



POLICY ON A PLATE: TOWARDS A FOOD MANIFESTO

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Food Ethics, the magazine of the Food Ethics Council, seeks to challenge accepted opinion and spark fruitful debate about key issues and developments in food and farming. Distributed quarterly to subscribers, each issue features independent comment and analysis.

The Food Ethics Council challenges government, business and the public to tackle ethical issues in food and farming, providing research, analysis and tools to help. The views of contributors to this magazine are not necessarily those of the Food Ethics Council or its members.

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Edited by: Liz Barling
Design: James Adams
www.getupandgodesign.com

Printed by: Newman Thomson Limited, Burgess Hill. Printed on 80% post-consumer recycled paper. ISSN 1753-9056

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The Food Ethics Council, registered charity number: 1101885

Cover photo: Andy Hay

Time to celebrate party food?

Bringing the right ingredients to the table



In recent decades political parties have tended to disregard food as a serious issue. Only when problems emerge that politicians really can't ignore, like BSE in cattle, salmonella in eggs or horsemeat in burgers, do they face up to some of the problems in the food system. But even then, they tend to address the immediate issue and not the root cause. Is this set to change as we approach the 2015 UK General Election?

This issue of Food Ethics asks leading figures involved in the UK food system what it would take to put food firmly on the political map. We've asked them what they'd like the next Government to do in relation to addressing concerns – both ethical and practical – relating to food. We've tried to reach out to a cross-section of different people and organisations with a wide range of interests, and while we don't claim this is representative, we do believe it makes for an eclectic but engaging read. I hope you'll agree.

Lang and Barling [p4] are optimistic for the future. They point to the fact that so many people across the UK and around the world are more engaged in food politics than ever before. They call this "food democracy" and they see it as a powerful agent for change.

So, what are the issues that matter? It is the growth in the number of people facing hunger in the UK that concerns Cooper [p10], who calls for a grown up debate about the issues facing the most vulnerable in our society. In contrast, it is the growth in waistlines – the obesity epidemic – that worry Calder and Capewell [p7]. They argue that government intervention, including policy and legislative innovations on taxing unhealthy food and further restricting advertising to children, are crucial to tackling this burgeoning public health crisis.

They're not alone in demanding a tax on empty calories. Longfield [p9] pens what she describes as probably one of the worst political slogans you've ever heard, but goes on to say that "the idea behind it is the most important measure any new government could take to set us on the road to a good food and farming system." Intrigued...? Then read on.

Miller [p12] also focuses on children's eating habits. She says that in order to change attitudes towards food we need to educate our children, giving them an appreciation of good food and the wherewithal to cook it.

There are certainly areas of common ground amongst our contributors. If we very crudely use the number of word mentions as a guide, then the importance of learning from the horsemeat scandal is very high up the list. A proper joined up

food policy gets several votes too, including from Hird [p14] and MacMillan [p14].

Dibb [p15], writing on behalf of the Eating Better alliance (of which the Food Ethics Council is a member, and helped establish), reminds us that the horsemeat scandal did have one positive effect. That was to highlight the true cost of 'cheap' meat to our environment, our health and animal welfare. She agrees with Lang and Barling [p6] that we're all going to have to change our eating habits if we want a sustainable food system.

There are important areas of difference too. Pink [p19] urges us to break out of the polarised debate on crop production systems and embrace appropriate use of science and technology. Tudge [p21] calls for an Agrarian Renaissance. His interpretation of what is 'appropriate' differs strongly from Pink's, but they are both working towards the same end – a sustainable future for our food system.

Moving to the other end of the value chain, Sandys puts the case for a Minister for Consumers, and argues for a more robust competition policy – an area the Food Ethics Council has a strong interest in. It begs the question: what aspects of policy relating to food should be 'competitive' (party political) and where should we push for cross-party consensus?

Here is not the place for me to put forward my own suggestions on what I think should be on party political manifestoes. I'll leave that to the other contributors in this issue, but it's an area the Food Ethics Council will be working on in the coming months. I'm keen to make sure we don't get too parochial in our thinking. We should remember that lots of decisions affecting the UK's food and farming system are made at EU rather than national level – as Pederson [p17] rightly points out.

Many readers of this magazine are people of influence in the food world. My plea to you is to do what you can to get issues of wellbeing, autonomy and justice onto the political agenda (of which getting commitments onto manifestoes is one important part). Please don't give up on the idea of government leadership. If we all work together, I truly believe we can bring about change. You may be able to tell that I'm a fan of optimism and action, not pessimism and apathy! Our growing food democracy may well mean that decisions about food could be a vote winner one day. When that happens, we'll know that we've succeeded in putting policy on a plate.

Dan Crossley is Executive Director at the Food Ethics Council

UK Food Policy Can we get it on the right track?





Almost half a century of neglect has left UK food policy in the doldrums, write **Tim Lang** and **David Barling**. But there are reasons to be optimistic.

As recently as thirty years ago only a few academics and people concerned about food in the developing world used the term 'food policy' let alone understood what it entailed. Neither politicians nor the public appreciated that the UK had a food policy, let alone recognised that it was awry. There were a few dissenters. Back in the mid 1960s, a minority of brave culinary champions had expressed alarm at the poor quality of our mass diet. In the early 1970s, a new breed of NGO (Friends of the Earth, Greenpeace) highlighted environmental issues such as pesticides, packaging and pollution. Some health researchers were troubled about heart disease in the '70s and additives in the '80s. A But the dominant political verdict was that the nation had never been so well fed.

In truth, since rationing had ended in 1955 there had been remarkable transitions in what people ate, the range of choice, where they bought food (the inexorable rise of supermarkets) and declining food prices. The latter were helped, economists argued, by rising incomes and macro-economic initiatives such as the ending of Retail Price Maintenance (RPM) in 1964. The demise of RPM meant manufacturers could no longer tell retailers what to charge for their products. This transferred power from food manufacturers to retailers, turning them into the gatekeepers they are today.

The cosy 1970s and 1980s?

In the 1970s and '80s, the then Ministry of Agriculture, Fisheries and Food (MAFF) ran an agriculture policy that focused mainly on what Britain could or could not do within the Common Market (now the European Union). While the period was characterised by a famously close relationship between MAFF and the farming unions, a raft of tensions were building including: who makes the money; what sort of food and farming system is desirable; power and control over food decision-making; the role of the state in food; diet-related ill-health; and – long before dire concerns about climate change – food's environmental impact.

Anyone reviewing the last half century of UK food policy history couldn't help noticing that these tensions, established a generation ago, are plainly still manifest today. And despite work to highlight them over the past 40 years by both traditional conservation bodies (including the National Trust, CPRE and the RSPB) and the new breed of publicity-savvy NGOs, policy makers are still refusing to address them. How much evidence of food's impact on the environment or health or social inequalities is needed for a new direction to be charted?

The UK food system

Food is both a biological entity, subject to whims of weather, taste, season, culture and fashion, and a microcosm of the economy, subject to wider socio-political forces. It's a fissured

sector, with 1.4 billion farmers (many wage-less) globally feeding seven billion people via a distribution system which distorts needs and mal-distributes. How else can 1.3 billion be overweight or obese while 0.9 billion are malnourished? The UK is part of that wider picture. Four hundred and eighty thousand farmers, 400,000 people employed in food manufacturing, 200,000 in wholesaling, 1.2 million in retailing, and 1.6m in catering feed 63 million consumers. Consumers spend around £180 billion on food each year from 90,000 shops and 430,000 catering outlets. Seventeen million hectares of the UK's landmass is farmed, about 70% of the total, but only 36% is croppable. We grow a declining proportion of our food. We imported about £37.5 billion's worth in 2012 and exported £18.2 billion. The food trade gap is steadily growing – something the Coalition has set out to reverse but has – so far – failed to deliver.

Home production peaked in the early 1980s and has declined slowly ever since, with hiccups along the way. About half of our grain is fed to animals, which, as meat and dairy, could contribute to a healthy diet but mostly doesn't. Calculations of the UK's food footprint are sobering. Like the rest of Europe, we are consuming as though there are two or three planets. Globally, the rich world consumes more than those on lower incomes, the USA seemingly beating a path to planetary overload, with the UK sadly following. In all, current UK food policy betrays a gap between the evidence showing what policy makers should address and what's being done by the food chain and the public.

The case for optimism

And yet, writing this, we are hopeful. More people are more aware of the enormous challenges facing food policy ahead than at any time in human history. The vibrancy of debate is wonderful. The spread of information and insights around the globe, in rich countries and poor alike, is quite astonishing. Blogs, books, tweets, media coverage, public consciousness and discussion proliferate. The horsemeat scandal – being investigated by the Elliott review (reporting in 2014) – led not to denial but to public hand-wringing by mighty retailers. Sadly no prosecutions seem to have followed, but then no-one (yet) has accused the powers-that-be of a systematic cover-up. Public scrutiny is alive in the age of the internet

The food policy genie is now truly out of the bottle. Too many people know too much about the state of modern food adulteration, food-related ill-health, gross waste of food by the rich world, and the unprecedented concentration of power over food systems by multinational corporate entities for there not to be some semblance of what we've called Food Democracy. With the increasing auditing of supply chains by industrial and retail buyers of food produce and its raw materials, and by Government departments, enormous amounts of data are

being collected right along the supply chain, and not just on our purchasing choices at the check-out tills. Here, there is a need for more transparency and accessibility of information to help public authorities shift these food supply chains towards better health and environmental outcomes. What's truly amazing is the lack of global conflagration driving policy-makers to reassess their previous strategies on how to ensure food security. This is important, since the big changes to the food system in the second half of the 20th century largely followed the destruction during and reconstruction after World War II.

The new complexity

As we have suggested above, the roots of current 21st century debate about the failures of Western food policies and the need for new strategies lie in the 1970s. Even as the post-World War II reconstruction appeared to be yielding, and the brilliance of technical revolutions were working through supply chains (plant breeding, industrial processes, new products and modes of cooking, logistics, branding), signs of their limitations were apparent. Not just obesity but an entire epidemiological and nutrition transition was spreading. As we have argued elsewhere, a new complexity emerged for policy makers. 'Diseases of affluence', environmental damage, consumer expectation of cheap food, and unprecedented concentration of power all combined to incapacitate politicians, undermining their ability to get a grip. Instead, they lionised retail bosses as exemplars of modern British capitalism.

After the systemic shocks of World War II complacency about food policy was first shaken not by macro-problems like non-communicable diseases or climate change but by food poisoning and safety issues. This surprised many watchers. Although worries about additives and pesticide residues emerged in the 1980s, it was hard data about foodborne diseases and food poisoning (salmonella in eggs, e-coli, BSE), which dented the policy 'lock in' and shook the food status quo, leading to modern food traceability, the rise of 'tick-box' management via HACCP, and new institutions (EFSA in the EU, the FSA in the UK, Defra replacing MAFF, shake-ups of Codex Alimentarius at the UN).

The 2007-08 commodity crisis momentarily unlocked this lockin. Fresh from ousting Tony Blair, Gordon Brown ordered a

Cabinet Office Strategy Unit review of food, the first since the 1950s, to take stock of the whole food system. 10,11 The resulting Food Matters report charted a new direction which narrowed the evidence-policy gap, stating that Britain should aim for a low carbon and healthy food supply. Negotiations went on across Whitehall, with Devolved Administrations, and most importantly with industry. A Council of Food Policy Advisors was created at Defra as well as a Cabinet Sub-Committee on food. A consensus emerged that a new framework would help, with big companies also recognising dire challenges ahead. Looking across the Atlantic they feared litigation. An optimism that some structural change might occur emerged. Globally there was a renewed interest in the importance of primary growing. ¹² In the UK, meanwhile, farming's contribution to the national economy had been shrinking; in 2011 it was worth £8.7 bn, a mere 9% of the total agri-food economy which itself was only 7% of the total national economy.7

Where to next?

