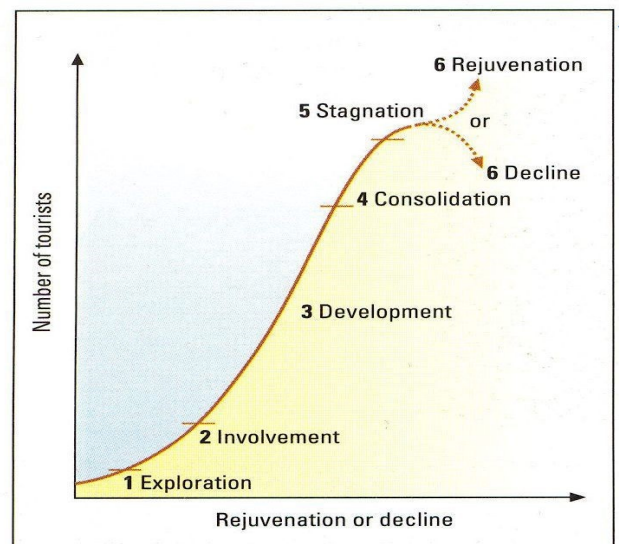
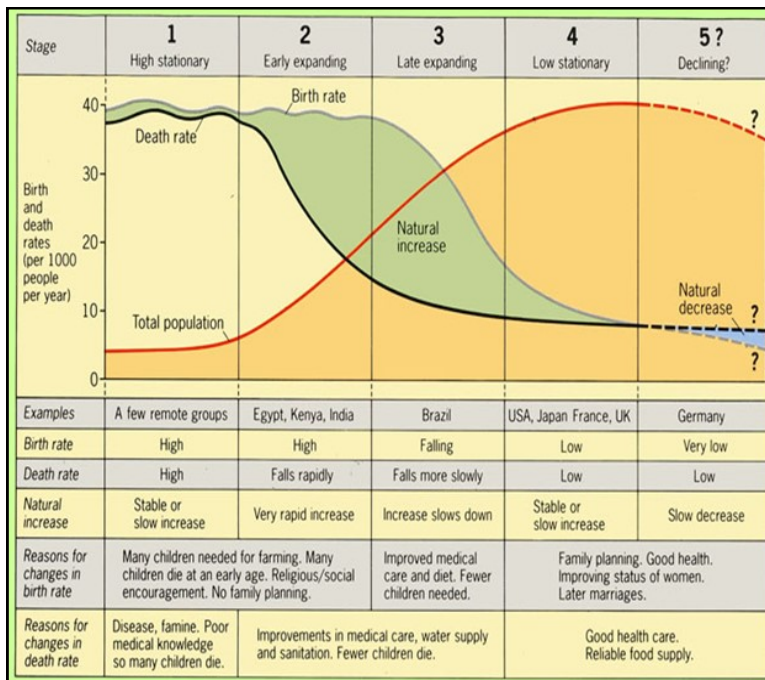


UNIT 2

GCSE GEOGRAPHY

This booklet includes:

- Population Change
- Changing Urban Environments
 - Tourism



GCSE EXAM

REVISION MATERIAL

How to use this Revision Guide...



WEEKS LEADING UP TO THE EXAM

1. READ through every section in the revision guide
2. LOOK at the exam tips and my predictions at the end of every section
3. HAVE A GO at answering some of the exam questions at the back of the guide
4. REMEMBER that CASE STUDIES in Geography are very important and will need a lot of revising! (The information in this booklet is only the basics, use your exercise books to revise the specifics)
5. DON'T PANIC Remember you have gone through all this information already, although you may think you have forgotten some, once you look over it a few times it will come back to you :)
6. TAKE TIME revise over a period of time which is suitable, although we all might think we work best at the last minute this is not always the case)
7. PRACTICE your time management, see if you can answer 9 mark exam questions in 10minutes!

NIGHT BEFORE/JUST BEFORE THE EXAM

1. Look over things once in the morning before the exam and once at night
2. Familiarise yourself with all your key facts
3. Enjoy a break and an early night
4. Any last minute problems, Miss Russell is in Hum4 for Form Time (come see me!)

IN THE EXAM

1. READ THE QUESTION!!! (So many times I have seen people answer questions with the EFFECTS of an event when the question is asking for the RESPONSES)
2. TAKE YOUR TIME do not rush through, make sure you have included enough detail to achieve the best possible mark
3. DRINK water (Not too much you need a wee!)
4. DON'T LOOK at other people, everyone works at their own pace (plus, it wastes time)
5. RUNNING OUT OF TIME? On a big question? Bullet Point the rest of your answer

Push-Pull Factors	Push factors are the negative aspects of a place that encourage people to move away. Pull factors are the attractions and opportunities of a place that encourage people to move there.
Migration	The movement of people from one permanent home to another, with the intention of staying at least a year. This move may be within a country (national migration) or between countries (international migration).
Destination	The country where a migrant settles.
Country of Origin	The country from which a migrant starts
Immigrant	Someone entering a new country with the intention of living there
Emigrant	Someone leaving their country of residence to move to another country.
Economic Migrant	Someone trying to improve their standard of living, who moves voluntarily.
Choropleth Map	A map where areas are shaded to show a range of figures. The higher categories are shown in darker colours and the colours get lighter as the figures reduce.

Getting that: Make sure you understand what each key-word means, even if you do not learn the definition word for word.

