

URBAN ISSUES AND CHALLENGES: URBANISATION

KEY TERMS

Urban: Built-up areas such as towns and cities

Rural: Areas of lower population in villages – the countryside

Urbanisation: The increasing proportion of people living in urban areas (towns and cities).

Counter-urbanisation: The movement of people from towns and cities to surrounding rural areas

Suburbanisation: The outward growth of towns and cities, which may swallow up villages on the outskirts of the urban area. Characterised by large housing developments.

MEGACITIES

These are cities with over 10 million inhabitants.

Top 5 largest by population (2024):

- Tokyo, Japan – 37.1 million
- New Delhi, India – 33.9 million
- Shanghai, China – 29.2 million
- Dhaka, Bangladesh – 23.2 million
- Sao Paulo – 22.6 million



URBANISATION TRENDS

Urbanisation is linked to industrialisation – people move to urban areas to find work (which is more reliable than farming).

57% of the global population live in urban areas (predicted to reach 67% by 2050).

HICs: High proportion of people living in urban areas (more than 60%) – but urban population is slowing in these countries.

NEEs: Rapid urbanisation since the 1980s (e.g. Nigeria, Brazil, India, China) – most of the world's megacities are in NEEs.

LICs: Typically less than 25% of population living in urban areas, however many LIC cities are now growing rapidly.

REASONS FOR URBANISATION

- Migration
- Natural increase



MIGRATION (PUSH-PULL THEORY)

Cities may grow because people move to them from other places.

international migration: When people move into cities from other countries.

Internal migration: When people move from other places within the same country.

Rural-urban migration: When people move to cities (urban areas) from the countryside (rural areas).

Push factors: Reasons to leave a place, e.g. poverty, lack of access to education and healthcare.

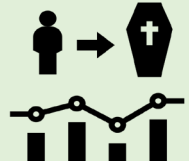
Pull factors: Reasons to move to a place, e.g. job opportunities, better access to services.



NATURAL INCREASE

When the **birth rate** is higher than the **death rate** = population increase.

In NEEs/LICs this happens because the death rate is decreasing rapidly – to better access to a varied diet, medical care and sanitation – fewer people dying of diseases linked to poverty or malnutrition.



URBAN ISSUES AND CHALLENGES: NEE CITY STUDY (LAGOS)

LOCATION

Lagos is a megacity in south-west Nigeria, about 300 km south-west of the capital city of Abuja. It is a port city on the coast of the Gulf of Guinea, which is part of the Atlantic Ocean.



PUSH FACTORS FROM RURAL NIGERIA

- Lack of healthcare and education
- Land shortage – not enough space to farm
- Desertification in Northern Nigeria – climate change will make this worse
- Pollution in the Niger Delta from oil spills
- Farming pays low wages – few other job opportunities
- Extremism in Northern Nigeria (e.g. Boko Haram)



GROWTH OF LAGOS

2024 population = 16.5 million (predicted to reach 24 million by 2030).

1960: The city expands Northwards onto the mainland.

1970s: Oil boom in Nigeria – people migrate to the city for work.

1980/90s: Living standards fell as more people moved into the city.

2012: Expansion around the Lagoon to the north and west and eastwards to the Lekki peninsular.

PULL FACTORS TO LAGOS

- Education opportunities – schools and universities – enables people to earn more later in life
- Better access to healthcare – many clinics and hospitals (so life expectancy is higher in cities)
- Lots of job opportunities – in manufacturing and service industries (higher wages and more reliable than farming)
- Access to essential services such as water and electricity supply (although can be temperamental)



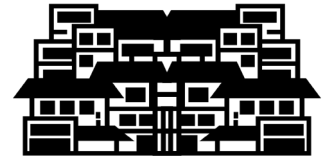
IMPORTANCE OF LAGOS

National:

- Home to 10% of Nigerians
- Accounts for over 60% of industrial and commercial activities in the nation
- Lagos contributes about 30% of Nigeria's GDP
- Previously was the capital city (before it moved inland to Abuja)
- Most Nigerian manufacturing takes place in the city

International:

- Biggest city in Africa
- Major hub for the HQ of many global companies
- Main financial centre in West Africa
- It is a global city with a significant 'foreign-born' population
- Airport serves hundreds of destinations around the globe – 80% of flights into West Africa land here
- Home to Nollywood – Nigeria's film industry (3rd largest in the world).



