CURDS Newcastle University

The Local Nexus Network for Redistributed Manufacturing Feasibility Project
POLICIES AND SOCIETY

Prepared for the EPSRC and ESRC

March 2017

David Bradley and Andy Pike

RR2017/01

Food Energy Water | LOCAL NEXUS NETWORK FOR REDISTRIBUTED MANUFACTURING

March 2017

The Local Nexus Network for Redistributed Manufacturing Feasibility Project
POLICIES AND SOCIETY

David Bradley and Andy Pike
Newcastle University

LNN Feasibility Report: Policies and Society

Executive Summary

Introduction

The aims of this report were to identify the barriers and potentials for the localisation of public procurement for sustainable local development. This report presents a literature review of both the barriers and potentials of public procurement localisation that supports local production systems and supply chains, together with a more in-depth and focused approach to the issues by focusing upon the county of Oxfordshire undertaking selected interviews with key actors and experts in the field.

Public sector food and catering purchases accounted for around £2.4bn (around 5.5%) of the food service sector in 2012 (DEFRA, 2014) or under 2% of overall purchasing of food in the UK. The estimate of public sector food and catering includes the procurement by a range of public institutions including central government departments such as hospitals and prisons and the armed forces as well as other bodies like schools and colleges. This purchasing is highly fragmented. In 2006, Deloitte (2006) estimated there to be over 30,000 public sector organisations in England and Wales that place orders for food on a daily basis. Despite this fragmentation, in many local contexts public procurers remain among the largest purchasers of food in the local area.

Local Procurement of food

During the 2000s, a widely based acceptance had grown that local food procurement was a positive thing for key actors and local citizens. Between 2002 and 2008, policy support for sustainable and local food procurement grew, including the development of the Public Sector Food Procurement Initiative (PSFPI) which quickly followed the World Summit on Sustainable Development in 2002. By 2006, the UK government was clear that the range of major interests and issues touched by public food procurement were a vital component of the Government's broader aims to improve users' experience of public services. This impetus was reflected in a number of important Government policy agendas, most notably on efficiency, public health and nutrition, and sustainability; together addressing the public sector's wider and longer term impact on the environment and economy.

Between the start of the new millennium and 2008, a patchwork of local procurement strategies emerged across the UK and overseas. Nevertheless, procurement managers and policy-makers in the UK largely failed to factor sustainability criteria into the public purchasing equation (Morgan 2008, Lang 2010). Since 2008 and following the global financial crisis and recession, food procurement managers have been faced with staffing cuts and changing roles and responsibilities, mounting budgetary pressures and growing array of performance targets in relation to nutritional standards, animal welfare and food safety. Procurement managers, particularly within England need to be even more highly motivated and bold to introduce any additional non-statutory contract criteria (e.g. local and sustainable meal content).

In the UK, new nutritional standards have been introduced affecting schools, hospitals, care homes, community meals and defence establishments. Such changes may be a driver for menu innovation, theoretically opening up potential opportunities for new suppliers and thus potentially for local food processors and caterers. However, our research across public sector institutions in Oxfordshire confirmed that the supply of food and catered meals to public sector institutions remains heavily dominated by a small number of major players most of which operate nationally or internationally.

Over recent years a number of studies have questioned the assumption that re-localization is critical in achieving more sustainable food systems. From an environmental perspective, food re-localization potentially reduces food miles but it may place unsustainable pressures on local water and energy resources (see for example Sonnino and McWilliam 2011). Even whether re-localisation would result in significant reduction in food miles is open to question. The scale of weekly demand for meals coming from large public sector sites such as acute hospitals and prisons afford chilled food manufacturers the opportunity to load several thousand meals on a delivery to a single site resulting in tiny fractions of food miles per meal associated with meal delivery.

Despite this challenging context many of the beacons of earlier success have continued in some form. This research into how some of the trailblazing exemplars are now fairing suggests a pattern of shifting responsibility to catering service providers and their tier 1 suppliers to purchase more sustainably and more locally. There are several trends that may have contributed to this apparent shift:

- Incremental shifts in UK Government Policy away from an emphasis on local food procurement with growing number of mandatory requirements
- Very significant cuts to public institutions' budgets may have led to:
    - Growing emphasis on reducing costs and minimising risk wherever possible
    - Reduced commitment with the loss of key personnel that had been the key drivers in securing local procurement arrangement and building relationships
- Shift in academic discourse away from the benefits of short food supply chains and localised food networks towards improving food quality and access to 'good' food. Leading academics in the field such as Sonnino to shift towards extolling the virtues of 'good' food rather than more 'defensive' local food strategies.

The majority of the public sector has remained unaware of which standards to buy to and consequently, different standards and approaches are used. This approach fails to use to use the purchasing power the public sector has, and fails to give a clear and consistent signal to the market of what it's looking for (Defra, 2014). Until the Defra 'Scorecard' (2014) there had been a lack of performance targets in the UK related to sustainability and there still remains a lack of national level performance targets or specific guidance relating to levels of local food procurement.

Opportunities for change

The pressures for public procurers to purchase local and sustainable food within a budgetary straight-jacket remains widespread.

The public sector through national governments and agencies and organisations at a local or regional level have the potential directly to encourage, enlighten and enforce more sustainable procurement through their publicly funded power of purchase and by encouraging their suppliers to procure more sustainably. Through such procurement practices this could in turn be expected to influence the behaviour of some of their clients (pupils and parents in the case of school meals, patients in the case of hospitals, etc). It is important to recognize that local procurement could be one small part of an integrated strategy to develop sustainable and local food markets. Given the scale of the overall food economy and its pervasive impact on health, culture and society it is inevitable that the value of public procurement support for locally produced and sustainable food has become politically and academically contested with campaigners and academic champions supporting environmentalists and others supporting global food corporation interests.

Although at the local level, each organisation will have a different target population with different nutritional needs, have different funding sources and face a different set of rules by working more effectively together, this could be expected to increase the potential cost savings from combined purchasing power, for menu and recipe innovation and related training and more effective waste management.

A handful of catering service providers and ready meals producers together dominate the provision of manufactured food to the public sector in the UK. Public procurers could potentially place higher demands on these suppliers in terms of their local manufacture of food or their sourcing of local food produce and products. In the case of the construction industry, leading tier 1 suppliers have sought to gather evidence relating to how their recruitment and purchasing would impact on the local economy in order to gain competitive advantage over other providers. This strategy could be encouraged in the public food procurement market.

Gaps in evidence

A range of earlier studies (e.g. Morgan and Morley 2002) suggested some early 'success' in terms of growth in the share of food products that had been sourced locally. Evidence demonstrating that local public procurement regenerates communities remains anecdotal (Thatcher and Sharp, 2008). A robust methodology to assess the relative cost and value of different approaches to food purchasing and food processing which incorporates a comprehensive range of social economic and environmental impacts remains elusive. Studies to compare the relative impact of procuring more food locally and sustainably have tended to have a narrow focus such as reducing food miles or carbon footprints. There has been a wide range of studies that have considered the various environmental, social and economic benefits that can arise from purchasing local and sustainable food. Typically studies have focussed on a limited range of impacts of a relatively small scale sustainable food procurement initiative that was spatially and organisationally restricted. In some cases, initiatives have turned out to be short lived or reduced in scope. In the absence of such tools and the transparency and measurable criteria they would provide, public sector organisations can expect to achieve only modest steps towards more local or more sustainable food procurement.

In order to make effective demands from food suppliers and catering services public sector institutions need to be able to make clear demands based on what they want to achieve and why . To date what is meant by local food and sustainable food remains at best fuzzy concepts. In the absence of workable definitions to define either local or sustainable then producers and caterers supplying the public sector can be anticipated to continue to make the minimum changes necessary to their purchasing arrangements to secure or retain contracts. Anecdotal evidence suggests that in some cases they have been able to exploit their asymmetric knowledge of both potential food suppliers and public sector meal consumers demands to deliver essentially token changes to their purchasing arrangements in order to achieve poorly defined quotas or targets.

Key Questions for future research

A key outcome of this research was to generate questions for future investigation:

- What impact can a shift to re-localised meal manufacture have upon
    - Client satisfaction with quality, freshness and taste?
    - Overall levels of food waste?
    - Nutritional content?
    - Flexibility in meal content – allergen content, halaal, calorie count, etc?
    - Food safety?
    - Food security?

- What is the relative cost and value of different approaches to food purchasing and food manufacture? (for the purchasing institution, the manufacturing area, the purchasing area, for the end consumer…) and what tools and measurable criteria should be used?
- What unintended consequences could occur as a food procurement strategies that favoured the procurement of locally manufactured food? (pattern of job loss and gain in food manufacture; changes to less sustainable forms of land use – arable to meat; arable to manufacturing)
- To what extent could support for re-distributed manufacturing of food help to facilitate the success of the healthy eating agenda's of public sector institutions?
- To what extent is it possible to assess the value of food as contributor to successful outcomes (such as the impact on attendance and educational attainment in the case of schools; successful treatment outcomes in the case of hospitals) and in turn gauge the contribution of the on-site manufacture of fresh meals to such outcome?

Contents

1 Introduction

1.1 Policies and society project aims

Within the context of the Local Nexus Network, the aims of this feasibility project on policies and society are:

- To identify the barriers and potentials for the localisation of public procurement for sustainable local development
- To understand the awareness and skills of public procurement managers at the local level for local and sustainable purchasing
- To explore how public institutions are shaping local food demand and supply and its localisation
- To examine measures to connect localised public purchasing with the stimulation and expansion of local food production and supply chains
- To investigate international lessons from localized and sustainable public food procurement for energy and water systems.

Our focus is on a wider and inclusive definition of public institutions in various public sector domains to include education, health, local government, and prisons.

This report presents a literature review of both the barriers and potentials of public procurement localisation that supports local production systems and supply chains, together with a more in-depth and focused approach to the issues by focusing upon the county of Oxfordshire undertaking selected interviews with key actors and experts in the field.

The literature review work has attempted specifically to target literature relevant and connected to the local procurement of the selected case study foodstuffs in the Local Nexus Network, namely locally produced tomato paste, chicken and bread. The work quickly identified an absence of specific evidence in the literature relating to the public procurement of chicken, bread or tomato paste and the research was therefore broadened to cover the procurement of all types of food by the public sector.

The Oxfordshire case study draws upon analysis of secondary materials (e.g. reports, articles) and primary interviews with key actors and experts in the field focussing on the individuals responsible for purchasing significant volumes of food on behalf of public sector organisations based in Oxfordshire. This work allowed for further exploration of the topics highlighted by the literature review process with particular emphasis on the potentials and obstacles relating to the public procurement of manufactured foodstuffs and meals provided in schools, universities and hospitals. process with particular

emphasis on testing the potentials and obstacles relating to the public procurement of locally manufactured foodstuffs.

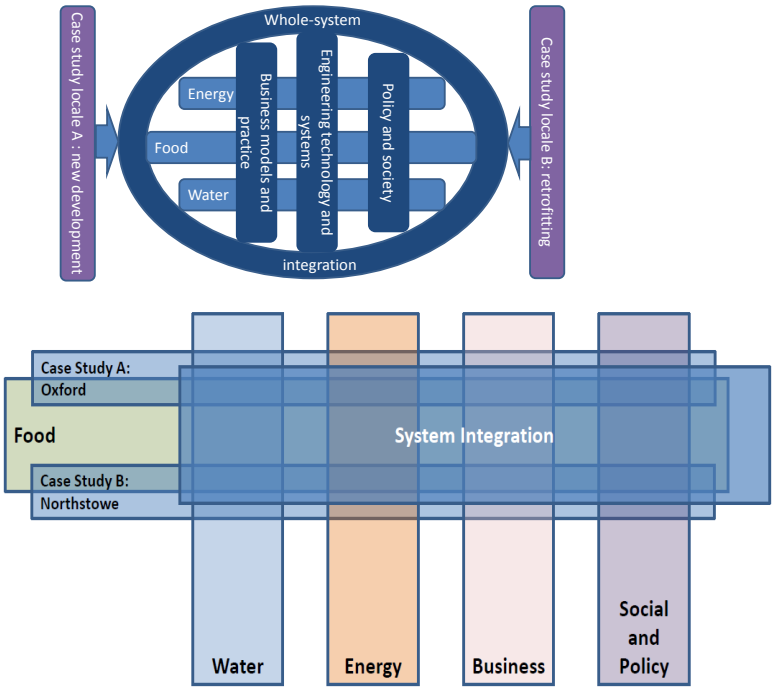
Rather than pre-define what we mean by local and sustainable public procurement we asked respondents about the definitions they are working to in order to understand the flexibility of definitions in use by different public sector institutions.

1.2 Overall Programme Research Aims

The sustainable development of decentralised energy and water systems capable of supporting a more localised food system, local nexuses, has the potential to contribute to the shared prosperity between business and community and between human society and natural ecosystems. Transitions in this direction call for a combination of "smart" engineering (smaller scale technologies, integrated processes) and both leadership and drive from businesses, communities and policy makers. As one of the six 24-month research networks on re-distributed manufacturing (RDM) funded by the EPSRC and the ESRC starting in early 2015, the Local Nexus Network aims to: 1) establish the state-of-the-art of local productions of food, energy and water; 2) generate initial insights to guide researchers, businesses, policy makers and communities who are enthusiastic about exploring the potential of local nexuses, and 3) develop an evidence-based agenda for future research.

A key mission of this network is to form an inclusive research and stakeholder community around the theme of local nexuses. It will actively seek to cross-fertilise interactions with the other EPSRC/ESRC RDM networks.

Figure 1 The Network's Approach



1.3 Public procurement and localisation for sustainable local development

To begin with it is important to understand what we mean by public procurement, localisation and sustainable local development. Public procurement is concerned with how public sector institutions purchase goods and services. Public sector institutions include organisations such as hospitals, local government and schools. In many local areas, such institutions are among the largest individual purchasers of food products. It has been argued that this purchasing can be a lever to deliver broader government objectives, such as stimulating sustainable local production, innovation in supply markets and supporting environmental and/or social objectives (McCrudden 2004; Morgan and Sonnino 2008).

