

The future of food

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A changing foodscape

- “Plenty is the medium in which our anxieties, our pleasures and even our ‘ethics’ thrive” (Harding, 2010).
- The era of endless food is winding down
- “Industrialized nations need to learn what it means to live in scarcity because the appearance of infinite abundance is an illusion” (Stuart, 2009, p xxii)



Food security: a new master frame

- Food security is one of the new master frames of early C21st public policy (Mooney and Hunt, 2009)
- Global price increases; food inflation; volatility
- “Our food system needs to be prepared for shocks and to be able to manage risks – from climate change, sharp commodity price increases and natural disasters to food contamination” (FOOD 2030, 2010, p. 11).



Global pressures on food security

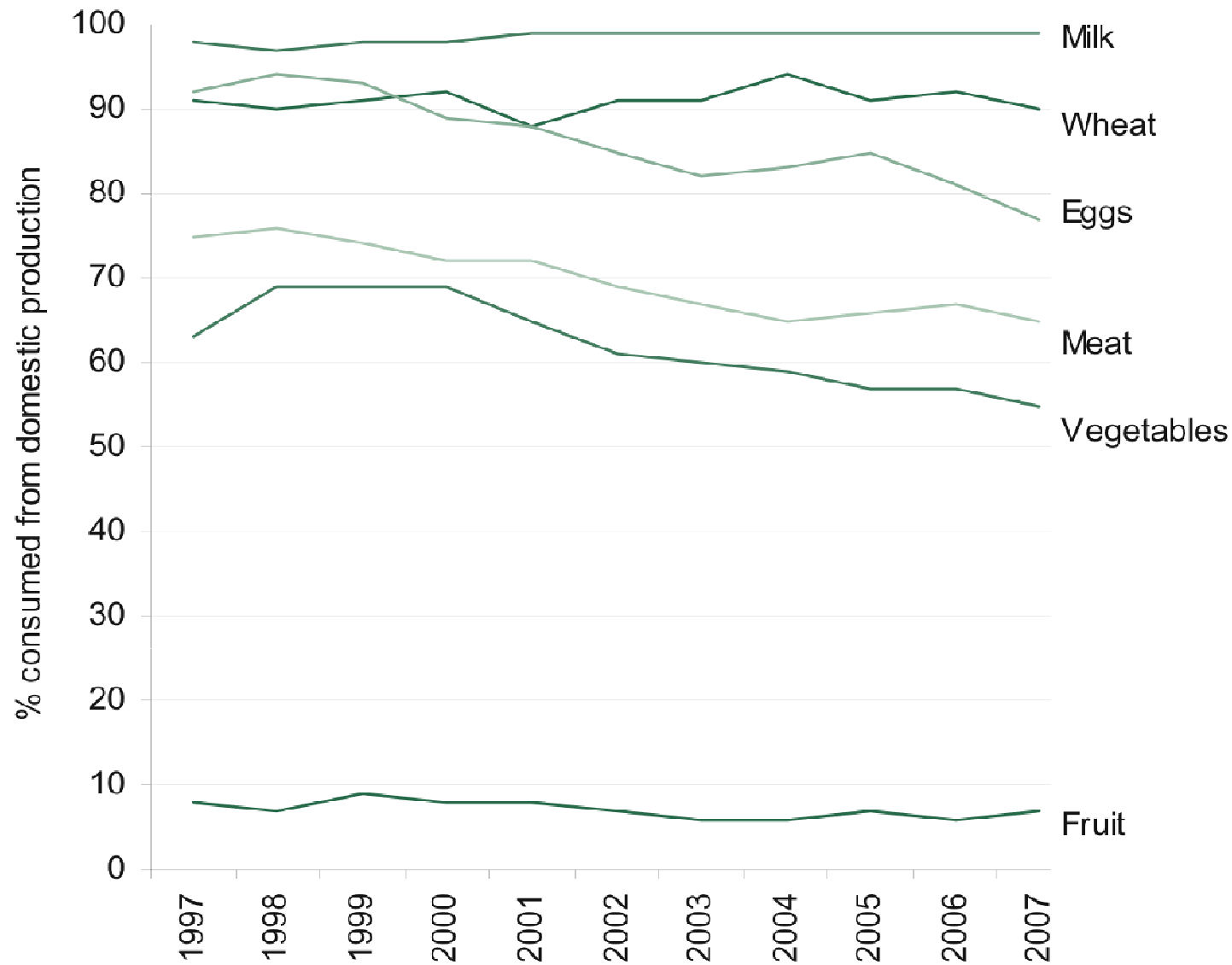
- Population growth
- The nutrition transition
- Energy
- Land
- Water
- Labour
- Climate change

