

3 meals away from a revolution?

How sustainable is our Food Supply?

Annette McDonald. Head of Skills, Enterprise and Innovation, Reaseheath.
March 4th 2010. Seconds from disaster!

3 meals away from a revolution?



Is a food crisis in the UK unthinkable?

Food Futures. Rethinking the UK strategy. Chatham House 2009

- Global food prices are increasingly volatile
- Defensive trade and political responses
- UK dependant on critical sources - soya based animal products, phosphate based fertilisers
- Own energy supplies are finite
- Environmental impact of modern agriculture and the broader food chain cannot be ignored.

The Perfect Storm?

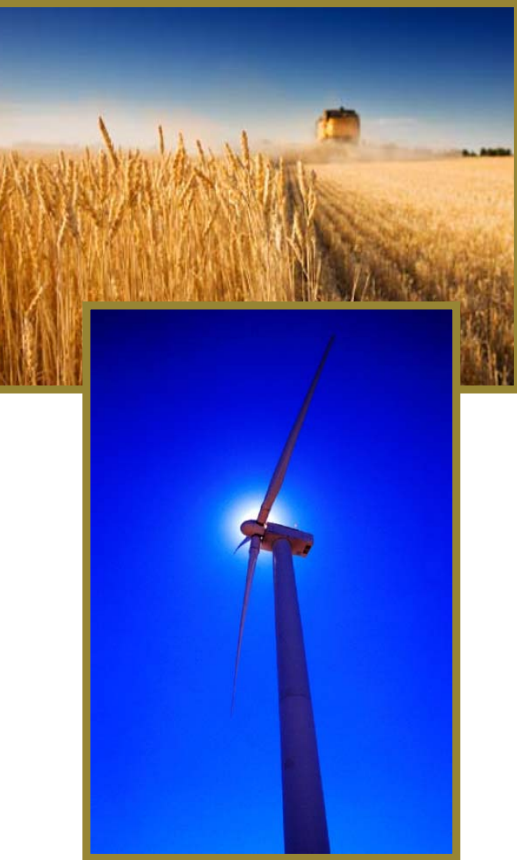


Combined pressure from 7 fundamental factors are driving the global food crisis, creating the Perfect Storm.

Professor Beddington October 2009

- Energy Security
- Water Shortages
- Labour Shortages
- Global Nutrition Transition
- Land Use Conflict
- Climate Change
- Population Growth (6.5 billion to 9 billion by 2050)

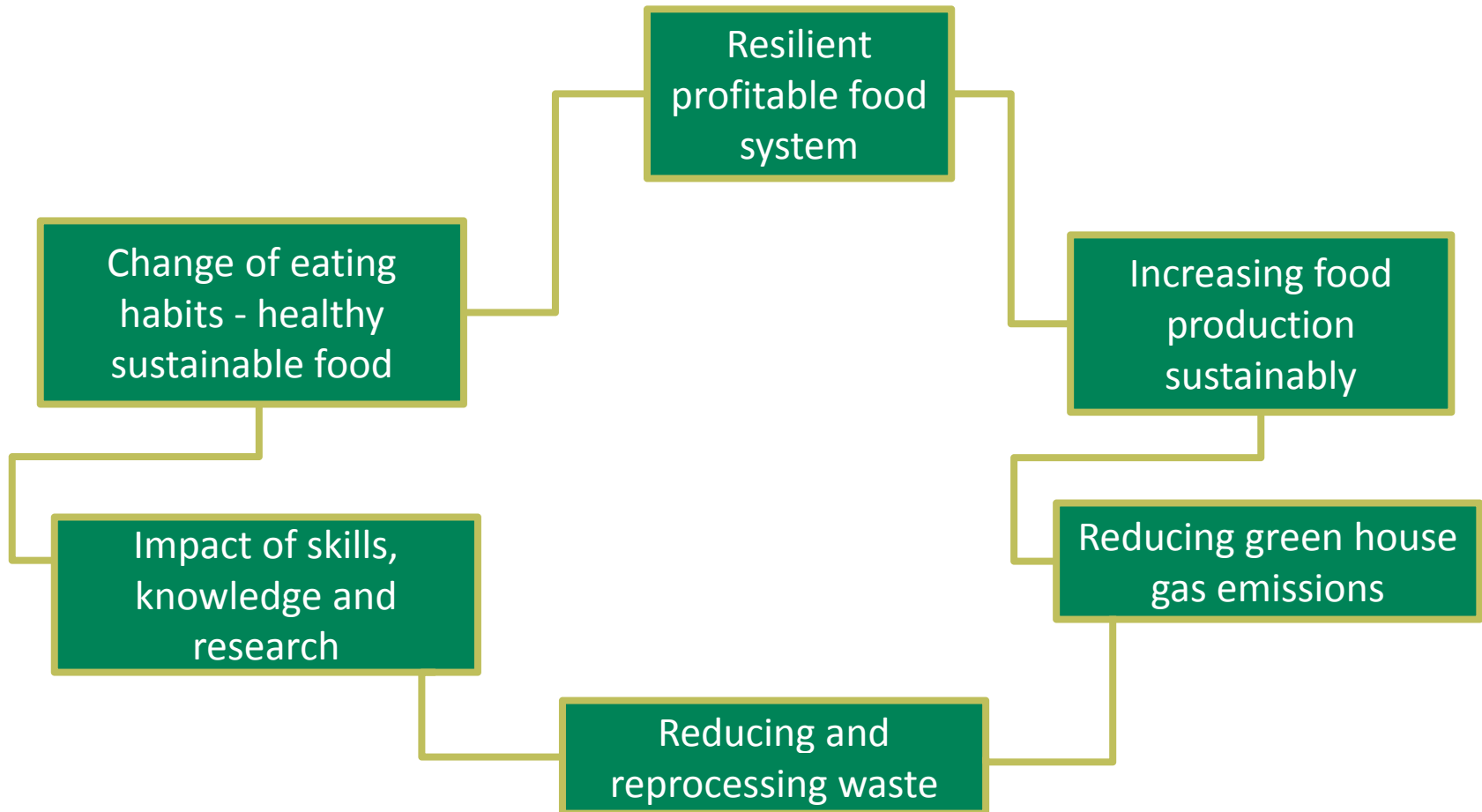
National regional local Agenda? Winning hearts and minds