Modern UK food policy discourse has come a long way. The muchheralded 2011 review was, rightly, mostly about the world. ¹³ Furious debates remain: light green vs deep green; consumer choice vs choice editing; whether to focus on single issues like carbon or aim for a more complex set of goals; hand-outs to the poor or decent living wages. Dare we suggest that there might be a core consensus on what is needed ahead for future food systems? We do. The future of food requires action now to:

- Lower environmental impacts drastically; this should address not just climate change but water stress, biodiversity loss, soil depletion, and more;
- Reconnect consumers with the realities of food economics. Put simply, food is too cheap, but it's a concept hard-wired into our culture. And cheap food is necessary for low income consumers for whom food is a flexible item in weekly household budgets.
 Recent food inflation means the UK is beginning to live with more expensive food, and with expensive housing and transport too, so a rebalancing of priorities is inevitable;
- Begin the slow process of what will have to be a radically changed set of food choices in the future, away from sweet, high calorie diets with high meat and dairy consumption



- to perhaps simpler, certainly more plant-based diets with meats more exceptional. We see potential here in applying the distinction emerging from public health nutrition between simple, processed and ultra-processed foods; 14,15
- Rebuild skills and engagement by the public, to take responsibility for and be involved in coming changes;
- Reframe markets by setting out clear new short and long-term goals; this requires bringing together individual company and sector actions under one framework.

All this requires institutional revitalisation, possibly reforms and certainly genial but firm leadership. Defra and the FSA, for example, are severely weakened by cuts. No-one wants food dictatorships but, unless the state has internal skills and capacities, it cannot be expected to 'chair' a new direction. Talk of the 'nanny state' is irrelevant now. Even hardline neo-liberals know that individual consumers cannot sort out their own food supply chains. The UK has no room – literally – for US-style backwoods self-sufficiency. We are all in this mess together and must work together to get the food system onto a genuinely sustainable footing.

Specific tasks

To help address and deliver these principles and goals, some immediate tasks already seem possible:

- Undertake a review of UK food policy, and outline options (from radical to business-as-usual), incorporating the thinking and work already done under strategies such as Food 2030 and the lessons of Coalition actions such as the green food project and export drives. ^{16,17} This could be done in a number of ways: highlevel taskforce; arms-length review (like the 2013 Dimbleby-Vincent review of school meals); joint existing advisory bodies (SACN, PHE, Environment Agency) devolved to a special joint working party (such as the Royal Society, Academy of Medical Royal Colleges); or open public engagement. But, wherever the review is conducted it must be inclusive in its policy scope, not fragmented into disconnected activities.
- Create a new set of sustainable dietary guidelines to replace
 the Eatwell plate. Nutrition and public health need to be
 aligned with environment. Each needs the other. This requires
 a new cross-disciplinary, multi-agency working party, and
 linking with the Environment Agency and other bodies. It
 should be applied and modified to suit all public provision
 including school meals, prisons, hospitals, and the forces.
- Appraise national skills needed for the transition to a
 sustainable food system. We need long-term advice on
 managing the UK's responsibilities. This should become a
 seminal review of the UK's education, science, technology and
 food skills capacities at all levels from citizens to science.
 What, for example, is required from soil science, once a world
 leader, but now marginal? Or from plant breeding beyond the
 current policy fixation on GM?
- Create a Beveridge-type review of food welfare, including the role of the labour market, the rise of zero-hours contracts, food poverty and food banks. Existing strains in this policy mix are likely to be exacerbated by the Coalition's welfare reforms and long-term thinking based on a living wage to afford a sustainable diet is needed.
- Reform institutional structures. Should the Food Standards Agency be merged into Public Health England (Scotland and Wales are already using their FSAs differently to England)? Should Defra's responsibilities for corporate supermarkets and large manufacturers be transferred to the Department for Business Innovation and Skills as part of BIS' industrial strategy?

- Re-activate the UK's high level involvement in the EU's sustainable consumption and production agenda, in the context of the Lisbon agenda, where the EC's Roadmap makes a start but remains subsumed under industrial policy and disconnected from the debates and decisions on CAP reform. Agriculture, the supply chain and consumers' health need to be reintegrated in EU policy formulation. The UK ought to be central to ideas in that forum. The SCP theme at EU and UN levels needs to be repatriated, and expanded beyond its current focus on food waste and greening public procurement, notwithstanding the importance of movement in these areas.
- Set out a clear land policy. We have argued before that this is
 ultimately a question about what land and food production
 are for.¹⁹ The UK could take the lead in advocating more
 productive land use strategies for food growing and meat
 reduction strategies internationally. Already the Netherlands
 is taking a lead on protein substitution.

Not much to do, clearly!

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Incentivising change – a business point of view



John Steel is CEO of Cafédirect.

Few would disagree that the pursuit of short term profit has led to massive environmental destruction and a breakdown in society. The recent horsemeat scandal brought to light the consequences of not having a transparent and accountable supply chain and just how disturbingly widespread this ignorance is. And right now the solutions being applied are like applying a plaster to a stab wound, wholly inadequate.

But think what could happen if those social and environmental impacts were monitored as closely as the financial bottom line. What if those impacts truly affected their ability to run their business and were fundamental to every decision taken. Now wouldn't that be a fantastic world in which to live!

But where's the incentive for business to change? Right now, the reality is that unless the environmental and social impact of their operations affects profits, then they are a minor consideration at best. Government legislation which either financially rewards or punishes companies for these impacts, such as through the use of tax breaks, funding or fines, would finally make it worthwhile for a business to invest time and resource into restructuring its reporting. For the first time, this would enable true accountability and transparency, giving their stakeholders and consumers insight into the companies they support and giving them the ability to pressure companies to continuously improve this position. Government is a key influence in the way businesses operate and will be crucial in putting social and environmental impacts at the very heart of each company.

References

- 1.Cooper, D., The bad food guide. 1967, London: Routledge & Kegan Paul. xvi, 192.
- 2. Pearce, F., Green warriors: the people and the politics behind the environmental revolution. 1991, London: Bodley Head. 331, [8] of plates.
- 3.COMA, Diet and Coronary Heart Disease: Report of the Advisory Panel of the Committee on Medical Aspects of Food Policy (COMA). 1974, Department of Health and Social Security.
- 4. Millstone, E., Food Additives. 1986, Harmondsworth: Penguin.
- 5.Regidor, E., et al., The role of political and welfare state characteristics in infant mortality: a comparative study in wealthy countries since the late 19th century. Int J Epidemiol, 2011. 40(5): p. 1187-95. Environment and society. 2009, Oxford: Oxford University Press.
- 6.Defra, Food Statistics Pocketbook 2012. 2012, Department for Environment, Food and Rural Affairs: London.
- 7. Defra, Agriculture in the United Kingdom 2012. 2013, Department for Environment, Food and Rural Affairs: London.
- 8. Audsley, E., et al., How Low Can We Go? An assessment of greenhouse gas emissions from the UK food system and the scope for reduction by 2050 2010, FCRN and WWF: Godalming, Surrey.
- 9.Lang, T. and D. Barling, Nutrition and sustainability: an emerging food policy discourse. Proceedings of the Nutrition Society, 2013. 72(1): p. 1-12.
- 10.Cabinet Office Strategy Unit, Recipe for Success: Towards a Food Strategy for the 21st Century. 2008, Cabinet Office: London.
- 11. Cabinet Office Strategy Unit, Food Matters: Towards a Strategy for the 21st Century. 2008, Cabinet Office Strategy Unit: London.
- 12. World Economic Forum and McKinsey & Co., Realising a New Vision for Agriculture: A roadmap for stakeholders. 2010, World Economic Forum: Davos.
- 13. Foresight, The Future of Food and Farming: Challenges and choices for global sustainability. Final Report. 2011, Government Office for Science: London. p. 211.
- 14. Monteiro, C., The big issue is ultra-processing. World Nutrition, 2010. 1(6): p. 237-269.
- 15. Monteiro, C.A., et al., Increasing consumption of ultra-processed foods and likely impact on human health: evidence from Brazil. Public Health Nutrition, 2011 14(1): p. 5-13.
- 16.Defra, Food 2030. 2010, Department for Food, Rural Affairs and Environment: London.
- 17. Defra, Sustainable Consumption Report: Follow-Up to the Green Food Project. 2013, Department for Environment, Food and Rural Affairs: London.
- 18. European Commission, Roadmap to a Resource Efficient Europe. Communication from the COmmission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM(2011) 571 final. Brussels, 20.9.2011. 2011, Europea: Brussels. p. 26.
- 19.Barling, D., T. Lang, and R. Sharpe, Food Capacity: the root of the problem. Royal Society of Arts Journal, 2008. CLIV (5533): p. 22-27.

Future government food policy and public health

A focus on healthy food and drink





Future policy interventions in public health should focus on obesity, and include legislation to reduce our intakes of sugar, salt and trans-fats, argue **Nicola Calder** and **Simon Capewell**.

The obesity epidemic represents a major public health crisis. One third of UK children and two thirds of UK adults are already obese or overweight. Obesity rates continue to rise alarmingly. And the increasing overweight and obesity amongst infants and children particularly in lower socio economic groups is particularly concerning. Excess weight drastically increases a child's risk of diseases including cardiovascular disease, diabetes, and common cancers. By 2050, rising obesity levels will affect 60% of men, 50% of women and 25% of children. Overweight and obesity is expected to add £10 billion to the annual total cost of the NHS by 2050, ¹ with an additional financial burden on social care, work places, welfare and personal and family wellbeing.

Key Challenges

Obesity rates have increased three fold over the last three decades. Obesity currently poses one of the most serious public health challenges. The key contributing factors are: changing dietary patterns including increased consumption of energy dense, nutrient poor 'junk' foods containing high proportions of fats, salt and sugars; low intakes of fruit and vegetables; sugary drinks; and reductions in physical activity.

The problem of excess weight is thus affected by society, individual behaviours and the environments in which people work, play and live. Increasing access to affordable healthy food choices should therefore be a key policy objective in counteracting rising levels of obesity plus increased opportunities for individuals to be physically active. Policies and actions are urgently required that will shape societies where healthy lifestyles become the norm.

Evidence for Interventions

Increasing the availability of healthy food and drink and influencing people's behaviour is complex. The primary prevention of obesity is dependent on the effective reduction of caloric intake and a healthier diet. Key obesity drivers in the current food system include the increased supply of cheap, palatable energy dense food; improved distribution systems to make junk food more accessible and convenient and very persuasive and pervasive food marketing.

Large reductions in future obesity prevalence can probably only be achieved by a reduction in the population consumption of the excess calories hidden in sugary drinks, junk food and overlarge portions. This will require 'population-based' prevention strategies (for example, taxes on processed products containing high levels of saturated fat, sugar taxes, legislating for smoke-free public spaces, banning dietary trans fats and halving daily dietary salt intake). They are all generally effective and also cost-saving. Furthermore they can reduce health inequalities. ²

Obesity control requires policy interventions to improve the environments that currently promote poor dietary intake and physical inactivity. A comprehensive strategy is therefore required, much like tobacco control. Achieving action of a scale powerful enough to impact on population levels of overweight and obesity is unlikely to be achieved purely at a local or individual level. Isolated marketing campaigns which focus on changing the lifestyles of individuals are likely to increase health inequalities. Collaborative action is required to enable national policy and legislative change that will complement local health improvement programmes and strategies. A continued population based focus on the key risk factors for obesity and poor nutrition is therefore essential. A study in the Lancet³ recently found that the most cost effective measures in terms of reducing obesity included:

- · A 20% duty on sugary drinks
- · Reduction of advertising of junk food and beverages to children
- · Front-of-pack red, amber, green traffic light nutrition labelling

The government has recently introduced a voluntary scheme of nutritional front of pack labelling. However there is still much to be done to improve food policy in the UK.

