

Food Security, Peak Oil & Climate Change: the policy context

Tim Lang

**talk to 'Food Security & Peak Oil' meeting, All Party
Parliamentary Group on Peak Oil, House of
Commons, Portcullis House, Thatcher Room,
Westminster, March 25 2008**

This talk....

1. What is the policy context?
2. Why the interest now?
3. What is the UK Gov't position?
4. What other positions are emerging?
5. What is the way forward?
- [& ...if we have time]
6. What issues require more attention?

1. What's the policy context?

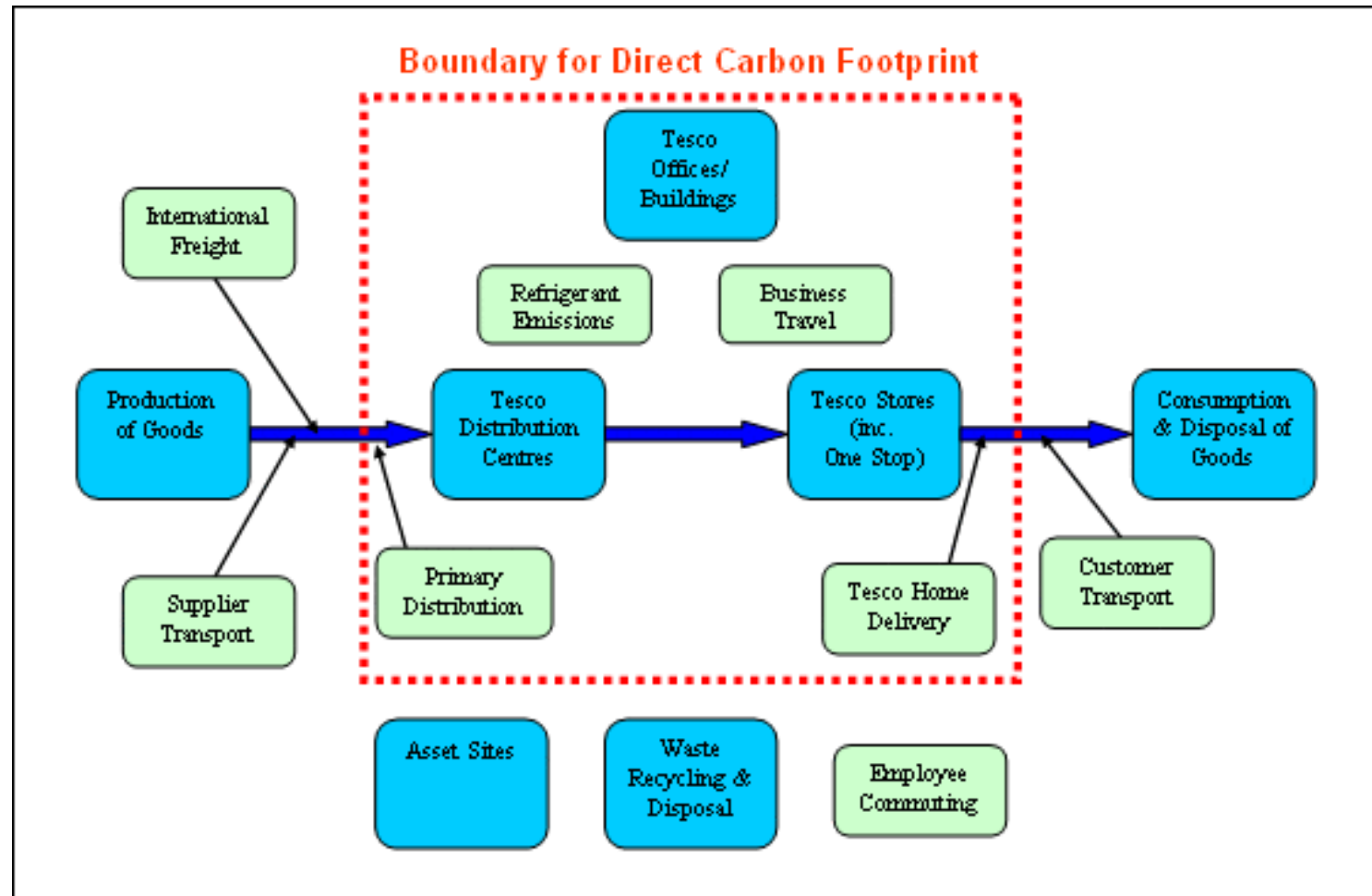
Food and Peak Oil

- C20th efficiency gains heavily oil-dependent
- 95% of all food is oil-dependent: on farm; processing; distribution; retail; consumers
- Oil politics: price rises; finite; wars etc.
- Oil \$100 barrel → +c.10% food prices (SDC 2007)
- Weak / mostly palliative policy response
- Emerging discourse of carbon-calories?

Food and Climate Change

- Food is single largest contribution:
 - c19% total av UK household GHG
- Targets exist:
 - on reducing emissions from buildings and operations
 - no Govt strategy on reducing transport emissions
- Main food hotspots:
 - meat & dairy, glasshouse vegetables, air-freighted produce, heavily processed foods and refrigeration

Where Tesco sets its Carbon Footprint boundary (2007)



source: Tesco (2007). *Measuring our carbon footprint*.
Cheshunt: Tesco plc.
<http://www.tesco.com/climatechange/carbonFootprint.asp>

Peak Oil & Climate Change are but latest entries to long FS discourse

- **Trade & Empire:** less need to grow food → cheap food for cheap urban labour → WW U-turns → EU tie-in → multilevel governance
