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Food security framings within the UK and the integration of local food systems

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Abstract

This paper provides a critical interpretation of food security politics in the UK. It applies the notion of food security collective action frames to assess how specific action frames are maintained and contested. The interdependency between scale and framing in food security discourse is also scrutinised. It does this through an examination of 'official' UK food security approaches and the place of local food systems within these debates. The paper shows how the UK government's approach to food production and food security has been underpinned by the notion of resilience, which it considers is best achieved through sustainable intensification, market liberalisation and risk management, with local food systems largely sidelined within these 'official' framings. Nevertheless, collective action frames are socio-political constructs which are open to contestation; they are not static entities and are part of a mobile multi-organizational political field. The notion of incompleteness and fragility is highly pertinent to an examination of debates about the contribution that local food systems can make to food security within the UK, suggesting that the 'official' interpretation of food security can be challenged to be more inclusive and to accommodate social justice imperatives. Adopting this more holistic perspective broadens UK definitions of food security beyond the quantity of food available to encompass the needs of communities, households and individuals, offering a more transformative and progressive role for local food systems, notwithstanding the significance of asymmetrical power relations.

Keywords: Local food systems; Food security; Scale; Collective action frames; the UK

1. Introduction

This paper examines the framing of local food systems within food security debates in the UK, noting their absence in much of the discussion up until now. Food security, which re-emerged in international discourse to frame responses to the 2007-2008 food price spikes and related anxieties about global climate change and key resource pressures (Ambler-Edwards et al., 2009; MacMillan and Dowler, 2011), is more usually connected with market-based solutions and a technological approach to a global food crisis (Beddington, 2010; Foresight, 2011; Horlings and Marsden, 2011). Such narrow interpretations of food security and the global food crisis have negative implications for the role and development of local food systems; although more holistic interpretations potentially provide significant opportunities for the latter to make an active contribution. Local food systems represent a significant part of the broader alternative food movement (see Tregear, 2011; Watts et al., 2005), to the extent that the notion of 'local food' has become something of a mantra for those intent on developing alternatives to the mainstream food supply chain, with a wide range of research undertaken on the role of local food in rural geography and cognate disciplines (e.g. Dowler et al., 2004; Holloway et al., 2007; Ilbery and Maye, 2006; Ricketts Hein et al., 2006; Thatcher and Sharp, 2008; Weatherell et al., 2003). At a governmental level, however, the significance of local food within the UK's food supply chain has seemingly now been sidelined by a new imperative that involves ensuring food security and resilience through a reliance on global food markets.

Despite this apparent sidelining, advocates of local food argue that it will still have a part to play in emerging food security scenarios, not least because it helps retain domestic production capacity, as well as having the potential to reduce the resource footprint of food (Brown and Geldard, 2008). Nevertheless, such claims need to be set within the context of a growing body of literature that critiques the role of local food, stressing the naivety of equating spatial framings with quality, sustainability and ultimately security (e.g. Born and Purcell, 2006; Harris, 2009; Hinrichs, 2003; NEF, 2009; Weber and Matthews, 2008). It also needs to be

acknowledged that one key aspect of food security is ensuring that there is a sufficient *quantity* of food available. In this respect there is no sector-level data on how much 'local food' contributes to the overall quantity of food in the UK, not least because it is difficult to circumscribe what the 'local food sector' is (Morris and Buller, 2003). There is also no single or legal definition of local food, notwithstanding that the most widely accepted definition involves food being both produced and sold within the same relatively small area, often within 30 miles (50 km) of each other (Defra, 2003; Pearson et al., 2011). A number of bodies do provide figures for the sectors they are involved with: for example, the Soil Association (a charity who is responsible for the majority of organic certification in the UK) provides an annual *Organic Market* report, which includes details of the percentage of organic produce that is sold through outlets such as farmers' markets, farm shops and box schemes (Soil Association, 2011); the National Farmers' Retail & Markets Association (FARMA) have commissioned reports on the value of sales through farmers' markets, as well as farm shops (http://www.farma.org.uk/); and the Federation of City Farms & Community Gardens website has details of the numbers of allotments, city farms, community orchards and community supported agriculture projects, etc in the UK (FCFCG, 2011). Useful though these are, it is difficult to produce an aggregate figure of the quantifiable contribution of local food to the UK food supply chain. Perhaps the best overall estimate is that provided by the market research firm, Mintel, who in September 2008 produced a report on the market size of local food in the UK. They estimated that in 2007 it was worth £4.6 billion and that it would grow to £6.2 billion by 2012 (Mintel, 2008). In the absence of any better data, this suggests that the percentage market of local food within the UK is roughly £6.2 billion out of a total food, drink and catering market of £174 billion (Defra, 2011), or 3.5%. While this figure needs to be treated with extreme care, it does at least provide a figure to work from.

Scale figures prominently in debates about both the associated benefits and emerging critique of local food, including discussions about the size and form of the sector; likewise, food security is often differentiated by scale, ranging from the food security of individuals and households up to

regional, national and global food security (Jarosz, 2011; Lee, 2007; McDonald, 2010; Pinstrup-Andersen, 2009). Some commentators view food security - especially at a national level - as being synonymous with self-sufficiency; indeed, the World Trade Organisation has defined food security as a "concept which discourages opening the domestic market to foreign agricultural products on the principle that a country must be as self-sufficient as possible for its basic dietary needs" (quoted in House of Commons, 2009, p. 6). Earlier definitional work by Maxwell (1996, p. 155) suggested that thinking about food security had shifted from the global and the national to the household and the individual; yet, much of the current emphasis on food security counters this shift and is global in perspective, as noted in commentaries which explain the origins and dynamics of the global food crisis (Jarosz, 2009; Lawrence et al., 2010; McDonald, 2010; McMichael, 2009). In a reading of World Bank and the United Nations Food and Agriculture Organization policy texts on food security, Jarosz (2011 see also Nally, 2011) argues that scaled definitions of food security have been used to serve neoliberal ideology, which more recently includes linking individuals to global modalities of governance that emphasise the instrumentality of agricultural productivity in development strategies.