A Duty on Sugary Drinks

Intake of dietary sugar has increased over recent decades in line with the obesity pandemic. Sugar sweetened beverages (SSBs) form a primary source of sugar, ⁴ often displacing more nutritious drinks such as milk and fruit juice. ⁵ Growing evidence links greater consumption of SSBs with weight gain and obesity in adults and children. ^{6, 7, 8, 9}



The average volume of sugary drinks consumed per person in the UK in 2011 was 92 litres. ¹⁰ Furthermore, sugary drinks account for a worrying 10% of daily calories consumed by UK kids. Worse, individuals with lower incomes consume more SSBs. The good news is that people on lower incomes are more sensitive to price increases, ^{10,11,12} and are more likely to reduce their consumption behaviour in response to price hikes. ^{13,14} They should therefore experience greater dietary improvements. Such taxes are, of course, mildly 'regressive' (that is, poorer people pay a greater proportion of their income in tax than do the rich). However the health gains are progressive and would narrow inequalities. ^{15,16}

A strong evidence base therefore now exists for public health strategies to discourage consumption of SSBs as part of a healthy lifestyle. 8,9 A duty on SSBs would form an equitable population based approach to reducing consumption. It would increase demand for healthier alternatives and reformulation of SSBs. Finally it would also raise significant funds towards children's health programmes and recovering costs associated with ill health. A 20p per litre duty on sugary drinks could raise £1 billion per year to invest in improving public health. 10

Further restrictions on the marketing of unhealthy foods and beverages to children

Children are highly vulnerable to advertising and marketing. They are unable to interpret advertising messages critically as they lack the necessary cognitive skills and experience. In essence, children cannot effectively evaluate advertising, and tend to accept it as truthful, accurate and unbiased. Even as they enter their teenage years, children's ability to understand advertising's intent tends to be only rudimentary. Whilst children may understand that advertising is intended to sell a product, they may not be able

to recognise the inherent biases in persuasive messages nor interpret these messages critically. ¹⁹ Like the tobacco industry, the food industry has adopted pervasive advertising and marketing strategies. ²⁹ Lessons learned from successful tobacco control can be transferred to advocacy efforts for food marketing to children and exercise duties on SSBs.

Restricting unhealthy food marketing to children has been repeatedly demonstrated as a cost effective obesity intervention. Excluding all TV advertising and sponsorship of foods high in fat, salt and sugar would result in annual health benefits of £125m in QALYS (a quality-adjusted life year, which is a measure of disease burden, including both the quality and the quantity of life lived) and £605m in VoL (the valuation of lives saved). Such restrictions have been successfully introduced in Norway, Sweden, Belgium, Greece, Romania and Quebec. They are thus practical and politically feasible.

The current Ofcom broadcasting code aims to protect children from junk food and sugary drink advertising on television by identifying products high in fat, sugar and salt. Products which do not meet specific nutritional criteria cannot be advertised during programmes or television channels made specifically for children, or during programmes of particular appeal to children under 16. However this narrow limit has been criticised because many programmes are not specifically marketed to children but still have a high youth audience such as X Factor and popular soaps. In 2011 the Advertising Standard Authority's remit was extended to include online advertising on paid and non-paid for space, including company websites and social networking platforms. However unlike the television regulations, the non-broadcast code does not distinguish between healthy and unhealthy food.

There have been at least five major systematic reviews of the scientific evidence relating to the impact of food marketing to children. ^{17,18,19,20,21} A recent systematic review prepared for the World Health Organization is both very comprehensive and up to date. ²² The review found that food advertising to children affects food choices and influences dietary habits, with subsequent implications for weight gain and obesity especially in children. ^{23,24,25} Furthermore, these effects operate at both the brand and food category levels. ¹⁹

Whilst television remains an important medium for marketing, it is rapidly being complemented by a growing mix of marketing communications that focuses on branding and building relationships with consumers. This wide array of marketing techniques includes advertising, sponsorship, product placement, sales promotion, cross promotions using celebrities, brand mascots or characters popular with children, web sites, packaging, labelling and point-of-purchase displays, e-mails and text messages, and philanthropic activities tied to branding opportunities. Food marketing to children is now a global phenomenon and tends to be integrated, using multiple

messages in multiple channels. Over 90% of UK children live in a household with internet access via a computer. Internet at home use increases with age, ranging from 65 per cent of 5–7 year olds to 93 per cent of 12–15 year olds. Children's internet use is no longer restricted to the home – over 40 per cent of 12–15 year olds have a smart phone which enables them to access the web on the move too. 26

For policy interventions to work they must be national in scope and see the whole picture. Current restrictions on advertising have limited effect in today's interconnected world, and political nervousness over 'telling people what to eat' is contributing to an obesity epidemic that threatens to overwhelm our health systems. The time for bold action is now.

Nicola Calder is project manager of the North West Obesity Task Force and Health Equalities Group. Simon Capewell is Professor of Clinical Epidemiology in the University of Liverpool. He is also FPH Board member and member of the AOMRC Obesity Group.

Paying the true price for food

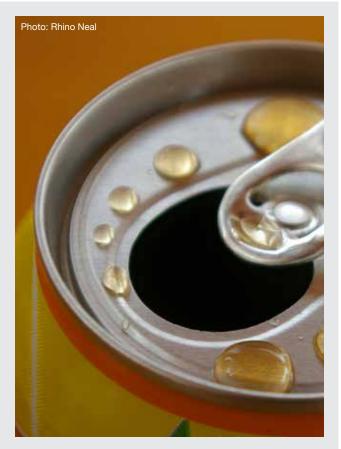


Jeannette Longfield is Co-ordinator of Sustain: the alliance for better food and farming, and a Food Ethics Council member.

What do we want? "Internalise the externalities". When do we want it? "As soon as we've worked out the details". Probably one of the worst political slogans you've ever heard? Put like that, I would agree. However, I'm going to argue that the idea behind it is the most important measure any new government could take to set us off on the road to a good food and farming system.

Coined by economists, externalities are the costs that don't show up in the price. For the food system, these so-called 'external' costs are very high indeed and include: catastrophic climate change; death and suffering from diet-related diseases like cancer and diabetes (and from food poisoning); extinction of animals, marine life and other aspects of biodiversity; loss of clean air, fresh water and living soil; and dismal (sometimes deadly) working conditions for many working in the global food and farming industries.

We pay for all of this, one way or another, but just not in the price of food which, despite recent increases, remains cheap by historical standards. This is what economists (them again) call 'market failure' because if the price signals are wrong, the market doesn't correct itself to deal with the 'external' problems. Leaving aside the very vexed issue of whether markets ever do correct themselves, the failure here is that junk food is cheap and good food appears to be expensive, because it includes the costs of avoiding or dealing with the 'external' problems. Organic food, for example, creates jobs and is good for birds, bees and other biodiversity because it uses pricey skilled people instead of relatively cheap chemicals. Fairtrade products pay decent prices to the people who produce our food, and the Marine Stewardship Council certifies products from more complex fishing systems that leave some fish (and ecosystems) in the sea.



How, then, do we correct the price signals so that junk food reflects, in its price, the costs of the problems it is creating? Taxes, duties and levies. These are powerful and under-used weapons in the government armoury, weapons that some governments around the world are starting to get out of the cupboard. Sustain is among many organisations arguing that a really good place for the UK government to start correcting market failure is by putting a duty on sugary drinks, and ring-fencing some of the money generated to spend on top notch, free school meals to improve children's health.

What do we want? "Free school meals for our kids". When do we want it? "Now, with the money from the sugary drinks duty". That sounds more like something a new government would do.

References

- 1. Foresight Tackling Obesities: Future Choices- Project Report. 2nd Edition. Government Office for Science. 2007
- Capewell S, Graham H. Will cardiovascular disease prevention widen health inequalities? PLoS Med. 2010 Aug 24;7 (8):e1000320. doi: 10.1371/journal. pmed.1000320
- 3. Gortmaker SL, Swinburn BA, Levy D, Carter R, Mabry P, Finegood D, Huang T, Marsh T, Moodie M. Changing the future of obesity: science, policy, action. Lancet, 2011; 378, 838-47
- 4. Anderson, A, Nutrition interventions in women in low-income groups in the UK, Centre for Public Health Nutrition Research, University of Dundee, in Proceedings of the Nutrition Society (2007), 66, p.25-32
- 5. European Public Health Alliance, (November 2011) EPHA Briefing Paper on Fiscal Measures applied to Food Policy, EPHA from http://www.champspublichealth.com/writedir/2c85EPHA_Briefing_on_fiscal_measures_applied_to_food_policy_FINAL-2.pdf, accessed 26th April 2012
- Malik at al, Intake of sugar sweetened beverages and weight gain: a systematic review, The American Journal of Clinical Nutrition, 10th August 2011, p.274
- 7. Vartarian et al, Effects of Soft Drink Consumption on Nutrition and Health: A Systematic Review and Meta-Analysis, American Journal of Public Health, April 2007, Vol 97, No. 4, p.867
- 8. James and Kerr, Prevention of childhood obesity by reducing soft drinks, International Journal of Obesity (2005) 29, S54-S57
- 9. American Beverage Association, cited in The Huffington Post, Soda Taxes Might Save 2,600 Lives A Year, But Certainly Make Cents, 16th Jan 2012, Source: http://www.huffingtonpost.com/2012/01/16/soda-taxes_n_1205630.html, accessed 25th April 2012
- 10. A Children's Future Fund. How food duties could provide the money to protect children's health and the world they grow up in. Sustain. 2013.
- 11. Smed, S., Jensen, J. D. & Denver, S. (2007). Socio-economic Characteristics and the Effect of Taxation as a Health Policy Instrument. Food Policy, 2007 32 (5–6), 624–639.
- 12. Powell, L. M. & Chaloupka, F. J. (2009). Food prices and obesity: evidence and policy implications for taxes and subsidies. Milbank Q, 2009; 87, 229–257.
- 13. Mytton, O., Clarke, D. & Rayner, M. Taxing unhealthy food and drinks to improve health. British Medical Journal 2012; 344, e2931
- 14. Lopez, R. A. & Fantuzzi, K. L. Demand for carbonated soft drinks: implications for obesity policy, Applied Economics 2012; 44 (22), 2859-2865
- 15. Smed, S., Jensen, J. D. & Denver, S. Socio-economic Characteristics and the Effect of Taxation as a Health Policy Instrument Food Policy 2007; 32 (5–6), pp.624–639.
- 16. Brownell, K. D. & Frieden, T. R. Ounces of prevention The public policy case for taxes on sugared beverages. New England Journal of Medicine 2009 360 (18), pp. 1805–1808.
- 17. Committee on Food Marketing and the Diets of Children and Youth. Food marketing to children and youth: threat or opportunity. Washington DC, USA: Institute of Medicine of the National Academies; 2005
- 18. Dalmeny K, Hanna E, et al. Broadcasting Bad Health: Why food advertising needs to be controlled. International Association of Consumer Food Organisations; 2003
- 19. Hastings G, McDermott L, et al. The extent, nature and effects of food promotion to children: a review of the evidence. Geneva: World Health Organisation; 2006
- 20. World Cancer Research Fund and American Institute for Cancer Research. Food, nutrition, physical activity and the prevention of cancer: a global perspective. Washington DC: AlCR; 2007
- 21. Livingstone S and Helsper E. Advertising foods to children: understanding promotion in the context of children's daily lives. Prepared for Ofcom; 2004
- 22. Cairns G, Angus K, Hastings G. The extent, nature and effects of food promotion to children: a review of the evidence to December 2008. Geneva: World Health Organisation 2009Goris JM, Peterson S, Stamatakis E, Veerman JL. Television food advertising and the prevalence of childhood overweight and obesity: a multicountry comparison. Public Health Nutrition 2010; 13:1003-12
- 23. Cairns G, Angus K, Hastings G. The extent, nature and effects of food promotion to children: a review of the evidence to December 2008. Geneva: World Health Organisation 2009.
- 24. World Health Organisation. Set of recommendations on the marketing of foods and non-alcoholic beverages to children. May 2010

- 25. University of Strathclyde (2003) Review of Research on the Effects of Food Promotion to Children. Final Report. Prepared for the Food Standards Agency
- 26. Ofcom. Children and parents: Media use and attitudes report. 2011.
- 27. Ofcom. Television advertising of food and drink products to children.2007.
- 28. NICE (2010) Prevention of cardiovascular disease at population level. National Institute for Health and Clinical Excellence (NICE) public health guidance 25.
- 29. Cancer Council (2009). Position Statement: Food Marketing to Children http://www.cancersa.org.au/cms_resources/position%20statements/Ps_Food_Marketing_to_Children_Published_December_2009.pdf, accessed 26th April 2012

Hungry for a safety net

A decade of destitution



Six years on from the start of the economic crisis in 2007, the prospects for society at large, and for those struggling on its margins in particular, are bleak. In fact, writes **Niall Cooper**, we are in the middle of the most prolonged squeeze on household incomes in modern times.

