

Changing Urban Environments

Urbanization

Urbanisation is the increasing of the percentage of the population living in urban areas. Rapid urbanization is happening in less developed countries (because of rural-urban migration).

Causes of urbanization (push and pull factors)

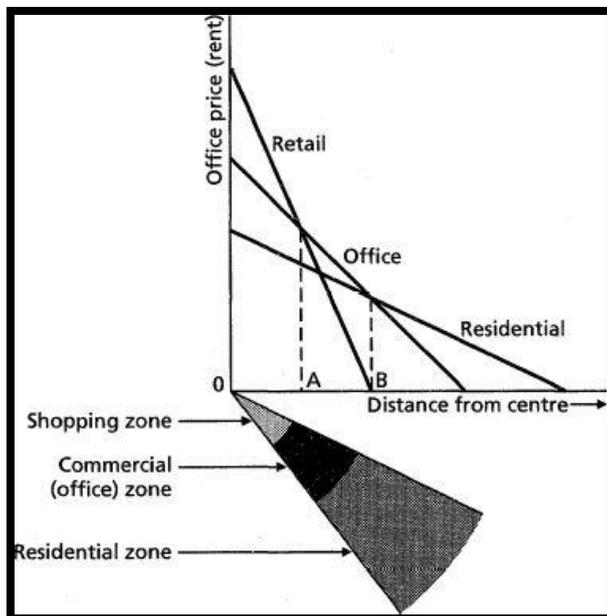
- Very few amenities in rural areas (push factor).
- Education and health is better in the cities (Pull factor).
- Better jobs available in urban areas (pull factor)
- Better quality of life in urban areas (pull factor)

Land use in urban areas (in the UK)

Central business district is the main shopping and service area in a city. This is normally found in the middle of the city, which means the accessibility is the best. Vertical zonation is common because of sky-high land prices. Land use is mainly commercial/retail, not residential.

Inner city areas consist of terraced housing, which dates back to the Victorian era. The inner city has derelict buildings, high crime rates and a bad environment to live in. Some old warehouses/industry can also be found here.

The suburbs contain much larger housing, mainly detached, because of the land prices being cheaper (bid-rent theory). Houses tend to have gardens. Houses are fairly recent. Middle class people tend to live in the suburbs.



(Bid rent theory)

Problems and their solutions in urban areas (IN RICHER PARTS OF THE WORLD)

Traffic congestion – there is too much traffic, which causes lots of problems.

Solutions

- **Charge a higher fee** for running a car e.g. congestion charge scheme (like in London) or increased car parking charges.

- **Improve public transport** so that people are more likely to use it. Make bus lanes to make buses much faster – this will encourage people to travel on the bus rather than drive through a traffic jam.
- **Pedestrianization** – Pedestrianizing areas of the CBD so that there is less congestion. This also improves the environment for shoppers in the CBD.

Pollution: Air pollution. This can be a health hazard to residents as well as damage the environment. This also damages buildings.

A solution is to reduce the number of cars on the road, and encourage the use of public transport.

Housing shortages – There is a massive problem in meeting the demand for housing.

Solutions:

- Regenerating old inner city houses into high-rise flats. More people are able to stay in a block of high-rise flats than one terraced house. This also makes the inner city more attractive.
- Try to re-locate some people e.g. offering people incentives to move elsewhere.
- Building new towns e.g. Milton Keynes.

Ethnic Segregation – People of different ethnic groups tend to cluster together. Some people may feel part of a community by clustering. They also feel safer against racial abuse. They are also able to practice their culture.

Solutions:

- Increasing community involvement by ensuring that minority groups have their needs met.
- Improving education where English can be a second language.

Inner City – Inner city areas are run-down and derelict. They have a high crime rate. Many old buildings are regenerated into newer, more attractive homes. Investment has been put into inner city areas to improve transport and communication links. The government has also tried to encourage more business in these areas.

Central Business District – CBDs in some urban areas are declining by both push and pull factors. Out of town shopping is much more pleasant because parking is much easier (and sometimes free). This is because land prices are much cheaper.

Brownfield vs Greenfield sites

Advantages of Brownfield	Advantages of Greenfield
<ul style="list-style-type: none"> • Water, electricity and other services are already there. • Roads already exist. • Sites in the city aren't left derelict. • Planning permission is easier to obtain. • Commuting time is cut. 	<ul style="list-style-type: none"> • New sites do not need clearing. • More space for gardens to be developed. • No restrictions on where the road can be built. • Land is cheaper. • Pleasant environment may appeal to some.

Squatter settlements

Squatter settlements are found on the outside of cities in less developed countries, and they rapidly increase in size because many of the people migrating from villages do not have skills to find proper work (they have also led to the **informal sector** of the economy) When they enter the city, these squatter settlements are the first thing they see, and they want to become a part of it. Because many of them are unskilled, they are forced to stay in these slums.

Many of these people create their own employment e.g. selling things, cleaning, and gardening. This is called the informal sector, and these are not recorded in official figures (no tax is paid on this income).

Squatter settlements lack basic facilities, such as clean water, electricity and transport links. Disease can also spread very quickly because they are so densely populated. A family often live in a single room, and living conditions are very poor.

Improving squatter settlements

- **Self-help schemes.** The government gives materials to people so they can build their own homes. The money which is saved due to labour can be used for providing services such as electricity.
- **Local authority schemes.** These are funded by the local government, although the **Favela-bairro** project in Rio de Janeiro received some funding from the Inter-American development bank. They improve temporary accommodation built by the residents.
- **Site and service schemes** – residents pay a small rent for a site, and they borrow money to get materials to build a house on their land. The rent money can be used to provide services such as electricity.

