## Food & People : consumers, economics, communities

Gareth Edwards-Jones

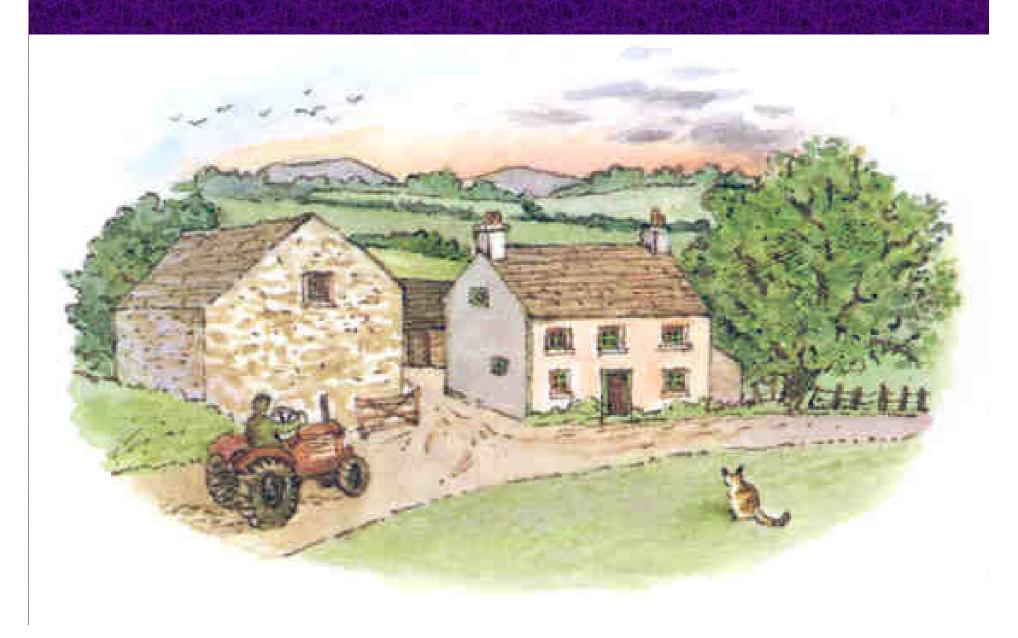
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#### **Culture and the countryside**



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#### **Countryside – the reality**



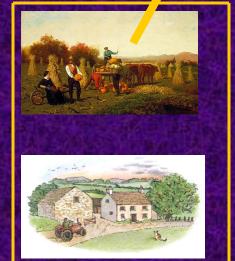
































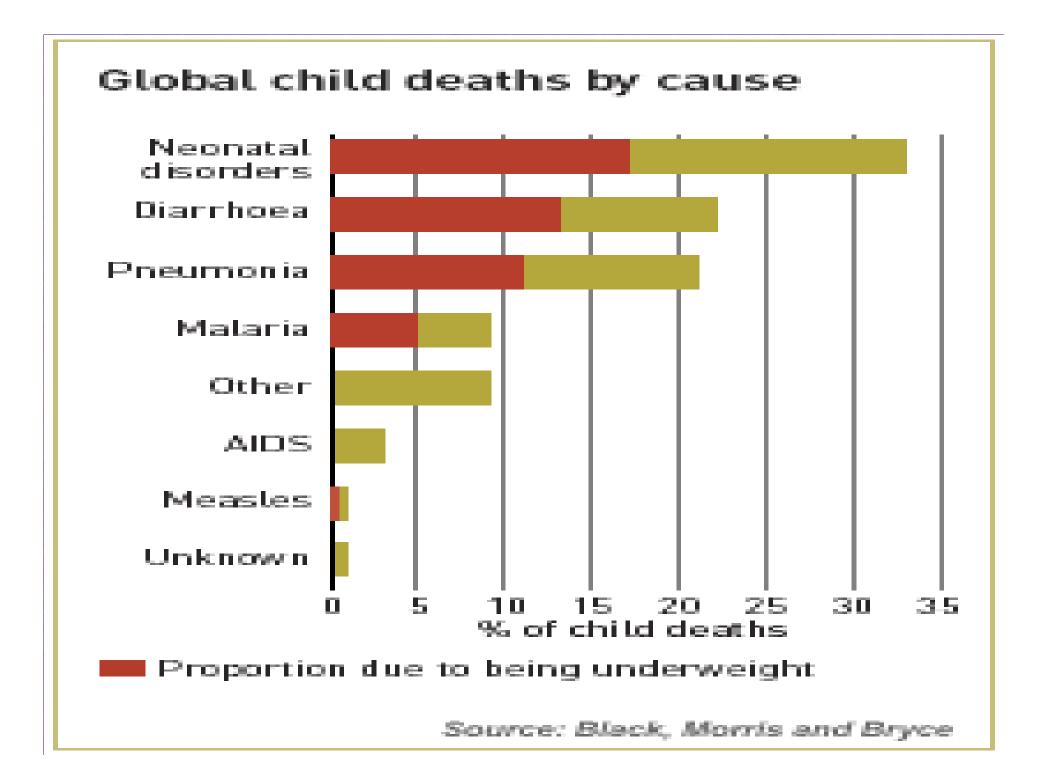
# Research areas and researchable constraints