According to Julia Unwin, Director of the Joseph Rowntree Foundation, "A decade of national debt risks being followed by a decade of destitution. Food banks open across the country; teachers report children coming to school hungry; advice services and local authorities prepare for the risks attached to welfare reform. There is evidence of a rising number of people sleeping rough, and destitution is reported with increasing frequency."

Around four million people are currently estimated to be suffering from food poverty in the UK. ² Whilst the level of food poverty is worrying enough, what is of greater concern is the exponential growth in the numbers of people across the UK who are experiencing real hunger and hardship. And with average household incomes projected to fall by more than 7% over the next three years, this growth is likely to continue.

The Trussell Trust (the biggest provider of food banks in the UK) has reported that more than 350,000 people turned to their foodbanks for help last year – almost triple the number who received food aid in the previous year. On the basis of evidence from around the UK,³ Church Action on Poverty and Oxfam GB recently estimated that the total number now reliant on food aid is in excess of half a million people, and this number is set to grow as changes to the benefits system take effect.⁴

"I have to cut down on basic living expenses as it is. I stay in bed to keep warm, especially in winter as I can't afford to put the heating on. The bleakness of this week to week is having an impact on my mental/physical health. I'm trying to find somewhere else to live, but so far have not been able to find anywhere affordable in this area. I have had to get occasional food parcels from the food and support drop in service."

CAB client in Greater Manchester⁵

Food poverty and increasing hunger is having a devastating impact upon low-income families and individuals in the UK.

It is clear that the government could save billions by tackling preventable diseases caused by food poverty. If benefit levels were raised in line with the cost of living and the government gave more help to people on low incomes, so that the poorest households could afford a healthy diet, real savings would be made in the long term.

It is difficult to calculate the food element of benefits because there is no set amount ring-fenced for food, but figures from the Family Budget Unit⁶ suggest it falls considerably short of the amount needed to prevent malnourishment. In the case of a couple with two children on income support, they calculated that an extra £39 per week would be needed for the family to eat a low-cost but acceptable diet.⁷



Case Study

Jack, a single mother, lives on housing benefit and child support. After selling all of her possessions to pay off debts she was left with just a bed and a sofa and a few items that were later donated by friends. She lives on a food budget of £10 per week. Sacrifices she makes to save money include never using the heating; taking out excess light bulbs and not having a freezer or tumble drier. She buys basic products and avoids meat and dairy products as they are too expensive. Her local food bank is able to provide nappies and five items of food each week.

On reading an article in *The Independent* she was shocked to find that nine of the sixteen criteria that class a child as being in poverty applied to her own son, including: not having outdoor space to play; not having two pairs of shoes; and not having meat or dairy in his diet. "It was a shock to me. I thought, my child is in poverty, and I wondered if I was a bad mother."

Welfare safety net no longer: is the benefits system creating hunger?

Olivier De Schutter (the UN's Special Rapporteur on the Right to Food) recently pointed to increases in the number of food banks in developed countries as an indicator that governments are in danger of failing in their 'duty to protect' under the International Covenant on Economic, Social and Cultural Rights (IESCR) which states that all citizens should have access to adequate diet without having to compromise other basic needs.8 Whilst the Department for Work and Pensions claims that the benefits system provides a 'safety net for essentials such as food', the evidence increasingly does not support this claim. In recent years there has been growing concern about the hardship caused by an increasingly harsh and punitive benefits sanctions regime. In 2010 Oxfam's UK Poverty Programme warned that the new sanctions regime being introduced alongside Universal Credit would "expose people to the risk of destitution. Removing benefits and leaving people with no income will result in extreme hardship for them and their families." In January 2013, an internal DWP 'Scorecard' leaked to the Guardian, revealed that more than 85,000 sanctions had been applied or upheld against JSA claimants in one month alone. 10

According to the Trussell Trust nearly a third of food parcel recipients had been referred because their social security benefits had been delayed. A further 15% came as a result of their benefits being cut or stopped. The trust said the majority of people turning to food banks were working-age families. 11 Delays in determining benefit or tax credit claims and appeals can have devastating effects on claimants. For increasing numbers, it means quite literally, that they are going hungry. Both Church Action on Poverty and Oxfam have welcomed the introduction of the new Universal Credit in principle. However, there are real concerns that aspects of its design will unintentionally result in a further increase in hunger and destitution. The fact that Universal Credit will normally be paid monthly, rather than fortnightly, runs the risk that the experience of running out of money before the end of the month will become much more widespread. On top of this, many charities have called into question the feasibility of the DWP's presumption that at least 85% of claims will be made online. More widely, there are growing concerns that Government's £18 billion programme of welfare benefit cuts will inevitably have major consequences in terms of increasing hardship and hunger for tens, or potentially hundreds of thousands of families already struggling to make ends meet. $^{\rm 12}$ To date, the Government has resisted calls to

commission a full assessment of the likely or actual impact of benefit cuts and changes on low income households, including sick and disabled people, their families and carers. ¹³

The need to restore an effective safety net

One of the key founding principles of the modern Welfare State in 1945 was to establish a safety net to end the 'Giant Evil' of want (or hunger). Most of us have grown up safe in the assumption that if we fall on hard times, the welfare safety net will provide a cushion to prevent us becoming destitute. Sadly, the evidence is increasingly pointing to the fact that, for tens of thousands of UK citizens, that safety net is no longer in place.

In recent years policy debate about 'welfare reform' has increasingly become focussed (or even obsessed) with the goal of 'making work pay' whilst at the same time achieving major cost savings. Public debate has become increasingly polarized, leading to unhealthy and misleading arguments about 'strivers and shirkers.' There is a pressing need to reframe the debate about welfare reform around the key principle of ensuring that a fully functioning welfare state safety net is in place. What form the safety net should take is rightly a matter for public debate, but it should be difficult for anyone to argue against the essential premise that the state needs to put in place measures to ensure that no one should go hungry.

Minimum Income Standard

A good starting point for this debate is the principle of the Minimum Income Standard. This is defined as an income which is sufficient to enable any household to live according to a 'low cost but acceptable' standard established on the basis of the social norms of the day – including having the means to afford a nutritionally balanced diet. Pretty much all the research to date points to the fact that benefit levels are currently set below the Minimum Income Standard for the vast majority of households, and that over time benefit levels need to rise – rather than fall – in real terms to reach this threshold. But even if the principle of increasing benefit levels to attain the Minimum Income Standard is not accepted, it is hard to sustain the case for a system which currently forces hundreds of thousands to subsist on net incomes significantly below existing benefit levels. This is hardly consistent with a 'basic safety net' principle.

On this basis, there is a pressing need for further welfare reforms to be introduced which enshrine the 'safety net' in law, including: A clearly established 'minimum acceptable income' level that any household is entitled to, to enable them to adequately clothe, heat and feed themselves. A principle that no deductions can be made - either by the state or by creditors - which reduces anyone's income below the 'minimum acceptable' level. A replacement of the current benefit sanctions regime (based on the apparent idea that it is now acceptable to remove an individual's total income for a period of time of up to three years), with a more humane approach to sanctions. The reintroduction of some form of grant payments system for essential household goods (such as a new cooker or fridge), for households whose incomes are so low that they cannot afford to make loan repayments without reducing their income below the 'minimum acceptable' standard. So as we move towards the General Election and beyond, I call on citizens, politicians and the media to have a grown-up debate about welfare reform and the spectres of hunger and destitution that stalk the most vulnerable members of our society.

Niall Cooper is Director of Church Action on Poverty

PUBLIC HEALTH AND WELFARE

References

- 1. http://www.jrf.org.uk/blog/2012/12/2012-review-decade-destitution
- 2. The Food Ethics Council: http://www.foodethicscouncil.org/node/693
- 3. Citizens Advice London: Food Poverty in London (November 2012). Bureaux have seen a rise of over 50% in the need for food parcels between the first and second quarter of this year. Citizens Advice Scotland: Voices from the Frontline (September 2012). Citizens Advice assisted with 2,200 applications for charitable support in 2011/12 more than double the number in 2009/10. The majority of which concerned essential goods such as food and heating, which the clients were unable to afford.
- 4. Walking the Breadline, Cooper, N. and Dumpleton, S. (2013), Church Action on Poverty and Oxfam GB.
- 5. Greater Manchester Poverty Commission Research Report, December 2012
- 6.The Family Budget Unit was an education charity based at the University of York. The charity was dissolved in 2011, its intellectual property is now owned by the Minimum Income Project.
- 7.The Family Budget Unit, Parker, H. et al (1998) Low-cost but acceptable: a minimum income standard for the UK, Policy Press.
- 8.Food banks can only plug the holes in social safety nets, Guardian, 27 February 2013; http://www.guardian.co.uk/commentisfree/2013/feb/27/foodbanks-social-safety-nets
- 9. Charities' hardship fear over benefit sanctions, BBC News, 12 November 2012; http://www.bbc.co.uk/news/uk-politics-11742916"http://www.bbc.co.uk/news/uk-politics-11742916
- 10. Jobcentre 'scorecard' shows how areas are performing on stopping benefits, Guardian, 28 March 2013; http://www.guardian.co.uk/society/2013/mar/28/jobcentre-scorecard-areas-stopping-benefits
- 11. Number of people turning to food banks triples in a year, Guardian, 24 April 2013
- 12. http://www.guardian.co.uk/society/2013/apr/24/number-people-food-banks-triples
- $13. \ http://www.childrenssociety.org.uk/news-views/article/joint-letter-response-welfare-benefits-rating-bill$
- 14. http://epetitions.direct.gov.uk/petitions/43154

The big question

What's on your manifesto wish list?



Laura Sandys is the Conservative MP for South Thanet.

Horsemeat in burgers, dodgy supermarket promotions, product shrinkage, and even strawberries – the list of food scandals seems to grow and grow. Big business has some way to fall before it earns the reputation that politicians or bankers enjoy but that is no excuse for letting them take consumers for a ride.

While most companies offer honest products at reasonable prices, there are still unacceptable practices regularly used, such as the incredible shrinking portion. The packaging misleadingly stays the same, but the contents are dramatically reduced. That explains how that £1 cottage pie can stay the same price despite commodity prices rocketing. According to an investigation by 'The Grocer' one chain of bakers has shrunk its bacon rolls by 18% and its pasties by 5%.

Another customer-unfriendly trick is 'yo-yo pricing', such as Tesco's strawberries. A product is sold for a limited period at a deliberately inflated price, then, on 'promotion' it is sold at a 'discount'. One chain's accused of raising and lowering prices so much it was impossible to establish its baseline prices. Others have had their 'value' promises investigated by the Advertising Standards Authority.

Over the past 15 years, large companies have become mega companies and consumer choice has suffered. In 1997 there were over a dozen large supermarket chains but today's market is dominated by the big four: Tesco, Asda, Sainsbury's and Morrison's. That shows we need a much more robust competition policy.

Whitehall needs a consumer makeover with a minister responsible for consumers working across government, as departments tend to be too close to vested interests. The consumer voice isn't heard often enough when policy is formulated.