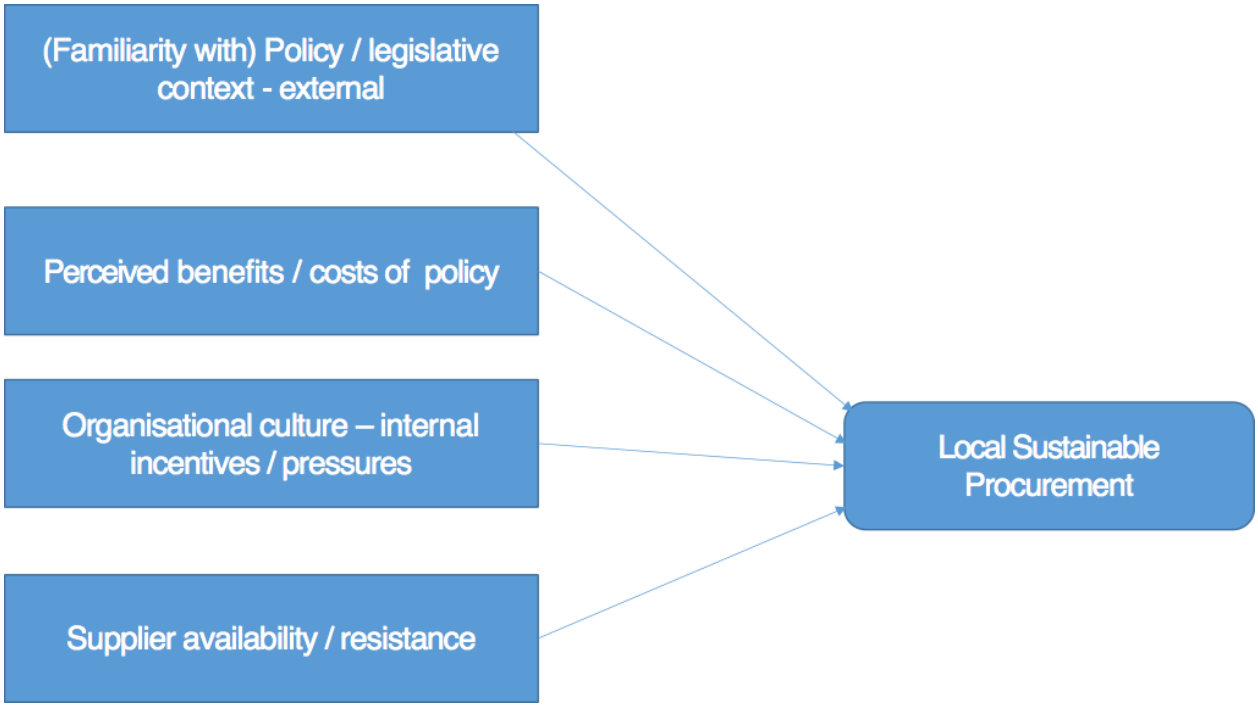
Localisation is the process of adapting a product or process to a particular local area or market. Local food refers to fresh food as well as manufactured food products. There is no widely accepted and singular definition of what is meant by 'local' and its specific geographical extent is used in varying ways to encompass different spatial levels including the community, neighbourhood, district, city and region. An important part of the feasibility work in this research strand is to determine in different contexts the spatial scale(s) over which it is feasible to develop viable and sustainable strategies for localised public procurement. For example, a basic premise of *regional* food networks is that the production, processing, retailing and consumption of food are organized on a *regional* basis. Despite much interest in the concept of local food, no single or dominant definition of a 'local' food system has emerged. While there is no consensus on a definition of "local" or "local food systems" in terms of the geographic distance between production and consumption, when "local" is based on marketing arrangements, such as farmers selling directly to consumers at regional farmers' markets or to schools, it is well recognised (Martinez et al 2010). In the British context, 'local' food is often defined as food that has originated in the local authority administrative area (county or unitary) or within a specified but variable distance for example 50 miles (Morris and Buller 2003). The concept of a local food sector remains empirically contestable and spatially indeterminate and distances, personal relationships between the various stages of the food supply chain and restrictions to a geographic region are the relevant issues (Lehtinen 2012).

Definitions of sustainable development continue to draw upon the World Commission on Environment and Development or Brundtland Commission's (1987) version that states that sustainable development is, "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Amid intensifying global concerns about climate change, demographic shifts, social and spatial inequalities and the increasing impact and awareness of the environmental problems of existing patterns of resource use and shortages, concepts and forms of sustainable local development are defined as those that are longer-term, more durable and/or less

damaging in economic, social and environmental terms. New ideas and metrics for local and regional sustainable development have been sought that reflect a broader notion of 'development' able to connect and integrate economic with social and environmental concerns including health, wellbeing and quality of life (Morgan 2012). Distinctions have been drawn between the appropriate priority given to intrinsically significant things – such as health, wellbeing and education – and instrumentally significant things – such as jobs and income (Morgan 2004). In response, approaches to sustainable local and regional development have tried to integrate and balance economic, environmental and social concerns rather than trade them off against one another.

The extent to which the public sector is able to achieve the procurement of local and sustainable meals and manufactured food products (including catering services) is influenced by a range of factors which have been usefully summarised by Walker and Brammer (2007) into four main groups (Figure 2).

Figure 2 The main influences on sustainable procurement



Source: a conceptual model summarising the influences on sustainable procurement adapted from Walker and Brammer (2007)

This report is centrally concerned with exploring the relationships between public procurement, localization and sustainable local development and identifying the barriers and potentials involved.

By enhancing the capacity of a local area to produce or process food and drink it could be anticipated that some of this food and drink would be sold elsewhere which would also be of benefit to the economy.

Figure 3 The Local Income Multiplier benefits of local procurement

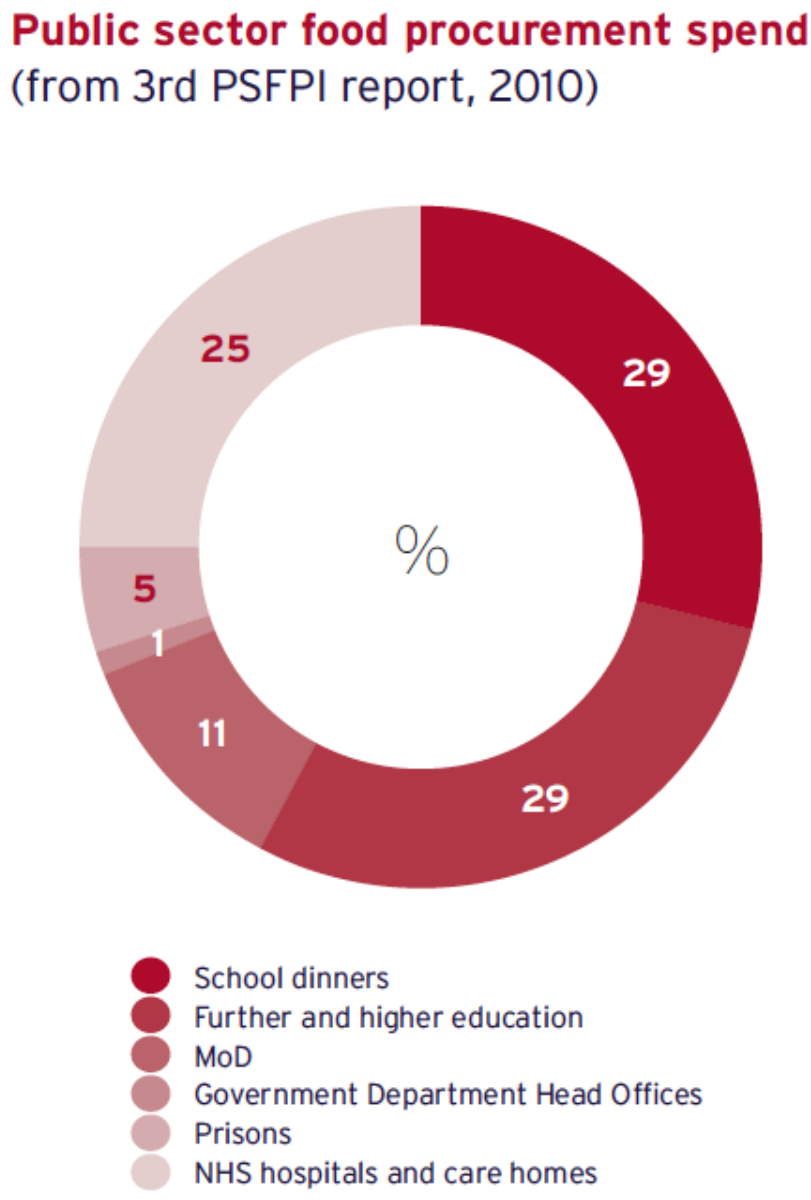
Source: Wilkinson (2006) Delivery of LM3 for the North East Presentation to Centre of Excellence North East

1.4 The scale of public food procurement relative to overall food demand

Public sector food and catering purchases accounted for around £2.4bn (around 5.5%) of the food service sector in 2012 (DEFRA, 2014) or under 2% of overall purchasing of food in the UK. The estimate of public sector food and catering includes the procurement by a range of public institutions including central government departments such as hospitals and prisons and the armed forces as well as other bodies like schools and colleges (figure 4).

This purchasing is highly fragmented. In 2006, Deloitte (2006) estimated there to be over 30,000 public sector organisations in England and Wales that place orders for food on a daily basis. Although precise data is unavailable, expert interviewees suggested that the number of public sector purchasers has grown further over recent years because of contracting-out and public sector reorganisation. This fragmentation within government bodies and their agencies has resulted in more complexity. This has been a longstanding and ongoing process of changing practice (Rimmington and Carlton Smith 2006).

Figure 4 UK Public sector food procurement spend



Source: DEFRA (2014) A Plan for Public Procurement, HMSO: London.

Therefore, both comprehension of the supply chain and the management of public procurement within and across the public sector has become more complex. In addition, the high levels of food regulation and standards, mean even slight changes in practice challenging and time consuming.

The role of local authorities as direct procurers of food is being reduced because of a combination of financial constraints and the current Government's plans to take schools out of local authority control. However, the potential for local authorities to enable the development of wider local food networks and wider collaborative purchasing remains pivotal in addressing the problems of fragmentation due to its broadly based position and responsibilities and power to convene relevant stakeholders locally, despite the continuously changing landscape of food and catering procurement by the public institutions across the public sector. Both existing and new public institutions are actors with considerable influence and purchasing power in the food and catering market. In addition to local authorities:

- Hospital Trusts have an increased role in the purchase of food
- Universities have over recent years been developing sustainable food and local food procurement statements

When viewed through a local lens, the range and variety of public sector actors creates a fragmented set of public institutions with differing procurement autonomy, resources and strategies. Despite this fragmentation, in many local contexts public procurers remain among the largest purchasers of food in the local area. More effective co-ordination and integration amongst public institutions at the local level is critical in providing a means to localise and engender more sustainable public procurement.

1.5 The role and potential of public procurement of food

Public institutions with a food purchasing responsibility can stimulate increases in localisation and contribute to sustainable local development through:

1. participating in the market as purchaser
2. regulating it through the use of its purchasing power to advance conceptions of social justice (McCrudden 2004).
3. Convening public and private stakeholders locally to develop local and sustainable food plans (Sonnino 2014)

Early research on food and sustainability focused on the production process and the provenance of food products. Localisation or re-localisation were claimed to be part of a strategy to create food systems that promoted democracy, environmental integrity and more equitable and inclusive forms of development (Ekersley 2004; Carter 2007).

Concepts of local food and sustainable food were used together and became synonymous. Morgan and Morley (2003), quoted in Palmer and Donald's (2006) 'A tale of Three Tomatoes', suggested that the refocus of procurement practices by public institutions could generate:

- Stable markets for farmers
- Stimulation of local food production
- Better quality food and improved health benefits for service users
- Reduced food miles
- Trade with known and trusted suppliers and hence improved food safety
- Support for local food networks and hence job creation.

Local food supply chains were typically and unsurprisingly assumed to be a more sustainable option due to savings in energy as food miles were reduced, the health benefits accrued from eating fresher produce and the overall improvement in civic responsibility due to the retention of economic value in a local economy (Ilbery and Maye, 2005).

Drawing upon a relatively limited range of evidence, several claims were made and provided support for public sector actors considering (re-)localising their food procurement:

- By placing public contracts in a strategic way, multiple dividends could be generated because goals such as social cohesion, the combat of long-term unemployment and the achievement of acceptable standards of living could be fostered (Walker and Brammer 2007).

- Procurement policies such as those implemented in Rome have the power to create an 'economy of quality' that could deliver the economic, environmental, and social benefits of sustainable development (Sonnino 2009)

- Public purchasing power is able to set environmental, economic and socio-cultural trends to be followed by other actors (Sonnino and McWilliam 2011).

Albeit on a small scale, a patchwork of local procurement strategies or more commonly 'local' and 'sustainable' food strategies emerged in the public sector as attempts to capture the benefits involved particularly during the early to mid 2000s (Deloitte 2009; Foodlinks, 2013). A number of public institutions across the UK including local authority school meal services, housing associations, schools and NHS Trusts experimented with implementing local food procurement strategies and were able to point to some success in increasing the ratio of food sourced locally (Deloitte 2009, Gourlay 2009, Thatcher and Sharp 2008). Local authority school meal services (including East Ayrshire, Bradford,

Shropshire) and hospital food (including Royal Brompton Hospital, Nottingham University Hospital Trust and Royal Cornwall Hospitals Trust) being among those most widely known. Further afield there have been several well quoted success stories the most cited of which is the school meals progamme in Rome (e.g Sonnino 2009).

More recently leading authors have increasingly questioned the validity of such assumptions and raised issues of wider sustainability. In particular, a number of studies have recently questioned the assumption that re-localization is critical in achieving more sustainable food systems. From an environmental perspective, food re-localization potentially reduces food miles but it may place unsustainable pressures on local water and energy resources (see for example Sonnino and McWilliam 2011).

2 The Evolving Policy and Practice landscape

This section explores the evolution of policies and practices for local public food procurement localisation and local sustainable development. Whilst there have been incremental advances in national and local food agendas, the global financial crisis and recession from 2008 provided a watershed moment in the evolution of local and sustainable food procurement strategy and its implementation at a local level in the UK. We have therefore divided our analysis in this section into pre- and post-2008 periods.

2.1 Food procurement in the UK pre-2008

During the 2000s, a widely based acceptance had grown that local food procurement was a positive thing for key actors and local citizens. Between 2002 and 2008, policy support for sustainable and local food procurement grew, including the development of the Public Sector Food Procurement Initiative (PSFPI) which quickly followed the World Summit on Sustainable Development in 2002. Supporting the local economy by buying food from as close by as possible was just one of six criteria in DEFRA's (2003) 'Criteria for defining sustainable food':

1. Procuring 'safe' food that supports good health through a balanced diet
2. Procuring and delivering food products that are accessible and socially inclusive sources, e.g. foodstuffs that are affordable and reflect local communities' culture
3. Supporting the local economy by buying food that is seasonable and nearby
4. Supports sustainable farming, high environmental standards and reduced energy consumption
5. Promotes animal welfare, nature and biodiversity
6. Ensures produce is the result of fair trade practices and ethical employment both in UK and overseas.

By 2006, the UK government was clear that the range of major interests and issues touched by public food procurement were a vital component of the Government's broader aims to improve users' experience of public services. This impetus was reflected in a number of important Government policy agendas, most notably on efficiency, public health and nutrition, and sustainability; together addressing the public sector's wider and longer term impact on the environment and economy. In 2007, the Revised PSFPI added additional goals to increase tenders from small and local producers, enhance their ability to do business with public food procurers and achieve increased integration throughout the supply chain but particularly on the demand side. There was increasing recognition of the linkages and potential trade-offs involved between these agendas. Over this period, the terms local and sustainable were used in conjunction with each other with no suggestion of a potential tension between the two or a choice between sustainable or local. The table below summarises some of the key policy documents during this period.

