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**Jones, Stephen, Krzywoszynska, Anna and Maye, Damian  
ORCID logoORCID: <https://orcid.org/0000-0002-4459-6630>  
(2022) Resilience and transformation: lessons from the UK  
local food sector in the COVID-19 pandemic. *Geographical  
Journal*, 188 (2). pp. 209-222. doi:10.1111/geoj.12428**

Official URL: <https://doi.org/10.1111/geoj.12428>  
DOI: <http://dx.doi.org/10.1111/geoj.12428>  
EPrint URI: <https://eprints.glos.ac.uk/id/eprint/10492>

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## ARTICLE

# Resilience and transformation: Lessons from the UK local food sector in the COVID-19 pandemic

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## Funding information

Economic and Social Research Council, Grant/Award Number: ES/V004107/1

## Abstract

How to ensure resilience of food systems is a key concern in the wake of the COVID-19 pandemic. Notably, there is a renewed interest in the role of local food systems from policy, academic, and third-sector actors, who see those systems as a source of “bounce-back” resilience, supporting existing structures, but also as sources of “bounce-forward” transformative resilience. Both perspectives move debates around local food systems beyond the dominant focus on social exclusion (defensive localism). The capacity of the local food sector to provide either form of resilience depends on the resilience of the local food actors themselves, which has been little investigated to date. This paper addresses this important gap in scholarship through an investigation of the “bounce-back” and the “bounce-forward” resilience of local food actors in the UK during the first wave of the COVID-19 pandemic. We advance resilience scholarship by developing an analytical framework which combines attention to resilience characteristics (“what is there”) and to the systemic forces that enable and constrain their development (“how things work”). Attention to social capital, we argue, is crucial to understanding transformative resilience. We present rich qualitative data to illustrate the multi-faceted impacts of the COVID-19 pandemic on local food system actors in the UK. This is complemented with a review of relevant policy and third-sector publications which contextualise local food system efforts. We conclude that while strong bonding and bridging capitals support the local food sector’s persistence and adaptability, a lack of linking social capital, most visible as a “middle-class image problem,” is preventing it from achieving a transformative role. We argue that the local food sector needs to form alliances which would move it beyond a single-issue topic, and articulate local food as part of place-centred community resilience strategies that foster social capacities.

## KEYWORDS

COVID-19, local food, resilience, social capital, UK

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# 1 | INTRODUCTION

The COVID-19 pandemic is prompting a rethink in a range of societal domains. It is widely seen as a crisis: an unprecedented, sudden and unexpected event with profound impacts. Food systems were amongst the first sectors to be notably affected, and in the UK empty supermarket shelves are one of the iconic images of the pandemic experience.

Understanding the resilience of food systems to this crisis, that is their continued ability to provide sufficient, appropriate and accessible food to all (Tendall et al., 2015), is central to learning from the pandemic. Immediate analyses focused primarily on global and just-in-time supply chains, arguing they have shown high levels of resilience, adapting well after an initial disturbance (Hobbs, 2020; Moran et al., 2020; OECD, 2020). More systemic analyses have, however, drawn attention to how the pandemic heightened pre-existing food system inequalities, notably food poverty, food insecurity, and food injustice (Barker & Russell, 2020; Dombroski et al., 2020; Power et al., 2020; Sanderson Bellamy et al., 2021). Considering the well-documented negative social and ecological effects of dominant food systems (De Schutter, 2017; FAO et al., 2020; Foley et al., 2005), the successful bounce-back of the supply chains has indeed been interpreted as undesirable resilience (Zollet et al., 2021), signalling a lock-in into unsustainable mechanisms and structures (Oliver et al., 2018). Consequently, while the full effects of the pandemic on food systems around the world are only starting to be understood (Béné et al., 2021), the need to improve their resilience is widely recognised.

Local food systems (LFS) are attracting particular attention in this pandemic-related resilience debate. Diversity is a well-evidenced element of resilience in food systems and beyond (Eriksen et al., 2010; Hodbod & Eakin, 2015; Moser et al., 2019), and LFS can enhance the diversity of markets, livelihoods and agro-ecologies. This lack of diversity is particularly acute in the UK, with 97% of trade in food taking place through just 10 supermarkets in January 2020 (Dimbleby, 2020), and whose dependence on the global food trade is seen as a vulnerability from a resilience perspective (Garnett et al., 2020; The Global Food Security Programme, 2020). Consequently, even those analyses that praise the resilience of the current food sector call for greater diversification through the strengthening of local food provision and a greater re-territorialisation (Bakalis et al., 2020; HLPE, 2020).

