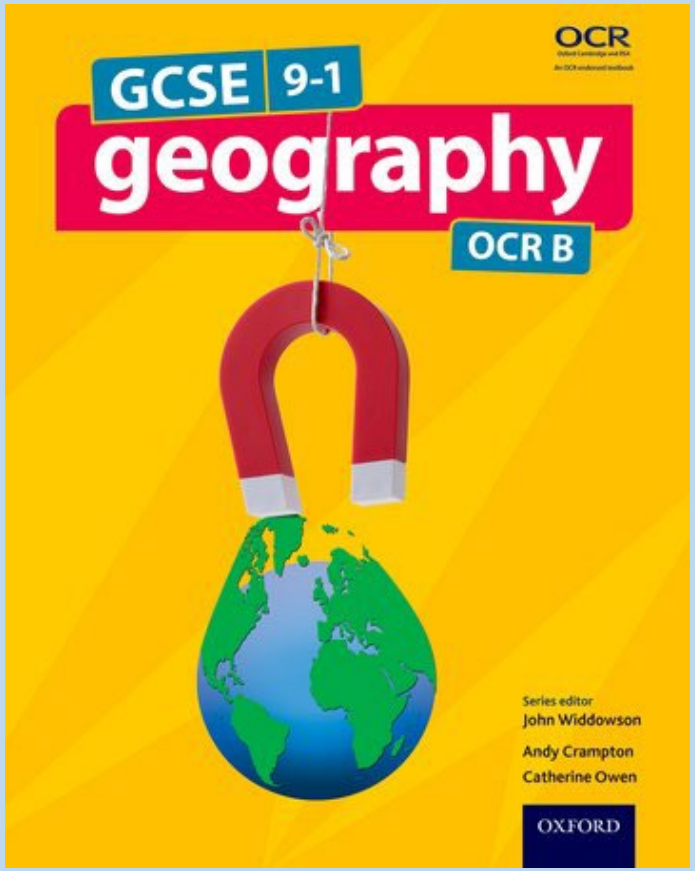
DNA

Tuesday, 13 October 2026

Case Study Revision













DNA

Tuesday, 13 October 2026

Component 1 - Our Natural World (Paper 1)

- **Global Hazards** *(Typhoon Haiyan 2013, UK Drought 2012 and Nepal Earthquake 2015)*
- **Changing Climate** *(Climate Change in the UK)*
- **Distinctive Landscapes** *(The Jurassic Coast and The River Thames)*
- **Sustaining Ecosystems** *(The Costa Rican Rainforest and The Arctic)*

Global Hazards

Typhoon Haiyan 2013 and Nepal Earthquake 2015





Typhoon Haiyan 2013

Causes :

- Sea temperatures over 26.5 C and depth over 60m (Pacific Ocean)
- Effected by the Coriolis effect

Impacts :

- 3 million people lived within 50km of the typhoons path
- 6300 deaths
- Heavy Rain and wind speeds of 315km/h
- Storm surges reached 6m causing flooding 1km inland

Consequences :

- Storm surge destroyed 90% of Tacloban city
- Half a million people made homeless
- 571 clinics and hospitals damaged
- $2.86 billion of damage caused
- 77% of farmers and 74% of fisherman lost their income source.
- Crops and trees uprooted and 85,000 litres of oil leaked into sea.

Key Facts!



- November 2013
- Effected the Philippines and the City of Tacloban
- Category 5 Storm

Total population	99.14 million
Population in rural areas	50.64%
GNI/capita (see spread 6.3)	$3470
Percentage below the poverty line	25.2%
Average life expectancy	69 years
Number of islands	7107

B Philippines factfile

Responses:

Short term-

- UN appealed for £190 million of emergence aid
- The WHO managed health workers.
- Various countries supported with aid / rescue teams etc eg UK

Long Term-

- Cash for work to clear debris and repair infrastructure.
- Mangrove trees planted around the coast as a natural barrier to flooding.

Typhoon Haiyan

6-mark question:

"Explain the impacts of a tropical storm you have studied."

REVISION TASK

Watch the video clip, make notes, then attempt the 6 mark question.



https://youtu.be/AlZgRjERPgs?si=il9U0XFG2gIcS3bM

REVEAL FOR MODEL ANSWER

UK Drought 2012

Causes :

- Low rainfall April 2010- May 2012
- Warmer temperatures (More evaporation)
- High water usage and leaking pipes!

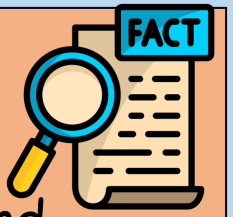
Consequences :

- Farmers found it hard to find water for crops and livestock
- Environmental damage caused by wildfires and water extracted from rivers.
- Hosepipe bans impacted people all over the UK.

Responses:

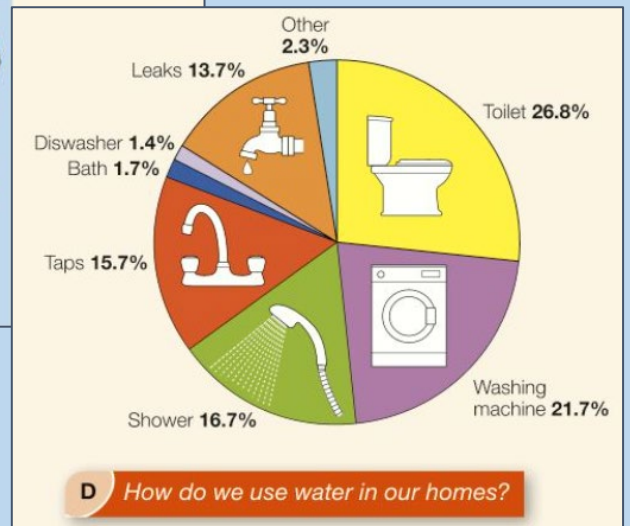
- Water companies allowed to extract water from rivers
- Hosepipe bans were issued
- Campaigns encouraged people to use less water in their homes.

Key Facts!



- 2012
- Low rainfall in England Wales
- South-East of England worst effected!





UK Drought 2012

6-mark question:

"Using a named example, explain the causes and impacts of a drought."

REVISION TASK

Watch the video clip, make notes, then attempt the 6 mark question.



https://youtu.be/PZgqX9KOIuc

REVEAL FOR MODEL ANSWER

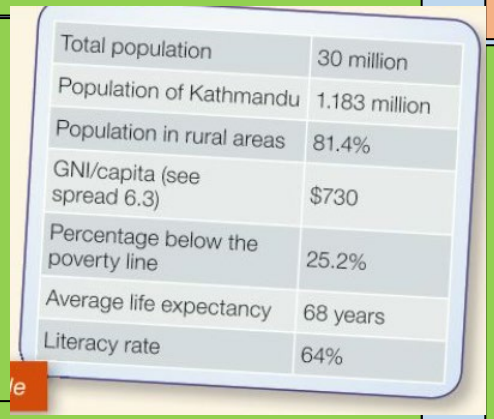
Nepal Earthquake 2015

Causes :

- Nepal is on a fault line along a Collison plate boundary in the Himalayas. **(Indian and Eurasian Plates)**
- Geoscientist knew pressure was building up but couldn't predict when the earthquake would happen.
- 25 April a magnitude 7.8 earthquake struck with a focus of just 15km, directly below the capital city of **Katmandu**.

Impacts :

- 547 landslides caused by the earthquake including avalanche on Mount Everest.
- Nepal is an LIDC and nor prepared for the event.
- 8635 people killed and 19,009 people injured.