Scale can therefore be used to justify political actions and support ideological objectives on the grounds of 'moral responsibility'. This paper provides a critical interpretation of national food security politics in order to examine approaches to food security in the UK and the place of local food systems within them. It operationalises Mooney and Hunt's (2009) conceptualisation of food security as a consensus frame, arguing that the interdependency between scale and framing in food security discourse warrants close scrutiny. This includes considering the implications of broadening UK definitions of food security beyond the quantity of food available to encompass the needs of communities, households and individuals in relation to issues of micro-level capacity building (Middlemiss and Parrish, 2010) and social inclusion - something that has only rarely been considered in the past (Dowler et al., 2001; MacMillan and Dowler, 2011). The rest of the paper is structured as follows. Section 2 introduces work on consensus framing and collective action frames, as a way of providing a structure within which

to assess how responses to an issue like food security can lead to opposition and conflict between different people and organisations. The third section of the paper then sets out the emergence of the food security agenda within the UK, including reflecting upon how the nature of food security has changed over time, and the 'official' UK response to the current global food crisis. Section 4 examines the history and development of local food systems in the UK, including critiques about their efficacy and sustainability as a means of ensuring food security. This analysis shows how local food is notable by its absence in official responses to UK food security, with local food activities rarely featuring as possible contributors to broader food security goals. The final two sections of the paper consider how local food can be repositioned within the UK's overall approach to food security in the 21st century.

2. Consensus framing and collective action frames

Frames are mechanisms by which to organise experience and guide action, wherein actions may be individual or collective (see Benford and Snow, 2000; Mann, 2009). The notion of a frame provides a conceptual tool that helps to establish a boundary within which interactions take place (Callon, 1998, p. 249), and appropriate courses of action are taken. Hajer and Laws (2006), quoted in Tomlinson (in press, p. 3), argue that frames can be used to "explain how policy-makers structure reality to gain a handle on practical questions". In a recent study, Mooney and Hunt (2009) postulate that food security is an 'elaborate master frame', with several distinct claims to ownership and multiple meanings for different people and organisations. They employ a frame-analytic perspective and draw on Gamson's (1985) social movements work to conceptualise food security as a 'consensus frame' – wherein there is overall consent to the values and objectives signified by the term – which nonetheless engenders opposition in terms of how the goals might best be achieved or actioned. In this respect, Mooney and Hunt (2009, p. 470) argue there is a "contested ownership behind the apparent consensus on food security".

Mooney and Hunt (2009) identify three collective action frames, which they suggest encompass food security as a master frame. These are:

- Food security associated with hunger and malnutrition;
- Food security as a component of a community's developmental whole; and
- Food security as minimising risks in industrialised agricultural production in terms of the risk of 'normal accidents' and 'intentional accidents' associated with agriterrorism.

The first frame (hunger and malnutrition) is the one most usually associated with the term food security, typified by three key dimensions: availability, accessibility and adequacy (see also Ericksen, 2008). The community food security framing, which gained momentum in the 1990s through a focus on local or regional supply systems that accented environmental concerns from a sustainability viewpoint, is the one most obviously applicable to discussions about the place of local food systems. The third framing (food security as risk) is driven by the desire to manage, control and minimise risks in the food supply chain.

Mooney and Hunt (2009) posit that collective action to address each of these frames can also vary, with multiple interpretations possible. This internal normative variation is identified using Goffman's (1974) "keying" concept. This suggests that each food security framing can, on the one hand, carry a "flat key", which usually reinforces extant dominant interpretations and practices and, on the other hand, carry a "sharp key" that offers critical, alternative interpretations and practices. The keys within each frame thus imply power differentials, with either an endorsement or critique of dominant institutional practices. For example, the flat key of the hunger frame endorses the forces of globalisation and predominates in the claims of transnational corporations and global institutions such as the World Bank. The sharp key of the hunger frame, by contrast, challenges the assumption that a free market will assure food security and critiques the productivist model of agriculture as being unsustainable. Shared keys (e.g.

sharp food security as hunger and sharp food security as community) may also act as bridging mechanisms between boundaries of otherwise distinct collective action frames.

Mooney and Hunt's paper is therefore useful on a number of levels. It helps to identify the different perspectives, interpretations and interests that can be taken towards the one consensual social problem: in this case, food security. The use of the keying concept also highlights the negotiated and contested nature of each framing, going beyond simply highlighting a plurality of static framings, as Maxwell (1996, p. 156) outlined in his earlier assessment. It locates the framing process "within an ordered, yet contentious, multiorganizational political field of differential power wielded by various insiders and outsiders" (Mooney and Hunt 2009, p.493). This allows distinctions to be drawn between relatively tame institutional responses (i.e. 'free trade' (flat key) perspectives) and more critical viewpoints (i.e. 'oppositional' (sharp key) perspectives). The result of this is that boundaries within frames may be firmer than boundaries between frames. Such distinctions resonate with writings that identify weaker and stronger variants of both alternative food networks (Watts et al., 2005) and multifunctionality (Hollander, 2004), as critiques of neoliberalism. In Mooney and Hunt's work, flat and sharp keys signify *tendencies* rather than essences to reflect social and political mobilisation. This is an important distinction given the transitional qualities of particular production systems and the way that food chain actors are repositioning and reshaping their alliances. As Brunori and Guarino (2010) note in a European context, discourses about food and agriculture are changing in response to the global food crisis. They argue that the food crisis, combined with the contemporary environmental, oil and financial crises, has "shaken the most consolidated policy paradigms, providing the impulse for better connections among food and ecology movements which have, typically, existed independently of one another" (*ibid*., p. 54).

