

Populations in Transition

✓ = Learnt

★ = marks my progress

POPULATION CHANGE :

- ✓ Explain population trends and patterns in births (Crude Birth Rate), natural increase, and mortality (Crude Death Rate, infant and child mortality rates), fertility and life expectancy in contrasting regions of the world.
 - ✓ Analyse population pyramids.
- ✓ Explain population momentum and its impact on population projections.

1. POPULATION DENSITY & DISTRIBUTION

SKILLS: CHOROPLETH & DOT MAPS

CASE STUDIES: BRAZIL (DENSITY)

Density: number of people per unit area. A measurement of the *concentration* of people

Distribution: the way people are dispersed across the landscape; the location of where people live

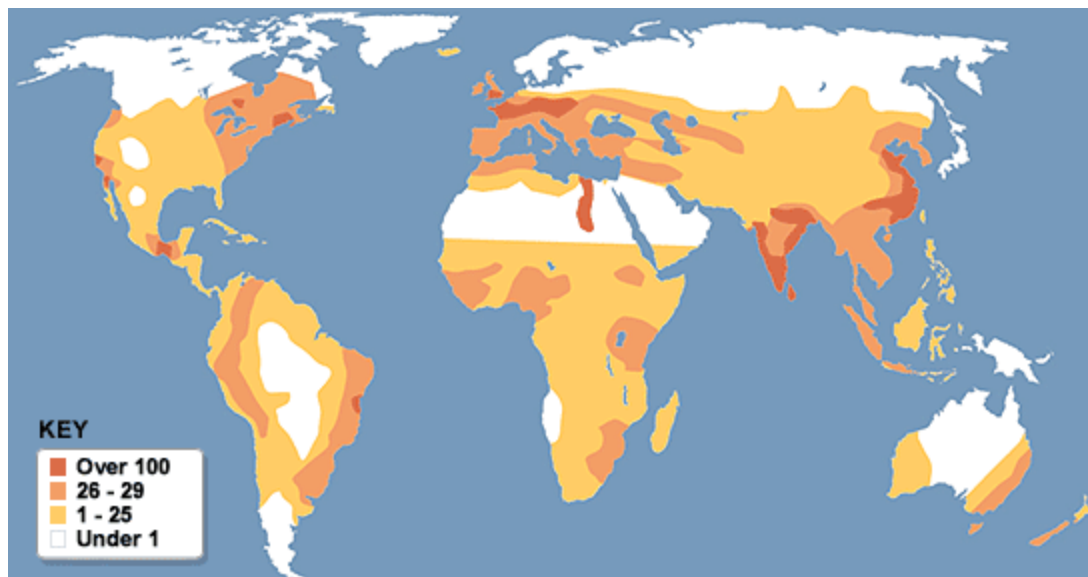
Q. Define density and distribution (2 marks)

World Pop. Density:

- Highest pop densities are usually MEDCs, e.g. Britain, Europe, Asia
- Lowest pop densities are usually LEDCs, e.g. Africa, South America, Russia
- Anomalies incl. America (MEDC w/ low pop density, due to larger land mass), India (LEDC w/ very high pop density, due to exponential pop. growth), Australia (MEDC w/ low pop density, due to uninhabitable land)

Q. Outline world population density and its 3 anomalies. (6 marks)

Choropleth map to show pop. density:



- Uses **colour scales** – different shades of one colour
- Darkest colour equates to highest density

- Data is grouped equally between frequencies (10-50, 50-100)

Q. Outline the appearance of a choropleth map to show pop. density (3 marks)

Limitations of the choropleth map?

- Only shows densities of whole countries, rather than individual cities – therefore limiting in its approximation
- Poorly shaded = does not reflect data accurately
- Assumes that the boundaries of pop density occur directly against each other, whilst in reality borders are not strict