While it's not the Government's job to decide what people should and shouldn't want it is a central responsibility of lawmakers to ensure that the markets are truthful and protect consumers.



Huw Irranca Davies is the Labour MP for Ogmore and Shadow Food & Farming Minister.

Labour has given ethical food a high priority within its food policy, examining issues such as locally sourced produce, transparent supply chains, animal welfare, food waste, food labelling and environmental benefits.

The recent horsemeat scandal has sparked a debate about how Britain's food is produced, traced, and regulated. It has also highlighted the complex supply chain that underpins our food system, exposing its weaknesses. If public trust in our food system is to be improved and sustained we need to examine issues such as transparent supply chains and food labelling. Labour is examining how we can restore trust in our food system by ensuring an effective role for the Food Standards Agency.

Beyond this Labour believes we need to produce more food whilst addressing the decline in biodiversity that we have seen over the last 60 years; in essence producing more by putting less in. To do this Labour believes in moving towards a smaller, greener CAP that delivers better value for money, encourages a competitive farming industry in Europe and protects the countryside, environment, and rural communities.

Labour, in government and opposition, has worked to provide transparency across the food supply chain and it is vital we continue this. From consumer to producer, through the dairy code and the Groceries Code Adjudicator, Labour works to ensure food is produced to a high standard and that producers get a fair price.



The Baroness Miller of Chilthorne Domer is a Liberal Democrat member of the Lords.

For all my political lifetime the very word "food" has largely been absent from the parties' manifestos.

It is easy to see why. Those running the political establishment in the '60s and '70s had a clear memory of wartime austerity. With unrationed access to an increasing variety of foods, and food prices falling as a proportion of income, it just did not seem to be something to worry about.

In the '80s and '90s the rise of the supermarkets and the demise of corner shops and markets fitted the political ethos of the time. Small was not beautiful – it was inefficient and expensive. Meanwhile big business had learned that the more processed food you can sell, as full as possible of cheaper ingredients, the better your bottom line would be.

As Chair of the All Party Parliamentary Group on Food and Health I hear a lot of excellent presentations on solutions to particular aspects of the problem and strategies for resolving the whole food crisis. It is quite clear that to turn the crisis around we need to build a generation of children with a taste for healthy foods and the skills to choose and prepare those foods. This will take concentrated political will. We have to start with a National Food Strategy in our 2015 manifestos.

And in education I would oblige and fund schools to ensure – by 2020 – the nation's children are breakfasting and lunching on foods that develop their tastes for fresh, healthy and, yes, exciting foods that the pupils know how to cook.



Natalie Bennett is Leader of the Green Party

The Green Party's food and farming policies are focused on three issues: ecology, affordability and support for small business and cooperatives to produce food in Britain. The government's Agri-Tech strategy, with its focus on exports and support for multinational companies such as Bayer and Syngenta, is wrongly directed, although the focus on international development work is to be encouraged.

It is clear that we urgently need to move away from high-input industrial monocultures and factory farming towards diverse, small-scale systems that work with local and global ecology, respect animal welfare needs, provide good jobs and ensure long-term food security.

With more than half a million Britons currently dependent on food banks, we need to deal with the two sides of the affordability issue, low incomes (we support making the minimum wage a living wage and decent benefits for all who need them) and keeping costs within bounds of a system in which producers receive a decent return. This issue is clearly also critical on the global scale.

We've been consulting with the Land Workers' Alliance about the promotion of small-scale farming businesses, supporting a strong Groceries Code Adjudicator and further action to ensure small suppliers have fair access to markets and aren't bullied by supermarkets or middlemen. We also want further action to ensure small suppliers have research and extension support.

We'd aim for honest, informative food labelling taking in a scheme scoring for sustainability, to encompass water and land usage, greenhouse gas emissions, animal welfare, support for rural communities, encouragement of biodiversity, fair trade and other relevant criteria.

Honesty and clarity in all promotions, better education about food throughout life and protection of children from junk food advertising are further important issues.



David Croft is Director of Quality and Technical at Waitrose

Since Sweeney Todd became an unaudited supplier to the pie trade, people have been concerned about the origins of their food.

Nearly a hundred years ago Waitrose and other retailers were established with the aim of supplying safe and healthy food to shoppers of the day, something that we've done successfully since then.

Recent issues, especially around the criminal introduction of horsemeat into some supply chains, have led many to question the entire food system. Waitrose did not have horse meat in its supply chain. We focus our efforts on own label, short dedicated supply chains that give us the span of control our customers expect. But if meat is purchased blind from global sources to provide bulk, commodity ingredients, it is less easy to find those guarantees and confidence that farm knowledge and proximity give.

In some businesses, financial pressures to hit a key cost point for commercial reasons can squeeze the supply chain even further. To complicate matters further, farmers are suffering big increases in costs as the price of feed and greater demand put pressure on supply.

Food cannot simply be seen as a cheap commodity, and food supply chains a simple process, when so many factors are working against those premises, including population growth, climate change, greater urbanisation, and the spread of a Westernised diet in the developing world. If something good comes of the scandals of 2013 I hope it is a renewed focus on the wider value of food, not just cost alone, and, consequentially, a focus on investing in the future of robust, sustainable food supply chains. This will help address the fraudsters and, more importantly, the security and sustainability of food for all.



Philip Lymbery is Chief Executive, Compassion in World Farming

I recently took part in a Food Ethics Council dinner with leading businesses. The question was posed, if we had three minutes with Prime Minister Cameron, what would we ask him?

My answer was to urge him to encourage food production that puts animals back on the farm instead of in factories; to get behind extensive, pasture-based and freerange farming, rooted in the land and with reduced reliance on grain, soya and other industrial animal feed. This would have multiple benefits attractive to any party leader, not least because making more nutritious food available to all is better for the countryside and animal welfare.

Land-based animal farming has much greater scope to contribute to the global food basket, rather than taking away from it. As things stand, the world's industrially-reared animals chomp their way through enough cereals to feed three billion people, not to mention nearly all the soya harvest and vast amounts of fishmeal. They give back a fraction of the calories and protein consumed in meat, milk and eggs.

Backing extensive farming would help the Government's health, social and environmental agendas, as well as safeguarding future food supplies. It would make best use of the valuable asset that is Britain's pasturelands, which make up two-thirds of the nation's farmland.

Backing better food from land-based farming would provide a golden opportunity for government to work with leading food businesses, some of whom are already moving down this track.

Most consumers would be shocked to learn that much of Britain's meat is produced on factory farms, the reality shrouded in often misleading labelling. So, putting farm animals back on the farm should be a vote-winner too as that is where many consumers mistakenly believe they are anyway!



Tom MacMillan is Director of Innovation at the Soil Association

Top of the list has to be a joined-up food policy. Labour almost got there with the last government's Food Matters report, the Lib Dems have a food strategy and Gove's School Food Plan shows the Tories can think laterally. In the wake of the horsemeat scandal, all parties need a proper food policy at the heart of their manifesto.

What would the policy include? It should protect what's precious, safeguarding agricultural land from development, defending and growing public health budgets in local authorities, and making free healthy lunches part of the childcare entitlement for the most disadvantaged two year olds.

It should also back what works. The majority of school and hospital meals should meet Food for Life Catering Mark Silver or Gold standards within five years, and schools should adopt the Food for Life Partnership goal of all children experiencing cooking, growing and a farm visit. In implementing the CAP, Pillar 2 support for organic farming across the UK should at least match the average in other Member States, so there's a level playing field for farmers. And at least 10% of agricultural research funding should focus on improving organic systems, as they pioneer integrated approaches that can benefit all of farming, at home and internationally.

All these measures have three things in common. They cost next to no extra money, need no new laws and can be decided in Britain not Brussels. They should be a dream come true for politicians!



Duncan Williamson is Food Programme manager at WWF-UK

There are many issues with the current food system. The good news is that – as well as problems – we also have many of the solutions within our grasp. The key will be to take a whole system approach rather than tinkering at the edges. This means talking about food consumption as well as production.

It's not the UK's role to feed the rest of the world. Rather we should be setting an example, demonstrating that we can feed everybody in a healthy, sustainable manner.

We can promote a system which provides a good living for farmers, supports rural communities and promotes cultural traditions, whilst embracing change and enhancing biodiversity. Healthy diets do not have to cost more. We already produce enough food to feed more than 10 billion people.

Conservation NGOs support farming that makes the best use of natural resources whilst conserving ecosystems; contrary to popular belief this is why many of us are in favour of upland beef and sheep farming, much like that found in the UK.

Variety and moderation are two key components of a sustainable food system, as is being enabled to make easy choices about what to put in our bodies.

Following on from the recently published Green Food Project report on sustainable consumption I would ask the government when is it going to develop a programme of work that fully develops the principles of a sustainable diet.

The UK is leading the debate on this subject and can remain a global leader by developing a cross-departmental group which promote eating habits that are good for people, the planet, and our pockets, as well as supporting our producers.



Vicki Hird is Senior Campaigner, Land Use, Food and Water Security Programme, Friends of the Earth

Any MP thinking about food related manifesto content is probably reflecting on how to tackle horsemeat-like scandals and their constituents' concerns about prices, food banks and waste. Food security is also an emerging concern.

MPs with rural constituencies may find themselves responding to issues such as planning, water stress, fracking, bee decline and climate volatility.

Poor food in schools and hospitals may have also got constituents' attention. Meanwhile local food businesses may be demanding less regulation on the one hand, and more protection for the resources they need – like raw materials (especially global) and inputs like fertiliser, energy, land, water and labour – on the other.

Clearly any manifesto should present a coherent sustainable food strategy to tackle these and other issues. Essentials elements must be:

- 1. High and mandatory standards for all public food procurement (schools, hospitals, the armed forces) including specifying less but better meat, more fruit and veg, and phasing out junk. A 'whole school' approach would engender healthy children who are well prepared for the challenges ahead.
- 2. Putting sustainable, affordable food supplies for all at the centre of any decisions about planning, land, food standards and farm subsidies so shoppers can access diverse high streets, farmers are supported in the right way and food scandals and unsustainable technologies such as fracking are avoided.
- 3. An end to promotion of crop-and forest-based biofuels which compete with food production over land and water.
- 4. Keeping global temperature increases to less than 2 degrees any higher could devastate crop yields and livestock production.
- 5. A commitment to end land grabbing financed by UK companies, by making the new UN FAO guidelines on land tenure legally binding.

Eating better to feed the world more fairly



Policies to shift our eating patterns towards less and better meat and more sustainable plant-based diets must be at the heart of an ethical food manifesto, writes Sue Dibb.

The horsemeat scandal did have one upside. It helped raise awareness of the true costs of 'cheap' meat, from its impacts for animal welfare, the environment and health, as well as for UK farmers squeezed by the economics of opaque and complex supply chains. Yet the political and food industry response has been to get back to 'business as usual' as soon as possible. It is questionable whether the scandal has yet helped catalyse longer-term solutions to our broken food system. As political parties begin the task of developing their manifestos for the next election, there is an opportunity to look above the parapet of short-term political expediency and see the win-wins that addressing our unsustainable patterns of food consumption can have for cutting health bills, for the environment and for greater fairness within food systems.

Eating Better: for a fair, green, healthy future is a new alliance that is campaigning for food policies that put sustainable consumption at the heart of solutions to national and global food security challenges. We are calling for action by governments, the food industry and all those who can make a difference to help people move towards eating less meat and more food that's better for us and the planet, as part of the vital task of creating sustainable food and farming systems.

Launched in July 2013 with the endorsement of celebrity chef and campaigner, Hugh Fearnley-Whittingstall, Eating Better's growing support includes over 30 national organisations, including the Food Ethics Council, spanning the breadth of health, environment, social justice, animal welfare, international development, resource use, sustainable business and faith perspectives. Eating Better encourages a culture where we place greater value on the food we eat, the animals that provide it and the people who produce it. Eating Better supports farmers who produce meat in a sustainable way.