The food security collective action frames derived by Mooney and Hunt (2009) are firmly grounded in the US experience. A central ambition of this paper is to apply this conceptualisation of *food security collective action frames* in a different geographical context

(namely the UK), in recognition of geographical specificity, and to provide a more detailed assessment of specific action frames to understand how they are maintained and contested. In this case, the emphasis is the relationship between 'official' UK food security approaches and the place of local food systems within these debates (other papers in the special issue examine contrasts between, for example, new biotechnologies and sustainable agro-ecological approaches). Mooney and Hunt's (2009) community framing, expressed through the paired opposition of pro-globalisation versus resistance to globalisation and the promotion of localisation, is particularly relevant. Similarly, their framing of risk relates clearly to UK institutional calls for resilience within food supply systems. The next two sections of the paper examine the 'official'/institutional UK response to food security over time, as well as the evolution of local food systems and associated responses to food security.

3. The 'official' UK response to food security

Since the onset of the Industrial Revolution in the early 1700s, the UK has become increasingly dependent upon international trade as a way of securing its food supplies, albeit with significant disruptions during both the First and Second World Wars. The changing perceptions of food security in the UK since World War II are reflected in government policy, with some of the most significant food security policy statements being summarised in Table 1. In the mid-1970s, concerns about the rapidly rising cost of energy and imports led the government to see the expansion of domestic food production as being in the national interest, as highlighted in the government White Paper *Food From Our Own Resources* – MAFF (1975) (quoted in Barling et al., 2010, p. 66), with a consequent rise in the level of self-sufficiency. From the 1980s, this focus changed as trade liberalisation grew, driven by World Trade Organisation agreements that increasingly brought food into the global trade arena (Barling et al., 2010). Defra's (2006) *Food Security and the UK: An Evidence and Analysis Paper*, while recognising the growing potential for disruption in food supplies to the UK, stated that national self-sufficiency does not equate with food security. Instead, it argued that it is a matter of "identifying, assessing and managing

[the] risks associated with food supply" (*ibid:* p. iii), risks that are best mitigated by the UK sourcing its food needs from a variety of countries through the global marketplace and, in particular, the EU Single Market. Domestic agricultural production is acknowledged to have a role to play, but it too is recognised as being exposed to risks, not least in terms of its inputs (such as fertiliser, fuel and machinery), many of which are imported.

--- Insert Table 1 about here ---

Clearly, there is nothing inherently new about the issue of food security within a UK context; it is more that events in recent years have again brought it into sharp focus. Key to this renewed awareness has been the worldwide food price spike in 2007-08, described as being unusual in that it "applies to almost all major food and feed commodities, rather than just a few of them" (Chatham House 2008: p. 2)[1]. At a global level, this escalation in food prices resulted in violent protests and demonstrations in a number of developing countries. In the UK, although less dramatic, these impacts served to underline, as the Chatham House report, *Food Futures: Rethinking UK strategy*, put it: "our global interdependency and... the political and social importance of affordable food" (Ambler-Edwards et al., 2009: p. 5). They have also led to recognition that a food crisis in the UK is not unthinkable and that the UK can no longer afford to take its food supply for granted. Any UK response to its food security in the 21st century must therefore take into account emerging constraints on global food supplies, which are linked with changing dietary patterns as well as population pressures. There is also a growing awareness of the risks posed by climate change and increasingly scarce natural resources, such as land, water and fossil fuels. Food production in the face of these challenges, therefore, will need to be achieved through a more effective, rather than exploitative, use of resources. In its report, *Reaping the Benefits* (Royal Society, 2009), the Royal Society suggests that crop production methods will need to increase yields while at the same time "sustain the environment, preserve natural resources and support the livelihoods of farmers and rural populations around the world"

[1] This spike was a strong indicator of instability within global food supplies. Perhaps significantly, global commodity prices exceeded the 'spike' of 2008 in January 2011 (SDC, 2011).

(*ibid.*, p. ix). Key to achieving this is the notion of 'sustainable intensification', which Godfray et al. (2010, p. 2776) define as "achieving higher yields from the same acreage without severely impacting the environment", arguing that it involves a whole new way of producing food.

