



Paper 2 Case Study Booklet

- This covers each **case study you have learnt**. This is not all the revision you do but is essential to add detail to the base knowledge from your knowledge organisers.
- Try and plan the **practise questions** as you go through the revision booklet.

Paper 2: Section A: Urban Issues and Challenges

Case study of a HIC city (Manchester, UK): location, importance, reasons for growth (international and natural migration changing the city's characteristics)

- Opportunities- cultural mix, recreation, entertainment, employment, integrated transport systems, urban greening
- Challenges- inequalities in housing, education, employment, urban deprivation, dereliction of buildings, greenfield/ brownfield sites, water disposal, urban sprawl (commuter towns)

Sustainable development	Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.
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Manchester is a city located in the *north west of England*. Manchester (The City) has a population of 520,000, whilst Greater Manchester **CONURBATION** (10 North West towns (e.g. Bolton) have a population over 2.5 million people. It is well connected to the rest of the UK – 2 hours by train to London. Additionally, it has a well-developed infrastructure – Manchester Airport/3 rail stations/Metrolink Tram.

Manchester has a long history of migration:

- Agricultural workers for industry
- Irish labourers for docks and canals
- 20th Century: Jews fleeing persecution (Broughton)
- China Town established in city centre
- 1950s West Indians migrated to Moss Side
- Pakistanis migrated to Rusholme
- 1990s: Refugees from Yugoslavia, Iraq and Somalia
- Most recent influx of Eastern Europeans: Polish

Manchester's diverse culture:

- Held the Commonwealth Games in 2002.
- National Cycling Centre opened in 1994.
- Football teams – Manchester United and Manchester City.
- Trafford Centre & Manchester Arndale shopping centre.
- Theatre – Opera House and Royal Exchange


▼ fig.178 Ethnicity in Manchester

All Ages	503,127
All White groups	66.6%
Mixed	4.6%
Indian	2.3%
Pakistani	8.5%
Bangladeshi	1.3%
Other Asian	2.3%
Black Caribbean	1.9%
Black African	5.1%
Other Black	1.6%
Chinese	2.7%
Other	3.1%

Impact of Migration on Manchester

Positives	Negatives
Culture is enriched (food – Curry Mile in Rusholme, China Town, festivals - Manchester Caribbean festival, music)	Increasing cost to services, such as health care and education. More people cause higher costs.
Flexible and skilled workforce that can fill shortages. 16.5% of NHS staff moved over to fill staff shortages	Tensions between different ethnic groups can lead to hate crimes
More people spending money in the UK and more people paying taxes that pay for schools and hospitals.	Migrant remittances (migrants send money to their families in their home country) which means it is not spent in Manchester
Migrants are more prepared to take on low paid, low skilled jobs like fruit picking and lorry driving.	Education is needed to help migrants learn English in schools that pushes up costs

More Opportunities

Employment	<ul style="list-style-type: none"> • Media City in Salford – 10,000 jobs created in BBC, ITV, Lowry Theatre, shops and restaurants. Added £1 billion in first 5 years opened. • Manchester based companies (e.g. PLT, Boohoo, Siemens, Amazon, Warburton's) • Manchester Science park – over 150 fast growth science and digital technology businesses on Oxford Road.
Integrated Transport Systems	<ul style="list-style-type: none"> • Bee Network (Metrolink, bus fleet and lanes, bikes, park and ride) • fleet of 101 environmentally-friendly diesel-electric hybrid buses and three fully electric buses.- £2 a ride • 93 stops with all trams electric and 62% of this power provided by wind! – 45 million tram journeys a year 
Urban Greening	<ul style="list-style-type: none"> • Manchester lacks some of the green space of other UK cities. Nevertheless, it has 160 parks, such as Heaton Park • Mayfield Park Is Manchester City Centre's Only New Urban Park Created In over 100 Years. Cost \$1.4 billion

GCSE Practise Question: To what extent has urban change created social and economic opportunities in a UK city you have studied? (9)

- **Challenges - inequalities in housing, education, employment, urban deprivation, dereliction of buildings, Greenfield/ brownfield sites, water disposal, urban sprawl (commuter towns)**

Manchester is **classed as the 6th most deprived place in the North-West**. Of the core cities, only Birmingham ranks as more deprived than Manchester. **29.7% of Manchester's children live in income-deprived families**. This is due to deindustrialisation (shutting down of factories that the working class would have worked in) during the 1970's. Also the cost of living increasing.

Key Words

- **Urban decline** is the deterioration of the inner city often caused by lack of investment and maintenance.
- **Social deprivation** - The degree to which a person or area lacks what they really need such as decent housing, adequate income and employment.



West Didsbury (richer)

Mile Plattling (Poorer)



Examples of Inequality between Miles Plattling and West Didsbury (both in Manchester)

Housing Factor	West Didsbury	Miles Plattling
Housing type Terraced	12.1%	41.1%
Tenure of house Social rented (council house)	9%	52.6%

Health	West Didsbury	Miles Plattling
Very Good Health	58.3%	39.6%
Very Bad Health	1%	3%
No Long term illness	87.6%	73.4%

Employment	West Didsbury	Miles Plattling
Status		
Employed	93%	79%
Unemployed	4 %	14%
Never worked	2%	11%

Education Factor	West Didsbury	Miles Plattling
No qualifications (GCSE's and above)	8%	41%

- Reasons**
- Residents have less disposable income to afford healthy food and healthy lifestyle
 - Deindustrialisation led to unemployment of previously skilled workers
 - Deprivation can lead to poorer attitude towards education so lack of educational attainment
 - Residents are unable to afford a mortgage to buy their own homes

Challenges

As Manchester grows and switches from being an industrial town there are changes to the environment

Housing	Locals cannot afford housing. There have been plenty of new homes built - however, not one of the apartments meets the definition of "affordable". It is estimated GM will run out of homes in a decade. This problem is partly due to the fact that 85,000 students live in Manchester. The students increase competition for housing, increasing rent costs. This leads to fewer houses on the market to buy.
Transport	Journeys take a lot longer than they should. <ul style="list-style-type: none"> • Unsustainable congestion on Northern roads and motorways. • Poor public transport – unreliable, poor or patchy service. For example, in 2017 only 45% of Northern Rail's services in North Greater Manchester arrived on time.
Waste Management	1.1 million tonnes of waste are produced each year in Greater Manchester- that's 3,000 tonnes per day! In 2003 85% of this waste went to landfill and only 7% was recycled. Greater Manchester targets: 60% recycling and 90% diversion from landfill by 2025.

Problems with Urban Cities

Change in urban cities may not always be for the best. Sometimes change doesn't benefit the entire population or can destroy the **environment** surrounding.

Urban Sprawl and Housing Developments

As the city's population increases, so does the **demand** for housing. Developers and builders will prefer to use cheaper **greenfield** land, rather than any **brownfield** land, to keep the **cost of construction** low.

- **Greenfield Land** - Land that hasn't been built on before, often used for farming or left naturally.
- **Brownfield Land** - Land that has been previously built on. The buildings may still be standing or demolished.



