



UK challenges

PRESSURES ON RESOURCES

As there is a growing demand for **energy**, fossil fuels will be exploited. A growing demand for **food** will mean that certain resources, like fish, will be exploited. Also woodland areas will have to be deforested to make way for more farmland. A growing demand for **water** will lead to greater pressure to provide water to the increasing population. The growing population will lead to growing demand for **wood** for building and for furniture.

PRESSURES ON ECOSYSTEMS

A greater demand for **space** will result in ecosystems being built upon. Increased population means an increase in **car ownership**. This pollutes the local environment with noise and air pollution. Ecosystems will have to be converted into agricultural land in order to meet the **food** demands of the growing population. Marine ecosystems will be affected by overfishing and off-shore wind farms to meet the energy and food demands.

MIGRATION TRENDS

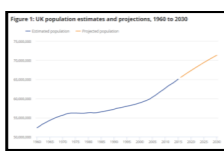
UK migration has increased. UK migration statistics are not always reliable
 1) People enter the UK illegally and so are not included in statistics.
 2) There is not formal method of measuring who is coming into the UK and out of the UK apart from those who apply for a VISA (note – a VISA is not needed for EU citizens).
 3) People may have entered the UK to work temporarily and may, or may not, be included in migration statistics.

UK MIGRATION

Positive	Negative
Locals experience a range of different cultures and traditions. Bring a diverse range of skills and provide the government with additional taxes. Many migrants work in low skilled that British people are not prepared to do.	House prices are increasing across the UK due to a greater demand. Education systems struggles to cope with the number of students that do not speak English. Police forces have to pay additional costs for translators. Putting greater pressure on the NHS.

CHANGES IN UK POPULATION

The UK population is expected to increase significantly
 In 1960—52 million. By 1980 approx. 56 million. By 2010 approx. 62 million. By 2030 is predicted to be 71 million.



UK TWO SPEED ECONOMY

Causes	Solutions
Companies prefer to have headquarters in London due to skilled workforce available from the range of universities. There are excellent transport links to Europe and the rest of the world from London. Firms located in London have a positive image. London is often the focus of government regeneration (East London Olympics regeneration) and receives much more money. There are excellent transport links within the capital city (e.g. London underground).	The government have invested in regeneration projects in other areas of the country, to encourage people and businesses to locate here. The High Speed Rail 2 (HSR2) between London and the North is under construction to attract businesses away from London. Government spending and regeneration projects across cities in the north of the country have helped to improve transport links. The government have moved some key Gov. departments out of the capital, (e.g. Passport office in Cardiff).

GREENFIELD AND BROWNFIELD SITES

	Advantages	Disadvantages
Greenfield an area that has never been built upon before	Away from the traffic and pollution in the city. It is a cleaner environment. The layout of new buildings is not determined by the previous development on the land. The land is much cheaper.	Natural land is permanently lost. Could increase traffic congestion. Wildlife would be disturbed. Farm land may be lost.
Brownfield is an area that was once built on	Brownfield sites usually have good services in place. Reduces the loss of any of our countryside. Rejuvenate old or worn down areas.	Some sites are contaminated with pollutants. The land is expensive. Old buildings may have to be demolished, which can be very costly.

DEVELOPMENT OF NATIONAL PARKS

Benefits	Problems
Increased house prices within the national parks – which is beneficial for the home owner looking to sell their property. Increased tourism, supporting the local economy. Increased protection and conservation of natural habitats. Rural shops and services are maintained. Increased number of shops.	The houses will increase in price, making them too expensive for first time buyers. The jobs created in the area through increased tourism are only seasonal jobs. Most tourists will arrive at national parks by car. This leads to congestion. Tourists cause noise pollution, footpath erosion, litter, vandalism, fires and often disturb livestock.

CONSERVATION OF NEW FOREST NATIONAL PARK

Conservation	Evaluation
When any trees are cut down for timber they are replanted with native species of deciduous trees.	+ this ensures that the size of the forest remains the same, even if some deforestation takes place. - the trees take a long time to grow, and the natural habitats will take a long time to recover.
Very little maintenance work in the New Forest takes place during the summer months. (e.g. cutting down timber, planting new trees and culling deer).	+ this ensures that plants/trees are not cut back during their growing season, and animals aren't disturbed during their mating seasons. - the winter climate makes maintenance work difficult for the rangers.
The national park employs a number of rangers who work in the area.	+ this ensures that the area is maintained well, that tourists have minimal impacts, and they ensure that the rules around the forest are upheld. - there is a large financial cost to employ the rangers.
In the New forest there are restrictions as to where people can go (walking and in their cars).	+ this ensures that the impacts of tourists are minimised and animals are not disturbed, by only allowing the tourists to go to certain areas. - this concentrates the problems of tourism in one area, and may put off tourists from coming to the area.
At the New Forest Visitor centre, they provide a visitor leaflet called '5 ways to love the forest.'	+ this ensures that visitors know how, and why, they can help to care for and protect the forest. - the leaflet adds to the litter caused by the tourists and it is not a guarantee that they will read it, or follow the instructions.