High on the political agenda

- Copenhagen summit - renewable energy, decrease in carbon emissions
- AD UK strategy July 2009 - food waste and reducing agricultural CO₂ and methane emissions
- ROCS and feed in tariffs to encourage renewable energy production
- DEFRA Food strategy 2030 – use of resources sustainably, food security, rural communities, low carbon food system. First food strategy for 30 years.
- Food Futures rethinking the UK strategy - Chatham house report
- Funding available for businesses and domestic market
- Regional and local strategies reflecting and delivering the national agendas and priorities

DEFRA 2030 food strategy



High on Our Agenda for Cheshire?

Sustainability and Climate Change Agenda NWDA

“We have a once-in-a-lifetime chance to develop and deploy the strategies and technologies that will secure our future and realise the economic opportunities presented by the changing climate. “

“Make no mistake, climate change is a ‘make or break’ issue for this region and no region is better equipped than ours to tackle the environmental challenge of the age.”



High on Our Agenda for Cheshire?



Landscape

- Farmers as energy producers,
- Change what we grow, where we shop and what we eat
- GM versus organic, extensive versus intensive
- Carbon footprint of agriculture
- New ways to produce food- innovation new technologies
- Climate change - drive changes in leisure/work patterns

Communities

- Waste less, use less energy
- Change where we work how we work
- Impact of fuel security on rural communities - services, facilities

Industry

- Energy self sufficiency - lead to innovation
- Growth of new industry sectors - innovation, new technologies
- Requirement for new skills
- More entrepreneurship

High on the Reaseheath Agenda -Zanussi?



National - feed into influence and deliver national strategies and agendas.

- Role of land-based FE colleges increasingly seen as delivery arm of national strategies - practical appliance of science.
- Project Eden – strengthening skills resource across the supply chain in Dairy - UK wide innovative cooperative project
- Soil and water skills strategy

Regional - funding for the Enterprise Delivery Hub from NWDA. 4.8 million project

- Remit - increase GVA
- Reduce carbon emissions
- Rurally based business support to grow and create new jobs
- Knowledge transfer - food, agriculture and sustainability
- Skills
- Investment in 7 million food innovation centre
- Anaerobic digestion demonstration plant

High on the Reaseheath Agenda- Zanussi?