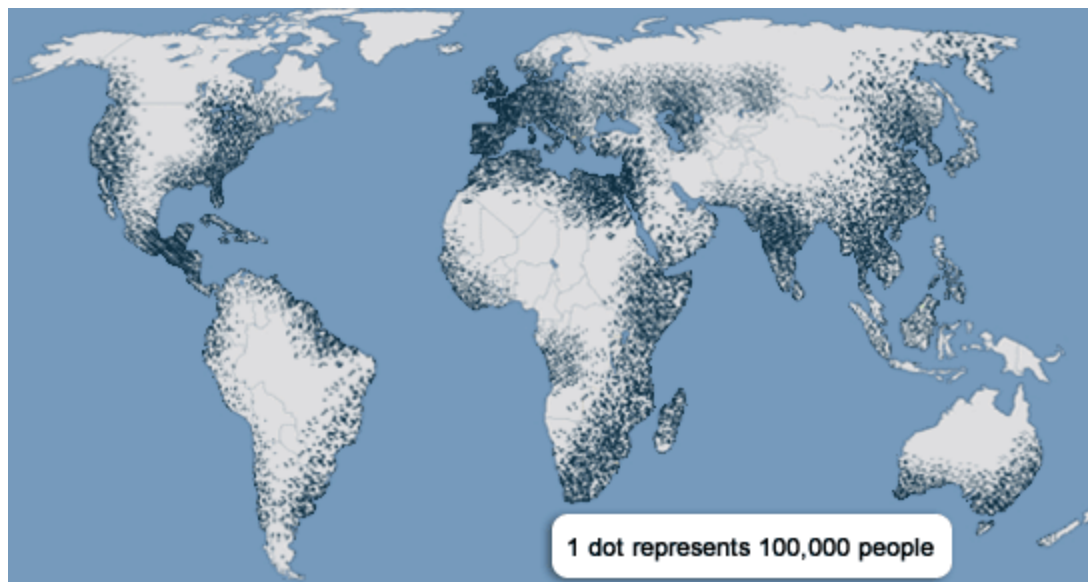
Q. What are the limitations of a choropleth map? (3 marks)

World Pop. Distribution:

- UNEVEN POP. DISTRIBUTION – SUBJECT TO CHANGE
- (Usually LEDCs) Highest pop. distribution is within certain parts of Asia, i.e. India, and Europe, i.e. UK and Germany
- (Usually MEDCs) Lowest pop. distribution is within Canada, Australia, Russia and South America (usually due to uninhabitable areas)
- Anomaly is that Asia, an LEDC, is supposed to have lower pop. distribution – however due to increased rates of growth, Asia has very densely distributed population
- High pop. distribution will occur around coasts and other water sources

Q. Outline the world's population distribution. (4 marks)

Dot map to show pop. distribution:



- One dot represents a certain scale
- The more dots there are over one area, the more people there are in that area
- More densely distributed dots would mean overcrowding; less dots over a wider area means a more evenly distributed population

Q. Outline how to view a dot map for world distribution. (3 marks)

Limitations of dot maps:

- Can give the impression that certain areas have *no* people due to high scale – this isn't actually true.
- If the dots are too numerous, it may be difficult for the reader to count the dots. This can cause the map to be ineffective in communicating its message.

Q. What are the limitations of dot maps? (2 marks)

Reasons for uneven pop. distribution around the world?

FACTORS	SPARSELY POPULATED AREAS	DENSELY POPULATED AREAS
PHYSICAL	Rugged mountains, where it is difficult to build an infrastructure; harsh landscape; active volcanos (Andes)	Flat, lowland plains (Bangladesh); areas surrounding volcanoes (Mt. Etna)
CLIMATE	Extreme climate – desert conditions (Sahara desert); drought, high humidity (Amazon Rainforest); cold areas (Canada)	Temperate climate; reliable and even rainfall for crops, no temp extremes (Europe)
VEGETATION	DENSE FOREST. Coniferous forests (Eurasia/Canada) and tropical rainforests (Amazon). Alternatively, desert land w/ sparse vegetation	Areas of grassland
SOILS	Frozen soils or infertile soil; places w/ soil degradation (Kenya)	Deep, humus-filled soils; fertile soils w/ high agricultural use
WATER SUPPLIES	Insufficient rainfall; places w/o a permanent supply of fresh water; lack of money/technology to build reservoirs and wells; contamination of sewage	Reliable water supply, aka. access to river or large rainfall (northern England); wealth/technology to build reservoirs (Canada)
DISEASES	Areas w/ life-threatening diseases and no access to healthcare services	Areas pest-free; medical expertise to eradicate diseases
RESOURCES	Areas devoid of minerals; sources not easy to get (Tibet)	Large mineral deposits and energy supplies
COMMUNICATIONS	Areas where it is difficult to construct transport or phone lines eg mountains (Bolivia), deserts (Sahara) or rainforests (Amazon)	Areas where it is easy to construct railways, roads and airports (Britain); areas where ports can be opened for trade (Singapore)
ECONOMIC	Less developed, less secure economies; small workforce; less opportunities for jobs	More opportunities to jobs; Intensive farming industry can support lots of people on a smaller land (Netherlands)
POLITICAL	Government that is corrupt or fails to invest money into development	Democratic government; governments w/ decision to affect pop distribution ie by creating new

		cities (Brasilia)
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Q: Draw a table of factors against sparsely and densely populated areas. (10 marks, 2 more marks for each point)