Table 1 Key Policy Documents pre-2008

Sustainable Procurement Policy	Year	Main Objectives
World Summit on Sustainable Development(need ref for each policy document)	2002	promote public procurement policies that encourage development and diffusion of environmentally sound goods and services
Public Sector Food Procurement Initiative (PSFPI)	2003	• promote food safety and increase the consumption of healthy and nutritious food • mainstream good practice in food procurement and supply to improve efficiency and realise savings that can be ploughed back to improve public catering • improve sustainable performance at each stage of the food chain
The Sustainable Development Strategy (DEFRA) 'Securing the Future	2005	to be amongst the leaders in Europe on sustainable procurement by 2009
NAO Smarter Procurement in the public sector a good practice guide	2006	The report identified significant scope for improving efficiency in six areas: • Reduced prices for the same or better quality food products • Improved transparency of costs and more rigorous oversight of contract caterers charges • Aggregating demand to reduce procurement costs and increase purchasing power • Improving catering professionalism and better use of external expertise • Managing catering operations to reduce environmental impacts and costs • Increased take up of meals and income generated by them
The Revised PSFPI	2007	The PSFPI's objectives were revised in 2007 to better reflect current Government priorities. Additional objectives to: • to increase tenders from small and local producers and their ability to do business • to increase co-operation among buyers, producers and along supply chains
DCFS The Children's Plan for sustainable schools	2008	Suppliers of local and sustainable food and drink by 2020

As policy developed incrementally, the definition of sustainability broadened with inputs from a range of different government departments. Distinct policy frameworks emerged too at the sub-national level in the Wales (REF) and Scotland (REF).

One of the last documents to be produced in this period was the Department for Children, Schools and Families (2008) The Children's Plan for Sustainable Schools. The report included a recommendation that by 2020 all schools would be suppliers of "healthy, local and sustainable food and drink." Link/mention to Ofsted including points for Schools participating in the Soil Association's 'Food for Life' programme – i.e. regulatory change encouraging local/sustainable food.

In addition a wide range of initiatives and local and sustainable procurement strategies emerged across the UK over the period including East Ayrshire Schools (Gourlay, 2009), Royal Cornwall Hospital Trust (Thatcher and Sharp, 2008) and Bradford Schools (Deloitte, 2009).

2.2 Food procurement in the UK post-2008

The global financial crisis and recession from 2008 placed all parts of the UK public sector under increased fiscal pressure. Cost reductions and doing more for less became the main concern. The UK Government's Procurement Pledge launched in 2012 recommended that procurers back British companies as well as giving all types of potential providers, including smaller providers, simpler, more streamlined procurement processes (Defra 2014). However, it was 2014 before new policy was generated in the changed context. With public sector and catering services amounting to well over £2 billion, the new plan by Defra (2014) sought to enable public procurement to support a healthier future for people, farms and food producers, in particular a sustainable and competitive UK food and farming sector. The idea was to help procurers evaluate cost against less definable criteria such as health and wellbeing and at the same time give 'autonomy' to public institutions to make decisions based on the local culture and priorities.

Table 2 Key Policy Documents post-2008

Sustainable Procurement Policy	Year	Key Objectives
A Plan for Public Procurement DEFRA (REF)	2014	• public procurement to support a healthier future for people, farms and food producers • a sustainable and competitive UK food and farming sector • to help procurers evaluate cost against less definable criteria
A Plan for Public Procurement: Food & Catering. Balanced scorecard for public food procurement (REF)	2014	The associated 'scorecard' combines mandatory requirements with other award criteria which will be used to assess letting contracts for public procurement. This will allow broader aspects of service to be weighed against cost, and give suppliers an incentive to be better than the minimum.

Support for 'local and cultural engagement' became one of seventeen criteria included within the 'balanced scorecard' for the procurement of food and catering services by the public sector (DEFRA 2014b). The seventeen award criteria categories included both mandatory and non-mandatory award criteria (see Table 3). The mandatory requirements to be utilised as contract performance conditions as all organisations bidding for public sector contracts would be expected to meet the mandatory requirements. In this policy document local is merged with cultural engagement. Local and cultural engagement being amongst the non-mandatory criteria with the aim stated to 'encourage engagement with food related issues in order to encourage people to understand and value the food that they eat, including aspects of its production and preparation, and its local and cultural context'. Overall, there has been a further broadening of the 'sustainable' food agenda and as a consequence a policy shift by the UK Government away from local and sustainable food procurement (Defra 2014:44).

Examples of the mandatory criteria include:

- Animal welfare – all food must be produced in a way that meets UK legislative standards for animal welfare of equivalent standards
- Environmental management – all food must be produced in a way that meets UK legislative standards of food production
- Health and wellbeing- minimum servings of fruit, vegetables, fibre in cereals, and oily fish, maximum servings of salt and saturated fat
- Food safety and hygiene – suppliers of food and catering services shall have systems in place to ensure that they meet their legal obligations and in particular are able to identify the businesses from whom they have obtained food ingredients or food producing animals.

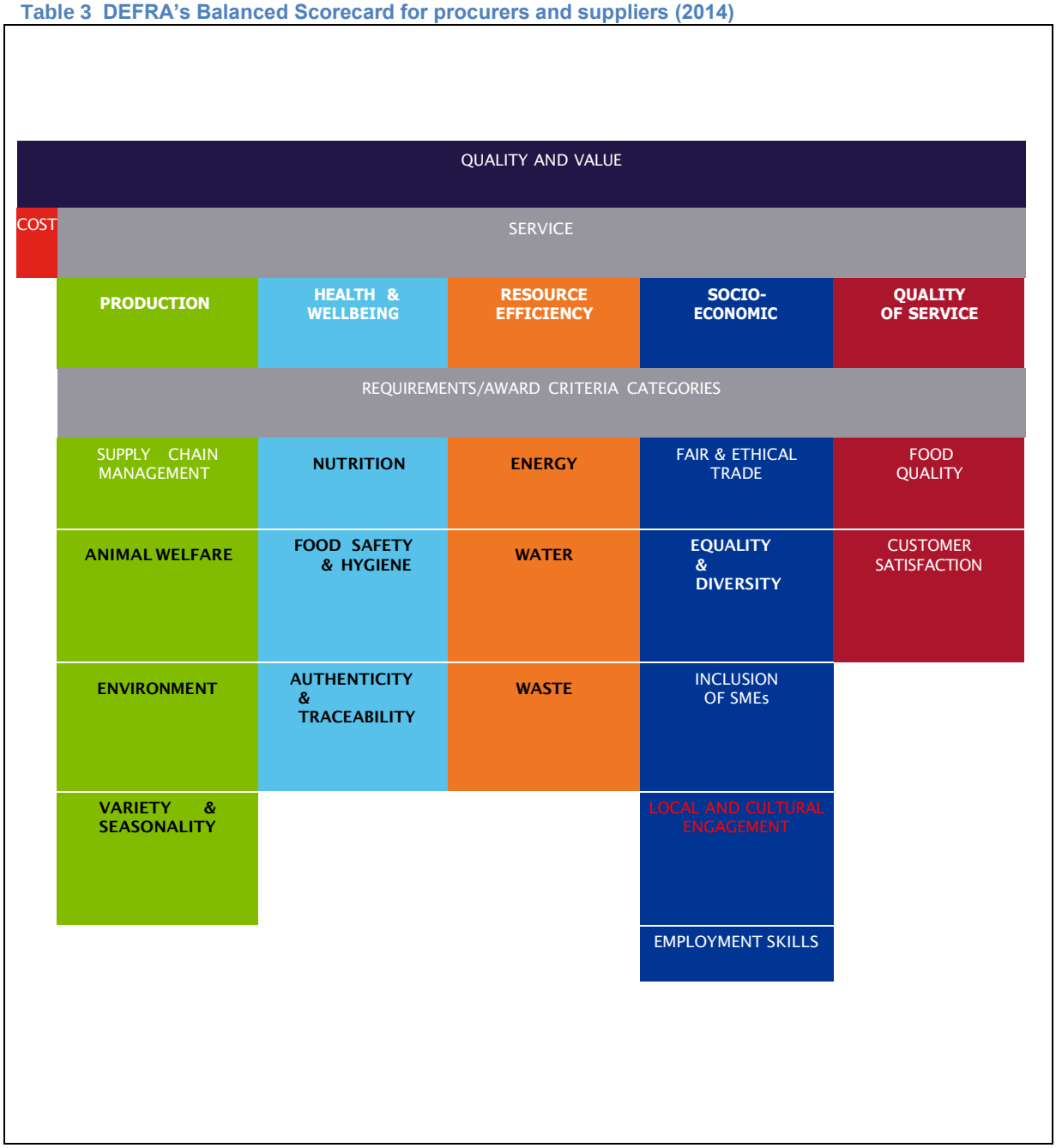
No weighting was given to each of the criteria leaving discretion to reflect individual priorities with the procuring body. As stated above, the category of 'local' is merged with cultural and becomes one of the six quality and value criteria for which there is no mandatory requirement, although if bidders show they are operating to higher standards across these criteria then they could be rewarded although procurers are not forced within the guidance to adopt such measures.

Despite what appears to be a virtual abandonment of 'local' from the 'Balanced scorecard', the Plan for Public Procurement produced at the same time states that the potential of public procurement to support the local economy remains and moreover (somewhat paradoxically) first in the list of potential benefits:

> "Effective public procurement can deliver a range of benefits: it supports a thriving local economy, and supplies quality nutritious food for its customers. It can lead by example, magnifying its impact" (DEFRA 2014:7).

A procurement portal for the sourcing of food, in partnership with the Crown Commercial Service (CCS), has been in place since September 2014. This allows suppliers to register to show the services or products they can provide and the area in which they are based. The aim is to provide a clear route into the public sector marketplace and enable suppliers to check themselves against the criteria set out in the balanced scorecard DEFRA (2014).

Table 3 DEFRA's Balanced Scorecard for procurers and suppliers (2014)



Source: DEFRA (2014

3 Barriers and potentials

3.1 Introduction

This section identifies the barriers and potentials for the localisation of public procurement for sustainable local development based on the four main groups identified by Walker and Brammer, 2007 (see figure 3):

1. The policy and legislative context
2. Financial cost and benefits
3. Organisational culture of procurers
4. Organisational culture of suppliers

The first group of influences is the policy or legislative context. The influence of procurement and competition rules together with financial support for the development of local food procurement

The second group contains the financial costs and benefits in terms of both procuring more local food products and produce and the administrative cost of doing so.

The third group of influences is the organisational culture and the degree to which local food procurement is supported.

The final group of influences is the ability and willingness of local food producers to supply products to local public procurers at the prices which are offered.

The purpose of the following sub-sections is to explore in greater depth the evidence from the literature relating to these groups and influences that act as either barriers or potentials in order to better assess the feasibility of local and sustainable procurement of food produce and manufactured food products.

3.2 Policy and legislative context

There are five key policy domains which impact on the potential of public procurement to favour locally produced food products:

International competition policy

Underpinned by their support for the free movement of factors of production in open markets and anti-protectionist stance, the International Regulatory Regime, through bodies such as the European Union and the World Trade Organisation, make it difficult for national and sub-national governments to shift public procurement towards explicitly supporting locally grown and locally manufactured food on the basis of it being 'local'. In

particular, in the case of contracts exceeding £100,000 in value, purchasing officers are not allowed to specify the origin of food, whether UK or local (from within specified distance or from a specified region).

However, public procurers with an explicit objective to increase the proportion of food purchased which originates from the local area and has been produced in a sustainable way have found innovative solutions in order to be able to purchase local produce and locally produced products and keep within the rules (Gourlay 2009). Whilst public institutions cannot discriminate in favour of domestic producers, they are able to specify such qualities as fresh and seasonal which might be expected to favour local producers, e.g. it is not uncommon to see tender specification phrases such as, "as fresh as possible at the point of delivery". Their procurement strategies can therefore be localised in all but name. These approaches have been widely disseminated and accepted as legitimate by Member States and at UK level the Balanced Scorecard for Public Procurement states that "public procurers can specify standards and criteria relating to products and their production processes where they are objectively justifiable" (Defra 2014b: 7).

Sustainability Policy

In the UK, the Balanced Scorecard for Public Procurement (DEFRA 2014b) does include three criteria to cover the resource efficiency of water, energy, and waste (these can also be found in the Government Buying Standards (GBS) for food and catering). Off-site catering operations are required to have an energy management policy appropriate to the nature and scale of their energy use and consumption. Tap water shall be visible and freely available and such provision shall be promoted whereas pre-bottled water should not be included in the hospitality menu. Food and catering suppliers with off-site meal preparation operations shall provide evidence of a systematic approach to managing and minimising the impacts of waste throughout their direct operations.

Under Ofsted's Common Inspection Framework (September 2015), inspectors assess how "children and learners keep themselves healthy, including through healthy eating" [link to school participation in 'Food for Life' programme]. Inspectors will look at "the food on offer and visit the canteen to see the atmosphere and culture in the dining space and the effect this has on pupils' behaviour" (School Food Plan 2015).

Further research is needed to test whether these changes favour larger suppliers with more sophisticated policies and statements or whether the changes encourage an increase in local and sustainable meal production. Feedback from a major supplier of school meals suggested that they and other school food caterers carefully consider what food purchases would maximize the proportion of spend that was on sustainable food products without significantly affecting the overall cost per meal produced. For example, in order to meet the Soil Association's 'Gold Standard' for organic food content and

remain competitive over price this has lead suppliers to achieve this standard by simply buying organically produced minced beef and few if any other organically produced food.

Between 2003 and 2008, UK Government Departments, the Welsh and Scottish Assemblies and the English RDAs produced numerous policies and strategies. Whilst most of these strategies were explicitly supportive of micro-level adaptation and voluntary action that would support local public procurement, they fell short of introducing any mandatory requirements to increase the proportion of food sourced locally. There has been no new legislation or financial incentives to encourage public procurers to buy local food products, although some public sector agencies have successfully introduced targets enabling the proportion of locally or sustainably sourced food to be incrementally extended.

France is the first country to attempt to introduce a national target for the minimum local content of meals served. The upper chamber of France's parliament has passed a law requiring all of the nation's "collective restaurants" (school cafeterias, hospital cafeterias, senior living communities, prisons and other state institutions) to source at least 40 percent of their food locally. In addition to being locally sourced, the food served must be in season, organically grown and certified ecologically sustainable. The law does not have a set definition of "local", but different recommendations will be given depending on the product and the geographical area. Currently, recommendations are estimated to be about a 30-kilometer radius (around 19 miles) for fruit and vegetables and a 100-kilometer radius (about 63 miles) for foods that need processing before consumption (i.e. meat, grains). The proposal will need to be approved by the French Senate before it becomes law (Foodtank 2016).

Nutritional Standards

In the UK, new nutritional standards have been introduced affecting schools, hospitals, care homes, community meals and defence establishments. Examples of new policies include the School Food Healthy Eating standards (2014), Department of Health (2014), Public Health England (2014) Panel Report. Examples of new nutritional standards include (Defra 2014b: 17):

- Introduction of oily fish into menus (two portions of fish per week one portion of which to be oily fish if both lunch and dinner provided, one portion every three weeks if one meal per day provided)
- At least 50% of hard cheese shall have a maximum total fat content of 25g per 100g
- 75% of ready meals contain less than 6g of saturated fat per portion
- Half of desserts available should contain at least 50% of their weight as fruit
- Fresh fruit alone does not count as a desert

- At least 50% of breakfast cereals (procured by volume) shall be higher in fibre (i.e. more than 6g per 100g and shall not exceed 22.5g per 100g in total sugars.