Tip: Try to use keywords in all exam answers 3 marks + as it will help you to shorten your answer and show the examiner you have an extensive knowledge of the topic.

Tip: When answering CASE STUDY questions about China One Child Policy/Kerala/France Pro Natal make sure you locate the case study in the first sentence by stating when the policy began and why it was introduced.

E.g. China One Child Policy was set up in 1979 when the population reached one billion.

EXAM TIPS FOR POPULATION CHANGE

Getting that: When answering CASE STUDY questions try to include at least one specific fact about the area.

E.G. Kerala birth control programme was introduced in 1952.

TOP REVISION TIP:

Always remember when you are given a figure (graph, table, photo...) you must look at ALL the information thoroughly. Then make a general comment on the data, pick out a specific example to back up your general comment and is there an exception to the rule?

REMEMEBER: GCSE!

REMEMBER: Revision is about picking out key information and re-visiting it. If there is something you completely DO NOT UNDERSTAND please ask your teacher to go through it again.

Factors affecting Population

Changes in agriculture:

The introduction of technology within farming improves crops and saves on labour. This means that farming families are no longer needed to be large to support the farm itself. Smaller families become more desirable.

Education:

As levels of educational achievement increase, bringing improved standards of living, children become an economic disadvantage. Fewer children mean parents have more money to spend on each one improving their future chances.



Agricultural Change



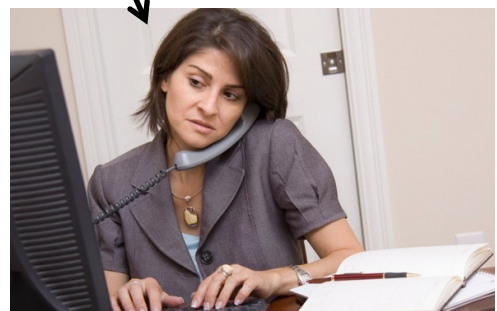
Education

Major Factors affecting population growth



Urbanisation

Improving Status of women



Urbanisation:

Rural-Urban migration is common in poor countries as cities are believed to have greater opportunities. Due to lack of space and less opportunities for child work, large families are no longer needed.

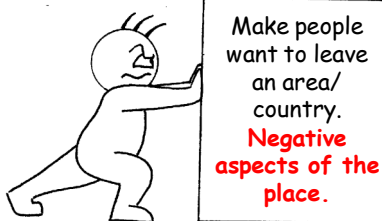
Status of Women:

Due to the improving status of women in the workplace, women now have more opportunities. This means that many women are delaying marriage and childbirth to focus on careers. Childcare can be expensive meaning smaller families are also preferred.

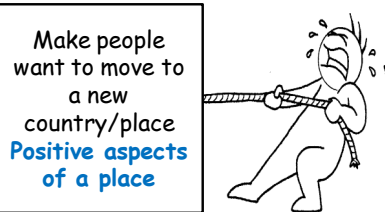
International Migration

Reasons why people want to migrate

PUSH FACTORS



PULL FACTORS



Push Factors	Pull Factors
War Low Income High Unemployment Difficult Climate Religious/Racial Intolerance Natural Disasters	Better Education Better Healthcare Job prospects High Standard of Living Improved Housing Attractive Environment

KEY TERMS:

MIGRATION: the movement of people from one permanent home to another with the intention of staying at least a year. It can be within a country (internal migration) or between countries (international migration)

Destination: the country where a migrant settles

Country of Origin: the country from which a migration starts

Immigrant: someone entering a new country with the intention of living there

Emigrant: someone leaving their country of residence to move to another country.

EFFECTS ON THE COUNTRY OF ORIGIN (Where the migrant has come from)

Positive Effects	Negative Effects
⇒ Money can be sent back to the Country of Origin ⇒ Lower Population in the country of origin can put less of a stress on resources.	⇒ Country of origin is losing workers ⇒ Areas of the country of origin can experience a 'brain drain' where highly skilled workers have moved to new countries for better job opportunities

EFFECTS ON THE DESTINATION COUNTRY (Where the migrant moves to)

Positive Effects	Negative Effects
⇒ Destination country benefits from a new influx of workers willing to work for lower pay ⇒ An increasing population in the destination country can lead to a boost in the economy with more tax payers. ⇒ Migration brings new labour and skills to the UK economy	⇒ Finding accommodation can be difficult for migrants in the UK ⇒ Too many migrants can put pressure on public services such as healthcare and education ⇒ Migrants can sometimes experience racism or intolerance in their destination country ⇒ Demand for housing increases house prices.

Migration from outside the EU

LABOUR MIGRATION INTO THE EU

Cheaper travel and more information attract skilled and unskilled labour to Europe. Many EU residents would like the flow of migration to reduce, but the United Nations predicts that Immigration into the EU will rise by 40% over 40 years. Immigration is a subject of political debate in all EU countries. Spain's immigrant population grew by 400% in 10 years in the early 21st century. Italy expects 100,000 Romanians in the years following Romania's joining of the EU. Although Italy needs workers, not everyone is happy with such a large influx of new people.

Europe needs immigrants because of its falling birth rate and the resulting lack of workers. Highly skilled workers often come to the EU to take temporary jobs in areas of shortage such as teaching, nursing and high-tech computer jobs. About 20% are graduates. Nevertheless, many people see immigrants as a problem rather than as an opportunity.



