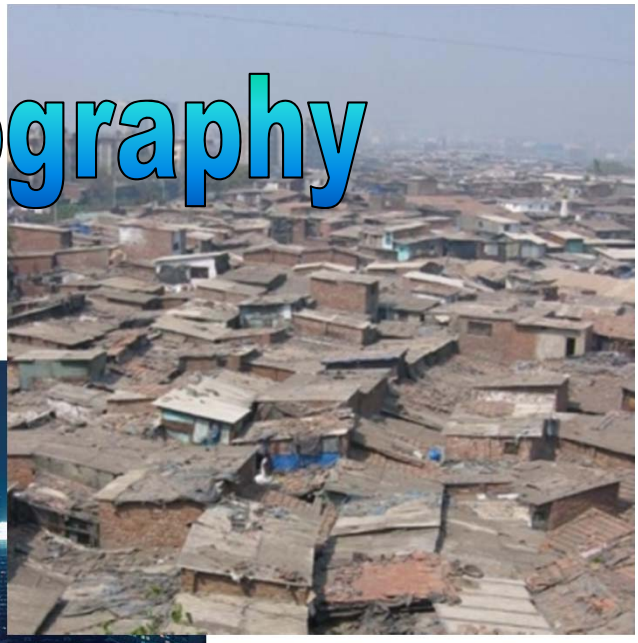
GCSE Geography



Revision Guide

- What is Urbanisation? ☐
- Urban Deprivation ☐
- Urban Hazards ☐
- Urban Transport ☐
- Urban Sustainability ☐

Use this Guide **to assist** with your revision for the mock exam

Environmental Hazards in Urban Areas

How does Urban Growth increase environmental pressures?

- Growing demand for transport increases vehicle emissions
- Increased demand for energy leads to more power stations being built -> more air pollution
- Air pollution caused by burning firewood and coal in urban slums.
- Water courses become filled with human and industrial waste
- People burn their waste due to lack of land creating toxic pollution.
- More buildings have to be built reducing the amount of green space.

What was the problem in Beijing?

1) Greater demand for energy has led to the building of coal fired power stations.
2) More people have cars again creating greater air pollution and smog.
3) The high level of pollution led to thousands of premature deaths and cases of Bronchitis

What has been done to improve environmental conditions?

- They banned cars entering the city centre for a couple of weeks before the Olympic Games to allow the smog to clear.
- More sustainable approaches have been the introduction of EU style emission standards for cars.
- Use of cleaner alternative energy sources such as natural gas and renewables.
- Stricter environmental laws to reduce industrial pollution.

Natural Hazards in Urban Areas

A Multi-Hazard City – Los Angeles

LA suffers from earthquakes, tsunamis, wild fires, flooding and landslides. However, people choose to live there because of the wealth and prosperity provided by the oil, tourism and agriculture businesses.

One of the biggest earthquakes in recent years to hit LA was in January 1994 where 69 people lost their lives and much of LA's infrastructure was destroyed such as the Cypress Viaduct.

The earthquake hazards can be deal with by **p**reparing, **p**lanning and **p**rotection. Here a selection of methods chosen by the LA authorities to deal with the hazard:

- All new buildings must comply with strict earthquake planning regulations.
- An earthquake warning and information system has been installed
- Organise and prepare hospitals and evacuation centres in safe areas.
- Prepare disaster plans and carry out regular practices
- Educate people on what to expect and what will happen, for examples the gas supply will be turned off.
- Train emergency services such as police, fire and ambulance crews.
- Organise emergency water, food and power supplies.

- Earthquakes are most likely after long periods without any plate movement.
- All new buildings must comply with strict earthquake planning regulations.
- An earthquake warning and information system.
- Organise and prepare hospitals and evacuation centres in safe areas.
- Building regulations must be adhered to and safety checks are carried out.
- Prepare disaster plans and carry out regular practices.
- Just before a quake small cracks may develop in the rock, which may fill with water and causes nearby water levels to changes. Radon Gas may bubble in the water.
- Educate people on what to expect and what will happen, for examples the gas supply will be turned off.
- Sometimes there will be small foreshocks which can be measured with a seismograph.
- Existing buildings, roads and bridges should be strengthened.
- Train emergency services such as police, fire and ambulance crews.
- Organise emergency water, food and power supplies.

QUESTIONS:

1.Using an example you have studied:
a) explain why some urban areas are at risk of natural hazards
b) describe how the threat of a natural hazard can be reduced

2. Using examples you have studied, describe the environmental hazards found in Urban Areas.

Key words –

Deprivation – where a persons quality of life falls below a level that is regarded as the acceptable minimum by the government.

Deprived areas – places where economic, social and environmental conditions are very poor.