OPPORTUNITIES/ADVANTAGES IN LAGOS

Coastal location – Atlantic Ocean



Easy to export goods



Concentration of industry



Easy access by rail



Port function – Lagos Port Complex



Educated/skilled workforce



Easy access by air



Easy access by road



URBAN ISSUES AND CHALLENGES: NEE CITY STUDY (LAGOS)

PROBLEMS WITH RAPID GROWTH IN LAGOS

Rapid population growth means that infrastructure struggles to cope with the number of people.

Transport: Nearly half of new cars in Nigeria are registered in Lagos – making it one of the most congested cities in the world. On average people spend 3 hours a day in traffic and serious accidents are common.

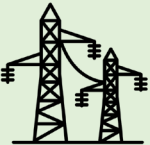
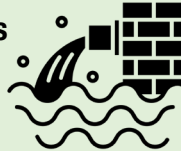
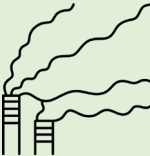
Air pollution: This is linked to traffic, but also pollution from industry. Levels of air pollution are 5 times higher than the internationally recommended limit.

Water supply: Most people have to use public taps or buy water from street vendors (very expensive) – only the richest residents have piped water supply.

Sanitation: Lack of proper sewage system – it gets washed into open drains and rivers, and leaks into the ground from pit latrines. Lots of cases of cholera and dysentery.

Electricity: Supply is unreliable and blackouts are frequent – wealthy households and businesses use back-up generators when they need to.

Crime: Armed muggings, burglaries and car jackings are common.



THREAT OF SEA LEVEL RISE IN LAGOS

Most of Lagos is less than 2m above sea level – rising sea level is a severe threat. Lagos regularly floods – causing drains to overflow and sewage to enter homes...

- Lagos is on the coast
- Flat and low-lying – quick to flood; slow to drain
- Wet, tropical climate
- Rapid urbanisation – impermeable land surfaces
- Lack of drainage in informal settlements



MAKOKO INFORMAL SETTLEMENT

Makoko is on the edge of Lagos Lagoon – homes extend into the water, built on stilts – home to around ¼ million people.

- High fertility rate due to lack of family planning
- Not many children continue their education
- Difficult to control – crime is high here
- Water is very polluted – makes fishing difficult.

Floating school: Half building/half boat built to improve access to education but also to create a community hub – BUT, almost destroyed by flooding so future is in doubt.



EKO ATLANTIC

Being built from reclaimed land on the coast (called Africa's answer to Dubai!) – aims to be Nigeria's (and West Africa's) financial centre – costing \$6 billion.

Will attract TNCs to Lagos – creation of 150,000-350,000 jobs in formal economy (direct and indirect jobs) – more tax revenue for the city to spend on infrastructure – multiplier effect. New luxury homes being built for wealthy residents.



INFORMAL ECONOMY

Jobs without security – no taxes paid, but no employment benefits, such as sick pay, maternity pay, holiday pay, pensions, etc. BUT, means less tax revenue for city government to spend on important services.



OLUSOSUN RUBBISH DUMP

Around 500 people work here (informally) – sorting valuable items to sell – reduces waste. Workers exposed to toxins – no protective clothing. The dump has shops, bars, cinema and a mosque!

URBAN ISSUES AND CHALLENGES: NEE CITY STUDY (RIO)

LOCATION

Rio de Janeiro is on Brazil's Atlantic coast in a large natural bay (Guanabara Bay). Previously the capital of Brazil, but replaced by Brasilia in 1960. It is the 2nd largest city in Brazil after Sao Paulo.



PUSH FACTORS FROM RURAL BRAZIL

- Lack of healthcare and education
- Commercial farming and use of machines has reduced jobs
- Farming pays low wages – few other job opportunities
- Dense rainforest



PULL FACTORS TO RIO

- Education opportunities – schools and universities – future earning potential
- Better access to healthcare – many clinics and hospitals (so life expectancy is higher in cities)
- Job opportunities – in manufacturing and service industries (higher wages/ more reliable than farming)
- Access to essential services such as water and electricity supply (although can be temperamental)

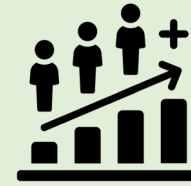


GROWTH OF RIO

2024 population = 6.2 million (predicted to reach 13 million by 2030) – growth rate of 0.5% annually.

Natural increase: 35% of Rio's urban growth (but has slowed down recently due to ageing population).

Migration: 65% of urban growth – mainly rural-urban, but also from other countries, such as Bolivia and Peru, as well as other continents.



