



Reliable Resources



A **resource** is something we **use** which has a **purpose**.

The 3 most important resources to human development are food, energy and water (FEW).

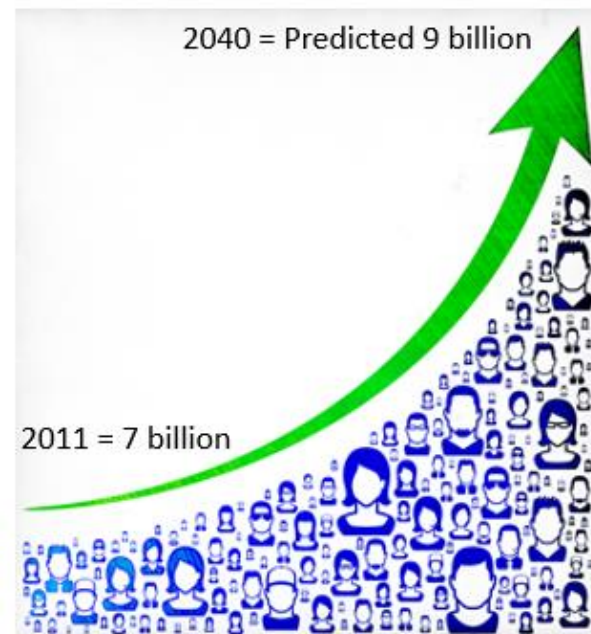


Key point: Access to resources per person is decreasing because demand outweighs the supply.

Carrying capacity = The maximum number of species that can be supported on our planet.



1. Rising Population More people = more resources



2. Economic Development

People are getting wealthier, especially in EDCs which leads to increasing **consumption**.



More **disposable income** = higher demand for more varied food, bigger housing, more luxuries and travelling



Increased energy use



Increased water use



Increased demand for one resource can increase demand for another. E.g. More people = more food to be grown = more water to stimulate growth.

Factors affecting access to resources:



Climate- Some countries have very low rainfall which limits water supplies, reducing how much food they can grow, often leading to reduced crop yield and a shortage in food supply. E.g. flooding or droughts.

Geology- Some countries don't have reserves of fossil fuels such as coal and oil, and may not have a suitable landscape for generating renewable energy from, e.g. wind or hydropower.

Conflict- War can disrupt the transport of resources, e.g. by damaging roads, water pipes or power lines. Fighting can damage agricultural land making it more difficult to grow enough food. Conflict also makes it difficult to import food because trade routes are disrupted and political relationships with supply countries may break down.

Poverty- People living in poverty often can't afford to buy food and don't usually have their own land where they can grow food. Poverty also affects people's ability to farm the land effectively as they may not be able to afford the fertilisers and pesticides they need. Some countries also can't afford farming machinery.

Natural Hazards- Events such as tropical storms, earthquakes and volcanic eruptions can damage agricultural land and destroy infrastructure such as water pipes and power lines.



worldometers

835,711,422	Undernourished people in the world
1,674,501,934	Overweight people in the world
727,803,561	Obese people in the world
19,306	People who died of hunger today

3,004,647,535	Water consumed this year (million L)
225,126	Deaths caused by water related diseases this year
870,578,746	People with no access to a safe drinking water source

247,679,575	Energy used today (MWh), of which:
200,619,365	- from non-renewable sources (MWh)
47,060,210	- from renewable sources (MWh)
1,849,245,996,598	Solar energy striking Earth today (MWh)
60,529,355	Oil pumped today (barrels)
1,547,434,089,995	Oil left (barrels)
16,138	Days to the end of oil (~44 years)
1,103,584,635,062	Natural Gas left (boe)
58,083	Days to the end of natural gas
4,328,311,079,004	Coal left (boe)
149,252	Days to the end of coal

What is the distribution of world energy consumption?