Importantly, the pandemic brought to light the crucial contributions of local food systems beyond market diversification. A growing number of papers and reports indicate that LFS were crucial in ensuring the resilience of communities, providing food access when centralised distribution fell short, and organising and delivering agile emergency food support, often to those community members who were overlooked by centralised responses (Béné, 2020; Dombroski et al., 2020; Griffin et al., 2020; Sanderson Bellamy et al., 2021; Wheeler et al., 2020; Zollet et al., 2021).

Local food sectors' market diversification and emergency food provision enhance the resilience of current structures. However, some have stressed that, post-pandemic, LFS should go further, and become the engine of transformative resilience for the food system as a whole. In this perspective, LFS should not just be seen as an element in "bouncing back," but as a resource for "bouncing forward" into a more socially and ecologically just and beneficial food system (Altieri & Nicholls, 2020; Clapp & Moseley, 2020; Sanderson Bellamy et al., 2021). These calls signal an important move in debates around local food beyond critiques of defensive localism (Winter, 2003), and situate strengthening local food geographies (Kneafsey et al., 2021) as a contribution to social economies (Sonnino & Griggs-Trevarthen, 2013) and community resilience.

The capacity of the local food sector to provide food system resilience in times of crisis and beyond is therefore an issue of major public and political interest. However, this capacity depends on the resilience of the local food actors (LFAs) themselves. We know from these previous relocalisation studies that LFAs provide social vectors to build community resilience. However, appreciating why social capacities are important properties for resilience has not been recognised enough in local food scholarship. The pandemic has revealed that we need to better understand social capital in local food systems as an enabling asset for food system resilience at all scales. While there has been some investigation of the contribution of local food systems to community resilience (Dombroski et al., 2020; Sonnino & Griggs-Trevarthen, 2013), insights into resilience of LFAs themselves, be they businesses or community organisations, are a new area of enquiry particularly prompted by the COVID-19 pandemic (Benedek et al., 2021; Paganini et al., 2020; Tiftonell et al., 2021). These analyses have, to date, focused on assessing local food system resilience as a bouncing-back mechanism. In this paper, we take the debates further by also investigating the bounce-forward potential of local food systems, i.e., their transformative resilience capacity.

To do this, we develop an analytical framework for assessing LFAs' resilience, which combines attention to resilience characteristics as well as the systemic forces that enable and constrain their development. In particular, we argue for the relevance of combining analysis of resilience characteristics with analysis of social capital to understand

the transformative capacity of local food system actors, i.e., their ability not only to persist, but to instigate positive change in response to crisis events. We then use this analytical framework to understand the resilience of local food system actors in the UK drawing on 31 in-depth interviews with local food system actors and local food system experts conducted in early 2020, and an analysis of 26 key policies and third-sector reports. In the concluding sections, we reflect on the lessons from this food system case study for ambitions around resilience transformations in the post-pandemic era.

## 2 | THEORETICAL FRAMEWORK: UNDERSTANDING THE INTERACTIONS BETWEEN RESILIENCE AND SOCIAL CAPITAL IN FOOD SYSTEMS

The concept of resilience is rooted in ecology, where it is defined as the capacity of a system to absorb shocks whilst still maintaining function (Folke, 2006). Ecological resilience is characterised by persistence: the ability of the system to return to its original state following a disturbance. This understanding of resilience has been further developed in relation to social systems by socio-ecological (Folke, 2006) and social resilience (Adger, 2000) approaches. Socio-ecological approaches examine the combined social and ecological drivers of resilience, whilst social resilience approaches, such as the one taken in this paper, focus more specifically on understanding the response of human systems to shocks and disturbances (Wilson, 2012). Importantly, social studies of resilience have broadened the neutral ecological concept of resilience, which was narrowly concerned with the characteristic of persistence, to also include the capacity for adaptation and transformation (Bernier & Meinzen-Dick, 2014; Folke et al., 2010; Lyon, 2014). In these normative understandings of resilience, human systems should not only be able to “bounce back” following a shock, but further to learn from the experience, adapt and “bounce forward” to a more desirable state (Bernier & Meinzen-Dick, 2014; Cutter et al., 2008; Moser et al., 2019).