Such changes may be a driver for menu innovation, opening up potential opportunities for new suppliers and thus potentially for local food processors and caterers. For example, across mainland Europe several cities have reduced the meat content of meals freeing up resource to source organic fruit and vegetables. An example is the public food procurement programme in Rome. The 'All for Quality food programme', has been in place since 2010 when Rome's City Council adopted a decision to ensure that 69% of the city's 144,000 school meals include organic food. Nutritionists and dieticians advise and monitor the service (EU UrbAct 2012). Similarly, The City of Malmo's commissioned research into the impact of food transport on emissions concluded that reduction in meat consumption has a positive impact across a number of levels (Moragues-Faus and Morgan 2015; Moragues et al 2013).

Across the UK we found scant evidence of an opening up of opportunities for new local suppliers and thus for local food processors and caterers. The supply of food and catered meals to public sector institutions across the UK remains heavily dominated by a small number of major players most of which operate nationally or internationally.

In a context of tight budgetary constraint across all parts of the public sector, it could be expected that new nutritional standards would have presented challenges for procurers and providers alike. However, in the case of schools meals for example, oily fish simply needs to be occasionally on the menu. For larger suppliers with sophisticated systems for the monitoring of the recent patterns of take-up, they are aware that on days when oily fish is one of the choices on the menu they only need to include a carefully estimated (very low) proportion of oily fish portions within the overall delivery of meals produced.

Food safety standards

Suppliers of food and catering services are required to have systems in place to ensure they comply with the Food Hygiene (England) Regulations 2006 and General Food Law EC/178/2002. Caterers or catering suppliers are expected to:

- Provide evidence of compliance with food safety requirements confirmed through copies of local authority Environmental Health Officer reports and food hygiene ratings.
- Describe the systems in place to assess risks and manage food safety and food hygiene throughout the supply chain.

In the UK, the food industry and provides guidance to good hygiene practice and the application of HACCP (Hazard Analysis and Critical Control Point) principles within the

legislative framework. The UK Food Standards Agency recognises these guides. This is a preventative food safety system in which every step in the manufacture, storage and distribution of a food product is scientifically analysed for microbiological, physical and chemical hazards. The HACCP system is designed to assist managers in food manufacturers, supply chain intermediaries (processors, wholesalers, distributors) and caterers to identify where they may be at risk, minimise risks to food safety and comply with the food safety regulations. At the moment, however, it is 'one size fits all' and this can place an unwelcome burden on SME food producers who may not have the administrative systems in place to demonstrate how they deal with risk and traceability. As a consequence, it might contribute to levels of local supplier resistance to supplying food to public sector procurers. Some smaller businesses may be excluded from PSFP contracts by not conforming to HACCP requirements (Sonnino 2009). Five European Case studies demonstrated that whilst key legislation is enacted at the national level, it is then how it is interpreted at a local level, which is ultimately a driver for sustainable procurement (Smith et al 2015). Creative procurement is easier to implement if there is a politically supportive environment and where procurement officers have the competence and confidence to internalise health and environmental costs independently (Gourlay 2009).

3.3 Costs and benefits of policy

No evidence was found in the literature relating to the costs and benefits to public sector institutions or their client groups of procuring locally manufactured food.

What limited evidence is available indicates that the costs of locally produced food are relatively higher than non-locally. This may in part be a reflection of the economies of scale that can be achieved by larger suppliers operating at a national or international scale with nationally procured contracts which have cost as a primary focus. National contracts have less concern with food provenance and how it is processed and produced. Local farmers can produce food more cost effectively seasonally or in relatively large batches. For food manufacturers and producers sourcing food more widely allows them to benefit from a series of seasonal gluts and lower prices. This cost differential has been demonstrated by the Scottish Government. The East Ayrshire pilot school meals project saw the overall cost of ingredients rise from 59p to 71.9p, due in part to sourcing organic and sustainably produced food (Gourlay 2009). This rise was judged to fall within the range of ingredient costs reported by other Scottish Local Authorities for conventional models of procurement (Bowden et al 2005). On the other hand, the overall cost of sustainable food is difficult to establish with several public procurers actually claiming that overall savings had been made following a strategy to increase the proportion of food purchases from local producers in the local area. What these studies demonstrate is that affordability or keeping within budget limits remains a critical issue for public sector procurers in the current UK financial climate.

Budgetary constraints are by no means restricted to public procurers in the UK. A study of public catering in Finland found price to be the most important deciding factor. Financial pressures are the most salient barriers to the implementation of sustainable procurement (Lehtinen 2012). In Brammer and Walker's (2007) survey of 106 public sector procurers, in which respondents were asked to identify the barriers to sustainable procurement, they found that financial constraints were by far the most regularly cited barrier to sustainable procurement with around a third of organisations highlighting that sustainably produced products were often, more expensive than competitor products. While costs are perceived to be a significant barrier, it is clear that there is potential for further exploration of opportunities to assess and value the wider economic, social and environmental benefits. It is likely that any survey will highlight cost constraints as a major barrier but a more nuanced and holistic approach might signpost ways and means of putting cost into context and encouraging more long- term decisions to be made. For instance, the health and well-being of target groups and communities form key corporate objectives in the strategies of the NHS, Department for Education, Local Authorities, the Prison Service and other government sponsored catering activities.

Studies to compare the relative impact of procuring more food locally and sustainably have tended to have a narrow focus such as reducing food miles or carbon footprints:

- The increased participation of local suppliers in East Ayrshire led to a significant reduction in the distances that food has travelled and the achievement of some supply chains based entirely within East Ayrshire. (Bowden et al, 2006)
- The Cornwall Food Programme trimmed an estimated 111,000 road miles from annual deliveries. Soil Association (2007)
- By sourcing locally Durham University claims to have assisted in a reduction of 42,000 kilos of carbon from the University's delivery miles (Durham University website)

Given the widespread acceptance of the term 'food miles', there is a generalised assumption that decreasing the number of miles that food had to travel miles will result in the reduction of Greenhouse Gas Emissions (GHGE). The most frequently mentioned benefits are the reduction of GHGE from burning fossil fuels during transportation and nutritional benefits by increasing the availability and hence the consumption of fresher foods. Research on the environmental impact of agri-food systems is still relatively new and littered with methodological challenges around capturing and analysing data. Cleveland et al (2015) suggest a more holistic and nuanced approach to understanding "food miles" is more helpful. The term "local" is itself a slippery term and a UK study found that if consumers drive more than 7.4 km (4.6 miles) to buy organic produce direct from the farm, the GHGE are greater than "the emissions from the system of cold storage, packing, transport to a regional hub and final transport to customer's doorstep used by

large-scale vegetable box suppliers". Another comparison between locally produced food in the U.K. compared to imports from New Zealand found that apples and onions produced in and shipped from New Zealand to the U.K. were more energy efficient than those grown in the UK (Cleveland et al 2011).

There have been a wide range of studies that have considered the various environmental, social and economic benefits that can arise from purchasing local and sustainable food ingredients. Typically studies have focussed on a limited range of impacts of a relatively small scale sustainable food procurement initiative that was spatially and organisationally restricted. In some cases, initiatives have turned out to be short lived or reduced in scope. Table 4 below illustrates the range of benefits that various studies have identified

Table 4 Range of benefits

Type of benefit	Example	Source(s)	Comments
Environmental	Reduction in food miles as a result of shorter supply chains	MacLeod and Scott (2007); ADAS (2006)	Food miles as a concept challenged by a range of authors
	Reduction in greenhouse gas emissions	Yorkshire Forward (2005)	Few examples using lifecycle analysis
Economic	Local economic benefits from buying food locally	Thatcher and Sharp (2008); Footprint Consulting (2008); Wilkinson (2006)	Evidence on economic benefits using LM3 multiplier model
	local jobs	Footprint consulting (2008);	Difficult to attribute directly to food procurement; Thatcher and sharp found no evidence of job creation
	Support for Small and medium sized enterprises	ADAS (2006); HMT(2008)	Highlight (potential) role of procurement in accelerating the SME economic engine
Social	Increased food security	MacLeod and Scott (2007); Morgan and Morley(2002)	
	Higher quality ingredients	ADAS (2006)	Achieved but at a higher price
	Higher nutritional value	Powys Public Procurement Project (2003)	Higher nutritional value of local food questioned (e.g. Edwards-Jones et al (2008))
	Reduced future health conditions such as incidence of obesity, diabetes	Footprint consulting (2008)	Uncertainty over how much can be attributed to local food initiative
	Improved educational attainment of pupils receiving improved school meals	Wesnes et al (2003)	One of several studies linking food consumption with pupils behavior and performance

Source: Builds on the work by Gourlay (2009)

Further work is needed to understand what unintended consequences could occur as a result of local and sustainable food procurement policies. A study of the local food sector in Gloucestershire (Morris and Buller 2003) found that 'new' forms of local food activity such as farmers markets and other forms of direct retailing had benefitted some businesses but impacted negatively on others including established local retailers by affecting sales and their ability to source local produce. There are also a few examples where local food has been seen to be associated with social exclusion due to its focus on niche market, highly priced products orientated towards the demands of more wealthy consumers (Kneafsey 2013).

A new metric or view may be factored into to the procurement process for example through mechanisms that seek to calculate the 'Most Economically Advantageous Tender', 'Most Environmentally Advantageous Tender' and so on. The Social Return on Investment (SROI) is an evaluation method for understanding, measuring and reporting on change, and the value that is created by an organisation or activity. It examines the social, economic and environmental impacts arising from the organisation's work, and attributes a value based upon common accounting and investment appraisal methods in order to estimate its financial value. For example, a study produced by Footprint Consulting for East Ayrshire evaluating their 'Schools Food for Life' estimated that the procurement of sustainably produced 'local food' achieved a SROI was 1:6.19 – that is for every £1 East Ayrshire Council has invested in the initiative, it has returned £6.19 in social, economic and environmental value to its stakeholders (Bowden et al, 2006).

However, until robust and convincing measures of the relative and wider economic, social and environmental benefits of sourcing locally are developed then food products compete simply on price. Progress might be achieved in two possible ways, through the introduction of mechanisms that indicate value added and/or removing costs from the assessment process. This could be successfully applied, e.g. by tackling food waste in institutions. A study of food waste in three Welsh hospitals by Sonnino and McWilliam (2011) found that the overall total food waste ranged from 19% to 66% per meal service. A more recent study of food waste by Zuger and Honegger (2014) found overall waste levels were still within this range.

While there may be many opportunities for innovation in what and how food is supplied, it is nevertheless difficult to deliver in the present climate of austerity and reductions in public expenditure. The private sector appear however open for innovation – see examples below

> *We are committed to sourcing food regionally and locally wherever possible and we give preference to fresh ingredients in season. Both measures enable us to make the*

most of British food and also minimise the energy used in its production, transport and refrigeration" (Elior Website).

Underpinning our service delivery is the drive to create a sustainable business and minimise our impact on the environment (Interserve Website).

Commitment to delivering best value will ensure your budget goes as far as possible. Plus, because we offer a total facilities management solution, you'll only have one point of contact for all your essential services – meaning a more efficient, effective way of working. (Servest.co.uk)

Primary schools in the UK are now required by law (Section 102 of the Children and Families Act 2014) to offer free meals to reception, Year 1 and Year 2 children. This policy could be expected to increase the take-up of school meals and as a result achieve better economies of scale and achieve a better quality of meal per unit cost. DfE promised to pay schools £2.30 per meal per pupil. In contrast, the funding for school meals in Rome increased to EUR 5.23 back in May 2007, approximately double the UK government spend per school meal at that time. Before this budget increase funding per meal stood at EUR 4.23 at that time, one director of a food supplier was quoted as saying that "If they don't raise the price, today's excellence can become tomorrow's weakness" (Sonnino 2007)

Neither, the Royal Cornwall Hospital Trust 'Food Programme', nor the East Ayrshire Schools Meal project evaluations took into account job creation by supplier businesses as an impact. The Royal Cornwall Hospital Trust's 'Cornwall food programme was successful in spending 57.2% of the 2003-2004 catering department budget of £2,487,000 on Cornwall-based suppliers. However, the businesses supplying the Hospital Trust were mostly larger businesses and therefore unrepresentative of the majority of smaller Cornish businesses. Only one of the supplier businesses claimed that the Cornwall Food Programme contract was worth more than 3% of its annual turnover and only one claimed that it had had any impact on staffing levels. This raises yet another important variable that might be introduced in a thorough assessment of bids to supply food services.

3.4 Organisational skills and culture: internal incentives and pressures

As the previous section highlighted, procuring food and catering services are complex tasks requiring a considerable amount of knowledge, skills and expertise. Organisational skills and attributes, and even senior management support and culture will influence decisions and impact differently on a number of levels and across different time frames.

An overall trend in the contract catering sector has been to reduce the number of suppliers. Potential drivers for this shift include economies of scale, reduced risk and improved food safety. Economies of scale then increase opportunities to achieve volume discounts and better terms. The post-2008 policy landscape with an increased focus on

doing 'more for less' has accelerated an approach where these direct and indirect savings are sought, for example economics of scale and a reduction in back office functions. Most, if not all, public procurers of food across the UK have faced significant budgetary pressures over the past 5 years and faced reduced staffing levels to manage contacts and assess procurement decisions. The supply of contract catering turnover is overwhelmingly dominated by large contract caterers, including Compass Group, Aramark, Baxter Storey, Elior and Sodexo (Table 5 below). In turn, these Tier 1 companies use preferred national foodservice suppliers such as Bidvest (formerly 3663) and Brakes, both as wholesalers and to deliver supplies.

The ongoing concentration and centralisation of the private sector providers and their sophisticated branding and marketing strategies to secure tendering access from the public procurement market means that smaller companies and those in the locale face fierce competition from these Tier 1 companies. In an assessment carried out by Bradford District Council in 2004 it was concluded that most opportunities for smaller companies or primary producers was as second and third tier suppliers, securing contracts from the Tier 1 suppliers.

