



Unit 2c: Contemporary Urban Environments

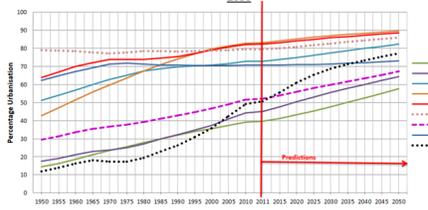


Global patterns of urbanisation

In 1945 less than one third of the world's population lived in urban areas. By 2008, more people lived in urban areas than rural areas. Urbanisation in HIC's peaked in the 1900's there has since been rapid **suburbanisation causing urban growth**.

Rates of urban growth are slowing down however, in all continents and globally. This means that urban areas, whilst still growing, are doing so at a slower pace

A graph to show World Urbanisation for different world areas from 1950 to 2050



Urbanisation issues

Cities in 9/10 countries have higher levels of inequality than national average.

Economic inequality - Occurs in access to services, open land, education and to employment =poverty

Social inequality = Housing is a major cause of urban exclusion

Cultural diversity = This links both social and economic issues

Economic - migrants tend to work in labour where wages are lower and could lead to a lack of jobs for locals

Housing = Ethnic minorities are less successful in securing mortgages and can lead to residential succession

Education = variation in attainment (ethnic minorities more likely to attend university)

Health = poor quality environment impacts health

Religion = conflict due to misunderstanding and festivals

Entertainment = 75% of Europeans consider sport as a means of integration.

Urban Sustainable Development

Ecological footprint – Amount of land needed to produce everything consumed. This will be impacted by wealth, public transport availability and size of the city.

Liveability – combination of factors that determine a community's quality of life.

Natural –
-increase urban space
-improve waste disposal

Physical –
-improve quality of housing

Social –
-improve transport
-improve education

Economic –
-improve economic opportunities.

Curitiba – Brazil – although has mass poverty considered to be sustainable

Urban Policy

Urban policy = strategies chosen by the local or central government to manage the development of urban areas and reduce urban problems.

Year	Policy name	Explanation	Example
1981	Urban development corporations	Re-develop deindustrialised areas	London Docklands
1981	Enterprise Zones	Small area of land opened to attract high-tech businesses	Metro Centre Gateshead
1997	Single regeneration budget	A coherent scheme that local councils had to bid for	Oueburn Valley, Newcastle
2010	Local enterprise partnership	Determine local priorities and support economic growth	Birmingham
2011	Localism act and tax increment	City leaders can be given powers to set own local policies	London

Urban Air Quality

Urban areas have large amounts of particles (10-40micrograms compared to >10 in rural areas) this is due to industry
Smog = mixture of smoke and fog occurs when smoke particles and sulphur dioxide from burning coal mix with fog.

Airpocalypse (Beijing) - 2013 smog was 35x stronger than WHO limit

Methods to reduce urban air pollution:

- Congestion charging
- Vehicle restrictions
- public transport improvements
- Alternative fuels
- Pedestrianisation
- legislation

Urban Environmental Issues

Water Pollution – Common in urban areas due to industry and large amounts of wastewater (sewage) which can cause damage to ecosystems.

Air pollution – Air quality is a lot poorer due to industry and accelerated due to urban microclimate

Dereliction – When economic activity declines buildings become run down.

Detroit – 1970 oil crisis saw industry decline and became 'rust belt' with x2 national unemployment rate. Air and water pollution have improved

Urban Drainage

Infiltration is low due to impermeable surface = replenishment of groundwater is slow.

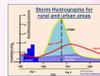
Runoff is channelled through drains to transport water out of the area quickly.

Sustainable Drainage System (SuDS) – A realistic, environmentally friendly replica of natural drainage system. For example: permeable surfaces, infiltration trenches, green-roofs, rainwater storage etc.