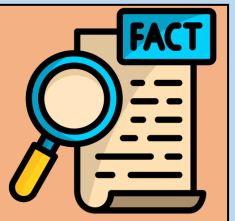


Total population	30 million
Population of Kathmandu	1.183 million
Population in rural areas	81.4%
GNI/capita (see spread 6.3)	$730
Percentage below the poverty line	25.2%
Average life expectancy	68 years
Literacy rate	64%

Consequences :

- Over 180 buildings destroyed in Katmandu, including historic and religious buildings.
- $10 billion of damage was caused.
- Thousands left homeless in city plus wider mountain area.
- Schools and health facilities forced to close.

Key Facts!



- Nepal is an LIDC
- 25 April 2015
- Magnitude 7.8 shallow focus earthquake

Responses:

Short term-

- NGOs helped to support injured and homeless. EG Oxfam Red Cross
- India provided 10 tonnes of blankets, 50 tonnes of water and 22 tonnes of food.

Long Term-

- Cash for work projects.
- UK Government gave £33 million to rebuild hospitals etc…

Nepal Earthquake 2015

REVISION TASK

Watch the video clip, make notes, then attempt the 6 mark question.



https://youtu.be/946BfN-OI-Q?si=ORKMroNghXItk3pg

https://youtu.be/T5N-dIMWZNA?si=CVmtuREliovxx0bz

6-mark question:

"Explain the responses to the Nepal earthquake 2015."

REVEAL FOR MODEL ANSWER

Changing Climate

Climate Change in the UK







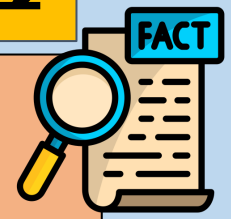
Climate Change in the UK (Warmer Temperatures)

Problems with Extreme Heat

- More people will die m particularly Elderly and Asthma sufferers (Social).
- More bacteria on food leading to an extra 9000 cases of salmonella. (Social)
- More heat = more evaporation which means along with less rainfall there will be an increase in droughts, hosepipe bans and less water for growing crops. (Economic, Social and Environmental)

The Benefits of Warmer Temperatures:

- Fewer deaths due to cold. (Social)
- Better climate for tourism which will boost the UK tourist industry (Economic).
- Growing seasons longer so more food grown, more profit for farmers and grow new types of crops such as olives, melons, grapes etc… (Economic)

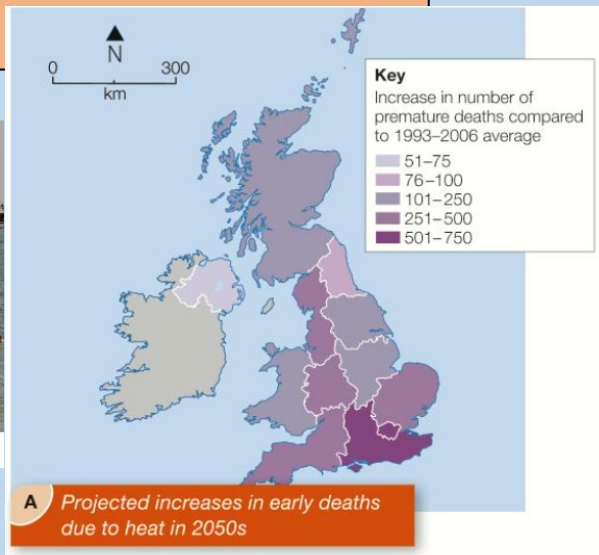


Key Facts!

- The UK is expected to be 1-2.5 'C warmer by 2050.
- The UK is going to experience more extreme heat in the future.
- There are positives and negatives of warmer temperatures in the UK.



B Tourists enjoy Brighton Beach during the 2013 heatwave



A Projected increases in early deaths due to heat in 2050s

Climate Change in the UK (Rainfall and Flooding)

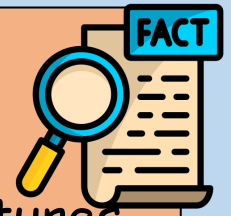
Coastal Flooding

- Global sea levels are rising and threatened the UK coast with flooding.
- £120 billion of infrastructure at risk
- More money needed to be spent on coastal defences
- People will be forced to move and lose their jobs

Extreme Rainfall (Tewkesbury 2007) :

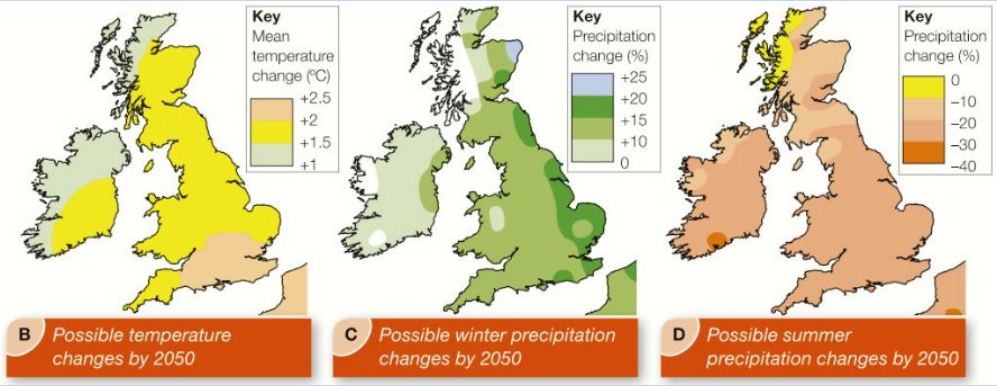
Wetter winters will lead to more flooding. In 2007 Tewksbury had 2 months of rainfall in 14 hours and had the following impacts:

- 13 people died (Social)
- 135,000 people had no water for 17 days (Social)
- It cost local councils £140 million and the UK economy £32 billion. (Economic)
- Breeding ground of birds were flooded (Environmental)



Key Facts!

- UK Average Temperatures to increase by 1-2.5 C in the next 50 years.
- Winters to be warmer and wetter.
- Summers to be warmer and drier.



Climate Change in the UK

REVISION TASK

Watch the video clip, make notes, then attempt the 6 mark question.



https://youtu.be/eM7mgMQbz0o?si=jftSYA2RSCRGkw4t

6-mark question:

"Explain the impacts of climate change on flooding in the United Kingdom, using a named example."

Model answer:

Climate change is increasing the risk and impact of flooding in the United Kingdom due to more frequent and intense rainfall. An example is the Tewkesbury floods 2007, prolonged heavy rain caused rivers such

REVEAL FOR MODEL ANSWER

Distinctive Landscapes

The Thames Basin and The Jurassic Coast





The Thames Basin

Meanders on the Thames

The Thames gentle gradient means less downward erosion and more **lateral erosion.**

The lateral erosion creates meanders because:

- On the outside of the bend fast- flowing water erodes the bank to form a river cliff.
- On the inside of a bend slow-flowing water deposits its load to form a slip of slope
- This causes the river to bend.

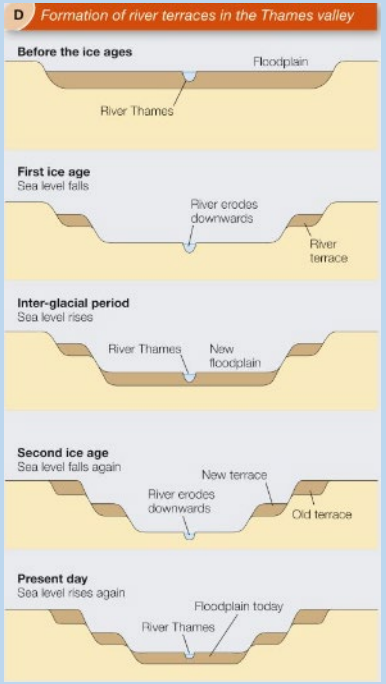
Rejuvenation on the Thames

Past sea level changes affect the rivers gradient and its power to erode its valley:

- When sea level fell, the gradient increased and the river gained energy.
- It eroded downwards into its floodplain, forming **river terraces.**
- When sea level rose again the gradient decreased and the river lost energy. It deposited more material to form a new floodplain.