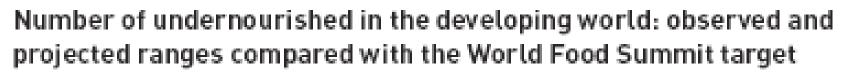
## The State of Food Security in the World 2004 FAO

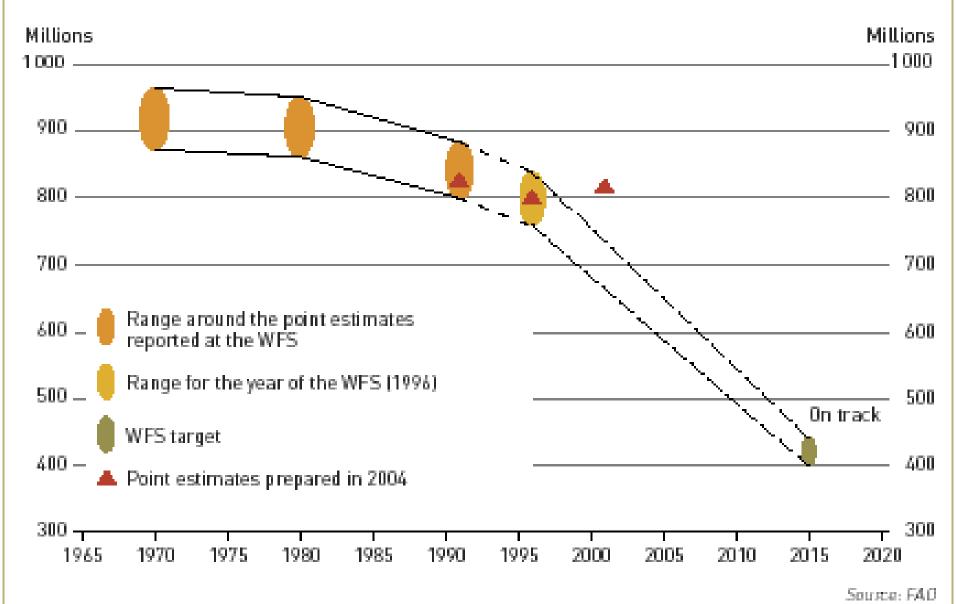
- 852 million people are undernourished.
- More than 5 million children die each year from hunger related causes.

#### % of population undernourished

India	21%	221 million
China	11%	142 million
DR Congo	71%	35 million
Kenya	33%	11 million
Venezuela	17 %	4 million







## 'The History of the UK in the 21st Century' by Homer McSimpson (2120)

'In 2004 the popular song 'Feed the world (do they know its Christmas)' rose to the top of the music charts for the second time in 20 years. It is interesting to note that despite the continued concern of the public for the hungry of the world, the research community totally failed to solve this problem.

Indeed, while the decades either side of the year 2000 witnessed unprecendented progress in biological research it is debatable whether the research community even seriously engaged with World hunger as a problem.

It is very hard for us global citizens of 2120 to comprehend the inability of the scientists of a 100 years ago to seek to address the major humanitarian issue of their time.'