Quality of life – to describe the general conditions in which people live. Quality of life can be measured using indicators like –

Economic – level of income, unemployment rate, rate of home ownership.

Social – quality of local schools, housing quality, access to healthcare, life expectancy, crime rates.

Environmental – amount of green space, pollution levels, amount of vandalism.

Dereliction – previously used land/buildings that have become run down and fallen into disuse and decay.

Redevelopment – renovation and improvement of areas that were previously run down.

Deprivation in more developed countries – Example London Docklands

Background

Before the 1950's the port of London was the busiest in the world. It had warehouses which would store goods, factories and lots of housing. However by the 1970's the Docklands had become virtually derelict, there were few jobs, few amenities and poor living conditions. In 1981 the London Docklands Development Corporation (LDDC) was set up and it improved the economic, social and environmental conditions of the area (see picture to the left).

Before	After
No shopping centres or leisure facilities. Busy, narrow roads Small shops Many people unemployed or paid low wages as they lacked skills and training. Poor quality housing that were built close together creating a strong sense of community Unused Docks Empty factories and warehouses Lots of derelict land No open spaces Little parking	New shopping facilities built. Leisure facilities including an indoor sports centre and water sports complex. Better transport links. New roads, the Docklands light railway and a City Airport. Financial and high-tech industries attracted to the area. Huge new office blocks like Canary Wharf Tower built. Over 16,000 new jobs created Over 20,000 new houses and flats created and the old terraces cleared or renovated. Derelict land reclaimed, trees planted and creation of parks

Task –

Can you sort these ideas economic, social and environmental?

How do you think these changes improved the quality of life for people living in the area?

How do you think different groups of people may have felt about these changes? Not everyone was happy,

Questions –

1. How can the quality of life be measured?
2. Why is quality of life a mixture of social, economic and environmental conditions?
3. Describe what the quality of life might be like in a typical deprived urban area in a developed country?
4. For an urban area in a developed country, explain what was done to improve the social and economic living conditions.

URBANISATION IN DEVELOPING COUNTRIES

Key Definitions:

- **Urbanisation** is an increase in the proportion of people living in towns and cities.
- **Rural-urban migration** is people moving from the countryside to cities
- **A Megacity** is a city with over 10 million inhabitants; for example Tokyo, Mumbai or Los Angeles
- **A conurbation** is a large urban area where towns have grown so big that they have merged
- **A Shanty Town:** is a squatter community that springs up in an area that used to have no houses.

Reasons for Urban Growth in LEDC's:

% of Urban/Rural Population with access to:						
Country	Safe Water		Education		Healthcare	
	Urban	Rural	Urban	Rural	Urban	Rural
Bolivia	76	18	78	22	86	38
Mosambique	48	16	90	38	98	30
Pakistan	96	36	92	44	99	35

♦Consider where better service provisions are in developing countries…

PUSH FACTORS-REASONS TO LEAVE	PULL FACTORS- ATTRACTIONS TO A PLACE
• LACK OF EMPLOYMENT • FLOODING • CIVIL WAR • LACK OF EDUCATION • VOLCANIC ERUPTION • OVERCROWDING • DECLINE IN AGRICULTURE AFFECTS ECONOMIC SITUATION • DROUGHT DESTROYS CROPS • FAMINE AND LACK OF FOOD	• FAMILY HAVE ALREADY MOVED TO THE CITY • IMPROVED HOUSING • CLEAN WATER SUPPLIES • CLEAN ENVIRONMENT • IMPROVED ACCESS TO HEALTH CARE • OPPORTUNITIES TO MAKE MONEY • IMPROVED JOB OPPORTUNITIES • GOOD CLIMATE • BETTER QUALITY OF LIFE?

General characteristics of Shanty Towns:

- Usually grow in less favourable parts of a city, such as swamps or on steep hills
- Homes are built from anything that's available - wood, cardboard, plastic, metal, plastic sheeting
- The People are Squatters - they live there illegally and have no land rights.

Positives Of Shanty Towns	Negatives
• High Sense of Community • Shanty Town populations can boost a LEDC cities population and therefore profile and reputation. • Provides a willing, cheap workforce	• Many have no Running Water (water often arrives by truck) • There's no sanitation, causing diseases to spread quickly • Many children work as opposed to go to school • Overcrowding • High Crime Rates • Limited Health Care provision

General Challenges:

- Managing the increased number of cars, traffic congestion and pollution: e.g. Mexico City, Los Angeles or Bangkok
- Supplying houses to the Urban poor
- Redeveloping Slums into better quality housing, e.g. *Favela Bairro (Rocinha, Rio De Janeiro)*
- Creating enough jobs to improve migrants quality of life

General Opportunities:

- Urban Areas can provide the first step towards a better life for some of the worlds poorest people
- Access to Clean Water, Sanitation, education and Healthcare is often better in Urban Areas
- Better opportunities for employment
- Slums provide affordable housing for poor migrants
- Urban poor provide a massive labour force who carry out essential jobs to keep cities running

Case Study: Rocinha (*favelas*)- Rio De Janeiro (Brazil)
Population: 200,000

Challenges:

(1) **No running water**. Water mainly delivered by truck. Some areas have water pumped to them 2x a week.
(2) **Disposal of human waste is a problem**. Children under 3 years old have diarrhoea 9 times a year.
(3) **Poor health**. Overcrowding, lack of clean water and toilets, lack of health care (doctors). Death rates 3x higher than average for Rio De Janeiro.
(4) **Crime**. Street crime, drugs and violence are major problems.

Opportunities:

(1) People have set up own businesses, banks and restaurants.
(2) Small playground built for children to play safely.
(3) Community workers developing ICT skills.
(4) Local radio set up to focus on local community activities.

Case Study: Dharavi (*Bustees*)– Mumbai (India)
Population: 750,000

Challenges:

(1) **Air pollution**. A major threat to health.
(2) **No running water**.
(3) **Disposal of human waste is a problem**.

Opportunities:

(1) **Community**. Small schools, community groups and organisations to help orphaned children set up.
(2) **Economy**. Hundreds of businesses and workshops where people can earn a living. India's largest plastic and tin recycling facility is here. Shops along roads selling just about anything. Largest businesses sell clothes and bags.

Solutions to Urban Growth

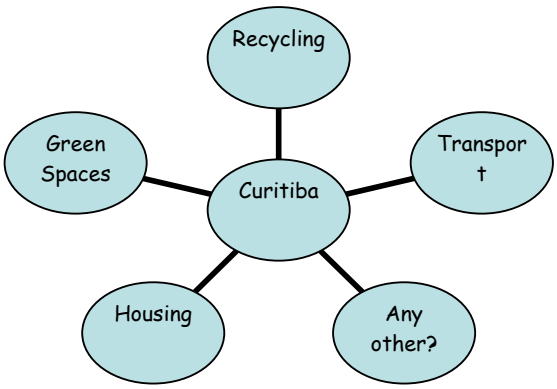
Self Help Schemes: A scheme where people take responsibility for their own living conditions

"Although Shanty towns are illegal the government have realised that they can't remove them. The people are so poor that it is difficult to build them homes and charge them rents necessary. One solution is in building self help schemes. The government puts in basic services such as clean water and sewerage and provides building materials, such as breezeblocks. The families then get together and help build the homes (Some being trained as plumbers, some electricians and so on.) This means that the buildings are relatively cheep, hygienic and creates good community spirit.

For and Against the Dharavi Slum Clearance:

'Vision Mumbai':

For	Against
• Dharavi sits on expensive land that could be used to make Mumbai a 21st Century City • Revelopment will be environmentally friendly • New jobs will be created • Slum dwellers will be re-housed	• Dharavi is home to 1 million people- where will they go? • Strong sense of community • New jobs created may not be for residents of Dharavi



QUESTIONS:

1. Describe the challenges and opportunities created by urban growth in developing countries
2. Explain how conditiuons for the urban poor are being improved in developing countries
3. Why are urban areas growing so rapidly

Urban sustainability

Bedzed – Zero energy development project in London.

Can you describe the main features of this zero energy urban project?

Energy

Sustainability
Meeting the needs of the present without compromising the ability to do so in the future

Energy efficient buildings, renewable materials, self-sufficient heating and power, low energy consumption appliances. Meaning the Bedzed project has a small ecological footprint.

The Greenhouse development- Leeds

Can you explain how urban living can be made sustainable?

A disused industrial building has been redeveloped to form a carbon-neutral development with houses, offices and a communal courtyard.

The project is sustainable because

- Energy generation is from wind turbines and solar panels.
- Super insulation keeps warms warm in winter and cool in summer
- Double glazing reduces heat loss
- Energy efficient appliances
- A car club encourages car sharing to create a sustainable community and reduces emissions
- Green taxis and buses travel between Leeds city centre and the Greenhouse development.
- Free cycle hire is available as well as all homes having bike storage.
- Allotments (gardens for growing vegetables to grow) reduce air miles and packaging
- Recycling facilities are available.

Practice exam questions

1.Describe the methods that can be used to:

a. make urban areas increasingly carbon neutral

b. increase the amount of green space in urban areas. (6 marks)

2. What factors need to be considered if a planned settlement is going to be sustainable? (8)

3. What does carbon neutral mean? (1)

4. Explain how eco-settlements are examples of sustainable urban planning.
Use example(s) you have studied. (8)