B A meander on the Thames near Oxford



Key Facts!

- The River Thames is 346 km long from source to mouth.
- Source (Cotswolds) Mouth (North Sea)
- Gentle gradient (Only starts around 100m above sea level
- Flows mainly on clay
- Runs through the cities of Oxford, Reading and London
- River basin has a population of 13 Million People

Flooding on the Thames

West London Floods 2014

- Worst flooding along the Thames in 40 Years = **February 2014**
- Village of **Wraysbury** and town of **Staines** were badly hit

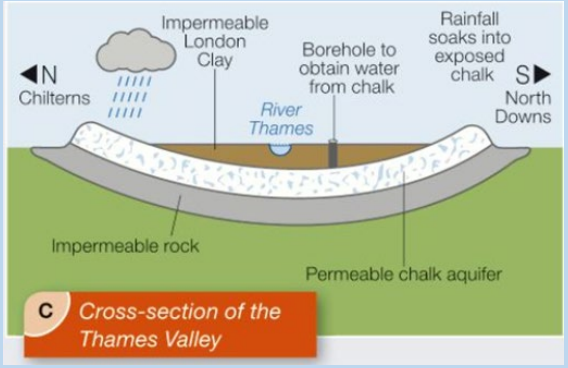


Causes	Impacts	Responses
- Twice the normal amount of winter rainfall fell in 2013/2014 - Ground saturated with water - Buildings and roads increased flow of water into rivers - The Jubilee River (Artificial Channel increased the flood risk in Wraysbury and Staines	- Over 5000 homes and business flooded in Wraysbury and Staines - Homes damaged, people could not return for many months - Cost of cleanup after floods was £500 Million - No lives were lost	- The EA (environmental Agency) issued 14 flood alerts along the Thames. - People were evacuated from their homes by the emergency services - Plans for new flood relief channel on the Thames to reduce flood risk of West London

The Thames in London

London's water supply

- The River Thames alone cannot meet London's water demands.
- London obtains 40% of its water from **groundwater**.
- Boreholes drilled through the clay supply water from the chalk.



Flood protection (The Thames barrier) https://youtu.be/3K6vfwJm_R4?si=kBqg4dSaGHTw8T6j

- The Thames Barrier was **built in 1984** to protect London from Flooding. The gates on the barrier are raised to prevent tidal water from reaching London.
- During the stormy winter of 2013/2014, the barrier was closed more than 50 times.
- There are proposals to build a new higher barrier to cope with the predicted rise in sea level in the 21st century.



Barking Riverside

Barking Riverside is a new residential development being built in east London.The site is downstream of the Thames barrier so not protected. Flood risk is managed by:

- Allowing water to spread naturally over the floodplain on the site and including water as a feature of the development.
- Planting trees and grass to slow the rate that water filters into the ground.
- Building homes on raised ground to protect them from flooding.



The Jurassic Coast

Lulworth Cove

- Lulworth Cove is an example of a landform caused by coastal erosion.
- This is where softer rock is eroded more quickly than harder rock



Old Harry Rocks

- Old Harry Rocks are an example of a cave arch stack stump found along the Jurassic Coast.
- These features are caused by Hydraulic action, Abrasion and weathering.



Key Facts!



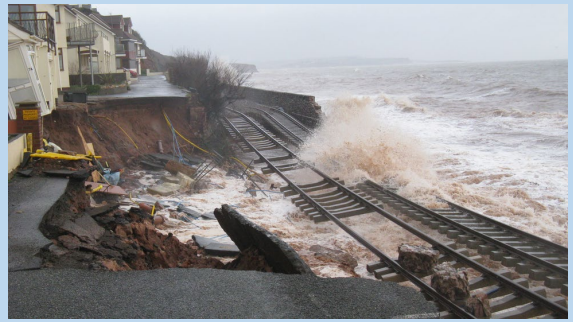
- Stretches 155km along South coast of England from Devon to Dorset
- The coast is made of sedimentary rock formed millions of years ago
- Rock types include Triassic, Jurassic and Cretaceous

2014 Storm

https://youtu.be/D0kuNuAIhqQ?si=cDVtExOUVcXModLd

On 5th February 2014, a huge storm battered the Jurassic Coast causing the following impacts:

- Mian railway line from Exeter to Devon badly damaged at Dawlish and was closed for 2 months.
- Portland Bill at the end of Chesil Beach was cut off by floodwater and budlings damaged
- Cliffs at West Bay collapsed and retreated the coastline by a few meters
- Lyme Regis was pounded by waves, but coastal defences protected the town.



The Jurassic Coast

REVISION TASK

Watch the video clip, make notes, then attempt the 6 mark question.



https://youtu.be/gY39egokSFA?si=tEZnMQjpwHzm7qIY

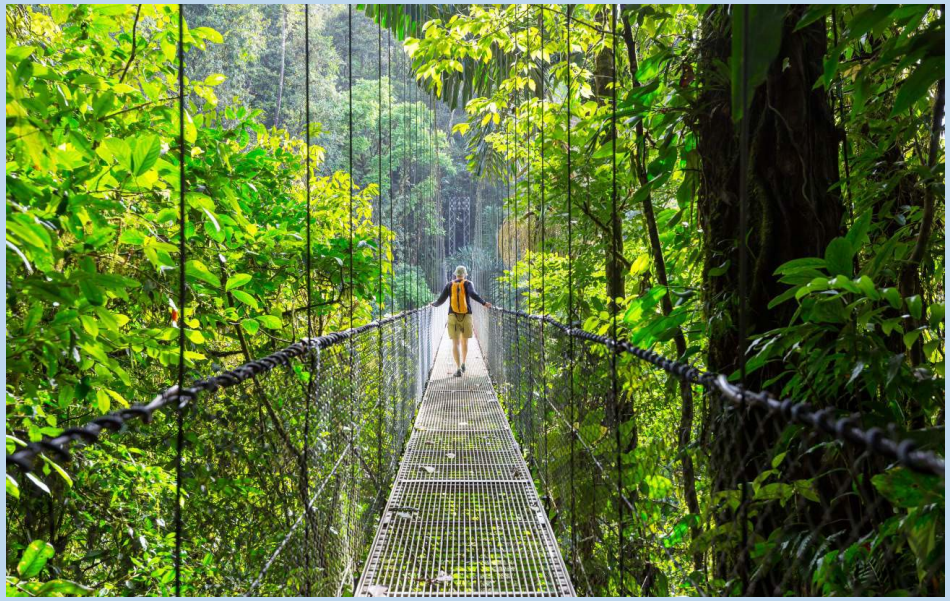
6-mark question:

"Explain the formation of the coastal landform *Old Harry Rocks*."

REVEAL FOR MODEL ANSWER

Sustaining Ecosystems

Costa Rica (rainforest) and The Arctic (Tundra)





Costa Rica- Sustainable Rainforest Management

Strategies for Sustainable Management

- **Agroforestry** = Trees and crops are grown together
- **Afforestation** = Trees are planted to replace original forest that's been lost
- **Monitoring** = Satellite images are used to ensure no illegal logging happens
- **Selective logging** = Trees are felled only when they reach a certain height.