2. WORLD POPULATION GROWTH

SKILLS: LORENZ CURVES

CASE STUDIES: JAPAN AND ETHIOPIA

Current world population:

- Current world population is seen as 9 bil. by 2015, at current growth rate
- Fastest growing region has been India and China (most populous countries in the future)
- Japan, Russia and Germany have shrinking populations
- Afghanistan's population will double; Niger's pop. will triple; Ethiopia
- Fastest and slowest growing regions?

Why has world pop. grown?:

1 billion to 7 trillion in 1800s – control and reduction of death rate, e.g. curing smallpox

Q. Describe the world population. (4)

Q. Why has world pop. grown so exponentially? (2)

Malthus' population theory (18th century):

- The power of the population to increase is greater than that of the Earth to sustain it
- Demand will overpower supply
- No control of the population will eventually cause death and destruction/war
- Physical limits determine how many people can be supported on earth

Neo-Malthusian ("effect of Malthusian theory"):

- Methods used to sustain the rapidly expanding population (eg by increasing agricultural and industrial activity)
- Leads to extreme environmental and financial impact

Q. Outline the Malthus population theory. (5 marks)

Paul Ehrlich's population bomb:

What factors affect population change?:

Socio-economic culture/religion changes, loosening values on contraception; emancipation of women; family planning; family size decreases due to changing values (labour – work on farms); improved healthcare (esp. within elderly sector); food/health/sanitary conditions all improve; improving education

Political policies implemented; war or famine; female infanticide (infant mortality)

Environmental access to water supply improves; natural disasters

Q. What factors affect population change? Split into social, economic, political and environmental. (at least 12 marks)

Population momentum: The tendency for a population to grow despite a fall in birth rate or fertility levels.

Why does population momentum occur?:

- Due to relatively high concentration of people on the pre-childbearing/child-bearing years (large youthful population)
- POP CONTROL POLICY IMPLEMENTED but as this sector grows older and become reproductive, the more the num. of births will exceed the num. of deaths in the older population
- Therefore population will continue to grow despite more deaths and less births

Q. What is population momentum? (2 marks)

Q. Why does population momentum occur? Include a diagram. (4 marks)

3. DEMOGRAPHIC TRANSITION MODEL (DTM)

SKILLS: DTM, POPULATION PYRAMIDS

DTM: Demographic Transition Model; shows birth rate, death rate and overall population change. Euro-centric.

DTM Stage 1: High birth rate and high (fluctuating) death rates; overall population remains constant and low

Why? Because contraception/family planning has not been introduced yet; culture/religion prohibits planning of children/use of contraception; agricultural labour workers needed

High death rates due to lack of improved medicinal cures/technology, lack of quality of life (bad sanitation/healthcare/hygiene), and a poor diet

Why fluctuating?

Overall population remains mid-way as birth rates balance out death rates. Constant balance.

DTM Stage 2 (developing country, eg Ethiopia and Afghanistan): High birth rate & rapidly increasing death rates; overall population begins to grow

Why? High birth rate continues as women are not emancipated; culture still remains intact

Lowering birth rate due to better medicine/healthcare, increasing life span and reducing disease; better sanitation (Public Health acts placed within UK in 1800s); improvements in food supply (eg more crop growth)

Population grows due to slower death rates

Africa will stall at this stage due to AIDs and other diseases

DTM Stage 3: Birth rate decreases rapidly, death rate still decreases but slows down; overall population slows rate of growth

Why? Birth rate will decrease due to cultural/religious change; contraception allowed; education improves therefore family planning occurs; agricultural workforce is not needed anymore

Death rate lowers slowly due to increase in nutritional diet, but people still die as cures to epidemics/non-curable diseases still occurs

DTM Stage 4: Birth rate lowers, death rate lowers (fluctuating), pop remains constant

Emancipation of women means less births due to career being put first

Death rates fluctuate but remain low due to increase in lifestyle diseases (eg high obesity, smoking), and an ageing population

DTM Stage 5:

Population shrink as death rate remains constant and birth rate lowers again (seen in UK, Germany)