Other problems caused by urbanization (mainly LEDCs)

- **Waste disposal.** Disposing of waste is a big problem, because landfill sites are running out. Incineration is another way of getting rid of waste, but this has many environmental impacts, so this is not a solution to the problem. Recycling is the only solution, because it reduces the amount of waste which needs to be disposed of, and it also preserves the Earth's resources, therefore it is a sustainable method.
- **Air pollution.** This is a big problem, especially in rapidly industrializing countries such as India and China. Industry is the main cause of air pollution, because these countries have a huge demand for energy, which causes harmful gases to be released into the atmosphere, such as CO₂, SO₂ and nitrogen oxide. New technology should be implemented so that SO₂ and nitrogen oxide emissions can be reduced. Alternative energy sources should be used, and traffic congestion should also be reduced (see above for ways to reduce traffic congestion).
- **Water pollution** is a major issue, and it needs to be tackled, especially in countries where the population is growing at a rapid pace.

How can urban living be sustainable?

A sustainable city has characteristics which enable the people of today to have their needs met, however it preserves resources for future generations to use.

- **Green-belts** were created in order to prevent urban sprawl. This encourages development on brown-field sites, which is more sustainable than building outwards into the countryside.
- **The disposal of waste** is a big problem because landfill sites are running out, and incineration causes harmful gases to be released. Therefore, recycling is a way of reducing the amount of waste we produce. It is sustainable because it means landfill sites can be saved for future generations. Recycling also **creates jobs**, so economic benefits are there too.
- **Improving the public transport system** and making bus lanes. By having fast and efficient public transport, people are more willing to use it rather than cars, which is better for the environment because less pollution is caused per person. This is more sustainable than everybody using cars and creating pollution.
- **Carbon-neutral homes** are another way of sustainable living. The government should encourage people to install **wind turbines** in their homes so that they can produce some energy for themselves in a renewable way. This eases the pressure on burning fossil fuels, which is much more sustainable. Also, more homes can be created without creating much more pollution.
- Existing green spaces and historic buildings should not be developed on.

Case Studies

Reducing problems in urban areas in a poorer part of the world – New Delhi

- New Delhi has a very good public transport system. There is a BRT (Bus Rapid Transit) in place, and Delhi has the world's largest fleet of environmentally friendly buses. This both reduces congestion and improves air quality.
- New expressways have been built to relieve some of the city from traffic.

However, these solutions have not had much of an effect. Traffic congestion is still a massive issue – there are more cars entering the streets than leaving it. Expressways have not solved the problem, they have just redistributed it.

Reducing problems in urban areas in a rich part of the world – London

- **The congestion charge** means **cars have to pay extra** to enter central and west London. This **deters people** from using cars, which mean they are more likely to use public transport, which will result in a fewer number of cars. However, local **businesses have had a drop in sales** due to the congestion charge.
- London has a **very good public transport system**. **Hydrogen buses** are currently running in London, and these only release water. This improves the overall air quality.
- Areas on the edges of London have been declared **green belts**, which prevents the expansion of the city outwards in most directions (urban sprawl). London also has a **lot of parks and green spaces**.

On the whole, London has been successful in implementing these. There is much less traffic congestion, and air quality has improved – CO₂ emissions have fallen by 20% and vehicles entering the zone have reduced by 16%.

BedZED zero-energy housing scheme, London (SUSTAINABLE SETTLEMENT)

- The area is well linked by public transport – bus, train and cycle routes.
- Vehicles are used on a pay-as-you-drive basis, which encourage only essential use.
- The houses recycle any rainwater that falls.
- Solar panels are installed to generate renewable energy. This has economic and environmental benefits.
- Buildings have lots of energy saving measures e.g. triple glazing and high thermal insulation.
- There is a very good recycling scheme, which enables most materials to be recycled. This reduces waste.

These measures have been successful. Space-heating requirements were 88% less. These houses use half of the average water and a quarter of the average energy usage per household

London Docklands – Inner City Redevelopment

Between the years 1978-1983, over **12000 jobs** were lost here. This was mainly due to **globalization**, causing businesses to relocate. Many workers were **blue-collar** workers, and their skills were inappropriate for many growth areas of London's economy.

A joint public-private partnership of about £10billion was invested to transform the area. Over 140km of new road was built, about 25000 new homes were built and 85000 people now work in the area. A light rail was also constructed. However, there have been some problems caused by the redevelopment:

- People could no longer afford to live there.
- Unskilled workers could not do high-tech jobs. There were limited opportunities for existing people.
- Traffic congestion was becoming a large problem.
- The community spirit between people has been lost.

Favela-Bairro Project, Rio de Janeiro (Squatter Settlement)

Rio de Janeiro has over 600 squatter settlements, which house 20% of the city's population. The Favela-Bairro project started in 1995 and has been very successful. The project involves 250,000 people and is being extended to help more. The scheme is a joint venture between the local authority and the Inter-American Development Bank.

This scheme has made lots of improvements to the squatter settlements:

- **Adult education classes** improve adult literacy
- Services are there to help people combat drug and alcohol problems, as well as domestic violence.
- Daycare centres are there to look after children while their parents are at work.
- **Training schemes** train workers skills so that they can find better jobs and earn a higher income.
- Residents can own their own properties.
- Streets are being widened, which **improves accessibility**.
- **Basic services are provided** e.g. safe water, electricity and weekly rubbish collection.

Community involvement is also a key feature of the project. The new services are staffed by residents. This also teaches them skills and provides them with income.

This project has been extremely successful. The **standard of living and health of residents has improved** a lot. **Property values have doubled** and the **number of businesses within the settlements has also doubled**.