IMPORTANCE OF RIO

Regional

- Brazil's largest university
- Several large hospitals serving surrounding population
- Source of jobs for people locally



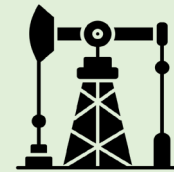
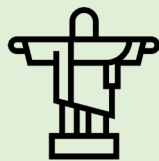
National:

- Major port for exporting coffee, sugar, etc
- National attractions, e.g. National Museum of Fine Arts
- Contributes 7% of Brazil's GDP



International:

- Best known Brazilian city – home to famous attractions, e.g. Statue of Christ the Redeemer, Sugar Loaf mountain, the Rio carnival (known as 'the greatest show on Earth')
- Rio hosted the 2016 Olympic Games and the 2014 football World Cup
- Part of the city is a UNESCO World Heritage Site
- The city is a world-famous global tourist destination, with well-known songs written about the beaches at Copacabana and Ipanema
- Home to the HQs of major TNCs of Petrobras (energy company) and Vale (mining company)
- Rio is very ethnically diverse and has the largest Portuguese population outside Portugal (Portugal was the former colonial power)



URBAN ISSUES AND CHALLENGES: NEE CITY STUDY (RIO)

HEALTHCARE IN RIO

Disease spread rapidly in overcrowded favelas and access to family clinics is poor in some parts of the city – care for the elderly and pregnant women is lacking. NGO Bliss has set up programmes to improve health, e.g. leprosy awareness, and training to be health workers. Health kits have also been taken into homes that can detect 20 different diseases – this has reduced infant mortality.



EDUCATION IN RIO

Literacy rate for children 10 and over is 95% – good access to schools and 99 higher education institutes in the city. BUT, many leave school by 14 to start work (especially in favelas). Government grants to encourage children to stay in school and funds football and other extra activities.



SERVICES IN FAVELAS

Waste: Refuse lorries can't get through narrow streets

Electricity: 70% of people have access, but those without often try to hook up illegally to existing power lines – leads to risk of fires and blackouts.

Water: 90% of people have running water – those who don't often buy water from street vendors (expensive). Lots of leakage through old pipes.

Sanitation: Untreated sewage flows into waterways.

Regeneration linked to 2016 Olympics included new water treatment plants and pipelines, a biogas plant (from rotting waste), a new nuclear power station and HEP plant.

FAVELAS

These are informal settlements – there are over 1000 in Rio, home to 24% of the population. The city has expanded right up into the mountains and hills which surround it – here the favelas are very crowded, and vulnerable to landslides.

Some favelas are very poor, whilst others are vibrant and well-established.

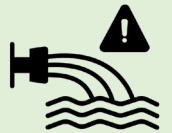


ENVIRONMENTAL ISSUES

Water pollution: Especially in Guanabara Bay - 200 tonnes of raw sewage and 50 tonnes of industrial waste poured into the bay daily, also oil spills. Huge impact on fish and other marine wildlife.

Congestion: Most congested city in South America – steep mountains limit road building and tunnels are expensive to build. Crime means that most people prefer to drive around the city.

Air pollution: Build up of exhaust fumes and factory emissions – leads to thick smog (gets trapped by mountains) – leads to 5,000 deaths a year.



FAVELA BAIRRO PROJECT

Site and service scheme: Local authority provides land and services for people to build homes. Cost = US\$ 1 billion.

Improvements: Paved formally named roads; access to water supply and sanitation; secured hillsides (to stop landslides); new health/education/leisure facilities; cable car system; access to credit and 100% mortgages; Pacifying Police Unit (UPP) to reduce crime.

Success? Improved quality of life, BUT some issues with maintenance (people lack skills/resources), increased rents mean that the poorest residents are worse off.



URBAN ISSUES AND CHALLENGES: UK CITY STUDY (LONDON)

LOCATION

London is in south-east England – was built on the River Thames.



GROWTH OF LONDON

18th century: Became important port and manufacturing developed after the Industrial Revolution.



1801: 1 million inhabitants – world's most populous city.

WWII: Population peaked at 8.5 million – then declined (bomb damage).

1990s onwards: Population increasing – 2011 census = 8.1 million; 2021 census = 8.7 million (2024 est = 9.7 million). London has a young population compared to the rest of the UK.