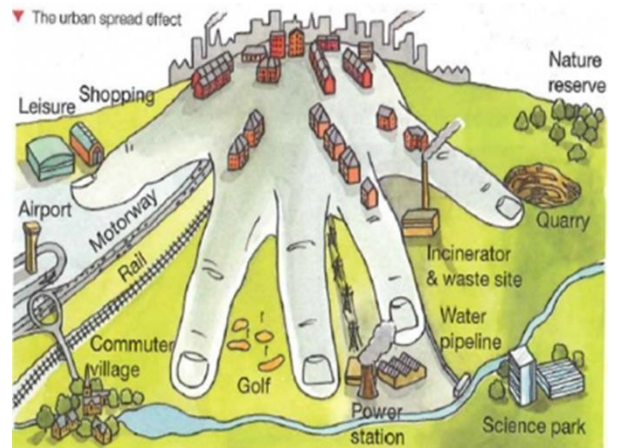
	Greenfield Land	Brownfield Land
Advantages	<ul style="list-style-type: none"> 👍 Never been built on before, so no additional cost to remove rubble or waste. 👍 Cheaper land price, as greenfield tends to be slightly further from the city centre. 👍 For struggling farmers, selling their land to developers can be a good source of income. 	<ul style="list-style-type: none"> 👍 Developers use up land rather than leaving it derelict, which can detract from the surrounding area and become a target for crime. 👍 Housing developments would be close to the city centre, so developers can charge more for the houses that they build.
Disadvantages	<ul style="list-style-type: none"> 👎 Once buildings have been built, the land will never be greenfield again, so cannot be turned back into farms after construction. 👎 The city can grow uncontrollably, which is called urban sprawl. If the city sprawls too much, it may become too far for residents to commute to the centre or lose its characteristics. 👎 Habitats are destroyed and wildlife pushed further away from the city. 	<ul style="list-style-type: none"> 👎 Expensive to remove all waste, demolish any existing buildings or remove any chemicals (if there was industry here in the past). 👎 To compensate for the high cost of preparing the land, housing tends to be unaffordable and high-value apartments. So not everyone can afford to live in brownfield developments.

Dereliction and **urban sprawl** are two main issues facing UK cities. Therefore, it is important for local governments to **balance** the amount of **greenfield** land and the amount of **brownfield** land used for housing developments. This will stop the city growing uncontrollable, and becoming empty wasteland in the centre, where old industry or housing exists.

Urban sprawl puts pressure on the rural-urban fringe

Urban sprawl is the unplanned growth of urban areas into the surrounding countryside, it is a transition area where there's a mix of urban and rural land use.

1. The population in Manchester is predicted **to grow by 10% over the next 20 years**. This will require around 179,000 new homes in the region by 2037. Due to land in the city being so expensive, new homes must be built on the outskirts of the city centre.
2. Residents and environmentalists have expressed worries about the loss of **rural landscapes** and the effects on wildlife **biodiversity and habitats**. Increasing traffic **congestion levels, noise, and air pollution** are also areas of concern.
3. Commuter settlements (areas where many residents travel to work in different locations) have grown recently (e.g. Bolton, Bury, Oldham, Salford)
4. Altrincham is an example of a commuter settlement. Its location along the Metrolink has meant easy travel into the city centre. However, this has pushed up house prices in the town, increased congestion on the local roads.



GCSE Practice Questions: In a HIC city that you have studied, how is the city making use of the changes to promote economic growth? [6 marks]

GCSE Practice Questions: 'Explain how international migration has led to changes in the character of a named UK city' (4 marks)

GCSE Practise Question: Assess the challenges created by urban change in a UK city you have studied (9)

GCSE Practise Question: To what extent has urban change created environmental challenges in a UK city you have studied? (9)

Regeneration to improve the city (Salford Quays)

Salford Quays is an area of Salford, Greater Manchester, England, near the end of the Manchester Ship Canal. Previously the site of Manchester Docks, it became one of the first and largest urban regeneration projects in the United Kingdom following the closure of the dockyards in 1982.

Brief History

Manchester is a landlocked city – this led to the opening of the Manchester Ship Canal in 1894, which allowed ships to travel into Manchester. This led to an increase in size and population of Manchester Docks, before going into decline in the 1970s due to a decrease in UK manufacturing.

Consequences of economic decline

- Job losses: In the 1900s there were 75,000 jobs; by 1985 there were 24,500 jobs.
- Polluted water and toxic waste remained.
- Derelict land and buildings.
- Lack of investment.



In 1983, Salford City Council acquired parts of the docks from the Manchester Ship Canal Company. The area was rebranded as Salford Quays and redevelopment by Urban Waterside began in 1985 under the **Salford Quays Development Plan**.

Consequences of economic growth

Category	Positives	Negatives
Social	<p>New entertainment</p> <ul style="list-style-type: none">• Lowry Centre attracts 820,000 visitors a year.• Imperial War Museum North opened in 2002.• Lowry Outlet Mall.	<ul style="list-style-type: none">• Locals cannot afford housing – housing is aimed at professionals not families. Cheapest one bed apartment £165,000 and NV Penthouse = £825,000- also economic.• Perception of high crime rate still exists.
Economic	<ul style="list-style-type: none">• New jobs created: BBC Media City complex opened in 2007, and ITV Granada Studios followed. The Lowry Centre supports 520 jobs.• More profit - Lowry Centre: For every £1 invested, £16.27 is delivered.• BBC move has contributed £1.5 bn to regional economy and supports 1,000 jobs and 15,000 businesses.	<ul style="list-style-type: none">• Local 'low income' people did not gain employment with 'new opportunities' (more tertiary jobs than secondary).
Environmental	<ul style="list-style-type: none">• Water quality improvement, new buildings, bridges and roads.	<ul style="list-style-type: none">• 'Empty' feel at night as people vacate the area after work.

GCSE Practise Question: Suggest how a regeneration project can solve urban problems. (9)

Example of urban sustainability (Freiburg & Bee Network - Manchester): conserving water and energy, recycling waste, creating green space, urban transport strategies



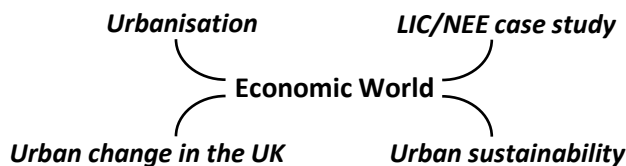
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Sustainable Urban Living - Freiburg




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The Big Picture



Key Terms


-  **Sustainable energy supply** – Energy that can be used well into the future without affecting future generations.
-  **Renewable energy sources** – An energy resource that cannot be exhausted.
-  **Solar energy** – Electricity generated by solar panels.


Background


Freiburg is a city in the south of Germany. In 1970 the local government set the goal of urban sustainability.

Why?

- Freiburg has one of the youngest populations in Germany.
- The old town is cobbled, which reduces traffic in the city.
- The city is situated in the Black Forest.

 **Social Planning** – decisions take into account people's needs and includes local people in the planning process.

 **Economic Planning** – providing people with employment opportunities e.g. green industries employ 10,000 residents.

 **Environmental Planning** - ensures that resources are not wasted, and the environment is protected for future generations.

Water and Energy

- The city plans to be 100% renewable energy powered by 2050 by reducing consumption by 50% and increasing energy efficiency.
- 10m kw of electricity produced from solar energy every year as the area is very sunny.
- The wastewater system allows rainwater to be retained, reused or seep into the ground.
- Grey water used within homes.
- Flood retention basins store excess water from the River Dreisam.

Waste recycling

- Energy for 28000 homes is provided by burning waste.
- Annual waste disposal has reduced from 140000 tons to 50000 tonnes in 12 years.
- More than 88% of packing waste recycled.
- 350 community collection points for recycling.
- Collection of garden waste and organic food, which is used to generate gas in a biogas digester.