Ageing population is not being replenished by large youthful population; ageing people live for longer and do not die due to medical improvements; birth rate is lowered due to less women marrying traditionally

Population shrinks as it falls below replacement level

China, Brazil and Thailand have passed through DTM model v. quickly due to fast socio-economic change

Q. Draw the DTM, its 5 stages, along with population pyramids and annotations describing each stage. Include references to existing countries and the stages they are currently within. (20 marks)

Is the DTM a perfect model?:

- Allows a model for comparison
- Shows explanation for transitions in mortality and fertility
- In most countries the cultural setting determines the onset of fertility rate (therefore reflects Europe v. well)
- However, doesn't take into account war or famine
- Doesn't take into account family planning, medical knowledge transfer
- Doesn't show migration or immigration/emigration (eg Poland-UK)
- Doesn't show evolving of culture and religion (eg Gulf states w/ good industry but high birth rates)
- Doesn't show government policies
- EUROCENTRIC – excludes wider views of the world

Q. Is the DTM a perfect model? (3 marks for, 6 marks against)

Country like Japan would have an inverted population pyramid (DTM 5)

Low, declining birth rates (narrow base)

Low/mid death rates, low infant mortality (steep sides w/ no sloping gradient)

High life expectancy (tall and large apex)

Country like Ethiopia (DTM 2)

High birth rates (wide base)

High death rates, high infant mortality (sloping sides, certain sides impacted by AIDs)

Low life expectancy (shorter, narrow apex)

4. FERTILITY AND MORTALITY

SKILLS:

CASE STUDIES: JAPAN VS ETHIOPIA

Fertility: Num. of live births per 1,000 women aged 15-49 in one year; or, average num. of children a woman will bear

Gender-related fertility rate: Measures inequality between the sexes in life expectancy, education and standard of living

Replacement level fertility rate: Level at which each generation of women has only enough daughters to replace themselves in population

Q. Define fertility, gender-related fertility rate, and replacement level fertility rate. (6)

What factors affect fertility?:

DEMOGRAPHIC

- Infant mortality rates will influence fertility; eg. a high mortality rate / many youths die / parents have to 'compensate' for labour workers.

- Age structure of population (youthful/ageing)
- Death rates

SOCIAL

- Tradition requires high reproduction rates; eg. inequality of women means no say in num. of pregnancies / Catholics/Muslims oppose birth control.
- Social class favours boys instead of girls; raises fertility rate due to repeated births for boys
- UK benefits and healthcare for children reduces fertility rates
- Culture within emancipated states; education and family planning (knowledge and social awareness of contraception/birth control)

Q. List the factors that affect fertility (15 marks)

How does fertility vary across the world? For both Japan and Ethiopia look at population pyramids for both countries and try to account for changes in fertility and mortality rates, think about education, culture, religion, employment, wealth and social factors (government policies etc).

RESPONSES TO HIGH AND LOW FERTILITY:

- *Explain dependency and ageing ratios.*
- *Analyse the impacts of youthful and ageing populations.*
- *Evaluate examples of a pro-natalist policy and an anti-natalist policy.*

5. POPULATION CHANGE POLICIES

SKILLS:

CASE STUDIES: JAPAN (PRONATALIST) VS CHINA (ANTINATALIST)

Q. Define pro-natalist policy. (2 marks)

A policy designed to increase population through birth and fertility rates. Incentives usually offered, e.g. bonuses, Angel Plan, free education/child care benefits. Introduced due to ageing population or shortage of ECS.

Q. Define anti-natalist policy. (2 marks)

A policy designed to decrease population through birth and fertility rates. Rigid policies e.g. punishment/fines, or a more relaxed, education-based policy in which females become literate and are able to control birth rates. Occurs when a country is overpopulated or has a youthful population

6. YOUTHFUL & AGEING POPULATIONS

SKILLS: TRIANGULAR GRAPHS

CASE STUDIES: UK (AGEING) VS GAMBIA (YOUTHFUL)

What is a dependency ratio?

