Unit 3 Making Geographical Decisions

In your Unit 3 exam, you need to make **decisions** based on evidence about topics that affect our planet. Unit 3 enables you to draw together knowledge and understanding from Units 1 and 2.

**Overview of content**
- This unit will assess students’ ability to make decisions about geographical issues and justify them.
- The unit includes the pressures (conflicts), players and options that are involved in making geographical decisions and which are related to sustainable development and environmental issues.

**Overview of assessment**
- This unit is assessed through a 1-hour 30-minute, tiered, written examination.
- 53 total marks are available, spread across three questions.
- Of the 53 raw marks available, up to 3 marks are awarded for Spelling, Punctuation and Grammar (SPaG).
- A resource booklet will be available in the examination. The examination will relate to the material in the booklet.

[See Page 320 in textbook for more details]

**Key Ideas**

Your Unit 3 paper will be on **one** topic. The topic will cover one or more of these key ideas:

[See pages 286-287 for more detail]
Key Idea 1: Sustainable Development is an important concept

Sustainable development definition: ‘Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.’ [Bruntland 1987]

This definition suggests that human development is sustainable when

- It meets the needs of people today, i.e. incomes and quality of life improve
- Development today does not reduce quality of life for people in the future.

An idea, which is often used to explain sustainable development, is the three-legged stool. A failure to make any of the legs sustainable will not meet the Bruntland definition and will make the stool ‘fall over’.

<table>
<thead>
<tr>
<th>Key Features</th>
<th>Sustainable development</th>
<th>Unsustainable development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Directly improves life, such as better education, health and housing.</td>
<td>Excludes some people, such as women or an ethnic minority group, increasing inequality.</td>
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<tr>
<td></td>
<td>Promotes equality between different groups</td>
<td>Imposed on people from above, so they have no say in decision making.</td>
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<tr>
<td>Economic</td>
<td>Increases incomes for many people long term, so quality of life improves.</td>
<td>Leads to debt which future generations will have to pay back.</td>
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<td></td>
<td>Proves to be good value for money, benefitting the most people for the least cost.</td>
<td>Only makes a small number of people wealthy and increases inequality.</td>
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<tr>
<td>Environmental</td>
<td>Helps conserve biodiversity, e.g. selective logging rather than large-scale deforestation</td>
<td>Wastes finite natural resources e.g. fossil fuels, which are then not available in the future.</td>
</tr>
<tr>
<td></td>
<td>Uses non-polluting and renewable resources.</td>
<td>Causes pollution e.g. industry polluting the air and water, that future generations will have to clean up.</td>
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</tbody>
</table>

Examples in your textbook which could help you prepare for this include:
Section 3.5 – threats to the Biosphere
Sections 4.7 and 4.8 – solutions to the water crisis in developed and developing countries
Section 12.7 & 16.8 – biogas and sustainable development in rural India

Questions to think about
1. Re-examine the Sardar Sarovar Dam project. Do you think this project was economically, socially and environmentally sustainable?
2. Are bottom-up projects more sustainable than top-down ones?
3. Is there such a thing as a sustainable level of population?
Key Idea 2: Since the 1990s ‘environmental sustainability’ has become increasingly important.

‘Environment**al sustainability** involves making decisions and taking actions that are in the interests of protecting the natural world.’

Different organisations have different attitudes towards environmental sustainability:

<table>
<thead>
<tr>
<th>TNCs such as Nike and BT</th>
<th>NGOs such as Oxfam</th>
<th>Conservation organisations such as WWF</th>
<th>Environmental pressure groups such as Greenpeace</th>
</tr>
</thead>
<tbody>
<tr>
<td>TNCs often stress their environmental policies and efficiency, but are sometimes accused of ‘greenwashing’ and ‘tokenism’ by environmentalists using slick marketing and public relations to appear more environmentally friendly than they really are.</td>
<td>Many NGOs that work in the developing world emphasise the need to use small scale, intermediate technology such as water hand-pumps, solar panels and rainwater harvesting. They focus on using renewable resources.</td>
<td>The Worldwide Fund for Nature (WWF) focuses on the eco-footprint concept. This suggests humans are already ‘living beyond their means’ in terms of using natural resources.</td>
<td>Pressure groups such as Greenpeace focus on pollution and waste, such as the damage done to the environment by industry, energy consumption and the ‘throw away’ society.</td>
</tr>
</tbody>
</table>

A radical alternative is what is called a ‘no-growth’ or zero-growth economy.

Examples in your textbook which could help you prepare for this include:

- Section 3.4 – conflicts of interest in the rainforest
- Section 11.6 – who wins and loses from Globalisation?
- Section 12.7 – the debate about GM crops and sustainable development

Questions to think about

1. Look back at the energy resources you studied in Unit 2 and consider if they are environmentally sustainable.
2. Think about trade and globalisation from Unit 2. Is global trade good or bad for the environment?
3. Identify the management measures from Unit 1 that are designed to make humans’ relationship with the biosphere more environmentally sustainable. Chapters 3 and 7.
Key Idea 3 – Demand for resources is rising globally but resource supply is often finite which may lead to conflict

The main reason that sustainability has become such a catchword is because, increasingly, the supply of resources does not match demand.