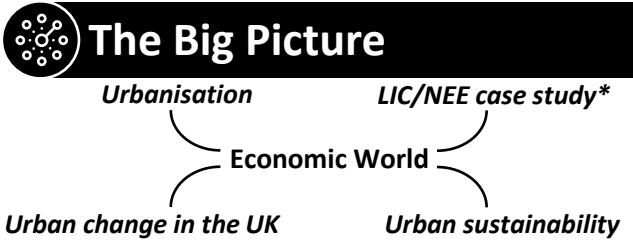
Creating Green Space

- 40% of the city is forested.
- 44% of the wood from the city's forest is used for timber, with 75% growing back within a year.
- 56% of forests are nature conservation areas.
- The River Dreisam is unmanaged and allowed to flow freely, providing natural flora and fauna habitats.
- Only native shrubs and trees are planted in 600 hectares of parks.
- 44000 trees have been planted in parks and streets.



- **Case study of a NEE city (Rio, Brazil):** location, importance, reasons for growth
 - Opportunities- access to healthcare, education, water supply, energy and economic development in urban industrial areas
 - Challenges- growth of favelas, lack of clean water, sanitation, informal employment, crime, waste disposal, air/ water pollution, traffic congestion
 - Urban planning to improve the quality of life for the urban poor (Rio Barrio Project)

The Location and Importance of Rio



The Location of Rio



Rio de Janeiro (Rio) is Brazil's second most populated city after Sao Paulo with a population of 6.5 million, and a further 12.5 million in the urban area. Rio is located in the southeast of Brazil on the Atlantic coast. Rio was the capital of Brazil under Portuguese colonial rule. It was established as a trading port. Brasilia became the capital city of Brazil in 1960 to encourage economic development further inland. However, Rio remains one of Brazil's most important cities.

Regional Importance

- Rio is important in providing hospitals, schools and universities and provides employment, leisure and recreation opportunities
- A thriving arts and culture scene.
- The city is a major transport hub with an airport and important docks providing raw materials for local and regional industries exporting products.

Key Terms

- Transnational Corporation** – companies that operate in more than one country.
- GDP** – the monetary value of final goods and services — produced in a country in a given period of time.

National Importance

- Brazil's oil, mining and telecommunications companies have their headquarters in Rio.
- Several of the country's universities and research and development institutions are based in Rio.
- Rio is a major manufacturing centre specialising in chemicals, processed food, clothing and pharmaceuticals.
- The port is important for the export of coffee, sugar and iron ore.
- It is Brazil's second most important industrial area and produces 5% of the country's gross domestic product (GDP).
- Major entertainment and media organisations are based in Rio.

International Importance

- Rio has hosted a number of global sporting events for example the 2016 Olympic and Paralympic Games, and the 2014 World Cup
- Tourists from around the world are drawn to Rio to see attractions such as the Statue of Christ the Redeemer and participate in colourful festivals.
- The city is an international centre for industry and finance.
- It has five ports and three airports, which make it a major international transport hub.
- It is one of the most visited cities in the southern hemisphere due to natural attractions such as its stunning beaches and Sugarloaf mountain.



Urban Issues and Challenges

The Growth of Rio

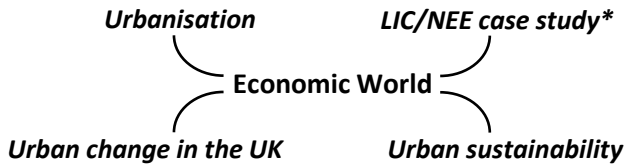


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The Big Picture



Key Terms



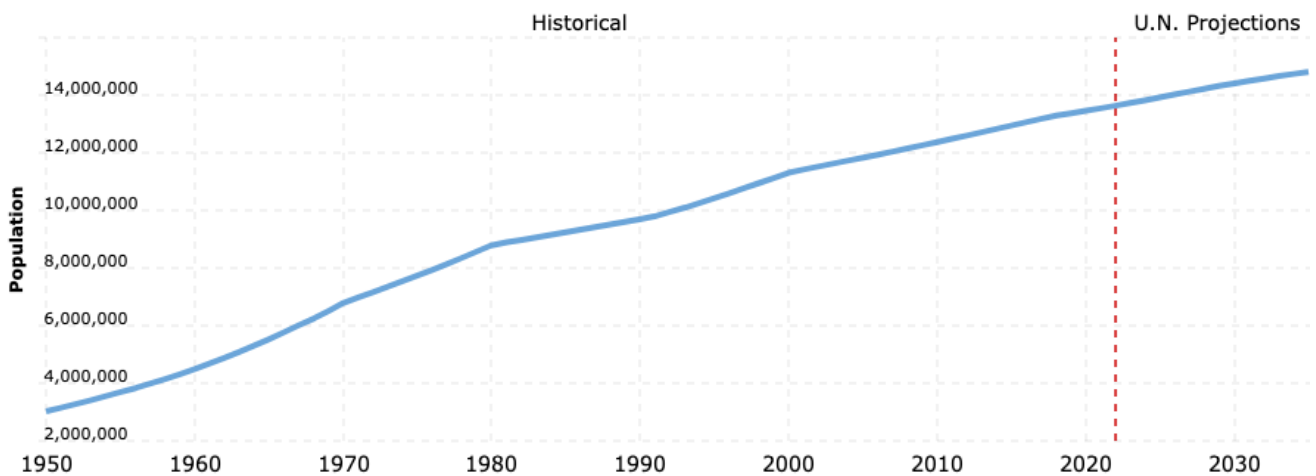
Rural to urban migration – The movement of people from the countryside to the city.



Natural Increase – The difference between live births and deaths in an area.



Population Growth



Rio's population is growing rapidly. Since the 1950s, the population of the city has more than trebled. As a result, Rio de Janeiro has an estimated 2020 population of 6.48 million. The metro population (surrounding area under the same local government) of Rio de Janeiro is much larger, however, with 13.5 million residents in 2021.



Reasons for Growth



Rural to Urban Migration

As Rio has developed, it has attracted migrants from within Brazil and from abroad. One of the largest groups of migrants is the Portuguese people. Rio is the largest Portuguese city outside of Portugal. Rural-to-urban migration has been a significant cause of population growth. Migrants are pulled to the city because of better education, employment opportunities, and improved living conditions. On the other hand, migrants have been pushed from rural areas due to mechanisation (use of machinery) on farms, poor living conditions and the lack of employment

opportunities. More recently, Rio has attracted migrants from South Korea and China who seek business opportunities.



Natural Increase

The high migration rate into Rio has led to a youthful population. As a result, the city has a high rate of natural increase due to the high birth rate and relatively low death rate. The death rate was 5.7 per 1000 people in 2015 and the death rate was 12.75 per 1000 people. This is a natural increase of 7.05 per 1000 people.



Urban Issues and Challenges

Social and Economic Opportunities of Urban Growth in Rio

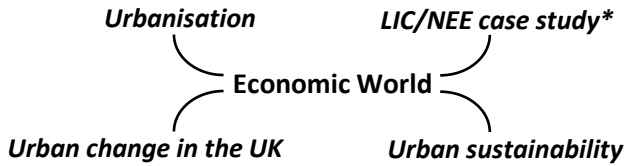


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The Big Picture



Key Terms



Social opportunities – Chances for people to improve their quality of life e.g. access to healthcare and education.