CASE STUDY: INTERNATIONAL LABOUR MIGRATION TO THE EU: SENEGAL TO ITALY.

- ⇒ Many Senegalese men have moved to Italy in the hope of finding secure and reliable employment
- ⇒ Employment in Senegal is predominantly in the fishing and farming industries which do not always guarantee a reliable wage.
- ⇒ Patterns of emigration from Senegal to Italy have been well-established



IMPACTS ON SENEGAL

- ⇒ Money is sent home by the migrants to support their families.
- ⇒ Unemployment is now high in Senegal
- ⇒ Houses are left empty and villages are being abandoned leaving little to attract the migrants to return

IMPACTS ON ITALY

- ⇒ Social tension - between immigrants and Spaniards
- ⇒ More unskilled workers - filled gaps in labour market
- ⇒ Average wages for unskilled jobs has FALLEN (as so many people want the jobs)
- ⇒ Birth rate has increased with so many young immigrants.

Migration from outside the EU

REFUGEE MOVEMENTS TO THE EU

Asylum seekers are people who are at risk if they stay in their own country. They become **REFUGEES** when they settle in another country. 1/3 of EU migrants claim to be asylum seekers. Since EU countries reduced the number of EU migrants they would allow in, some economic migrants have claimed to be asylum seekers, believing this would give them a better chance of being allowed to stay in the EU. Unfortunately, this has sometimes caused strong feelings against genuine asylum seekers.

The EU has been criticised by the United Nations (UN) for not taking enough genuine refugees, but it has a good past record in taking those displaced by war. The 1990s Bosnian war produced hundreds of thousands of refugees to the EU. Germany alone took 400,000 many of whom returned home after the situation was peaceful.



Today, the wars in Iraq and Afghanistan- in which EU forces are involved- provide most asylum claims. Two million Iraqis have already left the country, some for neighbouring countries and some to the EU. Another 1.8 million refugees live away from their homes in Iraq and may feel sufficiently threatened to want to leave. Christians are particularly persecuted.

Sweden is particularly generous to asylum seekers. By 2007, 70,000 Iraqis already lived there- half of those coming to the EU. The Netherlands, Germany, Greece, Belgium and the UK have given homes to most of the rest. Asylum requests to EU countries from Iraqis increased to 38,286 in 2007 from 19,376 the previous year. They are the largest group currently seeking refuge in the EU and this migration stream is likely to continue, although some decrease in the rate is likely towards the close of the war.

Topic 2: Changing Urban Environments

Keyword	Definition
Urbanisation	A process where an increasing proportion of the population lives in towns and cities (and there is a reduction living in rural areas)
Rural-to-Urban Migration	A process in which people move from the countryside to the towns.
Land Use	The type of buildings or other features that are found in the area, e.g. terraced housing, banks, industrial estates, roads, parks
Function	The purpose of a particular area, e.g. for residential use, recreation or shopping
Central Business District (CBD)	The main shopping and service area in a city. The CBD is usually found in the middle of the city so that it is easily accessible.
Inner City	The area around the CBD-usually built before 1918 in the UK.
Outer City (Suburbs)	The area on the edge of the city. Many suburbs were built after 1945 and get newer as they reach the edge of the city.
Household	A person living alone, or two or more people living at the same address, sharing a living room.
Brownfield Site	Land that has been built on before and is to be cleared and reused. These sites are often in the inner city.
Greenfield Site	Land that has not been built on before, usually in the countryside on the edge of a built up area.
Urban Development Corporation (UDC)	Set up in the 1980s and 1990s using public funding to buy land and improve inner areas of cities, partly by attracting private investment.
City Challenge	A strategy in which local authorities had to design a scheme and submit a bid for funding, competing against other councils. They also had to become part of a partnership involving the local community and private companies who would fund part
Regeneration	Improving an area.
Sustainable Community	Community (offering housing, employment and recreation opportunities) that is broadly in balance with the environment and offers people a good quality of life
Quality of Life	How good a person's life is as measured by such things as quality of housing and environment, access to education, healthcare, how secure people feel and how contented and satisfied they are with their lifestyle.
Park and Ride Scheme	A bus service run to key places from car parks located on the edges of busy areas in order to reduce traffic flows and congestion in the city centre. Costs are low to encourage people to use the system- they are cheaper than fuel and car parking charges in the centre.

Segregation	Occurs where people of a particular ethnic group choose to live with others from the same ethnic group, separate from other groups.
Squatter Settlement	Areas of cities (usually on the outskirts) that are built by people of any materials they can find on land which does not belong to them. Sometimes known as shanty towns.
Informal Sector	That part of the economy where jobs are created by people to try to get an income (e.g. taking in washing, mending bicycles) which are not recognised in official figures.
Self-help scheme	Sometimes known as assisted self help (ASH), this is where local authorities help the squatter settlement residents to improve their homes by offering finance in the form of loans or grants and often installing water, sanitation etc.
Site and Service	Occur where land is divided into individual plots and water, sanitation, electricity and basic track layout are supplied before any building by residents begins.
Industrialisation	A process in which an increasing proportion of the population are employed in the manufacturing sector of the economy.
Disposal of Waste	Safely getting rid of unwanted items such as solid waste.
Landfill	A means of disposing waste by digging a large hole in the ground and lining it before filling it with rubbish.
Recycling	Collection and subsequent reprocessing of products such as paper, aluminium cans, plastic containers and mobile phones instead of throwing them away.
Air Pollution	Putting harmful substances into the atmosphere such as carbon dioxide.
Transnational Corporations (TNCs)	Companies that spread their operations around the world in an attempt to reduce costs.
Water Pollution	Putting poisonous substances into water courses such as sewage, industrial effluent and harmful chemicals.
Sustainable City	An urban area where residents have a way of life that will last a long time. The environment is not damaged and the economic and social fabric, due to local involvement, are able to stand the test of time.
Green Belt	Land on the edge of the built up area, where restrictions are placed on building to prevent the outward expansion of towns and cities and to protect the natural environment.
Urban Sprawl	The uncontrolled outward expansion of the built up area of a town or city.
Sustainability	Development that preserves future resources, standards of living and the needs of future generations.
Incineration	Getting rid of waste by burning it on a large scale at selected sites.