Figure 5- Annual consumption per person (millions of British thermal units)

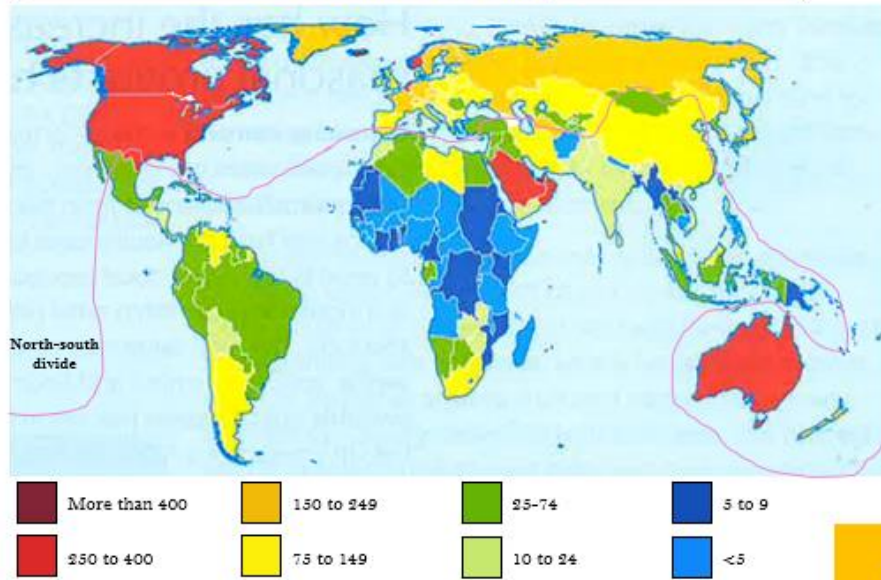


Figure 6-Reasons for increasing use

The demand for essential resources has grown over time as we develop new processes, new products and change our way of life. As LIDCs and EDCs develop industrially and economically, their demand for resources has grown too. For example as industry has grown in China, energy consumption has increased with it.

Challenge: What will be the impact of future LIDC economic development? (Refer to 'disposable income'.

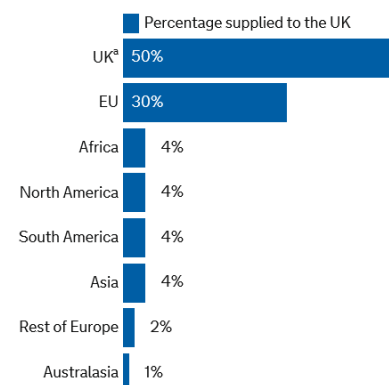
Grades 1-3 You describe the distribution of average energy consumption per person for a few countries.	Grades 4-6 You describe the distribution for specific countries, using facts and statistics.	Grades 7-9 You do all of securing plus offer reasons for the distribution.
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Describe and explain the distribution of world energy consumption (6 marks)

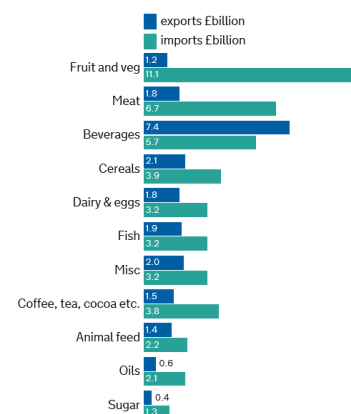
Food miles = The distance food has been transported to the market.

Carbon footprint =The amount of carbon dioxide produced during both growing and transporting the crop to market.

% of UK food from different continents

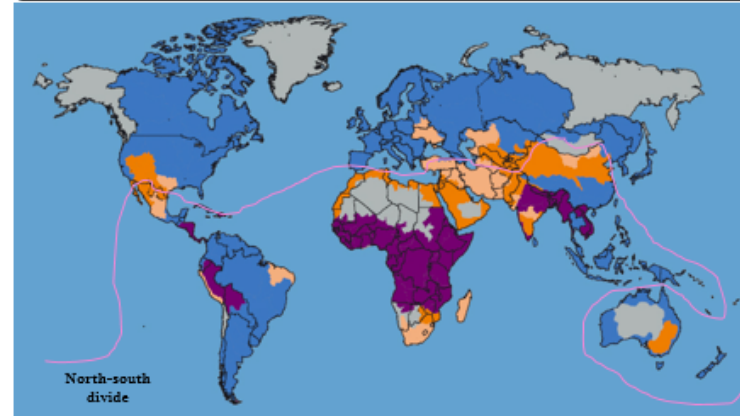


UK Imports and Exports



What is the distribution of water across the world?

