Making the case and measuring progress
Towards a systems approach to healthy and sustainable food

Draft document

Acknowledgments

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This is a draft document currently under consultation.

On the basis that it is extremely difficult to show clear link and causality between activities like local food programmes and specific outcomes, we have attempted here to start building these links between action, evidence and outcome. We hope that this draft will appear as a first step in measuring the success of local food programmes at a local level and making the case for them.

We would be very grateful if you could send us your comments or suggestions around the following issues:

a) Do the purpose and utility of this document and its conceptual framework appear clearly? Do you consider it to be useful for your programmes/projects?
b) Are there any meta indicators, activities, case studies or pieces of evidence missing? In particular, known measurements in the final tables of the document. Please add any useful information by inserting a comment where appropriate.

Thank you very much for your time and help

Please send us any feedback on the above by 27th of January 2017 to Dr Ana Moragues-Faus MoraguesFausA1@cardiff.ac.uk**. This document is not to be shared widely at this stage.

Contents

Introduction

In the face of rapid urbanisation, burgeoning socio-economic inequality and accelerating ecological degradation, policy-makers and municipal authorities are recognising the urgent need to transition to a food culture and food system that maximises health and wellbeing, increases prosperity and equity and conserves and enhances natural resources. Indeed, an increasing number of cities around the world are now adopting collaborative cross-sector approaches that use food as a primary vehicle for delivering positive social, economic and environmental outcomes.

Despite the multiplicity of city-scale food initiatives taking place, a key challenge remains around measuring the impact such complex systems-based approaches can have in achieving desired outcomes. At a time of persistent austerity in public finances, such an evidence base is vital if local policy makers and commissioning bodies are to have the confidence to invest increasingly scarce resources in such new approaches.

This document presents the main results of a year-long study led by Cardiff University funded by the Economic and Social Research Council and involving more than 100 sector experts and practitioners from across the UK. This participatory action research process uses a conceptual framework that links a place-based food systems approach to current evidence of impact against key health, economic and environmental outcomes.

The research was undertaken using the framework of the Sustainable Food Cities model, which has been developed over five years and has now been adopted by 47 places across the UK. This involves the establishment of a local cross-sector food partnership where the local authority, public health, business, academic and third sector organisations work together to develop and deliver a strategy to make healthy and sustainable food a defining characteristic of where they live.

This document - which is presented in the form of a toolbox for action – has two main purposes. The first is to provide local authorities and policy makers with a clear, robust and comprehensive collation of relevant evidence and indicators of success of a place-based approach to food. The second is to help both existing and interested 'practitioners' to plan, implement, monitor and evaluate the impact of their Sustainable Food Cities programmes. For this purpose, we develop a common framework and approach that is sufficiently flexible to account for differing local circumstances and priorities

For ease of use, this document is a summary version of a more comprehensive report produced by Cardiff University which readers may wish to refer to for a better understanding of the methodology used - which included a literature review, input from four participatory workshops and a further test phase with experts and practitioners.

Conceptual framework

The focus of our participatory research involved working with sector experts and practitioners to identify key outcomes and potential indicators of success for achieving those outcomes grouped around the three dimensions of health and wellbeing, economy and environment. This departed slightly from the standard three pillars of sustainability - social, economic and environmental - as participants' consensus view was that health and wellbeing were paramount and should constitute a dimension in their own right and that other aspects of 'social' sustainability such as equity and fairness would better be covered under the economic and environmental dimensions.

Due to the vital importance of political and institutional commitment, effective and inclusive cross-sector governance and wider stakeholder engagement, and the need for an embedded systems approach in driving forward successful place-based food programmes, 'governance' was identified as a separate fourth dimension. Since this dimension relates to the overarching management and development of successful city-scale food programmes, which are a relatively new phenomena, it is treated separately from the other three dimensions in this document and uses indicators of success based on a 'health check' for measuring the strength and impact of local food partnerships recently developed and tested by the Sustainable Food Cities Network.
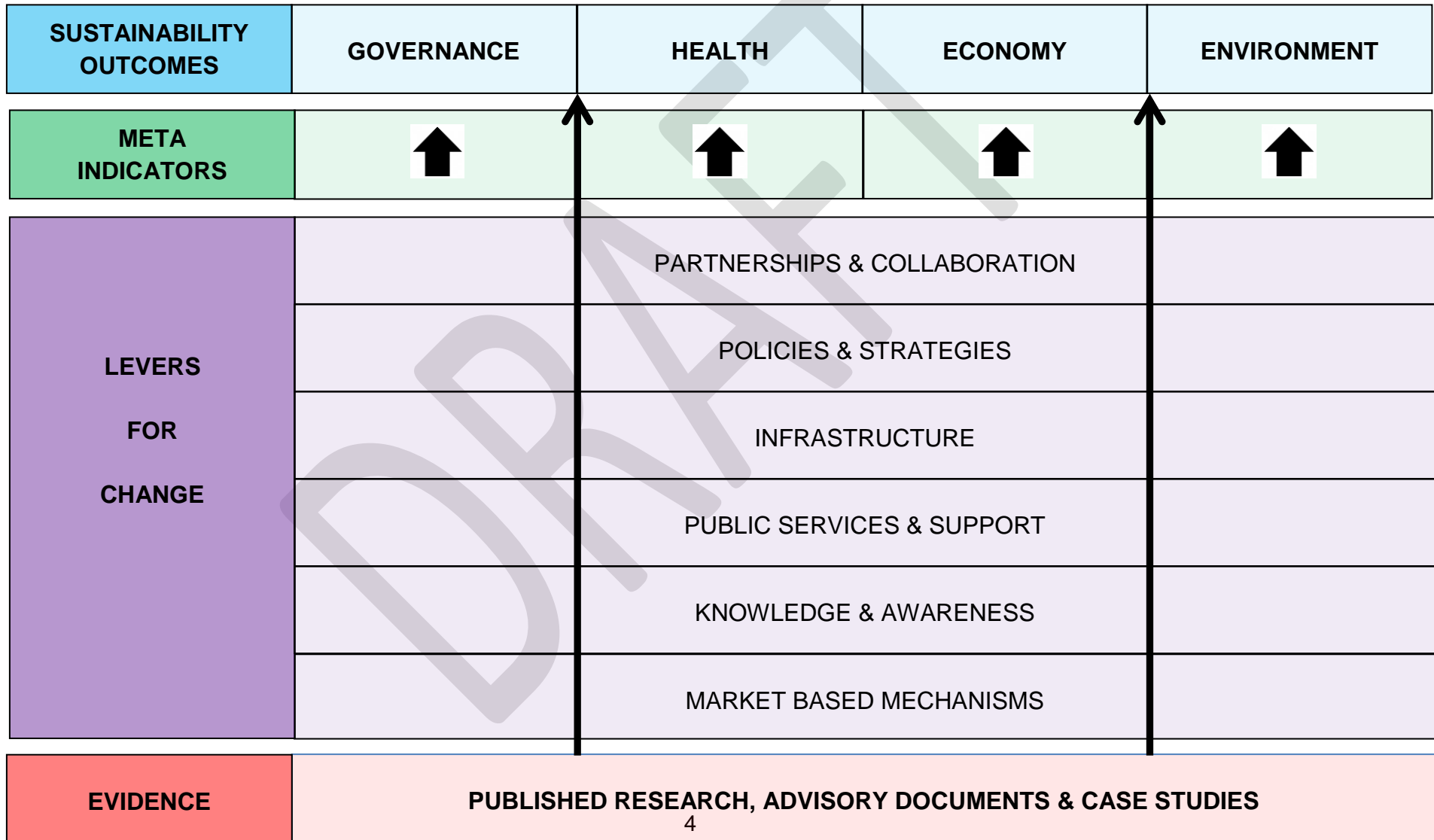
It is important to recognise, however, that none of these dimensions should be considered in isolation. Each is intimately interlinked and, since actions in one dimension often lead to positive outcomes in another, they should be considered part of an integrated and holistic whole that can deliver more than the sum of its parts in achieving long lasting change, which is one of the essential characteristics of the Sustainable Food Cities model.

Having collated and analysed participants' feedback regarding outcomes and indicators and complementing this through a literature review and further consultation with sector experts, we formulated a conceptual framework to link those outcomes and indicators with levers for change (actions for their achievement) - based on the Sustainable Food Cities Awards framework which is a distillation of relevant food related activity in cities across the UK - underpinned by evidence from published research and advisory documents as well as relevant case studies. The 'levers for change' section of this framework was further refined by classifying actions under the following headings to reflect the type of tools and mechanisms employed:

- Partnership and collaboration
- Policies and strategies
- Infrastructure and planning
- Public services and support
- Knowledge and awareness
- Market-based mechanisms

A visual representation of this conceptual framework on the next page reflects the structure used for much of the remainder of this document.

Conceptual framework for a systems approach to healthy and sustainable food

SUSTAINABILITY OUTCOMES	GOVERNANCE	HEALTH	ECONOMY	ENVIRONMENT
META INDICATORS	⬆	⬆	⬆	⬆
LEVERS FOR CHANGE	PARTNERSHIPS & COLLABORATION			
	POLICIES & STRATEGIES			
	INFRASTRUCTURE			
	PUBLIC SERVICES & SUPPORT			
	KNOWLEDGE & AWARENESS			
	MARKET BASED MECHANISMS			
EVIDENCE	PUBLISHED RESEARCH, ADVISORY DOCUMENTS & CASE STUDIES			

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1. Governance

In order to develop a holistic, integrated and strategic approach to food system transformation, it is paramount to involve a wide diversity of stakeholders in a city's food governance, including those that have previously been excluded either because the relevance of their professional remit has not been fully recognised (e.g. planning, procurement or economic development) or because there has been a historic lack of relevant forums for enabling grass-roots engagement in decision-making (e.g. voluntary and community sector). Governance has been shown to play a crucial role as a driver of food insecurity and as a potential solution to it (Candel 2014; Pereira and Ruysenaar 2012) and there is growing evidence that effective governance, in the form of a local food partnership, is vital to the long term success of any city-scale food programme. In a recent report, the International Panel of Experts on Sustainable Food Systems (IPES) outlined as a key recommendation that 'these forms of food systems planning must be based on broad participation. Taking inspiration from municipal and city-level food policy councils, these processes should reach across constituencies, bringing together agriculture, health, environment and other interest groups with a stake in food systems reform' (IPES-Food. 2016). Some of the key indicators of the strength and impact of a food partnership include the extent to which it:

- Is representative of, and responsive to, a wide range of cross-sectoral interests including key local authority departments, public health, businesses, academic, NGO and community organisations.
- Is recognised, mandated and supported by the local authority and other key stakeholders and formally links into and/or reports to existing high level city governance structures and processes.
- Is recognised by all local food system actors and the wider public as a legitimate, inclusive and transparent 'lead body' for collectively empowered decision making on food issues.
- Has developed and is delivering an integrated food strategy and action plan that covers all key food issues and is incorporating healthy and sustainable food into all relevant city-wide policies, strategies and plans.

