exam, remember they do not mean the same thing
- Density refers to the actual number of people living in an area per km<sup>2</sup> (P/Km<sup>2</sup>)
- Distribution refers to where people live



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- For example; population distribution is uneven across the globe, with the majority of the global population living in the northern hemisphere, however, Asia has the highest population density with approximately 153 P/Km<sup>2</sup> compared to Europe with 33 P/Km<sup>2</sup>
- The perfect place or climate does not exist, as there are human and physical factors that influence the distribution
- **Physical factors** that affect global distribution are:
  - **Climate and weather**
    - Temperate climates with stable weather conditions are more attractive for settlements
    - Areas with even sunlight, temperature and precipitation influence the suitability of land for human habitation and agriculture
    - Areas that are very dry, very cold or very wet will have sparse populations
      - Although India is subject to a seasonal monsoon climate, it is one of the most densely populated countries in the world
  - **Relief and landforms**
    - The shape and elevation of the land affects the accessibility, soil quality, drainage and natural hazards of an area
    - Volcanic areas, river deltas, lowland plains and valleys with fertile soil have higher population densities
    - Steep slopes and mountainous areas with poor-quality soil have low population densities
  - **Soil types and quality**
    - Volcanic areas can be highly attractive due to the fertile soil and resources and minerals (sulphur, gold, diamonds etc.) brought to the surface for economic activity
    - Flat land is attractive for building settlements and easiest for agricultural activities
  - **Vegetation**
    - Grasslands are more attractive to the development of settlements
    - Areas with dense forestry, or lack of vegetation have sparse populations
  - **Natural resources** such as freshwater, raw materials and minerals
    - The presence of fresh water, minerals, fossil fuels, forests, fisheries and other resources attracts human settlement and economic activity
    - Areas that are dry or suffer from regular drought or excessive rainfall or are prone to flooding are less densely populated



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- **Natural hazards**
  - The frequency and intensity of earthquakes, volcanoes, floods, droughts, hurricanes and other events can deter or displace human populations
- **Location**
  - The position of a place in comparison to other places will affect its connectivity, trade, migration and cultural exchange
  - Areas that are difficult to access or have poor communications will be less attractive
  - Areas that have pests (ticks, termites etc.), dangerous animals/plants (spiders, snakes, poison ivy etc.) or diseases (malaria, Ebola etc.) are usually avoided

## Human Factors

- **Human factors** can affect population distribution at the global scale and include:
  - **Economic development**
    - Areas with higher levels of income, trade, and industrialisation tend to attract more people and offer better living standards
    - Past industrial regions such as Birmingham, Manchester and Sheffield have continued higher densities of population
  - **Political stability**
    - Areas with lower levels of conflict, violence, and corruption tend to be more peaceful and secure, which encourages population growth and migration
  - **Cultural diversity**
    - Areas with more diverse and tolerant cultures tend to be more attractive and welcoming to people from different backgrounds and identities
  - **Social service**
    - Areas with better access to education, health care, and social welfare tend to have higher quality of life and lower mortality rates
  - **Environmental awareness**
    - Areas with more awareness and action on environmental issues tend to have lower levels of pollution, resource depletion, and natural disasters, which enhance population sustainability
  - **Historical**
    - Migration of people (forced or voluntary) has led to redistribution of populations such as the Windrush generation or the Atlantic slave trade



## Worked Example

Outline two physical factors that can lead to human settlement

(4 marks)

Answer:

Two favourable factors are river valleys (1) and flat, fertile grassland plains (1) with good water and silt supplies (1). Areas should not be too steep or at high altitudes and have a climate that is not too extreme (1).



Your notes



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## Global Patterns of Economic Development

# Global Patterns of Economic Development

- **Development** is a **process of positive change** where a country becomes wealthier and more technologically advanced
- It refers to positive changes in people's quality of life, such as happiness, educational opportunities, increased incomes, human rights, access to clean water and healthier living conditions
- There are different strands of development:
  - **Environmental** - where natural environments are improved or restored
  - **Political** - where governments become stable and effective
  - **Social** - standards of living, access to health care, education, clean water, housing and leisure are improved
  - **Economic** - income, employment and industry is increased

## Measuring Development

- Traditionally, measurements would focus on wealth, using indicators such as:
  - **GDP** - Gross domestic product is the total value of the economy per year
  - **GNI** - Gross national income is the total value of goods and services produced in a country per year
  - **The poverty line** - the percentage of people who earn less than \$2.15 per day as set by the World Bank in 2022 (up from \$1.90 per day in 2015)
- This divided countries into rich or poor, but did not take into account the scale or change of wealth a country can move through
- The World Bank categorises economies into income groupings per capita, in U.S. dollars:
  - **Low income countries (LICs)** where average earnings are \$1,135 or less
  - **Middle income countries (MICs)** - these are split into lower middle income of between \$1,136 and \$4,465 and upper middle income of between \$4,466 and \$13,845
  - **High income countries (HICs)** where average earnings are \$13,846 or more
- Globally there is an uneven distribution of high, middle and low income countries
- With 8 billion people in the world:

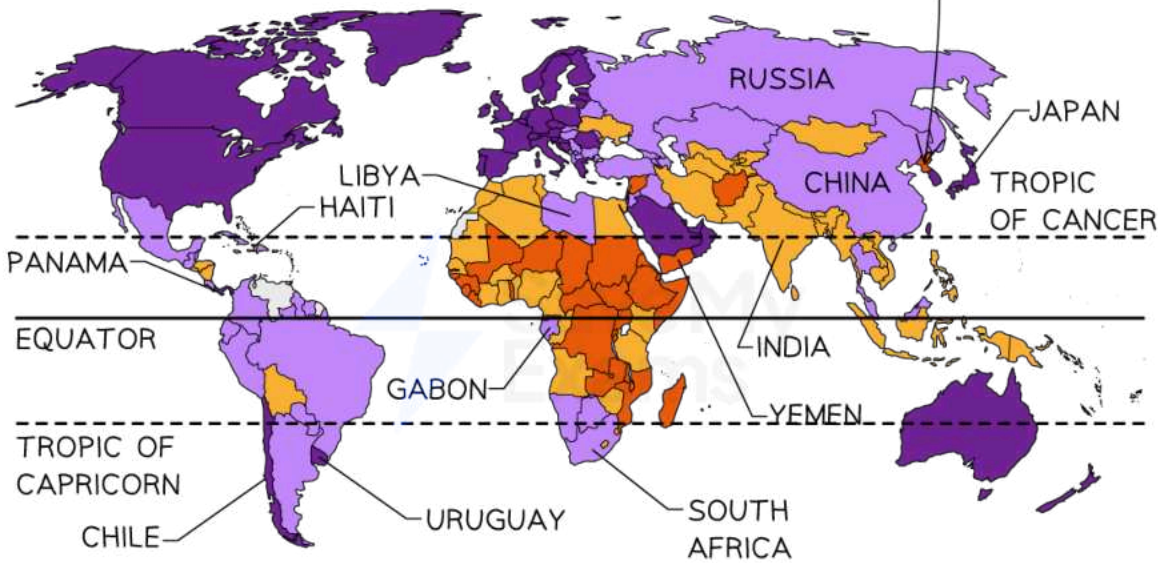


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- “Around 10% of the world’s population live in countries where the average income per person is less than \$2 a day. Around 20% are in high-income countries. The majority, around 70%, live in middle-income countries - Gapminder 2023”

## World Bank classification of countries by income groups 2021

NORTH KOREA IS A CPE, (CENTRALLY PLANNED ECONOMY) OR COMMAND ECONOMY, WHERE A STRICT, SOCIALIST STATE, CONTROLS PRODUCTION, PRICE AND ALLOCATION OF RESOURCES, GOODS AND SERVICES



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**Classification is based on a country’s GNI per capita and has changed over time**

- Most HICs are found in the northern hemisphere and include countries such as Canada, Japan, Spain, UK and Japan



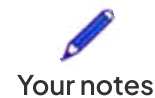


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- However, there are **anomalies** such as Chile, Australia, Uruguay and New Zealand, which are classified as high income countries, but are located in the southern hemisphere and Haiti is the only country in North America that is classified as low income
- Most LICs are found between the tropics and concentrated within Africa, along with some parts of Asia
- MICs vary by:
  - Region
  - Size - physical and population numbers
  - Income levels
  - E.g. Belize and the Marshall Islands have small populations, whereas the five BRICS countries - Brazil, Russia, India, China, and South Africa account for 27% of the world's land surface with 42% of the global population. China and India together account for approximately one-third of the world's population and are increasingly influential players in the global economy and Russia is the largest country by land mass at 11%

## Classification of Economic Development

- At an international level, the development of a country has been categorised into one of three groups:
  - **Low income, developing country or less economically developed:**
    - A country with low human development (LHD) is a poor country. Most people have a poor quality of life with inadequate services and few opportunities
  - **Medium income, newly industrialising or emerging economy;**
    - A country with high and medium human development (HMHD), a recently emerging country. Countries experiencing rapid economic growth and development based on industrial development. Incomes are rising and most people enjoy a reasonable standard of living
  - **High income or more economically developed:**
    - A country with very high human development (VHHD). Countries that have modern industries and people enjoy a good standard of living with relatively high levels of income
- However, the categories do not account for varying levels of development at a local and national scale
- There are differences between areas of the same city, the same country and between countries
  - Germany is more developed than Mexico, but Egypt is less developed than Mexico
- The differences between levels of development is known as the **development gap**
- Development is **hard** to measure **accurately** as it covers so many features
- It is **measured** using **indicators**



**Table of Indicators**

Social Indicators	Economic Indicators	Political Indicators
<p>These relate to strands such as:</p> <p>Quality of life and social well-being</p> <p>Equal opportunities, access to services such as education and healthcare</p> <p>Life expectancy, birth control, education</p> <p>Diversity, traditions and heritage</p>	<p>These relate to strands such as:</p> <p>Employment, income and general wealth</p> <p>Savings, house building, house sales, consumer spending, International trade</p> <p>Resources, pollution controls and conservation</p>	<p>These relate to strands such as:</p> <p>Effective governance, stability and integrity of governing bodies</p> <p>Ease of trade, property rights, human rights, equality, and income guides</p> <p>Corruption index</p>