Eg: Lamb Drive, Cambourne

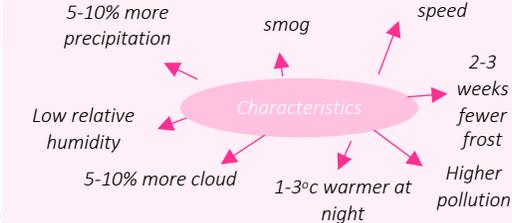
River restoration – removing all hard engineering to restore natural river.

River Skerne, Darlington – between 1850 and 1945 the river was straightened but in 1995 a project reconstructed meanders (soft engineering). This helped reduce flood risk and attract tourists.



Urban Microclimate

Urban microclimate = an area where the climate differs from the surrounding area

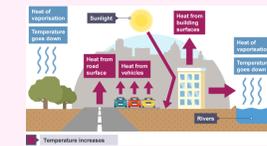


Urban heat island – urban area is significantly warmer than surrounding rural area.

-Urban areas have a lower albedo
-Less heat energy is lost in evaporation as water goes down drains
-buildings leak heat poor through insulation

Urban precipitation – The ground is heated through solar radiation

The air warms, rises, cools, condenses and falls as rainfall as it attaches to condensation nuclei.



Urban wind – Generally wind is lower due to friction however there are two effects; urban canyons (funnel of wind between buildings) and venturi effect (air is forced above and around buildings. When it hits the floor violent gusts form).

Urban Waste

1/5 of all global waste is likely to have been produced in urban areas costing \$205 billion each year.

Types of waste: domestic/ municipal/commercial/ institutional

Disposing of waste:

- Landfill = waste is placed in disused mines, quarries or sites
- Incineration = Waste is burnt and can be used to produce energy
- Recycling = Waste is reproduced into new products
- Submergence = dumping waste in oceans

Global waste trade: some waste is sent from HIC's to LIC's this is usually electrical or chemical waste that is dangerous.

New Urban Landscapes

Urban areas are constantly changing and adapting there are many new landscapes forming:

- **Town centre mixed development** – any urban development that blends residential, commercial, cultural and infrastructure
- **Cultural and heritage quarters** = An area that keeps cultural acidity through cultural production
- **Fortress Landscape** – urban development constructed with safety in mind
- **Edge cities** - Suburbs that have developed into urban centres in own right.

Urbanisation

- **Urban growth** – The increase in total population of town or city
- **Urban expansion** – The increase in size geographical footprint of a city

Some cities may experience growth and expansion but if this growth is not matched by population increases in rural area, urbanisation is not occurring.

Importance of urban centres – political power/ social and cultural sites/ economic production/ exchange of ideas/ migration centres/ highly skilled jobs/ shopping

World city

World city = How well connected they are to the rest of the world and the global economy = homogenisation

- Transport hubs** – good access by rail and air
- developed road
- Information** – state of the art communication
- Demographics** – large population
- Ethnic diverse with high tolerance
- high proportion of educated population
- Culture** – centre of excellence of arts
- rich heritage
- Finance and trade** – major hubs of international banking
- headquarters of multinational companies
- Governance** – national seat of government

World cities have emerged for many reasons, technological changes, colonial influences, ports and trading centres etc.

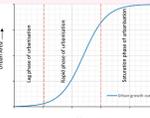
Forms of urbanisation

Urbanisation – The increase in proportion of population living in urban centres

Suburbanisation – The decentralisation of people, employment and services to the edge of an urban areas

Counterurbanisation – People move out the city back to surrounding rural settlements.

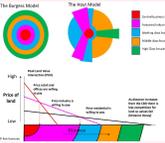
Resurgence – population moves back from rural to urban areas.



Urban forms

Urban forms = The physical characteristics that make up built areas including shape, density and configuration of settlements.

Bid rent theory = The price and demand for real estate changes as the distance from the CBD increases. This is because central areas tend to have better infrastructure.



MUMBAI

Total population - 20 million

World city – Mumbai is India’s largest city. It is the commercial capital home to India’s stock exchange. As well as hosting the headquarters of trans-national corporations such as Cadbury India, Volkswagen, and Tata steel. Mumbai airport carried 36 million passengers to 45 different countries in 2015.

