

1

CHANGING POPULATION

This core theme provides a background to the key global issues of our time, such as population dynamics, climate change and resource consumption. Four key concepts influence these issues: places, power, processes and possibilities. There are positive aspects of change as well as negative ones. It is necessary to accept responsibility for the causes, and to seek solutions and manage the issues.

You should be able to show:

- ✓ how population varies between **places**;
- ✓ the **processes** of population change and how these affect people and places;
- ✓ that there are population **possibilities** and **power** over the decision-making process.

1.1 POPULATION AND ECONOMIC DEVELOPMENT PATTERNS

- **Population density** – the number of people living in a given area, usually expressed as people per square kilometre. It is calculated by dividing the population of a region by its area.

- **Population distribution** – the location of people within an area. Population is unevenly distributed for a number of reasons. Factors that attract people include mineral resources, temperate climate, the availability of water and fertile, flat land. Factors that repel people include dense vegetation, limited accessibility and political or religious oppression.

- **Voluntary internal migration** – refers to the movement of population away from their home, from one part of a country to another. It occurs when people are free to move where they choose.

- **Core–periphery** – a more-developed part (core) of a country or the world, and a less-developed part (periphery) of a country or the world.

- **Megacity** – a city with more than 10 million inhabitants.

You should be able to show how population varies between places:

- ✓ Physical and human factors affecting population distribution at the global scale;
- ✓ Global patterns and classification of economic development:
 - ✓ Low-income countries;
 - ✓ Middle-income countries and emerging economies;
 - ✓ High-income countries;
- ✓ Population distribution and economic development at the national scale, including voluntary internal migration, core–periphery patterns and megacity growth;
 - ✓ Two detailed and contrasting examples of uneven population distribution.

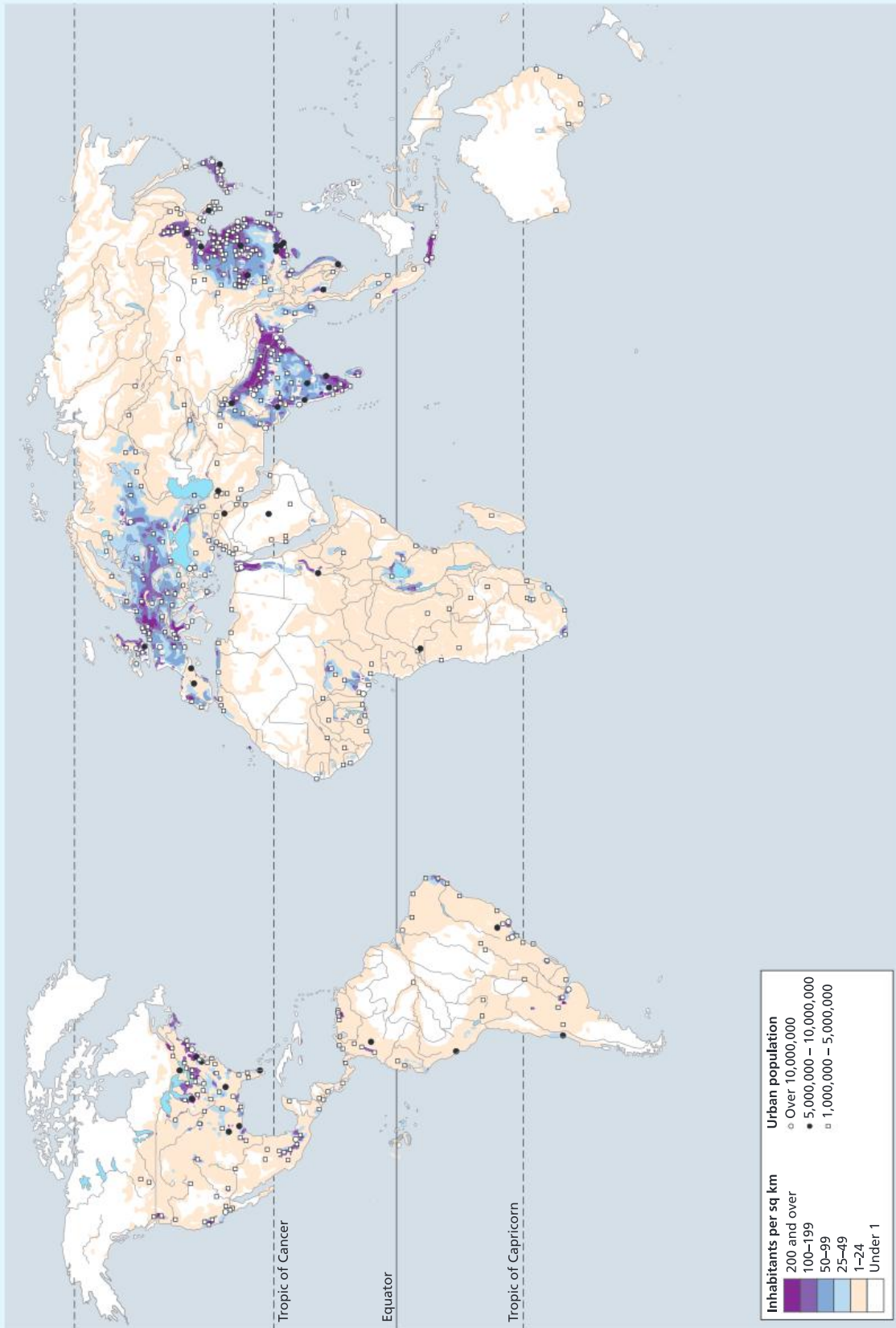
Physical and human factors affecting population distribution at the global scale