Economic opportunities – providing an equal chance for people to earn a living wage.



Social Opportunities



Health Care – Rio de Janeiro offers better healthcare access than rural areas, with 3.44 doctors per 1,000 people compared to Brazil's average of 2.81. Initiatives like "family health teams" provide vital services, reaching up to 3,000 individuals per team. Healthcare coverage in favelas increased from 4% to 70% since 2008, supported by investments for the World Cup and Olympics. During the COVID-19 pandemic, Rio achieved higher vaccination rates than other regions, reflecting its advanced healthcare infrastructure.



Water supply - Around 96% of Rio residents have access to piped water, compared to only 88% in favelas. The city's water system includes the world's largest treatment facility, seven new plants, and 300 km of pipelines built since 1998. Most of Rio's water comes from the Guandu River, supported by over 1,000 mm of annual rainfall, ensuring a reliable supply with proper infrastructure and management.



Education – Rio's education system surpasses that of rural areas, with **over 1,000 primary schools, 400 secondary schools, and six universities**. The city has a 97% literacy rate for those aged 15 and older, exceeding the national average of 93.2%. Programmes like "Schools for Tomorrow" and government grants improve education in favelas, where attendance has historically been low. The opening of Estácio de Sá University in Rocinha further enhances higher education opportunities.



Energy - Nearly 99% of Rio's population has electricity access, with the 2013 Simplicio hydroelectric plant increasing supply by 30%. Two nuclear reactors are operational, with a third underway. Initiatives like solar panels in the Santa Marta favela provide clean energy to poorer areas. However, illegal power tapping in favelas remains an issue, leading to risks such as fires.



Economic Development



Manufacturing – Rio is a hub for diverse industries, including engineering, pharmaceuticals, printing, publishing, and food processing. Offshore oil discoveries have driven the growth of oil-related industries such as refining and shipbuilding, which provide stable employment and attract investment. These industries create a multiplier effect, fostering new businesses in the supply chain and boosting economic growth.

Commercial and Industrial Zones – The North and Centro zones are key industrial hubs, benefiting from their proximity to Brazil's third-busiest port. These areas support exporting goods like coffee, sugar, and oil, while thriving industries here provide employment for the local population. The city's high income per capita drives demand for services and retail, boosting the economy further.



Infrastructure – Significant investment in infrastructure has improved roads, transport, and

services. The city's port facilities and transport links enhance its role as a centre for commerce and industry. Planned infrastructure improvements will continue to attract business and create further economic opportunities.



Tourism – With its iconic beaches, cultural heritage, and global events like Carnival, Rio is a top tourist destination. The South Zone, in particular, thrives on tourism, providing jobs in hospitality, retail, and luxury services. Tourism significantly contributes to the city's economy.



Informal Sector – Unemployment in Rio's favelas can exceed 20%, with many residents relying on the informal economy. Jobs include street vending, housekeeping, and handicraft production. While these roles offer essential income, they are low-paid, sporadic, and lack formal contracts, leaving workers without benefits or job security. This sector represents one-third of Rio's workforce but does not generate tax revenue for the government.



Urban Issues and Challenges

Challenges of Urban

Growth in Rio

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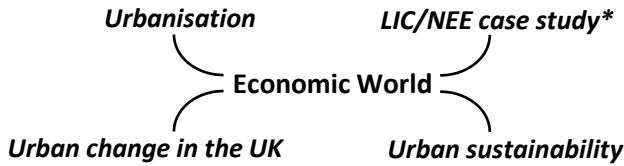
Informal settlements

Social and economic

Environmental



The Big Picture



Key Terms



Sanitation – Measures designed to protect public health, including the disposal of sewage and waste.



Informal sector – Employment done without official knowledge of the government without paying taxes.

less on average than in wealthier areas. Diseases like tuberculosis are 10x more common due to poor sanitation. Overcrowding led to the rapid spread of COVID-19 during the pandemic



Education – While 90% of 10-year-olds can read and write, 25% of the poorest children do not regularly attend. Favelas lack schools; for example, Rio das Pedras, with 50,000 people, has only two primary schools and one high school. Many children drop out by age 14 due to economic pressures to support their families.



Unemployment & Crime



Unemployment – Between 2017 - 2020, unemployment in Rio averaged 15%, with high youth and female unemployment. 3.5 million workers are in the informal economy, lacking job security, benefits, or tax contributions.



Crime – Drug trafficking and violent crime are prevalent in favelas. Murder rates have risen by 20% since 2017, linked to unemployment and reduced police funding. Drug related crime is common.



Environmental Issues



Waste Disposal – Rio produces 3.5 million tonnes of waste annually, with less than 2% recycled. Waste collection is irregular in favelas, leading to uncollected rubbish entering rivers and causing water pollution.



Water Pollution – Over 50 tonnes of industrial waste dumped daily into Guanabara Bay



Air Pollution and Traffic Congestion – Most congested city in South America. Air pollution causes around 5,000 deaths annually.



Managing Urban Growth

Housing Shortages: Rapid population growth has outpaced housing development, forcing millions into informal settlements or *cortiços*.

Favelas: Informal settlements built on steep hillsides and wastelands. These homes often lack basic amenities such as sanitation and clean water. Many are at risk of landslides, such as in 2010 when a slide killed 200 people and destroyed thousands of homes.

Cortiços: Overcrowded tenement buildings in central areas, often illegally subdivided. These lack proper ventilation, lighting, and sanitation - landlords charge high rents for poor conditions.



Water, sanitation and energy



Water Supply: The Guandu Treatment Plant provides 92% of Rio's fresh water. 12% of residents lack access to clean running water. Over 1/3 of water is lost due to leaky pipes, fraud, and illegal connections. Favelas supply issues include water being delivered to central collection points.



Sanitation: 35% of sewage is discharged untreated into Guanabara Bay. 50% of favela residents lack sanitation, and open sewers are common, increasing the risk of diseases like cholera.



Energy: Power cuts are frequent due to overloaded systems. Many favela residents tap into electricity illegally, causing shortages and fires.



Health and Education



Health – Rio has only six hospitals, and health clinics are insufficient for the city's population. In favelas, residents live 13 years



Urban Issues and Challenges

Urban Planning Improving Life in Rio

Favela Barrio Project

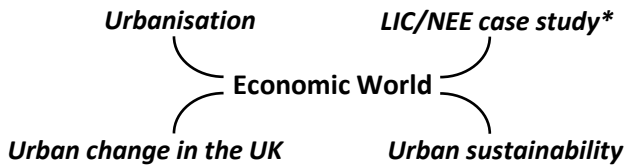


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The Big Picture



Rio's Challenges

- **Favelas:** Informal settlements housing over 1.5 million people, often lacking basic services like clean water, electricity, and sanitation.
- **Overcrowding:** Densely populated slums with poor infrastructure and high crime rates.
- **Employment:** Limited job opportunities and informal work with low pay.
- **Health Risks:** High rates of disease due to poor sanitation and unsafe housing.



Favela Bairro Project

- **What is it?** A site and service scheme where authorities provide land, materials, and infrastructure, allowing residents to improve their own homes.
- Example: Complexo do Alemão:
- Home to 26,000 residents.
- Improvements include:
 - Fresh water and sanitation systems.
 - Paved roads and street lighting.
 - Schools, health centres, and community facilities.
- A cable car system improving access to the city centre.
- Credit schemes for residents to purchase materials for home upgrades.



