# Food, Transport and the Environment

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VicHealth, Melbourne, 19th October
2006

### Food Issues







The real battle is to persuade those who supply us to provide better produce in general. Let's have tomatoes - in season - that have some flavour, and humanely reared animals which are a revelation to the tastebuds; banish the bland and taste-free produce that graces supermarket shelves because it handles better or lasts longer.

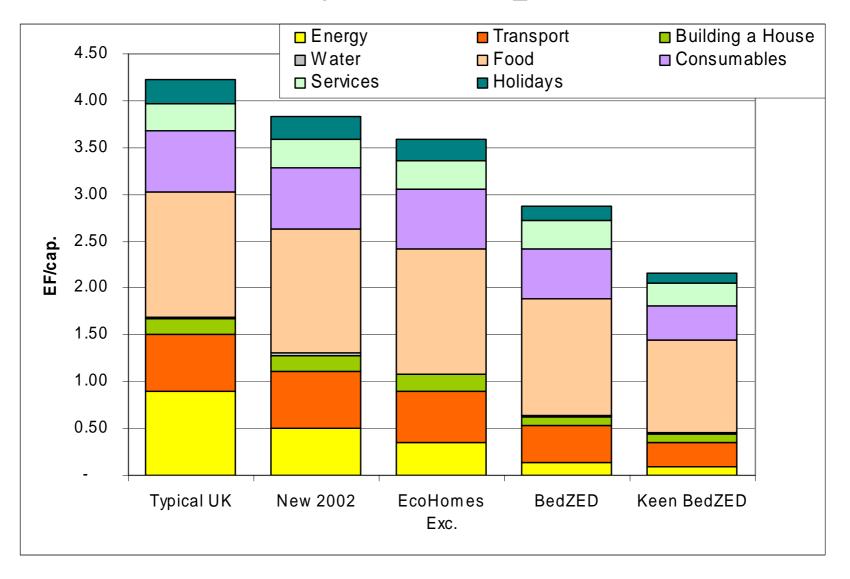
Shaun Hill, chef at The Merchant House, Ludlow, Shropshire.

(from <a href="http://www.waitrose.com/food\_drink/wfi/foodissues/foodtrends/9902130.asp">http://www.waitrose.com/food\_drink/wfi/foodissues/foodtrends/9902130.asp</a>)

# What is the Ecological Footprint?

"The land area required by the people in a defined region to provide continuously all the resources and services they presently consume and to absorb all the waste they presently discharge wherever that land might be."

# Lifestyle Footprints



# Lifestyle Results

ECOLOGICAL FOOTPRINT	Typical UK	New 2002	EcoHomes Exc.	BedZED	Keen BedZED
Energy	0.90	0.51	0.34	0.14	0.09
Transport	0.60	0.60	0.56	0.38	0.26
Building a House	0.18	0.18	0.18	0.10	0.10
Water	0.02	0.02	0.01	0.01	0.01
Food	1.34	1.34	1.34	1.26	0.99
Consumables	0.65	0.65	0.63	0.53	0.37
Services	0.30	0.30	0.30	0.30	0.24
Holidays	0.25	0.25	0.23	0.16	0.11
TOTAL HH FOOTPRIN	4.22	3.83	3.58	2.88	2.16
Shared resources	1.12	1.12	1.12	1.12	1.12
TOTAL EF	5.34	4.95	4.70	4.00	3.28

# Required Changes - Energy

- 95% reduction in space heating
- 63% reduction in cooking, lighting and appliances
- 69% reduction in water use

# Required Changes - Mobility

- 40% reduction in car use
- 118% increase in walking, 249% increase in cycling
- 127% increase in bus and train

# Required Changes – Consumables and Waste

- Simply consume less (about 20% less products)
- 25% reduction in overall waste
- 50% recycling and composting rate

# Required Changes - Food

- 10% of food organic
- 92% locally sourced
- less meat
- 30% more vegetables and 50% more cheese
- 20% reduction in overall consumption