Urbanisation - The growth of the city has mainly been historic; it is still growing but a lot of this change took place between 1971 and 1991. This has mainly increased due to rural to urban migration (push factors = new farming techniques in India has meant that there are fewer jobs in farming, poor standard of housing and pull factors = cheaper travel costs, variety of jobs, better access to education and healthcare) and natural increase.

Positive impacts –

- Large informal sector provides opportunities
- Shanty towns help to housing shortage
- Better healthcare

Negative impacts –

- 55% of city live below poverty line
- 1/3 population been a victim of crim
- 62% of population live in slums

Suburbanisation – Mainly occurred in 1970’s, towns and villages have been swallowed up by Mumbai in the process of suburbanisation. In the last decade, Thane, Vashi and Belapur have become extended suburbs despite being planned as individual towns. The biggest growth occurred along the train routes.

Urban Change - In 1854 the first Indian cotton mill was opened after the British had colonised India.
Decentralisation: Large cities like Mumbai need efficient mass transport systems so commuters can get into work quickly. This also led to more people moving to the suburbs (suburbanisation).

Regeneration - Bhandi Bazaar – once was an area of mixed chawls and 1,250 shops and stalls. It is estimated that 20,000 people lived there. The chawls were old and overcrowded. There was no proper waste disposal system and water was only supplied for a few hours each day.
 2010 plan = demolish 250 buildings and replace them with 17 high rise tower blocks. The project including:

- use of natural light and ventilation
- rainwater harvesting
- solar panels
- sewage treatment

The Society for the Promotion of Area Resource Centres, better known as SPARC, is an NGO that supports the efforts of local people to get better housing for their many members. Instead of demolition it teaches people how to improve their home.

Urban climate – Mumbai is 5C-7C warmer than in the surrounding rural areas on summer nights. In 2016, Mumbai was ranked the 63th most polluted city in the world. Mumbai often experiences heavy smog around Diwali which is x20 more than WHO limit.

Urban waste – Mumbai generates about 10,000 tonnes of waste each day. This has risen by 105% from 1999 to 2016. Only 95% of Mumbai have a rubbish collection. The rest of the city is expected to dispose of waste in a correct way. Of the 9,400 tonnes of rubbish that Mumbai sends daily to its dumping grounds, 73% comprises food, vegetable and fruit waste. 8% of all waste in Mumbai is recycled (this is often completed by those who live in the slums).

Sustainable development – Mumbai is currently one of the least sustainable cities in the world due to its reliance on fossil fuels, population rise and lack of sustainable transport.
 Aim:

- An SPV (special project vehicle) - an elevated sub-urban corridor project. This will transport 4 million passengers as well as a metro system transporting 9 million.
- Urban Farming: The Navi Mumbai Eco-City project – a carbon neutral city which is a Bottom up approach to development using opinions of locals

LONDON

Total population 18.9 million
BME (Black or ethnic minority) 41%

World city - London is a global city as it is home to some of the world’s top universities. There are around 300 languages spoken. 37% of the population was born outside the UK. There are endless opportunities for entertainment such as the West End. It has 3 international airports. Houses of Parliament and Canary Warf.

Urbanisation - Peaked in mid 1900’s (70% of population lived in cities). The vast majority of the recent growth in London has come from net international migration. London added 690,000 residents between 2001 and 2010. This pattern has become more prevalent since European Union enlargement, when Eastern Europeans began moving in much larger numbers to London.

Positive impacts –

- Agglomeration effect = easier to provide services as people live closer together

Negative impacts –

- 28% of Londoners are in poverty (10x higher) – this is highest in black or ethnic minority (38%)
- Violence and sexual offences x2 more prevalent

Suburbanisation – This mainly occurred in the 1960s and 70’s where car ownership encouraged people to migrate. As well as this a small ‘white flight’ occurred as the wealthy white moved away from inner city areas that were attracting BME populations (Brent has 69% BME population).

