



Office of the Chief Scientific Adviser

# “Science policy success” conference

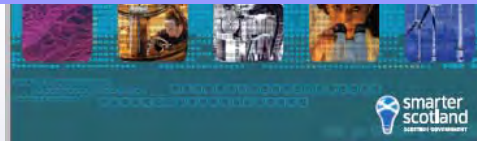
Professor Anne Glover  
Chief Scientific Adviser for Scotland



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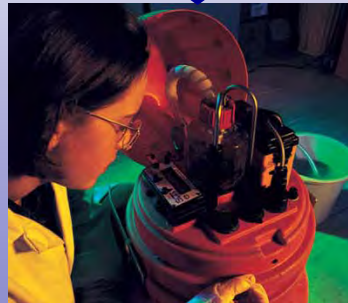


**Putting science, engineering and analysis at the heart of Government policy making**

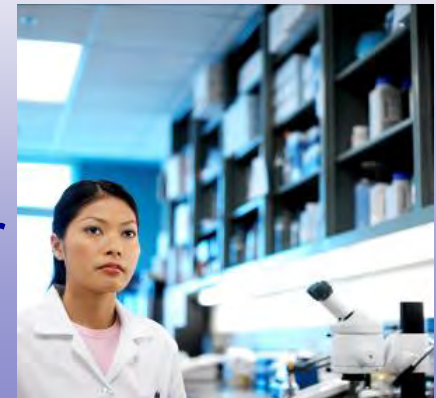


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Smarter



Healthier

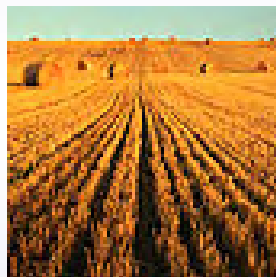


Safer and Stronger



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## Government policy programmes are more defensible and more likely to be successful if they are underpinned by a robust evidence base