Consequently, persistence, adaptability and transformability (PAT) are the three central aspects of social resilience which are examined in this article. Persistence, or coping capacity (Bernier & Meinzen-Dick, 2014), is the ability to withstand impact and revert to an original state after the event. Adaptability is the capacity to adjust in response to shocks and disturbances and continue developing, but within the limits of the current system or development path (Folke et al., 2010; Lyon, 2014). Transformability is the capacity to bring about a radical shift which fundamentally changes the wider system in beneficial ways (Bernier & Meinzen-Dick, 2014; Folke et al., 2010; Lyon, 2014).

In utilising a normative social resilience approach, major disruptions and shocks (like COVID-19) are seen as an opportunity for positive adaptation and transformation (Pereira et al., 2020). An inability to capitalise on such an opportunity is indicative of a lack of resilience, or vulnerability (Folke et al., 2010; Wilson, 2012). However, systemic forces (such as policy) or socio-economic characteristics (such as too narrow a focus on persistence) can inhibit this change and development (Bernier & Meinzen-Dick, 2014) or completely prevent it (“rigidity trap,” Hodbod & Eakin, 2015). Thus, human geographers have argued that studying social resilience necessitates recognition of the role of power, agency, culture, politics, economics, and other social factors in encouraging or preventing the PAT needed for resilience (Wilson, 2018).

In this paper we attend to these systemic dimensions by examining the resilience of LFAs in the UK during the first wave of COVID-19 through the lens of social capital. The relationship between resilience and social capital was established from the outset of the social resilience approach (Adger, 2000) and the concept of social capital has subsequently been employed to assess the resilience of communities (Bernier & Meinzen-Dick, 2014; Wilson, 2012) and supply chains (Johnson et al., 2013). We understand social capital as an “umbrella term that incorporates not only processes of social interaction, but also cultural and political capital” (Wilson, 2012, p. 1223). This understanding also includes, and places a particular emphasis on, the importance of social capital-building mechanisms as relational properties: bonding (cohesion within a group), bridging (ties to other groups) and linking (vertical relationships and ability to influence policy) capitals (Bernier & Meinzen-Dick, 2014; Wilson, 2012). This relational aspect is important because, as Sonnino and Griggs-Trevarthen (2013) observe, when the dominant system hits a period of crisis, interest in social models of economy re-emerges (in search of alternative visions). What is less attended to, however, are the experiences and actions of those in embedded forms of local economy as they work through the crisis and wider policy environment. To address this gap, in this paper we examine the interplay between resilience and social capital during the pandemic from the perspective of local food actors in the UK.

### 3 | METHODOLOGY

To understand how the persistence, adaptability and transformability aspects of social resilience were achieved during the pandemic, we employed a multi-scale methodology in order to provide both deep understanding and account for the role of power in resilience (Adger, 2000; Wilson, 2018). The methodology included 31 in-depth interviews with a broad range of LFAs, and a document analysis of key policy-level and third-sector reports. The methodology was co-designed with an expert advisory board, made up of representatives of key organisations involved in the local food sector.<sup>1</sup>

There is ongoing debate about what and who constitutes the “local” food system. Most of the research on LFS operates with a geographical and supply chain-based understanding of “the local,” and focuses on such entities as farmers’ markets, community supported agriculture, box schemes, consumer co-ops, producer co-ops, grow your own, local shops, farm shops and public procurement. In this project, we worked with the advisory board to revise the framings of “local” in current scholarly debate in the light of socio-economic changes in the UK in recent years, especially growing food poverty, and the rise of local food hubs, networks and partnerships (Goodman et al., 2012; Kneafsey et al., 2021). We co-produced an up-to-date list of sub-sectors within what these expert participants perceived to be the UK’s local food system. We further elicited from them an initial set of case study contacts in these sectors for further snowballing. We thus used a purposive sampling strategy to recruit and interview 31 LFAs based in England and Scotland, representing box schemes, local independent shops, community supported agriculture projects, grow your own schemes, farm shops, farm gate sales, local markets, farmers’ markets, procurement schemes, online direct sales platforms, community gardens, food hubs, food partnerships, local food research, and experts from the local food sector.