Several studies show that involving civil society organisations in the governance of food systems is crucial for effectively addressing food insecurity mainly given their capacity to identify local problems and response gaps, build legitimacy and public support for interventions, create synergies between government agencies operating at different levels and in different sectors, and offer different capacities to those of the public and private sector (Edwards 2012; Koc et al. 2008; McKeon 2011; Seed et al. 2013).

2. Health, Economy and Environment

In the table that follows, for each dimension we present a 'goal' to summarise the overarching objective for that dimension followed by a list of food-related outcomes most commonly cited in research and by research participants as constituting a key element in achieving that goal. These outcomes also comprise meta-indicators which, resources permitting can and in some instances are being measured at a municipal level and can therefore be used to measure progress. Appendix 1 at the end of this document collates current and potential measurements and data collection methods that can be used to assess progress towards achieving these outcomes.

In many instances such data is not readily available or easily collected. This is due to the nature of food policy and action being rooted in the long-term with systemic impacts across health, economy and environment becoming truly measurable only years after a policy was initiated. However, there is an increasing recognition in academic circles as well as in public policy of the value and robustness of qualitative data as opposed to quantitative data. The table section entitled 'levers for change' therefore lists common actions Sustainable Food Cities Network members have and are taking to achieve the identified outcomes. For each action we provide a reference to research and advisory documents (1a, 1b etc.) and to case studies (CS1, CS2 etc.) that attest to the validity of that action in contributing to achieving those outcomes (note that some actions contribute to outcomes across more than one dimension), so that implementation of the 'levers for change' actions can be considered proxy indicators of progress towards achieving the outcomes for that dimension.

References are included after the table with a brief summary of how each research or advisory document relates to each action, with links to the full document should the reader require more detail. Finally, there is a list - with links - of case studies where each 'lever for change' action has been successfully undertaken at a local or city level that provides a model for adoption elsewhere.

Shared food-related outcomes and leavers for change

Dimension	Health	Economy	Environment
Goal	Improving physical and mental health and wellbeing by reducing food poverty; improving access to affordable healthy food; promoting healthy weight and healthy diets; and increasing participation in food related physical and social activity.	Creating new and sustainable jobs and businesses as part of a vibrant, culturally diverse and prosperous local food economy that provides fair and equitable economic benefits to all actors involved in both local and global supply chains.	Reducing the negative ecological and ethical impacts of the food system from production, processing and distribution to consumption and waste, including GHG emissions, soil and water degradation, biodiversity loss, waste and poor animal welfare.
Outcomes (meta indicators)	Decrease in the number of people requiring emergency food aid Decrease in the number of people overweight or obese Decrease in the number of people malnourished Decrease in the consumption of salt, sugar, fat and meat Increase in the consumption of fruit and vegetables (5 a day) Increase in the number of healthy options in takeaways and vending Increase in the availability of free drinking water Increase in the number of people	Increase in the number of jobs in the local food economy Increase in the amount of money circulating in the local food economy Increase in gross value added within the local food economy Increase in the number of viable independent local food businesses Increase in the proportion of retail food sourced from local producers Increase in the proportion of catered food sourced from local producers Increase in the proportion of food workers earning the living wage Decrease in the number of food	Decrease in food related greenhouse gas emissions (GHG) Decrease in the consumption of meat and meat-based products Decrease in the consumption of highly processed products Increase in the consumption of seasonal fruit and vegetables Increase in the consumption of low input, organic, sustainable products Increase in the consumption of high animal welfare products Increase in urban and peri-urban food production Decrease in food waste (at all points

	cooking from scratch		workers on zero hour contracts		in the supply chain)
	Increase in the proportion of mothers breastfeeding		Increase in the number of young people training for a career in food		Decrease in food related waste (packaging, energy, water)
	Increase in oral health evidenced by levels of dental cares		Increased consumption of Fairtrade and other 'fair price' products		Decrease in the use of pesticides, herbicides and fungicides.
	Increase in the number of people involved in community food activities		Retention of and investment in local food system infrastructure		Increase in home and community composting

Levers for Change (proxy indicators)

Partnership & collaboration	A multi-agency partnership is established to strategically address the full range of issues that contribute to food poverty and inequality.	1a 2a 48a 49a CS22 CS68 CS81 CS92	A multi-agency partnership is established to promote and support the development of a vibrant and diverse local sustainable food economy.		
	A cross-sector sustainable food procurement group has been established to bring together procurement officers, caterers, suppliers and others to promote uptake of healthy, sustainable, local and ethical catering accreditation in all settings.				CS60 CS71 CS80
Policies & strategies	The Council adopts a city-wide Sustainable Food Procurement policy, incorporating commitments to sourcing more healthy, sustainable, ethical and local ingredients.				28a 29a 45a CS10 CS11 CS74

	Public and private sector organisations adopt healthy food policies including nutrition standards and healthy options in retail, catering and vending.	25a 27a 57a CS3 CS5 CS7	Public and private sector organisations adopt fair and equitable food procurement policies including Fairtrade and paying a fair price/wage to workers in the food chain.	3a 13a CS75 CS76	Public and private sector organisations adopt sustainable and ethical food policies such as cage-free, organic, sustainable fish, seasonal and tap water only.	22a 26a CS2 CS3 CS4 CS77
	Retail, tourism and economic development polices and strategies actively promote and support the growth of local healthy, sustainable and ethical food businesses.					CS1 CS12
	The Living Wage is adopted by the Council and is actively promoted to other employers through its incorporation into procurement contracts, business networks, campaigns and support.	1b 3a CS8 CS86	The Food Waste Hierarchy is incorporated into policies and practice to minimise waste and ensure surplus food and food waste are diverted to the most appropriate purposes.			4a 5a 6a 11a 12a CS9 CS35 CS72
Infrastructure & planning	The Council works to prevent the development of food deserts (where people cannot access affordable healthy food within 500m) and food swamps (where the high street is dominated by fast food outlets).	1c 7a 8a 43a 49b CS13 CS14 CS15	The Council maps redundant retail and brownfield sites and makes them available to new food enterprises, for example through use of meanwhile and special leases and business rates reductions and holidays.	9a 10a 52a CS16 CS56	The Council maps green and brownfield sites that could be used for food growing, composting and local food processing and distribution and makes them available to local communities.	CS17
	The Council/city protects and/or re-establishes vital local sustainable food infrastructure, such as Grade 1 and 2 agricultural land, local processing and wholesale businesses, food hubs and distribution networks.					30a CS18 CS19

	The Council/city increases allotment provision and pushes developers to incorporate food growing space into existing and new developments.	31a 34a 35a CS20 CS83 CS91			Council planning and/or green spaces policy requires all urban green space and productive land to be managed in an ecologically sustainable manner.	32a CS21
Public services & support	A range of healthy eating and healthy weight services are provided, from dieting, nutrition and hygiene advice and support to skills training such as menu planning, buying on a budget and cooking from scratch.	44a CS24 CS26 CS27	Vocational training and business planning, finance, development advice, support and grants are provided to new healthy and sustainable food entrepreneurs, including producers, processors, retailers and caterers.	CS29 CS82 CS96	Farmers, growers and land managers are provided with training, advice and support on ecological production and management techniques such as organic, low input, permaculture and pesticide / herbicide free.	39a 45b CS61
	The Council ensures high quality and affordable social meal provision such as meals on wheels, lunch clubs and holiday feeding programmes for vulnerable people who might otherwise go hungry or be at risk of malnutrition.	1d 2b 51a CS32 CS33 CS73	Producers, processors, retailers, caterers and the wider business community are trained and supported on how to reduce food packaging and waste and how to improve energy, water and other resource efficiency.			4a 5a 12b 14a CS3, CS35 CS36 CS37

	Health professionals, welfare advisers and housing / voluntary organisations are trained in food poverty issues and able to advise clients on accessing affordable healthy food and support services.	33a CS27 CS62			
	For those in urgent need - and particularly benefit recipients facing delay or suspension in payments - relevant agencies are providing rapid referral to hardship funds and emergency food aid.			1e 2c 40a CS38 CS63	
	Producers, retailers, charities and social enterprises are working together to ensure all consumable surplus food is redistributed to organisations feeding people in need, while raising the nutritional standards of the food being offered.	41a CS39 CS64	A food waste collection scheme for homes and for catering, retail and manufacturing businesses is established and is redirecting this waste for composting, energy recovery (AD) or animal feed (where appropriate).		15a 42a CS41 CS85
Knowledge & awareness	The Council incorporates cost-effective food data collection (in residents' surveys and other data gathering mechanisms) that would support an accurate assessment of the impact of food on local health, economy and environment.				CS79