## Measures of development

- The traditional method of measuring wealth is through the country's **GNP** (gross national product), **GDP** (gross domestic product) and **GNI** (gross national income)

**Methods of Measuring Development**

Measure	Definition	Measure of...	Effect on Development
<b>Gross Domestic Product (GDP)</b>	<p>The total value of a country's output of goods and services produced in a given year</p> <p>There is no way of knowing what the GDP is spent on: for example, GDP increases after an earthquake due to the rebuilding which is needed this does not mean that the country is more developed or that everyone's quality of life has improved</p>	Economic - wealth	Higher
<b>Gross Domestic Product (GDP) per capita</b>	The total value of goods and services produced within a country in a year is divided by the population of the country. As this is an average, then any variation in wealth is hidden	Economic - wealth	Higher



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	<p>There can be huge differences in GDP depending on the size and population of a country</p> <p>Dividing it by the population means that more meaningful comparisons can be made between countries</p>		
<b>Gross National Income (GNI)</b>	Gross national income (GNI) is an alternative to gross domestic product (GDP) as a measure of wealth. It calculates income instead of output. It is, therefore, the measure of the total income received by a country from its residents and businesses regardless of whether they are located in the country or overseas	Economic - wealth	Increases
<b>GNI per head</b>	This is the total income of a country's goods and services, (including overseas income) divided by the number of people living in that country	Economic - wealth	Increases
<b>Human Development Index (HDI)</b>	This uses life expectancy, literacy rate, education level and GNI to calculate a country's score between 0 (least developed) and 1 (most developed)	Disparities between countries = social and economic	Higher

- **Individual indicators are misleading** when used alone, as some features develop before others, which can suggest that a country is more developed than it is
- By using **multiple indicators (development continuum)** as a measure of development, a clearer picture of that country's development is produced



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## China's Patterns of Development & Distribution

# Case Study: China's Population Distribution

## Background

- China, with a land area of 9,706,961 km<sup>2</sup>, is located in East Asia
  - 27% of the land is desert
  - 33% are mountainous regions
- It is the second-most populous country in the world, with 1.42 billion people
- 10% of the population live on less than 1% of the available land
- The average life expectancy is 74 years (men) and 79 years (women)

## Uneven distribution in China

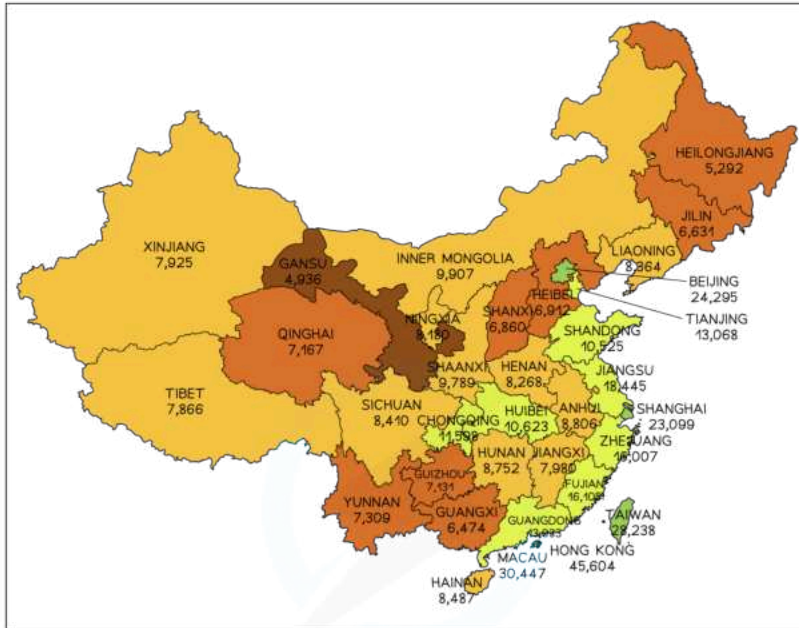
- China has a wide variation in population distribution and **GDP per capita** by province
- Mostly concentrated in the south-eastern part of the country
  - Beijing and Shanghai have the highest GDP per capita, over US\$23,000
  - Eastern China is easier to develop due to its flat plains
  - The Yangtze and Yellow rivers provide water for farmland and cities
- Four provinces along the **east coast** have a GDP per capita of over US\$13,000
  - These are favoured by global trade and commerce
- The province of Gansu in northern China has the lowest GDP of US\$4936
  - Frequent earthquakes, droughts, and low agricultural productivity contribute to economic instability
- Western China is the least populated region
- This is due to the Taklamakan and Gobi Deserts, along with the Tibetan Plateau
  - These regions receive little to no rainfall because of the Himalayan Mountains
  - They are high enough to see extreme temperature swings from as low as -40° C in the winter to 60° C in the summer