Population distribution and density refer to where people live and how many live in a given area. They are both affected by a number of physical and human factors.

Content link

Physical factors affecting population distribution and density are discussed in options A.3, B.3 and C.1.

Test yourself



▲ Figure 1.1.1. World population density

1.1 Distinguish between population distribution and population density. [2]

1.2 Suggest reasons for the regions of high population density shown in Figure 1.1.1. [3]

Assessment tip

Population varies between **places**. The distribution of population is influenced by physical factors in the first instance, and increasingly by human factors.

Concept link



PLACES: Places have similarities and differences in terms of their population distribution and economic development. Underlying each of these, there are a range of physical and human factors that ensure each process is dynamic and there is an interrelationship between these two factors. Not only are there internal interactions occurring between places within a country, but also between countries due to regional and global processes.

Test yourself

1.3 Describe the distribution of
(a) high-income countries, and
(b) low-income countries as shown in figure 1.1.2. [2+2]

Assessment tip

It is easy to talk about rich and poor countries. However, the World Bank uses a four-fold classification to illustrate the diversity of economic development within countries: high income, upper-middle income, lower-middle income and low income.

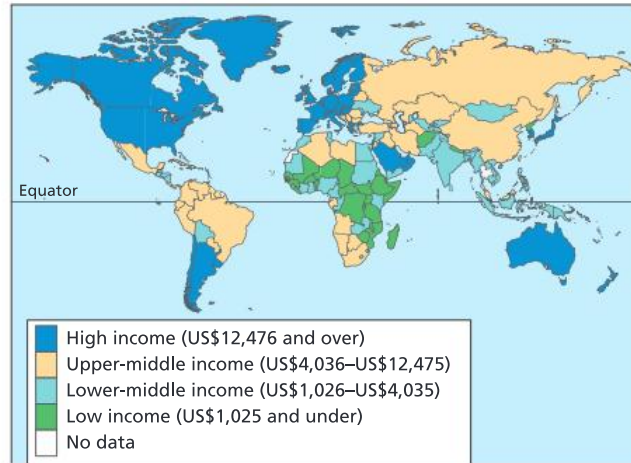
Content link

Connect this information with the role of powerful organizations and global groups in helping countries develop, discussed in unit 4.1. Unit 4.2 discusses how global networks and flows can also affect this development.

Content link

The effect of free trade zones (FTZs) on global interactions is discussed in unit 4.3.

Global patterns and classification of economic development



▲ **Figure 1.1.2.** The World Bank economic classification of countries

Assessment tip

When describing patterns, try to structure your answers so that you show the main features and anomalies (exceptions), and support your answers with examples. So for this question you would actually name countries that are anomalies, for example.

Population distribution and economic development at the national scale

Megacity growth in the Greater Bay Area, China

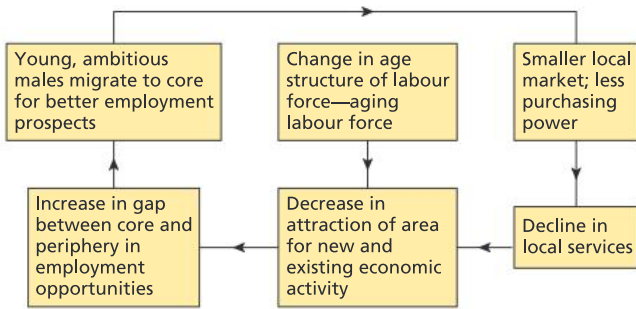
Megacity clusters will deliver China's future economic growth, and the most productive will be the Greater Bay Area, which combines the nine cities of the Pearl River Delta with the Special Administrative Regions of Hong Kong and Macau. The Area accounts for just 1% of China's land mass, contains nearly 70 million people and produces 37% of the country's exports and 12% of its GDP. The Guangdong province accounts for 22% of China's high-tech exports and this could rise to 40% by 2025.

The growth of megacities can lead to urban sprawl, slum development and income inequalities, which can cause social and political tension. In addition, air quality and water quality is poor, and much of the Pearl River Delta has been degraded. Large cities without affordable housing and efficient public transport can push the poor to live far from jobs and markets, forcing them to choose between long and expensive commutes or living in slums in which they have few rights.