		Public understanding of healthy eating issues such as breastfeeding, healthy weight, 5-a-day, cook from scratch and sugar and salt reduction is being raised through campaigns and other communication tools.	16a 17a 37a 44a 50a CS42 CS69 CS84	Public understanding of the beneficial impact that buying local food and supporting independent food retailers has on jobs, businesses and prosperity is being raised through campaigns and other communications tools.	30b 50a CS44 CS84 CS97	Public understanding of sustainable food issues such as seasonal, organic, sustainable fish, high animal welfare, meat free and Fairtrade is being raised through campaigns and other communication tools.	CS43 CS44 CS84
		Healthy Start vouchers, free school meals and other social food provision for vulnerable people such as lunch clubs, meals on wheels, breakfast clubs and holiday meals are provided and promoted.	1f 2b 47a CS30 CS31 CS33 CS65 CS78	Shops, restaurants and markets selling healthy, sustainable and local food are promoted to the public via marketing initiatives, directories, 'restaurants weeks' and food awards.	CS45 CS46 CS90	Campaigns to raise public and institutional awareness of food waste and how to reduce it - such as Love Food Hate Waste, Feeding the 5000, The Pig Idea and Disco Soup - are being delivered.	CS47 CS48
		Community food initiatives have been mapped and are being promoted to the public through print, broadcast and on-line media and/or via open days, food trails and volunteer recruitment and support programmes.	18a CS49 CS50	Restaurants and other food businesses are improving sustainability across all aspects of their business through peer learning and support from organisations such as the Sustainable Restaurants Association.	19a 38a CS51	Home and community food composting is being promoted through awareness and education campaigns and through the provision of composting tools, demonstrations and sites for communities to use.	20a CS52 CS53 CS87
		The public have a wide range of opportunities to see, taste, learn about healthy, sustainable, ethical and local food, through demonstration, sharing and celebration events such as food festivals					CS54 CS93

	Primary and secondary schools run holistic school food education, engagement and skills development programmes - such as Food for Life - including cooking, growing, farm visits and improvements to meals and dining culture.		21a 36a 45c 46a 50a CS25 CS88
Market-based mechanisms	Public sector organisations and large private caterers have achieved healthy, sustainable, ethical and local food accreditation, such as the Baby-Friendly Initiative, Fairtrade, Food for Life Catering Mark, Sustainable Fish, Good Egg and other awards.		13a 21a CS4 CS5 CS6 CS75 CS76 CS77
		Small scale producers and other sustainable food businesses are better able to access local procurement markets via cooperative marketing and supply initiatives and via on-line tendering.	28b CS55 CS58
	More healthy options are available in supermarkets, convenience stores, restaurants, takeaways, cafes, vending machines and catering settings.	43b 44b CS7 CS23 CS66	Local producers of healthy and sustainable food can connect direct with consumers through farmers markets, box schemes and buying groups and better access wholesale and retail markets through events, on-line tools, meet-the-buyer events and cooperative marketing, supply and retailing initiatives.	23a 56a CS57 CS89 CS94

	Food manufacturers are reformulating processed products to reduce their sugar, salt and fat content.		Efforts are being made to increase consumer spending in independent local food businesses through the introduction of local currency and loyalty schemes.	24a CS28 CS67	
	People have new opportunities to buy affordable healthy, sustainable, ethical and local food - particularly in areas with little or no existing provision - through markets and pop-up shops/restaurants and street food events.				52b CS59 CS95

References

1. Fabian Commission. October 2015. 'Hungry for Change. The final report of the Fabian Commission on Food and Poverty'. Fabian Society Report. 44 pages http://www.fabians.org.uk/wp-content/uploads/2015/10/Hungry-for-Change-web-27.10.pdf

1a At a national level, the report's first recommendation is for a new cross-departmental minister to 'coordinate action across government departments while working in partnership with devolved governments, local authorities, regulators, businesses, trade unions, civil society and those in poverty to end household food insecurity in the UK.' (p1)

1b At a national level, the report recommends that 'all governments in the UK should ensure all directly and indirectly employed public sector workers are paid at least the level of the living wage, and they should champion the voluntary living wage rates in the private sector' (p33)

1c The report recommends that 'Local authorities should establish food access plans that will identify any physical barriers to affordable, sustainable, nutritious food in their area and develop an action plan to overcome them. Local authorities should build on the work already being done by the Sustainable Food Cities Network to boost access to affordable, nutritious food in local areas.' It specifically looks at the need to address physical inabilities to access a sufficient quantity and quality of food' (p14) and the problem of 'fat swamps' in urban areas (p16).

1d As mentioned above the report recommends that Local Authorities should establish food access plans which could help 'establish new social enterprises to fill gaps in the offer of nutritious, affordable food that could be delivered in non-stigmatising contexts and settings.' (p29)

1e One of the immediate actions recommended by the report is that 'The Department for Work and Pensions should expedite action to reduce acute household food insecurity caused by social security benefit sanctions, delays and errors.' (p1)

1f The report makes the case for universal free school meals that conform with nutrition standards as a means of providing children from low-income households with a nutritious, hot meal (p16). It warns that the Healthy Start Scheme is at risk despite the fact that 'evaluations of the initiative have shown it to be a valuable public health scheme that can ensure babies born into poverty in the UK are protected from poor diet related health outcomes in the crucial early months of development. Ending this scheme could also contribute to higher costs in the long term' and adding that 'public health initiatives are generally good value for money' (p30)

2. London Food Link, Sustain. October 2015. 'Beyond the Food Bank: London Food Poverty Profile 2015'. Sustain. 22 pages http://www.sustainweb.org/publications/london_food_poverty_profile_2015/

2a The report recommends that Councils 'lead on the development of cross-sectoral interventions with retailers, caterers, manufacturers, advertisers and planners to ensure that good food is more affordable, more accessible and better promoted than junk food.'p5

2b Highlights the importance of providing adequate services to improve access to healthy food in the London Boroughs. These cover Healthy Start Vouchers boosting purchasing power by up to 25% for some families (p8); free school meals saving families up to £400 a year, tackling child poverty and boosting attainment; breastfeeding improving health of mothers and babies (p10); Meals on Wheels where an investment of just £1.32 per taxpayer per year in meals on wheels could save the UK economy as much as £1.7 billion by 2020.

2c Stresses the fact that social benefits are no longer sufficient to meet people's basic needs and maps the various actions London Boroughs are taking to tackle food poverty.

2d Warns that Healthy Start uptake has decreased due to problems with service delivery and lack of awareness and that 'local authorities are best places to increase uptake through health professionals in direct contact with those who may be eligible' (p8). It argues that Healthy Start vouchers provide a valuable financial support for low-income families (see 2b)

3. Living Wage Independent Advisory Panel. April 2012. 'A Living Wage for Newcastle'. Newcastle City Council. 41 pages. http://www.newcastle.gov.uk/sites/default/files/wwwfileroot/your-council/communications_and_marketing/a_living_wage_for_newcastle_-_april_2012.pdf

3a The report outlines some of the social, economic and ethical benefits of paying the Living Wage such as: easier recruitment and retention, reducing recruitment costs, higher quality staff, better attendance and reduced sickness absence, better productivity, motivation and loyalty, better quality of service, helping to combat child poverty, addressing deprivation, closing the gap between the pay of men and women.

4. Feedback. "The Food Waste Pyramid" via website of *Feedback*. Accessed on 22nd June 2016 http://feedbackglobal.org/get-involved/are-you-a-business/

4a Producers and other food businesses are encouraged to sign up to the Food Waste Pyramid and informed on how they can save resources by avoiding unwanted surpluses, diverting surplus food to charities or livestock feed and avoiding landfill.

5. DEFRA. June 2011. 'Applying the Waste Hierarchy: evidence summary'. Department for Environment, Food and Rural Affairs. 45 pages https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69404/pb13529-waste-hierarchy-summary.pdf

5a An evidence summary and overview of scientific research on the various ways of dealing with food waste ranked in order of environmental preference within the food waste hierarchy (p10)

6. WRAP. "Why take action: legal/policy case" via website of *Waste and Resources Action Programme.* Accessed on 22nd June 2016 http://www.wrap.org.uk/content/why-take-action-legalpolicy-case

6a Lays out the public and private sectors' legal responsibilities in terms of minimising food waste, provides guidance and encourages organisations to sign up to the Courtauld 2025 Commitment on reducing waste and GHG emissions.

7. Lawson Health Research Institute. "Children's nutrition linked to surrounding food environment" via website of *News Medical.* Accessed on 22nd June 2016 http://www.news-medical.net/news/20160621/Childrene28099s-nutrition-linked-to-surrounding-food-environment.aspx

7a The Canadian study using GPS technology 'showed that exposure to junk food outlets had a significant effect on a child's likelihood of making a junk food purchase' and that therefore 'bylaws and policies should be enacted that restrict the concentration of junk food outlets around schools.'

8. Public Health England. March 2014. 'Obesity and the environment: regulating the growth of fast food outlets'. Public Health England publications. 11 pages https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/296248/Obesity_and_environment_March2014.pdf

8a Focusing on the environment and the connections between planning and health, the report argues that 'local authorities have a range of legislative and policy levers at their disposal, alongside wider influences on healthy lifestyles, that can help to create places where people are supported to maintain a healthy weight. Public health professionals should work with their colleagues across local authorities to use these and other approaches to maximise health benefits.' (p3)

9. Department for Communities and Local Government. 16 October 2013. "Meanwhile use leases and guidance for landlords" via website *Gov.UK.* Accessed on 22nd June 2016 https://www.gov.uk/government/collections/meanwhile-use-leases-and-guidance-for-landlords

9a The introduction of meanwhile use leases by the Government aims to encourage the temporary occupation of empty town centre retail premises by non-commercial occupiers to contribute to town centre vitality.

10. The Meanwhile Foundation. "About us" via website *The Meanwhile Foundation*. Accessed 22nd June 2016
   http://www.meanwhile.org.uk/about-us/

10a The Meanwhile Foundation uses meanwhile leases to help capture the costs of empty properties and turn them into opportunities to create social and economic value for a neighbourhood.

11. WRAP. "Why take action: the commercial case" via website of *Waste and Resources Action Programme*. Accessed on 23rd June 2016
   http://www.wrap.org.uk/content/why-take-action-commercial-case

11a Lays out the evidence why businesses should incorporate food waste reduction policies arguing that food waste typically represents 4% to 5% of company turnover, provides ways of calculating it and support to implement.

