

The **co-operative** farms

Notes on Food security

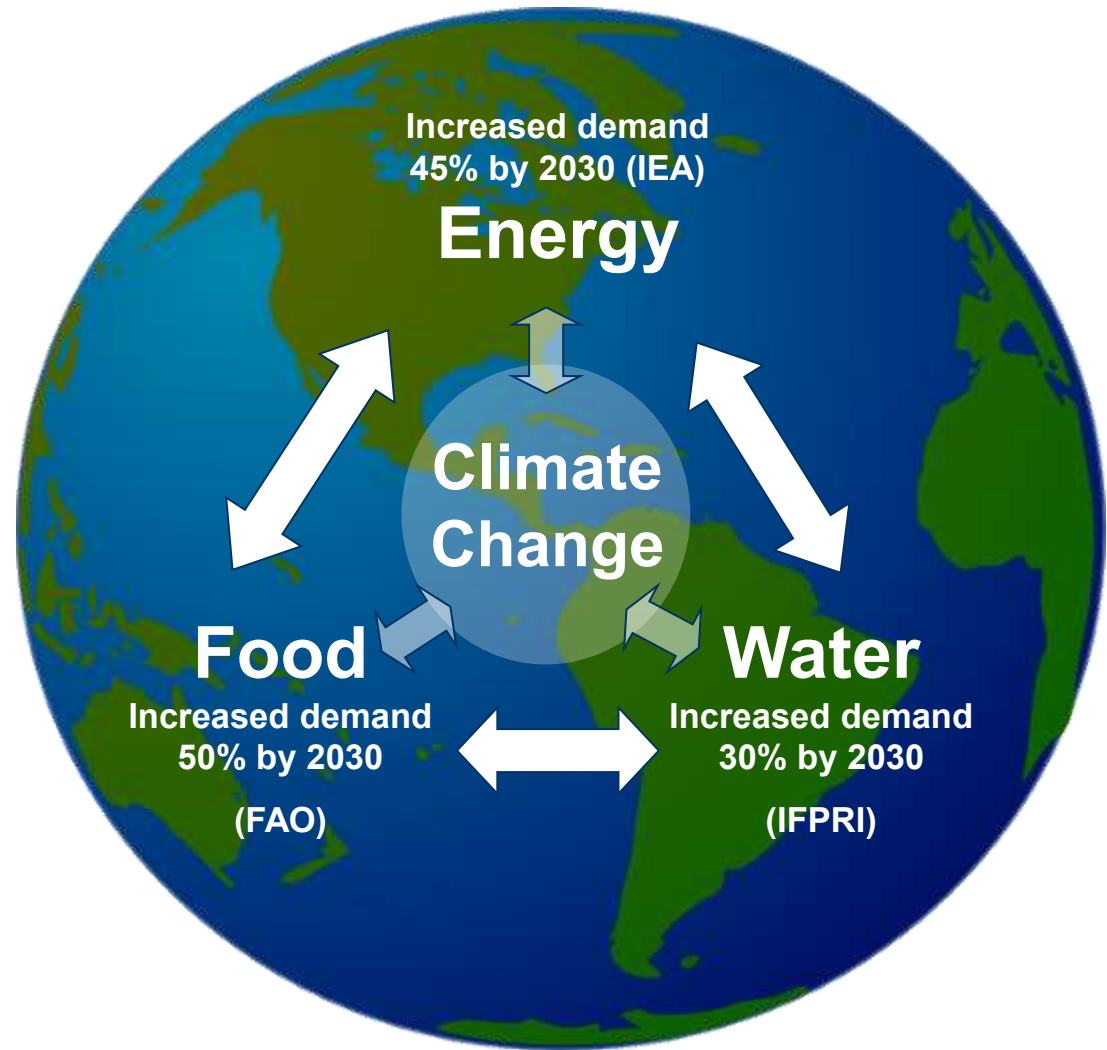
May 2011

Global Food supply

Diet	Western diets are being copied as countries (such as India and China) become more affluent. Meat and dairy rich diets are less healthy and need higher land and water resources
Population increase	Global food production needs to rise by 80% by 2050 to meet demand of approx 9 billion people with the predicted diet changes above R&D and investment is needed to improve productivity (and reduce waste of 40% to disease in field, storage, supply chain and in home)
Environment	By 2020 2/3 of population will be water stressed: agriculture is responsible for 80% of water usage and if water is short it will reduce production. There is a requirement to reduce greenhouse gas emissions, which could limit fertiliser use, which in turn reduces yields
Climate change	Southern Europe is getting hotter and drier and the north is getting wetter and warmer, with increased periods of drought. There is an increase in natural disasters and diseases are thriving with changing climates.
Energy	Modern agriculture is heavily oil dependent whether for fertilisers, farming, storage or transport. There is a global shortage of phosphates (a fertiliser). Bio-fuel demand (i.e. crops for fuel) is reducing food production area
World markets	Large areas of land (especially Africa) are owned or leased by foreign powers eg China, to secure food for themselves. Price volatility is inevitable due to low world stocks on commodities such as wheat and protectionism/trade disputes