The interviews were conducted online in July and November 2020, lasted between 1 hour and 90 minutes and were semi-structured. The interviews focused on the LFAs’ experiences in the first wave of COVID-19, explicitly investigating the presence of characteristics, capabilities or attributes previously identified in the literature on food systems resilience (Hodbod & Eakin, 2015; Jüttner & Maklan, 2011; Moser et al., 2019; Tendall et al., 2015). In line with the analytical approach explained in the above sections, our investigation focused on: flexibility (the ability to adapt to and exploit shocks and disturbances); rapidity (or velocity; the speed at which changes can be implemented); redundancy (having spare resources that can be drawn upon during a disturbance); collaboration (the ability to connect with others and work effectively together); diversity (or multifunctionality; having a broad range of alternatives to reduce vulnerability to the loss of specific elements); and learning capacity (the ability to draw on previous experiences of shocks, or the knowledge of others, and apply this to a new situation). In addition to these, the interviews investigated the role of social capital, both as a resilience characteristic in its own right, and as enabling some of these other characteristics. The interview recordings were transcribed and thematically coded in NVivo.

The additional document analysis involved a thematic analysis of 26 key reports in order to understand how the local food sector was approached in policy, and in debates within the third sector. In order to ensure that the documents analysed were pertinent to the local food system, the criteria for inclusion of the reports were co-produced with the advisory board. The final selection included all recent public reports and policy statements (published 2019–2021) that: concerned either specifically local food, or the current state of the UK food system more broadly; examined how the UK food system responded to COVID-19; and/or discussed the future of the UK food system. The focus was on documents which take a UK-wide perspective or aim at achieving UK-wide impact (such as the National Food Strategy for England, which included relationships with devolved administrations and working with food strategy teams from devolved authorities).

### 4 | COVID-19 IMPACTS ON LFAS AND RESILIENCE CHARACTERISTICS

The impact of the COVID-19 pandemic on the local food sector has been both profound and varied. Box schemes, online direct sales, farm shops, food hubs and local independent shops experienced a surge in demand following the start of lockdown in March 2020 (Griffin et al., 2020; Wheeler et al., 2020). Local food partnerships also saw a large increase in demand on their services in order to address increasing food insecurity. In contrast, LFAs that supplied schools, restaurants and the hospitality sector were negatively impacted by the forced closure of these sectors. Farmers’ markets as well as local indoor and outdoor markets were particularly negatively affected. Community gardens in open public spaces were also forced to close and events such as food shows, fairs and festivals were cancelled, which was a huge loss for both the operators and local food traders that relied upon them. The diversity of impacts that the first wave of COVID-19 had on LFAs was strongly influenced by the government guidance and lockdown policies. However, resilience characteristics also played an important role in shaping LFAs’ experience of the early pandemic.



## 4.1 | Flexibility and rapidity

Certain LFAs demonstrated strong resilience to the impacts of the first wave of COVID-19, both in terms of persistence (coping capacity) and, most strikingly, in their adaptability. This adaptability meant that LFAs, such as box schemes, food hubs, farm and other independent shops, were able to not just cope with, but take advantage of the situation by growing their customer base and increasing turnover. These LFAs clearly demonstrated the resilience characteristics of flexibility and rapidity. They were able to make swift changes to the ways they operated, often shifting substantially to online delivery.

Certain LFAs were also flexible in the way that they utilised their workforces and the space available to them. This involved allocating new employees and additional workspace to delivery services, or by re-allocating existing human and material resources. By working longer hours, changing shift patterns, and allocating staff to teams (or bubbles), they were able to meet the demand and comply with government guidance.

LFAs also displayed flexibility in establishing connections with new suppliers and quickly adapting their supply chains. There was often a need for these new supply chains on both sides, as vendors were faced with unprecedented demand, whilst many producers sought to re-route produce originally intended for the hospitality industry.

Not only flexibility but also the speed, or rapidity, with which adaptations were made was a crucial part of achieving resilience through adaptability. And it was this speed at which LFAs were able to implement changes that particularly impressed our interviewees, challenging preconceptions of the local food sector as “not really business-oriented”:

So an awful lot of the guys that I worked with prior to COVID, a lot of them were slightly old fashioned in their approach to things, people handled cash, they didn't have an online presence (...). I was absolutely amazed at how many of those guys just acted so quickly. They went online, they had contactless before you could say “how much is that,” the payment card machines, they'd set up delivery systems. And so an awful lot of them adapted really, really quickly. (Farmers' Market)

