

# Water futures

The future of water supply is unknown due to the unknown effects of climate change. Below are the likely impacts of climate change on water supply:

- Increased evaporation due to increased global temperatures
- Eustatic sea level rise means that salt water incursion of aquifers by the coast is more likely
- In the future there may be changes due to our current understanding of climate weather systems changing e.g. the monsoon rain season may change in the future
- Increased demand due to population growth, with supply reducing. This will limit irrigation and thus food production
- Increased precipitation due to the increased evaporation rate may mean that areas become wetter than they were before.

## Scenarios for water supply by 2025

There are 3 different scenarios that could occur by 2025 which would change the future of water supply, these are:

<b>Scenario</b>	<b>Changes to supply by 2025</b>	<b>Impacts</b>
<b><i>Business as Usual</i></b>	<ul style="list-style-type: none"> <li>- Increasing scarcity will reduce food production</li> <li>- Population growth and development will mean that consumption will rise by around 50%</li> <li>- Household use will increase by around 70% due to better standards of living and sanitation</li> <li>- The development of NICs and LEDCs will increase water usage through industry and manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>- The energy security of some countries will fall if they rely heavily of HEP</li> <li>- The limited irrigation will mean that food production falls. As a result the demand will be greater, increasing prices</li> <li>- Overabstraction will occur faster than the water can be recharged harming the environment and ecosystems</li> </ul>
<b><i>Water Crisis</i></b>	<ul style="list-style-type: none"> <li>- Global consumption will increase due to population growth and development</li> <li>- Irrigation will increase significantly due to the need for more food</li> <li>- Industrial demand for water will increase by 33% due to the development of countries e.g. LEDCs</li> </ul>	<ul style="list-style-type: none"> <li>- The increased consumption will mean that overabstraction will increase and thus may cause ecosystem death</li> <li>- There may be increased migration and thus climate refugees</li> <li>- The price of water will rise due to increasing shortage meaning that some people won't be able to afford it</li> </ul>
<b><i>Sustainable Water</i></b>	<ul style="list-style-type: none"> <li>- Global water consumption in domestic and industrial use will fall significantly.</li> <li>- Development of crop technology will mean that grain won't need as much water</li> <li>- Agricultural and household water prices double in MEDCs and triple in LEDCs.</li> </ul>	<ul style="list-style-type: none"> <li>- Greater investment in crop technology to make crops more drought resistant</li> <li>- Lower amount of abstraction will may therefore mean that there are less conflicts over water</li> <li>- Increased number of laws which dictate the amount of water that can be used domestically and industrially</li> </ul>

