












“Suggest how the UK benefits economically and politically from its membership from the commonwealth”

Case Study: Economic Change in the UK 	
<p><b>UK in the Wider World</b></p> <p>The UK has one of the largest economies in the world.</p> <p>The UK has huge political, economic and cultural influences.</p> <p>The UK is highly regarded for its fairness and tolerance.</p> <p>The UK has global transport links i.e. Heathrow and the Eurostar.</p>	
<p><b>Causes of Economic Change</b></p> <p>De-industrialisation and the decline of the UK's industrial base.</p> <p>Globalisation has meant many industries have moved overseas, where labour costs are lower.</p> <p>Government investing in supporting vital businesses.</p>	<p><b>Towards Post-Industrial</b></p> <p>The quaternary industry has increased, whilst secondary has decreased.</p> <p>Numbers in primary and tertiary industry has stayed the steady.</p> <p>Big increase in professional and technical jobs.</p>
<p><b>Developments of Science Parks</b> </p> <p>Science Parks are groups of scientific and technical knowledge based businesses on a single site.</p> <ul style="list-style-type: none"> <li>• Access to transport routes.</li> <li>• Highly educated workers.</li> <li>• Staff benefit from attractive working conditions.</li> <li>• Attracts clusters of related high-tech businesses.</li> </ul>	<p><b>CS: UK Car Industry</b> </p> <p>Every year the UK makes 1.5 million cars. These factories are owned by large TNCs, i.e. Nissan.</p> <ul style="list-style-type: none"> <li>• 7% of energy used there factories is from wind energy.</li> <li>• New cars are more energy efficient and lighter.</li> <li>• Nissan produces electric and hybrid cars.</li> </ul>
<b>Change to a Rural Landscape</b> 	
<p><b>Social</b></p> <p>Rising house prices have caused tensions in villages.</p> <p>Villages are unpopulated during the day causing loss of identity.</p> <p>Resentment towards poor migrant communities.</p>	<p><b>Economic</b></p> <p>Lack of affordable housing for local first time buyers.</p> <p>Sales of farmland has increased rural unemployment.</p> <p>Influx of poor migrants puts pressures on local services.</p>
<p><b>Improvements to Transport</b> </p> <p>A £15 billion 'Road Improvement Strategy'. This will involve 10 new roads and 1,600 extra lanes.</p> <p>£50 billion HS2 railway to improve connections between key UK cities.</p> <p>£18 billion on Heathrow's controversial third runway.</p> <p>UK has many large ports for importing and exporting goods.</p>	<p><b>UK North/South Divide</b></p> <ul style="list-style-type: none"> <li>- Wages are lower in the North.</li> <li>- Health is better in the South.</li> <li>- Education is worse in the North.</li> <li>+ The government is aiming to support a Northern Powerhouse project to resolve regional differences.</li> <li>+ More devolving of powers to disadvantaged regions.</li> </ul>