- **Health & wellbeing:** public health (Chadwick) → eugenics (Boer War) → rationing → NHS → obesity today
- **Welfare & morality:** facilities → affordability → income support → choice culture
- **Supply efficiency:** breeding → mechanisation → science → corporate control
- **Demand:** class → women's skills → consumerism

FS policy is complicated by different meanings...

- *Food nationalism*: self-sufficiency, autarky
- *Food defence*: feeding in dire circumstances
- *Food control*: the actions of state (rationing)
- *Food resilience*: capacity to withstand shock
- *Food risks*: factors which threaten goals
- *Food sovereignty*: ensuring societal control
- *Food democracy*: full social engagement
- *Food capacity*: capability to produce

2. Why the interest now?

8 fundamentals loom

- Commodity prices
- Climate change
- Fuel / oil / energy
- Water
- Land use (biofuels)
- Labour
- Demographics / affluence (BRICs +)
- Health / Nutrition transition

See:

1. T Lang (2008) City Leaders lecture: http://www.city.ac.uk/news/archive/2008/03_march/04032008_1.html
2. T Lang (2007) Rachel Carson lecture: <http://www.pan-uk.org/Projects/RCML/index.htm>
3. Chatham House project: http://www.chathamhouse.org.uk/research/global_trends/

3. What is the UK Government position?

Current food security policy

- No new official food security policy (yet)
 - Curry Commission (2002)
 - Cabinet Office Strategy Unit 2007-08 review
- Some tensions: farm protection (CAP)
- General ‘market’ focus:
 - Efficient supply chains (redoubled post Curry)
 - Retailer-led standards
 - Price conscious
- Emerging stress on public goods: environment, health, ethics, land
- Defra / HMT voicing new global position (2005)