12. WRAP. "Why take action: the environmental case" via website of *Waste and Resources Action Programme*. Accessed on 23rd June 2016 http://www.wrap.org.uk/content/why-take-action-environmental-case

12a Lays out the evidence why businesses should incorporate food waste reduction policies arguing that 'preventing 1 tonne of food waste from going to landfill saves 5 tonnes of CO_2 emissions.

12b. Includes links to practical guidance, tips and online support tools for SMEs to reduce food, drink and packaging waste.

13. Fairtrade International. 2014. 'Monitoring the scope and benefits of Fairtrade'. Fairtrade International.
   http://www.fairtrade.org.uk/en/resources-library/researching/Monitoring%20and%20impact%20resources

13a. The report finds that individual farmers benefit through increased income as a result of the Fairtrade Premium which also enables organisations benefiting from the Premium to invest in the viability of their businesses, support community development and provide services for workers (education, housing, healthcare).

14. Carbon Trust. "Tools, guides & reports" via website of *Carbon Trust*. Accessed 23rd June 2016 https://www.carbontrust.com/resources/

14a The Carbon Trust advises on food waste reduction but also overall resource waste (electricity, gas, water etc) for businesses. They can support the development of low carbon strategies and policies.

15. WRAP."Anaerobic Digestion for Local Authorities" via website *WRAP.* Accesses 7th July 2016
   http://www.wrap.org.uk/content/anaerobic-digestion-local-authorities

15a Provides a description for local authorities of anaerobic digestion, and the advantages of making use of this technique to recover energy.

16. The Baby Friendly Initiative. "Breastfeeding research - An overview" via website of *UNICEF UK*. Accessed on 23rd June 2016
   http://www.unicef.org.uk/BabyFriendly/News-and-Research/Research/Breastfeeding-research---An-overview/

   The Baby Friendly Initiative. "Preventing Disease and Saving Resources" via website of *UNICEF UK*. Accessed on 25th November 2016
   https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/advocacy/preventing-disease-and-saving-resources/

16a In the above links, Baby Friendly 1- provides a review of papers gathering evidence that breastfeeding is a major contributor to public health and has an important role to play in reducing health inequalities (artificially fed babies are at greater risk of allergic disease (eczema, asthma and wheezing), type 1 and type 2 diabetes and obesity); 2 –shows that for just five illnesses, moderate increases in breastfeeding would translate into cost savings for the NHS of £40 million and tens of thousands of fewer hospital admissions and GP consultations.

17. International Conference on Nutrition background paper. 2013. 'Promoting healthy diets through nutrition education and changes in the food environment: an international review of actions and their effectiveness'" FAO. 72 pages
   http://www.fao.org/docrep/017/i3235e/i3235e.pdf

17a The study found that actions tend to be most effective when they involve multiple components; e.g., information provision, behaviour change communication (including skills training), and policies to change the food environment (p47).

18. Capital Growth. 2013. 'Growing Success: The impact of Capital Growth on community food growing in London'. Sustain 24 pages
   http://www.sustainweb.org/publications/growing_success/?section

18a The study shows that London's Capital Growth campaign - which aims to increase the amount of land used for growing food and develop people's skills- has resulted in the strengthening of communities and improvement of individual wellbeing by, for instance, creating volunteering and learning opportunities.

19. Sustainable Restaurant Association. 'The Sustainable Restaurant Association Guide to Sustainable Kitchens'. Sustainable Restaurant Association 21 pages http://www.thesra.org/wp-content/uploads/2015/08/SRA-Space-Sustainable-Kitchen-Guide-FINAL.pdf

19a Details the reasons for businesses to adopt sustainable kitchen practices in terms of energy, water and waste savings (eg up to 15% savings on energy bills), environmental degradation, and consumer preference with practical guidance on how to achieve these changes.

20. Valuing Community Composting. "Toolkit for Unlocking the Potential of Community Composting". Via website of *Valuing Community Composting*. Accessed 23rd June. http://www.valuingcommunitycomposting.org.uk/page.cfm?pageid=toolkit

20a Provides a guide to develop community composting by putting forward its impact on communities and the environment through storytelling, involving the community and celebrating success.

21. New Economics Foundation. May 2011. 'The Benefits of Procuring School Meals through the Food for Life Partnership. An Economic Analysis' NEF. 40 pages. http://www.foodforlife.org.uk/~/media/files/evaluation%20reports/fflp-nef----benefits-of-local-procurement.pdf

21a NEF looks at the economic benefits of the Food for Life Schools programme and finds that in Nottinghamshire the programme returns £3.11 in social, economic and environmental value for every £1 spent. In addition, 'comparing current spending and re-spending in Nottinghamshire now and prior to a focus on procuring locally and seasonally shows that the total amount of money circulating in the local economy from this source has increased substantially, from £181,418 in 2004 to £3,826,688 currently.'

22. Compassion in World Farming. 2008. 'The impact of livestock farming: solutions for animals, people and the planet'. Compassion in World Farming. 6 pages. https://www.ciwf.org.uk/media/3817780/impact-of-livestock-farming.pdf

22a. The report articulates the link between the intensive livestock production system, the low animal welfare and environmental degradation it generates. It outlines a system where welfare is enhanced and the ecological impact is minimised.

23. Friends of the Earth Europe. May 2016. 'Eating from the Farm: the social, environmental and economic benefits of local food systems'. Friends of the Earth Europe. 27 pages. https://www.foeeurope.org/sites/default/files/agriculture/2015/eating_from_the_farm.pdf

23a FoEE look at various ways in which producers are linking directly with consumers through short-supply chains via farmers' markets, using web-based technology for self-harvest gardens, Community Supported Agriculture, solidarity purchasing groups and local co-op shops. They demonstrate how 're-localising the way we produce, process, and distribute food […] can help shift our economy so that it addresses the problems of climate change and biodiversity collapse as well as the rising levels of social and economic inequality' (p23).

24. New Economics Foundation. May 2015. 'Money with a purpose. Community currencies achieving social, environmental and economic impact'. New Economics Foundation. 78 pages. http://b.3cdn.net/nefoundation/ff0740cad32550d916_o1m6byac6.pdf

24a 'Community currencies specific to particular geographical areas aim to keep more the wealth circulating in the locality in which they are created. Community currencies can thus 'plug the leak' in a locality or sector that otherwise allows profits to flow to the headquarters of large

corporations, rather than back to the people that work for them. Why does this matter? Because keeping money circulating within a locality or SME network, through wages or supply chains for example, increases opportunities to reinvest in that community and strengthens both local economic and social infrastructures' (p38).

25. Food Active. Spring 2016. 'Healthy Weight: Why Local Authority Action is needed. The evidence base'. Food Active.16 pages
http://www.hegroup.org.uk/images/resources/Healthy_Weight_Briefing_paper.pdf

25a. The Declaration supports local government to exercise their responsibility in developing and implementing policies which promote healthy weight. It brings evidence of the negative impacts of the ease of access to unhealthy food options in the environment.

26. Sustain. December 2006. 'Have you bottled it? How drinking tap water can help save you and the planet.' Sustain. 21 pages
http://www.sustainweb.org/publications/have_you_bottled_it/

26a. A comparison of bottled and tap water looking at the health and environmental arguments for both. They find that bottled water can become a health problem if too much of the same brand is consumed regularly as the amount of minerals can be harmful in high doses. On an environmental level, 'the abstraction, processing, packaging, transportation and sale of bottled water, and the disposal of the associated waste, involves a significant amount of energy use and pollution' (water miles) p6.

27. Soil Association Food for Life Hospital Leaders. 'Food for Life Hospital Leaders: Transforming the food experience for patients, staff, visitors and the wider community' Soil Association Food for Life. 2 pages
http://www.foodforlife.org.uk/~/media/files/hospitals/6hlcasestudies.pdf

27a. A set of case studies of NHS Trusts which have chosen to work with the Soil Association Food For Life team to develop a framework for health-promoting and sustainable hospital food. This includes good food for patient and staff catering, hospital cafes and vending as a way of supporting recovery and promoting good health in the long term.

28. Forum for the Future. 2007. 'Buying a Better World: Sustainable Public Procurement'. Forum for the Future. 44 pages
http://www.forumforthefuture.org/sites/default/files/project/downloads/buying-better-world.pdf

28a The report explains the importance of incorporating sustainability thinking into public sector procurement strategies, the benefits for the economy and society and provides case studies and action planning tips.

28b The report advises using local spend to encourage local involvement in contracts,; increase local skills and jobs; recirculate money within the local economy; and reduce transport, freight and associated emissions . A recommendation is made in favour of advertising contracts in local media and websites to notify local farms, SMEs and social enterprises (p19).

29. Kevin Morgan. 2015. 'Good Food for All'. The Senedd Papers #3, Institute of Welsh Affairs. 32 pages http://www.iwa.wales/click/wp-content/uploads/SenneddPaper3_v3.pdf

29a. The paper argues that 'in the UK the public sector spends some £2.5 billion a year on food and catering services' and that 'this budget ought to be deployed more strategically to render good food more readily available in public sector settings' (p11). It calls for collaborative procurement across the public sector.

30. Campaign to Protect Rural England. 2012. 'Mapping Local Food Webs Toolkit'. CPRE. 194 pages. http://www.cpre.org.uk/resources/farming-and-food/local-foods/item/3076-mapping-local-food-webs-toolkit

30a The Food Webs Toolkit stresses the importance of maintaining and building strong local food infrastructures to create new jobs, and small businesses, to ensure that more money is spent and stays in the local economy, to reduce food miles and food waste and to secure better access to fresh, healthy and affordable food.

30b The Toolkit makes apparent the connections between local production, local retail and local consumption and their importance for local economic prosperity. It aims to be an educative tool for community groups to help them understand, shape and communicate on the local food system.

31. Planning Practice Guidance. "What is the role of health and wellbeing in planning?" via website *Gov.UK*. Accessed on 5th July 2016 http://planningguidance.communities.gov.uk/blog/guidance/health-and-wellbeing/what-is-the-role-of-health-and-wellbeing-in-planning/

31a Argues that 'the built and natural environments are major determinants of health and wellbeing' and includes food growing as a key determinant of a healthy community.