Urban Change – De-industrialisation: Collapse of manufacturing began in 1950’s due to; protectionism, trade unions, high exchange rate, lack of competitiveness = 1978 = 6.7 million manufacturing workers in UK → 2.7million in 2017.
Decentralisation: occurred in 60’s and 70’s where jobs lost were masculine and replaced by women bringing a ‘new set of gender roles’ (Doreen Massey, 1994).
Gentrification: Areas such as Notting Hill have been gentrified from slums to some of the most expensive areas

Regeneration - Stratford = one of the most deprived communities in the country, where unemployment was high and levels of health were poor. There was a lack of infrastructure and the environmental quality was poor. The 2012 London Olympics bid was partly successful on the understanding that Stratford would be used during the games and regenerated for local people to use after the competitors had left.
 Aims included:

- By 2030, more than 10,000 new homes will have been built in the park
- A new academy has been built, which is used to educate around 2,000 pupils between the ages of 3-18.
- over 20,000 jobs could be created by 2030, bringing more than £5 billion into the area.
- Sustainable - walking and cycling routes, the provision of public transport, the water-efficient design of homes and the protection of green spaces and natural habitats.

Urban climate – The highest temperatures are found in the city centre which are on average 5°C warmer. A London skyscraper dubbed the "Walkie-Talkie" was blamed for reflecting light which melted parts of a car parked on a nearby street.

Urban waste – London produces 7m tonnes of waste from homes, public buildings and businesses each year. Only 52% is currently recycled and the capacity of landfills accepting London’s waste is expected to run out by 2026 and London’s waste bill is now in excess of £2bn a year and rising.
 Aims:

- Circular London programme to create the conditions required to allow a circular economy
- London will be a zero waste city. By 2026 no biodegradable or recyclable waste will be sent to landfill and by 2030 65% of London’s municipal waste will be recycled.

Sustainable development -
 London’s ecological footprint is currently 120x greater than its actual size.

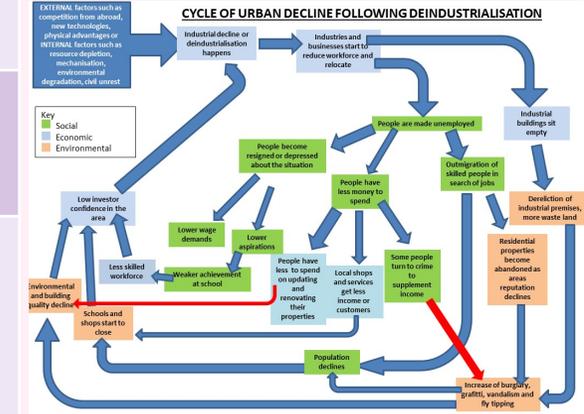
- London as an eco-district = Headquarters of Bloomberg’s have been designed in keeping with the local architect and includes air source heat pumps, green roof etc
- BedZed London = 82 affordable houses is a carbon-neutral development site

Megacity

- **Millionaire city** – A city with more than 1 million people
 - Birmingham – 1.086 million
- **Megacity** – A city with at least 10 million people
 - New York = 18 million – 1st megacity
 - There are now 26 megacities across the world
- **Metacity** – A city with more than 20 million people
 - Tokyo = 38 million

Urban Change

Urban change = any change can be positive or negative eg: industrial revolution
Urban decline = the deterioration of the inner city often caused by a lack of investment and maintenance
Deindustrialisation = Long term decline of a country’s manufacturing
Decentralisation – Movement of shops and services away from urban centres.



Gentrification - Gentrification is the process by which wealthier (mostly middle-income) people move into, renovate, and restore housing and sometimes businesses in inner cities or other deteriorated areas formerly home to poorer people.

Post-modern

- Pre-industrial city = Bath
- Modern city = Birmingham
- Public Transport Orientated = Hong Kong
- African City = Nairobi
- Socialist city = Prague
- Post-industrial city = A world that emphasizes diversity.



Urban structure = chaotic with high-tech
 Urban architecture = Unusual mix of styles
 Urban government = international capital
 Urban economy = quaternary dominated
 Culture = high levels of polarisation