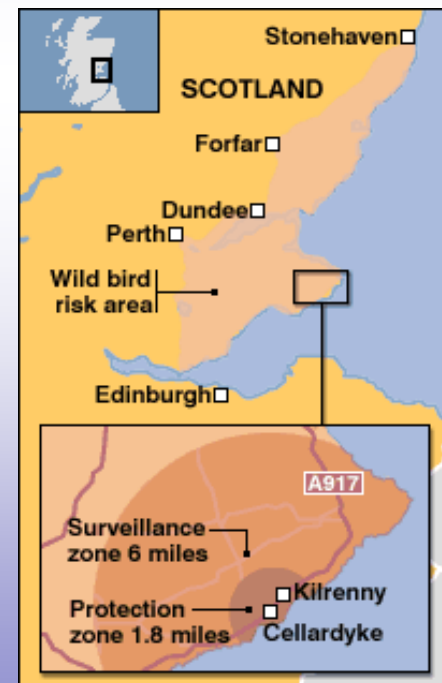
Land Capability



Blue Tongue



Invasive Species/Plant Health



Bird Flu

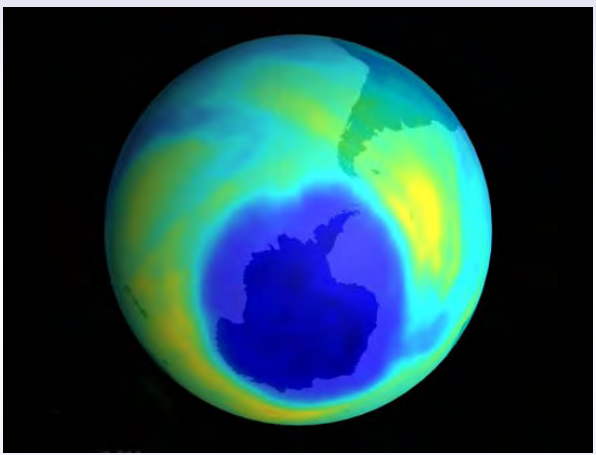


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# Global challenges



↑ Urbanisation



Climate Change



Alleviating poverty



↑ Energy demand



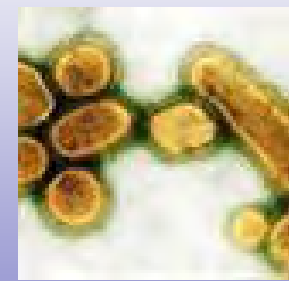
↑ Water demand



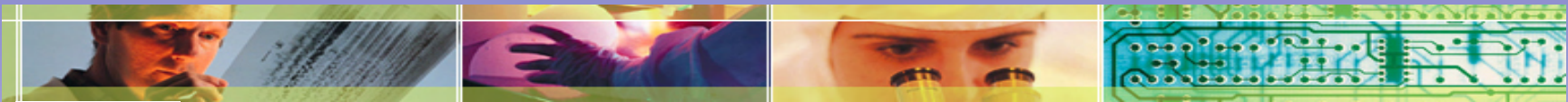
Food security



↑ Population

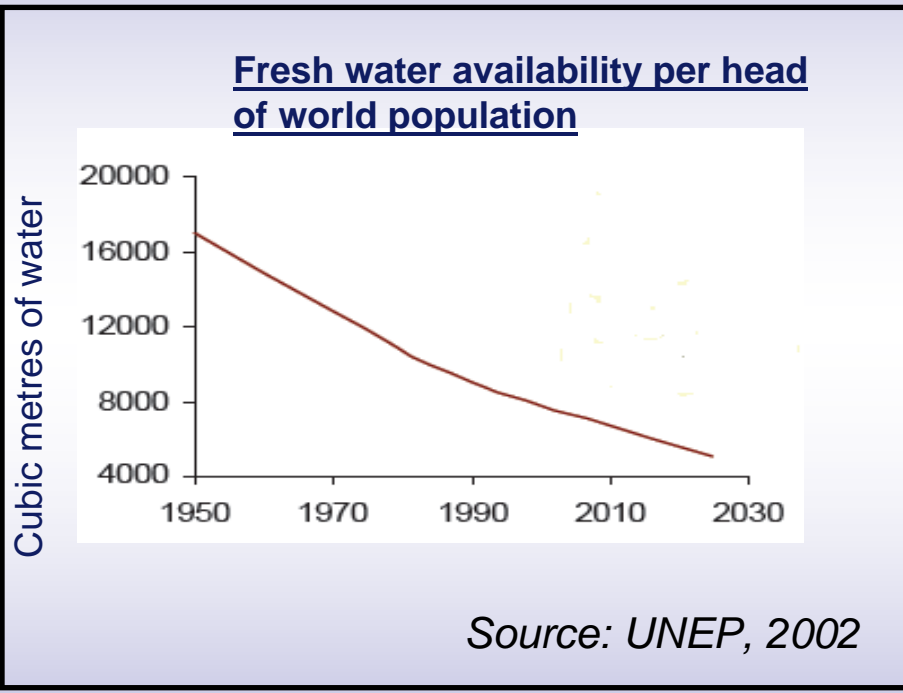


↑ Infectious Diseases



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# Global challenges



**It takes...**

<b>10</b> liters of water to make one sheet of <b>PAPER</b>	<b>40</b> liters of water to make one slice of <b>BREAD</b>
<b>70</b> liters of water to make one <b>APPLE</b>	<b>80</b> liters of water per dollar of <b>INDUSTRIAL PRODUCT</b>
<b>91</b> liters of water to make one pound of <b>PLASTIC</b>	<b>120</b> liters of water to make one glass of <b>WINE</b>
<b>140</b> liters of water to make one cup of <b>COFFEE</b>	<b>1,300</b> liters of water to make one kilogram of <b>WHEAT</b>
<b>4,800</b> liters of water to make one kilogram of <b>PORK</b>	<b>10,855</b> liters of water to make one pair of <b>JEANS</b>
<b>15,500</b> liters of water to make one kilogram of <b>BEEF</b>	<b>16,600</b> liters of water to make one kilogram of <b>LEATHER</b>