Ecotourism

- Ecotourism is sustainable tourism that aims to create local employment while conserving the natural environment.
- Ecotourism does not damage the natural environment; consults with local communities; is on a relatively small scale and benefits local people as well as tourists.

Key Facts!

- Costa Rica is a small country in Central America
- 2 million tourists visit a year
- Until 1980 Costa Rica had one of the highest rates of deforestation until the government acted
- Today there are 28 national parks and nature reserves and 24% of the land is now protected.

Samasati Nature Retreat https://youtu.be/oyuOVvTdl4A?si=uHf7ikRVpa2GJPYb

An example of Ecotourism in Costa Rica is Samasati Nature Retreat. It is classed as Ecotourism because:

- No mature trees are destroyed; buildings on stilts to allow drainage; employs only local people; Blends in with landscape; spring water used for drinking; uses sustainable timber; no heavy machinery used; recycles rainwater for bathrooms; minimal energy use and only uses biodegradable washing products.



Sustaining Ecosystems TRF

6-mark question:

“Explain how eco-tourism can help to make tropical rainforests more sustainable. Use a named example.”

REVEAL FOR MODEL ANSWER

Sustainable Management of the Arctic

Threats to the Arctic The Arctic has the largest remaining area of wilderness in the northern hemisphere but only a small area is protected.

- The greatest threat to the Arctic is **global warming**.
- This would lead to more sea ice melting in the Arctic Ocean, and it could be ice-free in summer by the mid- 21st Century.

A case-study of sustainable management: The Arctic

Now…	In the future?
- Arctic council set up in 1996 to protect the arctic environment but has no legal powers. - The Paris Agreement signed by 195 countries in 2015 is a legally binding agreement limit global warming	The proposal of an Arctic Sanctuary where harmful human activities would be banned such as: Fishing, exploration, oil and gas drilling, mining and military activity.

Differences between the Arctic and Antarctica

- The Arctic is an ocean surrounded by land; Antarctica is land surrounded by ocean.
- Indigenous people live in the Arctic whereas only scientists live in Antarctica.
- Eight countries have control in the Arctic, and nobody owns Antarctica. There is resource exploitation and military activity in the Arctic. Neither are allowed in Antarctica

Key Facts!



- The Arctic is a fragile environment with large areas of wilderness.
- The Arctic Council aims to protect the environment but has no legal powers.
- The proposal of the Arctic Sanctuary would ban harmful human activities.



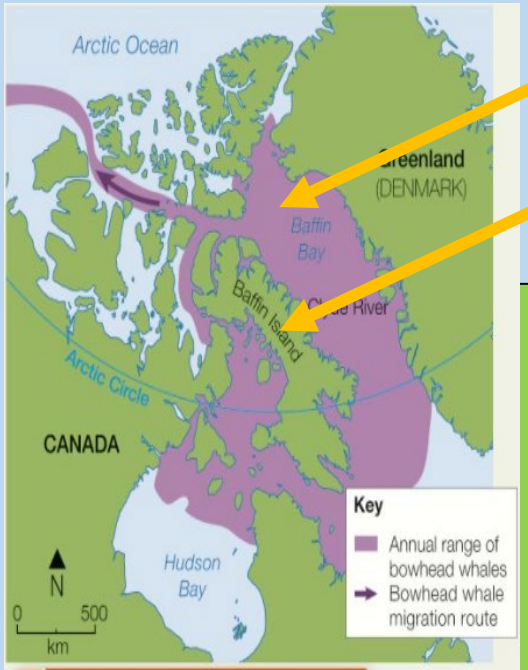
The Arctic- Sustainable Management of Whaling

A History of Whaling

https://youtu.be/BQGK_GOFbSY?si=MhsjZLVzCMXG7yI3

https://youtu.be/c9U-2PqJJoA?si=GLeWSskUUUfNOGll

- **1930s** = 50,000 whales caught every year, so whale population declined.
- **1946** = The International Whaling Commission (IWC) was set up to conserve whales and control the whaling industry.
- **1986** = The IWC introduced a ban on commercial whaling with exceptions.
- **Since 1986 = 30,000 whales have been killed including some by inuit communities .**



C The location of Clyde River, on Baffin Island, northern Canada

2000 bowhead whales stop over there on their annual migration around the coast.

A community of 1000 Inuit living here support the sanctuary and are allowed to hunt whales on a small scale.

Key Facts!

- Whaling on an industrial scale became unsustainable in the 20th century.
- The IWC conserves whales and banned commercial whaling in 1986.
- Clyde River is a marine wildlife sanctuary where whaling is managed sustainably

A case-study of sustainable management: Clyde River

- Clyde River is located on Baffin Island and became Canada's first marine wildlife sanctuary.
- Indigenous Inuits killed a bowhead whale in 2014 in the first Inuit hunt in over 100 years in the Clyde River.
- This was supported by Greenpeace, who argued that small-scale hunting can be part of a sustainable management strategy.

DNA

Tuesday, 13 October 2026

Component 2- People and Society (Paper 2)

- **Urban Futures** *(Birmingham and Istanbul)*
- **Dynamic Development** *(Zambia)*
- **UK in the 21st Century** *(Cambridge, and The UK in the Middle East)*
- **Resource Reliance** *(Tanzania, Goat Aid, Canada- Wheat Programme and SAGCOT)*

Urban Futures

Birmingham and Istanbul

Birmingham on the Map

Birmingham's Global Connections

- Birmingham is a young, multi-cultural city. Its population has come from all around the world.
- It has a large Irish community and one of the largest Pakistani communities in the world.
- 12,000 international students' study in Birmingham.
- Migration from Asia and the West indies began in the 1950s when people were recruited to work here.
- Cadburys Fairtrade chocolate in produced here using cocoa grown in Ghana.
- The Balti curry was invented here with its origins from Pakistan.
- The Jewellery Quarter is the largest working jewellery centre in Europe

Birmingham's Changing Population

In 1700 Birmingham was a small market town of just 10,000 people. During the industrial revolution it grew into a large industrial city.

In 1950 population peaked to 1,112,000 but fell with the decline of industry.

Birmingham's population is now growing again as a result of international migration and a natural increase.

Diversity in Birmingham

Birmingham is one of the most diverse cities in the UK outside of London. In 2011 only 53% of Birmingham were white British.

However, 86% of Birmingham's population see themselves as being British.

Key Facts!



- Birmingham is a city in the England (West Midlands)
- Second largest city (Population 1.1 million)
- City grew in the 19th Century through the development of factories (industry)
- It has many global connections



Explore Birmingham

The Bullring Shopping Centre

The Bullring was Birmingham's historic marketplace. In the 1960s it was redeveloped into a large concrete shopping centre surrounded by an urban ring road. By the 1990s it was run down and choked by traffic. Birmingham City council demolished it and regenerated the site.

Today the bull ring is very different…

- It is now better connected to the city as buses and trains provide easy access for visitors (there is no need to travel by car). Many of the streets have been pedestrianised making it feel safer, especially at night.
- A 1960s block of the old bullring has been refurbished and converted into luxury flats.
- The centre includes 160 shops, two department stores and public art galleries.