The ratio between dependents (old and young) and the economically active

$$= (\text{Dependent population} / \text{Population of working age}) \times 100$$

Q. What is the dependency ratio? How do you calculate it?

Dependency ratio may increase due to

- Increasing life exp (thus causing an ageing population)
- Falling death rate, rising birth rates

– Emigration of economically active, immigration of dependents

Q. How does dependency ratio increase? (3)

Old dependents: 65 +

Young dependents: -16

Economically active: 16-65

Q. Advantages of a youthful population? (4) Disadvantages of a youthful population? (4)

Lower death rates; less money spent on care homes/hospitals

Literate and educated population (esp. when they grow into the workforce)

Strong future workforce

Large 'future' market (young people interested in consumer goods)

Cost of childcare and education

Overpopulation

Pressure on healthcare

Unemployment b/c shortage of workforce

Q. Solutions for a youthful population?

Q. Advantages of an ageing population? (5) Disadvantages of an ageing population? (6)

Elderly people can be valuable in the workplace; lots of experience and will not take maternity leave

Less money spent on schooling

Lower crime rates

Valuable in daycare

Can be valuable to economy ('specialist' industry for the elderly)

Shortage of economically active, thus causing a decrease in economical input/profit

Cost of providing healthcare/care homes (NHS)

Cost of providing medicine in order to prolong lives of the elderly (eg terminal cancer)

Cost of pensions

Service decline (less shops, sports centres etc not in use by older residents)

Hostility felt through or by the youth

ECS feel pressure to look after them

Q. Solutions for an ageing population?

MOVEMENT RESPONSES (MIGRATION) :

- *Discuss the causes of migrations, both forced and voluntary.*
- *Evaluate internal (national) and international migrations in terms of their geographic (socio-economic, political and environmental) impacts at their origins and destinations.*

7. MIGRATION THEORIES

SKILLS:

CASE STUDIES:

8. PUSH-PULL MODEL

SKILLS:

CASE STUDIES: POLISH-UK MIGRATION

Push-pull suggests that there are factors to push them away from origins, and pull them to desired destination ('perceived opportunities').

Push factors:

Poor workforce; lack of job opportunities; lack of jobs despite having a good education
Food/water shortages
Poor education/medical care
Crime or conflict within area

Pull factors:

Prospect of a better job w/ economical progress/success
Prospect of a better quality of life
Lower crime rates/peace
Prospect of better education
Better quality of life

Intervening obstacles:

No passport/visa
Shortage of money
Fear of being a victim of crime
Arrest for illegal entry into countries

Advantages to host/recipient country of international migration:

Influx of educated and skilled workers
Workers willing to do 'small' or manual labour (cheap migrants to fill manual jobs)
Growth of local market
Growth of GDP
Growth of culture

Disadvantages to host/recipient country of international migration:

Racial tensions
Overcrowding due to 'perceived opportunities' not being what you hoped; many are forced to live in sub-par areas, e.g. shanties
Rise in unemployment when migrants accept lower paid positions; 'migrants stealing our jobs'
Money taken from GDP and given to source country when immigrants move back

Advantages of source country:

REMITTANCES ARE SENT HOME FROM HOST TO SOURCE COUNTRY. FINANCES ECONOMY. IMPROVES IT.

Increased political ties w/ host country
Increased skills from host country
Reduced pressure on healthcare/social care/school

Disadvantages:

Loss of workforce; most skilled/educated workers
Increase in dependency ratio
Separation of families

9. FORCED/INTERNATIONAL MIGRATION

SKILLS:
CASE STUDIES: DARFUR

10. (INTER) NATIONAL MIGRATION

SKILLS:
CASE STUDIES: BRAZIL

Urbanisation: The increase of people living in urban areas. Urbanisation normally takes place because of rapid rural-urban migration.

Urban growth or urban sprawl: The increase in size of an urban area, normally because extra houses are being built in the rural-urban fringe.

Counter-urbanisation: The movement of people out of cities or towards the edge of cities. People often move out or to the edge in MEDCs to find more space and less overcrowding and pollution.

Re-urbanisation: The movement of people back towards the CBD.

- The government has better control over the population if they leave in urban areas. They may join the formal economy and pay taxes
- It is easier for the government to provide services like schools and hospitals
- Remittances may be sent back to families
- Reduced pressure on limited electricity and water supply

Disadvantages • Increased congestion

- Causes urban sprawl as informal housing is built
- Increased pollution

GENDER AND CHANGE:

Examine gender inequalities in culture, status, education, birth ratios, health, employment, empowerment, life expectancy, family size, migration, legal rights, and land tenure.

11. GENDER INEQUALITIES

SKILLS:
CASE STUDIES: MOROCCO VS CHINA

12. UK & DTM (EQUALITY)

SKILLS:
CASE STUDIES:

Link changing population structure the emancipation of women and changing TRF. Link to changing values on sex and consumer society.

Consider differences in pay that still exist between men and women particularly in the corporate world.