Getting that: When you are given a Figure make sure you don't make silly mistakes. Read thoroughly what it is asking you to do.

EXAM TIPS FOR CHANGING URBAN ENVIRONMENTS

Tip: Try to add an example of an urban area you have studied in every question 4 marks + This will show the examiner you know your stuff

Tip: Ensure you are confident enough with the case studies that you can rattle off key facts about each.

E.g. Kibera: One million people live there, people have one metre squared of floor space each, 770 new self help homes were created

Getting that: Make sure you know which case study is relevant to which question.

Sustainable urban Living: Curitiba

Squatter Settlement: Kibera

Inner City: UDCs, City Challenge, Sustainable Communities

Getting that: Ensure you are aware of the 5 issues faced by rich country urban areas (Housing, Inner City, Traffic, Segregation, CBDs)

Tip: Make sure you understand the issues faced by rich country urban areas and the case studies which relate to each issue!

REMEMBER: Revision is about picking out key information and re-visiting it. If there is something you completely DO NOT UNDERSTAND please ask your teacher to go through it again.

Urbanisation

KEY TERMS:

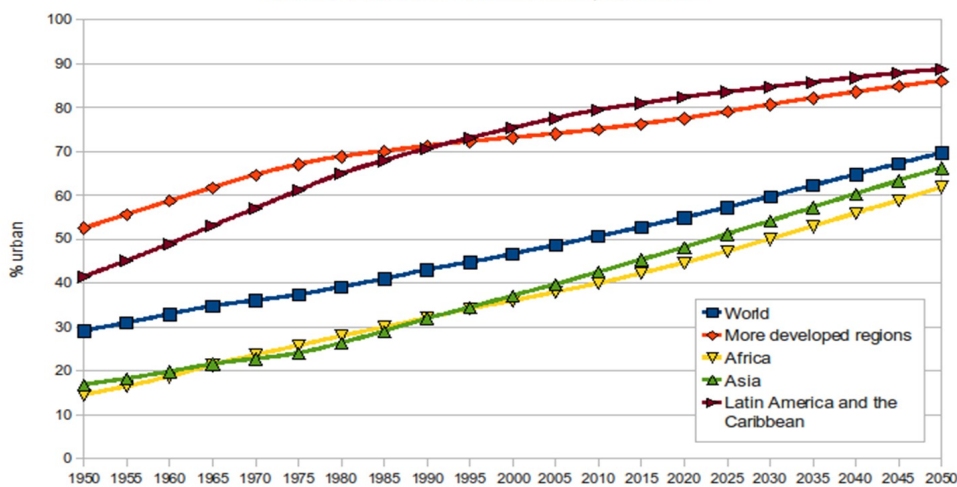
Urbanisation: A process where an increasing proportion of the population lives in towns and cities (there is a reduction living in rural areas)

Rural-Urban Migration: a process in which people move from the countryside to the towns.



Percentage of Population Living in Urban Areas by Region, 1950-2050.

Source: UN World Urbanization Prospects, 2007.



PATTERNS FROM THE GRAPH:

- All patterns show an increase in people living in urban areas (Therefore an increase in URBANISATION)
- More people living in urban areas in MEDCs
- Fast increasing rate of urbanisation in LEDCs including countries in Africa and Asia

HISTORY OF URBANISATION IN THE UK:

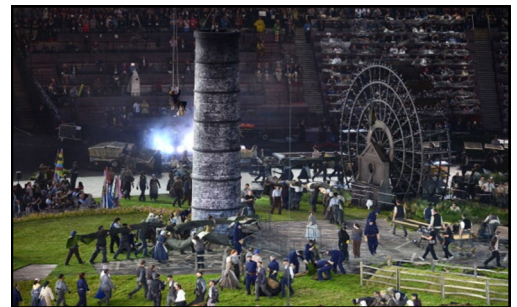
Until about 200 years ago, most people lived a rural life. They lived and worked the land in the countryside.

However, during the Industrial Revolution many people moved off the land and into growing towns and cities. Factories became important places of employment, so people moved to cities in search of work

This led to a huge growth in the size and number of towns and cities.

This growth in the size and number of cities is called Urbanisation.

Urbanisation is continuing throughout the world. New cities are growing all the time as more and more people leave their rural lives behind and move into cities in search of work.



