Changing Food Cultures: Challenges and Opportunities for UK Agriculture

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Background to the Report

30th June 2016 From Mike Vacher, Director of the Nuffield Scholarships Trust inviting me to apply.

‘How does the UK Farmer deliver to the UK Food Culture(s) of the 2030s.’

Denmark and Canada

Moving out of my intellectual comfort zone: from farming to food and from food to health

Nuffield Farming Lecture 4th July 2018
And just to make it even more fun:

Health and Harmony: the future for food, farming and the environment in a Green Brexit February 2018
So what is food culture?

- **The what, where and how** of our daily sustenance.
- **The social context and relationships** in which eating takes place.
- **The meaning and significance** we attach to food.
- Links across to gender, **identity**, aesthetics, **ethics**, spirituality, ceremony, .... it varies across time and geography.
Exploring food culture through:

- **Availability** - the manner in which food is provided and made available through production and manufacturing.
- **Acquisition** - the manner in which food is obtained through shopping, household budgeting and cooking.
- ** Appropriation** - the manner in which food is consumed.
- **Anxiety** - the manner in which food contributes to worries about health and ethical concerns about the food system.

*Draws on work of eminent food sociologist Alan Warde.*
Food availability

- Dependence on trade
- Role of manufacture and processing
- Role of finance capital
World Exports as a Percentage of Total World Production – Selected Crops and Livestock, 1961-2013
Global Food – more diversity or less?

7,000 plant species are documented as human food and yet....

The big 3 .. rice, wheat and maize provide half the world’s plant-derived energy measured in calories.
Breakfast
Diversity in choice or not?

Multiple mainstream **processed cereal** brands on offer

Most based on one of the big three (**rice, wheat, maize**) ... with plenty of **sugar** as well.

Inherently linked to **global commodity** trade

Supposed consumer choice of brands belies the **underlying sameness** of the dietary offer.
“Seafood, particularly salmon ...oolichan, sturgeon, herring, trout, and cod .... Clams, mussels, cockles, crabs, and urchins. ... seals, porpoises, and whales ... grouse and ducks. Over 200 species of plants ... roots, bulbs, tubers, stems, shoots, buds, leaves, and fruits all provided essential nutrients. Some groups also consumed seeds, nuts, and the inner bark of certain trees. .... among coastal groups alone, wild plants used for food include about fifty species of berries ... twenty-five species of green vegetables, ... several species of marine algae.. and about fifty (other) species of plants.” (Muckle 2014)
Ultra-processed food as a % of household purchases

- Under 25%
- Over 25%
- Over 50%

UK
50.7

Portugal
10.2

Cyprus

Guardian graphic. Source: Public Health Nutrition
Exploring food culture through...

- Availability
- Acquisition
- Appropriation
- Anxiety

**Acquisition** - the manner in which food is obtained through shopping, household budgeting and cooking.
Acquisition

1950: independent grocers account for 78% of UK grocery sales.
1984: their market share tumbled to below 30%
2015: less than 10%.

Same time period: growth in market share by multiple food retailers increased from 23% (1950) to 93% (2015).

But more change is coming – 2016 - online sales 7.3% of UK grocery share (second only to South Korea in terms of the proportion of groceries bought online).
Exploring food culture through...

Availability
Acquisition
Appropriation
Anxiety

**Appropriation** - the manner in which food is consumed.
Appropriation

2016: more food & drink books sold than ever before... 8.7 million books (value £90.3 million).

“Gastronomy is the intelligent knowledge of ... nourishment. .... Gastronomy is culture, both material and immaterial. Choice is a human right: gastronomy is freedom of choice. Pleasure is everybody’s right and as such must be as responsible as possible: gastronomy is a creative matter, not a destructive one. Knowledge is everybody’s right, but also a duty; gastronomy is education.” (Petrini 2007: 55)
Anxiety - the manner in which food contributes to worries about health and ethical concerns about the food system.
Anxieties
(drawing on Alan Warde again)

Physical concern ... hazards associated with modern, processed ‘de-natured’ food.

Social and moral concern ... changes in eating habits and practices adversely affecting family life and social mores.

Symbolic concern ... demise of traditional menu and troubling excess of choice symbolises consumer confusion, even identity crisis.

Economic concern ... power of retailers and value for money.

Ethico-political concern ... animal welfare, natural environment, implications for poorer countries.