32. Pesticide Free Towns. "Why make public areas pesticide-free?" via website *Pesticide-free towns.info*. Accessed on 5th July 2016 http://www.pesticide-free-towns.info/stories-principles#node-19

32a Lists the multiple benefits of adopting pesticide-free practices in local areas including: reducing air, ground and water pollution and associated costs for the local authority, protecting biodiversity, protecting the health of the most vulnerable groups and the quality of life for all residents, protecting the health of civil workers exposed to the pesticides.

33. Chartered Institute of Environmental Health. "Food Safety and Nutrition" via website *Chartered Institute of Environmental Health*. Accesses 5th July 2016 http://www.cieh.org/policy/food_safety_nutrition.html

33a CIEH recognises that food safety and nutrition are key concerns for the environmental health profession and therefore provide "professional education and development for environmental health practitioners".

34. The King's Fund. May 2016. 'Gardens and health Implications for policy and practice'. The King's Fund. 65 pages. http://www.kingsfund.org.uk/publications/gardens-and-health

34a The report brings evidence of the multiple benefits of gardening on health and wellbeing and encourages 'local government, health and wellbeing boards and clinical commissioning groups to make more of the diverse health benefits of gardening in support of their priorities.' It recommends developing access to allotments and identifies local planners as key enablers.

35. Growing Health. March 2016. 'Which Tool to Use. A guide for evaluating health and wellbeing outcomes for community growing programmes'. Sustain. 32 pages. http://www.sustainweb.org/publications/whichtooltouse/

35a Provides a set of tools that community groups can use to measure the health and wellbeing impacts of their growing projects.

36. Soil Association Food for Life. "What impact has Food for Life had so far?" via website *Food for Life*. Accessed on 6th July 2016 http://www.foodforlife.org.uk/what-is-food-for-life/our-impact .

36a Food for Life has commissioned many independent evaluations looking at the health, economic and environmental impact of their programme. Including increase in free school meal uptake in FFL schools, increase in the consumption of fruit and vegetables for children at school and at home and for their parents, increase in the procurement of more ethical, sustainable and local produce via the Food For Life Catering Mark.

37. The Baby Friendly Initiative. "Baby Friendly community health services: impact on breastfeeding" via website of *UNICEF UK*. Accessed on 23rd June 2016 http://www.unicef.org.uk/BabyFriendly/News-and-Research/Research/Baby-Friendly-Initiative/Baby-Friendly-community-health-services-impact-on-breastfeeding/

37a The research above found that implementing the BFI in community health services increased rates of exclusive breastfeeding until six months.

38. Food Ethics Council. May 2016. 'Catering for sustainability: making the case for sustainable diets in foodservice'. Food Ethics Council. 59 pages. http://www.foodethicscouncil.org/uploads/publications/Catering%20for%20Sustainability_Full_Report(1).pdf

38a Makes the business case for foodservice companies to cater for sustainable diets and informs on market trends. It identifies barriers for change and provides guidance to businesses including sharing best practice and collaborating beyond zero-sum competitiveness.

39. Innovative Farmers. "Other farmers look over the hedge" via website *Raconteur*. Accessed 12th August 2016 http://raconteur.net/lifestyle/other-farmers-look-over-the-hedge

39a The Soil Association's Innovative Farmers programme supports farmers and growers to undertake field labs and develop innovative organic farming techniques such as using natural predators to keep pests down, composting, planting companion crops or using green manures to fix nitrogen from the air. This support to farmers enables them to reduce their ecological footprint as well as increasing their yields in an ecologically sustainable way.

40. Trades Union Congress. June 2014. 'Universal Credit: the problem of delay in benefit payments'. Trades Union Congress. 27 pages. https://www.tuc.org.uk/sites/default/files/BenefitsDelayed2014.pdf

40a Voices its concern over the increased delays in payment that are expected to result from Universal Credit and the growing risks for claimants who may become more reliant on food banks, rent arrears and higher debt.

41. The Guardian. 18th March 2015. "Long-term food bank users risk nutritional problems". Via website *The Guardian*. Accessed on 7th July 2016 https://www.theguardian.com/society/2015/mar/18/long-term-food-bank-users-nutritional-problems-balanced-diet

41a The study led at Birmingham City University analysed food typically on offer at food banks and drew up menus based on the items available. These revealed that in the long term there was a real risk of children and families becoming deficient in fibre, calcium, iron and a variety of vitamins with a strong dominance of processed food.

42. WRAP. "Collection and recycling of food waste". Via website *WRAP*. Accessed on 8th July 2016 http://www.wrap.org.uk/content/collection-and-recycling-food-waste-0

42a Provides guidance to local authorities on collecting food waste, based on trials supported by WRAP and looks at the reasons behind the need to develop food waste collection schemes for households, schools, SMEs

43. The Food Foundation. January 2016. 'Force-Fed. Does the food system constrict healthy choices for typical British families?'. *The Food Foundation*. 64 pages. http://foodfoundation.org.uk/wp-content/uploads/2016/01/The-Food-Foundation-64pp-A4-Landscape-Brochure-AW-V32.pdf

43a One of the report's policy recommendations is that 'quick-service restaurants often serve cheap, unhealthy food and we need a range of measures in place to incentivise food service providers to provide healthier food. Planning regulation is only one of these measures, but, given the strength of evidence and existing guidance from Public Health England, having consistent decision-making by local government and planning inspectors on fast food outlets around schools would be an easy win.' (p35)

43b The report studies the extent to which unhealthy eating patterns are becoming more common as we increasingly 'eat out'. In addition to planning regulations to limit the number of fast food outlets (mentioned above), the report recommends many other measures to 'incentivise food service providers to provide healthier food'. These include 'setting upper limits for the formulation of processed foods' for specific nutrients; making Government Buying Standards mandatory for all public procurement; using VAT to support healthy choices; increasing school meal uptake and improving food in schools and workplaces (p27, 35)

44. Parliamentary Office of Science and Technology. April 2016. 'Barriers to Healthy Food'. *Houses of Parliament*. 7 pages. http://researchbriefings.parliament.uk/ResearchBriefing/Summary/POST-PN-0522?utm_source=twitter&utm_medium=socialmedia&utm_campaign=PN522

44a Identifies education and information as a fundamental intervention to improve diets including campaigns; school-based interventions involving cooking and nutritional education; life-style interventions with dietary components; and improving cooking skills in the adult population (p3).

44b The report makes evident that increasing the availability of healthy options is mostly dependent on reducing the availability of unhealthy options. As the report does not find strong evidence to support the widespread existence of food deserts, it instead recommends acting on the promotion, advertising and marketing of unhealthy options to make these less attractive in comparison with healthier alternatives. It adds the importance of having strong healthy public sector food standards as well as reformulation and portion control.

45. International Panel of Experts on Sustainable Food Systems. June 2016. 'From Uniformity to Diversity: A Paradigm Shift from Industrial Agriculture to Agroecological Systems'. IPES-Food. 96 pages. http://www.ipes-food.org/images/Reports/UniformityToDiversity_FullReport.pdf

45a IPES calls for agroecological public procurement that would support the demand for food produced within agro-ecological systems while markets develop. Local procurement 'could be favoured and coordinated through localized food systems planning processes' (p71).

45b The report highlights the multiple environmental, social, health and economic benefits of agroecological farming systems as opposed to industrial farming and calls for all stakeholders at a global, national and local level to support the transition (policy incentives, food policies, peer-to-peer action research, procurement, short-supply chains etc).

45c IPES recommends that 'improved education on healthy eating in schools from an early age is essential to changing eating habits' and that in order to achieve this 'school curricula at all levels should include modules that integrate the multiple dimensions of food systems, including hands-on experiential programs such as school gardens, food preparation facilities, and making meals a time for learning as much as for eating' (p72).

46. Public Health England. February 2015. 'Local Leadership, New Approaches. How new ways of working are helping to improve the health of local communities'. *Public Health England*. 21 pages. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/407060/2014712_Local_leadership.pdf

46a PHE reports on Calderdale Council's support of the integration of Food For Life in schools across the borough as well as extending to all settings with the aim of transforming food culture. Citing the public health manager at the Council, the report writes that 'there's widespread support for this type of focus on prevention from colleagues at the CCG and the local NHS hospital trust, who appreciate its potential to improve health and tackle inequalities' (p8).

47. National Association of Care Catering. "National Meals on Wheels Week" via website NACC. Accessed 25th August 2016. http://www.thenacc.co.uk/events/National_meals_on_wheels_week

47a The campaign is 'calling on the government and councils to recognise the real value of adult social care services, such as meals on wheels and luncheon clubs. The abolition of meals on wheels services is incredibly short-sighted and cuts a lifeline for many older vulnerable people that could lead to malnutrition related illnesses and older people face prospect of social isolation and loneliness.'

48. National Institute for Health and Care Excellence. November 2012. 'Obesity: working with local communities'. *National Institute for Health and Care Excellence.* 99 pages. https://www.nice.org.uk/guidance/ph42/resources/obesity-working-with-local-communities-1996354580677

48a Recommends adopting community wide, multi-agency approaches to obesity, integrated commissioning and coordinating local action.(p14)

49. Local Government Association. February 2016. 'Building the foundations: Tackling obesity through planning and development'. *Local Government Association.* 48 pages http://www.local.gov.uk/documents/10180/7632544/L16-6+building+the+foundations+-+tackling+obesity_v05.pdf/a5cc1a11-57b2-46e3-bb30-2b2a01635d1a

49a The LGA calls for a whole-systems approach to tackling obesity and for collaborative working across teams and organisational boundaries (p9)

49b The workshops undertaken to inform the report show instances where public health and planning teams have collaborated in the development of policies to regulate fast-food takeaways.