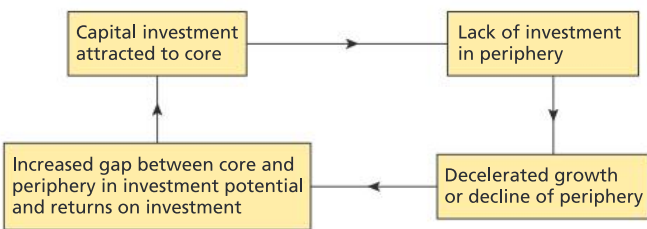
The Pearl River Delta has developed into a large manufacturing region due to a large amount of cheap labour, an excellent sea port, and the development of the Free Economic Zone at Shenzhen. It has been a major attraction for migrants ready to escape rural poverty for the prospects of better-paid work in urban areas. However, many migrants lack the right to education and healthcare in urban areas, and they remain relatively impoverished compared to those urbanites who have rights.

Migration is also affecting rural areas. Most of the wealth in rural areas come from money sent back (remittances) from migrants working in urban areas.

Core-periphery patterns



▲ Figure 1.1.4. A model of labour migration and core-periphery inequalities



▲ Figure 1.1.5. A model of investment and core-periphery inequalities

Uneven population distribution: China

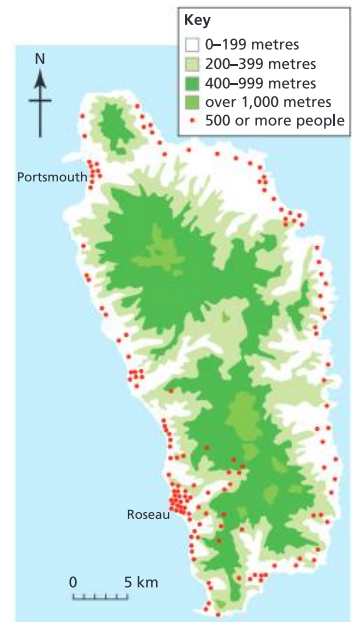
China’s population is concentrated in the eastern part of the country, especially in coastal zones and the lower reaches of river valleys. Much of the rest of the country is characterized by desert (for example, the Gobi Desert), the steep slopes of the Himalayas and the dry grasslands of the north-west.

The uneven population distribution in China results primarily from the country’s physical geography. Only a small proportion of the country can provide for rain-fed agriculture—most of the land is too dry or too steep to allow for much agriculture. In addition, the coastal and river locations are the more favoured sites for trade and commerce.

Uneven population distribution: South Africa

The distribution of South Africa’s population is very uneven. Some parts of the core economic regions, such as Gauteng province, have population densities of over 1,000 people per square kilometre, whereas large areas of the Northern Cape Province have densities of under five people/per square kilometre. High population densities are found in areas where there are good mineral resources, such as gold and diamonds, good farming potential, and good trading potential, such as Durban and Cape Town.

In general, the population decreases from the south-east to the north-west. This partly reflects the distribution of rainfall in South Africa: the lowest densities are found in the most arid areas and in parts of the mountain regions.



▲ Figure 1.1.3. Population distribution in Dominica

Test yourself

- 1.4 Describe the distribution of population on the island of Dominica. [2]
- 1.5 Suggest reasons for the distribution of population in Dominica. [3]

Test yourself

- 1.6 Suggest why some cities develop into megacities. [3]
- 1.7 Outline the advantages and disadvantages of megacity growth. [3+3]
- 1.8 Using the data on the Greater Bay Area megacity growth and figures 1.1.4 and 1.1.5, explain how megacities can lead to core-periphery inequalities in a country or region. [2+2]
- 1.9 Using an atlas, suggest how physical and human factors have influenced the distribution of population in China. [3+3]

1.2 CHANGING POPULATIONS AND PLACES

- **Natural increase** – the growth in population as a result of birth rates exceeding death rates.

- **Total fertility rate** – the average number of children born to a woman if she lives to the end of her child-bearing years.

- **Life expectancy** – the average number of years to be lived by a group of people born in the same year. Life expectancy at birth is also a measure of overall quality of life in a country.

- **Population structure** – the composition or make-up of the population, for example, age, sex, occupation, race, ethnicity, religion, class. The most commonly used indicators are age and sex, and these are shown using a population pyramid.

- **Dependency ratio** – a measure of the non-workers divided by the workers. It is commonly expressed as the population aged 0–15 (the children) and the population aged 65 and over (the retired) divided by the population aged 16–64 (the workers).

- **Demographic transition** – changes in birth and death rates over time; both rates change from high to low.

- **Forced migration** – migration that occurs due to war, religious persecution, famine, slavery, politics or natural disasters, creating refugees and internally displaced people.