Moderating our meat consumption -red, white and processed meats – while also choosing 'better' meat that is naturally-fed, has a known provenance and is produced to high animal welfare, environmental and quality standards can help support farmers without being more expensive for consumers. A 'less and better' approach to eating meat with meals based around a greater variety of plant-based foods will ensure healthy, balanced diets that are better for the planet and for fairer food systems too. So what's needed to help catalyse this dietary transition?

Addressing consumption as well as production

Firstly, policy to address food security needs to focus as much on consumption as production. There's an oft-repeated mantra that food production must increase by 60-70% to feed the anticipated world population of 9 billion by 2050. The proposed solution: greater (sustainable) intensification of agriculture has resonated with politicians including the UK's Coalition Government.

But many question this assumption. We cannot hope to feed a growing and more affluent global population healthily and fairly, prevent dangerous climate change and protect global ecosystems while continuing to consume and export wasteful, high meat (and junk food) over-consuming diets to the rapidly expanding economies of the world. The figures simply don't add up, unless we make changes to how we eat and use the food that we produce. That means cutting the scandalous amount of food that is wasted as well as facing up to the impacts of increasing meat consumption. Roughly one-third of food produced for human consumption is lost or wasted globally.1

Livestock production has a huge environmental footprint and grain-fed livestock production is highly inefficient. UNEP calculates² that each kilo of cereals used for animal feed will product 500kcals for human consumption whereas if used for direct human consumption will give 3000kcal. Halving food loss and waste could feed an extra one billion people. And halving world consumption of grain-fed meat could feed a further two billion.3

Politicians are beginning to get the message that what we eat is important for future food security. Earlier this year MPs on the UK Parliament's International Development Committee called for greater efforts to improve global food security. Measures include encouraging UK consumers to reduce their meat consumption and a stronger focus on pasture-fed livestock production. And the UK's champion for global food security, Professor Tim Benton has warned Government Ministers that it is no longer good enough to think exclusively of ways the country could produce more food. Instead, Government must work on 'demand' - changing the way we eat and wasting less food.4

It's a message that's been endorsed by stakeholders involved in the Defra Green Food Project's Sustainable Consumption working groups to address the role that diet and consumption play in the

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sustainability of the whole food system. Their report,⁵ published in July, includes draft guidelines for healthy sustainable diets. Government adoption of guidelines and advice for consumers and the food chain are a necessary step in developing policies and practices that support dietary transition. While official bodies in other European countries, including France,⁶ Germany,⁷ Sweden⁸ and the Netherlands⁹ have produced such guidelines, the coalition government stepped back from the previous administration's commitment to provide integrated advice to consumers.

Policy integration and coherence

Secondly, we need to see better integration of health, environment and farming policies in the UK Government and the EU. This means addressing the challenges of poor nutrition and obesity, degraded and destroyed ecosystems, climate change, waste and over consumption of resources, animal suffering as well as inequalities and unfair trading systems, as the connected impacts of unsustainable patterns of food consumption and production. But do we have the right institutions and governance arrangements to support such integrated policymaking, at an expert advisory or Ministerial level? It's fairly obvious that we don't. In the UK there is no longer an expert body tasked with advising government on sustainability. And the cross government framework that was introduced as part of the previous administrations Food 2030 strategy arrangements were dismantled by the incoming Coalition Government.

Improving policy coherence is not just a UK challenge. It is one of five priority areas for the European Commission's forthcoming Sustainable Food Communication. Any ethical food manifesto needs to ensure policy coherence. The good news for politicians and consumers is that a healthy diet is largely good for the environment, and wasting less and eating less meat help with squeezed household food budgets.

Roles and Responsibilities

Thirdly, we need to recognise that the transition towards healthy, sustainable diets will not happen under business as usual. Any ethical food manifesto needs to consider the levers, incentives and nudges for consumers, farmers and food companies to create the cultural and economics shifts necessary to make our food system greener, healthier and fairer. There's an important role for Governments to work with stakeholders to create the vision, provide the policy coherence and the political will to use

the levers that only governments have (including regulatory and fiscal), as well as being well placed to convene expertise, fund research, report and monitor progress.

Eating Better is calling on government to:

- Develop an integrated approach to healthy, sustainable consumption and production
- Agree and adopt the guidelines for healthy, sustainable diets and provide integrated advice (for the public and the food chain) on healthy, sustainable diets that includes advice on less and better meat consumption.
- Develop policies and practices to support the transition to less and better meat consumption and production.
- Engage with EU policy processes, including developing EUwide strategies to promote increased consumption of plantbased foods and reduced consumption of meat products.

Businesses are key enablers of behaviour change and Eating Better has already identified business-focused policies and practices to help customers reduce their meat consumption including:

- Reformulate products (such as reduce a proportion of meat in processed foods and replace it with wholesome and healthy plant-based ingredients)
- Develop a wider range of low meat and meat alternative meals
- Communicate with customers including providing positive promotions/advertisements for low/reduced meat and plantbased foods.
- Offer and promote 'better' meat choices.

Eating Better's vision is a world in which everyone values and has access to healthy, humane and sustainable diets, and where high meat-consuming countries and individuals have reduced their consumption in line with health recommendations and greenhouse gas reduction targets. Meat is produced humanely and sustainably; its production provides sustainable livelihoods, environmental benefits and it is consumed in quantities consistent with good health and global resource use capacity. This is no 'nice to have' vision, it's fundamental to ensuring our future food security and needs to be at the heart of any ethical food manifesto.

Sue Dibb is coordinator at Eating Better, a new alliance on sustainable diets.

AGRICULTURAL POLICY

References

- 1. Jenny Gustavsson Christel Cederberg Ulf Sonesson, et al. (2011) Global food losses and food waste: extent, causes and prevention, FAO, Rome HYPERLINK "http://www.fao.org/fileadmin/user_upload/ags/publications/GFL_web.pdf"www.fao.org/fileadmin/user_upload/ags/publications/GFL_web.pdf
- 2. Nellemann, C., MacDevette, M., Manders, et al. (2009) The environmental food crisis The environment's role in averting future food crises. A UNEP rapid response assessment. United Nations Environment Programme, GRID-Arendal, HYPERLINK "http://www.unep.org/pdf/foodcrisis_lores.pdf"www.unep.org/pdf/foodcrisis_lores.pdf
- 3. http://www.scidev.net/global/food-security/news/non-food-crops-lock-up-enough-calories-to-feed-4-billion.htmlHYPERLINK "http://t.co/1cOKY9PZD1"
- $4. \ http://www.telegraph.co.uk/news/uknews/10193689/Food-crisis-Professortells-families-to-cut-amount-they-eat-by-a-third.html$
- 5. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/229537/pb14010-green-food-project-sustainable-consumption.pdf
- 6. http://ecocitoyens.ademe.fr/mes-achats/bien-acheter/alimentation
- 7. http://www.nachhaltigkeitsrat.de/uploads/media/Brochure_Sustainable_Shopping_Basket_01.pdf
- $8. \ http://www.slv.se/upload/dokument/miljo/environmentally_effective_food_choices_proposal_eu_2009.pdf$
- 9. http://www.gr.nl/sites/default/files/201108E.pdf

Towards a better EU food and farming policy



With the deal just finalised on the current reform of the Common Agricultural Policy (CAP 2020) in June, **Robert Pederson** explains why it is even more important now to think about the next steps for EU food and farming policy.

CAP 2020 has been the focus for many organisations working with food and farming in Brussels and national capitals over the past four years, and with good reason, as it provides the framework for how our money will be spent to support food and farming from 2014 to 2020. Even with the proposed budget cuts, the CAP will remain a major area of spending. And although the CAP deal has been finalized in Brussels – there is still much work to be done.

CAP 2020 was a tough political process, with the European Parliament having co-decision with the Council of Ministers representing ministers of agriculture from 27 Member states on CAP for the first time in history. The Irish farm minister Simon Coveney rightly described the process of reaching agreement on the CAP as almost impossible with the three EU institutions – made up of one European Commissioner, 27 member state ministers and 754 MEPs – all with different perspectives and desired outcomes. So while politically the European Commission, Council of Ministers and European Parliament have breathed a sigh of relief that the deal was made before the current CAP expired, there is room for improvement in future reforms. The current pragmatic approach is "lowest common denominator" and lacks the vision necessary to meet the challenges that food and agriculture will face in the longer term.

The main thrust of this reform was to strengthen the environmental criteria for receiving direct payments; second, for allowing for a fairer distribution of CAP funding between Member states and recipients within individual countries; and third, by reducing administrative burden and simplification. The main issue was the concept of 'greening' (making 30% of direct payments conditional on the three criteria of ecological focus areas, crop diversification and permanent pasture). However, despite much lobbying and debate, the criteria of the final agreement have been watered down, and exemptions and allowances for equivalent measures are expected to reduce the impact of greening. In addition to this, a reduction in the number of requirements that are mandatory under cross-compliance is predicted to lead to reduced environmental performance in some areas.

The devil is in the detail

This means that although the deal is done at EU level, the battle will move to member states, as the policy is implemented by national agencies (such as in national rural development programmes). Or, to phrase it colloquially, the devil will be in the detail.

CAP 2020 provides the broad political framework for European agricultural policy, but continued negotiation of the implementing rules will define the details and Member states will have some leeway on how policy will be implemented. In short, success will largely depend on the implementation measures and on implementation at Member State level. The promise from EU leaders was for a 'greener, fairer and less bureaucratic CAP', and the resulting agreement leaves a great deal of flexibility for Member States to implement the reforms in a way that suits them. The final decision on issues such as capping payments, cofinancing, and the transfer of funds between pillars have been held over until the negotiations on the EU budget this autumn.

As in many other EU capitals, the views of stakeholders are being sought on how the CAP should be implemented. A new inquiry on CAP implementation for the period 2014 – 2020 has recently been launched by the Parliamentary committee Environment, Food and Rural Affairs (EFRA). In this inquiry stakeholders are asked to give written evidence built around three main themes: fairness of payments, improving environmental performance and reducing bureaucracy or administrative burden for farmers – as well as the catch-all "lessons learnt".

The outcome of CAP 2020 has been criticised by a number of stakeholders for not going far enough. Environmental NGOs argue that the current reform is a step backwards in terms of environmental protection, whilst the agribusiness lobby would have preferred a focus on a more competitive food sector and market-oriented policies. Many observers even suggest that any meaningful or substantial reform of CAP is impossible with the current decision-making structures and the broader issue of how to govern stakeholder engagement. In fact, the Commission's own evidence-based decision making process, drawing from a comprehensive Impact Assessment including extensive consultations, has not been fully applied in the context of the CAP reform.

Even though legislation relating to CAP will continue, with adjustments to implementing rules and new legislative initiatives, perhaps real change to EU food and farming policy will come from outside the Common Agriculture Policy and Directorate General for Agriculture and Rural Development. A Communication on Sustainable Food is expected during 2014 as part of the European strategy for resource efficiency, and a consultation was opened to gather ideas from stakeholders.



This hugely important endeavour could – and should – mark the beginnings of what many stakeholders (especially those outside agriculture) want to see – a Common Food Policy or a Sustainable Food Policy. However, many have expressed concern that the exercise may just be a manoeuvre to stall progress on this important process.

Another step in the right direction could be a Foresight 2050 scoping study being conducted by DG SANCO (Directorate General for Health and Consumers) to look at the long-term perspectives on European food safety and nutrition Policy. This will frame questions for what policies need to be in place to meet the food safety and nutrition challenges leading up to 2050. Hopefully this is an opportunity to work towards a more integrated European food policy that moves beyond traditional silo approaches and embraces a system approach that gives other public health aspects of food equal footing. The intention is that this scoping study will frame the right questions for a more rigorous Foresight study.