Within this context, determining the appropriate level of self-sufficiency within the UK is an important criterion in the current debate about food security. So what is the official UK government response to these newly highlighted challenges, and how do they envisage achieving food security within the UK? Despite renewed concerns that the UK is perhaps overly dependent upon global sources for its food supplies, the government's policy position would seem to be largely unchanged. In July 2008, the Cabinet Office published *Food Matters: Towards a Strategy for the 21st Century* (Cabinet Office, 2008), which aimed to review the main food production and consumption trends in the UK and to analyse their implications for the economy, society and the environment, as well as assessing how robust the current policy framework was for ensuring food security. Its main conclusion was that the principal food security challenge for the UK was at a global level, where there are undoubtedly pressures on both the sustainable production of food as well as its affordability. Nevertheless, self-sufficiency was not seen as ensuring food security; rather, the UK needed to focus on the *resilience*[2] of its food supply chains, whether domestic, EU or global, which includes providing support for improving agricultural productivity in the developing world. Similar conclusions were drawn from Defra's discussion paper, *Ensuring the UK's Food Security in a Changing World* (Defra, 2008), which aimed to describe the main trends in the global food supply chain, setting out the principal challenges and examining whether the UK food supply chain was sufficiently resilient to withstand short-term shocks as well as being robust enough to respond to long-term challenges. Again, the conclusion was that the UK's food security interests were best

[2] The notion of 'resilience' is being used here in terms of the ability of food supply chains to respond to a potentially disruptive situation. Clearly this is very different from the way in which ecologists, for example, would use the term. Arguably, it is also supportive of the dominant flat key framing of food security, based on a "neoliberal apparatus of security" (Nally, 2011, p. 44). While interesting, it is beyond the scope of this paper to explore this potential appropriation of the term, further.

served by an effectively functioning global market for food; an approach further reiterated in Defra's *Food 2030: How We Get There* report (Defra, 2010a).

In seeking to better contextualise the UK's government perspective on food security, it is instructive to consider the deliberations of a 2009 House of Commons Environment, Food and Rural Affairs Committee (House of Commons, 2009), which in its report outlined three possible approaches that the UK might take in order to ensure its food security. The first is entitled a 'head in the sand approach'. This would involve the UK continuing to buy its food on the world market and doing little or nothing about increasing its domestic levels of production. The report concludes that this would be short-sighted as well as 'morally unacceptable', in that the UK should be setting an example as to how best to increase the global supplies of food. As such it suggests that "a healthy domestic agriculture is an essential component of a secure food system in the UK" (*ibid: p. 56)*. Nevertheless, the Report urges against a 'self-sufficient approach' – the second approach identified by the Committee - even in indigenous foodstuffs, arguing that total self-sufficiency would increase vulnerability and make the UK's food supplies less rather than more secure; furthermore, that such a defensive food production strategy would contradict neoliberal trade policy agreements. In making its assessment of food security, Defra has developed a typology of possible threats and challenges (see Table 2), with the objective of building and ensuring food system resilience (Defra, 2010b). Clearly these represent a wide range of risks, each necessitating a particular response, with Defra's strategy predicated on the rationale that the UK's food security is best served by having a range of supply sources, whereby the risks of disruption are spread, lowering the impact of any one of them experiencing problems as a result of a threat(s) being realised.

--- Insert Table 2 about here ---

A 'sustainable production approach' – the third approach identified by the Committee – is therefore the approach recommended to the UK Government. The suggestion is that the UK

should increase its production of food, especially fruit and vegetables, but that crucially the production should be carried out sustainably. In other words, this suggests an era of what has been termed neo-productivism (Almås et al., 2009; Evans et al., 2002), in which producing more food in the UK is again a priority. Underpinning this approach is the need to invest in agricultural research and the development of new techniques, including new genomic techniques (Beddington, 2010; Foresight, 2011). Not surprisingly, the agricultural industry within the UK has embraced this renewed focus on production with enthusiasm (see essays in Bridge and Johnson's (2009) *Feeding Britain*, for example). Nevertheless, the report stresses that this is not the same as aiming to be self-sufficient, but part of a wider strategy that is aimed at spreading the risk of supply problems with any one food supply system.

Defra's position is that the UK currently enjoys a high level of food security, based on the diverse and global nature of its food supply chains. An important element of this viewpoint is that approximately 68% of its imports come from other EU Member States, with the EU as a trading bloc currently over 90% self-sufficient in agricultural products (Barling et al., 2008; Defra, 2010b). In 2007, UK self-sufficiency, together with its five leading food trading partners, all of which are members of the EU (Netherlands, Spain, France, Germany and Ireland), accounted for around 70% of the UK food supply (Defra, 2010b). The world trading system, together with the EU Single Market, are therefore crucial to the UK's food supplies (Defra, 2006). Moreover, it is clear that the government is intent on the further liberalisation of the world's markets through the Doha Round of trade negotiations, as well as reform of the EU's Common Agricultural Policy to facilitate this process (Defra, 2008). As a result, Barling et al. (2010: p. 75) argue that "the government's approach to UK food production has been framed by an overarching commitment to the liberalisation of international trade".

Despite this overwhelming focus on international trade as the means of achieving food security in the UK, there are also glimpses of the role that local food might have to play, even within these establishment responses. *Food 2030* (Defra, 2010a), for example, talks of the need for

consumers to find out more about their food and how it is produced, and to take control of their spending power to influence the way in which food is produced. The House of Commons (2009) report also recognises the enthusiasm among certain consumers for buying food that has a local identity, as well as for growing their own food, seeing this trend as an opportunity to reconnect people more directly with food production. In so doing, it potentially has "an important role to play in encouraging the sort of changes in consumer behaviour that will be necessary for a sustainable system of food production" (House of Commons, 2009: p. 58). Nevertheless, the report acknowledges that in terms of production output, local food's overall contribution to food security will be relatively small.

