

Oil in the Middle East

Countries such as Saudi Arabia, Iran and Iraq have some of the highest oil reserves in the world.

5 of the world's top 10 world's biggest oil producers are in the Middle east.

However, 4 of these 5 countries have been or are at war or involved in civil war and unrest.

This political instability has meant that many oil consuming countries looked for alternative sources and suppliers rather than the Middle East.

The First Gulf War (1990/91) started as a result of Iraq invading Kuwait to get hold of its oil reserves.

Geographers believe that oil consumption is close to a peak and so demand will decline. In the rich world oil demand has already peaked and has been declining. Partly due to changes in cars with a growing popularity of electric and hybrid cars.

Should the UK increase oil imports from the Middle East?

- Rocky relations in the past between the UK and Middle East – they stopped exporting to us
- Thirst for fuel – UK dependent on a lot of fossil fuels and the need to import a lot – need as many imports as possible.
- Plentiful and cheap reserves – Middle East has a lot of oil and the extraction has become more efficient meaning oil is cheap!
- Alternative energy – UK government could invest in renewable energy sources instead.

Middle East Water Crisis

Driest region on Earth - 12 of the worlds most water scarce countries here.

Water availability per capita is 6 times less than the world average

The agricultural sector uses 85% of water.

Reasons for the crisis:

Climate Change
Increased demand for water as population grows
Poor resource management
Wasteful agricultural policies
Water being lost due to overuse of groundwater
Outdated irrigation methods
Leaky pipes

Water scarcity is now affecting regional security Believed to be responsible for the Syrian uprising in 2011. Desertification is a threat now – could threaten the food security of hundreds of millions of people.

Year 9 – Spring 1 - Geography

How are countries in the Middle East responding to the crisis?

Israel and Gulf states

Rely on **desalination plants** – but this is not sustainable long term. It has harmful environmental effects.

Jordan

Efforts have been made to increase wastewater recycling and reuse



Water Wars and a disputed dams

The River Tigris and River Euphrates – the two main rivers in the Middle East. Both start in Turkey and travel southeast through Syria and Iraq to the Persian Gulf.

The new dam – Ilisu dam – that Turkey wants to build is causing controversy – especially downstream in Syria and Iraq. Iraq fear that Turkey and Syria will use up most of the water before it reaches them.

The River basins of these two rivers is one of most politically unstable regions in the world.

Turkey – think it is their river and can do what they want. Want to ensure there is enough water for their population. Think Syria and Iraq are wasteful of water.

Syria – Think pollution will increase in response to this dam. Thinks the 22 dams will be too many. Think Turkey can leave one river alone so Syria can have more security in water. Syria will lose half of water supply if the dam goes ahead. Syria needs water for agriculture.

Iraq – furthest downstream and most vulnerable to the dam. Dams in Turkey will cut off nearly 90% of water into Iraq. Syria's dams also restrict water into Iraq. Wars have destroyed most of their water supply and they rely on Rivers for water needs.

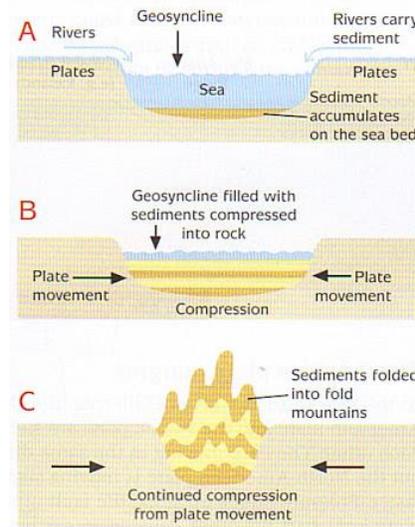
Himalayas and Fold Mountains



The Himalayas are located in Asia, stretching across the southern border of China, through Bhutan, Nepal and India as well. They formed as the result of the Indian plate colliding with the Eurasian plate, millions of years ago.

Fold mountains form when two plates collide with each other. The land as well as all the sedimentary rocks lying on the ocean floor between them are crumpled or folded to create a series of mountain ridges. They take millions of years to form. Once mountains have been formed and are pushed high into the atmosphere, they start to be weathered and worn away by the effects of frost, glaciers and rain. This explains why the oldest mountains in the world are not as high or as big as most recent ones.

Formation of Fold Mountains



What is a typhoon?

Typhoon = tropical storm. A tropical storm is a rotating storm system characterised by a low-pressure centre, strong winds and a spiral arrangement of thunderstorms that produce heavy rain.

Conditions needed for a tropical storm

Sea temperature of 27°C
Ocean depth of 70m+
Strong winds that spiral
To be close of the equator

Typhoon Haiyan 2013

Typhoon Haiyan was a tropical typhoon that affected the Philippines in South East Asia in November 2013. One of the strongest ever on record – category 5 on Saffir-Simson Scale
Wind speeds of over 306km/h (195mph)
Storm surges of up to 6m high causing coastal flooding that extended 1km inland – nearly as powerful as a tsunami and caused most of the damage. The Philippines is a fairly poor part of the world with minimal investment in prediction, planning and protection schemes.

Tohoku Earthquake, Japan 2011

When – 11th March 2011 at 2:46pm
Magnitude – 9.0 on the Richter Scale
Plate boundary – Destructive plate boundary – Pacific Plate subducting under the Eurasian plate.
Facts – Epicentre was 129km east of Sendai. Shallow focus of 30km. Felt across Japan. Tsunami generated – reached 39m high and travelled up to 10km inland.

Impacts:

- 15,883 deaths; 6,149 injured and 2,663 people missing
- People couldn't get access to clean water or food
- Government estimated the total damage at 16-25 trillion yen= \$300 billion
- Hospitals badly damaged so people couldn't get treated properly
- 163,000 people in shelters
- 3 meltdowns at the Fukushima nuclear power plant
- 4.4 million left without electricity
- 10% of fishing ports damaged
- Roads and bridges were severely damaged

Responses:

- Newer, higher tsunami wall being built
- Recovery was more complicated due to the radiation leaks – the unsafe areas had up be evacuated for up to 5 months
- 116 countries and 28 international organisations offered assistance
- Japan relief on aid from across the world
- Japanese army had cleared the debris within 2 days so emergency supplies could be delivered
- Aircraft were in quickly to survey the damage and identify areas that needed help.
- UK sent search and rescue teams to help

Typhoon Haiyan 2013

Social Impacts	Economic Impacts	Environmental Impacts
6,300 deaths	\$2.86 billion – cost of damage	Trees were uprooted
670,000 families made homeless and 11.5 million affected	Destroyed 90% of city of Tacloban	Contamination from sea water and oil leaked into sea
90% of houses in Tacloban destroyed/damaged	77% of farmers and 74% of fisherman lost their main source of income	Many coconut plantations were levelled and crops destroyed.

Short-term Responses

- To provide food, water, shelter and medical supplies was 1st priority.
- UN appealed for £190 million for emergency aid
- 1,215 evacuation centres were set up
- Widespread looting and violence led the government to deploy soldiers to restore law and order
- Philippine Red Cross delivered basic food aid

Long-term Responses:

- Once the initial emergency had been tackled the government refocused on long term aid, recovery and development
- By April 2014, services had been restored to 560 schools, 220 rural health centres and 30 hospitals
- 1500km of roads and 1100km of drainage canals has been repaired
- New storm surge warnings
- 'No build zones' set up