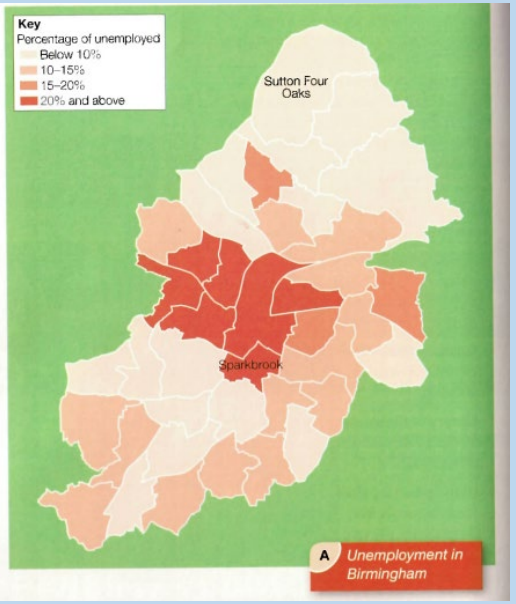
Inequality

Inequality can be seen in Birmingham from the varying levels of wealth or deprivation that exist within the city.

Some areas of Birmingham are very wealthy whereas other areas have high unemployment, child poverty, low household income, high crime rates and environmental quality issues.

House prices reflect inequality in cities. Wealthy people can afford high house prices and move to less deprived areas such as Sutton Four Oaks.

Poorer people may not be able to afford a house and more likely rent their home. They live in more deprived areas like Sparkbrook.



Sustainable Birmingham

The plan to be a more sustainable city

Birmingham was a manufacturing city but now aims to be a 'green city'. Becoming more sustainable brings new economic, social and environmental opportunities to Birmingham.

The Library of Birmingham opened in 2013 and is an example of one sustainable initiative in Birmingham.



The Library of Birmingham- A sustainable initiative

The Library of Birmingham opened in 2013 and is a great example of a sustainable initiative in Birmingham. The library is sustainable because:

- It is built on a brownfield site (Reused old land).
- 95% of waste material from the site was recycled.
- 250 builders employed which reduced local unemployment.
- Ground-source heating and cooling minimise carbon emissions.
- Energy consumption minimised by using natural daylight and ventilation.
- Uses less water by harvesting and recycling rainwater.
- A roof garden attracts wildlife and increases biodiversity.
- Good public transport connections and cycle storage space.
- https://youtu.be/XUYdqW8cqbI?si=3Ii9M3uwzUNSKv5K



Sustainable Birmingham

	Social	Economic	Environmental
Library of Birmingham Birmingham, UK	• Called the 'People's Palace' as it's a building for everyone, with facilities for different ages, different cultures, and accounting for different people's needs.	• Cost £189 million • Employed over 250 local people during construction • With the other developments within the city…will attract large amounts of businesses and tourism, boosting the city's economy	• Reduces energy consumption by using natural daylight & ventilation •Uses less water by harvesting rainwater • Has roof gardens to attract wildlife & improve biodiversity

https://youtu.be/pLNcGaAlK_A?si=dZXWUHEtNwSt0iWk

Urban Futures - Birmingham

6-mark question:

". Using an example of a city in an advanced country, explain how strategies have been used to improve urban quality of life / sustainability."

Model answer:

REVEAL FOR MODEL ANSWER

Explore Istanbul

Istanbul's Location

Istanbul is a city in Turkey and spans the two continents, Europe and Asia.

It is one of the fastest growing cities, with a population of 15 million.

It stretches along the coast of the Sea of Marmara east and west of the Bosphorus.

Istanbul's Population

Istanbul has always been one of the largest cities in the world. In 1950 the population was almost 1 million, in 2015 it was about 15 million people and in 2025 its around 15.7 million.

Most of the growth is due to **national migration**. Migrants come from other parts of Turkey for opportunities and jobs. Only 29% of Istanbul's population was actually born in the city.

There is not much international migration to Istanbul, but it is a growing tourist destination. Turkey is now among the world's most popular tourism destinations.

The city's expansion

https://youtu.be/u5UIU55Ctoo?si=PkdKG_15JGsv9-aV

Istanbul is growing due to national migration and its booming tourist industry.

The inland hills north of Istanbul make expansion difficult as there is little space.

Therefore, the city has expanded east and west along the coast of the Sea of Marmara. It now stretches 100km along the coast.

Key Facts!

- Istanbul lies on the Bosphorus strait between Europe and Asia.
- The city was called Constantinople and before that, Byzantium.
- Constantinople was the heart of the Ottoman Empire until 1923.
- Istanbul is **not** the capital city of Turkey! Ankara is the capital.



A Istanbul's location in both Europe and Asia

Challenges in Istanbul

Changes in Istanbul

Istanbul has grown outwards from its historic core. The old city centre is the cultural heart of the city and now attracts tourists, It is a bustling hotch-potch of markets, mosques, ferries and fishermen, tourists and trams.

Although, this has led to congestion, people and businesses moving out to the suburbs and commercial centres in other parts of Istanbul.

https://youtu.be/z_VofbtSAJI?si=tCMQp-bev-kxQNI

Istanbul's Housing Challenge

Since the 1960s Turkeys urban population has grown from 20% to 80% (Mass urbanisation)

Migrants have built squatter settlements or transformed old homes into apartments in Istanbul.

Later, squatter settlements were redeveloped and old urban areas **gentrified**.

https://youtu.be/fhZ7GJYxeH8?si=ilTtuQiwKt7Ld8Ey

Istanbul's Congestion Problem

Istanbul is one of the most congested cities in the world. Over 25% of passenger journeys are by car and car ownership is growing.

The Marmaray Rail Project could help reduce congestion as part of an integrated transport system (linking different form of transport together).

Dynamic Development

Zambia

Zambia- a low-income developing country (LIDC)

Key facts

Zambia



Population	14.5 million
Area	752 614 km²
Population growth rate	2.9%
Birth rate	43 per 1000
Death rate	13 per 1000
Average life expectancy	52
Literacy rate	80%
GNI/capita	$3070
Human Development Index	0.43 (ranked 164/187 in the world)
Urban population	36%
Economic growth rate	6.5% per year
Exports	copper (64%), cobalt, tobacco, flowers, cotton
Imports	machinery, transport equipment, oil, fertiliser, food, clothing

Zambia- the basics

- Zambia is a land-locked country in central southern Africa and is a LIDC.
- The country was once a British colony, when copper was discovered and mined.
- Despite being rich in copper, it remains one of the world's poorest countries.

About Zambia…

- Zambia was taken over as a British colony in 1888 and gained independence in 1964.
- Zambia is ranked 164/187 in the world for development.

Key Facts!

- Zambia is in Africa, and LIDC and is land-locked.
- Capital city is Lusaka
- Zambia is rich in copper.
- Zambia borders the countries; Angola, Zimbabwe, Mozambique, Malawi, Tanzania, the DRC and Botswana



Zambia's Zigzag Path to Development

Key Facts!



- Many different factors have helped and hindered Zambia's development.
- Zambia is in the process of attempting to achieve the Millenium development goals.