IMPACTS OF CLIMATE CHANGE

People	Environment
Heat related diseases - there may be an increase in diseases such as skin cancer and heat stroke Decrease in winter related diseases - as the winters will be milder, less people will die from the winter related illnesses, such as pneumonia. Crop yields affected - crops may not thrive as well in the warmer climates. Drought - in some areas drought may affect food/water supplies and food/water security Coastal flooding - due to sea level rises, coastal city areas are more vulnerable to flooding. Death of marine life - warmer sea temperatures mean marine life may not survive.	Increased storms - across the UK the increased temperature has led to an increase in storms and floods. Increased drought - due to a lack of rainfall in areas (S.E England) Sea level rises - leading to coastal flooding and increased coastal erosion rates. Ice melting in highland areas - affecting natural landscapes and habitats. Warmer river temperatures - may lead to the migration or extinction of marine animals. Increase forest growth - due to more favourable conditions. Pests/insects - Warmer conditions may attract mosquitos to the UK.

RESPONSES TO CLIMATE CHANGE

Local	National
The city of London council give out free energy saving light bulbs to households. Local schools have invested in renewable energy. The Mersey Forest Group, is a local group based in Liverpool. Their intention is to plant more trees across the city. Liverpool Council works with Liverpool Mutual Homes and is investing in improving council homes around the city, to improve energy efficiency. Liverpool have invested heavily in improving public transport across the city (regeneration of city centre stations, more frequent trains and buses, park and ride systems across the city), in order to reduce cars and greenhouse gas emissions.	UK Government have introduced 'feed-in tariff' incentives to home owners and businesses, to be more energy efficient. Businesses and home owners which have solar panels or wind turbines receive a 'feed in tariff' which means they are paid for any electricity they haven't used. The Climate Change Act 2008, has created legally binding targets to reduce greenhouse gas emissions. The UK government has invested heavily into the development and improvement of offshore wind farms and these facilities across the country. The government has increased road tax for cars that are not energy efficient. Electric cars are exempt from road tax. There are government grants for renewable energy sources.

MANAGING RIVER AND COASTAL UK FLOOD RISK

Coasts	Description	Benefits	Negatives
Sea wall (hard engineering)	This is a large wall built at the bottom of cliffs (sometimes curved) to absorb/reflect the waves energy.	Very effective. Lasts for many years.	Expensive to build. Unattractive.
Rip rap (hard engineering)	Large rocks placed in front of the cliff to absorb wave energy.	Effective for a number of years. More natural than sea wall.	Unattractive/unnatural. Can be expensive for large rocks being imported.
Groyne (hard engineering)	Wooden walls stretching out to sea to prevent longshore drift, so the beach stays. (the beach is a natural defence).	Helps to encourage a build up of a beach (a natural defence).	Not effective in storm conditions. Unattractive.
Beach replenishment (soft engineering)	The placing of sand and pebbles onto the beach (the beach is a natural defence).	Looks natural. Reasonably cheap option in short term.	Only a short term option – requires constant maintenance so expensive in long term.
Managed retreat (soft engineering)	Large rocks placed in front of the cliff to absorb wave energy.	Reasonably cheap option (although compensation has to be paid).	Land is permanently lost. As land falls into the sea, it pollutes sea water.
Cliff regrading (soft engineering)	The angle of the coastline is changed to create a gentle slope – reducing the wave power slowly.	Looks natural. Provides a natural habitat for animals.	Not very effective in storm conditions. Requires maintenance.

River	Description	Benefits	Negatives
Dams and reservoirs (hard engineering)	These are barriers (walls) constructed to hold back and control the flow of water. They store the water in a large man-made lake called a reservoir, behind the dam.	Also produces HEP. Long lasting and effective.	Large areas of land are flooded. Unightly.
Channelisation (hard engineering)	This is the process of deepening or straightening rivers, so that more water can flow through the river at a faster velocity.	Long lasting. Effective as river can hold more water.	Disrupts the natural processes of the river. Expensive.
Flood plain zoning (soft engineering)	This is when the government or local council will refuse planning permission for building houses near to the river and on its flood plain.	Very cheap as no defences built. Provides natural habitats for animals.	Large areas of land cannot be built upon. Encourages urbanisation in other areas.
Washlands (soft engineering)	This is when areas around the river are used to let the river flood onto. It floods onto less valuable land and prevents river flooding in other, more valuable, areas.	Gives a safe place for floodwater to go to, avoiding flooding in valuable areas.	The land can no longer be used for urban developments or farmland.