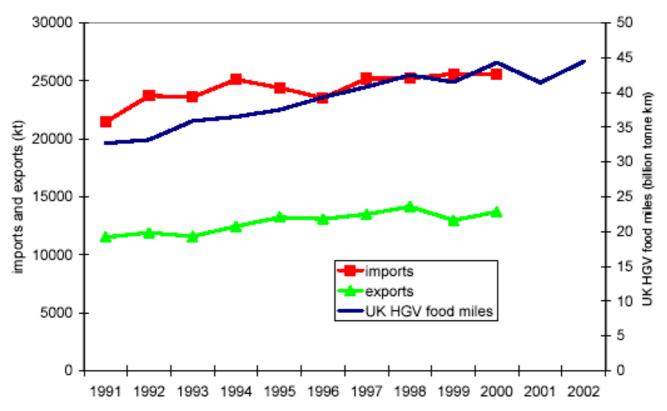


Figure 1: Trends in food trade and HGV food transport in the UK, 1991-2002

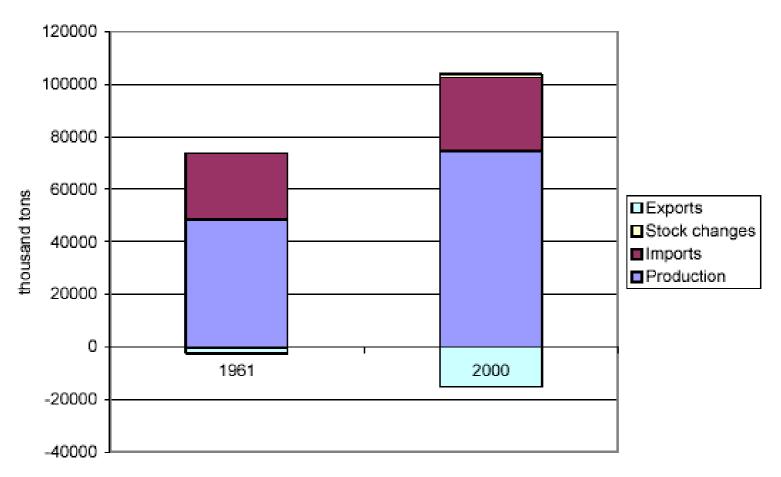
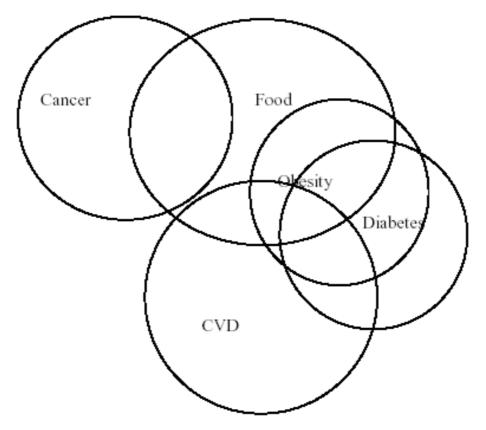


Figure 2 Changes in food trade since 1961

			% from road food transport in the UK
Total food transport CO <sub>2</sub>	18,956		51.4%
Food transport CO <sub>2</sub> emitted in the UK	9,742		
Total UK CO <sub>2</sub> (from all sources)	551,500	3.4%	1.8%
Total UK road transport CO <sub>2</sub>	116,600	16.3%	8.4%

Source: NAEI, AEAT estimates

Table 8: Contribution of food transport to UK CO<sub>2</sub> emissions (2002)



The overlapping nature of the burdens of ill-health

http://www.sustainweb.org/pdf/afn\_m2\_p1.pdf

#### So what do we do about this?

- Regional supply systems
- London food hub
- Farmers Own in Stockholm

#### Regional food supply: "Von Hier" ("From Here")

• Project of Feneberg a food processor and retailer in southern Germany

Regional umbrella brand name and labelling









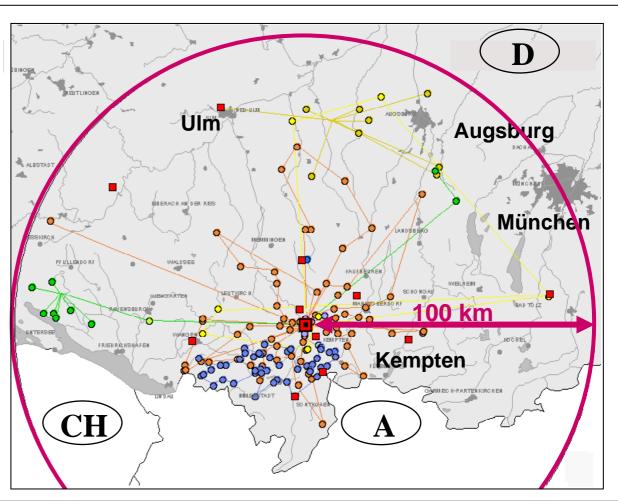
#### Regional food chains

#### Regional farmers – their products:

- Meat
- Milk(-prod.)
- Vegetables
- Fruits
- Eggs
- Grain(-prod.)