Table 5 Examples of major suppliers of contract catering services to public sector organisations in the UK

Contract Caterer	T/O £m (2014/2015)	Man client base	Approx. Meals per day	No of employees in the UK
Compass contact services UK	1,537	Schools, prisons, hospitals, military bases, police and Central Government Departments.	1 million	46,873
Aramark	320	armed services, police, prisons, universities, patient catering - Fresh production to cook freeze solutions	250,000	9,000
Baxter Storey	311	Hospital, Rail		6,799
Elior (UK) PLC	201	armed services, schools, universities, hospital retail services		6,715
Sodexo	137	schools, prisons, hospitals, military bases		1,808
MITIE Catering Services	96	hospital catering services		2,321
Interserve Catering Services	60.3	Schools	Supply approx. 700 schools	2,905
Servest Catering 7 Day Catering)	59			2,099
Harrison Catering	51	80,000 meals a day to maintained education sector and major provider to independent schools	100,000	2,148

Source: Company websites and FAME (**NOTE made need distilling before publication)**

Walker and Brammer's (2007) survey indicated that UK public procurers tended to put more weight on social and economic factors than they did on those that could be considered environmental and/or sustainable. Public sector organisations aspire towards supporting local economies and communities and do buy from small and local companies and headway can be built upon particularly in connecting localised activities with broader and long-term sustainability agendas. Deloitte's (2009) research (pre-2008) concluded that take up of PSFPI was somewhat limited with what they describe as 'islands of success'. They also pointed out that it was unrealistic to expect public sector organisations to take into account how social, sustainable and environmentally sound a service was across all areas of food procurement since many face the pressure of delivering meals within a fixed low budget (for example in the case of schools and prisons or very specific conditions (for example for Defence personnel). As mentioned above this is particularly relevant in today's context of low or fixed budgets. Our own investigations to identify key individuals in public sector organisations with explicit aims to procure local and sustainable food revealed that many cases those in post had moved elsewhere and their posts no longer existed or had been realigned as public sector organisations restructured to meet with current challenges. Examples include:

- Bradford District Councils Catering services still manages to purchase most of its meat from within Yorkshire but due to a combination of changes in budgets and nutritional standards has been forced to scale back aspirations for local sourcing

- The Cornwall Food Programme (CFP) was developed to address the food supply needs of the NHS in Cornwall to incorporate local and organic food sourcing initiatives, which in turn has been claimed to have helped to develop a more sustainable food market in Cornwall. The programme was funded by Defra, Organic West (Soil Association), and Objective One. The Cornwall Food team with less considerably less resources continues to support the principles of the CFP.

Further work is needed to understand whether such changes are illustrative of a broader shift away from procuring local food products and locally based catering services.

Many public sector organisations, especially smaller, front-line organisation lack the skills and market knowledge to negotiate the very best deals or to strike a balance between encouraging competition and offering some stability and permanence for suppliers (NAO 2006). Furthermore skills and technical expertise to verify supplier claims may also be under developed in what might be described as small organisations within a fragmented public institution landscape.

Making the links and integrating activities across fragmented public institutions is problematic especially if public sector procurers are trying to operate over multiple government domains. Where there are many agency stakeholders it becomes difficult to both manage and achieve a consistent application of sustainability policies and the

economies of scale that may come from linking and integrating fragmented institutions, organisations and individual departments (NAO 2006).

Whilst there are several thousand buyers of food and food services across the UKs public sector, the number of contract caterers is much fewer and, although competition is fierce amongst these suppliers, there exist opportunities to introduce new business models. An alternative model of local and sustainable food procurement is to recognise that in every part of the UK there are several public bodies operating side by side in the local area. As a minimum the NHS, FE colleges and local authorities typically operate within overlapping though not necessarily geographically co-terminous local contexts and in many areas there will be other public sector services including the prison service, universities, the armed forces and other government agencies.

An example of a collaborative public sector food procurement programme is in the North East where four local authorities as a result of close collaboration can claim to have made some £166,000 in savings (Deloitte, 2009)). This was largely done by eliminating the need for multiple tender processes and implementing better conditions of contract and improving supplier engagement (see http://www.northeastcouncils.gov.uk/nepo). However, this obvious potential for public food procurement to join together on a local or regional basis to increase their purchasing power might be hampered by the dissimilar food product and service requirements of different public sector organisations. Similarly the economy and cost effectiveness of either on-site kitchens or an off-site central food (meal) production unit might be enhanced if organisations or sites with similar meal requirements.

Further research is required to understand the relative costs and benefit of procuring manufactured meals locally.

3.5 Local supply capacity

A critical element in enhancing localization and more sustainable food procurement is the assumption that there are local businesses that are both keen and able to supply food or catering services that meet strict public sector requirements. However, the local supply base of small and medium-sized suppliers is not always present or geared up to engage with the market opportunities being created. Thatcher and Sharp's (2008) study of the economic impact of the Cornwall Food Programme identified deficiencies in the local food supply and process industries that obstructed and confounded local procurement. Similarly, research for Bradford's Education Contract Services (Bridger 2004) identified gaps in local provision, for example value-added dairy products and bacon curing and in terms of vegetable processing, vacuum chilling, peeling, preparation labelling and packaging did not always meet with standards.

Many studies also emphasise that not all potential local suppliers want to engage with public sector procurers (Thatcher and Sharp 2008; Rimmington and Smith 2006; Bridger, 2004). This lack of interest was influenced by a number of factors which include:

- Low margins generated by sales to contract caterers prevented them from seeking to market their produce into foodservice
- Potential suppliers being unaware of the procurement process and uncertain how to get on approved supplier lists
- Uncertainty regarding what Best Value means
- Potential suppliers dubious about transparency and fairness of the procurement process
- Slow payment in the past
- The difficulties of accessing the supply chain (centralized purchasing systems, complex volume rebates and limited supplier lists)
- Difficulty in meeting food safety requirements under HACCP
- Uneven nature of some public sector demand, for example schools and higher education establishments have little or no demand during the summer holiday period which coincides with the time of the year when some forms of local produce such as summer vegetables and salad crops are most readily available
- Food contracts are typically for tens of thousands of £s - 'local suppliers never have enough there not big enough'

It is clear from the literature and from our investigations that there are a number of key reasons why local sustainable procurement may face obstacles. The supply of food and catering services to the public sector is a highly competitive sector dominated by a few large companies that are national or international and able to achieve economies of scale through their supply chains and their integration of services. Public sector procurers are increasingly pressed to reduce costs and do 'more with less'. Given the existence of significant barriers, the next section turns to some of the success factors that may give rise to a more thriving and diverse local and sustainable food supply chain.

3.6 Success factors and driving forces for change

Procurement of local and sustainable food takes time and resources. Political and financial commitment to support local and sustainable food procurement has consistently been found to be a key starting point. Moreover, several authors have pointed to the apparent importance of support from all levels of government. Sonnino (2009) identifies this to be the case for school meals in both Brazil and Rome and similarly Gourlay (2009) has demonstrated this in the case of school meals in East Ayrshire. The same authors similarly identified the benefits of long-term support and development and refinement of a shared vision, with a long-term commitment by public

procurers being important to incrementally build on success. School meal consultative committees were established in Rome (Sonnino 2009) to support partnership working and involve suppliers.

In the case of Cornwall's hospitals, a local ice cream supplier was only able to compete by the Hospital Trust accepting smaller portions (Thatcher and Sharp 2008). Long-term joint planning relationships with locally based food producers and food manufacturers if not handled carefully may lead to a perception of restricted or unfair tendering of contracts (Bradford ECS 2004) which may also be important in achieving competitive tenders and thus affordable localised procurement. Embedding qualitative values for effectiveness such as cost ceilings and the percentage of local and the percentage of sustainable food and the regular review of these to steadily 'build on success' has again been identified as a success factor for several school food programmes by authors such as Oksuki (2012), Sonnino (2009) and Gourlay (2009)

Local Food production and distribution capacity also has an influence on the potential to achieve high levels of localised procurement. The municipality of Campinas, Sao Paulo, Brazil has hundreds of producers producing a wide range of year round products feeding into a local branch of the government run wholesale distribution company CEASA and has been the area that has been most successful in achieving high rates of local food procurement (Otsuki, 2012). In stark contrast, the state of Para in the North East of Brazil where there is a comparatively poor agricultural capacity, relatively limited food infrastructure and insufficient municipal funding have together resulted in an inability to provide locally sourced school meals and the consequences have been catastrophic with only half of the pupils attending school in 2010 because schools were unable to provide school food on a regular basis. East Ayrshire School food programme found that breaking down of contacts into geographic lots within the main contract was critical to encourage greater local competition and creating an opportunity for smaller local businesses to compete for contacts. This has been found to be the case in several other contexts in relation to school meals for example in Shropshire and Derbyshire (School Food Trust).

The most celebrated examples of local and sustainable food procurement are arguably the school food programmes in Brazil and Rome. Whilst different in terms of the resource allocation per meal they share some of the reasons for success. Significantly, both offer one meal without different choices. Our discussions with a major school caterer in the UK suggested that a return to 1970s style catering where there was one two course meal available would greatly increase the ability of school caterers to produce meals that were high in nutritional quality and achieve a significantly higher local and sustainable content.

4 Oxfordshire case study

4.1 Introduction

This section explores the current policies and practices for local public food procurement localisation in Oxfordshire.

4.2 Oxfordshire and the demand for local food

Compared with the average for Great Britain Oxford's population is more likely to be in employment, be better qualified and earn more. The City of Oxford has a high number of students and university staff relative to its population. Moreover, it has a high proportion of both international students and relatively wealthy students. This combination provides a demand for a diverse and high value added food offer

Table 6: Selected socio-economic indicators potentially relevant to 'local' food demand Comparison of Oxfordshire and Great Britain

	Oxfordshire	Great Britain
Total population estimate 2015 (persons)	677,800	63,258,400
Economically active in employment	79.5%	73.7%
Gross weekly pay Full time workers	£ 578.4	£ 529.6
Average hourly pay	£ 14.8	£ 13.3
Managers, Professionals, Associate Professionals	56.4%	44.6
NVQ level 4 and above	51.7%	37.1%

Source: Nomis October 2016 https://www.nomisweb.co.uk/

A strong local food culture has emerged across Oxfordshire evidenced by the range of independent restaurants and the success of local Farmers Markets and food festivals (e.g. Oxford Foodies Festival, Oxford Wine Festival, Thame Food Festival). Oxford Foodies Festival claims to be the UKs biggest food festival and the Thame food festival claims to be the UK's biggest one day food festival attracting 28,000 visitors on 24 September 2016.

Good Food Oxford which promotes local and sustainable production, preparation and consumption across the county, continues to build its base of over 130 supportive organisations.

Thame Food Festival
Source: http://www.thamefoodfestival.co.uk/

The Soil Association's Food for Life Catering Mark has become an increasingly important benchmark of progress towards achieving local and sustainable sourcing of food used by public sector meal procurers as a performance target and used by catering companies supplying the public sector as an indication of the quality of the food they produce. There are now over 1.6 million Catering Mark meals served daily. The number of caterers across the UK that hold the Soil Association's Catering for Life Catering Mark, at either Gold, Silver or Bronze award level having taken steps to achieve the target criteria has grown strongly over the past seven years. Over recent years a growing number of Oxfordshire's schools / their caterers have achieved the entry-level Bronze award is largely concerned with delivering fresh, traceable food that meets nutritional guidelines. Relatively few public sector organisations across Oxfordshire have sites where meals are served where the catering has achieved a Silver and Gold Award. Silver and Gold awards focus more on use of organic produce, ethical and environmentally friendly food, locally sourced ingredients and steps to offer healthier menus. Despite what would appear to be a relatively strong latent demand for locally produced food across Oxfordshire with the exception of schools the public sector appears to have been relatively slow to attempt to achieve a Catering for Life Award.

Table 7 Public sector achievement of Soil Association Food for Life Certification

Sector	Award Level	Number of sites (Oxfordshire)	Number of meals served daily (Oxfordshire)	Number of sites (UK)	Number of meals served daily (UK)	Percentage of sites in Oxfordshire	Percentage of meals served daily (UK)
School	Bronze	164	17,315	3,756	638,878	58.4%	13.0%
School	Silver	0	0	2,985	537,814	0.0%	10.4%
School	Gold	8	740	1,321	355,693	2.8%	4.6%
School	Non-accredited	109		20,729		38.8%	72.0%
All		281		28,791		100.0%	100.0%
Early Years	Bronze	0	0	31	1,307		
Early Years	Silver	0	0	268	42,732		
Early Years	Gold	0	0	30	1,140		
University	Bronze	3	620	76	25,624		
University	Silver	0	0	23	7,385		
University	Gold	0	0	24	2,649		
Hospital	Bronze	0	0	35	21,445		
Hospital	Silver	0	0	4	8,849		
Hospital	Gold	0	0	7	10,377		

Source: Soil Association, 2016 and https://www.gov.uk/government/statistics/schools-pupils-and-their-characteristics-january-2016 Table 7d

The overall scale of public sector food procurement in Oxfordshire relative to overall food demand in the county is believed to be slightly higher than the average for the country as a whole, largely as a result of Oxford University Colleges providing catering for students.

The purchasing of public sector food and catering by the public sector is highly fragmented in Oxfordshire with a large number of sites in some cases purchasing relatively low volumes of either meals (manufactured food) or ingredients. The number of public sector purchasers is believed to have grown further over recent years most notably because of individual schools now having responsibility for meal provision.

Despite this fragmentation, public procurers remain among the largest purchasers of food in Oxfordshire. In particular, the parts of the public sector that have contracted out their catering needs and become catering service purchasers such as Oxfordshire's two NHS Hospital Trusts, Oxford County Council through its centralized school meals contract and Oxford Brookes (campus wide catering contract) and Oxford University Estates dwarf the purchase of manufactured food by individual private sector clients. Parts of the public sector which still have their own in house catering teams, most notably individual Oxford University's Colleges have meal or food purchasing accounts with individual suppliers extending to tens of thousands of pounds per month.

It is however major catering businesses that supply the public sector that have the greatest purchasing power. Oxfordshire based Harrison Catering deliver around 100,000 meals a day at sites across the UK and Carillion deliver some 14,000 meals a day for schools just across Oxfordshire. Tillery Valley from its manufacturing plant in Abertillery South Wales produces approaching 200,000 meals a day for the UK public sector, delivering daily to schools, nurseries, hospitals and local authority establishments across the UK. Tillery Valley produce over 90 % of the meals consumed by patients and staff across Oxfordshire's hospitals.

Particularly when viewed through an Oxfordshire lens, the range and variety of public public institutions with differing procurement autonomy, resources and strategies becomes evident.

4.3 Local food procurement Barriers and Potentials (Current Oxfordshire context, learning from the past and opportunities for the future)

The purpose of the following sub-sections is to explore in greater depth the evidence from case study interviews the factors that act as either barriers or potentials in order to better assess the feasibility of local and sustainable procurement of food produce and

manufactured food products in Oxfordshire for each of the different types of public institutions that have the potential to procure local food.

Schools

Some 29,000 school meals are consumed per school day by Oxfordshire pupils. Most schools across Oxfordshire have contracted out their catering to private sector catering companies. Most schools have their own on-site catering facilities which are used by their chosen catering provider to prepare (manufacture) meals on-site.

Catering companies providing school meals reported a typical preference of client schools for food (processed and fresh) to come from 'local suppliers' with some schools having pre-qualification criteria for tendering. Only a minority of schools were understood to have asked for more organic produce and most of these then revised their requirements when they were made aware of the price implications.

The confusion of what is local is graphically illustrated by the table below.

Table 8 September purchases of bread by a contract catering company from one of its locally based suppliers

	Country of Origin on Pack				Country of Manufacture (if product is at least 65% British)			
	Value	% of Value	Number of Lines	% of Lines	Number of Lines	% of Lines	Value of Lines	% of Value
ALL	£75,599		117	%	117	%	£75,599	
UK Lines	£49,389	65%	87	74%	31	26%	£14,029	19%
Non UK lines	£26,210	35%	30	26%	86	74%	£61,570	81%

Source: Harrison Catering

Catering companies were found to able to readily sourced most of their ingredients from 'locally based' suppliers which typically included a combination of large regional suppliers, national suppliers in some cases with a network of local branches or business networks such as Enterprise for Bread, Enterprise for Food and National Catering Butcher. This approach allowed them to use their buying power nationally to secure competitive prices at a local level. The School Lunch Company was found to source some of its meat from butchers that were very local to some of the schools. The business started up four years ago initially serving a very small number of schools. As they have grown the capacity of one of the local butchers that serves them has incrementally expanded alongside their growth.