Defra 2006 FS paper

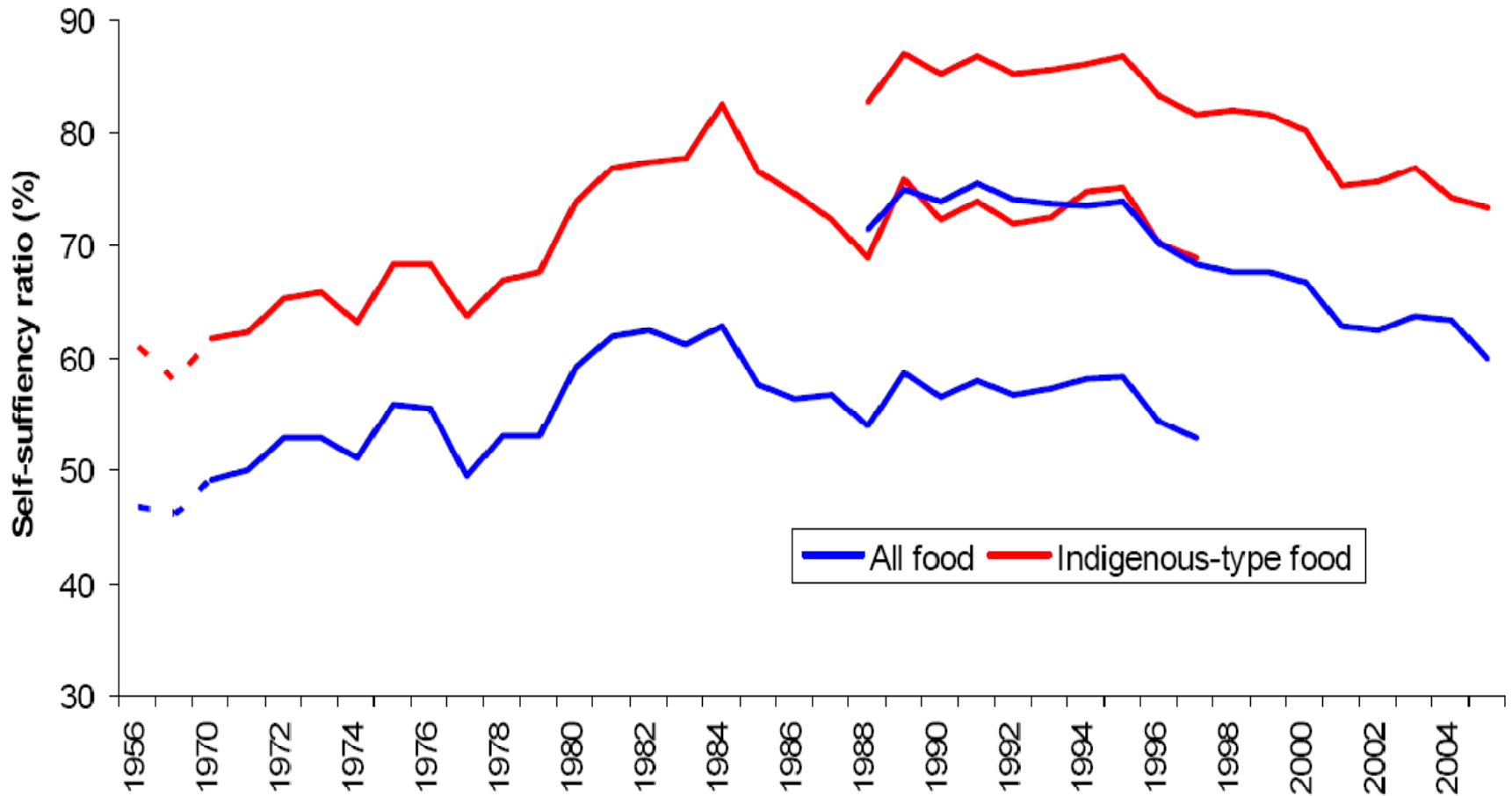
- *“Poverty and subsistence agriculture are root causes of national food insecurity. National food security is hugely more relevant for developing countries than the rich countries of Western Europe.”* (p23)
- There is enough food to feed the world
- Self-sufficiency is an undesirable goal for a trading nation (and won't work anyway)
- UK can and should buy on open markets and work for CAP reform (HMT & Defra 2005 *A Vision for the CAP*)
- Contingency planning is needed (p51)

FS not important to a 'modern' rich economy?

- Globalisation: restructuring e.g. WTO
- EU: CAP
 - From quantity / security → + env't (pillar 2)
- UK economic 'direction of travel' as finance, service and trading centre rather than production centre
- → return to 'old' policy agenda:
 - Why have farming? (what is land for?)
 - Triumph of 1840s ethos (again!)