The UK's official response to food security epitomises a number of the 'flat' key characteristics described by Mooney and Hunt (2009). The most striking feature of the UK approach, particularly since the 1980s, is the consistent argument that national food security will be best achieved via an effectively functioning global market for food, in conjunction with the European Single Market. It is also notable that the principal food security challenge is framed at the global scale (i.e. world hunger as an action frame). The risk frame is also evident, as part of a wider pro-free trade mantra that argues supply chain resilience and risk mitigation are best managed through securing food needs through a variety of countries, via the global market. While there is recognition of the need to improve resilience in domestic supply chains, this is to some extent viewed as a "moral obligation" to set an example of how best to secure global food supplies, and thus still supporting the general neoliberal thrust influencing the 'official' UK food security framing (cf. Jarosz, 2011). Support for local food systems is effectively rhetorical, seen primarily as a means of facilitating change within the main frame, rather than as a response in its own right or as a significant part of any long-term strategic planning. The next section of the paper examines the development of local food systems in the UK and related food security framings, which emphasise social justice and micro-level/community activity over global perspectives and market-based solutions.

4. The place of food localisation

Renewed interest in local food emerged in the UK during the 1980s and 1990s and since this time the local food movement has grown considerably. People have been attracted to it for various reasons (NEF, 2009): some due to concerns about the environmental impacts of conventional agriculture; some in reaction to the succession of food scares from the late 1980s; and some who see local food as challenging increasing consolidation and globalization within the agri-food sector. Development of the local food sector in the UK has been manifest, for example, in the growing interest in farmers' markets, box schemes, local food directories, community orchards and community supported agriculture (CSA), often promoted and facilitated by the actions of Local Food Links groups[3] (FCFCG, 2011; Sustain, 2011). A number of these groups originated in the late 1990s via the Soil Association's Food Futures programme, operating at the scale of a town, city, county or region. It has also been manifest more recently in the burgeoning support for the Transition Town movement, which has the development of local food as one of its central aims (Hopkins, 2008). In some cases, these initiatives have been expressly about producing more food, whereas in other cases food localisation has been more about reconnecting the various elements of the food supply chain, improving access and building community capacities (La Trobe, 2002; Pearson et al., 2011; Winter, 2003).

This approach is typified by a series of initiatives, each funded by the UK's National Lottery[4]. Firstly, the Food for Life Partnership[5], which is a network of schools and communities across England (currently more than 3600) that is committed to transforming food culture through reconnecting children and young people with where their food comes from, and inspiring

[3] Food Links UK was established in 2002 as a network of organisations active in supporting the local food sector and working towards fairer, healthier more sustainable local food systems (http://www.sustainweb.org/images/sustain/FLUK_summary_May06.pdf).
[4] (http://www.biglotteryfund.org.uk/).
[5] (http://www.foodforlife.org.uk/).

families to grow and cook food. Secondly, Making Local Food Work[6], which again is intent on helping people to take ownership of their food and where it comes from by providing advice and support to community food enterprises, such as farmers' markets, community supported agriculture and food co-operatives across England. Thirdly, the Local Food fund[7], whose main aim is to improve the access and affordability of local food to local communities. It does this by supporting a wide range of local food projects, including projects that share best practice, enable education and learning about food, as well as a significant number that help develop community food growing (including city farms, urban gardens and allotments). Quantity is not the main focus, rather it is about building community capacity to take some control over their own physical and social health through the medium of food.

Policy support for local food in the UK was significantly boosted following the Policy Commission on the Future of Farming and Food's report *Farming and Food: a Sustainable Future* (Defra, 2002, p. 43), which highlighted that producers should "build on the public's enthusiasm for locally-produced food, or food with a clear regional provenance". Subsequently, 'local food' as a policy issue has been understood primarily in terms of its potential to benefit both farmer incomes and rural development. However, as the notion of 'food security' has risen up the political agenda, advocates of localism and local food are arguing that there is a need to reappraise the role of local food, not least in terms of its potential to integrate the needs of environmental sustainability, nutrition and social justice (Lang, 2010). The Sustainable Development Commission[8], in its final report on food matters as the Government's independent watchdog, argues that there is a need to create local food partnerships that involve local government, health authorities, community groups and local businesses in order to help meet local sustainability goals; furthermore, that food security needs to be acknowledged as meaning different things to different people and should not be seen as a single all-encompassing term

[6] (http://www.makinglocalfoodwork.co.uk/about/index.cfm).
[7] (http://www.localfoodgrants.org/).
[8] Until 31st March 2011, when it ceased operating, the Sustainable Development Commission was the Government's independent watchdog on sustainable development, helping to ensure that it was at the heart of Government policy.

(SDC, 2011). The Soil Association also stress the need for local partnerships and recommend that 'regional and local authorities should draw-up strategies to make their region and locality more 'Food Secure' – treating food security with the same urgency as economic or energy security [and that] re-localisation of food supplies needs to be integrated into local planning guidance and local policy statements/plans on climate change' (Soil Association, 2009, p. 6). Rob Hopkins, originator of the Transition Town movement, simply asks: "How can we get from where we are now, an oil dependent economy with very little food security, to a localised, resilient and self-reliant food economy?" (Hopkins, 2007: p. 21). These framings typify alternative and more holistic visions of the importance of local food, in contrast to the establishment's interpretations of UK food security reviewed earlier, which view it essentially as a global issue with food system resilience best achieved through sustainable intensification, market liberalization and risk management.

