What is meant by development?

**KEY TERMS**

**Development** – the use of resources and the application of available technology to improve the standard of living within a country.

**Environmental impact assessment** – a document required by law in many countries, detailing all the impacts on the environment of a project above a certain size.

**Quality of life** – this term sums up all the factors that affect a person’s general well-being and happiness.

**Sustainable development** – development that meets the needs of the present without harming the ability of future generations to meet their own needs.

Development occurs when there are improvements to individual factors making up the quality of life. For example, development occurs in LEDCs when:

- a new well is dug and a pump supplied to bring clean water to a village for the first time. Benefits will include improvements to health, and the fact that people will no longer have to walk long distances to collect water
- local food supply improves due to new investment in machinery and fertilisers
- the electricity grid extends outwards from the main urban areas to rural areas
- a new road or railway improves the accessibility of a remote province.
Measuring Development

- Development can be measured by wealth,
  - Richer countries are known as MEDCs (More economically developed countries, such as the UK)
  - Middle income countries are known as NICs (Newly Industrialised countries, such as India)
  - Poorer countries are known as LEDCs (Less economically developed countries such as Bangladesh)
- Development can be measured by HDI (Human Development Index)
  - This is a combination of:
    - Life expectancy (how long you're expected to live in a country)
    - Adult literacy (% of over 15s who can read and write)
    - GNI (Gross National Income, how much people earn on average)
- Development can be measured by Happiness!
  - They use this measure in Bhutan!
- Development can be measured by literally hundreds of other little factors such as:
  - Mobile phone use
  - Calories consumed
  - Birth rate/Death rate
  - Infant mortality rate
- Development can be measured by Quality of life
Aid

Types of Aid:

- **Bilateral aid**
  This is aid given from one country to another, in the form of money, goods or services.

- **Multilateral aid**
  This is aid which comes from several different countries - often through international agencies such as the World Bank.

- **Tied aid**
  is gifts of money, goods or services that come with conditions attached. For example, the recipient country may have to agree to spend the money in particular ways, introduce specific economic reforms, allow companies from the donor country to set up or sell goods in the recipient country, spend the money on goods and services from the donor country. Both bilateral and multilateral aid may be tied in this way.

- **Non-governmental aid**
  This comes from NGOs such as Save the Children, UNICEF and Oxfam, which provide money and professional support paid for by donations from members of the public across the world. This type of aid is less likely to come with any conditions attached.

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**Pergau Dam Case Study**

Tied aid is now illegal in the UK following the UK funding of a hydroelectric dam on the Pergau River in Malaysia in 1991. The Malaysian government bought around £1 billion worth of arms from the UK at the same time.

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**What's the difference between short term and long term aid?**

**Short-term aid** deals with emergencies such as the tsunami that devastated parts of Asia on Boxing Day 2004. Other disasters requiring short-term aid are earthquakes, hurricanes, flooding, drought, and wars. This type of aid brings immediate help to people - flying in food
to prevent starvation, tending the injured and sick, and trying to prevent the spread of disease.

**Long-term aid** is required where problems are deep-rooted or cyclical. For example, the climate in some parts of Africa means that drought commonly occurs. This requires long term development to try to prevent water shortages - for example sinking a well and providing a village with a water pump so it can have permanent access to underground water.

Of course, many disasters that require short-term aid also need long-term aid - for example, to rebuild houses and work-places that have been destroyed, or to provide seeds to farmers so that food can be grown the following year.

**Aid has to be sustainable to work**

If one leg of the stool is too long or too short, the stool won't stay standing and it won't be sustainable.
WaterAid’s programme in Mali began in 2000 and it now works with seven partner organisations providing water, sanitation and hygiene support to communities in five out of Mali’s eight regions (Tombouctou, Gao, Mopti, Segou and Koulikoro) and in the capital city, Bamako.

Communities are involved in all stages of these projects, from the planning through to building, maintenance and management.