(Source: Chatham House, 2009, p. 5)

Conflicting discourses

- Food security has ‘multiple meanings’ and ‘distinct interests’ / conflicting discourses
 - Introduction of GM tech./Organic production
 - Quantity/Quality
 - Biofuel/food
 - Freedom of choice/Choice editing
 - Domestic vs global production
 - Domestic vs global needs (equity)
 - Ethical complexities and trade-offs – what is morally correct in this context

Estimate of the percentage of consumption from domestic production in the UK for various commodities (Environment and Rural Affairs Select Committee report, 2009)



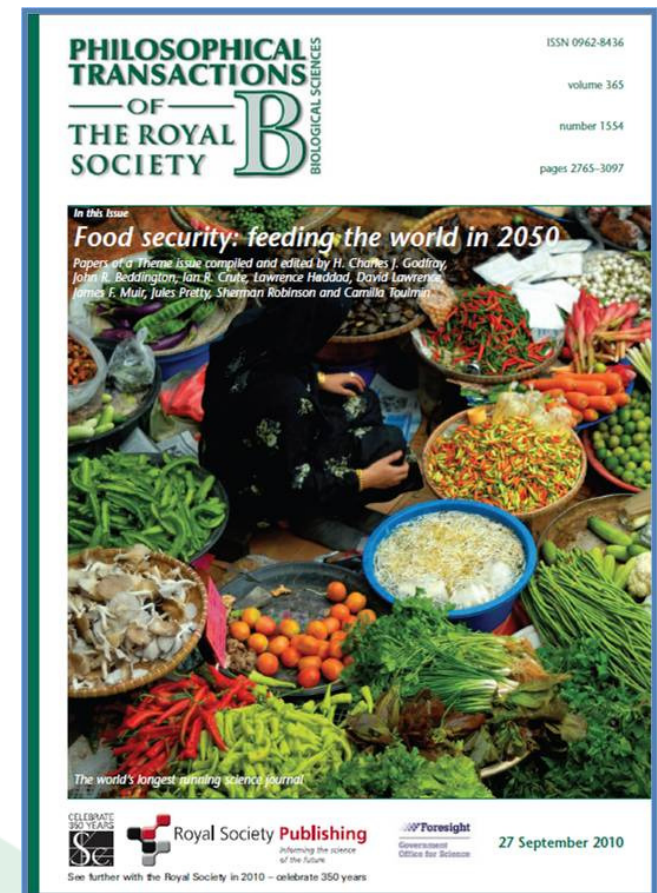
Four 'action imperatives'

Sustainable intensification

“Achieving higher yields from the same acreage without severely impacting the environment requires a new way of approaching food production - sustainable intensification.” (Godfray et al 2010, p. 2776)

Sustainable intensification

- Solutions from science and technology:
 - Crop improvement
 - Crop protection
 - Sustainable livestock farming
 - Mechanisation and engineering
 - Nanotechnologies



Is the future hydroponic?



Localisation

“How can we get from where we are now, an oil dependent economy with very little food security, to a localised, resilient and self-reliant food economy”?

(Rob Hopkins)



Avoiding the 'local trap'

- Need to avoid: 'fetishized constructions of the local' (Harris 2010, 355) or to see localisation as a neat antithesis to globalisation.
- 'Local' needs to be understood in terms of a more holistic conception of 'sustainability'
- 'Diversity receptive' (sustainable production approach in food security terms) **not** 'defensive' localisation (self-sufficiency approach in food security terms).

Sustainable Diets

- Global dietary patterns
- Population size, but also *per capita* consumption
- Nutrition transition – expansion then substitution
- High energy foods, including meat and fats
- Livestock production: significant but contested fraction of anthropogenic GHG emissions.
- Risk of obesity and attendant diseases

Sustainable Diets

- The importance of diet (SDC 2009 and Weber and Matthews 2008)

“Shifting less than one day per week's consumption of red meat and/or dairy to other protein sources or a vegetable-based diet could have the same climate impact as buying all household food from local providers” (Weber and Matthews 2008, 3512).

Waste

- An important way to increase food supply and reduce environmental consequences is to reduce waste within the FSC
- Over eating and eating the 'wrong' diet
- Technological solutions e.g. nanotechnology
- Socio-cultural solutions

Closing remarks

- This paper has mapped four future imperatives
- Debates about food security are inextricably linked to wider land use issues
- Major land use pressures:
 - food security, climate change and energy
- Trade-offs
- ‘New’ vs. ‘old’ environmentalists