Food system localisation has been widely heralded as being both 'good' and 'progressive' (Hinrichs, 2003: p. 33), with much of the associated discourse being concerned with closer relations between the producers and consumers of food, as well as "a commitment to the social, economic and environmental dimensions of sustainable food production, distribution and consumption" (Jarosz, 2008: p. 232). Local within this context is seen as a point of resistance to the global, a scale at which the problems associated with globalised processes of 'placeless' food production, distribution and access can be addressed. Closely linked to, and often conflated with, local are notions of 'community', which can be equated directly with notions of food security whereby community advocates are intent on building local capacity (Middlemiss and Parrish, 2010) to both produce and distribute food to those who might otherwise be excluded in some sense from more distantiated food supply systems. Feagan (2007: p, 28), in quoting Anderson and Cook (2000: p. 237), argues that "localised food production can meet many of the diverse community needs more effectively than globalised food systems because it can give priority to community and environmental integrity before corporate profit-making". In so doing, the ability of communities and individuals to access food of a suitable nutritional quality is

improved, and hence their food security, even though the overall quantities of food being produced may be relatively small-scale.

Ideas of hunger and malnutrition (the first of Mooney and Hunt's (2009) food security collective action frames) are not usually associated with the UK, with the 'official', flat UK response oriented more towards the global level and especially less-developed nations. Nevertheless, while in calorific terms the population of the UK is essentially food secure, if food security is taken to mean access to an adequate diet in nutritional terms then a number of surveys have highlighted considerable insecurity, or food poverty, amongst lower socio-economic groups (e.g. Dowler et al., 2001; Hitchman et al., 2002; Wrigley, 2002). The *Low Income Diet and Nutrition Survey* 2007, conducted on behalf of the Food Standards Agency[9], defined food insecurity as the: 'Limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways' (Nelson et al., 2007, p. 200). This survey, which sampled 3700 people from the lowest 15% of the UK population based on their incomes, found that 36% of those interviewed said they were unable to afford to eat balanced meals and 29% felt they had not had sufficient access to appropriate food over the previous year. Furthermore, the evidence suggests that this inequality in access to affordable, nutritious food can contribute to social exclusion. Examined in these terms, the UK Government's focus on national food security (which can be thought of as ensuring that *on average* there is enough food of a suitable quality to feed the whole population) risks excluding a whole segment of the population.

For its part, food localisation represents the sharp key of Mooney and Hunt's (2009, p. 478) first two collective action frames – hunger and malnutrition; and community food security - epitomised in their terms by "a radical commitment to locale and a conscious resistance to globalisation", together with a focus on developing local and regional food supply systems.

[9] The Food Standards Agency is an independent UK Government department set up by an Act of Parliament in 2000 to protect the public's health and consumer interests in relation to food (http://www.food.gov.uk/aboutus/).

Inherent within this sharp key is the promotion of access and availability to food at the community level, with objectives that extend beyond hunger prevention to include the enhancement of community health. There is also an emphasis on establishing food supply systems that are sustainable in environmental terms, which localisation is seen to enable (in part at least) through a reduction in the distance food travels (or 'food miles'). However, there is a need to avoid the 'local food trap' (Born and Purcell, 2006), and there now is a powerful critique of 'simplistic' assumptions about the environmental benefits of local food, especially in relation to the notion of 'food miles' (see Coley et al., 2009; Edward-Jones et al., 2008; Weber and Matthews, 2008). This and other critiques are strongly equivocal about the benefits and role of local food systems. Section 5 considers these issues further as a way to envisage a more inclusive and sustainable food security strategy within the UK.

5. Local food systems and food security: boundaries and permeability

One of the arguments developed in this paper is the need to appreciate geographical specificity in food security interpretations. National food security and, more specifically, food security within the UK, forms the geographical focus of analysis for this study. This raises the question as to whether Mooney and Hunt's (2009) framework, which is US-centred, is still applicable within the geographical context of the UK. Does their framing perspective work and add value to our understandings of UK food security? The analysis presented here suggests that it does, yet recognises the need to appreciate the context-dependency of discourses and experiences of food security. In Mooney and Hunt's (2009) terms, food security within the UK can be conceptualised as being a 'consensus frame' in which there is overall agreement on the values and objectives signified by the term, but nevertheless contestation as to how it might be best achieved. Specifically, this paper examines the place of local food systems within this debate. Before considering further their contribution to food security in the UK, it is important to contextualise the debate within recent critiques of the benefits and role of local food systems.

Inherent within local food systems discourses are notions of ‘place’, which are seen to underpin both the alterity of localised food systems and contribute to the quality(ies) of the products involved (Harris, 2010). Yet, in reality, why should the scale of local necessarily be any more democratic or sustainable than any other scale of operation. Born and Purcell (2006, p. 195) articulate this debate in terms of a ‘local trap’, wherein there is a tendency “to assume something inherent about the local scale. The local is assumed to be desirable; it is preferred a priori to larger scales”. Their argument is not that there is anything negative about the local scale as such, rather that there is nothing inherently good or bad about any scale, and that overly focussing on the scale of local can hinder the development of food systems research. Furthermore, that it can ‘confus[e] ends with means’, treating localisation as a goal in itself rather than as a ‘means to an end’. An unreflexive and uncritical perspective on localism fails to acknowledge the political realities of what is actually involved, including relationships of power (DuPuis and Goodman, 2005; Harris, 2010). Reflexive readings of the local as a particular scale and space of operation recognise that it is problematic to define local and global in simple binary terms; neither the local nor indeed individual communities are isolated from wider processes, but are in fact highly interdependent across a range of scales. In this respect, “global interconnectedness and some level of permeability is and will be the norm” (Feagan, 2007: p. 38).