In urban areas our partners are helping to establish communal tapstands that are linked to the city’s main water supplies. Community members pay a small amount to buy their water and this is used to pay for the upkeep of the water point and for the wages of trained community members who manage it.

In rural areas WaterAid’s projects focus on helping communities to deepen and protect hand-dug wells and fit them with either handpumps or buckets and windlasses to ensure that the water is not contaminated. Where possible broken handpumps are also mended.

The Malian Government has been extremely supportive of WaterAid’s work. Credit: WaterAid / Daniel O’Leary Sanitation schemes include household latrines and school sanitation blocks.

Hygiene education is carried out in a variety of ways - one approach is community soapmaking through which women not only earn money and a new skill but also encourage good hygiene among their communities. The simple act of washing hands with soap and water at key times - such as after going to the loo and before eating - can reduce diarrhoeal diseases by over 40%.

Revolving credit schemes have also been introduced to communities and these enable women to buy buckets with lids which prevent water from becoming contaminated on the journey home.

WaterAid aims to target the most vulnerable sections of society in Mali - the poorest and the most marginalised, including women, the elderly, disabled and those living with HIV/AIDS. To assist with this, research into gender was carried out in 2005 and a project has also been developed to work with disabled people.

The vulnerability ranking system, initiated by WaterAid in Nigeria, has also been introduced in Mali to ensure projects are equitable. This system enables communities to decide how much each member pays...
THEME B

How and why are there variations between the employment structures of different countries?

**Employment structure**

- This means, the proportion of people in a country who work in each of the 4 job types:
  - Primary: a job collecting raw materials from the land or the sea such as a fisherman, miner or farmer
  - Secondary: a job making things from the raw materials such as a baker, factory worker
  - Tertiary: a job providing a service such as a mechanic, doctor or teacher
  - Quaternary: a job in research and development, such as finding a cure for cancer
- Work can also be described as informal and formal
  - Informal work, no set salary, more likely in LEDCs, making money however you can, no formal employer such as shoe shiner, rubbish tip sorter
  - Formal work, formally employed, monthly salary such as a teacher or a nurse
- We would expect to see differences in employment structures relating to development
  - LEDCs would have more primary workers
  - NICs would have more secondary workers
  - MEDCs would have more tertiary workers
- We would expect to see employment structures of countries change as they develop more

**LED Cs**

People in the poorest countries of the world are heavily dependent on the primary sector for employment. Most of these people will work in agriculture and many will be **subsistence farmers**. In some areas where the population is very high and the amount of land is very limited, there will not be enough work available for everyone to work a full week. The work available is often shared and people are said to be underemployed.

In some regions of LEDCs, primary industry may dominate the economy. Work in mining in LEDCs is often better paid than jobs elsewhere in the sector, but the working conditions are often very harsh. In poor countries, higher paid jobs in the secondary, tertiary and quaternary sectors are usually very few in number. The tertiary jobs that are available are often in the public sector. Public sector jobs such as teaching, nursing and refuse collection are paid for by the government.
NICs

In NICs, employment in manufacturing has increased rapidly in recent decades. NICs have reached the stage of development whereby they attract foreign direct investment from multinational companies (MNCs) in both the manufacturing and service sectors. The business

The increasing wealth of NICs allows for greater investment in agriculture. This includes mechanisation, which results in the falling demand for labour. So, as employment in the secondary and tertiary sectors rises, employment in the primary sector falls. Eventually, NICs may become so advanced that the quaternary sector begins to develop. Examples of NICs where this has happened are South Korea, Singapore and Taiwan.

MEDCs

MEDCs are often referred to as 'post-industrial societies' because far fewer people are now employed in manufacturing industries than in the past. Most people work in the tertiary sector, with an increasing number in the quaternary sector. Jobs in manufacturing industries have fallen for two reasons:

- many manufacturing industries have moved to take advantage of lower costs in NICs. Cheaper labour is often the main attraction, but many other costs are also lower
- investment in robotics and other advanced technology has replaced much human labour in many manufacturing industries that remain in MEDCs.
This sector model is also known as the Clarke Fisher model and it shows the changing employment structures of countries over time.