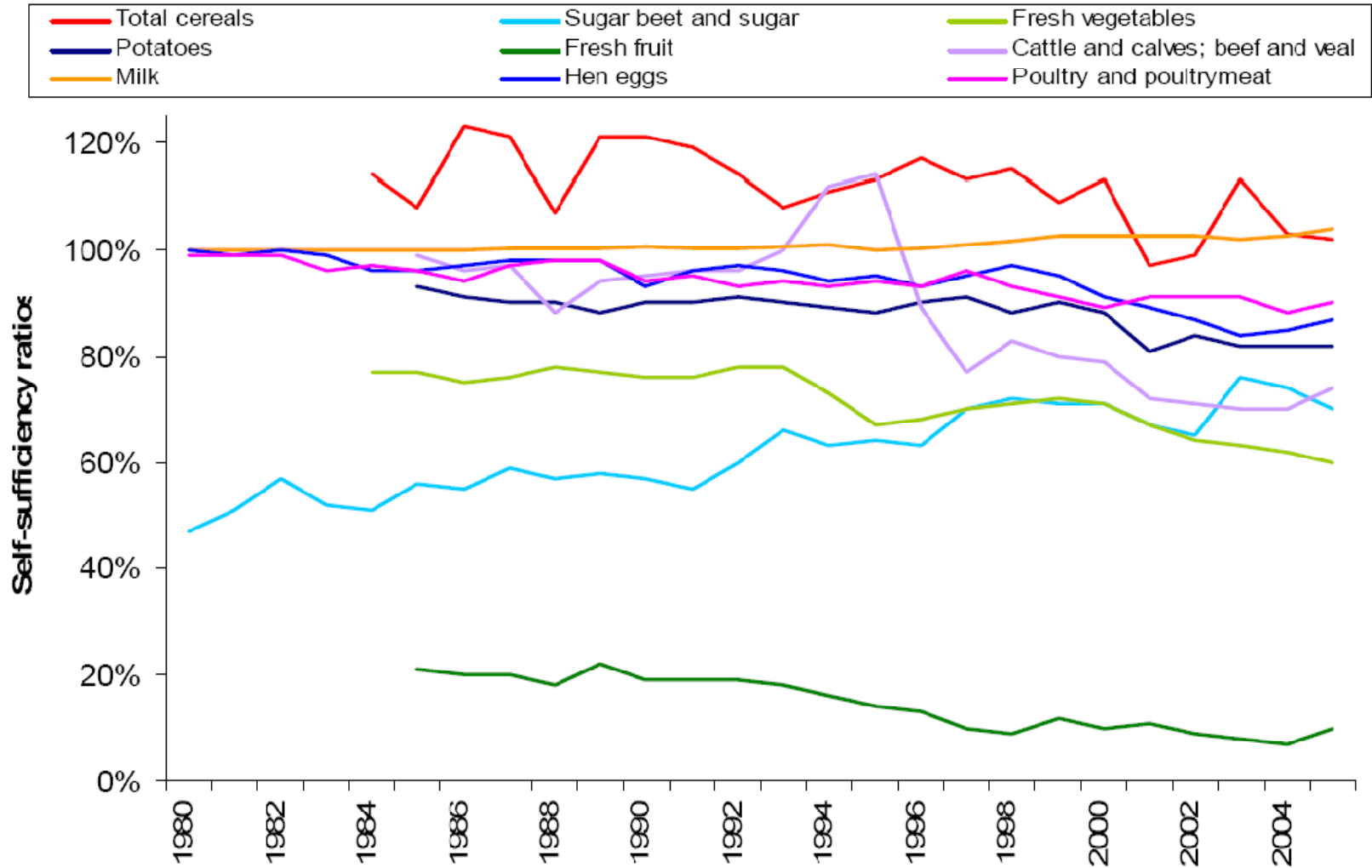
The UK Self-Sufficiency Ratio 1956-2005

source: Defra Fd Sec Dec 2006 fig 6.1 pg 34



Self-sufficiency ratios for a sample of commodities 1980-2005

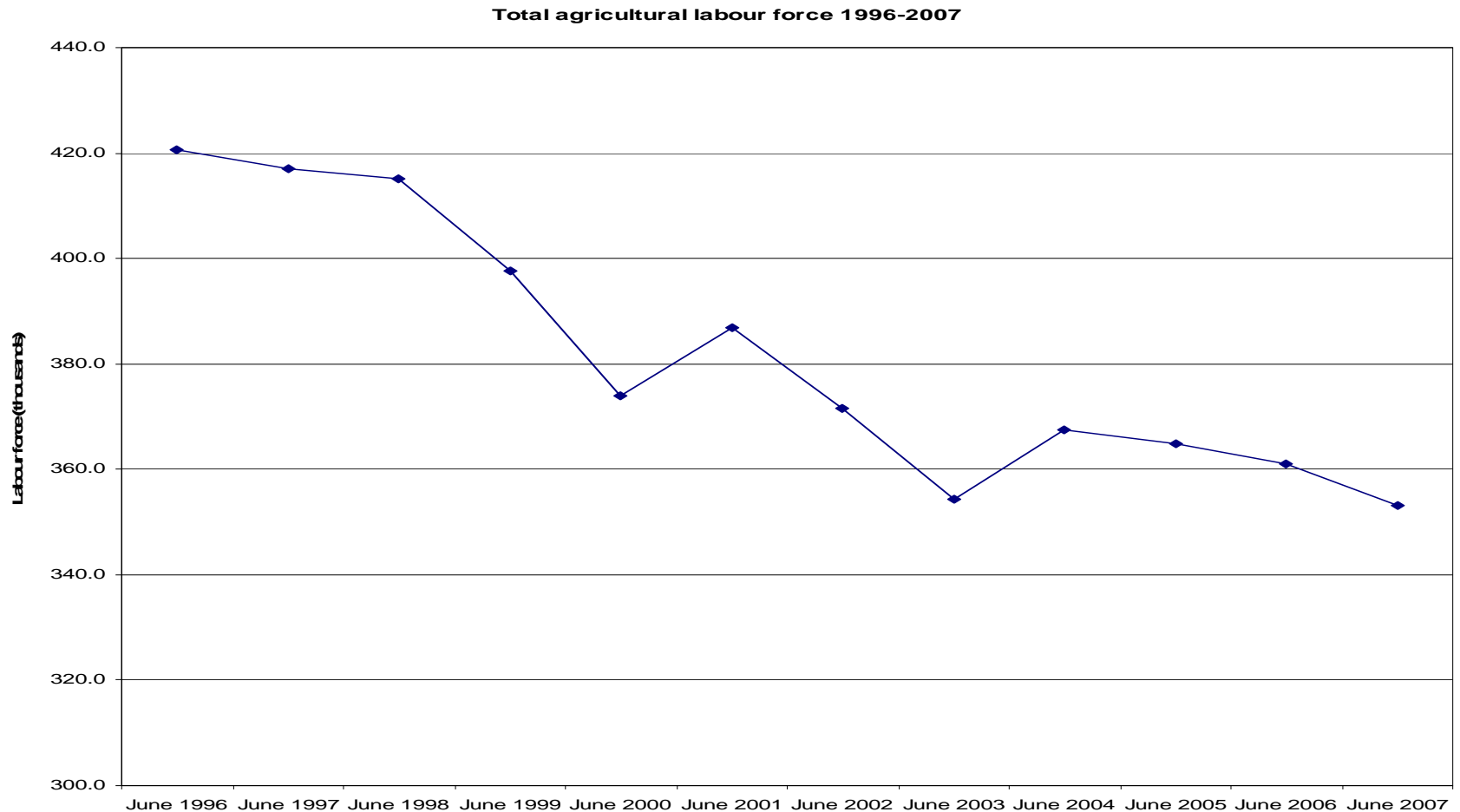
Defra (2006) Fig 6-2, p 34



Source: Defra, Agriculture in the United Kingdom, 2005

E+W AGRIC LABOUR FORCE 1996-2007

NB 1983-1996 decline of total agri labour force was 28%
(1996= change of data collection methodology)



Food resilience (to shock)

- UK is resilient with some problems exposed:
Helen Peck 2006 Defra study

http://www.defra.gov.uk/science/project_data/DocumentLibrary/FT0352/FT0352_4705_FRP.doc

- Potential shocks in FS discourse:
 - Power (centralised + no back-up)
 - Supply chain management
 - Environment: long-term climate change?
 - Health: avian 'flu impact on labour?
 - Transport: fuel prices up? (SDC study)
 - Power: Russians turn off the gas?
 - Taut supply chains = less storage?