DG SANCO is also looking at the short and medium term and reviewing current legislation on food safety, hygiene and

animal welfare to see if it is 'fit for purpose'. The process dubbed Regulatory FITness checks – or REFIT – focuses on examining current food law to make sure it does not create unnecessary burdens for food businesses, and that Europe remains competitive in a global market. At the same time, it offers the chance for the European Commission to strengthen the focus on public health and consumer protection that traditionally have been the drivers for general food law. Stakeholder contributions, including from Member states, should help the Commission to better reflect upon the fact that high standards for food safety and animal welfare are what give Europe a competitive edge in the market. In other words – Europe cannot compete on price alone.

So the answer to the question is – yes there is much to be done if the goal is a healthier, fairer, socially just and sustainable European food policy. One good place to start is with the coming elections for the European Parliament in June 2014. Ask your candidates what sort of food policy they want for Europe and the United Kingdom.

Robert Pederson is a Research Fellow at Aalborg University Copenhagen, Denmark.

Science and agriculture

More than GM



Population growth and climate change have prompted often polarised debates on how we should produce food, writes **David Pink**. Instead, we should be looking to embrace best practice from a wide range of crop production methods to meet the challenges ahead.

Although not the subject of this article, it would appear most likely that in the future, just as it is now, food will be produced under a range of farming systems tailored to individual farmers' circumstances and the requirements of consumers. This is acknowledged in the UK government's recently launched Agri-Tech strategy, alongside a recognition that the economic, social and environmental sustainability of future food production systems will be based on sustainable production of crops. Whichever crop system a farmer chooses, it will need to be as efficient as possible, producing the optimised yield per unit of land with reduced wastage, reduced output of green house gases and most likely a reduction of inputs. To fulfil these objectives all systems will need to take advantage of science and technology. Agricultural crop science has both a good and bad track record depending on the criteria it is judged by. Global agricultural production has climbed above the rate of population growth - in the past four decades it has more than doubled, with only an 8% increase in the use of land for agriculture.

Benefits of genetic research

The application of genetic research in plant breeding has made a huge contribution to this increase in production. It is estimated that 50% of yield gains in many crops during the 20th century was attributable to improved varieties, with the other 50% due to improvements in agronomy. There is no doubt that scientific based crop production systems have curbed hunger in many parts of the world. However, the general view now is that the environmental costs of these systems are unacceptable and must be reduced.

Current high-yielding crop varieties were bred for high input systems. Concerns regarding global food security mean the challenge for agricultural scientists in the 21st century is to underpin farming systems that maintain increases in yield while reducing the need for high energy inputs.

This requires a multidisciplinary approach involving genetics and plant breeding together with agronomy research to fulfil the genetic potential of new varieties, and a balance between basic and applied research. The UK's basic plant science research is excellent and well resourced. However, since the 1980s there has been a steady loss of capability in applied research and knowledge transfer to farmers.

This is recognised in the agri-tech strategy as a root cause for the decline in UK agricultural productivity, but there is little detail on how capability in more applied research is to be rebuilt. It is vital that any rebuilding of capacity in applied research is not at the expense of basic plant science, which is the source of scientific innovation. Twenty-first century crop scientists face the added challenge of operating in an environment where information of varying provenance is widely available. Scientists must explain their science and its benefits, and be open about potential disadvantages in clear understandable terms that provide robust information which in turn allows informed public choice.

Recent debate around crop science has focused on GM (which is not, as referred to in the agri-tech strategy, a production system. It is a technology equally as deployable in conventional or agri-ecological production systems). GM is an emotive issue and the debate is driven by socio-economic issues around ownership, exploitation of intellectual property and globalisation of the food supply chain. Most scientists, ill-equipped to take part in this debate disengaged from it. The end result, adopting 'the precautionary principle', has meant that GM crops have to date not been grown in the UK.

GM crops have now been widely grown in many other parts of the world, and for long enough to demonstrate that they are safe. There have been no verified environmental or health issues associated with them. The science of producing GM plants is improving and continues to be refined, as is the knowledge of gene function and control. Future GM crops will be produced using technology to position the inserted gene more precisely in the plant's genome without the need for antibiotic markers, and under much more subtle and targeted control mechanisms, meaning the gene will only be expressed when required or in a particular part of the plant. I believe that a blanket ban of GM crops under the precautionary principle is, therefore, no longer justified.

Continuing socio-economic issues associated with ownership of the technology include charges of scientific imperialism levied at global biotech companies promoting the use of GM crops to smallholder farmers in the global South. Such issues do need to be addressed but in ways that give smallholder farmers access to modern genetics, allowing them to grow better crops. For

example, GM could be used in an agro- ecological approach to control disease, producing crops that look and yield the same but possess different resistance genes.

One way of allowing poorer farmers to access science is via funding of public good research with the results available to all. Paradoxically the successful opposition to GM in the UK led to a government withdrawal of public funding for GM crop research, disrupting the balance between public good and corporate research. The current agri-tech strategy seeks to coordinate public and corporate funding of agricultural research but we must maintain a strong public good sector to allow this to happen in a balanced way.

Despite claims that GM is absolutely necessary to solve the global food crisis, it will not solve many of the problems we face. However, it is a component of a portfolio of scientific approaches that will be needed to underpin sustainable food production. These currently include technologies used to underpin 'traditional' breeding of new crop varieties: a range of tissue culture techniques, the controlled use of mutagens to make new version of genes and DNA marker technology which uses natural variation in the DNA sequence of plants to select those with the best combination of genes.

The agri-tech strategy document gives an example of the use of this type of technology (breeding Beneforté broccoli which has potential health benefits). It names the two institutes that carried out the underpinning scientific research but omits the name of the company which has brought it to market; possibly because Monsanto is seen as 'toxic'. This is a pity as Beneforté broccoli serves to illustrate the point that all breeding companies, even one closely associated with GM, will use a range of appropriate technologies to produce innovative new crop varieties.

The use of these technologies broadens the scope of 'traditional' breeding, for example using embryo rescue techniques to cross species that would not cross naturally, and using DNA markers so plants possessing different versions of individual genes can be selected in the laboratory. This latter approach has benefitted dramatically over recent years from the development of next generation DNA sequencing. Whereas early genome sequencing took several years and many millions of pounds it is now possible to sequence a genome in a few weeks for thousands of pounds.

The availability of cheap and quick sequencing technology is revolutionising how we find 'useful' genes. In the 20th century crop breeding led to erosion of genetic diversity as new varieties replaced older locally adapted ones. This was exacerbated by the globalisation of plant breeding which aimed to produce varieties adapted to as large a growing region as possible to maximise economic returns. To counter this diversity loss, plant genetic resource collections of landraces, old cultivars and wild crop relatives were established. Many of these heritage accessions evolved or were selected to grow in relatively low input systems, and so represent a strategic resource for the traits now required for the 'new agriculture'. Current and future developments in genetics based on next generation sequencing will allow crop scientists to 'mine' genetic resources collected in the 20th century for the genes needed for breeding varieties for the 21st century (such as genes for improved nutrient and water use efficiency).

In the recent past too much focus has been placed on genetic approaches to develop sustainable solutions with consequent lack of research into how the crop is grown and what it is grown in (for instance research into 'healthy' soils). The agri-tech strategy does address this issue and also redresses an omission made in the Foresight report on the Future of Food and Farming; the need for investment in agricultural engineering to develop precision farming systems through the use of robotics and automation.

These will allow plant growth to be monitored more closely so that the application of inputs such as water, nutrients and pest and disease control can be optimised down to individual plant level, saving waste and optimising yield. Again this requires a partnership between public and private research and development to bring such technology to use in farmer's fields.

Precision farming will be equally applicable to agri-ecological and conventional approaches to crop production. The future production of our crops will require us to break out of the polarised debate on production systems, embrace best practice from across the spectrum of current production methods, and build upon these through the appropriate use of science and technology in order to reduce UK agriculture's environmental footprint while still maintaining yield and quality.

David Pink is Professor of crop improvement at Harper Adams University, and Food Ethics Council member.



The future of farming

An agrarian renaissance



Relying on political and economic institutions to secure a sustainable future for farming won't cut it, writes **Colin Tudge**. Instead we need to harness the power of ordinary people.

Farming, inescapably, is at the heart of all human affairs, affecting everything and affected by everything. As such, farming strategy should not be dictated by political convenience or economic dogma. Instead it should be responsive to the requirements of crops, livestock and wild nature - and by agrarian cultures that far predate all formal politics within and across borders. So we cannot rely on our traditional centres of power - governments, corporates, banks, and their selected intellectual and expert advisers, nor the European Union and its Common Agricultural Policy. If we, people at large, give a damn about securing the future for ourselves, our children and other creatures, then we, ordinary Joes, must take matters into our own hands. We must bring about a bottom-up, grassroots-led, 'Agrarian Renaissance'. This may seem the most fanciful of all pies in the sky: to wrest control of the world's greatest enterprise from an apparently allpowerful oligarchy. Yet it is do-able; and many different people all over Britain, and Europe, and the rest of the world are showing how. We do not need violent revolution. We already have the necessary know-how and have merely to make proper use of financial, political, and legal mechanisms that are already in place - crucially abetted by the new technologies of IT.

So what does the Agrarian Renaissance entail? To begin with, we need to re-think all of agriculture from first principles – and all that goes with it, which in truth is everything. We can start with three fundamental questions (which the government-corporate-financial-intellectual oligarchy never seems to ask, for it takes the answers for granted). First, what are we really trying to achieve – what is right? Secondly, what do we need to do? And, thirdly, what is it possible to do?

In answer to the first question, many a survey suggests that what most people really want out of life is peace of mind; time with friends and family; security; and personal fulfilment, not least in the form of satisfying work. Mere wealth is low on the list – just enough to live in reasonable comfort and security will do; enough "to get the kids off to a good start". Some status is vital; everyone wants to be respected and valued, but few want actively to lord it over others. In short, once basic comforts are taken care of most people's values are not material. Food is obviously pre-eminent among the basics – the prime task of agriculture. Farming designed expressly to produce good food for everyone (without wrecking the rest) I have called 'Enlightened Agriculture'.

But the prevailing economy is that of 'neoliberalism': the ultra-competitive unrestricted ('free') market, pitting all against all. Its modern founder, Milton Friedman, was not a monster but his creation is monstrous. Its ambitions in practice are entirely materialistic. The aim is to become as rich as possible in the shortest time, and to come out on top – an economic parody of Darwinian natural selection. In practice the market is not 'free', but is dominated by the biggest players – and, as if by a law of

physics, the biggest players grow bigger and richer while the rest are shoved ever further to the sidelines. As Friedman himself acknowledged, there is no internal mechanism in the free market to correct the injustice.

Today's agriculture is increasingly neoliberal - intended not to provide good food for everyone but to maximize the profits and centralize the power of the biggest players. Governments like Britain's are happy to see themselves as extensions of the corporate boardroom, for this is the easiest way to increase GDP, though GDP is only a crude measure of wealth and has almost nothing to do with wellbeing. The EU, including the CAP, though it still recognizes social and environmental constraints, also must bow to corporate power. But agriculture that is designed to maximize wealth cannot provide good food for everyone and demonstrably does not. About one billion of our current seven billion strong population are chronically undernourished. The fundamental flaw lies in the ambition: today's neoliberal agriculture simply is not designed to produce good food for everyone because that is not the most profitable course. Lip service is paid to "feeding the world" but lip service is all it is. Ethics should mean morality, and today's industrial, neoliberal farming, designed by oligarchs for oligarchs, is morally vile.

The second basic question - What do we need to do? - is primarily a matter of nutrition. Each person requires about 3000 kilocalories of energy per day with commensurate amounts of protein and micronutrients; and we need this presented as recognizable food - good cuisine! - and not simply as pabulum. Overall we need enough for seven billion now and for the 9.5 billion who (the UN tells us) will be with us by 2050; and we must provide this without destroying our fellow creatures or the fabric of the world. In practice right now we fall far short. The UN tells us that nearly a billion out of the seven billion are chronically undernourished and expectations are rising. That is why so many official reports (such as Sir John Beddington's government 'Foresight' Report on The Future of Food and Farming of 2011) tell us that we will need to produce at least 50% more food by 2050. The Foresight report left us in no doubt - following the official line - that we will need the highest of high tech, with genetic engineering (GMOs) the flavour of the decade.