**KEY TERMS**

**Foreign direct investment** – overseas investments in physical capital by MNCs.

**Multinational companies (MNCs)** – firms that produce goods in more than one country.

**Subsistence farming** – the most basic form of agriculture where the produce is consumed entirely or mainly by the family who work the land or tend the livestock. If a small surplus is produced it is sold or traded.

**Outsourcing**

A major change in employment has been the increase in **outsourcing**. Companies do this to save money. Work can be outsourced to companies in the same country or it can go abroad where labour and other costs are much lower. For example, many British and American companies have outsourced their call centres to India.
THEME C

What determines the location of different economic activities?

Locational factors of differing economic activity

- Climate
- Site
- Ready Built accommodation
- Similar companies nearby
- Market
- Labour
- Capital
- Access
- Industrial Inertia
- Universities
- Energy
- Water and Electricity supply
- Quality of life
- Raw Materials
- Component suppliers
- Energy
- Government influences

Look in your exercise book, you have information on how each of these factors affects the location of industry for primary, secondary and tertiary industries.
Zambia Copper mining (primary industry)- locational factors...

<table>
<thead>
<tr>
<th>Social locational factors</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>- a large willing workforce</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Economic locational factors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Investment by a Chinese Company in the mine</td>
<td></td>
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<tr>
<td>- Cheap labour by locals</td>
<td></td>
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<tr>
<td>- Electricity supply for the mine</td>
<td></td>
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<tr>
<td>- There is a global market for copper as it is used in all wiring</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental locational factors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Copper ore found under the surface of the earth</td>
<td></td>
</tr>
<tr>
<td>- driving distance from Dar Es Salaam and Cape Town for global export</td>
<td></td>
</tr>
</tbody>
</table>

You will find notes on the effects of this mine in your exercise book
In your book you have a table of social, economic and environmental factors that caused Cambridge Science Park to locate where it did.

Here is a small selection

Social:
- close to Cambridge for pubs etc
- a large selection of well qualified people from Cambridge University to employ
- Greener than London, more open spaces, landscaped gardens at the park

Economic
- only 50 minutes train journey from London for important meetings
- Cheaper housing than in London

Environmental
- Short commute from Cambridge
- Greener site
THEME D

How do multinational companies affect development?

- **MNC (multinational company)** - A corporation that has its facilities and other assets in at least one other foreign country. Sometimes referred to as transnational corporation.

## Nike - a multinational company

Use your notes from the 2 videos to indicate the positive and negative effects of Nike (a multinational company) on global development.

### The positive effects of MNC investment

Foreign direct investment by MNCs can bring a number of advantages to the countries in which they operate. This is why most countries encourage MNC investment. The location of a new MNC factory can create a large number of jobs. While wage levels vary, they are usually higher than those paid by local companies. If a number of MNCs locate in an NIC or LEDC the effect can be to (a) develop a much wider range of skills in the local population and (b) set off the multiplier effect. As most MNC production will be exported, this will benefit the host country's trading position.

### The potential disadvantages of MNC investment

A concern of many NICs and LEDCs is the speed with which MNCs can close factories in one country and open up in another. Because such factories may employ thousands of people, a closure can have a huge negative impact on the local economy. This is always a worry if a country or region relies on a small number of MNCs for employment. There is a danger that countries can become too dependent on MNCs. In some countries, MNCs may be so important to the economy that they can influence government decisions. Critics see this as being anti-democratic. The cultural impact may be of concern too. When MNCs come into a poorer country they bring aspects of ‘Western’ culture. Islamic countries in particular seem concerned about this.
How can economic activity affect the physical environment at a variety of scales including global.