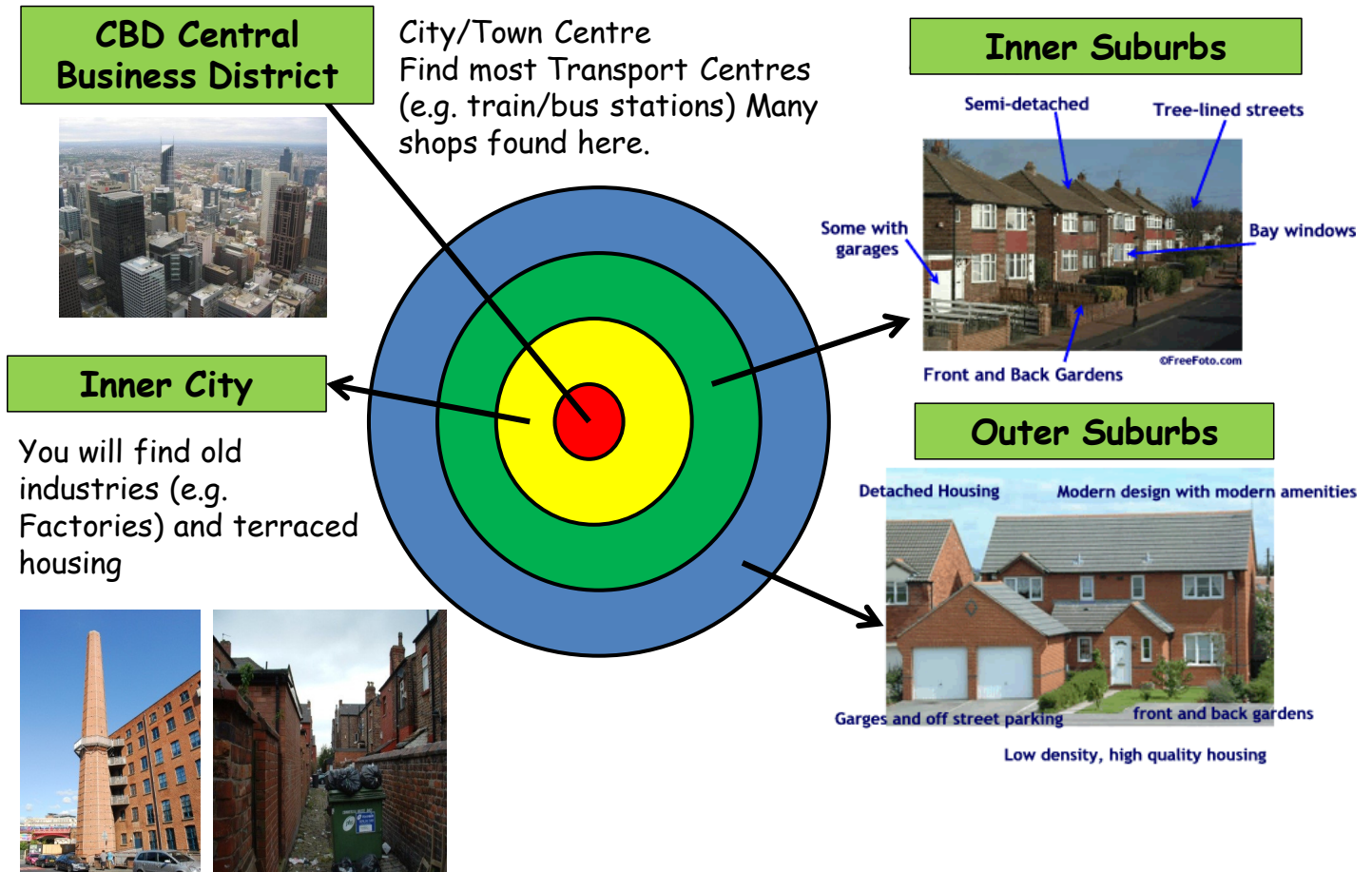
Causes of urbanisation (push and pull factors)

- 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 (MEDC)

THE URBAN LAND USE MODEL



- ⇒ **Central business district (CBD)** 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. Land use is mainly commercial/retail (shops), not residential. Residential properties are generally apartment blocks. **(Think Manchester City Centre)**
- ⇒ **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. **(Think Ancoats/Around Manchester City Stadium)**
- ⇒ **The suburbs (Inner and Outer Suburbs)** contain much larger housing, mainly detached, because of the land prices being cheaper. Houses tend to have gardens. Houses are fairly recent. Middle class people tend to live in the suburbs. **(Think Failsworth- Inner Suburbs, Heywood- Outer Suburbs).**

Issues in MEDC Urban Areas

The number of households in the UK has risen. Demand for housing has increased dramatically. More housing is hoped to be built on brownfield sites rather than greenfield sites

Inner city areas are where many councils will encourage development to take place. There have been many strategies to try and regenerate the inner city areas in the UK.

ISSUE 1: HOUSING

ISSUE 2: INNER CITY

ISSUES IN MEDC URBAN AREAS

ISSUE 3: TRAFFIC

Increasing car ownership means more people have cars which adds to traffic levels. This leads to many environmental issues

ISSUE 4: MULTICULTURAL MIX

Many migrants choose to segregate themselves away from others with a different ethnicity or culture

ISSUE 5: CBD

The CBD can sometimes struggle to attract business after the introduction of out-of-town shopping centres. The city centres have now improved their image to become more vibrant

ISSUE 1: HOUSING

Population in the UK has increased by 7% since 1971. The number of households has risen by 30% since 1971. Most of this increase is because more people live alone, leaving home earlier to buy properties and the increase in divorce rate. The government target is to build 240,000 new houses every year by 2016 so that house prices do not spiral out of control as a result of shortage.