But – the third question – is it really possible to feed all the world's people well, forever? If so then we must be thoroughly ashamed of ourselves for failing so badly, and very angry with the governments and corporates and their advisers who have assumed all that power and then failed to deliver. If it is not possible then our ethical position is very tricky indeed. Should we spread out what food there is, and compromise everybody? Or write some people off and allow a crude version of Darwinian selection to decide who lives and who dies? (An impartial Martian observer might conclude that the latter policy is already in place).

The answer – mercifully – is that it should be easily possible to provide good food for everyone forever. The same UN demographers who predict a world population of 9.5 billion by 2050 also say that the percentage rise in numbers is falling, and by 2050 should reach zero, so that numbers then should stabilise. Nine and a half billion people is as many as we should ever have, and if we can feed that many, we have cracked the problem. Hans Herren, president of the Millennium Institute in Washington, points out that the world already produces enough food energy and protein to support 14 billion: twice the present number, and 50% more than we will ever need. Waste and maldistribution - the wrong kind of food in the wrong places - account for the present shortfall. The focus on productivity is purely a matter of commerce. We already have more than enough, and good cooking is all that is required to turn that basic provender into great cuisine. Furthermore, says Professor Herren, 50% of the world's present food comes not from the big, high-tech industrial farms that are now considered de rigeur, and are supported so abundantly at taxpayers' expense, but from small-to-medium sized, traditional, family farms. Since another 20% of our food comes from fishing, hunting, and people's gardens, the industrial high tech farms that are now considered "conventional" provide only 30% of what we need. Furthermore, the industrial farms are now hard up against biological – and moral – feasibility. Today's high-yielding soils are collapsing under the strain and our 10,000 litre industrial cows suffer mightily: their life-span is only about a quarter of what it should be.

But all who know traditional farms worldwide say that most of them could easily double or even triple their output – not with GMOs and the rest but with simple logistic support, including passable roads (so they can deliver what they produce) and appropriate banks. It obviously makes far more sense to double the output of the 50% (if we really do want more) than to squeeze another 10% or so from the 30% that is already overstretched. But official circles (paid for by us) favour more industrialisation with fewer people on bigger units and more high tech and greater control by a steadily diminishing handful of corporates because that generates more money in the short term, and is easier to administer, and maintains the present oligarchy. In the end it's a matter of priority. Do we really want to provide good food for everyone forever, and keep the Earth habitable? Or do we want primarily to conserve the present hierarchy of power and the economic dogmas on which it now rests? This is why, if we do give a damn, then we, all of us ordinary Joes, need to take matters into our own hands. I personally am part of various interlinked groups that seek to push the Renaissance along: the Campaign for Real Farming, which informally helps to develop the ideas; the Oxford Real Farming Conference held every January - the antidote to the official Oxford Farming Conference; Funding Enlightened Agriculture, which seeks to direct various income streams towards appropriate farms, markets, and research; and the College for Enlightened Agriculture, which kicks off this September with a five-day introductory course at Schumacher College a Dartington in Devon, and is intended to offer a masters' (or equivalent) course, beginning in 2015.

Worldwide, many are on the case, offering solutions far more subtle and well-thought-out than the dogmas and rhetoric that rains on us from on high and, in many cases, demonstrating for all to see what can be and is being done. All the Renaissance really needs is for people at large to start taking an interest, and a little more coordination and cooperation. The collective wealth and power of humanity at large far exceeds that of the oligarchs. We need merely to exert it. As Napoleon said of China, the sleeping tiger needs merely to stir. But we have to stir a lot more quickly than China did.

Colin Tudge is a biologist and writer. He and his wife, Ruth, run the Campaign for Real Farming. Colin's book, *Why Genes are Not Selfish and People are Nice*, is available from Floris at £16.99.

Smallholder farmers: stronger together



Tim Aldred is head of Policy and Research, Fairtrade Foundation

I write this following a week in Peru meeting co-operative leaders from across Latin America. Those at the meeting – organised by Cafedirect – represented over two hundred thousand smallholder coffee growers. Buyers, traders and producers shared market information, built understanding of challenges, and discussed ways forward together.

There was much concern at the recent crash in the price of coffee from over \$3 per kilo to \$1.15 in the space of 18 months (well below the cost of sustainable production). The Fairtrade minimum price helps, kicking in at \$1.40 per kilo plus a 20 cent premium. But the hit to 'conventional' sales still threatens livelihoods across the region.

A coffee bush is not a carrot: you can't decide how much to plant on a yearly basis, since plants take three years from planting to their first harvest. The volatility discourages long-term investment, hurts the livelihoods of growers, and threatens the supply of products the public wants to buy.



Challenges like price volatility will not go away any time soon. But they must be faced, and government has its part to play in facing them, along with business. The message of this week's conference for me is that it is also possible, helpful – and right – to face them together with smallholder producers themselves.

So I'd like to see government testing policy proposals against the impact on smallholder producers. When government addresses food price volatility, food prices, or trading practices, the impact of proposals on the lives of the hundreds of thousands of smallholders who supply much of our food should be top of the list.



Cooked

Michael Pollan | 2013 | Allen Lane ISBN 978-1846147500

This funny, interesting and beautifully written book focuses on a single message: cook. Modern man has outsourced food production to corporations. We are trapped in a paradox where we watch, read and talk about food but don't actually cook. Our reliance on processed foods is explained as Pollan takes us on four transformations in the alchemy of cooking: fire, water, air and fermentation. Drawing on anthropology and science, this book calls for the virtues and values of proper cooking to be brought back and why and how we should revel in the magical activity of making food. JL

A Greedy Man in a Hungry World

Jay Rayner I 2013 I Harper Collins ISBN 978-0007237593

Clever, witty and compelling by turn, Jay Rayner takes us on a whistle-stop tour of 21st century global food issues. Through interviews with farmers, corporate executives and scientists he claims to tell us that almost everything we thought we knew about food is wrong. But as with any book that tries to tackle these intractable issues in less than 300 pages, some of the complexities of the arguments he examines are inevitably left out. The verdict? A flawed but addictive read. EB

Planet Carnivore

Alex Renton 2013 | Guardian Shorts

Diving straight into the heart of the matter with a two-page, no-holds-barred account of the recent horsemeat scandal, this short book explores our desire for cheap meat and the associated costs. It takes a 'cool headed' look at some of the options for future meat production and asks whether it's ever ok to eat meat. The author's answer to this thorny question is a tentative 'yes', but only if we take some responsibility for the effects of the meat production system. EB

The Oxford Handbook of the Economics of Food Consumption and Policy

Lusk J.L.; Roosen, J.; Shogren J. eds | 2013 | OUP ISBN 978-0199661084

This handbook turns its attention to the consumer and issues related to food consumption. It provides a useful reference text for academics, food and agriculture professionals and policy makers interested in food economics, policy and the consumer-end of the supply chain. As well as considerable theoretical focus, it discusses topical consumer issues such as food safety, nutrition, labelling, food security and development. JL

Practical Ethics for Food Professionals

J. Peter Clarke and Christopher Ritson eds. | 2013 Wiley-Blackwell | ISBN 978-0470673430

A comprehensive book about food ethics with chapters written by the pre-eminent food ethicists of today (many of them members of the Food Ethics Council). How ethics relates to food, what the food industry can learn from medical ethics and many other challenging and thought-provoking essays follow, including on topics from GM technology to animal welfare. A must-read for anyone working in food. EB

A Very Short Introduction to Food

John Krebbs | 2013 | OUP | ISBN 978-0199661084 Drawing on science and history to looking at four great transitions in food – cooking, agriculture, processing and preservation – this book explores the role of taste, how our senses contribute to flavour and the role genetics play in our food preferences. Issues such as the global disparity between malnutrition and overconsumption are explored as are obesity, sustainable agriculture and GM technologies. This fascinating exploration ends with the billion-dollar question: how will it be possible to feed a population of 9 billion in 2050, without destroying the natural environment? JL

Chickens' Lib - The story of a campaign

Claire Druce | 2013 | Bluemoose ISBN 978-0-9575497-2-2

This engaging piece of social history chronicles how a mother and daughters' concern about conditions for battery hens turned into a major campaign that challenged the government and industry. They founded the pressure group Chicken's Lib and embarked on a 40-year journey that led to changes in welfare standards and saw their concerns broadening out to other animals and rearing practices such as the widespread use of antibiotics. GT

Foodopoly – The Battle Over the Future of Food and Farming in America

Wenonah Hauter | 2012 | The New Press ISBN 978-1-59558-790-9

In 16 information packed chapters, the author argues the control of food production in the USA by a relatively few corporations prevents farmers from raising healthy crops and limits consumers choices too. She examines the hijacking of agricultural policy by lobbyists and explores the consequences of the system that has developed both domestically and overseas. She concludes that to change this requires political action not just a shift in personal choices and suggests a number of ways forward. GT

Forthcoming events

29th Sept - 2nd Oct First International Conference on Global Food Security | Elsevier

http://www.european-agronomy.org/frontpage/esa-events/item/first-

international-conference-on-global-food-security.html

Noordwijkerhout, Netherlands

27th September Future of Food: Food Security, Science, Farming and the Community

Aldeburgh Food and Drink Festival | http://www.aldeburghfoodanddrink.co.uk/

wp-content/uploads/2013/07/The-Future-of-Food-2013 lowres.pdf

Snape Maltings, Suffolk

2nd October The Art of Writing About Science | British Society of Animal Science

http://www.bsas.org.uk/events-conferences/bsas-writing-skills-workshop

Kenilworth, UK

2nd October Next steps in climate science | The Royal Society

http://royalsociety.org/events/2013/climatescience-next-steps

Royal Society, London

7th October Implementing the UK Strategy for Agricultural Technologies

Westminster Forum Projects

http://www.westminsterforumprojects.co.uk/forums/event.php?eid=436

London, UK

7th - 9th October Empowering people and shaping policies for resilient agrictulture and

food systems | Wilton Park

https://www.wiltonpark.org.uk/wp-content/uploads/WP1237-Programme.pdf

West Sussex, UK

9th-10th October Soil Assoiciation Annual Conference | Soil Association

http://www.soilassociation.org/conferences/2013conference

Central Hall, Westminster

12th October Harvest Festival & Apple Day - Nationwide | Garden Organic (among others)

http://www.gardenorganic.org.uk/events/show_event.php?id=884 | Ryton, UK

12th October Festival of Wellbeing | Resurgence

http://www.resurgence.org/take-part/resurgence-events/wellbeing-

festival-2013.html | London, UK

16th October World Food Day | United Nations

http://www.fao.org/getinvolved/worldfoodday/en/

16th October Food (In)Security Conference: International and Trans-Disciplinary

Perspectives | University of Warwick

http://foodsecuritynet.wordpress.com/conference-programme | Warwick, UK

20th November Let Nature Feed Your Senses Conference | Let Nature Feed Your Senses

http://www.letnaturefeedyoursenses.org/letnature/media/conference2013.eb

Birmingham, UK

26th November Food Advertising seminar | Organic Farmers and Growers

http://www.organicfarmers.org.uk/news-events/events-calendar/adviceam-

food-advertising | London, UK

28th - 29th November Farm Business Innovation - Growing in different directions | Prysm Media Group

http://www.olympia.co.uk/whatson/farm-business-innovation

Olympia, London

9-10 December Food Futures: Towards Sustainable Production and Consumption

Chatham House Conferences | http://www.chathamhouse.org/Food13

London, UK



The Food Ethics Council works towards a food system that is fair and healthy for people and the environment.

Our independent research, and advice to business, government and civil society helps find a way through controverisal issues and supports better choices in food and farming.

To keep up to date with our work, register at www.foodethicscouncil.org to receive our free monthly e-newsletter.