## China GDP per capita by province

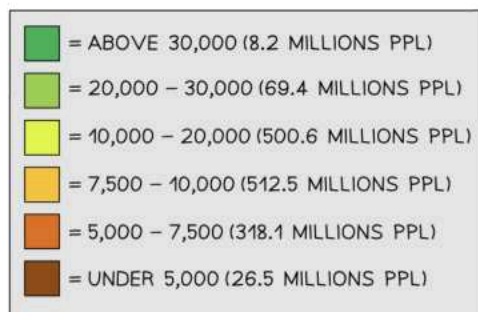


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GDP PER CAPITA IN CHINA, 2020



GDP PER CAPITA OF MAINLAND CHINA WAS 10,451 U.S. DOLLAR IN 2020: WHILE GDP PER CAPITA OF THE WHOLE WORLD WAS 11,429 IN 2019 (WORLD BANK DATA) OR ESTIMATES 10,980 IN 2020



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## Core-periphery

- The provinces along the east coast can be regarded as the **economic core** of China
- Most **secondary** and **tertiary economic activities** are located there
- The **economic periphery** is to the **west and far north-east** of China:
  - Includes the Gobi and Taklamakan Deserts
  - The Plateau of Tibet is a mountainous region that includes the Himalayas



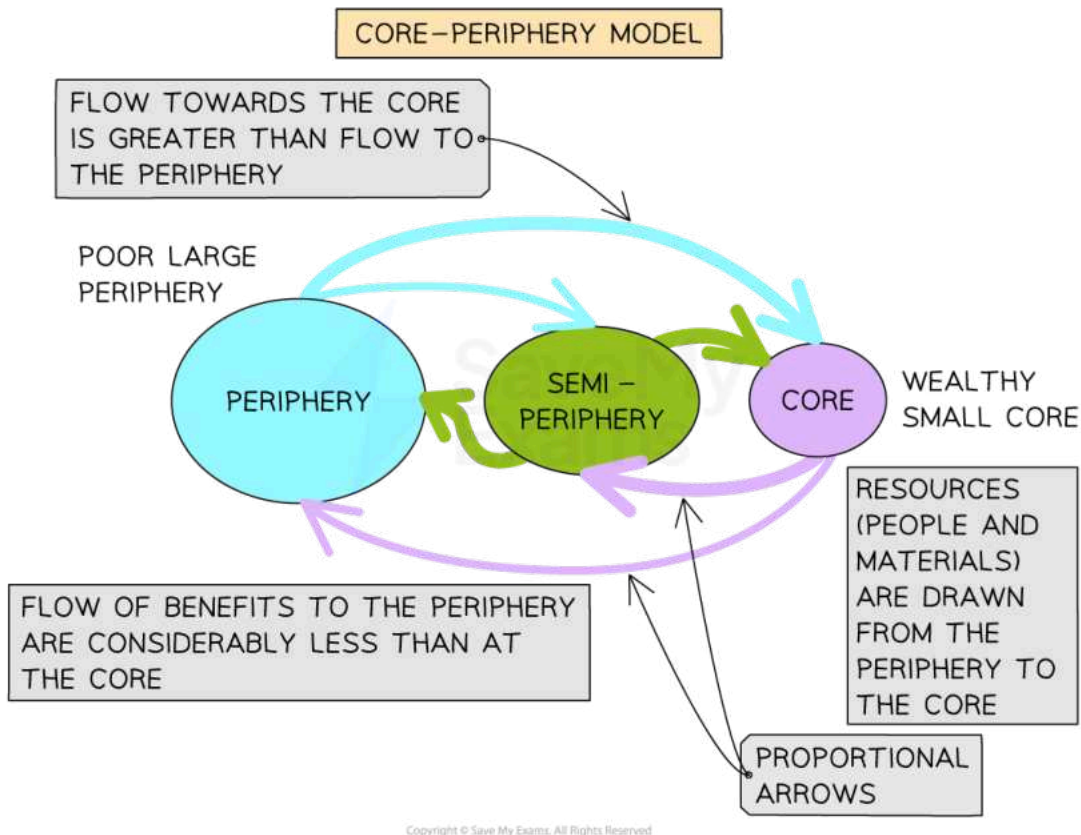
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- The development gap can be seen in a range of areas:
  - **17 million** people still live on US\$2.30 a day
  - **Over 90%** of people living in poverty live in rural areas
  - The standard of housing is often poor
  - People are being moved to apartment blocks, to free up land for factories
  - **Over 25%** of rural households have access to piped water
  - **Literacy rates** in rural areas are **65%**, but in urban areas they are **84%**
- The rate of **unemployment** in rural areas is over **30%**
- This leads to:
  - Increased poverty
  - Difficulty attracting businesses to these regions
  - The periphery is becoming more dependent on primary economic activities to survive
- This regional inequality has led to significant **rural-urban migration** in China

## Core-periphery model



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## Case Study: China's Internal Migration