Many of these properties will have to be built on Brownfield rather than Greenfield sites.

- ⇒ **Greenfield Site:** Land that has not been built on before, usually in the countryside or on the edge of a built-up area.
- ⇒ **Brownfield Site:** Land that has been built on before and is to be cleared and re-used. These sites are often in the inner-city.

Advantages of building on Brownfield sites

- Easier to get planning permission
- Water and Electricity are already provided
- Near to pre-established facilities (e.g. Shops)
- Roads already exist

Advantages of building on Greenfield sites.

- New sites do not need clearing first
- Pleasant countryside environment
- Land cheaper on outskirts and plots larger
- More space for gardens

Issues in MEDC Urban Areas 2

ISSUE 2: THE INNER CITY

Part of the demand for housing will be satisfied in inner-city areas. Many governments tried to improve the inner cities since 1945:

- ⇒ Cheap high rise flats were built during the 1960/70s as a 'quick fix'. Over the years strategies have changed and there has been greater involvement of private companies and the local community. There have been **THREE** major strategies in improving MEDC urban areas.

STRATEGY 1: URBAN DEVELOPMENT CORPORATIONS (UDCs)

CASE STUDY: LONDON DOCKLANDS DEVELOPMENT CORPORATION (LDDC)

UDCs were set up in the 1980s and 1990s using public funding to buy land and improve inner city areas, partly by attracting private investment.

The LDDC was at work for 17 years regenerating the area of the London Docklands. Specifically with Canary Wharf. It encouraged almost £2bn of public sector investment and £8bn of private sector investment. It constructed the Docklands light railway and built 24,046 new homes and started 2,700 businesses trading.



STRATEGY 2: CITY CHALLENGE

CASE STUDY: HULME, MANCHESTER

City Challenge: a strategy in which local authorities had to design a scheme and submit a bid for funding, competing against other councils. They also had to become part of a partnership involving the local community and private companies who would fund part of the development

Through City Challenge, Hulme received £37.5million. Homes were designed to conserve water, and be energy efficient and pleasant. Local schools and a new park have been built. The views of local people were taken into account.

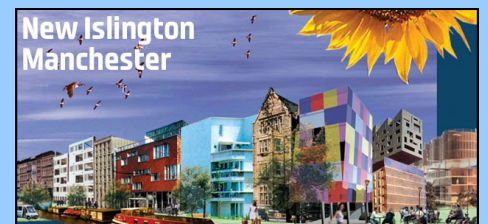


STRATEGY 3: SUSTAINABLE COMMUNITIES

CASE STUDY: NEW ISLINGTON, MANCHESTER

Sustainable Communities: Community (offering housing, employment and recreation opportunities) that is broadly in balance with the environment and offers people a good quality of life.

66 new homes, 700 apartments and 34 urban barns were built along the canalside in Manchester's inner city. 10 new shops, metrolink stations, schools and football pitches were created around the area.



Issues in MEDC Urban Areas 3

ISSUE 3: TRAFFIC

As we demand greater mobility and accessibility with flexibility, the number of cars has increased, as has the problem of traffic congestion. Many households now have more than one car. The government has attempted to encourage greater use of public transport through **Park and Ride Schemes**

Environmental problems resulting from traffic congestion:

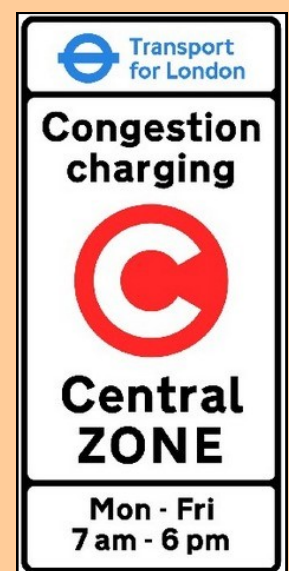
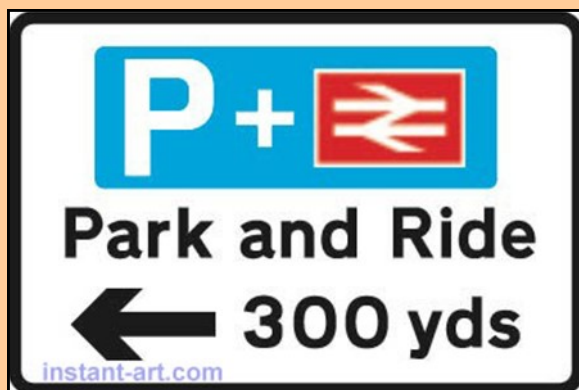
- ⇒ Air Pollution from vehicles
- ⇒ Noise from heavy goods vehicles
- ⇒ Buildings discoloured
- ⇒ Impact on health
- ⇒ Unsightly (Visual Pollution).



- ⇒ **Park and Ride Scheme:** A bus service run to key places from car parks located on the edges of busy areas in order to reduce traffic flows and congestion in the city centre. Costs are low to encourage people to use the system- they are cheaper than fuel and car parking charges in the centre

Other Schemes introduced to tackle the issue of traffic:

- ⇒ **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. (e.g. Manchester Metrolink)
- ⇒ **Pedestrianisation** - Pedestrianising areas of the CBD so that there is less congestion. This also improves the environment for shoppers in the CBD.



