

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



REASONS FOR URBANISATION

- Migration
- Natural increase



MIGRATION (PUSH-PULL THEORY)

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

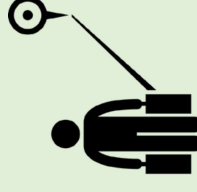
International migration: When people move into cities from other countries.

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.



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.

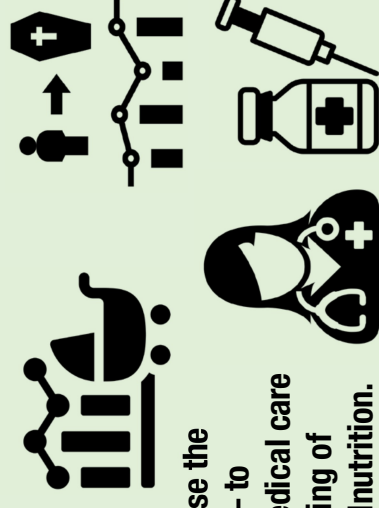
LICs: Typically less than 25% of population living in urban areas, however many LIC cities are now growing rapidly.

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 (RIO)

LOCATION



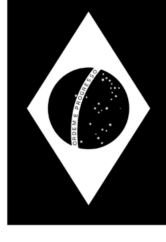
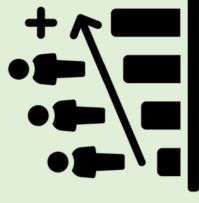
Rio de Janeiro is on Brazil's Atlantic coast in a large natural bay (Guanabara Bay). Previously the capital of Brazil, but replaced by Brasilia in 1960. It is the 2nd largest city in Brazil after Sao Paulo.

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.



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

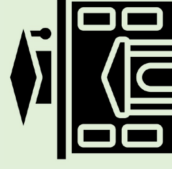
- Education opportunities – schools and universities – future earning potential
- Better access to healthcare – many clinics and hospitals (so life expectancy is higher in cities)
- Job opportunities – in manufacturing and service industries (higher wages/ more reliable than farming)
- Access to essential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



IMPORTANCE OF RIO

Regional

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



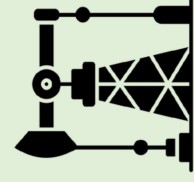
National:

- 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.



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.



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.



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.



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.*

FAVELA BAIRRO PROJECT

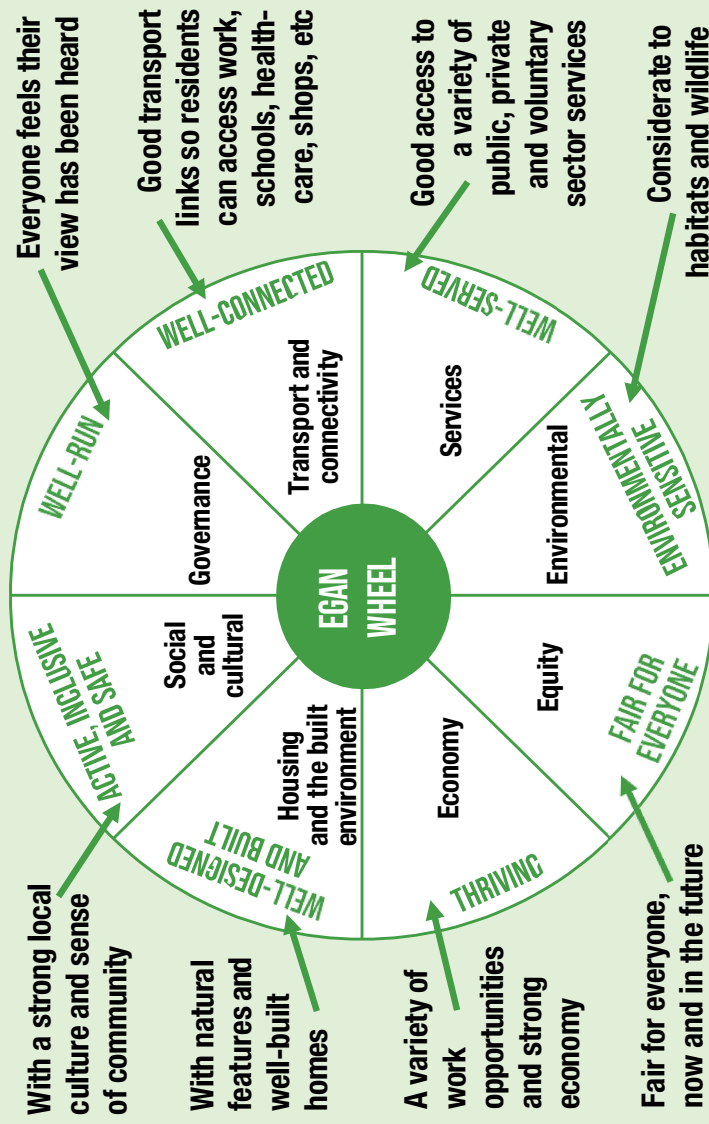
Site and service scheme: Local authority provides land and services for people to build homes. Cost = US\$ 1 billion.
Improvements: Paved formally named roads; access to water supply and sanitation; secured hillsides (to stop landslides); new health/education/leisure facilities; cable car system; access 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: 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.