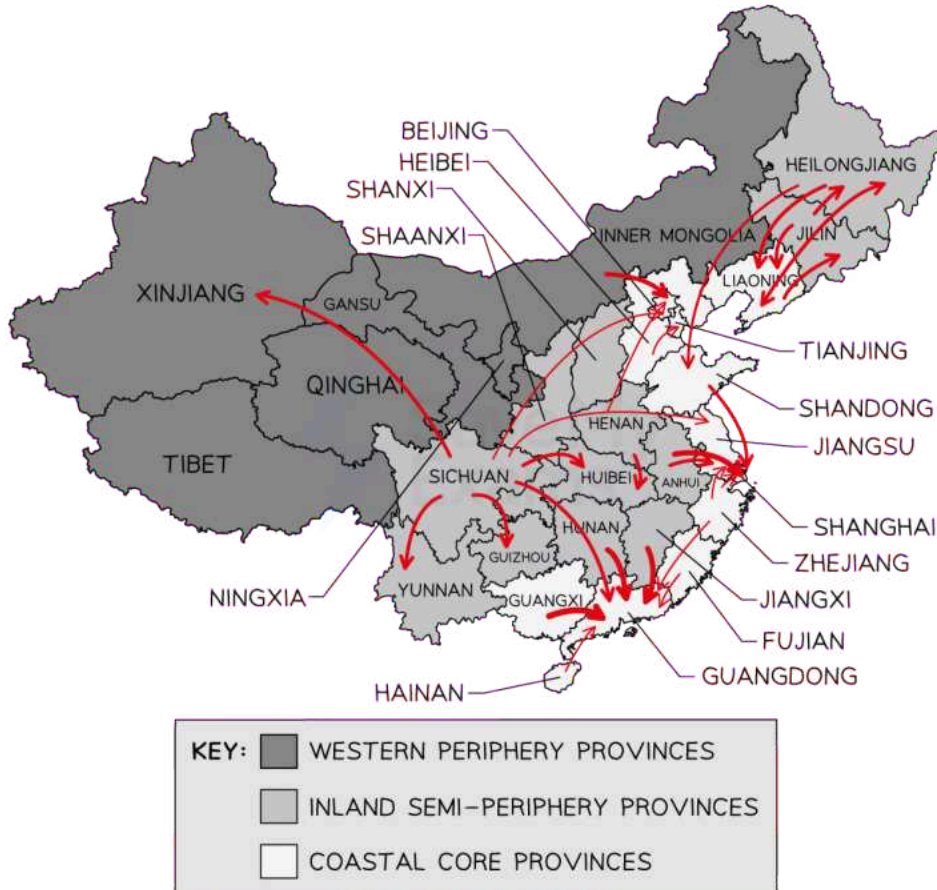
### Migration in China

- Since 1978, over 160 million people have **left rural China** to seek **work** in the **major cities**
- **Wages** in **urban** areas are **40% higher** than in rural areas
- Development is concentrated along the coastal zones
- The majority of the migrants are:
  - Economically active
  - Mostly female
  - From inland, rural, and poor communities
  - They are considered a **floating population**, as they don't have official urban **hukou** status

## China's internal migration stream



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- China rapidly industrialised after the government created Special Economic Zones (SEZ) during the 1980s
- These policies allowed for foreign investment into 'special zones', that are managed by a single administration and regulations
- More than 200 million rural migrants now work in China's main cities, such as Shanghai and Shenzhen
- Around 20 million people arrive in cities each year
- Over the next decade, an estimated 60% of Chinese people will live in urban areas

## Megacity growth in China

- Approximately 56% of the world's 8 billion people now live in cities



- This is expected to rise to over 68% by 2050
- That means 2 out of every 3 people will live in a city
- China has more than 100 cities with over one million people
- 6 of them are considered megacities with over 10 million people each
- China's megacities are:
  - The result of rapid urbanisation, economic growth, and migration from rural areas
  - Centres of innovation, trade, culture, and transportation, with leading technologies such as solar energy, electric cars, high-speed rail, 5G, AI, and space science
  - Face challenges such as environmental pollution, social inequality, traffic congestion, housing affordability, and cultural preservation
- There are 5 economic zones and 17 open cities
- These aim to attract inward investment and include groups such as the Jingjinji Integration, the Chengdu-Chongqing City Group, and the Yangtze Delta City Group
- There are plans to combine the largest megacity, Shanghai, with eight surrounding cities
- This would create the city of Jing-Jin-Ji with 130 million inhabitants by 2035



Your notes



Your notes

## South Africa's Patterns of Development & Distribution

# Case Study: South Africa's Population Distribution

## Background

- The Republic of South Africa is the southernmost country of the African continent
- It has a land area of 1.22 million km<sup>2</sup>, with a **population density** of 50 per km<sup>2</sup>
- It is the 2nd most populous country south of the equator, after Tanzania, with 60.6 million people and the 24th most populous country in the world
- Approximately, 69.0 % of the population is **urban**
- The median age in South Africa is 27.6 years
- Average **life expectancy** is 60 years (men) and 66 years (women)
- A large plateau dominates the centre of the country, with rolling hills falling to plains and the coast
- The climate is mostly semiarid; subtropical along the east coast; with sunny days and cool nights
- South Africa has 3 capitals
  - Pretoria (administrative capital)
  - Cape Town (legislative capital)
  - Bloemfontein (judicial capital) and 9 provinces