Figure 1- Areas of physical and economic water scarcity



Abundant water resource relative to use, with less than 25% of water from rivers withdrawn for human purposes.

Water extraction exceeds sustainable production. More than 75% of the river flows are withdrawn.

>60% of river flows are withdrawn. These locations will experience future physical water scarcity.

Financial capital limits access to water, even though water in nature is available to meet the demands.

Describe and explain the distribution of physical and economic water scarcity (6 marks)

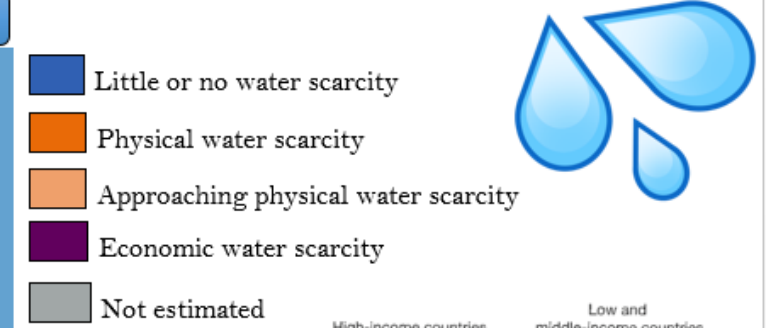
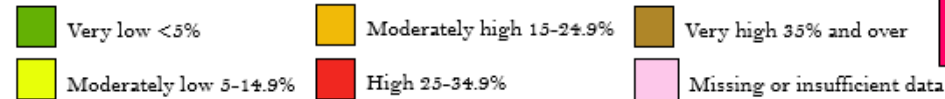
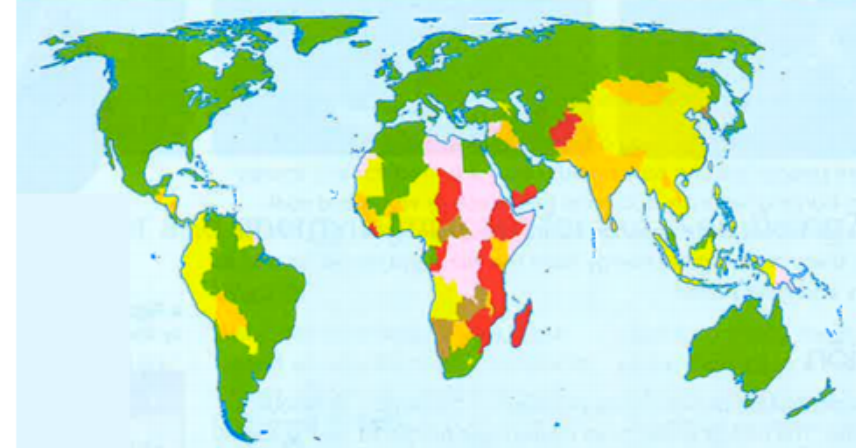


Figure 2- Water use

Grades 1-3 You describe the distribution of physical and economic water scarcity.	Grades 4-6 You describe the distribution shown using specific facts and statistics in support.	Grades 7-9 You offer reasons for the distribution using the pie charts of figure 2.
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What is the distribution of world undernourishment?

Figure 10- Prevalence of undernourishment in the population in 2014-15 (percent)



Grades 1-3 You describe the distribution of undernourishment across the world.	Grades 4-6 You describe the distribution shown using specific facts and statistics in support.	Grades 7-9 You offer reasons for the distribution using your own geographical knowledge.
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TASK: Describe and the distribution of undernourishment across the world.



Answer structure:

- A description of the main pattern of undernourishment- even or uneven?
- Reference to specific continents and countries.
- Compare ACs/EDCs and LIDCs.

Challenge: What do you think will happen in the future and why?