Issues in MEDC Urban Areas 4

ISSUE 4: MULTICULTURAL MIX

Despite the racial mix in many cities, a significant number of immigrants choose to live with people from similar areas and away from others with different ethnicity and culture. This represents **segregation**.

Segregation: Occurs where people of a particular ethnic group choose to live with others from the same ethnic group, separate from other groups.

Some reasons for this clustering:

- ⇒ Support from others: sense of belonging and protection
- ⇒ A familiar culture
- ⇒ Specialist facilities
- ⇒ Safety in numbers
- ⇒ Employment Factors: Poor wages- most live within inner city



Solutions:

- ⇒ Increasing community involvement by ensuring that minority groups have their needs met.
- ⇒ Improving education where English can be a second language.
- ⇒ Increasing community involvement by ensuring that the needs of minority groups are understood and met.
- ⇒ Providing facilities that encourage meetings of all sections of a community rather than separate ethnic groups

ISSUE 5: THE CENTRAL BUSINESS DISTRICT (CBD)

During the 1960s to the early 1980s, the CBD struggled to attract businesses. Out of town shopping areas and regional shopping centres became more favourable destinations as they offered pleasant shopping opportunities with ample parking. In contrast the city centres appeared busy and crowded.

However, there have been significant changes in CBDs and their image is becoming a more positive one. They have become vibrant and pleasant places as a result of a number of initiatives.

Manchester has increased involvement in the CBD through the construction of a new shopping centre (Arndale), Metrolink services, Recreation facilities (The Urbis), New Hotel Complex's (e.g. The Hilton, Deansgate).

Squatter Settlements (LEDGs)

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.

CASE STUDY: SQUATTER SETTLEMENT (KIBERA, NAIROBI- KENYA)

- Largest slum in Kenya
- 60% of the people that live in Nairobi live in slums
- Between 800,000 and 1 million people live in Kibera
- 255 ha (around the size of 255 football pitches)
- Extremely high population density
- 1 meter of floor space per person
- There are around 100,000 orphans - this is due in part to the AIDS epidemic in Kibera
- ⇒ The houses are built from any available material (Corrugated iron, Wood, Card board)
- ⇒ Paths between houses are irregular, narrow and often have ditches running down the middle that have sewage in
- ⇒ One pipe may provide 40 inhabitants. Private companies own hosepipes- they then charge double than the standard rate for water
- ⇒ Individuals homes are kept very clean and residents welcome visitors



SOLUTIONS:

- ⇒ Low cost flats (770 families rehoused!) Inhabitants used involved in the planning. Flats have Running water, toilets, electricity. Small, but bigger than the shanties! Less crime! Gives people pride in themselves and their community Funded by the govt, charities and private loans!
- ⇒ Make peoples homes permanent! People have no right to the land that their shanty is built on- the government can come at any time and move them on- so people do not see the point in spending time and effort in improving their shanties! If people knew that their shanties were permanent they would be worth investing in!

Problems of Urbanisation in LEDCs

There are three main problems being faced in LEDCs due to rapid urbanisation:

1. **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. (e.g. The creation of e-waste and its disposal in India)
2. **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). (e.g. Shanghai, China 73% of electricity is created from coal fired power stations giving off thousands of tonnes of harmful gases every year).
3. **Water pollution** is a major issue, and it needs to be tackled, especially in countries where the population is growing at a rapid pace. (e.g. The Ganges River contains untreated sewage, cremated remains, chemicals and diseases. People wash, do their laundry and drink from this water).



Reducing the problems

1. **Waste disposal:** Waste provides a resource and a means of making a living for many shanty dwellers in poor countries. In Sao Paulo, Brazil, two huge incinerators burn 7,500 tonnes of waste a day. Children and adults scavenge and extract materials to reuse or re-sell (e.g. Car tyres can be made into sandals and food waste is fed to animals or is used as fertiliser). Large companies need to take responsibility for the safe disposal of e-waste.
2. **Air Pollution:** Limits need to be set and enforced on emissions and companies, including transnational corporations (TNCs) must be monitored to ensure that emissions of CO₂ and SO₂ are reduced. In Mexico City odd-numbered cars are allowed into the city one day and even-numbered on another day as a strategy of reducing transport pollution.
3. **Water Pollution:** Limits need to be identified and enforced if quality is to improve. In 1986 the Ganga Action Plan sought to introduce water treatment works on the River Ganges in India, which it did successfully. In Shanghai the Huangpu and Suzhou rivers have been granted a World Bank loan of £200million to improve quality in 2002.