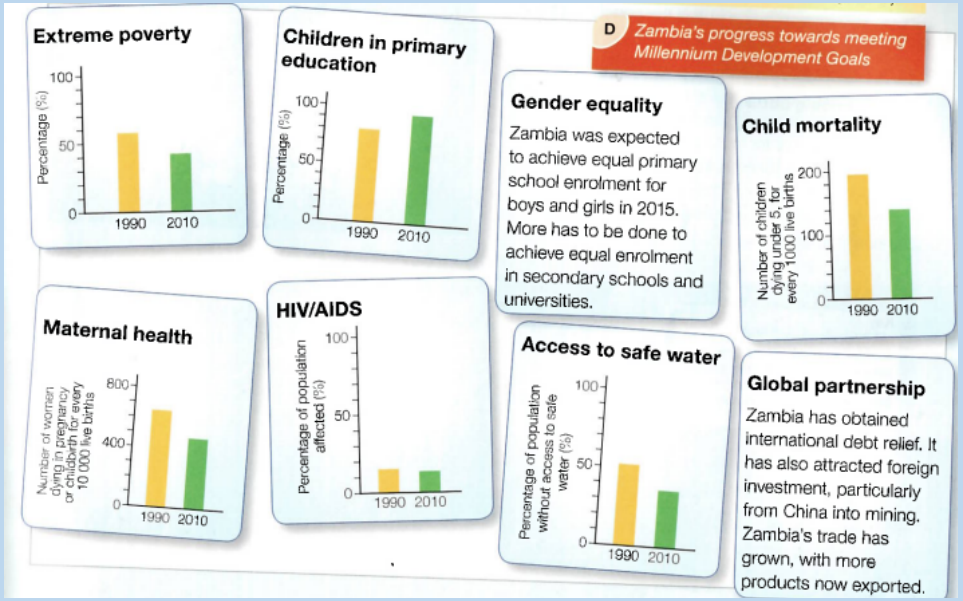
Zambia's Development

The Rostow model of economic development is a straight line, showing the stages a country goes through as it develops. The model was based on the experience of ACs.

However, Zambia's path to development since 1964 has been more of a zigzag than a straight line as its economy has gone through a series of ups and downs.

Zambia's Development Goals

- In 2000 world leaders signed an agreement, committing their governments to eight **Millenium Development Goals (MDG's).**
- The main aim of these goals was to cut world poverty by half in 2015.
- Zambia's progress to meeting these goals has been mixed, it has met some targets but not others.



1964 Zambia gains independence. However, few Zambians are trained to run the country. Most of the power and wealth is still in the hands of Europeans.

1970 The global price of copper falls. It remains low for the next 30 years. Zambia has to borrow money to develop.

1975 The Kariba Dam starts to generate hydro-electric power for Zambia. This is important for the copper industry.

1980 HIV/AIDS spreads across Africa. The death rate in Zambia increases and life expectancy falls.

1990 Zambia's debt is now very high. Food is expensive to buy because the government cannot afford to subsidise it and there are riots.

2000 The global price of copper starts to rise again, increasing the amount of money Zambia can earn.

2006 The IMF cancels Zambia's debt, enabling the government to spend more on services such as health and education.

2010 Zambia begins to develop new industries like tourism, farming and hydro-electric power to reduce its reliance on copper.

B Zambia's development timeline

Invest in Zambia

Zambia's growing economy

Zambia has one of the fastest growing economies in Africa. The Zambian government wants to attract investment to become and EDC by 2030.

Zambia's reliance on copper

- Zambia relies on copper for 70% of its exports. This can be a problem because global copper prices can fluctuate up and down, therefore, so does Zambia's production of copper making the economy uncertain.
- Zambia wants to diversify its economy so that its less reliant on copper and can make money from other things, such as, mining, tourism and farming etc…

TNC's in Zambia

Associated British Foods (ABF) is a large UK based trans-national company that owns Zambia Sugar- the company that produces most of the sugar in Zambia.

Zambia Sugar factory is in **Mazabuka**, a town at the heart of Zambia's sugar growing region. The company helps to make Mazabuka a prosperous town by building new school and employing many local people.

Although ABF pays almost no tax in Zambia and this does not help the national economy.

Reasons to invest in Zambia:

1. **Stable political system**
2. **Growing economy since 2000**
3. **Attractive investment incentives** *(e.g. reduced taxes)*
4. **Good banking, legal and insurance services** *(Many world banks operate in Zambia).*
5. **Abundant natural resources such as copper.**
6. **Access to other markets** *(Zambia borders 8 other countries and is a member of international trading organisations)*
7. **Thriving private sector** *(the government encourages business)*
8. **Good place to work and live** (Many national parks, its safe and has good shops/schools).

Aid and Debt in Zambia

Zambia's difficult situation

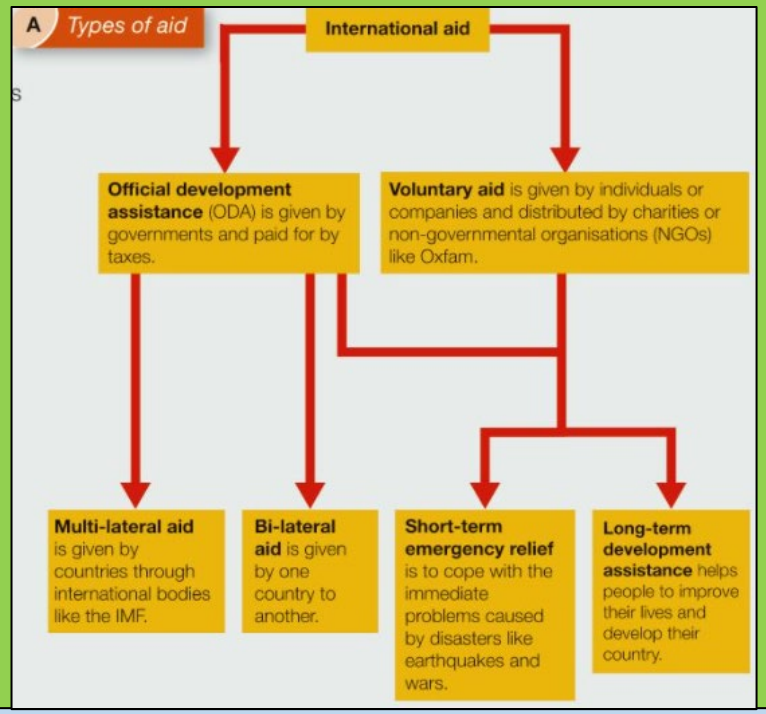
Zambia needs to raise money through tax in order to pay for services like health and education. But it also wants to encourage TNC's to come to the country and invest by lowering taxes.

Key Facts!

- **Aid and debt relief are two ways in which ACs can help LIDC's.**
- **Aid can be given by governments, charities or large bodies like the IMF.**
- **The problem of international debt can be solved by debt relief.**

Aid

International aid is help given to a country, mainly from Acs to LIDCs. But there are different types of aid, such as…



Debt Relief

A problem for LIDCs is international debt. The amount of debt they have to pay can be greater than the amount of aid they receive.

In 2006 39 **highly indebted poor countries (HIPCs)** included Zambia were given debt relief. As a result, they were able to increase spending on health and education.



Development in Zambia

Key Facts!



- **The Kariba Dam was a top-down development strategy in Zambia; it was built to provide hydro-electricity to Zambia and Zimbabwe who worked together to build the dam.**
- **Room to Read is an NGO that works to improve literacy and gender equality and is an example of a bottom-up development strategy in Zambia (Zambia has poorer literacy performance than most other African countries.**

Top-down development (The Kariba Dam)

The Kariba damn was built to by Zambia and Zimbabwe to provide sustainable hydro-electric power.

Positive impacts	Negative impacts
Generates large amounts of HEP for cities and the copper industry.	Many farmers moved to less fertile land.
HEP is renewable and does not produce carbon emissions.	Natural flooding no longer occurs, leading to loss of farmland and ecosystems
New industries like fishing and tourism have developed around Lake Kariba	Communities on either side of the lake are cut off from each other.

Bottom-up development (Room to Read).

Bottom-up strategies are carried out and funded by non-government organisations (NGOs).