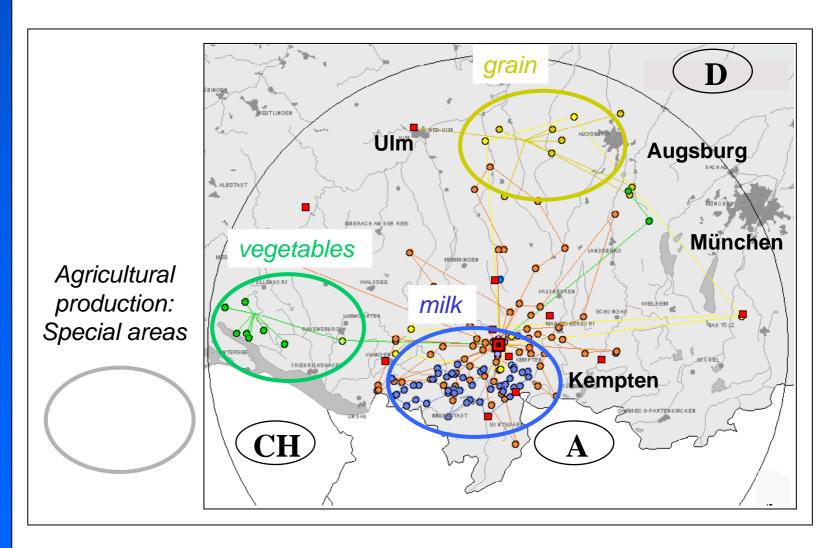
#### Elements of the network:

- Trade connection
- Logistic centre
- Processing enterprise





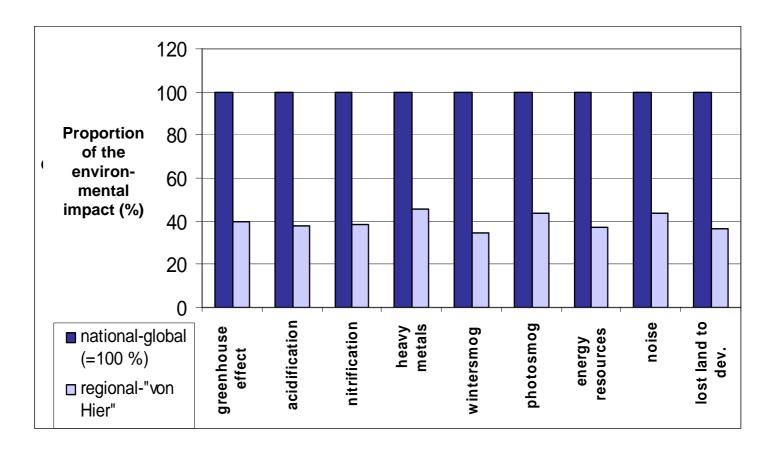
#### Agricultural specialisation within the region





• Farmers are well organized in **producer groups** 

#### LCA of transports: A regional and supraregional food basket





 The regional food basket reduces the environmental impact by nearly two-thirds

# Short paths to efficiency: the example Migros (CH)





• The food supply system of the future?

# Better Food for London: the Mayor's draft food strategy

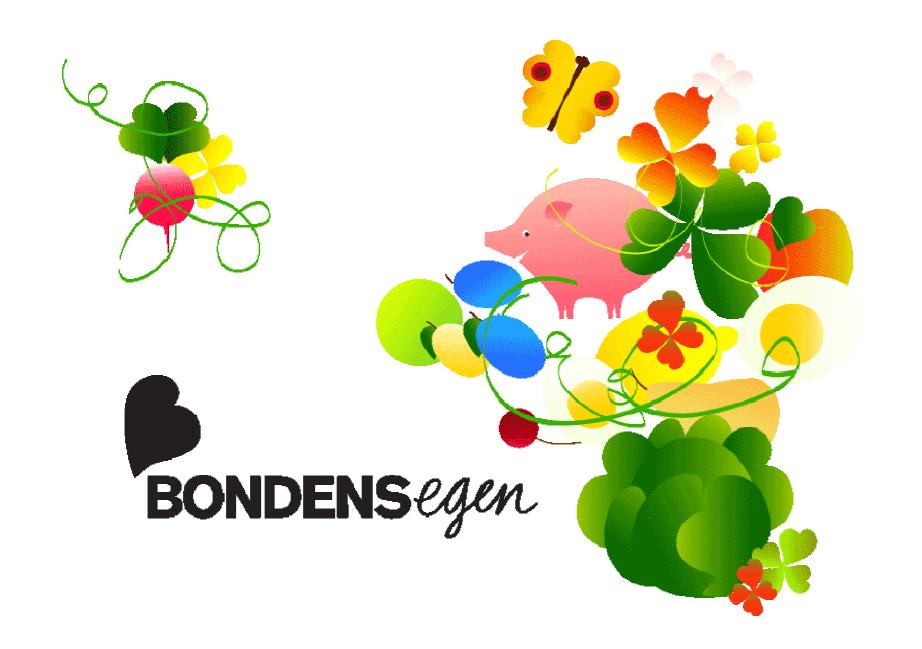
- Support local, regional and organic producers
- More of London's food will be "local" and diverse
- London will have a food distribution infrastructure that is economically and environmentally efficient and socially just