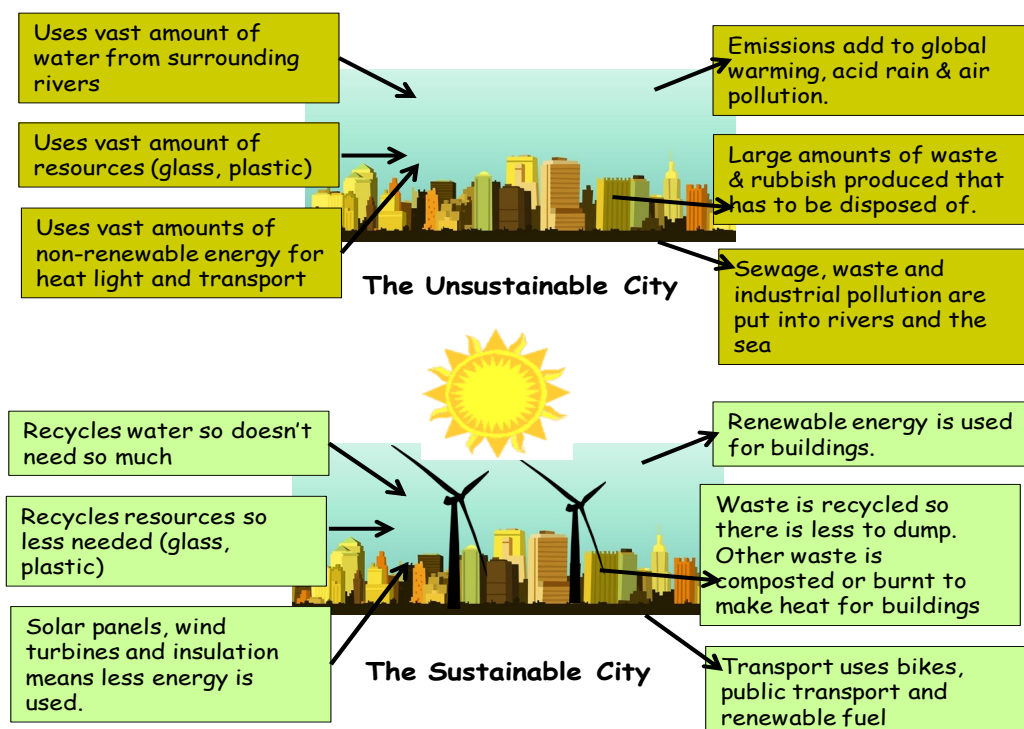
Sustainable Urban Living

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.

Sustainable cities of the future

Cities have a huge impact on the areas around them. Planners are trying to make sure future cities are **SUSTAINABLE** - they can operate without a negative effect on surrounding areas



Key Terms :

Sustainable cities
Green Belt
Urban Sprawl
Sustainability

Example / Case-Study :

Curitiba- Brazil
London - England

Possible Questions :

What do you understand by 'sustainable cities'?

What actions would have to be taken to make a city 'sustainable' for the future?

Weblinks :

Youtube film on future cities

<http://bit.ly/b2qet4>

Sustainable Urban Living

CASE STUDY: SUSTAINABLE URBAN LIVING IN CURITIBA, BRAZIL

Curitiba is the capital city of the Brazilian state of Parana. It is the 7th largest city with a population of 1.8million. The city is seen as a role model for planning and sustainability in cities world-wide.

Timeline of Curitiba

- ⇒ **1940s** - Curitiba experiencing rapid growth and Alfred Agache improved sewage system and Rerouted traffic away from the city.
- ⇒ **1960s** - Curitiba experienced huge urban growth and Jamie Lerner put in place Curitiba Master Plan (1968)
- ⇒ **1970s** - Lerner developed pedestrian only streets and Tri-ary road system. The new system sandwiched a central two-lane street restricted to buses and local car traffic between wide fast-moving one-way streets. Also, industrial zone built
- ⇒ **1980s** - citywide recycling program was initiated in which Curitibaanos separated organic waste and trash, plastic, glass, and metal. The city sold the salvage to cover the costs of operation. "Green areas" protected from future development were established in Curitiba, and a number of parks were dedicated to the city's different ethnic and immigrant groups.

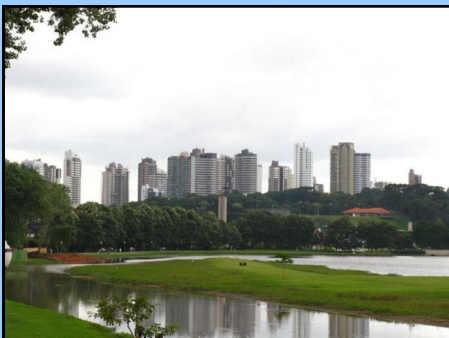


The Bus Rapid Transport (BRT) System: Curitiba was the first Brazilian city to have dedicated bus lanes. The BRT system has four elements:

1. Direct Line buses
2. Speedy Buses (operate on main routes into city centre)
3. Inter-district buses (join up districts without crossing the city centre)
4. Feeder mini-buses which pick people up from residential areas.

Housing in Curitiba

In Curitiba, COHAB, the city's public housing programme, believes that residents should have 'homes-not just shelters'. They have introduced a housing policy that will provide 50,000 homes for the urban poor



Recycling in Curitiba

People are encouraged to recycle through an exchange scheme where recycled goods are exchanged for fresh fruit and vegetables

Changing Urban Environments Exam Questions



TRY some of these exam questions on lined paper or in your exercise books. Bring them to revision sessions and lessons if you would like them to be marked by your class teacher!

1. What is urbanisation? (1 mark)
2. What is rural-to-urban migration? (2 marks)
3. Explain how many cities in poor parts of the world suffer from pollution (4 marks)
4. Describe how pollution problems can be reduced in cities in poor parts of the world. (4 marks)
5. Explain why people of the same ethnic group often live near to each other (4 marks)
6. Describe one strategy that tries to support multicultural communities in urban areas (2 marks)
7. Use an example to describe how problems of squatter settlements in poor parts of the world can be reduced (6 marks)
8. Outline how a government strategy has tried to improve inner cities (3 marks)
9. Explain why the CBD of some towns and cities needs to be improved (4 marks)
10. Use one or more named case studies to describe the features of a sustainable settlement (8 marks)