**4. What other policy positions
are emerging?**

Emerging competing positions (1)

- **Malthusians**

- Eco-malthusians
- Armaggedons → Sci-Fi 'Forever War' where currency is calories

- **Deniers**

- 'Something will come along'
- 'Shop till we drop'

- **Markets will sort it**

- Chance to alter playing field (end subsidies)
- Redefine efficiency (wheat/maize biofuel=stupid)
- New land can come into play

Emerging competing positions (2)

- **New ruralists / farm revival:**
 - Economic self-interest - Commercial Farmers Group
 - Rural fabric: Women's NFU / Baroness Byford
(Shadow Minister for Food & Rural Affairs)
- **Technical fix:**
 - new Green revolution: H₂O
 - Biotechnology, GM, 'biopesticides'
- **Consumer fix:**
 - Alter diets
 - Reduce waste

Emerging competing positions (3)

- **Egalitarians:**
 - Rich over-consume; poor under-consume
 - All need to change how we consume
- **New Localists:**
 - Stop idiotic ‘exchange’
 - Rebuild the local (what can be grown)
- **Interventionists**
 - Price controls, rationing, etc
 - Welfare: raise incomes to keep food affordable

5. What is the way forward?

Shift discourse to Food Capacity- reflecting the SD 3 pillars

- **Production capacity:** production base, supply chain governance & necessary skills (at a time of fragile employment on land)
- **Load-bearing capacity:** food's impact on environment, land and natural resources (in a time of climate change stress)
- **Social capacity:** all-important social dimension of consumption and consumer expectations (at a time of rising diet-related health costs and consumer expectations of low prices which fail to internalise full environmental costs)

Roadmap for Food Capacity

- Address all 8 fundamentals in systemic focus
- Think through governance implications (Gov't lead)
- Work out on national/regional/local basis
- Build on embryonic thinking
 - D.A.s: Wales, Scotland
 - Civil society: Transition Towns movement
 - Research: Zero Carbon Britain project (CAT)
- From CAP to Common Sustainable Food Policy

Redefining UK Food Policy Goals

- **State:**

- Must lead on what a sustainable food system should be - SDC (2008) 'Green, healthy & fair'
<http://www.sd-commission.org.uk/pages/supermarkets.html>