In seeking to understand the role that local food systems might play in helping to ensure food security in the UK, it is therefore crucial to ensure that the strategy employed is the most effective that can be devised to achieve those ends, irrespective of the scale of operation. In her work, Clare Hinrichs (2003) distinguishes between 'defensive localisation' and what she terms 'diversity receptive' localisation, arguing that defensive localisation is intent on constructing local places that are in some way bounded and defended from national and global agri-food systems. The focus is on 'traditional' values as a reaction to globalisation and the result can be a regressive and exclusionary politics. 'Diversity receptive localisation', on the other hand, Hinrichs (2003) has described as having boundaries that are more permeable and less like

barricades. Within this framework, local places are seen as being embedded within wider networks and "relational and open to change" (Hinrichs, 2003, p. 37), which moves towards building a reflexive politics that critically assesses the roles that local places play in extra-local networks (Harris, 2010, p. 363). Within the context of food security and systems of provision, defensive localisation can be associated with self-sufficiency and an introspective vision of place, irrespective of the wider practicalities and implications of this approach. Diversity-receptive localisation, on the other hand, can be equated with seeing the local dimension of food provision as part of a wider, global system. In this respect, the strategy for achieving a particular end (e.g. food security within the UK) may recognise the role that local food systems can play in this process, but will not simply target the local scale for its own sake.

The UK Government's current approach to national food security is framed by "an overarching commitment to...international trade" (Barling et al., 2010, p. 75). Within the UK, this can be directly related to the establishment's 'flat key' response of *resilience* within the UK's food supply systems, most notably in having a variety of sources of food supply and ensuring that international trade relations continue to function properly (in relation to the risks highlighted in Table 2, for example). This relates directly to Mooney and Hunt's third frame, which is predicated on the notion of risk and how food security is essentially about the management of risk. Within this framing, food security is avowedly not equated with self-sufficiency, with the contribution of local food systems seen to be minimal, except perhaps in terms of changing the aspirations of consumers, principally because of the relatively small quantities involved. Indeed, in the majority of UK food security policy documents, local food systems are hardly mentioned.

Nevertheless, in considering the role of local food as part of a move towards more sustainable food systems and greater food security within the UK, it is instructive to recall how local food has in the past been used to respond to acute food security issues, in quantitative terms. At a global level, the most high profile example is Cuba's response to the breakup of the former USSR, which was celebrated in the 2006 film *The Power of Community: how Cuba Survived*

Peak Oil. Without Soviet aid Cuba needed to find another way to help ensure its food security, which it did through converting "the nation's agricultural sector from high input agriculture to low input, self-reliant farming practices" (Wright, 2009, p. 5). At a UK level, the Ministry of Agriculture's "Dig for Victory" campaign, launched one month into the Second World War in 1939, called on every man and woman in Britain to keep an allotment. It also saw downland being ploughed up, people digging up their flower gardens to produce vegetables, and municipal parks and roadside verges being used to grow food in response to the food shortages caused by the German U-Boat blockades (Lowe and Liddon, 2009).

The above examples are often cited as powerful polemical symbols of what can be achieved through localising food supplies, when faced with a hiatus in the global food supply system. Yet, these approaches are in danger of falling into the 'local trap': they are avowedly insular in perspective, as well as failing to adequately deal with the complex set of issues that threaten contemporary food security in the UK. It is clear from a review of the literature that there are strong arguments for questioning the value of local food, simply on the basis that it has been produced at a local scale. Likewise, Defra (2006) stress that local scale food systems are not immune from risk and are also prone to disruption, not least because in many cases they are dependent on inputs (such as soya-based food products, fuel and fertilisers) that are not available locally. In addition, a large proportion of local food is now sold through corporate retailers (who epitomise the global scale of operation), notwithstanding the role of local retail outlets such as farmers' markets, farm shops and local food hubs. These scalar tensions resonate with the work of Ilbery and Maye (2006, p. 355), who argue that it is difficult to maintain a binary distinction between local and global, making it more appropriate to think in terms of "hybrid food spaces" or, within this context, of permeability between action frames.

In reality, it would folly to suggest that local food can make significant contributions to overall *production* in quantitative terms, but equally many argue that UK food security is about more than this. In this respect, advocates of local food systems are unequivocal in arguing that they

have an important part to play in ensuring food security and resilience within the UK's food supplies. Nevertheless, for their significance to be acknowledged, the notion of food security needs to focus more on the micro-level and the needs of communities, households and individuals (rather than simply at a national level), and to recognise those who might be facing food poverty (MacMillan and Dowler, 2011). In so doing, it can then encompass more than simply access, availability and affordability, including also the social and cultural acceptability of certain types of food, as well as education about the nutritional value of food, thereby helping to foster social inclusion and indeed social justice (Dowler et al., 2001; SDC, 2011). This highlights the relevance of Mooney and Hunt's first frame, which is associated with hunger and malnutrition, as well as their second frame, which is concerned with food security at a community level. The approach of those advocating local food is symptomatic of a 'sharp key' response to the production and supply of food, intent on focussing on the local scale and the needs of individuals, households and communities, who may be excluded from the existing predominant focus on the national level.

Conceived of in these terms, there is a clear boundary between the sharp key response of those interested in developing localised food systems, and the establishment's flat key response of ensuring resilience through recourse to world markets. However, in order to understand the contribution local food systems might make to the UK's food security in the 21st century, the material reviewed here suggests it is necessary to avoid framing approaches to food security in such oppositional and bounded terms. Such static frames fail to reflect the dynamic and transitional qualities of particular production systems. It leaves local food systems in something of a food policy cul-de-sac, in danger of being sidelined or largely ignored in debates about food security. Indeed, Mooney and Hunt (2009) themselves acknowledge that the dichotomous quality of sharp and flat keys is problematic. As such, they suggest the analogy be treated as suggestive of tendencies, with frames being viewed as 'sharpened' and 'flattened' in order to maintain the dynamic quality of framing activity. Callon's (1998, p. 252) conceptualisation of framing relates to Mooney and Hunt (2009) in this respect, arguing, in contrast to Goffman

(1974), that overflowing is the rule and that framing, if present at all, is a rare and expensive outcome:

> "…instead of regarding framing as something that happens of itself, and overflows as a kind of accident which must be put right, overflows are the rule and framing is a fragile, artificial result based upon substantial investment".