Catering companies supplying school meals across Oxfordshire have responded to the benchmarks set by the Soil Association's Food for Life Catering Mark and standards such as: free range eggs only; MSC fish and Red Tractor Meat.

Central Government funding to support investment in new or improved on-site catering facilities has over recent years increased the number of schools with on site catering facilities capable of (manufacturing) preparing meals from freshly prepared basic

ingredients. The minority of small schools which lack sufficient kitchen facilities were found to have food delivered from a neighbouring school where food had been freshly prepared earlier in the morning.

The preparation of freshly baked bread on-site remains a feature of primary school meals across Oxfordshire. Most schools are understood to use a bread mix supplied by either Brakes or Bidvest. The School Lunch Company looked into the possibility of a local floor mill delivering flour to individual schools but at that stage the quantities required were too small to make it economic to do so.

Local Education Authority budgets and school budgets have become increasingly tight since 2008. Schools in Oxfordshire were found to be currently paying between £0.68 and £0.91 pence for the food content of primary school meals. Generally schools were claimed by the suppliers we interviewed to be keen to keep close to an average overall cost of around £2.10 per meal. As part of the School Food Plan, a new set of standards for all food served in schools was launched by the Department for Education. They become mandatory in all maintained schools, and new academies and free schools from January 2015.

One of the national caterers was found able to continue to maintain the price of their catering contract, portion sizes and local content only by achieving better purchasing agreements. They felt they had been able to achieve this mainly by streamlining the number of its suppliers. Another caterer found that in some cases schools were willing to go above £2.10 with one school choosing to go up to £2.30. The cost per meal can be higher in the case of small and isolated rural schools.

One of the larger catering businesses we interviewed felt that where they had lost out to competition this had been on price with a competitor for one group of schools contract in another county believed to have quoted as low as 60p for the food component per meal. This respondent suggested that delivering the food component of school meals at this price could only be achieved through a combination of:

- Deskilling the catering staff in schools
- Increasing the use of packet / dry mixes or other ready to use products
- Reducing local and even UK content
- Trimming portion sizes
- Other forms of 'Menu Engineering'

By serving meals that had been manufactured or pre prepared off-site that have been chilled, frozen or dried it was claimed that this could help to significantly raise the number of meals that could be produced per hour and thus significantly lower the cost of meal preparation.

Oxford's proximity to neighbouring counties with a wide range of fruit, vegetables and meat producers; proximity to the sites of major food wholesalers, catering companies, food processors and manufacturers and a school population that is predominantly White British all contributed to caterers serving public sector sites in Oxfordshire being relatively well placed to be able to comfortably achieve a Soil Association Food for Life Catering Mark.

Higher levels of take up of schools meals helps to lower the average cost per meal and thus the quality that can be delivered for a given price. Strong support for cooked lunches from the Head Teacher was suggested to be a key factor in achieving high levels of take up. One of the catering providers wrote a 'packed lunch policy' for one of their client schools which was aimed at reducing the consumption of junk food by children in the school. This then resulted in some parents switching their child over to a catered school lunch.

What food is delivered and who provides it is now the responsibility of the Head Teacher of individual schools Head Teachers are however heavily reliant on their catering providers in terms of what food is served.

In order to maximise the benefit of their purchasing power the two larger catering companies were found to purchase food from a 'locally as possible' but in practice large local and in some cases regional and national suppliers. In contrast the smaller Oxfordshire based school meal catering company tried to source food from as locally as possible using a range of small local suppliers such as independent butchers located close to the schools. However, each of the catering companies bought between 40% and 50% of all the food they purchased from a major national supplier (Bidvest or Brakes). Bidvest are head quartered in Slough but have a distribution depot in Bicester, Oxfordshire.

Oxfordshire's schools have been able to maintain or improve upon levels of on-site food 'manufacture' over recent years despite tight budgetary constraints. Fierce competition between catering providers to gain school contracts has led them to focus at least in the way they communicate their 'offer', on the quality and freshness of their ingredients with fresh produce from local suppliers seemingly being a widely accepted indicator The increasingly fragmented nature of demand does not appear to have added significantly to the cost of ingredients with individual schools being able to benefit from their catering provider sharing the benefits of their bulk purchasing power. The smallest catering provider we spoke to delivers some 5,500 school meals a day.

Central Government subsidy in the form of free school meals was considered by respondents to be critical in maintaining current standards. Faced with greater financial pressures an increasing number of schools might feel the need to cut costs and increase the use of products manufactured off-site.

Universities and Colleges

Spending on food and catering services in Oxfordshire is exceptionally high largely due to the Oxford University's college system. Oxford University has nearly 27,000 students and over 13,000 staff. Oxford Brookes has nearly 18,000 students.

In order to meet with the expectations of students both Oxford and Brookes University were aware of the extent to which other Universities have responded to:

- Local sourcing
- Organic
- Fair Trade
- Various other forms of certification – MSC fish, Red Tractor Meat
- Awards – notably the Soil Association's Food for Life Awards
- The Real Bread Campaign
- Providing Seasonal Menus

The catering facilities across Oxford Brookes University are delivered by Chartwells. The catering contract seeks to maximise the use of food which is local, sustainable or fair trade. In relation to fair trade Brookes back in 2003 became the world's first Fairtrade University. Since then Brookes has continued to attract praise from the Fairtrade Foundation. Their catering contract is delivered in accordance with its ethical sourcing policy. The targets and standards within the policy have been developed in partnership with Chartwells and thus focus on food types that are deliverable within budget and at no significant extra cost to staff and students.

The cost of purchasing prime cuts of meat from locally reared carcasses was found by Oxford Brookes to be considerably more expensive than meat from further afield due to competition from local restaurants and households willing to pay a premium for locally reared meat and felt too expensive within existing budgets. In contrast meat suppliers were able to supply mince, burgers and sausages with no local sourcing premium by making use of the meat left on the carcass of locally reared animals once they had been stripped of prime cuts. Chartwells delivering the Oxford Brookes campus catering contract are able to serve a term time offer of a Brookes Burger and a Brookes Banger guaranteeing the use of locally reared animals but all other cuts of meat due to cost constraints are sourced more widely from across the UK.

In most cases manufactured food products that are purchased come from outside the local area. Chartwells (Brookes campuses) have attempted to source locally manufactured products for example bread rolls and sandwiches. In both cases manufacturers lacked the capacity to achieve the daily term time demand levels

Both Oxford and Brookes Universities perceived the need to use large suppliers that could cope with significant and varied volumes of food required and critically have the systems in place to trace food from field to fork. In the context of a series of major food scares the delivery of food that could be guaranteed to be safe was of paramount importance. The Oxford College we interviewed shared this view.

Oxford University Estates felt that the potential buying power of the University was currently being lost due purchasing being split between individual colleges and departments. Oxford University Estates manage 27 catering facilities across the University with an annual spend on food (excluding hospitality) of around £3.9 million. The majority of University Departments and the overwhelming majority of colleges continue to do their own thing. The purchasing of food thus remains highly fragmented across Oxford University with most suppliers left to their own devices in terms of either local or sustainable procurement. The current priority of Oxford University Estates is to secure a major single contract which delivers a quality, consistent and affordable product that provides strong value for money which is then able to convince other parts of University to collaborate rather than focussing on setting specific targets in relation to a diverse set of other pulls on procurement priorities such as: seasonality; Certified / accredited products; Fair trade; organic; low carbon; no additives

Together Oxford University's colleges are understood to spend more than £20million per annum on food with individual colleges thought to be typically spending in the order of £400,000 a year on food for staff and students. Although 36 of the colleges have joined together to form a 'co-ordinated purchasing consortium' their combined buying power through an unwillingness to rationalise the thousands of different food items. Meals are subsidised by the colleges to a greater or lesser extent in order to facilitate a high level of onsite eating to help to strengthen college life. At present there is no driving pressure to reduce the gap between meal production cost and meal price. The overall extent to which meals are subsidised amounts to around £6million a year. Some of the Departments choose provide drinks and snacks at relatively low prices for example as low as 50p for a cup of tea. Even within Departments individuals are able to make their own arrangements with offsite caterers

Owing to the importance of maintaining college life and a high take up of meals there is a fear of change. In the absence of a client group demanding change to the menus or to procurement.

Whilst the Bursar and Head Chef at Lady Margaret Hall were committed to doing more in relation to local and sustainable procurement any change would need to be measured and respond sensitively to the meal requirements of students and staff. Maintaining high levels of take up of meals was the main priority for the College. The relative priorities, preferences and sensitivities of students and staff in relation to local,

sustainable, fair trade and so on was felt not to be well understood and nor was the potential willingness to pay more for some options. As a consequence what changes could be introduced without impacting on either the take up of meals offered or significantly impact on the college's catering budget was not at all well understood. The Bursar at Lady Margaret Hall however recognised that there could be potential to drive change by experimenting, telling staff and students what has changed and then asking them whether they liked it and would like more of it.

Chartwells carried out a survey of Oxford Brookes students in successive years looking at student willingness to pay more for fair trade, organic and local food. Responses suggested a relatively high proportion willing to pay more for all three. However when the same respondents were asked in more detail how much more they were willing to pay it is understood their willingness typically became lost.

Table 9 Willingness of Oxford Brookes Campus canteen users to pay more for Fair trade, local or organic food

Would you pay more for....?			
	2011	2012	2013
Fair trade food	66%	62%	59%
Local Food	67%	66%	60%
Organic Food	55%	56%	51%

Source: Chartwells surveys of canteen users 2011 to 2013

Brookes Restaurant forms part of Oxford Brookes University it provides a real life training facility for students following Hospitality Management Degrees as well as being one of the county's top cookery and wine schools.

The primary aim of the restaurant is to provide an opportunity for students to understand the needs of discerning customers. The focus is on delivering a high quality restaurant experience with the menus attempt to replicate the standards achieved at the very best restaurants. The cost of food forms a relatively small proportion of the overall budget and income is primarily derived from student fees. There is no pressure to cut costs. Chefs are encouraged to buy the best products and in particular source the products that will add most to actual and perceived quality. The price of the meals is more an indicator of the local market recognising the quality of what is being provided.

The Brookes Restaurant spends around £100,000 a year on ingredients this compares with a staffing cost of over £500,000. Feedback from customers suggests they value food having a local provenance whether it be produced for example in the case of meat or manufactured for example in the case of beer or cheese but they also food being sourced from locations where they perceive it to be of the highest quality for that

product. In the case of local this includes: bread flour; herbs; vegetables; eggs; pork; beer.

A detailed search for potential local suppliers was carried out five years ago with the aim to source as much food as possible within 20 miles of Oxford this involved visits to suppliers. This then broadened to include local suppliers within 40 miles. This search process lead to a step change in the proportion of food which is sourced from local food producers (e.g. fruit, veg, herbs, eggs and meat) and local food manufacturers (e.g. beer, wine, cheese and flour). Overall approximately half of the food purchased in term of value come from this local area.

As a training provider Brookes Restaurant is particularly careful in its recording of the provenance of supplies and to achieve exemplary food safety standards. Whilst the restaurant serves nutritionally balanced meals using fresh ingredients it does not aim however to achieve any prescribed nutritional standards. All food is purchased independently by Brookes Restaurant. Purchasing is entirely separate from that made by Chartwells who deliver the main catering contract across Brookes four campuses.

All meals are prepared ('manufactured) fresh on-site mainly using basic ingredients.

Two types of bread are produced each morning the total production amounts to around 10 kilos a day in the form of either 800g loaves or rolls.

With income from course fees being the dominant source of income the restaurant is relatively free from needing to consider the closely the price of food. Brookes Restaurant closely looks at the way in which the offer of high end restaurants is adapting and gains feedback from leading chefs that occasionally dine at the restaurant. On a day to day basis students collate feedback from customers including what local and other branding they valued. The continued popularity of the restaurant suggests that the restaurant is adapting affectively to changes in consumer preferences.

Their local supplier of eggs, has grown from struggling to supply Brookes Restaurant's weekly egg demand to now producing over 22,000 eggs a week. The producer now supplies Chartwells (Oxford Brookes Campuses) and a host of other local customers. This provides a good example of how a secure source of demand from public sector customers can help to pump prime food producers supply capability. In some cases the local supply capacity has not kept pace with demand. Several small local suppliers now supply high end commercial restaurants and have not expanded their production capacity to continue to supply the quantities required suggesting that whilst Economies of scale increase opportunities to achieve volume discounts and better terms large consolidated orders may prove difficult for small local businesses to service.

Most meals served across Oxford's University campuses and Oxford University Colleges are 'manufactured' on site. The Colleges that make up Oxford University and Brookes Restaurant are less financially constrained by the cost of meals produced than other parts of the public sector in Oxfordshire. Together they provide an exceptional market opportunity for local producers. The currently fragmented nature of their demand may provide an opportunity for local manufacturers and producers to scale up their supply capability. The extent to which Brookes Restaurant has purchased local produce and locally manufactured food has largely been limited by its availability. The extent to which Oxford Universities Colleges have sourced locally is more the result of institutional inertia.

Hospitals

Two NHS Trusts cover Oxfordshire: the Oxford University Hospitals NHS Foundation Trust and the Oxford Health NHS Foundation Trust. Together they spend over £8.3 million on catering services per annum (2015/16). Neither has a sustainable development management plan nor a carbon reduction plan and neither has sought to gain Soil Association Certification for their food procurement.

Both source a significant proportion of their meals from a cook-chill supplier. Oxford Health and OUH both use Tillery Valley in South Wales. OUH purchase cook-chill meals for 3 out of its 4 sites. Its Horton site in Banbury, is the one site with kitchen facilities to freshly prepare patient meals on-site.

OUH spends £6.94 million on contracted out catering services. The majority of Teaching and large acute Hospital Trusts (38 out of 66) prepare fresh food on-site and indeed sell food or catering services to external organisations. Several generating sales of food or catering services to external organisations of over £1million per annum. The average Cost of feeding one inpatient per day (inpatient meal day) at OUH in 2015/16 was £14.32[1] this was well above average, being the 27th highest out of the 222 NHS Hospital Trusts that provided data to HCIC. The 2015 Care Quality Commission In-patient Survey rated the quality of food served to in-patients of OUH at 5.3 out of 10 which was reported as being 'about the same as other hospital trusts'. The cost per inpatient at OUH's Horton site in Banbury meal day is £12.06. Levels of patient satisfaction with the meals is comparable with the other OUH sites where regenerated meals are served to patients. OUH's Soft FM Client Contract Manager claimed that regenerating cook chill meals at OUH's other three sites this offered greater hot meal choice for patients, achieved better nutritional content in meals, more accurately controlled portions. OUH is moving towards patient ordering of meals as close to the time of consumption in order to reduce waste.