<table>
<thead>
<tr>
<th>Resource demand</th>
<th>Resource supply</th>
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<tbody>
<tr>
<td>• World population was 3bn in 1960, grew to 7bn in 2010 and could be 10bn by 2050.</td>
<td>• Over 80% of global energy demand is met by fossil fuels, a finite resource.</td>
</tr>
<tr>
<td>• Energy and water demand is rising fast and could double by 2035.</td>
<td>• Some resources are showing signs of reaching peak supply, such as oil, wild ocean fish.</td>
</tr>
<tr>
<td>• Demand for food could also double between 2010 and 2050.</td>
<td>• The amount of ‘spare’ land that could be used for farming is very small.</td>
</tr>
</tbody>
</table>

Projected Global Energy Demand

Check your understanding
An increasing population causes rising demand for resources. Why does increasing wealth do the same?

Examples in your textbook which could help you prepare for this include:
Section 2.5 - how human activity can change the atmosphere and may be a cause of climate change
Section 9.1 - the rising global population
Section 10.1 and 10.2 - increasing global demands on resources

Questions to think about
1. How useful would population policies, like China’s one-child policy (Unit 2), be for reducing resource demand on a global scale?
2. Would there be more or less conflict if humans developed renewable resources?
3. What is the link between rising resource demand and climate change?
Key Idea 4 – Balancing the needs of economic development and conservation is a difficult challenge

Balancing the need to conserve the environment with the need to develop the economy is very difficult. Governments have a very difficult balancing act.

<table>
<thead>
<tr>
<th>If economic development is prioritised:</th>
<th>If conservation is prioritised:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Land will be lost to <strong>urban sprawl</strong>, factory and transport developments</td>
<td>• Protecting <strong>greenbelts</strong> could lead to housing shortages</td>
</tr>
<tr>
<td>• Pollution regulations will be weak, leading to environmental degradation and poor human health</td>
<td>• Money spent on conservation could be spent on social services</td>
</tr>
<tr>
<td>• Farming will be intensive and cause soil <strong>erosion</strong>, land and water pollution.</td>
<td>• Overly strict regulations could prevent investment in factories and offices</td>
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As environmental concerns have become global rather than just national issues, global organisations like the United Nations have stepped in to put forward global solutions. Getting many countries to agree is very difficult, as the 1997 **Kyoto Protocol** proved – see page 143 for details.

**Examples in your textbook which could help you prepare for this include:**
Section 3.7 – ways of conserving the biosphere e.g. RAMSAR
Section 4.8 – the development of small-scale solutions to problems of water supply
Section 10.7 – how governments encourage the development of renewable energies

**Questions to think about**
1. Can conservation, such as national parks and tropical forest reserves, deliver economic development as well as conservation?
2. If humans continue to emit large amounts of greenhouse gases and this causes global warming, could this have economic costs?
Key Idea 5 – Achieving sustainable development requires funding, management and leadership

Even when a government has decided to adopt policies that favour sustainable development and environmental sustainability, there can be problems. New policies need to be funded (mostly from taxes) and managed so that people are not negatively affected.

For some important sustainability issues it is NGOs, pressure groups and environmentalists rather than the government that lead the way. They launch campaigns to try and persuade the public, governments and business to change their attitudes and actions.

Even celebrity chefs like Jamie Oliver have played a role in bringing the issue of overfishing and the waste from fishing ‘bycatch’ to the public’s attention.

Examples in your textbook which could help you prepare for this include:
Section 2.9 – how Egypt is threatened by climate change
Section 3.8 – encouraging the sustainable management of ecosystems
Section 10.9 – education for recycling and UK government energy grants
Section 10.10 – the development of renewable energies and technologies

Questions to think about
1. What actions would the UK government need to take if global warming meant sea levels rose by 1 m and rainfall decreased by 20%?

2. How important is education in persuading the public that they need to lead more sustainable lifestyles?
Key Idea 6 – Physical processes and environmental changes increasingly put people at risk

Many people across the world are vulnerable to physical processes:

- Tectonic plate boundaries generate earthquakes, volcanic eruptions and sometimes tsunamis
- Climate change is likely to mean rising sea levels, and possibly more floods and tropical storms

Developing world megacities, with large concentrations of people on low incomes, are particularly at risk from tectonic and climate change hazards.

Check your understanding
How could climate change affect rapidly urbanising cities in the future?

Examples in your textbook which could help you prepare for this include:

Sections 1.7 and 1.8 – living with the threat of earthquake hazards and how these can be managed
Section 2.8 and 2.9 – the changing climate and risks posed to the UK and to the African continent
Section 4.4 – living with chronic water shortage in the Sahel

Questions to think about
1. Which groups of people are most vulnerable to climate change and tectonic hazard risks?
2. Should governments plan for the maximum or minimum global warming projections you studied in Unit 1?