Features

Social:

- Childcare and after-school programmes.
- Adult education and skills training (e.g., computing and hygiene).
- Access to healthcare services.



Key Terms



Favela: A densely populated informal settlement in Brazil, often self-built homes and a lack of access to services such as sanitation, water, and electricity.



Site and Service Scheme: A project where infrastructure is provided, and residents build their own homes.



Quality of Life (QoL): Measures well-being based on health, education, and living conditions.

Economic

- Legal land ownership for residents.
- Credit access to enable home improvements.
- Increased job opportunities through better transport links.

Environmental

- Replacement of unsafe housing with brick structures.
- Infrastructure upgrades for water, electricity, and sanitation.
- Road widening to improve waste collection and emergency access.



Improvements to QOL

- **Social:** Better healthcare, education, and safer housing.
- **Economic:** Legal ownership and credit schemes improve financial stability.
- **Environmental:** Safer housing and improved sanitation reduce health risks.



Successes and Challenges

Successes:

- Recognised by the UN as a model for sustainable urban planning.
- QOL and job prospects significantly improved.
- Mobility enhanced through the cable car system.

Challenges:

- Limited literacy affected training programmes.
- Credit schemes were not widely accessible.
- Rent increase made homes inaccessible to some.
- Maintenance of costly infrastructure (e.g., elevated pavements causing flooding).



Changing Economic World

The Location and Importance of Nigeria

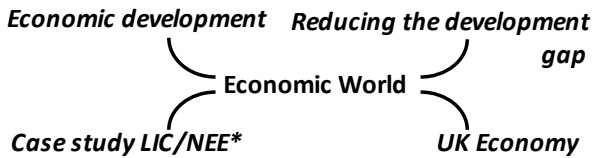


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The Big Picture



Nigeria

Nigeria is an NEE located in Africa. It is one of a number of countries experiencing rapid economic growth.



Key Terms



Economy – the production, consumption, and trade of goods and services.



GDP – the total value of all goods and services produced in a country.



LIC – A low income country with a GNI per capita of less than \$1045.



NEE – A newly emerging economy with a GNI of between \$1046 and \$12 696.



What is Nigeria's location?



Nigeria is located in West Africa, sharing a border with Benin, Niger, Chad and Cameroon. To the south, it borders the Gulf of Guinea, part of the Atlantic Ocean. Nigeria is almost 4 times the physical size of the UK. Its population, at just over 200,000,000, is three times the size of the UK. Nigeria is the most populous and economically developed country in Africa. Its recent growth, based on the sale of oil, has led to the country's transformation from a LIC to a NEE.



Global Importance

- Nigeria had the 31st largest GDP in 2018.
- It is the world's 21st largest economy and has experienced recent rapid growth.
- Seventh largest population in the world.
- Nigeria is the 15th largest producer of oil (2.2% global supply).
- Lagos, Nigeria's largest city, is a thriving 'world city', with a strong financial and economic base.
- Nigeria has the second -largest film industry in the world - Nollywood
- Nigeria plays an important role in United Nations peacekeeping.



Regional Importance

- The fastest growing economy in Africa.
- Nigeria has the highest GDP in Africa (\$440 billion)
- Nigeria has the largest population on the continent.
- Nigeria has the third -largest manufacturing sector. The country also has the largest agricultural output and the highest number of cattle (19 million)
- Nigerian music is enjoyed throughout Africa. It is also a hub for literature boasting a range of popular writers.



Changing Economic World

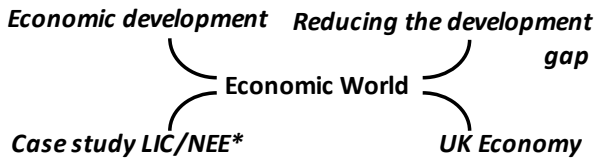


read

Nigeria's Context

quiz

The Big Picture



Key Terms

The Commonwealth – a voluntary association of 53 independent and equal sovereign states, which were mostly territories of the former British Empire.

Political Context

- European colonial powers drew up the political map of Africa in 1883. The continent was exploited for natural resources and slavery for many years.
- After independence from the UK in 1960, Nigeria experienced political instability for several years due to different factions fighting for control. Civil war ravaged the country between 1967 to 1970.
- In 1991 the capital moved from Lagos to the newly built city of Abuja. The country, regarded as stable since 1999, experienced free and fair elections in 2011 and 2015.
- Increased confidence in the country has led to considerable economic investment from China, the USA and South Africa.
- Nigeria is a member of the Commonwealth.

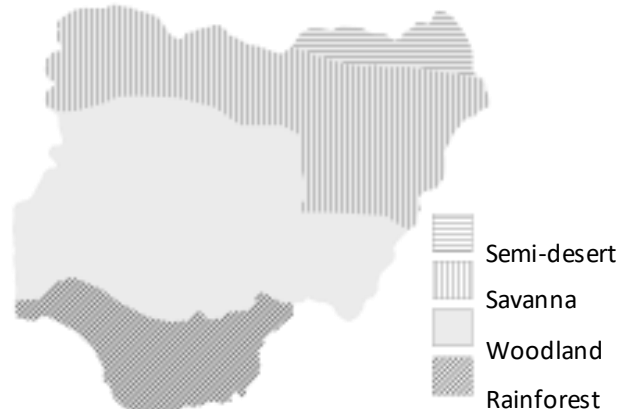
Cultural Context

- Nigeria has a rich and varied culture due to its social diversity. Its film, music (Afrobeat's) and literary sectors are thriving
- Nigeria has experienced success within Africa by winning the African Cup of Nations three times.
- Nigeria has the second -largest film industry in the world, behind India. Nigerian cinema is known as "Nollywood".

Social Context

- The population of Nigeria is multi -cultural and multi -faith. It is a land of over 500 languages and hundreds of ethnic groups, such as the Hausa, Yoruba and Igbo.
- Although social diversity is a considerable strength of Nigeria, it has led to some regional conflicts. The fundamentalist group Boko Haram has hindered economic development through conflict.

Environmental Context



- Nigeria spans several climatic regions. It experiences a tropical climate to the south, whereas, toward the north, it is much drier.
- Rainforest thrives in the equatorial climate in southern Nigeria. Tree crops in this area include cocoa, palm oil and rubber.
- To the north, savanna grassland replaces the rainforest. A range of field crops is typical here, including cotton and millet. Cattle also graze the savanna.
- Semi-desert exists in the very north of Nigeria. The nomadic grazing of cattle is the primary type of agriculture in the region.

Regional Variations

- There are huge variations in wealth and development in Nigeria.
- Urban areas have a greater share of public services.

Nigeria – The Role of TNCs



Introduction - Fill in the missing words below.

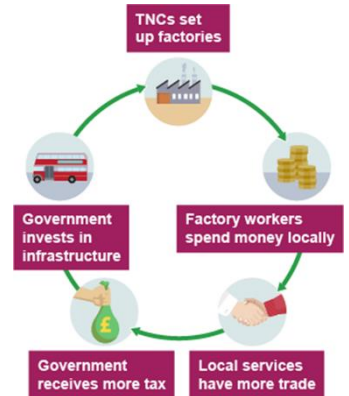
Transnational corporations (TNCs) have played an important role in Nigeria's recent economic growth. They can invest significant amounts of money and expertise while benefiting from tax incentives, cheap labour and large internal markets.