50. Soil Association Food for Life. 2016. 'A Healthier Place: the impact of the Food for Life Programme'. *Soil Association Food for Life.* 12 pages http://www.foodforlife.org.uk/~/media/files/evaluation%20reports/impactreportfinalpdf7716.pdf

50aThrough its evaluation work and subsequent communication strategies targeted at schools, families and local public agencies, Food for Life shows the impact its whole school approach and multi-settings programme have on health and well-being and the local economy. This latest report shows that for every £1 spent on Food For Life (FFL) there is a social value of £4.41 created over a three year period. It also shows that pupils in FFL schools reported consuming almost one third more portions of fruit and vegetables than pupils in comparison schools.

51. Frontiers in Public Health. August 2016. 'School Holiday Food Provision in the UK: A Qualitative Investigation of Needs, Benefits, and Potential for Development'. *Frontiers In Public Health* 8 pages. http://journal.frontiersin.org/article/10.3389/fpubh.2016.00172/full?&utm_source=Email_to_authors_&utm_medium=Email&utm_content=T1_11.5e1_author&utm_campaign=Email_publication&field=&journalName=Frontiers_in_Public_Health&id=210518

51a Interviews with staff involved in holiday clubs found that they 'felt that the food provided at holiday clubs gave children opportunities to try new and more nutritious foods than they would have access to at home. Staff believed that the children liked trying new foods and felt that these new food experiences could have a positive influence on children's dietary habits at home.' In addition, 'holiday clubs offered an array of

enjoyable activities for children' which 'were believed to alleviate boredom and reduce the likelihood that children would engage in anti-social behaviour' thus improving overall wellbeing (p4).

52. The Great British High Street. 2016. 'The Great British High Street of the Year Awards 2016. Good Practice Guide'. *The Great British High Street. 27 pages.* http://thegreatbritishhighstreet.co.uk/pdf/GBHS-Good-Practice-Guide.pdf?2

52a Encourages local authorities to offer rebates or cut business rates for new shops, bars and restaurants taking over vacant areas. One case study shows 'Trafford Council developed a Town Centres Loan Scheme which offered businesses interest-free loans of up to £10,000 (£20,000 on specific streets) when opening in previously vacant units. This has enabled 14 new independent businesses to date to open in Altrincham town centre.'(p4)

52b Recommends that local authorities encourage the setup of pop-up shops to reinvigorate high streets. 'Pop ups offer an easy, low cost way for burgeoning businesses to take their first steps and offer a great way to get new and different cuisine into local areas.'

53. Moragues-Faus, A, and Kevin Morgan. 2015. "Re-Framing the Foodscape: The Emergent World of Urban Food Policy." Environment and Planning A (47): 1558–73.

53a This recent contribution to the food governance literature points out key aspects to deliver sustainability and food security outcomes such as the importance of policy coherence, institutional coordination, holistic approaches to the food system and inclusiveness.

54. There is a growing literature on the governance of socio-ecological systems such as food systems that recommends the following aspects to foster sustainable transitions: reinforcing communication and the institutional interplay among different levels (for example between administrative levels but also connecting better knowledge produced at different scales); developing strong policy networks; implementing co-management strategies to improve multiple and complex understanding of food system challenges and solutions; and establishing boundary or bridging organizations that play an intermediary role convening and mediating between different actors and interests to deliver sustainability benefits (Berkes 2006; Cash, Adger, and Berkes 2006; Folke et al. 2005; Sundkvist, Milestad, and Jansson 2005; Termeer, Dewulf, and Lieshout 2010).

55. Several studies show that involving civil society organisations in the governance of food systems is crucial for effectively addressing food insecurity mainly given their capacity to identify local problems and response gaps, build legitimacy and public support for interventions, create synergies between government agencies operating at different levels and in different sectors, and offer different capacities to those of the public and private sector (Edwards 2012; Koc et al. 2008; McKeon 2011; Seed et al. 2013).

56. Moragues-Faus, A. (2016) Emancipatory or Neoliberal Food Politics? Exploring the "Politics of Collectivity" of Buying Groups in the Search for Egalitarian Food Democracies. *Antipode*, doi: 10.1111/anti.12274.

56a. This paper shows how buying groups and other related food initiatives based in collective actors can forster social change by developing ethical repertoires, fostering inclusion, collaborating with different environmental and social demands for change and expanding democratic practices in the food system.

57 S. Angell, L. Silver, G. Goldstein, C. Johnson, D. Deitcher, T. Frieden, M. Bassett Cholesterol control beyond the clinic: New York City's trans fat restriction. *Ann Intern Med*, 151 (2009), pp. 129–134

57a The New York City Department of Health and Mental Hygiene restricted artificial trans fat - a contributor to coronary heart disease - in restaurants. The Department first undertook a voluntary campaign, but this effort did not decrease the proportion of restaurants that used artificial trans fat. In December 2006, the Board of Health required that artificial trans fat be phased out of restaurant food. To support implementation, the Department provided technical assistance to restaurants. By November 2008, the restriction was in full effect in all New York City restaurants and estimated restaurant use of artificial trans-fat for frying, baking, or cooking or in spreads had decreased from 50% to less than 2%. Preliminary analyses suggest that replacement of artificial trans-fat has resulted in products with more healthful fatty acid profiles. For example, in major restaurant chains, total saturated fat plus trans-fat in French fries decreased by more than 50%. At 2 years, dozens of national chains had removed artificial trans fat, and 13 jurisdictions, including California, had adopted similar laws. Public health efforts that change food content to make default choices healthier enable consumers to more successfully meet dietary recommendations and reduce their cardiovascular risk.

Case studies

CS1. The Food Tourism Action Plan for Wales 2015-2020 defines food tourism as 'any activity that promotes a high quality, distinctive, local and sustainable food experience linked to a particular place'

   In Belfast's integrated tourism strategy, food is identified as one of the city's most significant tourism assets. The local provenance of restaurant food is one of the hospitality industry's key marketing devices, strongly supported by the Council.

CS2. Lewisham Council have made a Sustainable Seafood Commitment to the Sustainable Fish Cities campaign.

CS3. Brighton University's sustainable food policy covers Fairtrade, tap water, seasonal fruit & veg, organic milk, free-range eggs, sustainable fish and meat and dairy reduction.

CS4. Bournemouth & Poole has become the first Sustainable Fish City thanks to commitments from the Local authority, schools, hospitals, universities, restaurants and workplaces.

CS5. Nottingham University Hospitals is the first NHS Trust to achieve Gold Food for Life Catering Mark.

CS6. Plymouth City Council and Oldham Council schools catering services have achieved the Gold Food for Life Catering Mark.

CS7. Blaenau Gwent County Borough Council (see p8 of the document) in Wales decided to trial a second vending machine filled with healthier options such as freshly prepared baguettes, sandwiches and wraps, in two leisure centres. Both sites saw initial high sales of fresh food and water; over the three-month period for which returns were submitted, £2,400 of the vended produce was 'healthy' according to the definition set out in the monitoring guidance – 22% of the total vending revenue.

   Sheffield International Venues will be imposing a 20p levy on drinks with added sugar in all its vending machines across the city. The revenues generated will go to obesity and diabetes prevention programmes for young people.

CS8. Lambeth Council supports raising the living wage and has a report to help contractors, schools and others to become London Living Wage Employers.

CS9. The University of York has developed a Food Waste Strategy based on the waste hierarchy to divert as much food waste away from landfill as possible.

CS10. Brighton & Hove City Council's policy requiring all Council food procurement contracts over £75k to meet minimum health and sustainability standards.

CS11. Carmarthenshire County Council's Local Sustainable Food Strategy: Building Sustainable Development into Food Contracts.

CS12. In Brighton and Hove the development of 'more local food processing, more jobs, and better quality food' has been included as an action in the City's Economic Strategy 2013/2018 under the overall objective 'To grow quality jobs and business opportunities in higher value and low carbon sectors'.

CS13. London Borough of Waltham Forest has adopted Supplementary Planning Guidance to deny planning permission to new fast food outlets within 400 metres of schools.

CS14. Leicester City Council introduced a Street Trading Policy to prevent burger vans trading outside schools.

CS15. The Food Access Radar toolkit was developed by Staffordshire County Council and Oxfordshire County Council as a tool for identifying food deserts.

CS16. Oldham Council provides business rate relief for small businesses and food retailers (including shops, pubs, cafes and restaurants).

CS17. Bristol City Council Parks and Open Spaces (which includes allotments and smallholdings) led an internal resource assessment mapping exercise to identify all available land for food growing. The team are also working with Bristol Food Producers to link up with people seeking land for food growing. They have provided free 'set-up agreements' and early years peppercorn rent on larger areas of land for community growing projects. (see evidence in Bristol Method 18: How to encourage food production in the city–https://www.bristol2015.co.uk/method/food-nature/)

CS18. Brighton & Hove City Council is in the unusual position of holding (in public ownership) 11,923 acres of 'downland' farmland. A City Downland Advisory Board has been established (includes representatives from farmers, City Council, wildlife specialists and Brighton and Hove Food Partnership) to develop policy which supports a viable local farm economy; to support diversification such as eco-tourism; to reconnect farmers and city residents; and to promote sustainable food production.

CS19. Brighton and Hove City Council owned Open Market has been redeveloped and handed over to a community interest company, with a commitment to "local, Fair Trade, free range and organic produce, and other goods that demonstrate a considerate approach to the environment".

CS20. Brighton & Hove Council adopted a [Food Growing and Development Planning Advice Note](#) in 2011. The PAN made provisions for the incorporation of community food growing into new commercial and residential developments.

CS21. Islington Council adopted a [Parks and Urban Green Spaces Habitat Action Plan](#) concerned with the conservation and enhancement of biodiversity. This plan is seen as a way for the borough to mitigate the impacts of climate change. One action relates to the reduction in pesticide use.

CS22. [Medway Council](#) (p12) has set up a local obesity network to bring the public, private and voluntary sectors together.

[Brighton and Hove Food Partnership](#) have produced a [case study](#) which looks at how the partnership developed a city-wide [food poverty action plan](#), from the initial reflections on poverty in the city to the ways of measuring the success of the plan.