## Distribution of population

- The main ethnic groups in South Africa are:
  - Black African 81.4%,
  - **Coloured** 8.2%
  - White 7.3%
  - Indian/Asian 2.7%,
  - Other 0.4%
- The eastern half of the country is more densely populated than the west
- The province of **Gauteng**, has the highest concentration of people with 830 people per km<sup>2</sup> (20% of South Africa's population)

- With concentrations of people inland around and along the southern and south-eastern coast

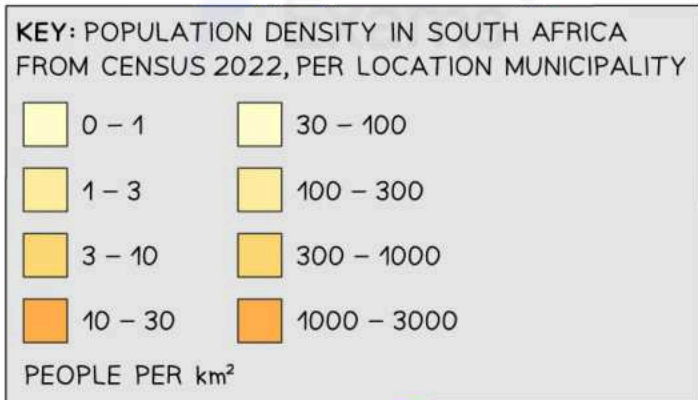
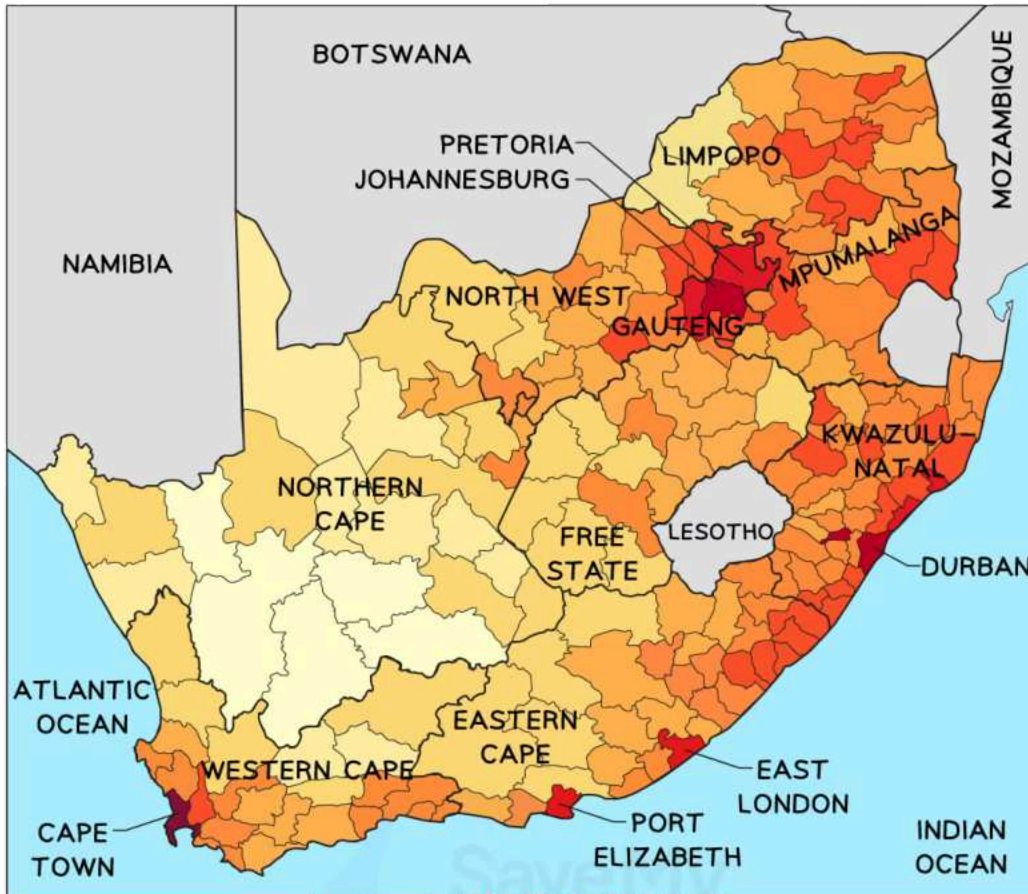
## Distribution of South Africa's population



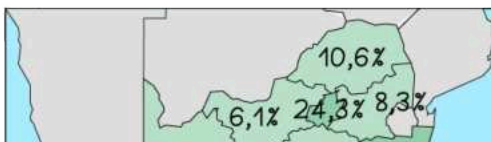
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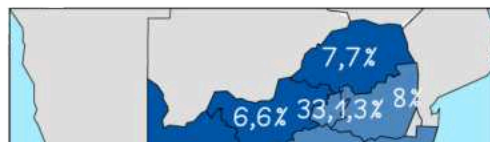
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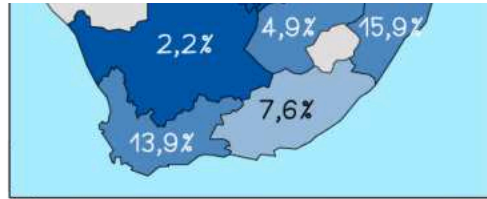