You should be able to examine processes of population change and their effect on people and places:

- ✓ Population change and demographic transition over time, including natural increase, fertility rate, life expectancy, population structure and dependency ratios;
 - ✓ Detailed examples of two or more contrasting countries;
- ✓ The consequences of megacity growth for individuals and societies;
 - ✓ One case study of a contemporary megacity experiencing rapid growth;
- ✓ The causes and consequences of forced migration and internal displacement;
 - ✓ Detailed examples of two or more forced movements, to include environmental and political push factors, and consequences for people and places.

Population change and demographic transition

▼ **Table 1.2.1.** Population characteristics for China and Ethiopia

	China	Ethiopia
Birth rate (‰)	12.3	36.5
Death rate (‰)	7.8	7.7
Population aged 0–15 years (%)	17.2	43.5
Population aged 16–65 years (%)	72.0	53.6
Population aged over 65 years (%)	10.8	2.9
Dependency ratio (%)	38.8	86.6

Source of data: Adapted from *CIA World Factbook*

The Demographic Transition Model (DTM) suggests that changes in birth and death rates happen in five stages:

1. High birth rate, fluctuating but high death rate.
2. Birth rate stays high, death rate starts to fall.
3. Birth rate starts to fall, death rate continues falling.
4. Birth rate is low, death rate is low.
5. The birth rate is low and the death rate increases.

▼ **Table 1.2.2.** Birth and death rate for Bangladesh, 1901–2018

Period	Birth rate (per thousand)	Death rate (per thousand)
1901–11	53.8	45.6
1911–21	52.9	47.3
1921–31	50.4	41.7
1931–41	52.7	37.8
1941–51	49.4	40.7
1951–61	51.3	29.7
1961–74	48.3	19.4
1971–80	47.0	17.2

Test yourself

1.10 Define the terms “birth rate” and “death rate”. [1+1]

1.11 Compare the demographic characteristics of Ethiopia with those of China. [2+2]

1.12 Suggest why population growth varies between China and Ethiopia. [2]

Period	Birth rate (per thousand)	Death rate (per thousand)
1986	38.9	11.9
1989	–	11.4
1994	27.8	8.6
1998	19.9	4.8
2011	22.9	5.7
2018	18.8	5.4

Dashes indicate no data is available

Source of data: UN Commission on Population and Development and CIA World Factbook

Test yourself

- 1.13 (a)** Using table 1.2.2, **determine** the natural increase for Bangladesh for the period 1901 to 2018. [1]
- (b)** **Identify** the period when natural increase was greatest. [1]
- (c)** **Describe** the trends in natural increase in Bangladesh between 1901 and 2018. [2]
- 1.14** **Draw** an appropriate chart to show the changes in the birth rate and death rate for Bangladesh for the period 1901–2018. [3]
- 1.15** **Describe** the main changes you have shown. [3]
- 1.16** **To what extent** does Bangladesh follow the Demographic Transition Model (DTM)? [3]

Concept link



PROCESSES: Economic, environmental, political and social processes create change within a country's population by influencing fertility, deaths and migration. Changes occur in rural and urban areas and the interactions between these places create further changes, such as the forced movement of people from one place to another. The process of internal displacement of people can be linked to environmental and political change, and this migration can subsequently create pressure elsewhere within a country.

The consequences of megacity growth for individuals and societies

Case study: A contemporary megacity experiencing rapid growth—the Greater Bay Area

China has completed building a 55 km bridge connecting the former European colonies of Hong Kong and Macau with the city of Zhuhai. It was designed by the Chinese government to connect these two semi-autonomous regions more closely to the mainland, both economically and politically. In addition, a new US\$11 billion rail link, which links Hong Kong into China's vast high-speed rail network, is a crucial element in Beijing's plan to integrate Hong Kong and Macau with nine neighbouring urban areas, including the megacities of Shenzhen and Guangzhou.

The Greater Bay project covers an area containing nearly 70 million people with a US\$1.5 trillion economy, larger than some G20 countries such as Australia, Indonesia and Mexico. The area's economy is predicted to nearly double to US\$2.8 trillion by 2025. Guangdong is the "workshop of the world", exporting US\$670 billion of goods in 2017. Its economy is more driven by private enterprise than any other area of China. The Greater Bay Area has three of the world's 10 busiest container ports—in Hong Kong, Guangzhou and Shenzhen—and thriving international airports in all three cities.

The Greater Bay Area plans to promote large-scale business opportunities, but many Hong Kong residents claim that they have lost freedoms and autonomy. Critics argue



Content link

The factors affecting the economic activities of urban environments as megacities are discussed further in option G.1.