Resource Challenges			Food in the UK		Water in the UK		
Resources are things that humans require for life or to make our lives easier. Humans are becoming increasingly dependent on exploiting these resources, and as a result they are in high demand.			<b>Growing Demand</b> <ul style="list-style-type: none"> <li>The UK imports about 40% of its food. This increases people's carbon footprint.</li> <li>There is growing demand for greater choice of exotic foods needed all year round.</li> <li>Foods from abroad are more affordable.</li> <li>Many food types are unsuitable to be grown in the UK.</li> </ul>		<b>Growing Demand</b> <p>The average water used per household has risen by 70%. This growing demand is predicted to increase by 5% by 2020.</p> <p>This is due to:</p> <ul style="list-style-type: none"> <li>A growing UK population.</li> <li>Water-intensive appliances.</li> <li>Showers and baths taken.</li> <li>Industrial and leisure use.</li> <li>Watering greenhouses.</li> </ul>		
<b>Significance of Water</b>			<b>Impact of Demand</b>		<b>Deficit and Surplus</b>		
Resources such as food, energy and water are what is needed for basic human development.			<b>Foods can travel long distances (food miles). Importing food adds to our carbon footprint.</b> <ul style="list-style-type: none"> <li>+ Supports workers with an income</li> <li>+ Supports families in LICs.</li> <li>+ Taxes from farmers' incomes contribute to local services.</li> <li>- Less land for locals to grow their own food.</li> <li>- Farmers exposed to chemicals.</li> </ul>		The north and west have a <b>water surplus</b> (more water than is required). The south and east have a <b>water deficit</b> (more water needed than is actually available). More than half of England is experiencing <b>water stress</b> (where demand exceeds supply).		
<b>FOOD</b>	<b>WATER</b>	<b>ENERGY</b>	<b>Agribusiness</b>		<b>Pollution and Quality</b>		
Without enough nutritious food, people can become <b>malnourished</b> . This can make them ill. This can prevent people working or receiving education.	People need a supply of <b>clean and safe water</b> for drinking, cooking and washing. Water is also needed for food, clothes and other products.	A good supply of energy is needed for a basic standard of living. People need <b>light and heat</b> for cooking or to stay warm. It is also needed for industry.	<b>Farming is being treated like a large industrial business. This is increasing food production.</b> <ul style="list-style-type: none"> <li>+ Intensive farming maximises the amount of food produced.</li> <li>+ Using machinery which increases the farms efficiency.</li> <li>- Only employs a small number of workers.</li> <li>- Chemicals used on farms damages the habitats and wildlife.</li> </ul>		<b>Cause and effects include:</b> <ul style="list-style-type: none"> <li>Chemical run-off from farmland can destroy habitats and kills animals.</li> <li>Oil from boats and ships poisons wildlife.</li> <li>Untreated waste from industries creates unsafe drinking water.</li> <li>Sewage containing bacteria spreads infectious diseases.</li> </ul>		
<b>Demand outstripping supply</b>			<b>Sustainable Foods</b>		<b>Water stress in the UK</b>		
The demand for resources like food, water and energy is rising so quickly that supply cannot always keep up. Importantly, access to these resources vary dramatically in different locations			<b>Organic foods that have little impact on the environment and are healthier have been rising. Local food sourcing is also rising in popularity.</b> <ul style="list-style-type: none"> <li>Reduces emissions by only eating food from the UK.</li> <li>Buying locally sourced food supports local shops and farms.</li> <li>A third of people grow their own food.</li> </ul>				
<b>1. Population Growth</b>		<b>2. Economic Development</b>		<b>Management</b>		<b>Water Transfer</b>	
<ul style="list-style-type: none"> <li>Currently the global population is <b>7.3 billion</b>.</li> <li>Global population has risen <b>exponentially</b> this century.</li> <li>Global population is expected to reach <b>9 billion by 2050</b>.</li> <li>With more people, the <b>demand</b> for food, water, energy, jobs and space <b>will increase</b>.</li> </ul>		<ul style="list-style-type: none"> <li>As <b>LICs</b> and <b>NEEs</b> develop further, they require <b>more energy</b> for industry.</li> <li><b>LICs</b> and <b>NEEs</b> want similar lifestyles to <b>HICs</b>, therefore they will need to <b>consume more resources</b>.</li> <li>Development means <b>more water is required</b> for food production as diets improve.</li> </ul>		UK has <b>strict laws</b> that limits the amount of discharge from factories and farms. <b>Education campaigns</b> to inform what can be disposed of safely. <b>Waste water treatment plants</b> remove dangerous elements to then be used for safe drinking. Pollution traps catch and filter pollutants.		Water transfer involves moving water through pipes from areas of surplus (Wales) to areas of deficit (London). <b>Opposition includes:</b> <ul style="list-style-type: none"> <li>Effects on <b>land and wildlife</b>.</li> <li>High maintenance <b>costs</b>.</li> <li>The <b>amount of energy</b> required to move water over long distances.</li> </ul>	
<b>Resource Reliance Graph</b>			<b>Energy in the UK</b>				
<p><b>Consumption</b> – The act of using up resources or purchasing goods and produce.</p> <p><b>Carry Capacity</b> – A maximum number of species that can be supported.</p> <p><b>Resource consumption exceeds Earth's ability to provide!</b></p>			<b>Growing Demand</b>		<b>Energy Mix</b>		
<ul style="list-style-type: none"> <li>The demand for resources has driven the <b>need for new technology</b> to reach or gain more resources.</li> <li>More people in the <b>secondary and tertiary industry</b> has increased the <b>demand for resources</b> required for electronics and robotics.</li> </ul>			The UK <b>consumes less energy</b> than compared to the 1970s despite a smaller population. This is due to the <b>decline of industry</b> .		The majority of UK's energy mix comes from <b>fossil fuels</b> . By 2020, the UK aims for 15% of its energy to come from <b>renewable sources</b> . These renewable sources do not contribute to <b>climate change</b> .		
<b>3. Changing Technology and Employment</b>			<b>Changes in Energy Mix</b>		<b>Energy in the UK (continued)</b>		
			<ul style="list-style-type: none"> <li>75% of the UK's oil and gas has been used up.</li> <li>Coal consumption has declined.</li> <li>UK has become too dependent on imported energy.</li> </ul>				
					<b>Significance of Renewables</b>		
					<ul style="list-style-type: none"> <li>+ The UK government is investing more into low carbon alternatives.</li> <li>+ UK government aims to meet targets for reducing emissions.</li> <li>+ Renewable sources include wind, solar and tidal energy.</li> <li>- Although infinite, renewables are still expensive to install.</li> <li>- Shale gas deposits may be exploited in the near future</li> </ul>		
					<b>Exploitation</b>		
					<b>Nuclear</b> <ul style="list-style-type: none"> <li>New plants provide job opportunities.</li> <li>Problems with safety and possible harm to wildlife.</li> <li>Nuclear plants are expensive.</li> </ul>		
					<b>Wind Farm</b> <ul style="list-style-type: none"> <li>Locals have low energy bills.</li> <li>Reduces carbon footprint.</li> <li>Construction cost is high.</li> <li>Visual impacts on landscape.</li> <li>Noise from wind turbines.</li> </ul>		