PERCENTAGE OF POPULATION BY PROVINCE



PERCENTAGE OF GDP PER PROVINCE





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- South Africa's total GDP for 2022 was R6.6 trillion (\$358 billion US) roughly US\$6,776 per capita
- Gauteng province is the centre for economy, contributing 33.1% to national GDP in 2022
- Gauteng is the smallest province with the highest density and is the core region
- Northern Cape province has the lowest density of less than 4 people per km<sup>2</sup>

#### Population Density per Province in South Africa

Province	Density (person per km <sup>2</sup> )
Gauteng	830.6
KwaZulu-Natal	131.7
Mpumalanga	67.24
Western Cape	57.41
Limpopo	52.27
Eastern Cape	42.79
North West	36.27
Free State	22.83
Northern Cape	3.636

Data from 2022 South Africa Census

## Economic distribution

- **Finance** is the biggest industry in Gauteng and the Western Cape

- **Mining** dominates in Limpopo, Mpumalanga, North West and the Northern Cape
- KwaZulu-Natal's major industry is **manufacturing**, although it has the country's largest **farming** sector
- **Government services** - such as health, education and administrative spending - are focused in the Eastern Cape and Free State

## Core-periphery

- Population size correlates with each province's contribution to the national economy
- Gauteng has the largest and therefore, is the core of South Africa and dominates with finance
- The northeastern provinces dominate in **secondary** and **tertiary economic activities** of mining, manufacturing and government services
- The Western Cape is mostly tertiary economic activities with finance and tourism
- The **economic periphery** is to the **north-west** of South Africa:
  - Includes the Northern Cape and Free State
  - The Free State is mostly maize and Northern Cape is an emerging renewable energy hub
- South Africa has some of the highest levels of inequality and the development gap can be seen in a range of areas:
  - 18.2 million people are living in extreme poverty of less than \$2.15 a day
  - **20%** of the population holds over **68%** of income, with **40%** seeing just **7%** of income
  - Unemployment remains high, at around 35% and nearly 60% of the country's youth (15-24 yrs) are unemployed
  - Income per capita in Gauteng is twice that of rural provinces such as the Eastern Cape and Limpopo
  - Electricity supply is regularly cut (reaching 9 hours a day in 2023), this impacts economic activity and increases operating costs for businesses, particularly those that rely on diesel generators
  - 88.5% of the population live in formal housing and just 59.7% have access to piped water in their homes
  - **Poverty was an estimated 62.6% in 2022**; the Eastern Cape is the poorest region
  - **Only 24%** of rural households have access to piped water
  - **Literacy rates** is 95.3% with Gauteng and Western Cape seeing literacy rates of 98.9%
- In some areas, the unemployment rate in rural areas is over **30%**. This leads to:
  - Increased poverty



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- Difficulty attracting businesses to these regions
  - The periphery is becoming even more dependent on primary economic activities to survive
- Regional inequality has led to significant **rural-urban migration** in South Africa

## Case Study: South Africa's Internal Migration

- Migration has been a major part of the development of South Africa, particularly unskilled labour migration from peripheral countries such as Mozambique, Botswana, Lesotho and Malawi to the mining regions
- Colonialism created **economic node/centre**, which in turn brought continued uneven development of the country
- After apartheid and the relaxing of migration rules, internal migration has been driven by economics where the majority of South Africans move from the poorer provinces to the richer ones, and from rural areas to the cities
- Gauteng is South Africa's wealthiest province, mostly a city region, it is the centre of the country's economy
- Between 2016 and 2021 Gauteng saw the largest **net migration rate** of 1.5 million people population and continues to increase in number
  - The majority of migrants came from Limpopo and KwaZulu-Natal
  - Johannesburg City saw the largest number of internal migrants
- Western Cape, North West, Mpumalanga and the Northern Cape also experienced positive net migration rates
  - Western Cape received migrants from the Eastern Cape and Gauteng, with Cape Town the biggest recipient
  - North West saw immigration from Gauteng to Rustenburg and Madibeng
  - Mpumalanga had a positive in migration from Gauteng
  - The Northern Cape, the largest but least populated province, saw a positive net migration from the North West province
- Four provinces experienced negative net migration - Limpopo, Free State, Eastern Cape and KwaZulu-Natal
  - Free State and Limpopo both had negative net migration to Gauteng
  - Eastern Cape saw negative migration to Western Cape and secondly to Gauteng
  - KwaZulu-Natal had a negative net migration with the majority migrating to Gauteng



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## Internal migration pre and post apartheid

- From 1960 to the late 1980s, apartheid laws kept families and communities in poor rural areas
- Forced migration of many black people to the homelands such as Transkei and KwaZulu-Natal
- Young, black men were allowed to move to the cities, where their labour was valuable
- However, they were forced to live separately in 'townships', and needed both residential and work permits to live in the restricted areas
- Townships were a collection of nondescript settlements found on the outskirts of cities
  - Soweto (South-Western Township) for example, was a separate residential area for black African workers in the gold mines around Johannesburg as they were not permitted to live in other 'white-designated' areas of Johannesburg
  - Johannesburg's Chinese community, during the apartheid era, was not legally classified as 'Asian', but as 'coloured' and they too had their own separate townships
- After the end of apartheid, from the mid-1990s, internal migration increased, particularly for black South Africans
- Urbanisation grew, with Johannesburg seeing the largest increase of rural to urban migration, leading to Johannesburg being the largest and only megacity in South Africa
- Over 67.5% of the total population of South Africa now live in urban areas and cities