## 4.2 | Contribution of social capital

These characteristics of flexibility and rapidity, our analysis revealed, were often enabled by the LFAs' social capital, which enabled them to be resilient by persisting and adapting to the shock of COVID-19. Well-developed bonding social capital, which describes the strength of within-group cohesion (Bernier & Meinzen-Dick, 2014), was key in enabling the rapidity and flexibility displayed by the LFAs. The interviewees reflected that as LFAs were made up of relatively small but “tight” teams (Local Independent Shop), with a strong sense of group identity and goals, they were well placed to “really pull together” (Food Hub) to implement changes quickly. Bonding capital has also been evident through the use of group video calls, Facebook and WhatsApp groups by LFAs involved in the Grow Your Own and Community Garden sectors. These online groups were used as a way to share experiences, ask questions and maintain some of the social aspects of these groups that had been largely lost because of social distancing.

So we have a ... Facebook group, so that has gone up in membership, I've no idea but about at least 25% over the last few months, you know it's grown a lot, and the traffic on it has grown a lot. So the community of people growing has really sort of tried to self-support ... (Local Food Partnership)

Bridging capital, the ability to maintain and build relationships with other people and groups (Bernier & Meinzen-Dick, 2014), was similarly important in allowing LFAs to be adaptable and persistent. Bridging capital has many parallels with the resilience characteristic of collaboration (Jüttner & Maklan, 2011) and it was evident in the way that the LFAs described having “close” (Box Scheme) or “strong” (Local Independent Shop) relationships with their existing suppliers, which meant they were able to rely upon each other during this time of uncertainty. Beyond ensuring pre-existing supply chains, this strong bridging capital also meant that LFAs were capable of adapting by establishing new suppliers. These adaptations often involved some flexibility in regard to the LFAs' values or priorities, such as connecting with suppliers who were not organic, or were based further away than the LFAs would have ideally preferred. By being flexible on these values, LFAs demonstrated the bridging capital required to establish relationships with new suppliers and meet their increased demand for produce.

We umm'd and arhh'd a lot about this ... because everything about what we do is local, seasonal, etc., but we actually had such a demand from people who didn't want to go to supermarkets that we put together from a local wholesaler a bag of fruit. So this was, you know apples, pears, not necessarily local obviously or seasonal but it was all based around nutrition. (Food Hub)

Beyond supply chains, the importance of LFAs' well-developed bridging social capital in providing resilience was also evident in the way they linked with one another to enable learning capacity and provide moral support. Local food organisations such as Sustain, Open Food Network and Sustainable Food Places were noted for facilitating webinars providing useful guidance on how to adapt to the challenges of COVID-19. Similarly, farm shop owners used a Facebook group set up by the Farm Retail Association to connect and share with one another. Beyond information exchange, these forums provided the opportunity for LFAs to share their stories, experiences, successes and struggles with one another. As well as learning from one another how to successfully adapt to the impacts of COVID-19, this example of bridging capital provided an important source of moral support and reassurance that helped LFAs to cope with an incredibly demanding and stressful time.

A further way in which LFAs were able to use their strong bridging capital was recruiting new volunteers and staff. LFAs often had to deal with their regular staff and volunteers having to self-isolate because they were shielding or had come into contact with the disease. However, for many LFAs, the negative impacts of this were minimised because they were able to take advantage of an influx of new volunteers due to the furlough scheme or university closures.

When COVID came along and they were put on to furlough, or they couldn't necessarily stay where they were so they often came back home, to their parents' home or whatever. So we had a really large number of people who were very bright, active, keen people who were being paid something or other through the furlough but were otherwise unoccupied and not allowed to earn. So we suddenly had actually rather more people who could volunteer than we ever would have imagined. (Food Hub)

Similarly, this strong bridging capital meant that a number of LFAs we spoke to were granted temporary permission to use extra space (such as car parks or town halls) that were not being used by other local businesses or groups because of lockdown restrictions. Overall, the strong bridging and bonding capitals of LFAs meant that they were able to establish connections with new people, businesses and groups, allowing them to be persistent and adaptable. This further enabled LFAs to possess the resilience characteristics such as flexibility, rapidity, learning capacity and collaboration. However, the resilience of LFAs also depended on other characteristics that did not specifically relate to their strong social capital.