To this I would add an additional concern for provenance with issues of localism and national identity too cutting across the other concerns.
Now to the impact of food culture on health

Availability
Acquisition
Appropriation
Anxiety

The scale of the global obesity challenge :-

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Global Burden of Disease (GBD)

UK: dietary risks are the leading cause of lost Disability-Adjusted Life Years (DALYs) which quantify both premature mortality and disability within a population.

Largest contributor to DALYs are dietary risks related to low consumption of fruit, vegetables, whole-grains, nuts, seeds, seafood omega-3 fatty acids and milk and high consumption of red meat, processed meat, sugar-sweetened beverages, and low fibre (Newton et al. 2015).
Intake of dietary fibre

Men and women aged 19-64 and 65+ years: National Diet and Nutrition Survey (2012/13 to 2013/14)

- Men
- Women
- Currently recommended level of dietary fibre intake, approximated as NSP
- Previously recommended level of NSP intake

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<tr>
<th>Age in years</th>
<th>NSP intake g/day</th>
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<td>19-64</td>
<td>15 - 17</td>
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<td>65+</td>
<td>16 - 18</td>
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Cost of obesity to global economy (healthcare and lost productivity) could be as much as 5% of global GDP (FAO, 2013)
Which brings us to agriculture.....
Fibre comes from ...

- **Wholegrain** breakfast cereals, wholewheat pasta, wholegrain bread and oats, barley and rye.
- **Fruit** such as berries, pears, melon and oranges.
- **Vegetables** such as broccoli, carrots and sweetcorn.
- Peas, beans and pulses.
- Nuts and seeds.
- **Potatoes** with skin.
Trade in Fruit and Vegetables, UK (£ million at 2016 prices)
Spelt and rye induced a lower acute glycemic response (increase in blood glucose levels) compared to refined wheat, providing strong evidence that spelt might play an important role in the prevention or delay of diabetes development (Biskup et al., 2017).
In the UK pulses account for less than 2% of total protein consumption,

Since 1961, global cereal yields increased from 1,450 to 3,900 kg/ha, but ... pulse yields only grew from 550 to 1,000 kg/ha.

IYP 2016 certainly had impact ... 1,257 new pulse-containing products were launched in North America that year.

The ‘Eating for Energy’ base in Vancouver, Canada was one of the responses to the IYP with its “Just Add Pulses” campaign.
Farm Business Income 2015/16, England

Average income (£ per farm)

- £120,000
- £90,000
- £60,000
- £30,000
- £0
- £-30,000

Cereals  General cropping  Dairy  Grazing livestock (Lowland)  Grazing livestock (LFA)  Specialist pigs  Specialist poultry  Mixed  Horticulture  All types

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Recommendations from the study

Policy development

- Innovative and dynamic market structures
- Enhancing skills and developing communities of practice
Recommendations: POLICY DEVELOPMENT

1. There is a need to develop a **food and farming strategy** for the delivery of **safe, nutritious and affordable food** in the UK, which will allow UK farmers to respond with confidence to the concerns and opportunities presented by civil and consumer society.

2. There is a **clear policy imperative** to support farmers through the transition to **post-Brexit agriculture** and policy needs to be designed to ensure that a strong, competitive and food health-oriented industry emerges.

3. **Agricultural policy** should be more focused on **health and nutrition**.

4. **Nutritional security** should be seen as a ‘**public good**’.
Recommendations: POLICY DEVELOPMENT

5. Sustainable Intensification policy and research should be broadened to include human nutrition as a core element.

6. A new conversion and/or grant scheme should be developed for horticulture.

7. There should be policy encouragement for the cultivation and market development of pulses.
Recommendations:
INNOVATIVE AND DYNAMIC MARKET STRUCTURES

1. **Quality Assurance Schemes** should be **deepened** to include **nutritional quality** at the **core**.
2. There is a need to develop **stronger and shorter supply chains focused on nutritional qualities of food**.
3. The lessons of the **food sovereignty** movement need to be considered to see whether a UK version is possible.

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Recommendations: ENHANCING SKILLS AND DEVELOPING COMMUNITIES OF PRACTICE

1. There is a need to facilitate new entrants into agriculture and to up-skill existing farmers, especially smaller farmers.

2. An up-scaling or expansion of the Prince’s Countryside Fund Farm Resilience Programme would be particularly welcome in this respect.

3. Further development is needed of new communities of practice around food provisioning.
In conclusion ..... 

**We are what we eat.**

**We eat what is available to us.**

**As consumers and citizens we can (and should) change what we eat.**

**Farmers have a great opportunity to contribute to the health challenge.**
References