CS23. A shop offering healthy fast food has been opened with the help of [Haringey Council](#) (p7). The Council is supporting local youngsters to choose a better option by investing in a not-for-profit social enterprise that offers a tasty, healthier alternative using free-range, local and seasonal produce.

CS24. Food Futures Manchester's [Community Food Coordinators](#) programme delivers free healthy eating, weight management, cooking and nutrition course in local community settings.

CS25. [Calderdale Council](#) (p22) has made working with schools a priority and in achieving this has integrated its weight management and physical activity services, which has helped it work more closely with schools. It has commissioned the Soil Association Food for Life to run whole-school programmes in over 75% of schools engaging children in healthy eating, cooking, growing and farm visits.

CS26. [Wigan Council](#) (p26) has responded to the obesity challenge by integrating its support service under one umbrella. The new service has particularly helped to increase uptake of the National Child Measurement Programme. Integrating the service has also allowed the council to seek new and innovative ways to improve health and tackle obesity. A six-week healthy lifestyles programme has been launched and includes advice on healthy eating, cooking and physical activity.

CS27. [Lambeth Council](#) (p32) has trained over 900 of its local front-line staff in how to identify and deal with weight problems in children and set up nutrition training for staff in children's centres. As part of London's Food Flagship programme the Council is helping residents gain the knowledge, passion and skills to grow, buy, cook and enjoy healthy and sustainable food. Vouchers are also being offered to families at children's centres at risk of food poverty, which can be exchanged for fruit and vegetables.

CS28. Derbyshire County Council (p36) has created an awards scheme to promote local eateries that sell healthy food. A local directory, and a series of pledges form this award scheme which gives profile to healthy and sustainable businesses developing smaller portions, using less fat, salt and sugar in products, but more vegetables, fruit and pulses.

CS29. The Royal Borough of Greenwich is supporting Greenwich Cooperative Development Agency to run free food business start-up training which cover healthy eating, environmental and financial sustainability, business planning, product development.

CS30. Leeds City Council has developed a toolkit to help schools and caterers to increase the uptake of free school meals.

CS31. Sheffield City Council provides a list and map of lunch clubs for vulnerable and socially isolated older people.

CS32. South Lanarkshire County Council's community meals service has become the first in the UK to achieve the Food for Life Catering Mark.

CS33. The Food and Fun programme piloted by Food Cardiff provides a lifeline for families facing the lack of food provision for children during the summer holidays. Following its huge success the programme is now being rolled out in five local authorities across Wales.

CS34. Aberdeenshire Council offers on-line advice on reducing food packaging waste and reducing food waste at work.

CS35. North East Lincolnshire Council produced a handbook to help businesses reduce waste including food waste and packaging.

CS36. North London Waste Authority's 'Waste Less, Save More. A guide for North London Businesses' provides top tips, how to measure success, useful contacts and case studies.

CS37. Coventry City Council provides free advice for businesses on waste reduction, environmental awareness and energy efficiency with a potential for grant support.

CS38. Midlothian Council, Changeworks and MFIN offer increased targeted and local welfare advice and improved coordination and awareness of sources of hardship support.

CS39. Cumbria Councty Council has produced a document to inform and encourage local communities to organise the collection and redistribution of surplus food locally.

CS40. London's Plan Zheroes' mission is to find, support and inspire food businesses who are willing to donate their surplus food to local charities and people who need it.

CS41. Plymouth County Council have organised the collection of food waste from all council-managed primary schools with the food waste being turned into energy via an anaerobic digestion plant.

CS42. Food Active's campaign GULP! Give up Loving Pop has attracted national attention as it defied the soda industry and sought to increase people's awareness on the health impact of sugary drinks.

CS43. Sustainable Fish Cities is a national campaign run by Sustain to persuade restaurants and caterers to adopt sustainable seafood policies and practices. They have already reduced the impact on fisheries by changing the fish procurement policies of millions of meals served every year thanks to local campaigning.

CS44. Bath & North East Somerset have produced a film which provides a snapshot of the activities which support local, healthy and sustainable food across the district and hope to inspire the local community to support the local food economy.

CS45. Oxford's local food directory includes entries on box schemes, allotments, farmers' markets, local producers, grocers and sustainable retailers.

CS46. Cambridge Sustainable Food awards businesses that successfully demonstrate their overall sustainability by making a series of pledges. The Business Awards are not only a way to stimulate discussion around sustainable food locally, they are also a great way to encourage action by providing a platform to showcase sustainable local businesses.

CS47. Bexley, Brighton, Croydon, Dorset, Leicester and Oxfordshire are running Love Food Hate Waste campaigns locally to encourage residents to reduce their food waste.

CS48. Bristol, Edinburgh and London have organised Feeding the 5000 events to divert tons of food waste and feed thousands of people.

CS49. Bristol Food Network's Get Growing garden trail and Good Food Guide take people through the many and sometimes unknown community food initiatives.

CS50. London's Capital Growth space finder maps hundreds of growing spaces across the city where volunteers can get involved

CS51. GCDA provides food business training for food entrepreneurs which covers menu planning with sustainable and healthy food, procurement, financial management and promotion.

CS52. Brighton's Community composting scheme has over 30 sites and 1000 households taking part. Read their latest case study

CS53. Norfolk County Council helps communities establish composting schemes and get financially rewarded for success through an innovative 'recycling credits' scheme.

CS54. Liverpool Food for Real film festival seeks to explore the environmental, cultural and political impacts of the foods we grow, eat, waste and share.

CS55. Manchester Veg People is a cooperative of local organic growers working with and supplying buyers from restaurants, caterers and public sector organisations.

CS56. Manchester City Council (p7) has identified vacant and derelict land in the city and has piloted meanwhile projects with partners to deliver growing projects.

CS57. Tamar Valley Food Hubs is an online Farmer's Market to encourage local shoppers to buy local and seasonal produce by providing a platform where they can access all products in one place.

CS58. Sell2Plymouth is an on-line portal through which local small businesses can register for updates on public contracts, including food procurement opportunities.

CS59. Oxford's VegVan sells fresh, locally-produced food at regular weekly mini-markets throughout the city and county.

CS60. The Brighton & Hove Good Food Procurement Group (GFPG) includes the City Council, Universities, Hospitals, Community Meals and workplace canteens. They work together to share good practice and improve sustainable procurement in the city. Both the University of Brighton and Eden Foodservice (contract caterer for primary school meals) achieved MSC chain of custody certification following a GFPG meeting on sustainable fish with a presentation from the Marine Stewardship Council.

CS61. Manchester based Kindling Trust runs a Commercial Organic Horticulture Course for those wanting to develop a career and business in organic growing.

CS62. Brighton and Hove Food Partnership provides food poverty advice and resources for advisors and health professionals.

CS63. Bristol's The Matthew Tree Project provides an individualised food poverty service for residents using a social enterprise training and distribution model.

CS64. Liverpool's FareShare Merseyside redistributes surplus food to over 100 charities and community organisations working with vulnerable people in the region.

CS65. Carlisle's Fair Meals Direct is an innovative service working to get 'hearty, healthy, locally-produced food' to some of Carlisle's most vulnerable people.

CS66. A number of cities have developed their own Healthy Choice Awards, including Brighton and Hove, Kirklees, South Oxfordshire and Tameside to celebrate businesses and caterers providing healthy options.

CS67. Independent Liverpool Food Card encourages consumers to shop at independent local food shops and restaurants through year-round discounts.

CS68. Knowsley Council (p20) has fully integrated health and wellbeing across all council functions by, for instance, placing public health staff within other functions such as planning, performance management and environment and is working in partnership with communities.

CS69. West Sussex County Council (p7) piloted a Sugar champion programme to promote national Change4Life campaigns on sugar reduction. They elaborated a 12-months calendar of events to raise awareness around health issues and developed a network of local champions to advocate the sugar reduction agenda.

CS70. Brighton & Hove has launched its Sugar Smart City initiative, a campaign to help residents get smarter about sugar. They aim to reduce sugar consumption by encouraging schools, cafes, restaurants, takeaways, vending and supermarket to introduce a sugary drinks levy on all soft drinks with added sugar, the profits of which will be paid into the Children's Health Fund to support programmes and schemes aimed at improving children's health and food education.

CS71. London Borough of Lambeth's Responsible Procurement Policy (p26) highlights the various accreditations that the Borough is striving for or wishes to maintain and that procurement officers should consider in all food contracts

CS72. Lambeth's waste strategy aims to reduce food waste, run Love Food Hate Waste campaigns, link with food growing projects to encourage community composting and subsidise home composting.

CS73. Lambeth cooperates with food banks by providing a link policy worker and finance and benefits advisors to sit in food banks when they are open. Lambeth is commended in the GLA report 'Zero Hunger City'.

CS74. Brighton & Hove's Primary School Meals Service serves 64 Primary schools and has been found to not only improve lunch experience with a sustainability accreditation (Silver Food For Life Catering Mark) but has increased spend in the local economy, helped schools to meet Ofsted criteria, created 118 new jobs since 2011 with no zero hours contracts and helped address food poverty.

CS75. Unilever achieved accreditation as a Living Wage Foundation employer covering its UK workforce in 2015.

CS76. Stockport has been awarded Fairtrade Borough status for its commitment to supporting Fairtrade and sourcing Fairtrade products.

CS77. University of Portsmouth has achieved Good Pig, Good Dairy, Good Chicken and Good Egg Awards for its high animal welfare sourcing.

CS78. Public Health in Greenwich convened a steering group to coordinate activities to promote uptake of Healthy Start Vouchers (p8). Midwives now sign registration forms for all women (income eligibility is determined by the Department for Work and Pensions once the form is submitted). Healthy Start vitamins are free to all pregnant women. The steering group has mapped the location of Healthy Start retailers and encouraged more than 100 local shops to become authorised (including street traders and local fruit & veg box schemes).