UK govt Chief Scientist's "Perfect Storm"

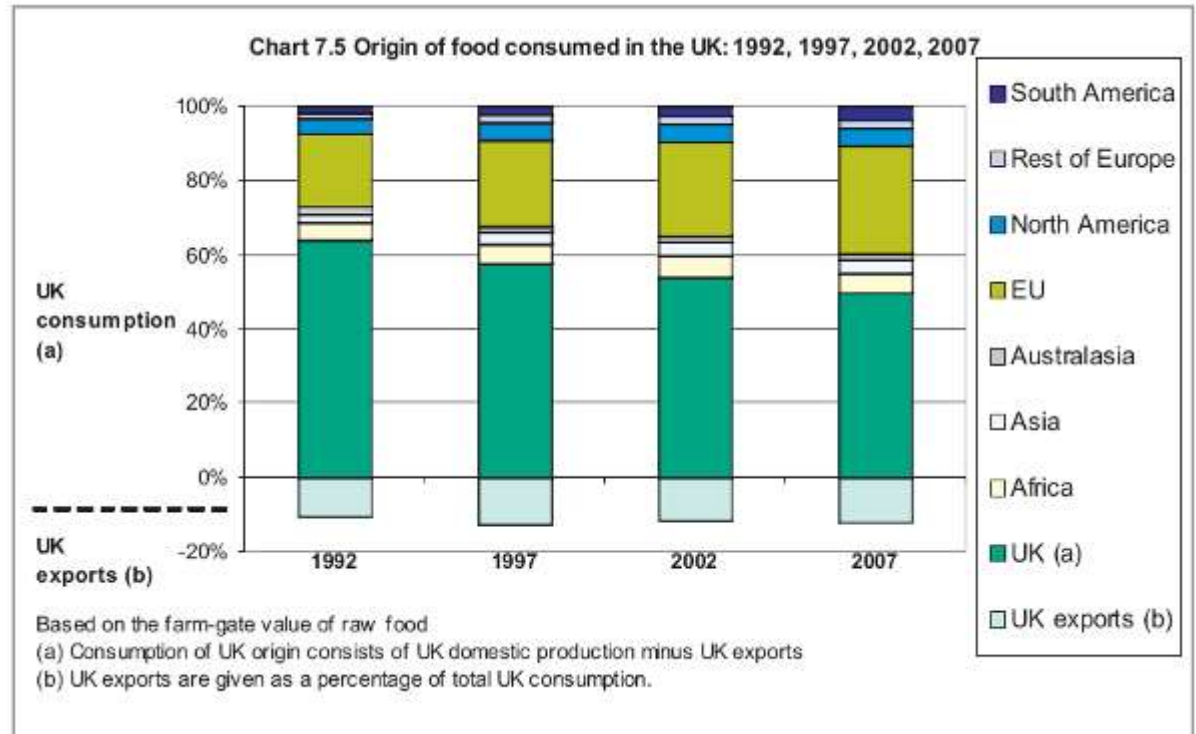
1. Increasing population
2. Changing diets
3. Losing land to urbanisation and rising sea levels



UK self sufficiency

- UK only 11% self sufficient in fruit and 58% in vegetables

- Self-sufficiency in 2008 was 60% of all food, 73% for indigenous food



Professor Sir John Beddington
UK Govt Chief Scientist
Foresight Report into the Future of Food and Farming
Feb 2011

“There is no quick fix. There is no silver bullet. The issues are all intimately related and require nothing less than a redesign of the whole food system.”

Foresight report priorities

Consumers

- Understand the magnitude of challenges to the future food system
- Make strategic choices when purchasing food
- Minimise waste
- Support government when they make difficult choices on food sustainability

Industry

- Work in partnership to develop sustainable food systems and share best practice
- Provide simple and clear food labelling so consumers can make choices
- Form and strengthen farm organisations to secure supply chains
- Promote sustainable intensification (increase yield and reduce impact)

Foresight report priorities

National governments

- Raise food up political agenda
- Remove subsidies and trade restrictions and find other ways of supporting rural communities
- Increase consumer food literacy
- Develop strategies for waste reduction, energy efficiency and GHG mitigation

EU member states

- Show global leadership on subsidy reform
- Reform CAP to encourage investment to increase competitiveness and sustainability
- Ensure governance of the food system and investment in new technologies is proportionate and evidence based
- Increase priority of food system and research