▲ **Figure 1.2.1.** The Hong Kong-Zhuhai-Macau bridge took over 15 years to build and cost nearly US\$20 billion

Test yourself

1.17 State one advantage and two disadvantages of high population density. [1+2]

1.18 Suggest why the Greater Bay Area continues to attract many migrants. [3]

1.19 Outline the potential impacts of megacity growth for individuals and societies. [3]

Assessment tip

Remember to read the question carefully, and then answer it. Sometimes, as here, you are asked to give different numbers of advantages/disadvantages or social/economic/environmental reasons. In question 1.17, you will only receive credit for one advantage, but you are expected to give two disadvantages.

Test yourself

1.20 Outline the main areas of the world in which there are displacements due to conflict and violence. [3]

Content link

The displacement of populations and the resulting influence on cultural diversity and identity is discussed further in unit 5.2.

that one of the most visible signs of Beijing's political intentions is the creation of an additional border crossing facility in the new rail station in West Kowloon, Hong Kong.



▲ **Figure 1.2.2.** The Greater Bay Area megacity region

The causes and consequences of forced migration and internal displacement

Causes of forced movement and internal displacement include civil war, political uprising, the rise of terrorism and tribal conflict. Environmental causes include flooding, drought, hurricanes, global climate change and volcanic eruptions.

The Democratic Republic of Congo (DRC) has over 2.2 million internally displaced people (IDPs), mainly due to violence and years of war and disaster. Inter-communal fighting and conflicts between tribal groups and the country's armed forces have led to many IDPs, especially in North Kivu and South Kivu. In contrast, in the Horn of Africa (Somalia and Ethiopia), years of drought have led to crop failure, livestock deaths, food insecurity and malnutrition. In addition, conflict and violence have forced many people to become IDPs, and some have been displaced due to heavy "taxation" by the non-state armed group al-Shabaab.

In 2016, flooding in the Yangtze River Basin in China displaced over 7 million people. Also in that year, nearly 10% of Cuba's population were evacuated ahead of Hurricane Matthew, while in Haiti around 550 people lost their lives, half a million people were displaced and up to 90% of homes were destroyed in the worst affected areas.

1.3 CHALLENGES AND OPPORTUNITIES

You should be able to assess population possibilities and power over the decision-making process:

- ✓ Global and regional/continental trends in family size, sex ratios and aging/greying;
- ✓ Policies associated with managing population change, focusing on:
 - ✓ Policies related to aging societies;
 - ✓ Pro-natalist or anti-natalist policies;
 - ✓ Gender equality policies and anti-trafficking policies;
- ✓ The demographic dividend and the ways in which population could be considered a resource when contemplating possible futures;
 - ✓ One case study of a country benefiting from a demographic dividend.

Global and regional/continental trends in family size, sex ratios and aging

The highest fertility rates (more than five children per woman) are found in Central and West Africa, whereas the lowest rates (fewer than two children per woman) are found in North America and Europe. The most rapid decline in the fertility rate has been in North Africa, where the rate fell from about seven in the 1950s to around three in the 2010s. However, globally, fertility rates are declining around the world.

As a result of the falling fertility rates, family size around the world is generally decreasing. Reasons for this include more working women, the high cost of having children, the high cost of housing, longer working hours, marital breakdown, greater availability of contraception and/or the desire for a more materialistic and individualistic lifestyle.

Sex ratios vary considerably around the world. The UAE has the most men (274.0) for every 100 women. Relatively high ratios of men to women are found across the Middle East and North Africa, China, India and western Asia. In contrast, Mauritius has the fewest men (84.5) for every 100 women. Low ratios of men to women are found across Russia, parts of eastern Europe and Japan.

Policies associated with managing population change

Policies related to aging societies

According to the World Health Organization:

- between 2015 and 2050, the proportion of the world's population aged over 60 years will double from 12% to 24%
- by 2020 the number of people aged over 60 years will outnumber children aged under 5 years
- by 2050, 80% of older people will be living in low- and middle-income countries.

- **Sex ratio** – the ratio of males to females in a population or cohort (age group).

- **Aging population** – a situation in many HICs where the average age of the population is increasing. It occurs when birth rates fall and the number of elderly people increases. Countries with older populations (a high percentage aged 65 and over) need to invest more in the health sector and in pensions. This may create problems if the workforce is small or reducing.

- **Pro-natalist policies** – population policies that encourage families to have more children, for example longer maternity/paternity leave, increased child allowance.

- **Anti-natalist policies** – population policies that encourage families to have fewer children, for example forced abortions, sterilization.

- **Gender equality** – treating males and females the same.

- **Trafficking** – taking people against their will and forcing them into occupations they do not wish to do.

- **Demographic dividend** – the benefits that come from a very large proportion of the population being in the adult age range, and a reduced proportion of young and/or elderly.

Test yourself

1.21 Suggest reasons for variations in gender differences around the world. [3]

Assessment tip

A common misconception is that aging populations are a drain on societies. Some aging populations can be a drain, but many are well-off and provide valuable social and economic services such as childcare and charity work, and they may spend a lot on travel and recreation.