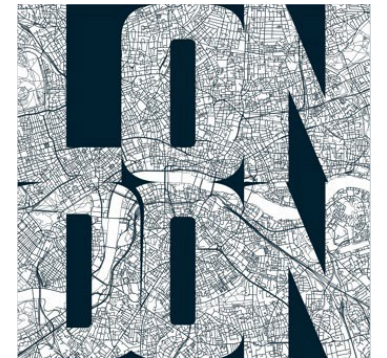
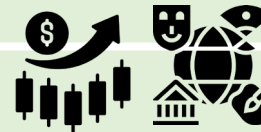
IMPORTANCE OF LONDON

National:

- UK capital city
- Largest and wealthiest city
- HQ of many major British firms
- House prices and earnings have risen quicker here than anywhere else – wealth gap between London and the rest of the UK
- Generates approximately 22% of the UK's GDP
- Top universities, e.g. London School of Economics and Imperial College London
- Culture hub, e.g. British Museum
- Major transport hub

International:

- Global city
- Joint most important financial centre (with New York)
- HQ of many global TNCs
- 5 international airports, including, Heathrow, Gatwick and Stansted, serve London
- Home to 251 foreign banks
- Centre for tourism – 16.1 million international visitors in 2023
- Many of London's iconic buildings (e.g. the Shard) and sports teams are owned by foreign investors
- Home of media and culture, e.g. West End



MIGRATION LONDON

40% of its residents were born abroad. Led to distinctive areas of the city...



Bangladeshi: East London, e.g. Tower Hamlets and Hackney (Brick Lane – famous for curry houses).

Caribbean: Brixton (south), Notting Hill (west), Hackney (east) and Tottenham (north).

Changes to the city: Culture, e.g. Notting Hill Carnival, Chinese New Year, variety of food, religious buildings, number of languages spoken, street art – often linked to gentrification (as in Shoreditch).

INEQUALITY IN LONDON

Boroughs in north/east London are generally less wealthy than those in the south/west...

Unemployment and benefits receipt: Highest in Newham, Barking and Dagenham, and Tower Hamlets (all east), e.g. over 20% of population on benefits in Newham.

Life expectancy: Knightsbridge (in Kensington and Chelsea) = 90, Compared to 78 in West Ham (in Newham).

School outcomes: 80% of students in Kensington and Chelsea achieve 5+ 'good' GCSEs, compared to 62% of students in Newham.

Home ownership: Higher in south/west boroughs too!



URBAN ISSUES AND CHALLENGES: UK CITY STUDY (LONDON)

KEY TERMS

Urban sprawl: When cities spread out into the surrounding countryside.

Green belt: A ring of protected countryside around major towns and cities to control urban growth.

Greenfield site: Land that hasn't been used for building development before i.e. farmland and countryside.

Brownfield site: Land that has been built on before and is being reused

ENVIRONMENTAL ISSUES

Waste: Low recycling rates – many Londoners live in flats without designated recycling facilities.

Air pollution: Traffic congestion leads to poor air quality – worse than most European cities. Most of London is above EU limit of 40 mg/m³ for NO₂ – over 4,000 premature deaths a year.



STRATEGIES TO REDUCE CAR USE

Congestion charge: £15 a day to enter zone 7am-10pm – fine of £160. Has reduced car use by 10%.



ULEZ: Ultra Low Emissions Zone tries to stop heavily polluting vehicles from entering central London – decreased NO_x emissions by 44%.

London cycle superhighway: 1.5m wide barrier-free cycle path – dedicated lanes, barriers, and traffic signals to protect cyclists from cars. 12 routes (but only 6 have opened).



URBAN GREENING

47% of London is green space, e.g. parks, woodlands, cemeteries and gardens...



- Air filtering – absorb CO₂ and other pollutants
- Reduces flood risk – increased infiltration
- Provides wildlife habitats
- Important for physical and mental health (especially as many households lack gardens)
- Growing food in allotments



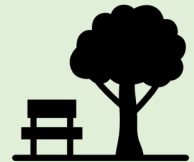
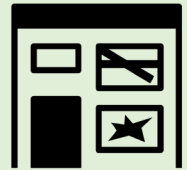
URBAN REGENERATION CASE STUDY: STRATFORD – OLYMPIC PARK AND EAST VILLAGE

Before: Stratford (in Newham) was picked as the site for the 2012 Olympics – former industrial area (brownfield site). It was one of the most deprived areas in the UK (high unemployment, low school attainment, high level of health issues, crime, etc) so the Games would leave a lasting legacy of improvements.

Improvements for the Games: New sports venues, e.g. Aquatics Centre; stadium and velodrome; landscaped park with tourist attractions and natural habitats; the Athletes' Village, now converted into a residential community; derelict buildings and pylons removed; soil and waterways cleaned up. BUT some former communities forced out.

