Urban Growth

Urban growth

- The world's population is growing rapidly and reached 7.3 billion people in 2011.
- The highest rates of population growth are occurring in low income countries (LICs), such as Zimbabwe, Malawi and Niger.
- Some countries are experiencing population decline, for example Japan, Russia and Ukraine.
- Today more than 50% of the world's population live in urban areas.
- The number of cities with over 10 million people is increasing.
- These are called megacities.
- There are now 34 megacities in the world.

Examples of Possible push factors

- unemployment
- lower wages
- crop failure
- poor living conditions
- poor health and education services
- few facilities
- natural disasters
- civil war

Examples of Possible pull factors

- more jobs
- higher wages
- better living conditions
- better education and health services
- better facilities
- less chance of natural disasters

Causes of urban growth

The population of cities usually changes in one of two ways:

- 1. Natural increase (or decrease) - this is the difference between the number of births and the number of deaths.
- 2. Migration - this is the movement of people into or out of the city.

More and more people are leaving rural areas and moving to cities. This is called rural to urban migration. People move because of push and pull factors.

- Push factors are things that make people want to leave rural areas.
- Pull factors are the things that attract people to the city.

Rural to urban migration in Mumbai, India

India is an example of a newly emerging economy (NEE). Each year thousands of people move to the city of Mumbai from rural areas. People move to Mumbai because the city has lots of pull factors. People think that the city will provide lots of opportunities such as:

- social - better housing and services, e.g. healthcare and education
- economic - more jobs and higher wages
- environmental - better living conditions with a safer environment (less chance of natural disasters)

People who move think that they will have a better quality of life. Unfortunately, cities such as Mumbai face lots of challenges and the people who move there do not always have a better quality of life. Some of the challenges they may face include:

- social - poor housing conditions and crime
- economic - low wages or unemployment
- environmental - polluted drinking water and a lack of sanitation

Urban growth

Examples of Possible push factors

Examples of Possible pull factors

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Urban Planning in Mumbai

Squatter settlements

A problem of rapid rural to urban migration is the development of squatter settlements. In Mumbai the squatter settlement of Dharavi is now home to over 1 million people. Dharavi lies between two railway lines and is one of the biggest squatter settlements in the world. The squatter settlement is unplanned and has the following characteristics:

- overcrowded, noisy and smelly
- houses are made from cardboard, wood, corrugated iron, plastic sheeting and metal from oil drums
- lack of sanitation, clean drinking water and open sewers
- pollution and disease are common
- thousands of workshops and people employed in the informal job sector

Improving squatter settlements

Squatter settlements can be improved through urban planning. The plan to improve Dharavi is called Vision Mumbai. This involves replacing squatter settlement housing with high-quality high-rise tower blocks of flats. The improvement of Dharavi has still not begun.

The Mumbai Slum Sanitation Project

Previously, in Mumbai hundreds of people shared a toilet and an estimated 1 in 20 people are forced to use the street as a toilet.

- The slum sanitation project aims to improve sanitation for up to a million slum dwellers across the city
- Over 300 community toilet blocks have been built
- Each one houses more than 5100 individual toilets
- There are separate facilities for men and women

The Mumbai Slum Electrification Project

Many slum areas do not have access to electricity and rely on bottled gas for cooking and heating.

- This is expensive and dangerous
- Fumes created cause health problems

10000 slum dwellers have been provided with new or upgraded electricity connections

The Mumbai Slum Resettlement Scheme

As part of the Mumbai Urban Transport Project (MUTP) a slum area along side the railway line was cleared and residents moved to a new housing area in a different part of the city. The new apartments:

- Are solidly built
- Have a water supply
- Have proper drains
- Have plumbing to reduce the risk of diseases like typhoid, stomach problems and other infections, so children miss less school
- Have lots of shops and businesses to provide jobs
- Televisions and a fridge
- Beds

“People in these schemes need homes, not shelters!”

Incremental Housing Strategies

Incremental housing strategies are a way of developing informal slums into permanent residential areas by making gradual improvements:

- Families are given the right to the land their house is built on
- They are given a grant which can be uses for improvements
- They work with an architect to design their home or even plan a new house
- The local community is involved in the design and layout of the area and individuals make decisions about their homes, including the colour of outside walls.

This is a way of giving people what they want and keeping communities together rather than knocking their homes down and splitting up the community by moving people to different parts of the city.

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Urban Areas in the UK

Characteristics of the UK

In 2015, the population of the UK rose to over 65 million people. The major cities of the UK can be seen on the map. London is the UK's largest city and Birmingham is its second largest city.

Case study: Birmingham

Birmingham is located centrally in England, in the Midlands. It is the UK's second-largest city and has strong connections with other countries in the world as a result of its ethnic diversity. The city presents many positive opportunities such as:

- Social - ethnic and cultural diversity allows people to experience different religions and foods. The Balti Triangle is an area of Birmingham famous for its restaurants and curry houses. St Paul's Square is a popular venue for live music. The Birmingham Royal Ballet and the City of Birmingham Symphony Orchestra help to create a culturally-rich city. The city also has five universities, which cater for over 65,000 higher education students.
- Economic - the Bullring shopping centre includes 140 shops generating employment and income for the local economy. Brindley Place is a city centre development which includes bars, retail, offices and entertainment facilities and which generates a large income.
- Environmental - canals in Birmingham have been cleaned up. The towpaths have been upgraded to encourage people to walk and cycle along the canals in the city. The Eastside City Park is a new park developed to increase the amount of green space. To reduce pollution, traffic has been managed by creating a park and ride scheme, encouraging the use of buses and the Birmingham Metro tramline.