Assessment tip

When describing data from a graph or table, look for the maximum and minimum values and any trends, and point out exceptions (anomalies). Remember to use the data (manipulate it or transform it) rather than just copying it.

Test yourself

1.22 Outline the opportunities and constraints of having
(a) an aging population, and
(b) a youthful population. [3+3]

Concept link



POSSIBILITIES AND POWER:

A country's population will be influenced by political decisions that focus on different demographic sections in a country. For example, policies such as implementing pro-natalist and anti-natalist policies, or ensuring that an emerging youthful working population will find employment opportunities, may help to manage change and help a country develop in a sustainable manner. Governments can be effective in creating change, such as China's One Child Policy, although there are many other governments in other countries that have struggled to influence their citizens with regard to natalism. Contemporary issues such as human trafficking not only relate to the power of authorities within a country's borders, but also cross-border cooperation in order to manage the illegal movement.

With aging, there is a gradual decrease in physical and mental capacity, a growing risk of disease, and ultimately death. However, there are other life changes, such as retirement, relocation to more appropriate housing, and the death of partners, friends and relatives.

Policies to deal with aging societies must therefore:

- commit to healthy aging, that is, improve the health of the elderly
- align health systems with the needs of the older population
- develop systems to deal with long-term care
- provide pensions and financial assistance.

However, these things require a great deal of funding which may increase the burden on taxpayers, for example, increased taxes and/or raising the age of retirement.

Pro-natalist and anti-natalist policies

Pro-natalist policies are designed to encourage families to have more children, while anti-natalist policies attempt to reduce the birth rate. Singapore has had both anti-natalist policies and pro-natalist policies.

In 1960, Singapore had a total fertility rate of over 5.5. This fell to under 1.5 by 1985, and has remained low since then.

Anti-natalist policies in Singapore (1972–87) included:

- creation of the Family Planning and Population Board
- increased access to family planning clinics
- promotion of sterilization programmes
- increased access to low-cost contraception
- use of the media to promote smaller families
- free education and low-cost healthcare for smaller families.

However, from 1987, pro-natalist policies encouraged families to have three or more children if they could afford to.

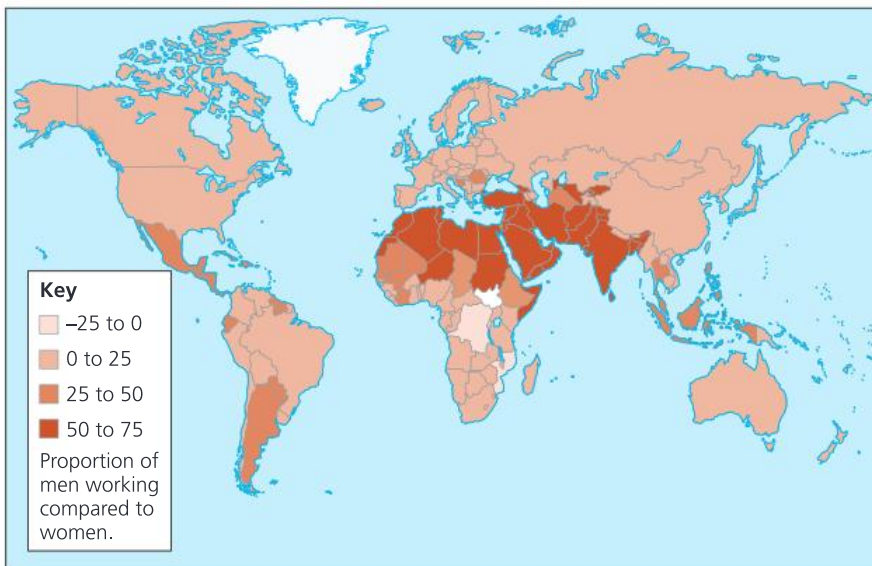
- The Family Planning and Population Board was abolished.
- Child benefits were increased, especially for those with higher academic qualifications.
- Maternity leave was increased.
- There was government-sponsored childcare.
- Sterilization and abortion were discouraged.
- State-sponsored dating agencies were established.

Overall, there were slight increases in the fertility rate when these measures were introduced but they were short-lived. Some businesses were against the increased maternity leave, and some individuals felt their "free choice" was being eroded.

Gender equality policies

According to the UN:

- in Sub-Saharan Africa and Western Asia girls face barriers to entering primary and secondary schools
- women in North Africa account for less than 20% of jobs in the non-agricultural sector
- on average, women in the labour market earn 24% less than men globally.



▲ **Figure 1.3.1.** Inequalities in employment (the difference between the proportion of men and women working)

Source of data: International Labour Organization

The UN Sustainable Development Goals (SDG) aim to:

- end all forms of discrimination against women and girls everywhere
- eliminate all forms of violence against women and girls
- recognize and value all forms of unpaid care and domestic work
- give women equal rights to economic resources, ownership and control of land and property, financial services, inheritance and natural resources.