There are currently around 40 TNCs operating in Nigeria, most of which have their headquarters in Europe and the USA. Increasingly, Asian TNCs are investing in Nigeria.

tax economic markets Asian corporations Europe

Background

- Shell is one of the world's largest oil companies.
- British Company
- Since the discovery of oil in 1958, its operations in the Niger Delta have been controversial (disputed).
- The swampy river delta is one of the most difficult places in the world to extract oil.
- As a TNC, Shell has been able to invest money and expertise into extracting oil here.
- Nigeria can still increase its output of oil



Arguments for and Against Shell in Nigeria

Positives of Shell	Negatives of Shell
Providing direct employment for 2,700 workers and a further 9000 contractors (97% are Nigerian)	Frequent oil flares send toxic fumes into the air.
90% of Shell contracts have been awarded to Nigerian companies	Oil theft and sabotage (disruption) are big problems in the region, reducing production levels and costing TNCs and the government billions of dollars every year
Shell 'not for profit' enterprise creates renewable energy projects such as solar power which helps provide clean energy for 75% of Nigeria's population not connected to the National Grid	Most crude oil is extracted in Nigeria then shipped to the USA and Europe to be refined. Nigeria then has to import the refined oil back costing billions and reducing their profits.
\$50,000 per year is spent on healthcare benefiting 250,000 people	1,011 oil spills in Niger Delta since 2011 have caused water pollution and soil degradation, reducing agricultural production and fishing yields.
3000 scholarships awarded to Nigerian students to schools and universities	

GCSE Practise Question: 'Transnational corporations (TNCs) bring more disadvantages than advantages to a host country.' Do you agree? (9)

Nigeria's Environment & Lifestyles

Nigeria's wealth has been **increasing** over the last century. However, a recent **recession** (a dip in the economy) has resulted in **unemployment** and **slow improvements** in the lives of Nigerians. Here are some measures of quality of life for Nigerians:

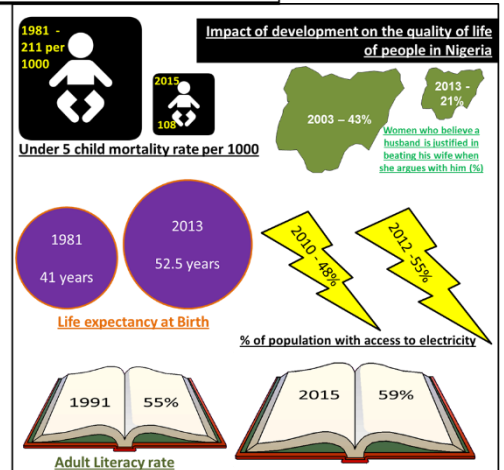
Life Expectancy	54 years (the average for the world is 73 years, which is significantly higher than Nigeria's life expectancy)
Literacy Rates	65.1% - This is very low, especially in girls, due to inequality in girls and boys' aspirations. Only one in three children stay in school.
Human Development Index (Rank out of 188 countries)	158 out of 188 - Low life expectancy and large inequality in wealth has resulted in this low rank.

Impact of Development on Nigeria

- More disposable income
- More doctors and hospitals
- Reliable, better paid jobs
- Better access to safe water and sanitation
- Improvements to roads and infrastructure

Industry

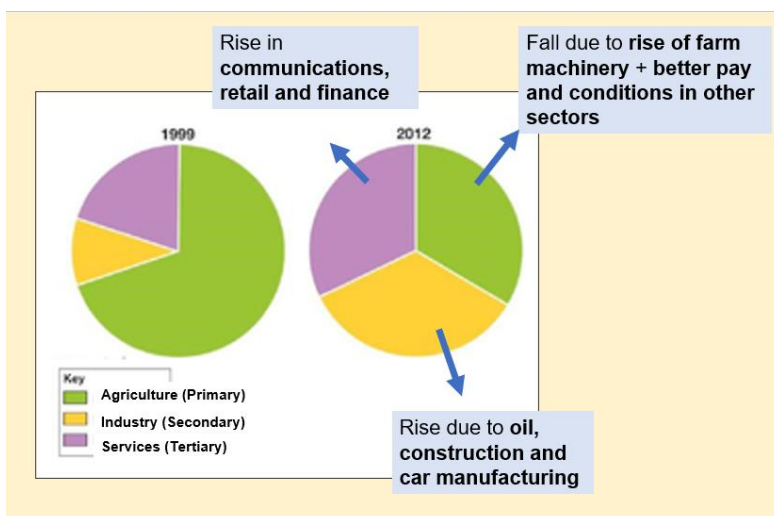
GCSE Practise Question: Using a case study of a LIC / NEE, evaluate the effects of economic development on the population's quality of life (9)



Nigeria, even though it is a developing country, has a **large agriculture industry**. Agriculture has the largest number of workers, many of whom grow just enough food to feed themselves and their family (called **subsistence farming**). This is unusual for a developing country, as farmers don't make much profit.

Most developing countries have large manufacturing industries because manufactured goods make more profit than raw materials. In Nigeria, manufacturing is mainly in the form of **processing oil** that has been mined. Oil makes a **large profit** and can help Nigeria have **political influence** over other countries.

Oil now accounts for 9% of GDP and 90% of export earnings



Manufacturing in Nigeria: what are the benefits?

- Regular paid work – more disposable income for locals and tax for gov
- A booming industry attracts foreign investment (money)
- Oil processing has created chemical by-products that can be sold e.g. soaps, detergents and plastics

GCSE Practise Question: Apart from cheaper labour, explain why industry is developing rapidly in an NEE you have studied (6)

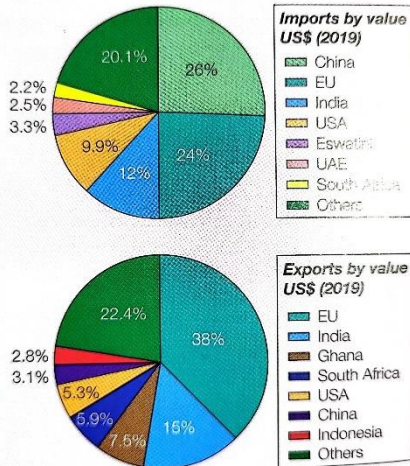
Nigeria's political links



- **Until 1960 Nigeria** was part of the British Empire – it has now become a member of the British Commonwealth.
- However, it now has equal status with all countries including the UK.
- Although Nigeria is a republic, it recognises the Queen as Head of the Commonwealth.



Nigeria's global trading relationships



- Nigeria is a major global trading nation.
- Its main exports are crude and refined petroleum, natural gas, rubber, cocoa and cotton.
- One of **the fastest growing imports is telephones**, imported from China, and they are in demand due to the Nigerian emerging middle class.

Aid

There have been several **NGO campaigns** in Nigeria to improve the quality of life and health of locals. This is the focus of most **aid**, as Nigeria has a large economy but much of its wealth is made by rich oil companies and isn't shared to Nigeria's poorer residents. Take a look at the different schemes by two NGO charities:

Christian Aid

Source: Christian Aid

- ♥ Protecting displaced Nigerians, who have had to leave their homes due to violence in North Nigeria.
- ♥ Supporting individuals with HIV in support groups, to reduce discrimination in the community against people with HIV
- ♥ Medical treatment to 200,000 children under 5 years old for Malaria, Pneumonia & Diarrhea.