Environmental challenges

- Dereliction - derelict buildings from the manufacturing industry are common in inner city areas.
- Building on greenfield sites - this results in the loss of more green space and may make urban sprawl worse. However building on brownfield sites - this will improve a derelict site as the space is reused for a new development.
- Waste disposal - a large urban population produces a lot of household and commercial waste which creates challenges for how to manage and dispose of this waste.
- Atmospheric pollution - with more people in a city, there are more vehicles on the road, leading to atmospheric pollution.

Social and economic challenges

- Urban decline - Birmingham used to have a large manufacturing industry. Due to competition from abroad, most of Birmingham's manufacturing industry has now gone. This has led to urban decline as manufacturing buildings were left empty and became derelict.
- Deprivation - with the closure of the manufacturing industry and high unemployment, parts of Birmingham experienced a spiral of social and economic decline leading to deprivation
- Inequalities in housing - Birmingham's high population has resulted in pressures on housing. There is not enough good quality and affordable housing for people in the city.
- Education - the quality of education was particularly poor in inner city areas such as Aston. Aston is an area of deprivation with an ethnically diverse community where many children struggled to access and succeed in education.
- Health - in Aston, people with poorer English language skills found it difficult to access healthcare facilities.
- Unemployment - the closure of factories in the manufacturing industry led to high unemployment.

Urban Regeneration in Birmingham

In the last 20 years, Birmingham has been transformed by a number of **regeneration** projects, with some being completed or scheduled for completion in 2030.

Part of he transformation includes the Big City Plan, which includes the regeneration of five areas in or close to the city centre.

The Longbridge Regeneration Plan includes:

- A technology park and innovation centre
- £70 million town centre with a number of large national stores
- Hotel and leisure developments, including restaurants and cafés
- Bourneville College – a £66 million learning facility
- A range of office accommodation to suit different size businesses
- Residential developments to suit different age ranges
- Large industrial and distribution centre buildings (warehouses), within easy reach of the local road networks

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Urban Sustainability

Urban areas can be made more sustainable by encouraging:

- water conservation - dual flush toilets in businesses and homes, collecting rainwater for gardens and the use of water meters in properties
- energy conservation - insulating businesses and homes, use of double and triple glazing in buildings, use of low-energy lighting and appliances
- waste recycling - recycling of household and commercial waste, adopting a 'reduce, reuse, recycle' policy, using 'grey' water to flush toilets in public buildings
- creating green spaces - increasing the number of parks and planting more trees e.g. Queen Elizabeth Park in London

Sustainable transport in LICs

Case study: Curitiba, Brazil

Curitiba is a capital city of the Parana state in Brazil. Nearly two million people live there. The city has had an urban master plan since the 1968. It is an excellent example of managing urban growth in a sustainable way. The master plan includes social, economic and environmental programmes.

A bus rapid transit system operates. This is cheaper to run than a tube system. Some employers subsidise their employees who use it. 80% of travellers use it.

The bus rapid transit system uses triple section bendy buses. It carries two million passengers a day. The bus fare is the same wherever you go. No one lives more than 400 metres from a bus stop.

Transport

- Metrolink opened in Manchester in 1992 at a cost of around £152 million.
- A fleet of 26 trams operates over the 31 km network.
- Metrolink has now reached 13.9 million passengers a year and 65% of Metrolink passengers have a car that they could have used instead of Metrolink.
- Between 14% and 50% of car trips to destinations served by Metrolink have been switched to Metrolink.
- The system is simple and easily understood.
- Quick journeys and citycentre track gives good access to the main attractions and work places.
- The service is frequent and reliable.
- The system is safe to travel on.
- Extensions through Salford Quays have been built running along Eccles New Road, and will serve a significant residential population.
- Four further extensions to Oldham and Rochdale (cost £137 million), Manchester Airport, Trafford Centre and East Didsbury, were approved by the Government.

In a very short time Metrolink has established itself as a very successful transport system, tempting people out of their cars in a deregulated bus environment and without subsidy. It is part of any integrated transport strategy for Manchester. It is a clear indication that investment in good quality public transport works.

Case Study: Tianjin Eco-city, China

- All buildings in the Eco-city should meet green building standards
- At least 70% of the plant varieties in the Eco-city should be native plants/vegetation
- public green space should be at least 12 square meters per person by 2013
- At least 90% of trips within city should be non-motorised transport, i.e. cycling and walking, as well as trips on public transport by 2020.
- The proportion of energy utilized in the Eco-city which will be in the form of renewable energy such as solar & geothermal energy, should be at least 20% by 2020
- At least 50% of the Eco-city's water supply will be form non-traditional sources such as desalination & recycled water by 2020
- At least 60% of total waste should be recycled by 2013
- All residential areas in city should have access to free recreational & sports amenities within a walking distance of 500m by 2013
- All hazardous & domestic waste in the Eco-city should be rendered non-toxic through treatment
- Entire city will have access to key infrastructure services i.e. recycled water, gas, broadband, electricity, heating by 2013
- At least 20% of housing in the Eco-city will be in the form of subsidized public housing by 2013

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- waste recycling -
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