Anti-trafficking policies

Human trafficking is a crime that strips people of their rights, dignity and hopes. It is a global problem.

▼ **Table 1.3.1.** Modern-day slavery: victims and profits by region

	Developed economies and the EU	Latin America and the Caribbean	Central and Southern Europe and the CIS	Africa	Middle East	Asia-Pacific
Victims	1.5 m	1.8 m	1.6 m	3.7 m	600,000	11.7 m
Cost (US\$)	\$44.9 bn	\$12 bn	\$18 bn	\$13 bn	\$8.5 bn	\$52 bn
Cost per victim	\$34,800	\$7,500	\$12,900	\$3,900	\$15,000	\$5000

Source of data: International Labour Organization (2014)

There are a number of organizations and charities raising awareness of human trafficking.

The Blue Heart Campaign (www.unodc.org/blueheart/) raises awareness of the impact of trafficking and the need to fight it; it also attempts to produce action to stop trafficking. To raise awareness, it encourages people to wear the Blue Heart to show solidarity with the victims of trafficking. (The Blue Heart is a symbol for the sadness of those trafficked and the cold-heartedness of the traffickers.)

The United Nations Voluntary Trust Fund for Victims of Trafficking in Persons, Especially Women and Children was created in 2010 as an integral part of a global effort to address trafficking in persons. The Trust Fund provides humanitarian, legal and financial aid to victims of trafficking. It supports NGOs that help people who have been exploited by trafficking.

Content link

Unit 5.1 discusses UN policies for empowering women and indexes for measuring gender equality in more detail.

Test yourself

1.23 Identify the region(s) where inequality in employment is greatest. [2]

1.24 Evaluate the type of map shown in Figure 1.3.1 (choropleth—density shading) and its scale as a means of showing variations in employment. [3]

Content link

Unit 4.2 discusses illegal flows, such as human trafficking, further.

Test yourself

1.25 Describe the number of victims and profits by geographic region, based on the data in table 1.3.1. [3]

1.26 Briefly explain the reasons for the use of the Blue Heart as a symbol of trafficking. [2]

Assessment tip

The command term “analyse” in a question would require you to bring out the essential elements of a structure or feature. When referring to this case study, you would need to consider Kenya’s total fertility rate (for example, is it high/low, falling/rising, above/below replacement level?).

The demographic dividend

Case study: Demographic dividend in Kenya

Kenya’s fertility rate is still relatively high and is above the replacement level (2.1), but it fell by over 50% between 1978 and 2014. High fertility has resulted in rapid population growth and a youthful age structure. Kenya’s population increased almost fourfold between 1969 and 2014.

Access to family planning is projected to increase from just over 50% in 2014 to 70% by 2030.

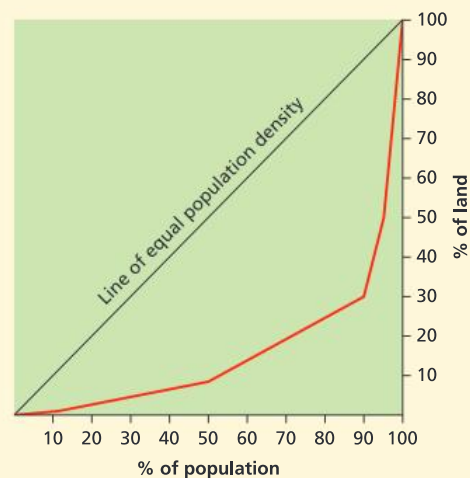
Kenya can expect a demographic dividend to occur if the birth rate falls below replacement level and the proportion of adults in the population increases. Birth rates may be expected to fall as the IMR and CMR decline, access to contraception increases, and the value of girls remaining at school becomes more widely realized.

The main advantage of a demographic dividend is that there is an increase in the proportion of workers relative to children and the elderly. Thus, the dependency ratio decreases. Having a larger workforce should result in greater economic output and greater revenue for the country. However, if there are insufficient jobs for the workforce, having too many adults could lead to unemployment, underemployment and political and social tensions. Many people may have to leave the country in search of employment, and that could lead to families being separated.

QUESTION PRACTICE

On the right, a Lorenz curve shows the inequality in the distribution of population in China.

- a) Using the Lorenz curve:
- state** the proportion of people living on the most densely populated 10% of the land area in China [1]
and
 - state** the proportion of people living on the least densely populated 10% of the land area in China. [1]
- b) **Suggest** two physical factors that can lead to uneven population distribution. [2 + 2]
- c) Using an example that you have studied, **explain** the impact of internal migration on the source regions. [4]



Essay

“Of all the possible challenges facing different countries, demographic issues are of greatest concern.”

To what extent do you agree with this statement?

[10]

How do I approach these questions?