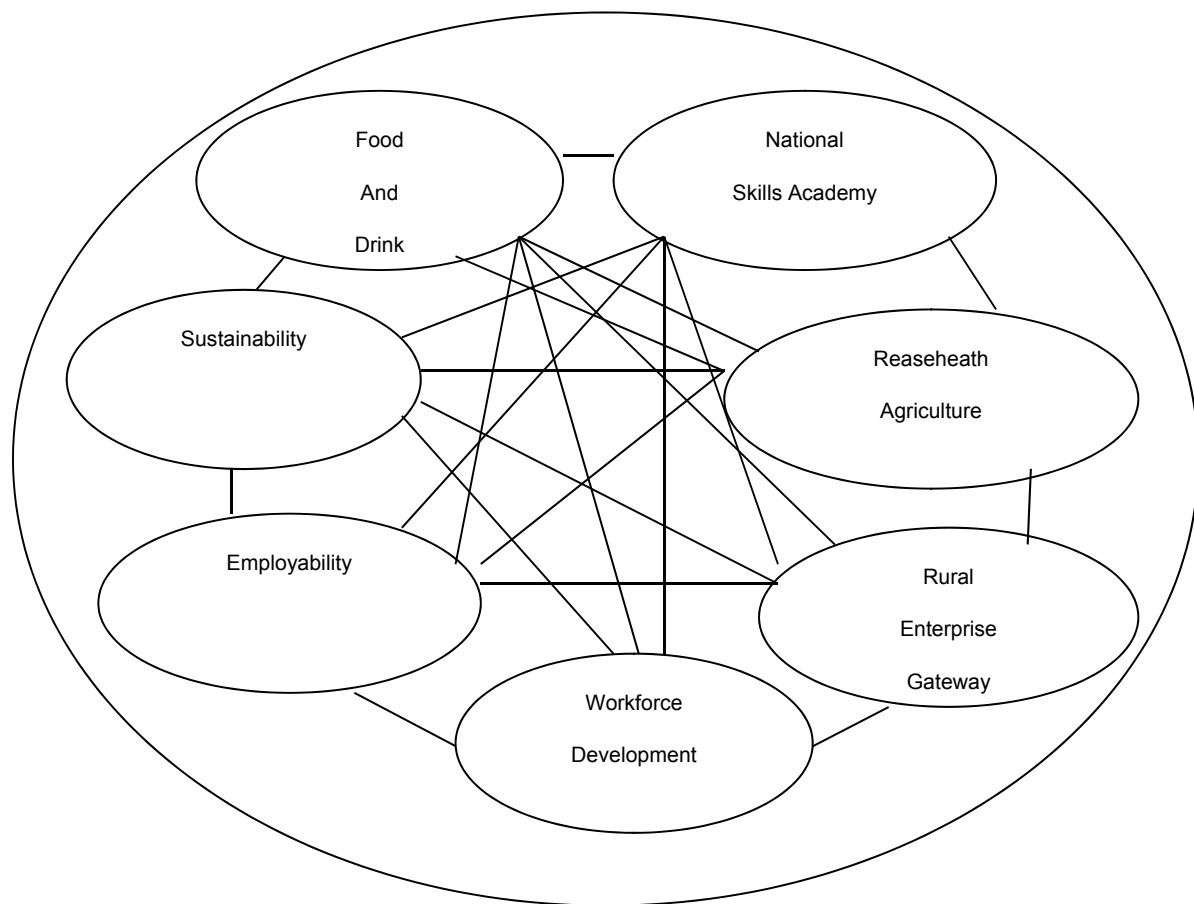
Sub Regional

- Food Cheshire
- AD Biogas feasibility study
- RDPE skills programme for Cheshire and Warrington
- RDPE diversification programme for Cheshire and Warrington
- NW Livestock programme

Local and community

- Local LAPPs and community led initiatives
- Local and Sustainable Food centre - support and information for communities, local co-operative not for profit groups and social enterprises throughout the supply chain
- School work, parkland community projects

Enterprise Delivery Hub - skills, innovation and enterprise



- Food and drink programme running since 2007
- Support for local producers through made in Cheshire
- Skills workshops - marketing, how to get into food and drink production
- One to one support
- Technical assistance
- Access to state of the art product and processing halls
- Support to access and deliver innovation vouchers, research and innovation grants
- Innovative and business collaborations
- Food Cheshire - Taste, Technical assistance and Knowledge transfer,

- Knowledge and Technology transfer for Sustainability - dedicated resource
- Emphasis on low carbon technology
- AD demonstration project - on farm scale AD biogas/electricity production
- AD biogas feasibility study
- Resource efficiency and low carbon technologies for tourism and food service industry
- New trials and developments to increase production of crops
- Sustainability in Horticulture - pioneering range of new technologies to encourage increased crop and food production
- Young hands = - food production and entrepreneurship

- Sustainability in the Dairy Industry - Fresh Start, share farming
- Nutrient management, resource efficiency through integrated farm systems, water harvesting, NVZ agenda
- Lean management and advanced farm business management skills through monitor farm project - disseminating best practice
- Workshops to increase productivity - fertility, calf rearing, mastitis
- Soils and water skills and KTT with Harpers and RAS
- Sustainable high welfare pig production - KTT partnerships

How do we overcome the challenges ahead?



“ It is not the fittest or most intelligent of the species that survive but those that are most adaptable to change”

Darwin