Action Aid

Source: Action Aid

- ♥ Encouraging girls to go to school by constructing girls toilets and providing sanitation products, so they don't miss school because of their period.
- ♥ COVID-19 meant some families couldn't afford food. Action Aid have delivered food parcels to families out of work due to the virus.
- ♥ Pressuring TNCs to pay their taxes in Nigeria, so the government can invest in communities.

GCSE Practise Question:
Describe one or more impacts that international aid has had on a named LIC/NEE country. (6)

How does Economic Growth affect the environment?



Industrial Development

- Nigeria has about **5000 registered industrial plants and 10,000 illegal small-scale industries**. The fast unregulated growth of industry has led to environmental problems.
- **In Kano, Kaduna and Lagos, harmful pollutants go directly into open drains and water channels**. This is harmful to people and ecosystems.
- Industries dispose of **chemical waste on nearby land which contaminates groundwater**.
- **94% of people are exposed to air pollution levels higher than is deemed safe by the WHO**. This leads to **respiratory and heart problems costing Nigeria 1% of its GDP due to lost work**.

Urban Growth

As Nigeria has developed, urban areas have grown rapidly. The rate of urbanisation has brought challenges.



- Squatter settlements are common (**slums**) these have **poor services**.
- Waste disposal has become a major issue. The **40ha Olusosun landfill site in Lagos receives 10,000 of waste a day**.
- Traffic congestion is a major problem in Nigerian cities → **exhaust emissions can lead to air pollution and global warming**.
- Some greenbelts are being converted into building sites. In Abuja vegetation is being replaced with concrete.

Commercial farming and deforestation

- Inappropriate practices and commercial farming have led to land degradation (**96% of forest gone**).
- **Water pollution due to chemicals, soil erosion and silting of river channels**.
- The building of settlements and roads has destroyed habitats **and added to greenhouse gas emissions**.
- Species have disappeared because of deforestation, **including cheetahs, giraffes and 500 types of plants**.



Mining & Oil Extraction

Mining can lead to serious pollution. They can damage ecosystems and affect people's jobs.

- **Tin mining led to soil erosion**. Local water supplies were also polluted with toxic chemicals.
- Many oil spills in the **Niger Delta have disastrous impacts on freshwater and marine ecosystems**. Oil spills can cause fires, **sending CO2 and other harmful gases**. They can further cause acid rain.
- Some economic developments in the Niger Delta have caused **violent conflict** with local people.

GCSE Practise Question: Describe the effects of air pollution and water pollution in urban areas in poorer parts of the world. (6)

➤ Example: Tourism reducing the development gap: Jamaica



Changing Economic World

Reducing The Development Gap



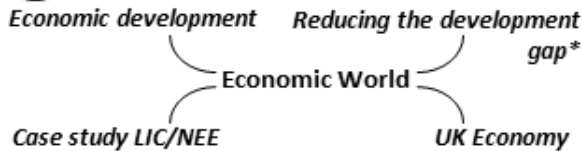
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Tourism in Jamaica

quiz



The Big Picture



Key Terms



Multiplier Effect – Investment leads to increased prosperity. Money generated by an industry is spent on goods and services, increasing demand and economic activity.



Location and Background



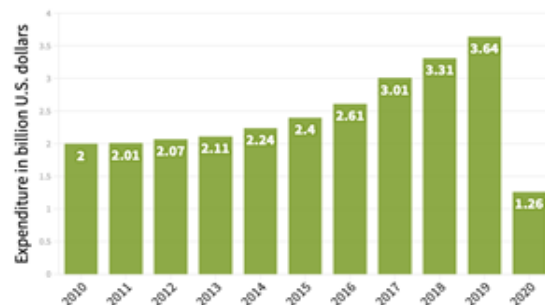
- Jamaica is a NEE.
- Jamaica is the fourth-largest island country in the Caribbean.
- It has a tropical climate with high temperatures throughout the year.
- Jamaica is famed for its beautiful sandy beaches and rich cultural heritage.
- It has excellent communications and is a popular destination for cruise ships.



The Growth of Tourism

- There has been an almost exponential growth in the number of visitor arrivals to Jamaica between 1994 and 2016. However, although visitor arrivals continued to increase in 2009, the change was not in line with previous years due to the recession, which reduced many people's disposable income.
- Total visitor expenditure increased from US\$1.3 billion in 1975 to US\$3.6 billion in 2019.

Expenditure by international tourists in Jamaica from 2010 to 2020 (in billion U.S. dollars)



The Development Gap

- Tourism is one of Jamaica's top sources of revenue. The industry contributes over 50% of the country's total foreign exchange earnings (approx. US\$2b).
- Thousands of Jamaicans work directly or indirectly in tourism. Tourism employs the second largest number of Jamaicans (approximately 200,000) directly in hotels, transport and attractions and indirectly (multiplier effect) in trading, manufacturing, agriculture and banking.
- Local farmers sell produce to hotels. For example, five farmers are the sole providers of Irish potatoes to the entire Sandals group, which comprises 11 resorts in Jamaica.
- There have been considerable investments in infrastructure to accommodate tourists. Port facilities have been expanded, as have airports and road infrastructure. The development of roads came later as cruise provision was prioritised. Some hotel owners were unhappy with this.
- Many people in key tourist areas, such as Montego Bay, have benefited from an improved quality of life due to tourism. However, pockets of poverty still exist.
- The environment has benefited from landscaping projects and the introduction of nature parks.

GCSE Practise Question: Explain how mass tourism contributes to the economy of a country. (4)



Changing Economic World

Torr Quarry



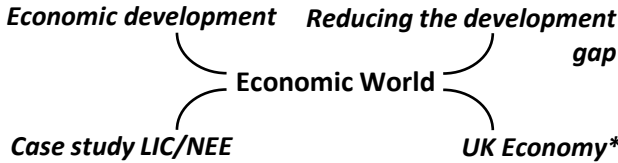
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An example of how modern industrial development can be more environmentally sustainable

quiz



The Big Picture



Key Terms



Quarry – a large, deep pit, from which stone or other materials are extracted.



Physical environment – The physical geographical and geological features on Earth. These include the atmosphere, biosphere and hydrosphere



Environmental sustainability – the responsibility to conserve natural resources and protect global ecosystems to support health & wellbeing.



Impacts of Industry

Industry can have a significant impact on the physical environment. Pollutants can be released into the air and water courses, damaging the soil. They generate waste which is often buried in landfill, contaminating the air, water and soil. Additionally, transportation of raw material and manufactured goods increases emissions that contribute to climate change.



Sustainable Industrial Development

Today, people expect industries to take better care of the environment. This includes reducing the use of resources such as water and minerals and protecting biodiversity. The steps that can be taken to support this, include:

- Using technology to reduce emissions from power plants and heavy industry.
- Desulphurisation of harmful gases released from power stations.
- Setting strict targets for water quality, air pollution and landscape damage for industry.
- Impose fines for industrial pollution incidents.
- Protect, restore and conserve natural ecosystems to support biodiversity.
- Monitor and regulate industry to reduce environmental impacts.



Quarrying in the UK

Quarrying in the UK can have a significant impact on the environment including the destruction of natural habitats, noise pollution and dust, the pollution of local waterways and scars on the landscape caused by removing soil and rock.



Where is Torr Quarry Located?

Torr Quarry is located in Somerset in southwest England. It is one of eight quarries in the Mendip Hills.