This interpretation does not deny that framing occurs, nor suggests that it is of no value, but instead exposes the partial, negotiated, dynamic and fluid nature of any framing process. Frames, as Mooney and Hunt (2009) make clear, are socio-political constructs, always contested and always in a state of becoming. This constructivist perspective suggests that approaches to food security, including those associated with local food systems, need to be understood as being permeable and liable to overflows and leakage between collective action frames. This notion of incompleteness and fragility in the formation of responses to a particular issue is highly pertinent to an examination of debates about the contribution that local foods can make to food security within the UK, allowing for the articulation of a more processed-based, relational and permeable vision of sustainable food security. Adopting this perspective offers a more transformative and progressive role for local food systems, both now and in the future. 'Local' in this relational framing is embedded within a larger national or world community, with local food not so much a discrete sharp key response within debates about food security; rather, it is one component of a mix of food supply systems, operating at a range of geographical scales, that taken together will help ensure food supplies at all levels, from the national level down to the individual. The critical point is to shift the emphasis away from fixed interpretations of scale and distinct action frames, towards thinking in terms of designing the most sustainable and appropriate food security policies.

6. Conclusions

This paper has argued that it is important to not overly focus on the scale involved to make food systems more secure, but instead to ensure that the strategy employed makes the most sustainable use of the resources available. However, for this to happen it will be necessary for food security to be framed in more holistic, inclusive, dynamic and diversity-receptive terms, which includes acknowledging the role local food systems can play in ensuring food security, especially in relation to individuals and communities who may currently be socially excluded in some way, or suffer from food poverty (see e.g. Dowler et al., 2001; MacMillan and Dowler, 2011). So far this repositioning is not reflected in government thinking. Local foods, in a UK context at least, do not figure much in recent policy discourse and long-term strategic planning, restricted mostly to short-term funding initiatives. The key challenge to achieving a more holistic vision is related to the power of the "current agri-industrial food paradigm" (Horlings and Marsden, 2011, p. 442), and the dominance of existing scientific and marketing framings that essentially view food security as a global issue with resilience best achieved through sustainable intensification, market liberalization and risk management.

It is also important to recognize that there are significant interests at stake here (such as corporate retailers, seed companies and commodity traders), which will fight to maintain the existing narrow interpretations of food security and the 'neoliberal truth regime' (Nally, 2011, p. 49), framing market-based, productivist solutions as 'structural preconditions' to ensure supplies. It is clear too that some local food activists will actively challenge and oppose this 'flat' key response in distinctly oppositional terms, as a critique of dominant institutional practices. Nevertheless, as Mooney and Hunt (Mooney and Hunt, 2009, p. 493) note, the desire for power to create change also drives alignment processes between frames and keys. In this case, it may involve the local food movement working with and forming alliances (shared keys) with social networks beyond their normal ambit (e.g. linking with the now burgeoning agro-ecology movement and advocates of food sovereignty), thereby demonstrating permeability between 'sharp' collective action frames, as well as the ability to form partnerships that align

local food systems with 'official' institutional responses. Opposition and contestation thus play an important role in challenging power differentials; the key point is not to view food security collective action frames as static entities, but as part of a mobile multi-organizational political field. When viewed in these terms, it suggests that the 'official' interpretation of UK food security can be progressively challenged to be more inclusive and to better accommodate social justice imperatives. In fact, there are signs that in some Government quarters there is an acceptance of the need to think beyond the current paradigm. For example, the final report of the Foresight[10] project (2011), *The Future of Food and Farming: Challenges and choices for global sustainability*, views production as something that *contributes towards* food security, emphasising the need to improve access and distribution, and to improve livelihoods within the food chain, just as much as the need to increase production capacity and productivity. As the report puts it: "The solution is not *just* to produce more food, or change diets, or eliminate waste. The potential threats are so great that they cannot be met by making changes piecemeal to parts of the food system" (*ibid.*, p. 12; original emphasis).

Future research needs to examine the way that food security is mobilised, and to what ends, in the ongoing development of the local food sector, including its intersection with other social movements and organisations. This includes producing more compelling empirical data on the contribution local food systems can make to UK food security, if the dominant paradigm (or flat key framing) is to be encouraged to give it greater recognition. At present, although there are a wide range of significant local food initiatives in the UK, as discussed, there are currently no comprehensive data sets on the quantity of food that is produced through local food systems, nor any coordinated overview of their contribution to improving social inclusion through the medium of food, or helping to overcome food poverty (notwithstanding current evaluations of programmes such as the Local Food Fund, Making Local Food Work and the Food for Life

[10] Foresight reports directly to the Government Chief Scientific Adviser and the Cabinet Office. It is a part of the Government Office for Science within the Department for Business, Innovation & Skills. http://www.bis.gov.uk/foresight

Partnership[11]). It also needs to focus on how local food systems can be coordinated with national and international food systems, rather than envisaging the two systems as being mutually exclusive and oppositional.

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[11] (http://www.localfoodgrants.org/); (http://www.makinglocalfoodwork.co.uk/about/index.cfm); (http://www.foodforlife.org.uk/)

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