# The Challenge of Resource Management

Option 1: FOOD 	
<p>Food Security is when people at all times need to have physical &amp; economic access to food to meet their dietary needs for an active &amp; healthy life. This is the opposite to Food Insecurity which is when someone is unsure when they might next eat.</p>	
<p><b>Human</b> </p> <ul style="list-style-type: none"> <li>• <b>Poverty</b> prevents people affording food and buying equipment.</li> <li>• <b>Conflict</b> disrupts farming and prevents supplies.</li> <li>• <b>Food waste</b> due to poor transport and storage.</li> <li>• <b>Climate Change</b> is affecting rainfall patterns making food production difficult.</li> </ul>	<p><b>Physical</b> </p> <ul style="list-style-type: none"> <li>• The <b>quality of soil</b> is important to ensure crops have key nutrients.</li> <li>• <b>Water supply</b> needs to be reliable to allow food to grow.</li> <li>• <b>Pest, diseases and parasites</b> can destroy vast amounts of crops that are necessary to populations.</li> <li>• <b>Extreme weather</b> events can damage crops (i.e. floods).</li> </ul>
<p><b>Daily Calorie Intake</b></p> 	<p><b>Food Supply</b></p> 
<p>This map shows how many <b>calories per person</b> that are consumed on average for each country. This can indicate the global distribution of <b>available food</b> and <b>food inequality</b>.</p>	<p>This map shows the amount of <b>food produced</b> in different countries. Whilst Asia and <b>North America</b> have <b>high</b> production outputs, <b>Africa</b> and <b>Central America</b> have <b>low</b> production outputs.</p>
<p><b>Increasing Food Supply</b> </p> <p><b>Hydroponics</b> - A method of growing plants without soil. Instead they use nutrient solution.</p> <p><b>New Green Revolution</b> - Aims to improve yields in a more sustainable way. Involves using both GM varieties and traditional and organic farming.</p> <p><b>Biotechnology</b> - Genetically modified (GM) crops changes the DNA of foods to enhance productivity and properties.</p> <p><b>Irrigation</b> - Artificially watering the land so crops can grow. Useful in dry areas to make crops more productive.</p>	<p><b>C.S. Thanet Earth</b> </p> <p>Located in Kent, the site involves four huge greenhouses using hydroponics.</p> <p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>• Supports more than 500 jobs.</li> <li>• Produces food all year round.</li> <li>• Provides UK with food security.</li> </ul> <p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>• <b>Money generated</b> mostly goes to large companies not community.</li> <li>• Requires a lot of energy.</li> <li>• Causes visual &amp; light pollution.</li> </ul>
<p><b>Sustainable Food Supply</b> </p> <p>This ensures that <b>fertile soil, water and environmental resources</b> are available for future generations.</p> <p><b>Organic Farming</b> - The banned use of chemicals and ensuring animals are raised naturally.</p> <p><b>Permaculture</b> - People growing their own food and changing eating habits. Fewer resources are required.</p> <p><b>Urban Farming</b> - Planting crops in urban areas. I.e. roundabouts.</p> <p><b>Managed Fishing</b> - Includes setting catch limits, banning trawling and promoting pole and line methods.</p>	<p><b>C.S. NEE- Indus Basin Irrigation System</b> </p> <p>Largest irrigation scheme in the world. Involves large and small dams. Thousands of channels provides water to supports Pakistan's rich farmlands.</p> <p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>• Improves food security by adding 40% more land for farming.</li> <li>• Increased yield &amp; range of foods.</li> </ul> <p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>• Few take an unfair share of water</li> <li>• Water is wasted and demand is rising due to population growth.</li> <li>• High cost to maintain reservoirs.</li> </ul>

“Use a named example to evaluate the effects of a large scale irrigation scheme”