#### **MDFS**

• Establish local food distribution/wholesaling hubs

#### The Food Hub

• International benchmarking e.g. local food distribution systems in Austria and Sweden



#### **Farmers Own**

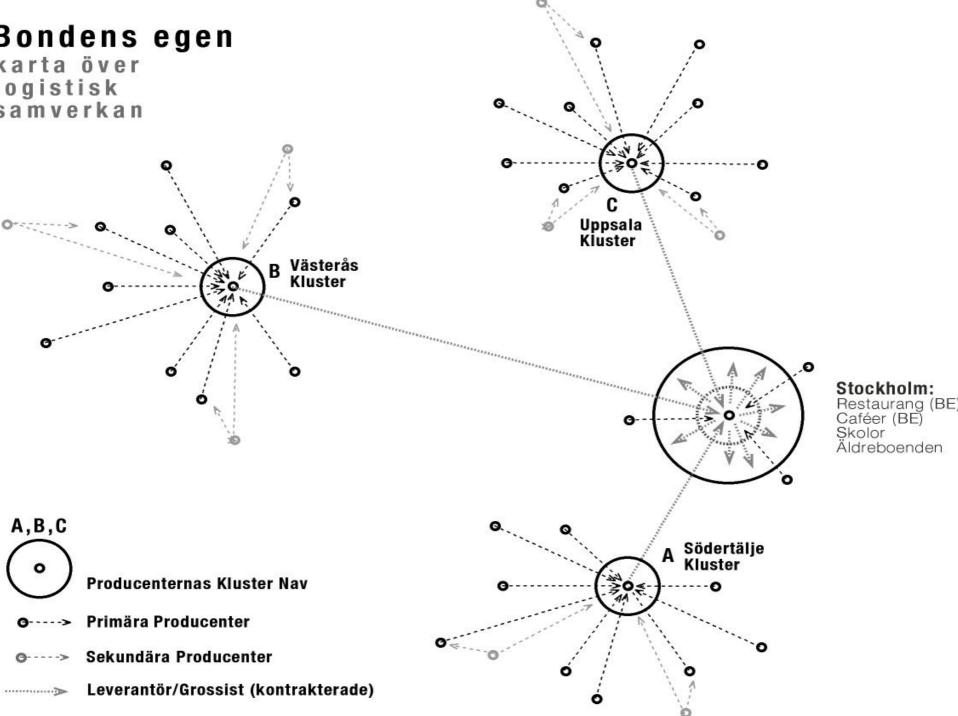
- The world's first fully integrated web-system for sales and marketing of locally produced food
- Database of local producers, products & prices, online warehousing system, distribution planner, order & invoicing system, harvest planner, seasonal reminder system, whole animal order system, marketing bank, a secure encrypted connection to the bank, environmental indicator
- User controlled
- Non-profit
- Free rights of use in other areas

#### Farmers Own - Stockholm

 180 farms supplying local produce in SthIm

Dedicated outlets (to locally produced food)

Malmö (second city to adopt)



### What is a hub (1)?

- A warehouse/logistic centre/business starter unit
- An information network linking producers, final consumers and logistics
- A secure and trusted place where small businesses, women, ethnic groups etc can thrive

## What is a hub (2)

- A supply chain system for balancing demand and supply, linking producers, linking imports and local supplies
- A focus for dealing with food desert problems
- A marketing/branding/labelling system
- Quality advice and services on provenance, hygiene and regulations

## What is a hub (3)

- A service that can save the time of procurement officers in hospitals, schools and local government by organising a total package of supply and logistics to their requirements
- A service that can save the time of growers by providing management services

# Policy Linkages

- Delivering sustainability at the regional level (e.g. health, CO2 reduction)
- Improve rural economy/suburban food
- What is the role of government?

# Specific Interventions

- Lorry taxation based on weight/distance
- Re-orientation of infrastructure and public funds towards models of regional co-operation and organisation
- Marketing of distinctive regional foods
- Specific financial assistance to small food producers and innovative marketing schemes
- Procurement strategies in favour of local producers