[1] This covers the cost of food and labour for 3 meals and 7 beverages per day

Oxford Health spend some £1.4 million in 2015/16 on catering services. The average cost of feeding one inpatient per day (inpatient meal day) at Oxford Health hospitals in 2015/16 was £10.56 this was slightly above average, being the 97th highest out of the 222 NHS Hospital Trusts that provided data to HCIC. Mental Health and Learning Disability Hospital Trusts are typically smaller and more fragmented across multiple sites have a lower propensity to sell food or catering services to external organisations (14 out of 50).

Levels of food waste are currently being monitored and costed by Oxford Health the results of the study are not yet available. It is thought that in the past when food was prepared on site there was less food waste mainly due to surplus food being sold to visitors and staff. Meals are ordered for next day delivery due to uncertainty over the numbers that will require meals there is over ordering. In order to try to reduce waste vegetarian meal options provided to Oxford Health in frozen form. Depending on the results of the waste monitoring Oxford Health may decide to move to all meals being pre-frozen. Bread and a range of other provisions such as cereals are supplied mainly by a national food wholesaler. Some provisions notably dairy and fruit are purchased from local suppliers. Purchasing of local and sustainable food has not been a concern of the Oxford Health to date.

The factors driving the Oxford Health's move from on-site catering to the buying in of ready prepared meals were a combination of food safety concerns including accurate labelling on allergens, and the desire to achieve greater control over nutritional and precise calorie content of meals. It was suggested that potential cost savings were not a driving factor nor was the more efficient use of the hospital estate.

Parts of the area previously used for on-site meal preparation across three of OUH's sites and several Oxford Health sites have been redeveloped and re-occupied with different uses. In both cases it was suggested that owing to space constraints it would be potentially difficult and indeed costly to recreate on-site catering capacity.

OUH suggested that delivering freshly cooked meals across a large site such as John Radcliffe which now has 41 wards would be difficult from a single central kitchen. Currently there are kitchens on each ward in the new building and for each floor for the rest of the hospital each with the capacity to regenerate pre-prepared meals, plate up and prepare drinks. In 1990 Oxfordshire Strategic Health Authority decided to form a Central Production Unit (CPU) at Slade and redevelop its on-site hospital kitchens. Within 5 years this new facility was closed down due to it being judged at the time to be financially unviable. This resulted in the current approach of sourcing chilled meals from outside the region. Neighbouring Southern Health NHS Foundation Trust (along

with Solent Hospital Trust) are currently examining the feasibility of developing a Central Production Facility to prepare cook chill meals.

The allergen rules within the EU Food Information to Consumers (FIC) food legislation came into force in December 2014. This introduced a new requirement to provide allergen information for foods sold or provided loose (non-prepacked) and requires food caterers such as hospital catering services to be able to provide information to patients, staff and visitors about the presence or use of any of the 14 specified allergens as ingredients in any of the food that they serve, including any food item served to patients at ward level and any food item sold in retail outlets. To meet these obligations hospital caterers must know what is in food, and the requirements needed to meet the legal obligations. Caterers must be able to evidence the exact ingredients used, such as by brand names, and pack sizes, or other information that details what is normally used or that of any replacement.

Following recent engagement between the Soil Association, a number of NHS Trusts involved in the Oxford Academic Health Science Network (AHSN) around sustainable and healthy food, there is now understood to be a watching interest from the group in forming a **Sustainable Hospital Food Cluster** facilitated by the Food for Life Hospital Leaders Programme. Most food consumed in Oxfordshire's hospitals is manufactured (cooked and then chilled) in South Wales transported to hospitals in Oxfordshire and then regenerated on site. Whilst hospitals are operating under ever tightening financial constraints the cost of food and catering remains tiny compared with the overall cost of running a hospital.

Although there are examples of large acute hospitals across the UK have demonstrated an ability to produce meals on-site, achieve higher levels of patient satisfaction with the quality of food, produce meals to a Food for Life Catering Mark standard and at a lower cost per patient per day there are no plans in the short term in Oxfordshire to shift to freshly preparing ('manufacturing') meals on-site.

The Oxford University Hospital Trust purchases over one million pre-cooked and chilled meals from a factory in South Wales 109 miles from John Radcliffe Hospital. Just 260 lorries are required each year to deliver these meals. Even assuming that none of these miles are not offset by drop offs to other sites on route or picking up of ingredients on the return journey this results in a total of under 0.05 food miles per meal relating to delivery from the non-local meal producer.

1,121,071 meals from South Wales per annum so around 4312 meals per 218 mile journey or 0.05 miles per meal relating to delivery (

Prisons

All prison meals are purchased through a national contract negotiated centrally across the UK.

A few years ago there was an initiative to involve prisoners in the production of food onsite at Bullingdon prison. The initiative was short lived and was more about providing training and experience than it was about food production. The area that was cultivated was small and did not have the potential to meet any more than a token contribution to the content of a tiny proportion of the meals served.

5 Summary and conclusions

5.1 Introduction

This section attempts to tease out some key messages.

5.2 The geography and complexity of food and catering supply chains

Most meals purchased by the public sector are provided by private sector catering companies. The companies use a mix of locally based suppliers and national wholesalers some of which have a 'local branch'. Most meat and vegetables are sourced from the UK. The extent to which produce and food products are sourced more locally depends on relative price, seasonality, agreed budgets and contractual agreements. Catering providers make a virtue of most of their food coming wherever possible from locally based suppliers. If public sector procurers were to insist that raw ingredients were to be produced on farms in Oxfordshire this would increase the cost per meal.

What is local is easy to define in the case of raw agricultural produce but once it is processed or manufactured local becomes more complex particularly where there are multiple stages of production in different localities. The sourcing of bread by one of the catering providers provides a simple example of this complexity.

The schools and Universities in Oxfordshire generally expressed a desire for catering providers to source from 'local suppliers'. Catering companies make a virtue of sourcing locally where possible. The School Lunch Company has developed some relationships with local supplier such as butchers that have grown alongside their rapid growth. Harrison Catering long term relationship with a limited number of 'regional' suppliers. National wholesale suppliers Brakes and Bidvest however supply a significant share of the food supplied to the overwhelming majority of schools and to both Universities. Over 90% of the hot meals served in Oxfordshire's hospitals are manufactured in South Wales. Institutional inertia among Oxford University colleges means they still do their own catering and still use local suppliers.

5.3 Changes within the public sector purchasing organisations that would be needed to achieve a step change in the local content of meals served

In order to achieve a step change in the local content public sector organisations would need to agree upon clear food priorities. The relative importance attached to local food

products and local food produce compared with other criteria such as sustainability, nutritional quality, Fair trade for most organisation has remained vague.

Meal provision would need to become a valued part of the overall service delivery rather than either a cost or an administrative burden – this is already the case for Brookes Restaurant and Oxford Colleges and for some schools but generally less so for schools, universities and hospitals.

Several organisations would need to overcome institutional inertia. Current levels of local food purchasing are more the result of having used a supplier for as long as anyone can remember. Oxford Colleges have potentially greater budgetary flexibility than most parts of the public sector and by trialling various menu innovations they could potentially achieve higher levels of local food procurement.

Public sector organisations need confidence they are purchasing food safely. Hospitals, schools and Universities all want to avoid direct involvement in any food safety scare. By contracting with large catering providers and suppliers which lots of other similar organisations have contracted with this reduces the perceived risk of blame. The procurement of food in Oxfordshire remains highly fragmented with smaller, front-line organisations such as academic departments in Oxford University and small primary schools inevitably lacking the skills and market knowledge to negotiate the very best deals and in the case of primary schools in particular they have tended to rely of the skills and buying power of their catering supplier to drive down costs.

5.4 Changes to the wider policy context that are perceived to have most impact on the local content of meals served

Most food for public plates is secured through stable long term relationships between large contract caterers and their large suppliers. Opening up of opportunities for new local suppliers and for local food processors and caterers to supply the public sector would require a combination of public subsidy and long term commitment from public procurers to purchase products in order to build up local manufacturing capacity.

Strong government directives such as minimum levels of local food content in meals (however defined) would help to shift priorities locally. Grants from the Department for Education to support new or improved kitchen facilities have helped schools to increase their capacity for fresh meals to be manufactured on site. Similar support across other types of institution might be expected to have differing levels of success in re-localising local meal manufacture:

- Many sites are locked into long term supply agreements as part of a wider PFI deal
- The range and complexity of meals and the times at which they are required impacts on the economies of scale required to manufacture fresh meals onsite

- Perceived relative risks of re-localising meal production – financial, food safety, food hygiene, etc.
- Perceived food priorities of funding agencies and client groups.

In the current context of tight budgetary constraints affecting schools and hospitals in particular livestock and fruit and vegetable growing subsidies, fresh food import tariffs, and meal subsidies such as universal free school meals could all be expected to impact on the local ingredient content of meals served by the public sector.

Changes in public tastes and food priorities can lead to public sector organisations focussing on achieving those priorities. Head teachers in some schools have been willing to pay more for a higher local content for example to secure local meat from a local butcher.

Where a higher local content of meals served has been achieved it is generally on sites where catering facilities are sufficient to enable the 'manufacture' of freshly prepared meals on-site Capital subsidies enabling schools to gain or regain this capacity has been important in the schools sector. Significant subsidies would be needed in the hospital sector for either hospital trust to shift away from importing pre-prepared meals from outside the region.

Local competition has developed between suppliers of school meals to achieve higher level Food for Life awards. If the Soil Association were to incrementally adjust these standards or add higher levels to strive for such as platinum or diamond that required higher levels of local produce or locally produced products (rather than locally based suppliers) this could be expected to incrementally lead to menu innovations that could increase local content within future budgets.

5.5 Progress towards inter-agency collaboration (New York model)

New York City Council has joined together with nine other public institutions to become one of the largest meal providers in the world, serving some 260 million meals per annum (Public Plate Report Working Group, 2014). The apparent success of this example suggests that a geographical or territorial basis for such co-operation could provide a workable basis and focus with the local authority as the lead and convening body and including the local private food sector and other relevant partners.

Making the links and integrating activities across fragmented public institutions is problematic especially if public sector procurers are collectively operating over multiple government domains. Our Oxfordshire case study research confirmed where there are many stakeholders it becomes difficult to both manage and achieve a consistent

application of local and sustainable procurement policies and the economies of scale that may come from linking and integrating fragmented institutions, organisations and individual departments. What was surprising was the extent to which collaboration opportunities between what externally might be considered to be similar organisations are not being fully realised. Thirty six of Oxford University's Colleges are involved in a 'co-ordinated purchasing consortium' but have been able to substantially rationalise the purchase items in order to achieve better economies of scale. The majority of schools in Oxfordshire have broken away from the catering and kitchen facilities management and maintenance contract negotiated centrally by the County Council. The two NHS hospital trusts in Oxfordshire are both supplied with chilled meals from the same supplier.

Both of Oxford's Hospital Trusts along with other NHS Hospital Trusts from across the wider region are involved in the Oxford Academic Health Science Network (AHSN). There is now understood to be a developing interest from the group in forming a Sustainable Hospital Food Cluster facilitated by the Food for Life Hospital Leaders Programme. Other Hospital Trusts in the wider region notably Southern Health are beginning to examine the feasibility of developing an appropriately scaled Central Food Production Unit (CPU).

Several new CPUs have been developed or are under construction. Examples include a new bespoke CPU on the New Cross Hospital Site in Wolverhampton which is 1,000 sq m kitchen with the capacity to produce a million cook chill meals per annum. Royal Cornwall Hospital Trust are building a new £3.6 million CFPU next to the Cambrorne-Redruth Community Hospital. CPUs reduce transport costs and gives hospital trusts (and their partners) more control on how meals are prepared as well as potentially contributing to economic sustainability within the region by sourcing local produce.

Lady Margaret Hall plans to build up a profile of exactly what is purchased from where. Following our meeting the Bursar plans to introduce controlled experiments by testing for short periods different food offerings – monitoring costs and net margins, staff and student feedback and waste levels.

The case study interviews revealed that across Oxfordshire there are different standards, priorities and approaches adopted by not only different types of institutions but by the same types of institution. Whilst this approach theoretically fails to maximise the purchasing power the public sector this fragmentation has resulted in some institutions achieving standards that other institutions then sought to replicate. Freshly baked bread in primary schools across Oxfordshire has become the norm. Within just a few years the overwhelming majority of primary schools now have bread baked fresh each morning on-site and the majority of school sites have achieved a Food for Life Catering Mark.

In general Oxfordshire's public sector is weakly placed to adapt to opportunities afforded by local seasonal gluts in supply:

- Schools, Colleges and Universities all have their main holiday period over periods when the diversity and availability of local fruit and vegetables are at their highest and prices for local fruit and vegetables at their lowest. Moreover their menus need to be prepared in advance with food typically purchased weekly not daily.
- In the case of Brookes Restaurant menus need to be written three months in advance so training courses can be refined.

Even in a context of seemingly increasing fragmentation of purchasing decision making by the public sector there will be an opportunity for public procurers to try to add to the purchasing power of their organisation by seeking to combine their expertise and experiences with those of others.

Individual schools for example have negotiated contracts have been able to push for more local sourcing. For example sourcing of meat through a local butcher.

5.6 Key messages

The scope for public sector organisations to enforce more localised and sustainable food purchasing of locally produced food by their catering providers remains challenging due to a variety of barriers:

- Affordability / budgetary constraints
- Competing priorities
- Uncertainty over what local is being demanded
- Existence of and Capacity of local suppliers to supply the variable quantities needed
- Institutional inertia.

It is important to recognize that an increase in proportion of food which is sourced from local food manufacturers or manufactured in house should be seen as one small part of an integrated strategy to develop sustainable and local food markets.

The value of purchasing local and sustainable food can be theoretically measured using a range of measures including the willingness to pay a higher price (or notional value where food is free at the point of contact for example in-patient meals in NHS hospitals), customer satisfaction (pupils, patients, students, etc), meal take up rates, % of wasted food. The difficulty then comes in defining what is meant by locally produced food. Does this mean where the meal is regenerated from a frozen meal manufactured elsewhere? or where it is manufactured from fresh ingredients? With locally purchased ingredients does this mean in the case of pork from a pig reared on a specific nearby farm? or pork from a butcher with a local branch?

Measuring the value of food as contributor to successful outcomes (such as the impact on attendance and educational attainment in the case of schools; successful treatment

outcomes in the case of hospitals) is more complex and challenging. Measuring the added value of localised food procurement when local food is such as 'fuzzy concept' would add a further dimension of complexity.

The Food for Life advice, monitoring, certification process across both the public and private sectors has become a significant source of revenue for the Soil Association. It has therefore been in their interest to set target standards which are achievable within current budgetary constraints. In order to build on this momentum and maximise their potential to drive higher standards in terms of how local and sustainable food served on public plates is the introduction of even higher thresholds of achievement such as platinum, diamond and black catering marks.

Many hospital trusts providing (notably those providing acute services) now sell catering services other organisations with several achieving sales in 2014/15 of over £2million.

The majority of meals provided on public sector sites in Oxfordshire are 'manufactured' fresh on-site. Virtually all hot meals serviced in Oxfordshire's schools and Universities are prepared on-site. Oxfordshire's hospitals have chosen a different route with hot meals prepared outside the region chilled and then reheated on site.