Room to Read is an NGO that works to improve literacy and gender equality in Zambia.

There is a much higher dropout rate from schools among girls in Zambia as girls are expected to take on domestic chores or earn money for their families from a young age.

Parents do not value education for girls in the same way as they do for boys and girls are sometimes pushed into marriage too early and become pregnant.

Room to Read®

Zambia

REVISION TASK

Watch the video clip, make notes, then attempt the 6 mark question.



https://youtu.be/dfHKCPffJpg?si=-gPCHiM2yy907Ego

6-mark question:

"Explain how reliance on copper mining affects Zambia's development."

REVEAL FOR MODEL ANSWER

UK in the 21st Century

Cambridge and the UK's global role

Cambridge- An Economic Hub

New Industries in Cambridge

- Cambridge is an economic hub in the south-east of England and is home to one of the top universities for over 800 years.
- In the 21st century it has emerged as a centre for new high-tech industries . There is now over 1500 bio-tech and IT companies based there.

Key Facts!

- **Economic hubs are cities where economic growth is the strongest**
- **Cambridge has emerged as a centre for hi-tech industries in the 21st century**
- **The city is linked to London and Stanstead Airport by the M11.**
- **The bio-tech company Abcam started there and is now worth £1 billion.**

Abcam- a bio-tech company

Abcam is a successful bio-tech company based in Cambridge, started by graduates from the university.

It produces antibodies used in the treatment of diseases.

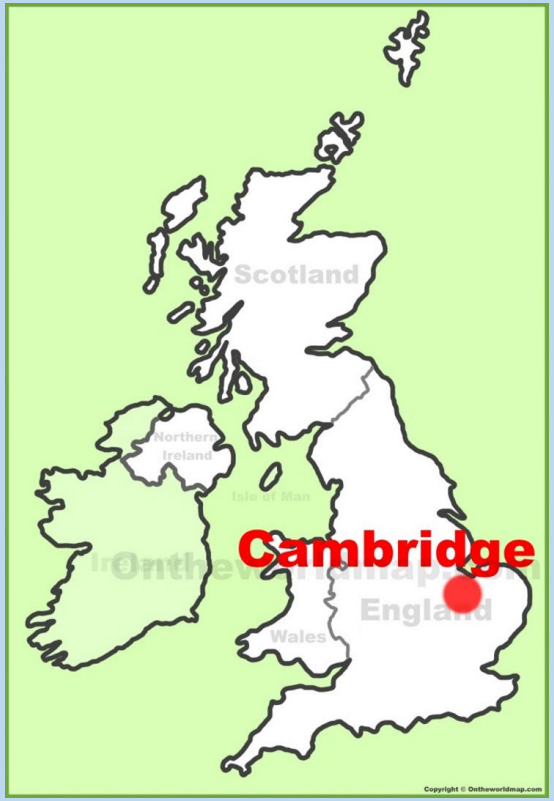
The company is now worth £1 billion and employs 200 staff with PhDs.

Advantages of Cambridge as a business location

- There are good transport links, including the M11 to London and Stansted Airport.
- Graduates from the university provide a highly educated workforce.
- There are few traditional industries to compete for land, so rent is lower.
- The city offers a good quality of life with much open space and high-quality shops.
- There are good links between colleges and industry, helping to develop business ideas.

Disadvantages of Cambridge as a business location

- The city is overcrowded and congested – the easiest way to get around is by bicycle.
- House prices are high and still rising, making it an expensive place to live.
- Road and rail routes need to be improved to speed up connections with other cities.



Cambridge

REVISION TASK

Watch the video clip, make notes, then attempt the 6 mark question.



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6-mark question:

"Explain why Cambridge has developed as an important economic hub."

REVEAL FOR MODEL ANSWER

The UKs Global Role

Empire and Commonwealth

Britain ruled the countries in its empire to obtain resources from them; there were benefits and costs to those countries that were colonised.

The commonwealth is a voluntary association of 53 countries that were once part of the British Empire.

Key Facts!

- **The British Empire once covered about one-third of the worlds land surface.**
- **Most countries gained independence in the 20th century and became art of the Commonwealth.**
- **The UK is a member of the UN, NATO and until 2019 the EU.**

The UKs influence today

The UK maintains its global influence today through its membership of international organisations including:

- **The United Nations (UN),** with 193 member countries. The UK is one of five members of the UN security council, along with USA, Russia, China and France.
- **The North Atlantic Treaty Organization (NATO),** a military alliance of 28 countries in North America and Europe.
- **The European Union (EU),** a political and economic unio of 28 countries which the UK left in 2019.







The UK in the Middle East

Conflict in the Middle East

The UK had a dominant political role in the Middle East util many countries gained independence from the British Empire in the 20th century.

Now, it still has a political interest in the region such as:

- The UKs trade with the Middle East is growing.

Islamic terrorism, connected with the Middle East, threatens security in the UK.



Key Facts!

- **Parts of the Middle East were once part of the British Empire.**
- **The UK has been involved in conflicts in the Middle East, both past and present.**
- **The UK wants to maintain friendly relations in the Middle East to increase trade.**

UK and the Middle East

Palestine/Israel- Palestine used to be part of the British Empire. In 1947a UN plan divided the land in two states, Palestine and Israel. There has been conflict ever since.

Iraq- NATO forces, including the UK invaded Iraq in 2003. The government was overthrown but there has been conflict in Iraq since then.

Iran- There was an Islamic Revolution in 1979. The UK broke off links with Iran in 1984, but they were restored in 2014.

Syria- Protests against the Syrian government in 2011 led to civil war. The UK joined international forces in bombing Islamic extremists in Syria in 2015.