CS79. Brighton & Hove City Council has, in recent years, been including a question on food/fuel poverty in their annual weighted survey of residents (p37). It asks *"Thinking about next year, how much do you agree or disagree that you will have enough money, after housing costs, to meet basic living costs? By this I mean to pay for food, water and heating?"*. This was a great win for the Brighton and Hove Food Partnership who has also called upon local organisations who come into contact with vulnerable people to ask a simple question about food poverty. In addition to the question above, suggested questions were *"In the last 2 months, did you (or other people in your household) ever reduce the size of your meals or skip meals because you couldn't afford enough food?"* and *"Thinking about your diet, do you feel that you (or other people in your household) tend to eat less healthily because you can't afford healthier options?"*.

CS80. Bristol's Public Sector Food Procurement Group (p43) was established in 2012 driven by Bristol's Food Policy Council and comprised senior food procurement officers from many organisations. Since then, member organisations have increased their procurement of local food and improved their ratings under the Food for Life Catering Mark.

CS81. Food Cardiff Council (p12) is working with a range of organisations and partnerships, such as the Cardiff Welfare Reform Group, who are tackling the wider determinants of poverty. The Business Group of Food Cardiff Council is itself taking a lead in developing a coordinated response to food poverty, bringing together all key bodies needed to develop an effective response in both the short and the long term.

CS82. Bristol Food Producers is a collaboration aiming to become a producer-led organization supporting viability and sustainability of local food production in and around Bristol. It is working on: Building a membership network; Investigating the benefits and costs of a local food

brand to promote local produce; Undertaking research into collaborative distribution; Developing a resource directory; Developing learning opportunities, including a Grow Leader course at Feed Bristol and bringing the Fresh Start Land Enterprise Academy for Horticulturalists to Bristol to develop a certified course: Livelihood Skills for Landworkers.

CS83. Following an extensive consultation process with local stakeholders, Belfast City Council published its new Growing Communities strategy 2012-2022. Starting in 2012, funding was made available by the Council, PHA and others to establish 10 new community garden facilities, with a further three added in 2013. Many of the new facilities have been built in existing city parks.

CS84. Cambridge Sustainable Food has many ways of raising public awareness (p6) of food, health and sustainability issues, through websites, social media, magazines, film shows, radio and press pieces, talks and conferences.

CS85. A weekly food waste collection service is provided for homes, schools and catering businesses across Bath and North East Somerset. Collected food waste is taken to an anaerobic digestion plant near Warminster where the gases produced generate renewable energy and digitate is made into fertiliser for local farms.

CS86. The Living wage is paid by the two of the largest employers in Cardiff (p13) (circa 28,000 people): City of Cardiff Council and NHS Wales (which includes Cardiff and Vale University Health Board and Public Health Wales). Food Cardiff Council member and core partner, Cardiff University, is the first Welsh University to become an accredited Living Wage employer.

CS87. Bath & North East Somerset Council runs a series of campaigns (p25) to increase food waste recycling (see section above) increasing food waste recycling rates to 47% in 2015- higher than the national average. Total collected food waste has decreased from 4,296 tonnes in 2011/2012 to 3,832 tonnes in 2014/2015.

CS88. Bristol has a very strong Healthy Schools Programme, and works closely with the Soil Association Food for Life team. Schools put food at the heart of the life of the school, using food in all curriculum areas, setting up cooking clubs, healthy tuck shops, food waste collections, composting and food growing.

CS89. RCMA (Riverside Community Market Association) Farmers' Markets in Cardiff has grown to become a vibrant social enterprise running several weekly markets. The aim of these markets is to provide local producers and small food businesses with better access to customers in Cardiff communities, with a strong marketing slant towards local, healthy and sustainable food. Across the three main markets the average weekly footfall is around 1300 people, shopping at between 50-55 stalls resulting in annual sales close to £1million.

CS90. Bournemouth & Poole Sustainable Food City Partnership are launching a five star Business Award Partnership Scheme which rewards businesses for the great stuff they're doing around local products, sustainable sourcing, waste management and recycling, working with their community and shouting about what they're doing.

CS91. Growing Durham is a project partly funded by County Durham, which encourages and provides support for people to get involved in growing some of their own food. It is helping to create a network of new and diverse community growing schemes that will help to improve access to fresh vegetables, herbs and fruit.

CS92. Edible Edinburgh has established a joint food poverty group with Glasgow Food Policy Partnership after having identified food poverty as their central priority. Supported by the Leaders of the Councils and the Directors of Public Health they issued statements that have gained extensive press coverage, have shaped a continuing debate around food poverty, have supported local initiatives, and have developed strategies for influencing policy and action at City and Scottish Government level.

CS93. Preston Food Partnership hosted 'Feast for Peace' an event that gathered over 1,000 people and enjoyed significant press coverage. The idea was to use food and cooking as a way to celebrate the city's cultural diversity.

CS94. Teesside University Student Food Co-op in Middlesbrough sells affordable, healthy, fresh and ethical food to students and the public through a membership scheme and bulk buying whilst working with local food producers.

CS95. Newcastle's very popular community run Jesmond Food Market was supported in setting up by Food Newcastle to increase the availability of healthy food whilst opening a new market for local producers.

CS96. The Kindling Trust, member of the Feeding Stockport partnership has set up FarmStart, the first two incubator farms in the UK. It provides business support in the form of training and mentoring, access to local markets as well peer support to those who which to trial their farming business ideas in a low-risk way.

CS97. FoodFuture Bridport campaigns to 'Spend a Tenner Locally' on locally and sustainably produced food, independently retailed. Their local research found that every £10 spent locally is actually worth £17.60 to the local economy because money is re-spent locally and retained much longer. In other words, if the 9000+ households in Bridport shifted just 10% of their weekly food shop to independent retail outlets this would inject £2.6 million a year to boost the local economy.

Appendix 1 Assessing progress towards achieving health, economic and environmental outcomes

The following table collates current and potential measurements and data collection methods that can be used to assess progress towards achieving the identified outcomes. The list is incomplete at this stage and we will continue our consultations to identify as many as possible.

Health Dimension

Goal: Improving physical and mental health and wellbeing by reducing food poverty; improving access to affordable healthy food; promoting healthy weight and healthy diets; and increasing participation in food related physical and social activity.

Outcomes (meta-indicators)	Existing and potential measurements
Decrease in the number of people requiring emergency food aid	Food bank records on numbers of referrals; quality of life surveys by local authority
Decrease in the number of people overweight or obese	National Child Measurement Programme; GP records; referrals to weight management programmes
Decrease in the number of people malnourished	Hospital admissions and extension of stay data; uptake of free school meals;
Decrease in the consumption of salt, sugar, fat and meat	Recorded levels of incidence of type 2 diabetes and other diet-related diseases; quality of life surveys by local authority
Increase in the consumption of fruit and vegetables (5 a day)	Self-reported consumption patterns; weekly basket surveys; number of Food for Life awards schools; quality of life surveys by local authority
Increase in the number of healthy options in takeaways and vending	Local Authority; public health and environmental health survey data; number of takeaways signed up to healthy catering commitments
Decrease in the consumption of fizzy sugary drinks	Records of incidence of tooth decay; retail data; self-reported consumption patterns; numbers of organisations adopting tap water only policies; surveys by local authority
Increase in the number of people cooking from scratch	Self-reported cooking habits; retailer data on ready meal consumption; quality of life surveys by local authority
Increase in the proportion of mothers breastfeeding	Baby-Friendly Initiative's breastfeeding prevalence statistics;
Increase in oral health evidenced by levels of dental cares	Records of incidence of tooth decay
Increase in the number of people involved in community food activities	Self-reported participation by survey; reports on participation by food project coordinators

Economy Dimension

Goal: Creating new and sustainable jobs and businesses as part of a vibrant, culturally diverse and prosperous local food economy that provides fair and equitable economic benefits to all actors involved in both local and global supply chains.

Outcomes (meta-indicators)	Existing and potential measurements
Increase in the number of jobs in the local food economy	Local Authority /Chamber of Commerce / Local Enterprise Partnership records
Increase in the amount of money circulating in the local food economy	?
Increase in gross value added within the local food economy	?
Increase in the number of viable independent local food businesses	Local Authority records
Increase in the proportion of retail food sourced from local producers	?
Increase in the proportion of catered food sourced from local producers	Food for Life Catering Mark
Increase in the proportion of food workers earning the living wage	Living Wage Foundation's list of LW Employers
Decrease in the number of food workers on zero hour contracts	?
Increase in the number of young people training for a career in food	?
Increased consumption of Fairtrade and other 'fair price' products	Fairtrade Foundation accreditations
Retention of and investment in local food system infrastructure	?

Environment Dimension

Goal: Reducing the negative ecological and ethical impacts of the food system from production, processing and distribution to consumption and waste, including GHG emissions, soil and water degradation, biodiversity loss, waste and poor animal welfare.

Outcomes (meta-indicators)	Existing and potential measurements
Decrease in food related greenhouse gas emissions (GHG)	? is this possible locally – maybe ask Low Carbon Southwest and/or the Carbon Trust
Decrease in the consumption of meat and meat-based products	Retailer records on purchasing patterns; survey of public attitudes and consumption trends
Decrease in the consumption of highly processed products	Retailer records on purchasing patterns; survey of public attitudes and consumption trends
Increase in the consumption of seasonal fruit and vegetables	Retailer records on purchasing patterns; survey of public attitudes and consumption trends
Increase in the consumption of low input, organic, sustainable products	Retailer records on purchasing patterns for products with organic, MSC, Rainforest Alliance (other?) accreditation; survey of public attitudes and consumption trends
Increase in the consumption of high animal welfare products	Retailer records on purchasing patterns for products with animal welfare accreditation e.g. CIWF; survey of public attitudes and consumption trends
Increase in urban and peri-urban food production	?
Decrease in food waste (at all points in the supply chain)	Local Authority records; Waste and Resources Action Programme (WRAP);
Decrease in food related waste (packaging, energy, water)	Local Authority records; Waste and Resources Action Programme (WRAP)
Decrease in the use of pesticides, herbicides and fungicides.	Local Authority policies/records for green space management; survey of public attitudes; survey of purchasing patterns at DIY stores and garden centres; Pesticide Action Network
Increase in home and community composting	Local Authority records; Community Composting Network