#### Overweight and ill health

An overweight population is at risk from the following:

- high blood cholestrol
- High blood pressure
- Insulin resistance
- Coronary heart disease
- Stroke
- Gallstones
- Gout
- Osteoarthritis
- Poor female reproductive health
- Depression
- Low self esteem

(from Lang & Heasman 2004)

## Contested information is everywhere....

'... and crucially they trust organic food to be healthier, because it does not contain pesticide residues, GM ingredients or artificial additives, and because it contains more nutrients and vitamins than non-organic food.'

'.....there is no science to tell me that the parents who buy the 46% of all baby food in the UK which is organic, are wrong to think this is healthier for their babies.'

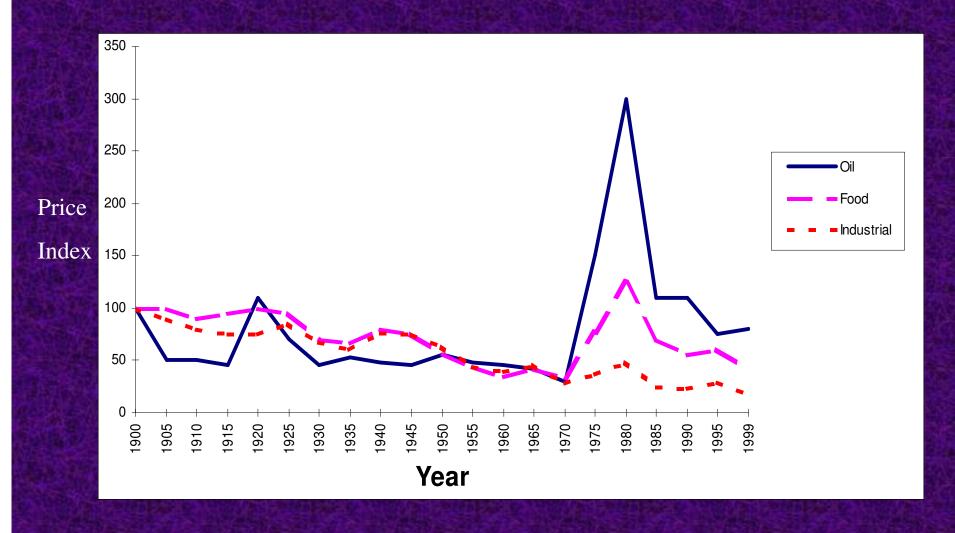
Peter Melchett, The Ecologist, January 2005.

#### The research questions

- Is it good use of tax payers money to fund research testing the costs and benefits of legally supplied food items?
- If we do this research what do we do with the outputs?
  - Put them on food labels?
  - Produce information sheets?
  - Ban certain food items?

Should research try and buck the market?

## Commodity prices in real \$ terms in the 20th Century 1900 = 100 (The Economist, Dec 2000)



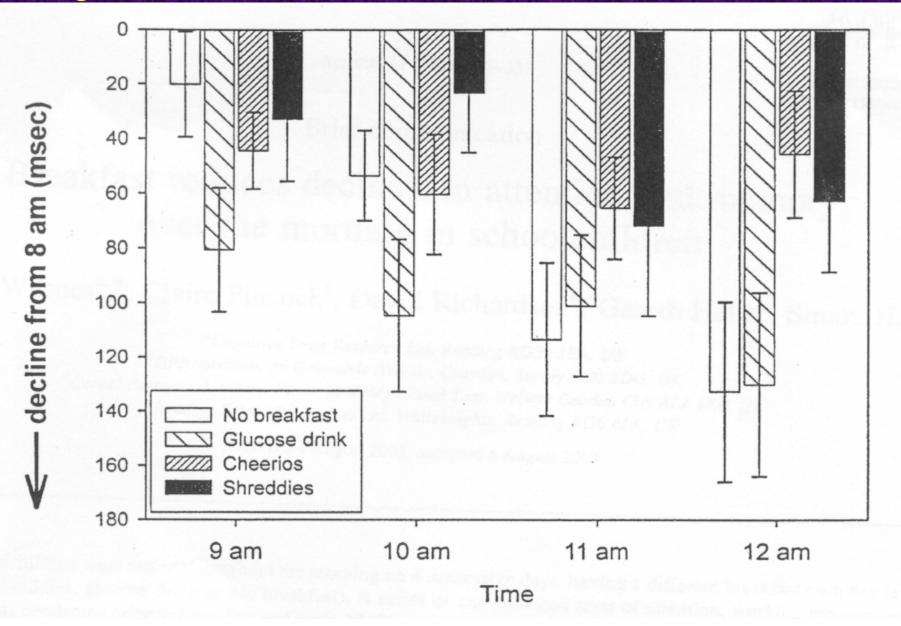
### Market share from 'discount supermarkets' 1991-2003 (The Grocer, Dec 2004)