Resource Reliance

Tanzania

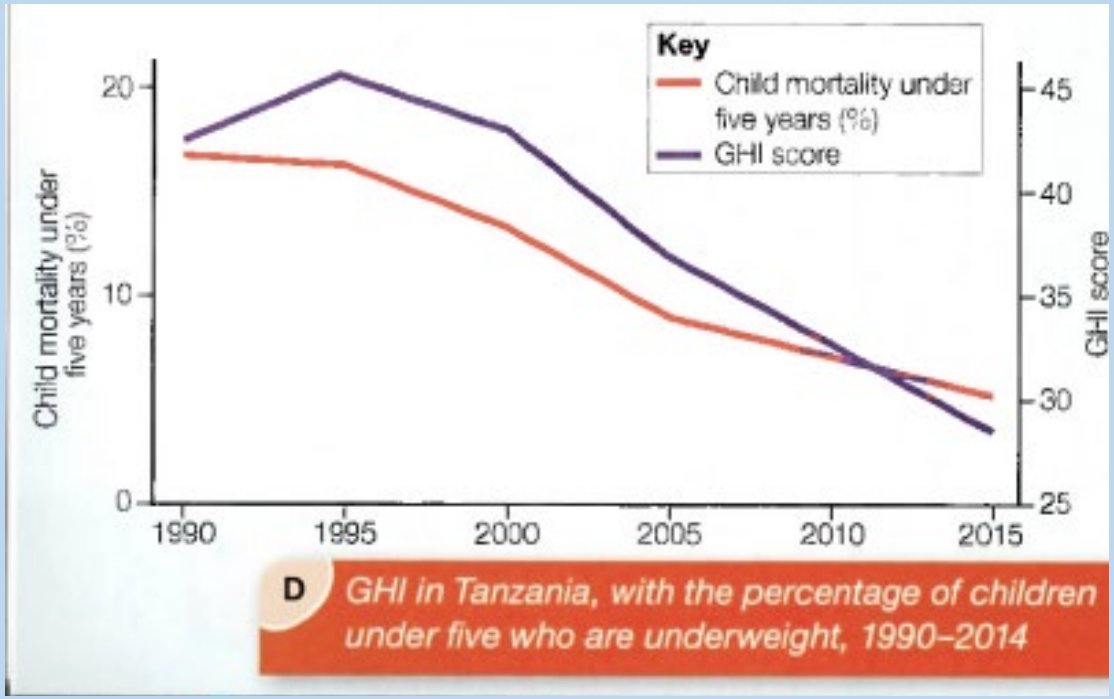
Food Security in Tanzania

Hunger in Tanzania

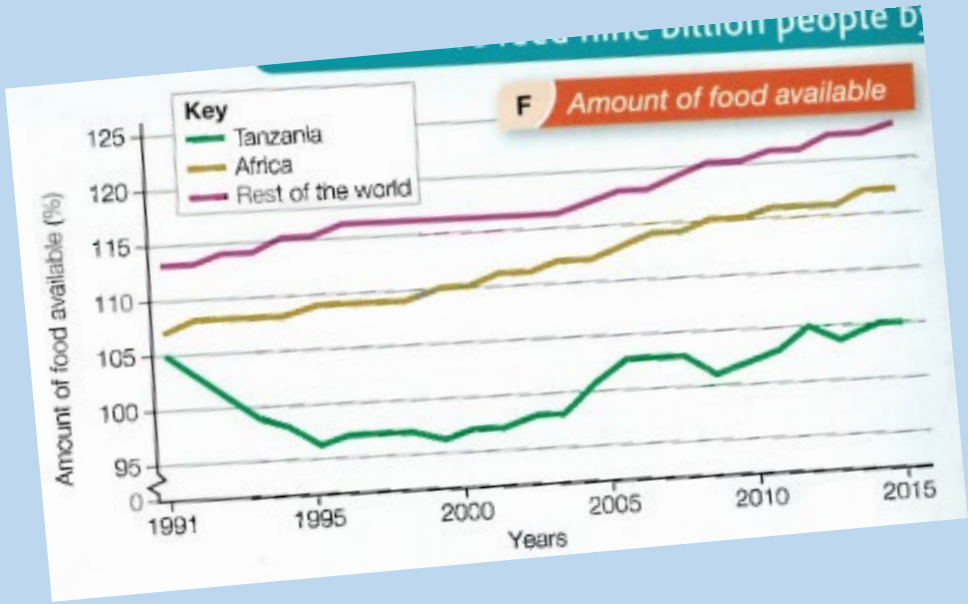
In 2015 Tanzania scored 28.7 in the Global Hunger Index (GHI), was ranked 89th out of 116 countries and had a hunger rating of 'serious'.

Key Facts!

- **Tanzania is a very poor LIDC in East Africa- it has a population of 51 million and most of those people live in rural areas.**
- **Hunger is a serious problem in Tanzania.**
- **Tanzania's global hunger index score (GHI) has improved since 1990, but the % of undernourished people has increased.**



D GHI in Tanzania, with the percentage of children under five who are underweight, 1990–2014



Tanzania (Babati)- Goat Aid

Goat aid in Babati

Babati is an area in northern Tanzania where 90%of people depend on agriculture for their livelihood.

- Between 1999 and 2006 a British charity called Farm Africa spent £200,000 on **Toggenburg** goats for the region to help improve food security.
- Toggenburg goats are dairy goats that produce three litres of milk a day, compared to cows which produce 1 litre.
- They bring many social, economic and environmental benefits.

Benefits of Goat Aid



1. Goats produce milk, improving people's diets.
2. Goats produce manure that fertilises the land
3. More crops are grown improving diets.
4. Extra milk and crops sold, increasing farmers income.
5. Farmers can afford to send their children to school.
6. Farmers can afford more farm equipment increasing food production.

Social (red) Economic (blue) Environmental (green)

Key Facts!

- **Goat Aid is an example of an attempt to achieve food security at a local scale.**
- **Goat aid brought social, economic and environmental benefits to Babati.**
- **Statistics show that people income in Babati improved suggesting Goat Aid was successful.**

Criticisms of Goat aid

- Goats require a lot of water (Tanzania experiences regular droughts).

Farmers may have to pay expensive vet bills.

Small-scale projects only help a small number of people.

Has it been successful?

Goat aid gives long-term benefits, which continue after the aid project finishes. Statistics show that farmers who receive goats make three times more profit than farmers who do not receive goats.

Tanzania – Canada Wheat Programme



The Wheat Programme

In the 1960s and 1970s Tanzania suffered from food shortages. The government asked Canada to help develop its wheat production.

Between 1969 and 1993 Canada provided $95 million of aid as Tanzania turned the **Hanang Plains** into wheat farms.

Aid included seeds, training, chemical fertilisers machinery and equipment. At first the equipment was free but then Tanzania had to pay for them.

The Hanang Plains used to grow wheat belonged to the **Barabaig** people who used it for grazing cattle. They claim they were violently forced from their land.

Was the project effective?

There are different opinions on whether the project was effective/successful.

The Canadian and Tanzanian governments say that it was successful, but with many disadvantages, many would argue it was a failure.

Key Facts!

- **The Tanzania-Canada wheat programme tried to grow huge quantities of wheat by using modern machinery and farming methods.**
- **At its peak it provided 60% of Tanzania's wheat.**
- **Much of the machinery broke and could not be repaired, and most Tanzanians could not afford the bread made from wheat.**

Benefits of wheat programme	Criticisms of wheat programme
Produced 60% of Tanzania's wheat	It would have been cheaper to import wheat.
121 Tanzanian's were trained in wheat production	Most Tanzanian's do not eat wheat- improving maize production would have been better
400 people worked in the farms	Lots of machinery fell into disrepair because Tanzanians could not afford the spare parts.
In the 1992 drought, Tanzania was the only southern African country to not rely on food aid.	40,000 Barabaigs lost their land and livelihoods.

Southern Agricultural Growth Corridor of Tanzania (SAGCOT)



SAGCOT

The Southern Agricultural Growth Corridor of Tanzania (SAGCOT) is a large project aiming to improve food production along a large strip of land stretching across southern Tanzania. **The project started in 2010.**

Key Aims:

- 188 commercial farms created
- $1140 million invested in roads, rail, electricity and water infrastructure.
- 75,000 small farms linked to markets.
- Regional food security assured.

Success to date:

- $39 million improvement to the railway running to the port at Dar es Salaam.
- Doubling rice yield in commercial farms on Kilombero Plantation.
- Small farms linked to Kilombero Plantation produce 8X more rice.

Key Facts!

- **SAGCOT aims to develop a modern agricultural industry in Tanzania.**
- **Huge investment is planned.**
- **Partnership between commercial farms and small landowners are developed through a hub and out-grower model.**

Hub and out-grower model

The Hub and out-grower model is an important innovation to improve food production on small farms.

Large, commercial farms act as hubs and improve infrastructure like electrical supplies , transport links and irrigation. Small farms link to these hubs as 'out-growers'.

They then benefit from the improvements made by the large farms and use expertise and infrastructure to improve their own food production and connection to markets.

Criticisms of SAGCOT

- Most money is invested in commercial farms.
- Nomadic tribes and some small landowners have lost land.
- Investment is promised but not given yet.
- It is a top-down project that does not consult with small landowners.

Is SAGCOT effective?

- It is too early to make judgements. The hub and out-grower model is innovative and there are some early successes.
- However, some argue that this will benefit TNCs producing food for export more than small landowners.