## International migration

- Most Africans escaping from violence tend to seek security and prosperity elsewhere on their own continent
- Of the world's 17 million displaced Africans, approximately 3% are in Europe, despite the media coverage
- The number of displaced people in Africa has increased by around 20% due to unresolved crises in:
  - Libya
  - South Sudan
  - Central African Republic
  - Northern Mozambique
  - Ethiopia
  - Cameroon's north-west and south-west regions

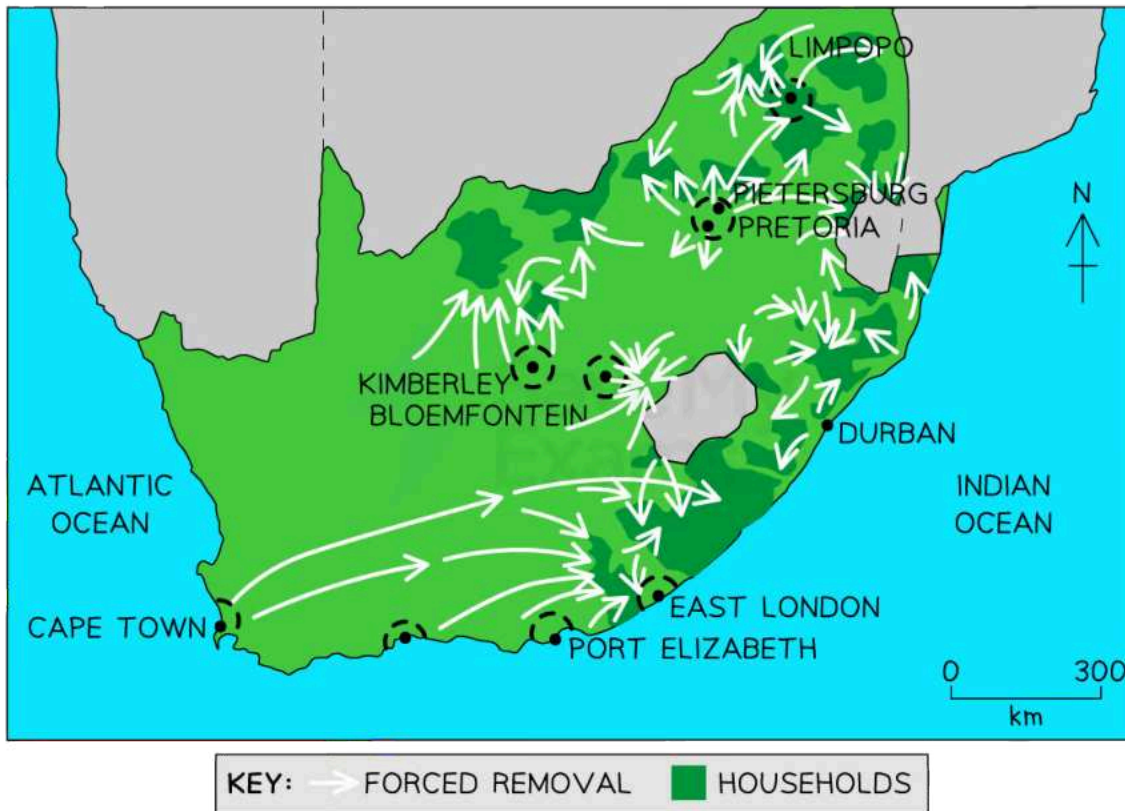




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- Overall, the 'Rainbow Nation' of South Africa (SA) has attracted roughly 3.2 million migrants to its wealth and stability from elsewhere in Africa
- Most migrants are from neighbouring countries, but also Morocco or Eritrea and mostly head towards Johannesburg
- Neighbourhoods such as Mayfair in Johannesburg are almost entirely populated by East Africans
- Unfortunately, there have been repeated outbreaks of violence towards migrants, which are caused by a shortage of jobs, housing, and services
- Over a million asylum seekers are still waiting to be processed, making South Africa the country with the highest number of pending claims in the world
- With increased European resistance to accepting new migrants, it is unlikely the flow of migrants to South Africa will slow

### Map of forced migration in South Africa during apartheid



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## Examiner Tips and Tricks

Include examples or specific detail in all your answers. For example, if asked to write a definition or meaning, providing an example shows your understanding and secures that mark, particularly if your definition isn't perfect.

For example, if you were asked to define migration:

Migration is when people move from one region to another region. This can be internal such as rural Free State to urban Gauteng in South Africa or international such as South Sudanese to South Africa escaping the civil unrest

Get into the habit of using your case studies or real-world examples in any question where you think they might help explain.

Don't keep them just for essays!



Your notes