

6.10 UK Water Supply Problems

Rainfall
imbalance

Slide 5

Ageing
infrastructure

Slide 6

Seasonal
imbalances

Slide 7

6.10 Emerging and Developing Country Supply Problems

Access to only
untreated
water.

Slide 8

Pollution of
water courses

Slide 9

Low annual
rainfall

Slide 10

6.11 Stakeholder views on water

Stakeholder – Someone who has an interest in what occurs.

LEARNING OBJECTIVE

To study how meeting the demands for water resources could involve technology and interventions by different interest groups.

Learning outcomes

- ▶ To know how attitudes to the exploitation and consumption of water resources vary with different stakeholders.
- ▶ To understand how technology can resolve water-resource shortages.

KEY TERMS

Desalination – the removal of minerals from salt water to make it drinkable.

Attitudes to the exploitation and consumption of water resources vary with different stakeholders



Head of Coca-Cola, India

If we are to keep our plants working efficiently and provide jobs for the local people, we need to use a lot of water. It is not our fault if this has to come from ground water sources; we have a business to run.



Government of India

The factories in our country will close if there are water shortages. We need to look after the welfare of our people and conserve water for domestic use.

Many countries in the world are short of water. We need to conserve water and use it sensibly if there is to be enough to go round.



Water Aid campaigner

We need to irrigate our crops so that we can make a profit and, of course, provide enough food for the people of America.



Farmer in Arizona, USA

I need to dam the river if I am to create enough energy. It cannot be helped if this stops the river flooding, which used to provide irrigation water for the farmers downstream.



HEP producer

Figure 13.19 Different views on the exploitation and consumption of water resources.

If we keep using ground water supplies at the present rate there will soon be none left. We have to start to conserving our water supplies or there will be severe water shortages in dry years.



Mayor of London

They keep going on about water shortages. I cross the Thames every day on the way to work and there seems to be plenty of water in it. What about all the floods that happened last year?



London resident

Stakeholder	Reason for viewpoint
Head of Coca Cola India	
Government of India	
Water aid campaigner	
Farmer in Arizona	
HEP (Hydro electric power) producer	
Mayor of London	
London resident	

Explain why different stakeholders have different views on water consumption (3 marks)

Use Slide 15 to complete this sheet.

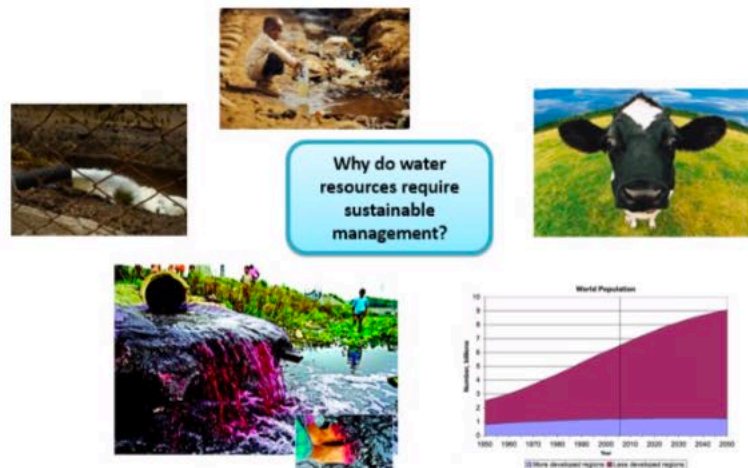
Define **desalination** (1)

Use two colours to identify the positives and negatives of desalination

Its method is proven and effective.	It is not dependent on changing factors (e.g weather—it just relies on sea water)	Plants could produce high amounts of greenhouse gas emissions, which means that that the process of removing salt from seawater can be very harmful to the environment
Its plants are expensive to build.	More electricity and energy is required to produce water from desalination than any other water supply	Desalination is backed up by scientific data and is highly understood.
It has the massive amount of ocean water as source.	Salt in the water is needed to be removed—a process that produces brine that is so rich in salt that it can contaminate any environment where it is placed	It is a costly process. For the average desalination plant these days, it takes 2 kilowatt hours of energy in order to produce 1 cubic meter of fresh water.

Suggest reasons why desalination may not be the most effective solution to the global water problem (3)

Use slide 16 to add detail to the mind map.



B. Different views held by individuals, organisations and governments on the management and sustainable use of water resources.



Stakeholder	Attitudes on the management and sustainable use of water resources
Government of China	I need to irrigate my crops or harvest will fail and I will make no money. I am pleased I have been taught new methods to irrigate my crops.
Chinese farmer	We need to work together to integrate water management so that we can get the most out of each river catchment areas.
UK resident	My life is so much better since the government provided me with piped water
Conservationist, UK	We are working hard to replace old Victorian water pipes to reduce the amount of leaks.
African villager	Why should I not use as much water as I like. It never stops raining here!
Water company spokesperson	We need to provide fresh water for our people but will there enough to go around as our population is still growing.