- a) This question requires you to read off the graph.
- The reading for the most densely populated area should be straightforward.
 - The reading for the least densely populated area requires some data manipulation. To read off the Lorenz curve for the least densely populated 10% of the land, this must be taken away from 100% (that is, take the reading for 90% of the area, and then the value for the percentage of population living on 90% of the land must be taken away from 100% of the population).



- b) You are asked to suggest (identify) two physical factors and to suggest how they affect distribution. One mark will be awarded for the identification of a valid physical factor and another mark for further development/exemplification. The explanation will need to be developed (more detailed and/or have a supporting example) in order to get the second mark. There is no credit for the identification/explanation of any human factors.
- c) In this question the impacts have to be related to the source (where the migrants come from). No credit is given for impacts on the destination. Each of the impacts needs to be developed for full marks, that is, a more detailed explanation of the impacts in the source area.

Essay

A well-structured answer is needed for this extended response question. Half of your essay should be an examination of either aging populations (Stage 5 of the demographic transition model, DTM) or youthful populations, and the consequences related to their respective populations. Problems may relate to health, education or the cost of services needed, while opportunities may be economic and/or social. The other half of your essay should counter the argument in the question, potentially by covering other challenges to countries such as migration and climate change. Your essay should include appropriate terminology, located examples and supporting facts and figures.

SAMPLE STUDENT ANSWER

a) i) 53%

Mark 1/1

ii) 2%

Mark 1/1

b) Relief affects population distribution as areas that are mountainous are less likely to allow human habitation. This is because it is difficult to build infrastructure and farm crops on steep slopes.

▲ Valid development point

Distance to the coast is another factor affecting population distribution as people are more likely to live on the coast due to easier transport (ports) and leisure (beaches).

▲ Valid development point

Two valid reasons with some development.

Marks 4/4

c) The impacts on the region the migrants have come from have been both good and bad. On the good side, many receive remittances from family that migrated and sometimes the migrants might return to the village to build a house for themselves causing some job growth.

▲ Valid point

▲ Valid point

▼ Two valid points although neither developed in detail

On the other hand, villages suffer from depopulation as many leave to find jobs. This leads to fewer jobs in the long term as services become redundant due to the lack of use, such as post offices. This means that regions get poorer.

▲ First negative point

▲ Development point

▼ Two valid points – could have been developed better

Although the points were not developed there is sufficient detail to gain full marks.

Marks 4/4



← Essay

"Of all the possible challenges facing different countries, demographic issues are of greatest concern." **To what extent** do you agree with this statement?

▲ Clear introduction—suggests the likely structure of the essay

▲ Valid challenge and nominal support

▲ Further development/exemplification

▲ Generic challenges of an ageing population

▲ Generic challenges of a youthful population

▲ Some development and support

▲ Start of the counter-argument

▲ Valid point—climate change refugees

▲ Second valid point

There are many challenges in different countries. These include demographic, social, economic, political and environmental.

● Often the challenges are a mixture of more than one e.g. too many people (e.g. in megacities) can lead to unemployment (economic challenge) which in turn leads to poverty (social challenge).

● For many countries with an ageing population e.g. Japan or China, there are problems with a shrinking workforce. Germany accepted some one million Syrian migrants in order to make up the short-fall of its declining workforce. Other problems related to an ageing population can be the high cost of pensions and health care, and the need for sheltered accommodation for the elderly.

● Equally, there are problems for youthful populations – pressure on school places, clinics, not enough jobs and so on. Many LICs, such as Niger and Mali, have youthful populations but high rates of unemployment.

● In other countries, the problems do not necessarily stem from demographic challenges. For people living in low-lying islands, rising sea levels, increasing storms and contamination

of freshwater sources are a bigger concern e.g. in Kiribati.

● For others, e.g. in Sudan and South Sudan, desertification and falling food yields are a more pressing concern.

This has an impact on population, although arguably has been caused by increased population pressure on the environment. In Yemen, the major concerns are civil war and the war with Saudi Arabia. The air strikes (bombings) by Saudi Arabia and the blockade of Yemen's ports are major concerns, and up to 12 million people are at risk of starvation.

In other rich countries, other concerns may be more pressing. In the UK, the Brexit negotiations have created major uncertainty regarding the countries' economic and political future. Moreover, it is creating uncertainty for non-UK nationals, whose future in the UK is in question. For countries such as China, trade wars with the USA are causing major economic challenges. The country has other challenges, such as pollution and a declining labour force, although the latter could be partially solved by speeding up rural-urban migration.

So, overall, demographic challenges are important but not necessarily the greatest challenge in all countries. Nevertheless, people are affected by other challenges, so there is an impact on the quality of life for people.

▲ Population as a potential cause and impact

▲ Another valid example—good details

▲ Contemporary example—good point

▲ Demographic challenge of Brexit

▲ Another contemporary challenge—identifies a number of challenges in China

Good account—focused on the question; has good supporting evidence. Critical thinking/evaluation is implied but not explicit.

Marks 9/10