East Village (E20) – Former athletes village:

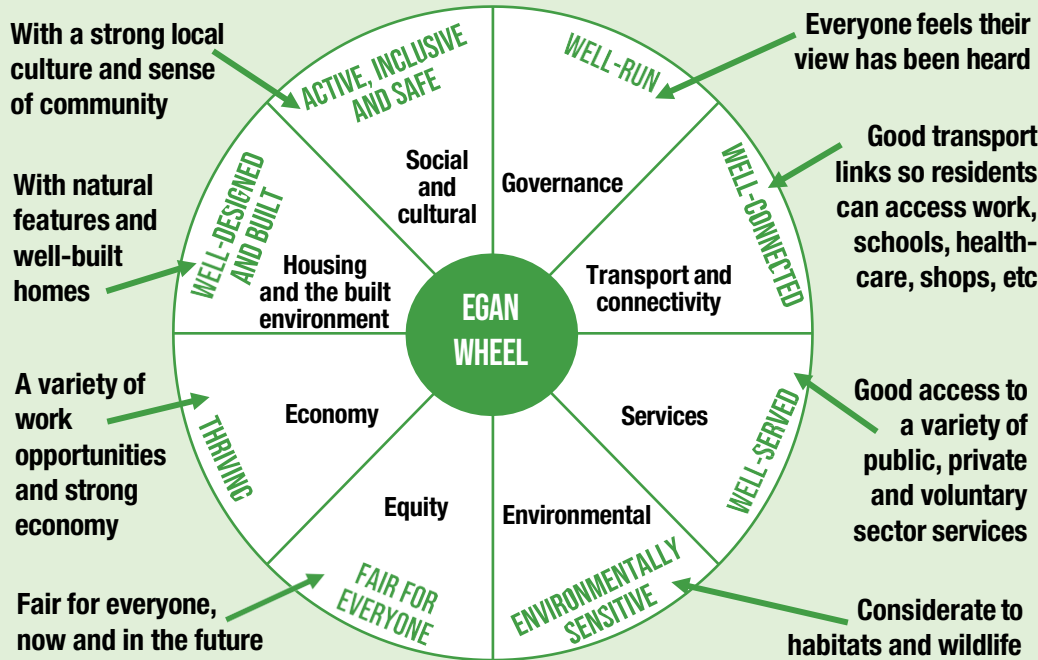
- 2,800 new homes – half private rent, half affordable rent
- Mixed housing – one-bedroom apartments to four-bedroom houses
- 27 hectares – 10 hectares of public park space
- 35 shops, bars, restaurants and cafes within the development
- New school and health centre
- Excellent transport links – cycle lanes, bus routes, DLR, Stratford International Station (London Underground and Overground, and Crossrail)



URBAN ISSUES AND CHALLENGES: URBAN SUSTAINABILITY

3 STRANDS OF SUSTAINABILITY

Sustainable urban environments need to be social, economically and environmentally sustainable.



EXAMPLE – FREIBURG, GERMANY

Social planning: Affordable housing, local people involved in decision-making and can invest in renewable schemes (e.g. £5 million in 9 wind turbines, 8 solar farms and an HEP plant) – financial rewards given.

Economic planning: Centre for solar technology – created 1000 jobs, also 10,000 jobs in 1,500 environmental business in the city.

Environmental planning: Organic waste collected and put through a biogas digester, waste is burned to provide energy for 28,000 homes, 350 community recycling collection points, 88% of packaging recycled. 40% of city is forested – 44,000 trees planted.

Water conservation: Rainwater harvesting increased infiltration through green roofs, unpaved tramways, pervious paths.

Sustainable transport: Tram network – 70% of people live within 500m of a tram stop – frequent and cheap; 400km of cycle paths and 9,000 'bike and ride' parking spaces; car parking restrictions.

WATER CONSERVATION

Minimises use of water and maximises supplies...

- Collection of water i.e. from rainwater harvesting
- Recycling water
- Protecting groundwater from pollution



ENERGY CONSERVATION

Minimises use of energy and reduces pollution...

- Saving energy
- Use of technology to make efficient use of energy
- Renewable energy



WASTE MANAGEMENT

Minimises waste sent for disposal and recycling as possible – reduces the need for the production of new raw materials and the amount of waste going to landfill.



SUSTAINABLE TRANSPORT

Integrated transport systems (ITS) in cities link parking and public transport hubs to make transport more efficient. Congestion is reduced, which reduces air pollution from vehicle exhausts.