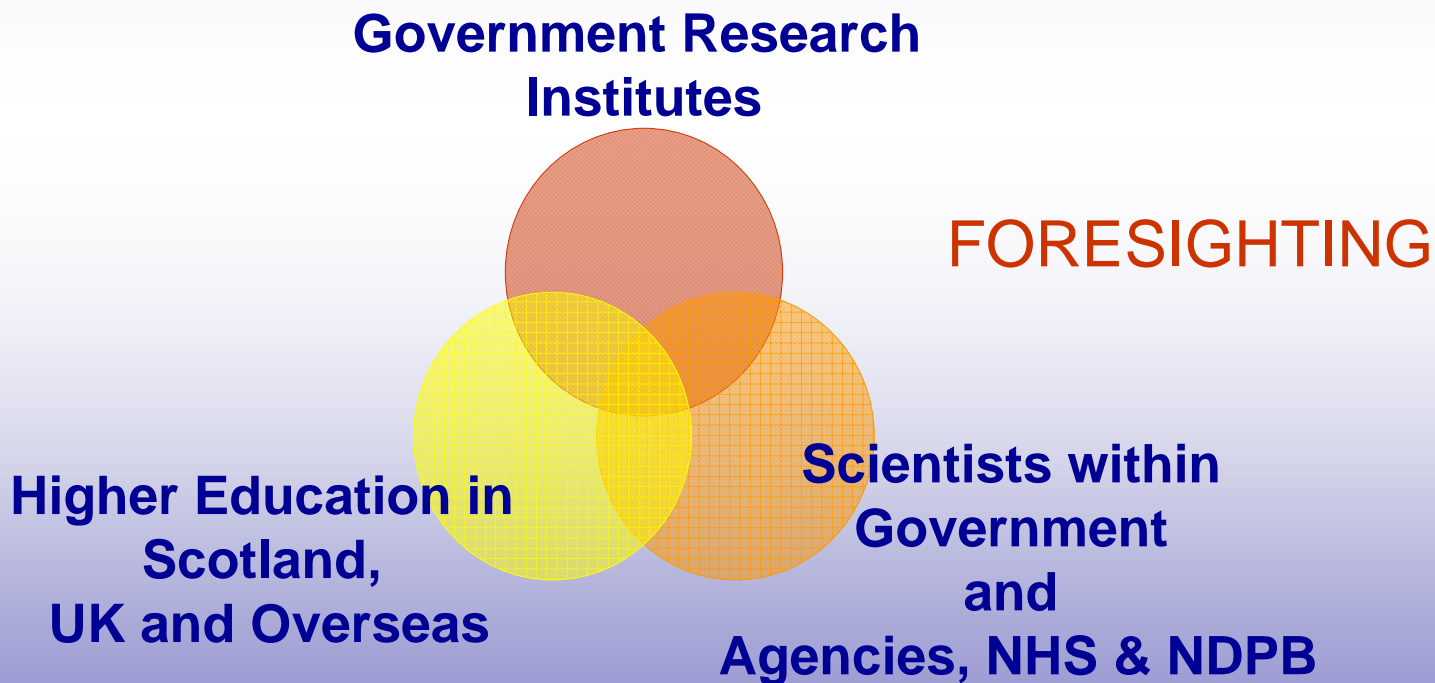
**1 in 3 people are already facing water shortages**

*Comprehensive Assessment of Water Management in Agriculture 2007*



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# Where do we get the knowledge from ? – asking the right people the right questions





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## What are the barriers?

- Communication - the complex language and technical nature of science
- Mutual respect and trust
- Sharing knowledge
- Timescales

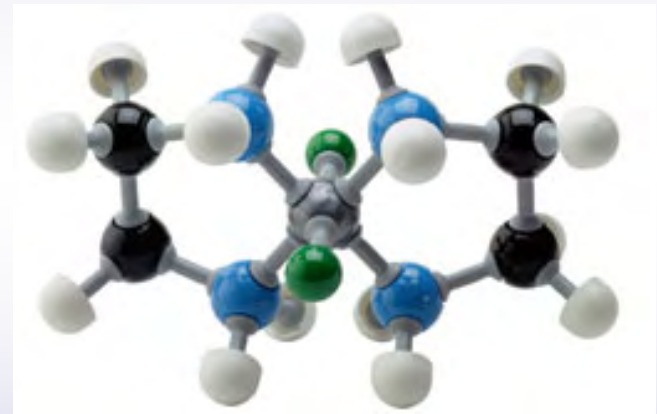




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## Making connections – *embedding science, engineering and analysis in the evidence base*

- Enhance communication
- Prioritise knowledge exchange
- Maximise collaboration and coordination
- Be imaginative in procuring evidence
- Influence policymaking with the best scientific advice



*“A little knowledge that acts is worth infinitely more  
than much knowledge that is idle” – Kahlil Gibran*



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# Thank you

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<http://www.scotland.gov.uk/Topics/Business-Industry/science/16607>