A procurement portal for the sourcing of food, in partnership with the Crown Commercial Service (CCS), has been in place since September 2014. This allows suppliers to register to show the services or products they can provide and the area in which they are based. The aim is to provide a clear route into the public sector marketplace and enable suppliers to check themselves against the criteria set out in the balanced scorecard DEFRA (2014). Anecdotal feedback from manufacturers (caterers) preparing meals for public sector clients in Oxfordshire suggested that much more needs to be done to promote the existence of the portal for it to become significant.

"No we haven't registered on this and I do not use it at present. However I will see if I can move this forward with the various PFI companies as it looks a useful tool and we should be utilising it".
"It would be of interest to be listed as a supplier on the CCS website. My understanding is that as these are public procurement opportunities they will also be advertised through the European Journal which is where we have previously pricked CCS opportunities up from".

References

Bonfield, P. (2014) A Plan for Public Procurement. Enabling a healthy future for our people, farmers and food producers. DEFRA (Department for Environment, Food and Rural Affairs)

Bowden, C. Holmes, M. and Mackenzie, H. (2006) Evaluation of a Pilot Scheme to encourage local suppliers to supply food to schools. ADAS UK Ltd. Scottish Executive

Brammer, S. and Walker, H. (2007) Sustainable procurement practice in the public sector: An international comparative study. University of Bath School of Management, Working Paper Series

Bridger, R. (2004) Local Food for Bradford Schools - Developing sustainable, localised supply systems for Education Contract Services, April 2004

Carter, N. (2007) The Politics of the Environment: Ideas, Activism, Policy, Cambridge University Press, 2nd Edition

Cleveland, D.A., Radka, C.N., Muller, N.M., Watson, T.D., Rekstein, N.J., Van M. Wright, H. and Hollingshead, S.E. (2011) The Effect of Localizing Fruit and Vegetable Consumption on Greenhouse Gas Emissions and Nutrition, Santa Barbara County. Environment Science and Technology 45 (10), pp 4555–4562

DEFRA (Department for Environment, Food and Rural Affairs) (2005) Securing the Future - The Sustainable Development Strategy.

DEFRA (Department for Environment, Food and Rural Affairs) (2014) A Plan for Public Procurement: Food & Catering Balanced scorecard for public food procurement can be accessed at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/419245/balanced-scorecard-annotated-march2015.pdf

Deloitte (2009) Public Sector Food Procurement Initiative: an Evaluation. Defra March 2009

Department for Education (2015) School food in England Departmental advice for governing bodies. January 2015

Department of Health (2014) Hospital Food Standards Panel's report on standards for food and drink in NHS hospitals downloaded from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/504866/Hospital_Food_Panel_Report.pdf

Durham University Procurement - Corporate Social and Environmental Responsibility in Procurement accessed from www.durham.ac.uk/greenspace/durini/procurement

Eckersley, R. (2004) The Green State: Rethinking Democracy and Sovereignty, The MIT Press

Elior Contract Catering Company accessed (2016) at http://www.elior.co.uk/

European Union UrbAct II (31 October 2012) Sustainable Food in EU Developing low-carbon and resource-efficient urban food systems.

Foodlinks (2013) Revaluing Public Sector Food Procurement in Europe: An Action Plan for sustainability

Foodtank (2016) New Law Could Change France's Food System for the Better. Accessed at http://foodtank.com/news/2016/01/new-law-could-change-frances-food-system-for-the-better

Gourlay, R. (2009) National food and Drink Policy ' Walking the talk – Getting Government Right' The Procurement of food by Public Sector Organisations (in Scotland). The Scottish Government

Ilbery, B. and Maye, D. (2005) Alternative (shorter) food supply chains and specialist livestock products in the Scottish English Borders. Environment and Planning. Vol. 37, pp 823-844

Jégou, F. and Carey, J. (2015) Creating Space for Sustainable Food Systems in Urban Communities (Handbook) URBACT II Thematic Network

Kneafsey, M. , Venn, L. , Schmutz, U., Balázs, B., Trenchard, L., Eyden-Wood, T. , Bos, E., Sutton, G., Blackett, M.(2013) JRC SCIENTIFIC AND POLICY REPORTS Short Food Supply Chains and Local Food Systems in the EU. A State of Play of their Socio-Economic Characteristics.

Lang, T. (2010), Crisis? What Crisis? The Normality of the Current Food Crisis. Journal of Agrarian Change, 10: 87–97

Lehtinen, U. (2012) Sustainability and local food procurement: a case study of Finnish public catering. British Food Journal, Vol. 114 Issue 8 pp 1053–1071

Martinez, S., Hand, M., Da Pra, M., Pollack, S., Ralston, K., Smith, T., Vogel, S., Clark, S., Lohr, L., Low, S. and Newman, C. (2010) Local Food Systems Concepts, Impacts, and Issues. Economic Research Service Economic Research Report Number 97 United States Department of Agriculture

McCrudden, C. (2004) Using public procurement to achieve social outcomes. Natural Resources Forum 28 257–267.

Moragues, A., Morgan, K., Moschitz, H., Neimane, I., Nilsson, H., Pinto, M., Rohracher,H., Ruiz, R., Thuswald, M., Tisenkopfs, T. and Halliday, J. (2013) Urban Food Strategies: the rough guide to sustainable food systems. Document developed in the framework of the FP7 project FOODLINKS (GA No. 265287)

Moragues-Faus, A. and Morgan, K. (2015) Reframing the foodscape: the emergent world of urban food policy. Environment and Planning A 2015, volume 47, pp 1558 – 1573

Morgan, K. (2004) Sustainable regions: governance, innovation and scale. European Planning Studies, 12 (6): pp 871-19.

Morgan, K. (2012) The Green State: Sustainability and the power of purchase cited in Pike, A., Rodríguez-Pose, A. and Tomaney, J. (Eds) The Handbook of Local and Regional Development, London, Routledge, pp 87-96.

Morgan, K. J. and Morley, A. 2002. Re-localising the food chain: the role of creative public procurement. Project Report. Cardiff Regeneration Institute, Cardiff University.

Morgan, K. J. and Morley, A. 2003. School meals: healthy eating and sustainable food chains. Discussion Paper. Regeneration Institute, Cardiff University.

Morgan, K.J. and Sonnino, R. (2008) The School Food Revolution: Public Food and the Challenge of Sustainable Development. London, Earthscan.

Morris, C. and Buller, H. (2003) The local food sector: A preliminary assessment of its form and impact in Gloucestershire, British Food Journal, Vol. 105 Iss: 8, pp.559 - 566

National Audit Office (2006) Smarter food procurement in the public sector: a good practice guide. HC 963 I, Session 2005-2006 accessed at https://www.nao.org.uk/report/smarter-food-procurement-in-the-public-sector/

Public Health England (2014) Healthier and More Sustainable Catering. A toolkit for serving food to older people in residential care. Accessed at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/347890/Older_people_toolkit.pdf

Blay-Palmer, A. and Donald, B. (2006) A Tale of Three Tomatoes: The New Food Economy in Toronto, Canada. Economic Geography Vol. 82, No. 4, pp. 383-399

Public Plate Report Working Group (2014) The Public Plate in New York City: A Guide to Institutional Meals. New York City Food Policy Center

Rimmington, M. and Carlton Smith, J. (2006) Smarter Food Procurement In The Public Sector – Does It Cater For Sustainability? Downloaded from http://www.nao.org.uk/wp-content/uploads/2006/03/0506963_oxford_brookes_paper.pdf

School Food Plan (2015) downloaded at http://www.schoolfoodplan.com/actions/ofsted/

School meals - healthy eating standards from gov.uk accessed at: https://www.gov.uk/school-meals-healthy-eating-standards

Smith, J., Andersson, G., Gourlay, R., Karner, S., Egberg Mikkelsen, B., Sonnino, R. and Barling, D. (2015) Balancing competing policy demands: the case of sustainable public sector food procurement, Journal of Cleaner Production Volume 112, Part 1, 20 January 2016, pp 249–256

Soil Association (2007) A fresh approach to hospital food downloaded at: www.dur.ac.uk/greenspace/durini/procurement/northumbrian_fields/

Sonnino R and McWilliam S (2011). Food waste, catering practices and public procurement: A case study of hospital food systems in Wales, Food Policy 36, 6, pp 823–829

Sonnino, R. (2009) Quality food, public procurement, and sustainable development: The school meal revolution in Rome. Environment and Planning A 2009, volume 41, pp 425-440

Sonnino, R. (2014), The new geography of food security: exploring the potential of urban food strategies. The Geographical Journal.

Sonnio, R., Blay-Palmer, A. and Custot, J. 2015. A food politics of the possible? Growing sustainable food systems through networks of knowledge. Agriculture and Human Values 33 (1), pp. 27-43.

Tassou, S.A., Kolokotroni, M., Gowreesunker, B. et al (2014) Energy demand and reduction opportunities in the UK food chain. Proceedings of the Institution of Civil Engineers, Energy Volume 167 Issue EN3, pp.162-170

Thatcher, J. and Sharp, L. (2008) Measuring the local economic impact of National Health Service procurement in the UK: an evaluation of the Cornwall Food Programme and LM3. Local Environment, 13:3, pp 253-270

The Association of Colleges (2014) The Department for Education budget after 2015. A report from the Association of Colleges May 2014

The School Food Standards downloaded from http://www.schoolfoodplan.com/wp-content/uploads/2015/05/School_Food_Standards_140911-V2e-tea-towel.pdf

Thompson, E. Jr, Harper, A. M. and Kraus, S. (2008) Think globally – eat locally: San Francisco Foodshed Assessment, American Farmland Trust, Sustainable Agriculture Education and University of California Berkeley, San Francisco

Walker, H. and Brammer, S. (2009) Sustainable procurement in the United Kingdom public sector, Supply Chain Management. An International Journal, Vol. 14 Issue 2 pp. 128–137

Walker, H. and Brammer. S. (2007) Sustainable procurement in the United Kingdom public sector. University of Bath School of Management Working Paper Series 2007.15

Wesnes, K. A., Pincock, C., Richardson, D., Helm, G. and Hails, S. (2003). Breakfast reduces declines in attention and memory over the morning in schoolchildren. Appetite, 41(3), 329-331.

Wilkinson, S. (2006) Delivery of LM3 for the North East Presentation to Centre of Excellence in North East England

World Commission on Environment and Development (1987) Our Common Future. This report, as presented to the UN General Assembly in 1987 downloaded at http://www.un-documents.net/our-common-future.pdf

Züger, G. and Honegger, F. (2014) Essential Requirements for the Parameterization of Food Waste in Hospitals. International Journal of Facility Management, North America, 5th December 2014

Annex 1 Consultees

Schools

Gail Witchell, FM Technical Officer, Oxfordshire County Council
Les Redhead, Operations Director and Managing Director, The School Lunch Company
Chris Carr-Barney, Head of Procurement, Edwards and Ward
Graeme White, Purchasing Manager, Harrison Catering Service Ltd

Universities and colleges

Harriet Waters, Head of Environmental Sustainability, Estates Services, University of Oxford
Bart Ashton, Bursar, Lady Margaret Hall College, Oxford University
Jonathan Warhurst, Restaurant Operations Director, (Brookes Restaurant), Oxford Brookes
Catherine Fleming, Catering Contract Director Carrillion (Oxford Brookes)

Hospitals

Bronwen Vearncombe Oxfordshire AHSN
Wendy Robinson, Soft FM Client Contract Manager, Oxford University Hospitals NHS Foundation Trust
Ann Helsdon, Head of Soft Facilities, Oxford Health NHS Foundation Trust
Stella Gardener , Catering Services Manager, Southern Health NHS Foundation Trust
Susannah McWilliam, Programme Manager for Food for Life Hospital Leaders

Prisons

Catherine Wilson, Deputy Catering Manager, HMP Bullingdon

Local authority

Jo Colwell, Environmental Sustainability Manager, Oxford City Council

Other

Hannah Fenton, Good Food Oxford
Rosie Eccleston, Good Food Oxford
Genevieve Cox, Catering Mark Officer, Soil Association Certification

Annex 2 Research Questions Oxfordshire Case study

Name
Role
Organisation
Roles / Responsibilities relating to food and catering procurement
Procurement of food and catering - Current situation
(focus on bread **only** where applicable or data readily available)

- *Current spend on bread per day, week or year*
- *% on locally produced bread*
- *Relative cost of locally produced bread*
- *Current number of loaves*

- Current total spend on food and catering
- Definitions of a) local b) sustainable
- % of total spend on locally sourced food
- % of total spend on sustainably sourced food
- Trends in % of local content – earlier years and future years
- Changes in procurement priorities? Key drivers for change
- Examples of any Local content initiatives (if any)

Current procurement priorities – including sustainable / local food strategies or statements
Change in procurement priorities? Key drivers for change
Rationale for local sourcing – costs versus benefits
What costs? evidence
What benefits? evidence
Barriers

- Cost per meal?
- Changes in cost per meal post 2008?
- Food/ catering procurement capacity / skills /time
- Wider contractual commitments
- Other priorities
- Nutritional content
- Menu flexibility
- Food safety
- Other Risk minimisation
- Production constraints – catering skills? Food preparation and cooking facilities
- Supply side deficiencies

Current and planned initiatives

- Targets, strategies, feasibility testing
- Partnerships / networking meetings, agreements, joint strategies, collaborative success
- Distribution hubs

Opportunities?

- Local content target? / target increase
- Strengthening ? Widening? Deepening? of inter agency collaboration
- Priorities for change
- Strengthening of local supply capabilities
- Team and Organisational commitment to local content
- Wider partner / local commitment to local content
- National policy / regulatory environment changes
- Competition policy / local content protection
- Meal subsidy
- Mandatory criteria status
- Grants for: catering training? Catering facilities? Other

References

Care Quality Commission In-patient Survey 2011

Care Quality Commission In-patient Survey 2015

Department for Education (2015) School food in England Departmental advice for governing bodies. January 2015

Department of Health (2014) Hospital Food Standards Panel's report on standards for food and drink in NHS hospitals downloaded from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/504866/Hospital_Food_Panel_Report.pdf

Hospital and Estates HSCIC 2013

Oxford AHSN Sustainable hospital food cluster proposal, June 2016

DEFRA (2014) Family Food Report
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/485982/familyfood-2014report-17dec15.pdf

Public Plate Report Working Group (2014) The Public Plate in New York City: A Guide to Institutional Meals. New York City Food Policy Center

School Food Plan (2015) downloaded at
http://www.schoolfoodplan.com/actions/ofsted/

School meals - healthy eating standards from gov.uk accessed at:
https://www.gov.uk/school-meals-healthy-eating-standards

The School Food Standards downloaded from http://www.schoolfoodplan.com/wp-content/uploads/2015/05/School_Food_Standards_140911-V2e-tea-towel.pdf

Centre for Urban & Regional Development Studies (CURDS),
School of Geography, Politics and Sociology,
Claremont Bridge,
Newcastle University
NE1 7RU

Tel: 0191 208 7691
Fax: 0191 208 7741
www.ncl.ac.uk/curds/
www.ncl.ac.uk/gps/geography/