Background

Torr Quarry is a significant limestone extraction site. The quarry is a significant employer in the area, providing over 100 jobs, and is estimated to bring over £15 million into the local economy each year. The material from Torr Quarry is vital for construction projects, especially for creating rock chippings used in road building. An impressive three-quarters of the quarry's yield is shipped by rail, primarily servicing the southeast. The quarry has taken several steps to become more environmentally sustainable.



Sustainability Strategies

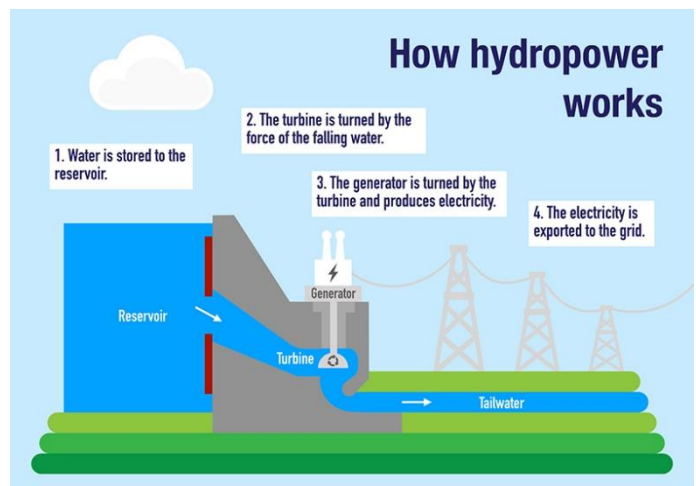
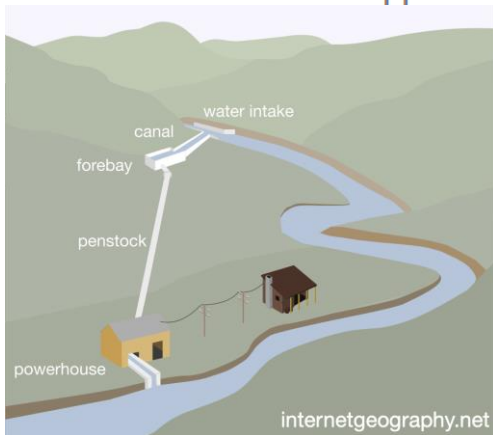
Torr Quarry is committed to sustainable practices, such as:

- Restoration efforts include transforming parts of the quarry into wildlife-friendly lakes for recreational purposes and water supply.
- Landscaping 80 hectares with grass and trees to blend with the natural surroundings.
- Crafting limestone features to enhance the area's natural aesthetics.
- Collaborating with the Somerset Wildlife Trust as part of the Mendip Hills Living Landscape Partnership to foster habitats teeming with biodiversity.
- Conducting ongoing assessments to monitor noise, vibration, dust emissions, and water quality.
- Prioritising rail transport to reduce the impact on local roads and communities.

- Different strategies can be used to increase energy supply.
- an example of a local renewable energy scheme in an LIC or NEE to provide sustainable supplies of energy.

Darbang Nepal – a local sustainable energy scheme

Darbang is a small community in the Himalayan Mountains in Nepal, located between Kathmandu and the Tibetan border. The area has been traditionally occupied by subsistence farmers, with some rearing of livestock. A micro-hydro scheme has been constructed with the support of the World Bank and came into operation in 2009.



WHY WAS A LOCAL, SUSTAINABLE ENERGY SCHEME INTRODUCED IN DARBANG?

- economic growth is restricted in this remote settlement in the foothills of the Himalayas
- there is a lack of electricity in the area
- roads are impassable during the monsoon season
- there is a low population density
- it was uneconomic to construct an electricity grid

WHAT ARE THE MAIN FEATURES OF THE SCHEME?

- it was government-funded
- a low-cost energy solution at US\$51,000
- the project was supported by the World Bank
- it would solve the energy deficit in the region

WHAT ARE THE BENEFITS OF THE SCHEME?

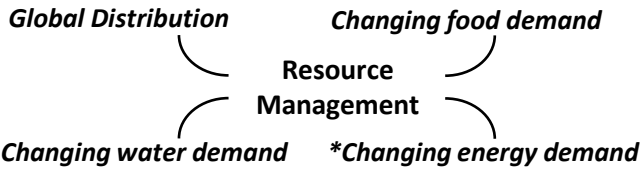
- the low maintenance and running costs
- 700 households have a reliable energy supply
- small environmental impact
- local materials and labour were used
- reduced the risk of flooding in the area
- deforestation for fuel has reduced
- the project is community-owned
- since becoming operational in 2009 there has been an influx of industry including furniture workshops, noodle factory and cement block manufacturer



□ Example to show how the extraction of a fossil fuel has both advantages and disadvantages – North Sea Gas

Natural Gas Extraction

The Big Picture



Natural Gas

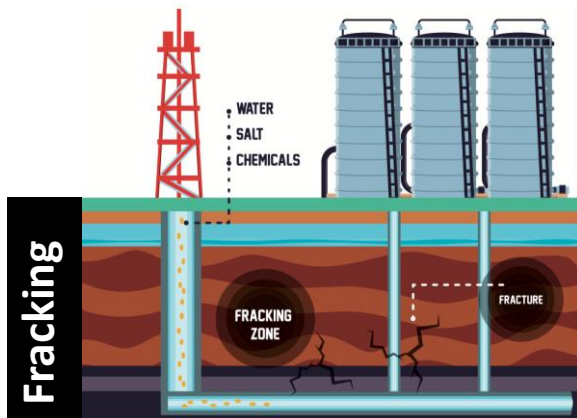
Natural gas is a fossil fuel. Natural gas is formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over millions of years. The energy the plants originally obtained from the sun is stored in the gas. Trapped deep below the ground, it is extracted and transported to power electricity, generate electricity, and provide home heat.

Natural gas provides 24 per cent of the world's energy supply. Gas overtook coal as the primary energy source in the mid-twentieth century.

Most of the world's natural gas production occurs in the USA, Iran, Qatar, Russia and Turkmenistan.

Gas is typically transported across countries using pipelines. The transfer can also include gas being shipped overseas in giant tankers. At some point in the transmission, the gas will be refined to remove any unwanted chemical impurities.

Recently, shale gas has been extracted using controversial fracking techniques. Fracking involves injecting bedrock with water and chemicals to extract gas.



Key Terms



Fossil fuel - A natural fuel formed in the geological past from the remains of living organisms, such as coal or natural gas.



Shale gas - A form of natural gas (mostly methane), found underground in shale rock.



Carbon emissions - Carbon compound (such as carbon dioxide) released into the atmosphere, often through human activity such as the burning of fossil fuels such as coal or gas.

Advantages



Natural gas is one of the cleanest fossil fuels, releasing 45% fewer carbon emissions than coal and oil.



It does not produce waste products, such as coal ash.



If there is a gas leak, it disappears quickly into the air, whereas oil leaks have a devastating impact on the environment and are expensive to clean.



Gas can be easily transported through pipelines directly to industry and residential properties.



There are considerable reserves of gas around the world.



Gas can be used for both heating and cooking.

Disadvantages



Gas is highly flammable, which means leaks can result in explosions.



Natural gas is toxic.



Gas infrastructure is expensive; pipelines cost a significant amount of money to construct.



Unless an odorant is added to the gas, leaks can go undetected.



The controversial process of fracking has caused earthquakes.



Burning natural gas results in the release of greenhouse gases, particularly carbon dioxide.