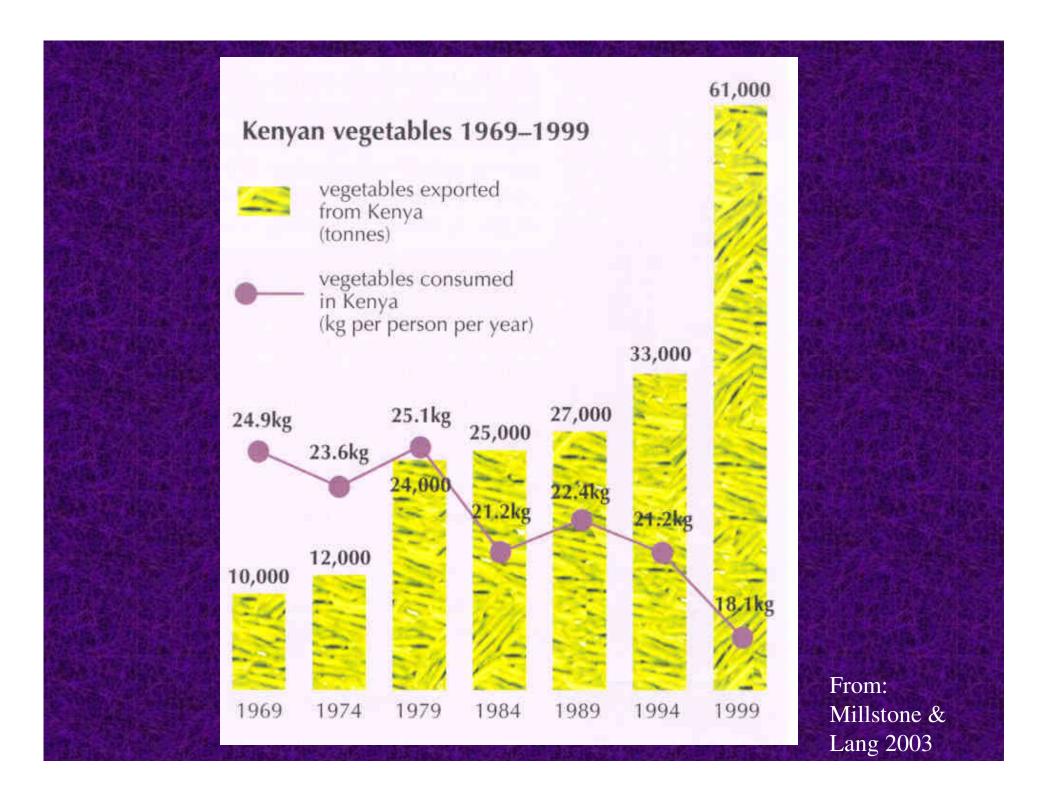


But efficient markets can have undesirable impacts both on society and individuals who do participate in it.

When does the taxpayer pay to research them?

#### Mean (with SEs) of declines in power of attention over the morning (Wesnes et al 2003)





#### **Conclusions**

- Erudite analysis of the specific is not always helpful for policy.
- Hard to understand why we do not do more to help the world's hungry millions.
- How much public money should be spent investigating legal products?
- Social 'externalities' of food systems are hitherto under analysed.

Public interest, misinformation, dogma and commercial interests abound in food systems. A great challenge for disinterested scientists to offer evidence based insights to inform the public and policy.