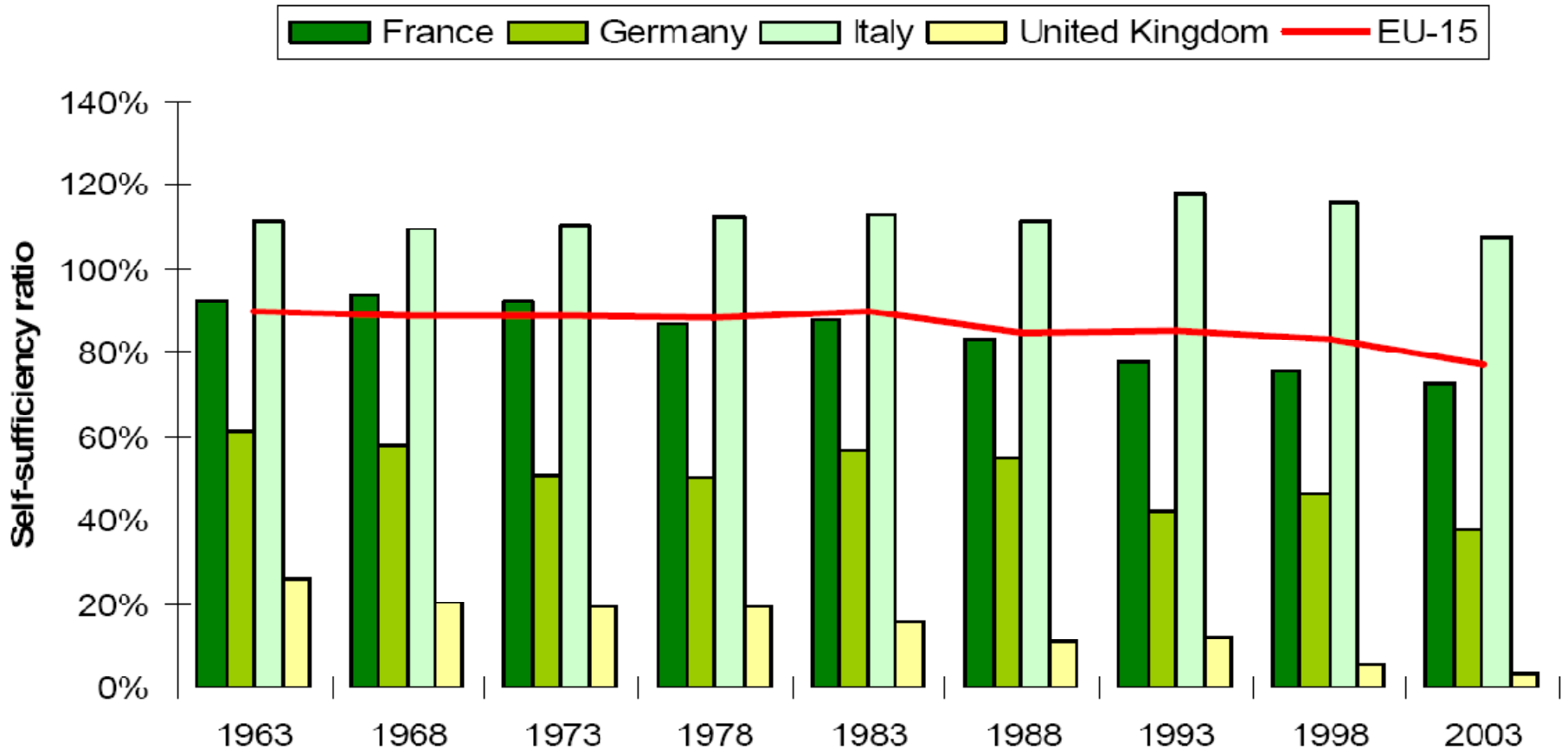
- **Supply chain:**

- Work to omni-standards: nutrition, safety, GHGs, H₂O, fairness, etc.

- **Consumers & civil society**

- Eco-nutrition will require dietary change
- Shift to 'values-for-money'

UK has a lot of catching up? eg. Fruit



6. What issues require more attention?

i. What could a post PO food system look like to meet FS?

- New vision needed
- Clear framework (learning from WW2?)
- Certain hotspots are likely

ii. Dietary change?

Meat & Dairy

- Major GHG source
- Big land use impact
- Poor health impact (excess)
- Poor converters
- Huge water impact

Fruit & Vegetables

- Major health gain
- Big skills requirement
- Seasonality issue
- Cultural challenge
- Not all land can grow!

iii. Price rises almost inevitable?

- Tackling consumer assumptions
 - Price
 - Availability
 - Seasonality
- What would values-for-money look like?
- A big political decision cuts across conventional party lines

iv. Public engagement

- City review for Chatham House 2006: no publicly available studies on attitudes to FS
- Defra 5 studies on consumer SD behaviour change:
 - Food sustainability consciousness low
 - Behaviour change shaped by cost + individual benefits
 - “If it was serious, the Gov’t would be doing something about it” → need for visible action by Gov’t + business
 - Buying better products is more acceptable than changing lifestyles – consumers ‘locked in’ by children + food tastes

v. Government role

- Leadership: carrots not sticks
- Define what a sustainable food system is (SDC)
- Common Sustainable Food Policy?
- Develop omni-standards
- Key starting points:
 - Land policy: food not biofuels
 - Energy: reduce use / retrofit
 - Skills: SD training across food supply chain
 - Re-orient the market on sustainability grounds
 - “Carry the people with us” not “hide behind Tesco”

vi. Supply chain capacity

- If 95% food is oil-dependent, what would a post or 'less oil' food economy look like?
- Which sectors need to change most?
- Cost: prices need to rise but how much would they? SDC \$100 showed +5-10%
- Skills on farm – role for gardening / urban agriculture?

vii. Consumers & civil society

- Patchy understanding of precarious state of supply system (due to élitist debate)
- Low income consumers
- NGOs: FS could be a unifying issue beyond single issues
- Core issue is Constraint vs Choice Culture
 - Rationing on sustainability grounds?
 - Carbon, water, nutrition standards = omni-standards