This graph shows how as countries become more developed they produce more pollution until a certain point where pollution levels go down. (you have notes in your book that give you the reasons why)
Aral Sea - economic development vs environmental impact

This case study is an example of when an industrial activity caused environmental damage. In the 1970s Russia took water from 2 rivers feeding the Aral Sea in Kazakhstans/Uzbekistan. This water was used to irrigate cotton crops which provided cotton for 70% of Russia's needs. However, the water then was not reaching the sea which devastated the local area.

Socially:
- People could not fish anymore, they lost their jobs
- Increased levels of dust caused many health problems, particularly babies

Economically:
- no work, people had very little money or food

Environmentally:
- the area became hotter (with the reduced water)
- Increased dust storms
- Salt in the soil meant growing crops was hard

YOU HAVE MUCH MORE DETAILED NOTES IN YOUR BOOK THAT YOU WILL NEED TO USE FOR REVISION OF THIS CASE STUDY.
Climate Change

Economic activity can be a direct cause of climate change. You need to know the causes, consequences and solutions of this.

The causes of climate change

The greenhouse effect

Global warming occurs because of the greenhouse effect of the Earth’s atmosphere. Climatologists calculate that without these greenhouse gases, the average temperature of the earth would be 33°C lower than it actually is today.

Human activity has significantly increased the amount of greenhouse gases in the atmosphere and this has caused temperature to rise more rapidly than ever before. As the economies of China, India and other NICs expand even further, greenhouse gas emissions will continue to increase.

![Image](https://example.com)
As humans, we contribute to climate change with the following gases:

The greenhouse gases are:

- **Carbon dioxide**: accounts for the largest share of greenhouse gas. It is produced by burning fossil fuels in power stations, factories and homes. Vehicle emissions are also a major source. CO$_2$ is also released into the atmosphere by deforestation and the burning of rainforests.

- **Methane**: released from decaying plant and animal remains and from farms (particularly from cattle and rice padi fields). Other sources include swamps, peat bogs and landfill sites.

- **Nitrous oxides**: from power stations, vehicle emissions and fertilisers.

- **Chlorofluorocarbons**: the main sources are aerosols, refrigerators, foam packaging and air conditioning.

- **Ozone**: from vehicle emissions.

The consequences of climate change can be summarised by this list:

- **Rising Sea levels**
  - By thermal expansion
  - By melting of ice caps
- **Growth of the tropical belt**
- **Changing patterns of rainfall**
- **Declining crop yields**
- **Impact on wildlife**

(For more detail on these see pages 202 and 203 of the textbook or CDrom)
**The solutions to climate change**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Currently available</th>
<th>Available by 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy supply</td>
<td>Improved supply and distribution efficiency; switching from coal to gas; nuclear power; renewable energy</td>
<td>Carbon capture and storage for fossil fuel generating facilities; advanced nuclear and renewable energy</td>
</tr>
<tr>
<td>Transport</td>
<td>Higher fuel efficiency; hybrid vehicles; cleaner diesel vehicles; biofuels; shifts to rail, public transport and bicycles</td>
<td>Higher-efficiency biofuels; higher-efficiency aircraft; more powerful and reliable electric/ hybrid vehicle batteries</td>
</tr>
<tr>
<td>Industry</td>
<td>Heat and power recovery; recycling and substitution of materials; control of emissions</td>
<td>Technological changes in the manufacture of cement, ammonia, iron and aluminium</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Management of land to increase carbon stored in soil; dedicated energy crops to replace fossil fuel use</td>
<td>Improvement of crops yields; reductions in emissions from some agricultural practices</td>
</tr>
<tr>
<td>Forests</td>
<td>Increase in forested area; use of forestry products for bioenergy to reduce fossil fuel use</td>
<td>Tree species improvement to increase biomass productivity and therefore carbon capture</td>
</tr>
</tbody>
</table>