### 4.3 | Diversity

Diversity has been seen as key for increasing systemic resilience as the broader range of alternatives reduces vulnerability to the loss of specific elements (Hodbod & Eakin, 2015). We indicate, however, that resilience through diversity (or multifunctionality) applies equally at a smaller scale, as the LFAs who demonstrated the most resilience often had diverse and multi-faceted operations:

We obviously lost quite a bit of revenue through our cafes but that was really more than made up through the extra demand in our shops. (Local Independent Shop)

Closure of hospitality, closure of offices was very significant for the [business to business] food hub. Meanwhile as you can expect on the other side, the veg boxes just massively exploded, the waiting list was huge, like 100s and 100s of people long. ... [W]e had to scale up and there was essentially a 50% increase, so going from about 800 boxes to 1,200 a week, peaking around 1,300. (Food Hub and Box Scheme)

Diversified LFAs could cope with one aspect of their business (such as a café, restaurant, or events) experiencing a downturn and focus instead on other parts of the business that were allowed to operate and were experiencing increased demand, such as food box schemes, online delivery services or shops. Similarly, market traders that already had a pre-existing online presence were better placed to adapt if their markets were forced to close by expanding that aspect of the business. This diversity is a further resilience characteristic that has allowed LFAs to adapt and even thrive during the first wave of the pandemic.

## 4.4 | Redundancy

Another key factor that has enabled the adaptability of LFAs has been their capacity to scale up operations in the face of increased demand. This was determined by their amount of redundancy (slack or unused resource, Johnson et al., 2013). In most of the cases we examined, LFAs had the capacity to increase the scale of their operations (at least to some extent) and so took advantage of the surge in demand:

So in the space of 2 weeks we went from 370 orders to 550 and it only stopped at 550 because we turned off the website and prevented new people from signing up. (Box Scheme)

As is indicated in the above quote, there were limits to this capacity for increasing the scale of operations. In some cases, as will be explored in the following section, LFAs were already working at capacity before COVID-19, and so had no redundancy they could use to adapt and grow.

## 5 | EXAMPLES OF LFAS' VULNERABILITY AND ITS CAUSES

The interaction of resilience characteristics and social capital discussed in the previous section meant that certain LFAs were able to show resilience in terms of their adaptability and persistence. However, we also found instances where certain LFAs had shown vulnerabilities to the impacts of COVID-19 through a lack of adaptability (rigidity) or persistence (coping capacity). Our analysis found that these vulnerabilities were the result of a lack of certain resilience characteristics, which were frequently linked with weakly developed aspects of social capital.

### 5.1 | Resilience characteristics that were lacking

The amount of redundancy an LFA possessed strongly informed their capacity to adapt, expand and fully take advantage of the surge in demand for local food. An extreme example of this came from a community supported agriculture (CSA) scheme, which was unable to take on any new members as it was already working at their full capacity before COVID-19. More commonly, LFAs did have some redundancy available, but were limited in the extent to which they could expand. Box schemes, for instance, often had to place caps on the number of orders and customers because of the space and workforce capacity, including limitations due to social distancing requirements:

We took on an extra 400 but it would have been great if we could have made the most of that situation and took on more new customers ... We were at capacity in the warehouse and especially with the social distancing measures even after doing split shifts and that sort of thing, it was just too much of an ask. (Box Scheme)

Another resilience characteristic which was lacking for certain LFAs was diversity. Market traders, farmers' markets and farm shops that did not have a pre-established online business struggled to set one up from scratch at short notice. Diversity of supply chains was also key. LFAs that produced fresh vegetables, or exclusively sourced UK grown vegetables, faced the problem that the start of national lockdown in March 2020, and the linked surge in demand, coincided with the annual "hungry gap": the time when autumn and winter crops have already been consumed, but spring crops are not yet available. Thus, certain LFAs faced increased demand at the time when UK vegetable producers were least able to meet it. Whilst some LFAs were able to source food from overseas, others were less willing to be flexible in their "local" values. This problem was further exacerbated by supermarkets and other large-scale buyers who, in response to their own supply issues, were approaching local producers and "hoovering up" remaining produce (Local Independent Shop) in an unusual competition with the LFAs.

I think the processing plants were very anxious and were finding it very difficult to actually produce to the levels that the supermarkets needed ... [They] wanted everything now and they didn't mind paying more, and we just didn't deal with them, you know we just said "no, sorry" ... there were three of them that spring to mind that were phoning and just being quite aggressive about it. (Fish Box)



## 5.2 | Problems of lacking social capital

Along with the lack of redundancy and diversity, the resilience of LFAs was also limited in some instances by aspects of their social capital. One such aspect was LFAs' particular brand of cultural capital: their image problem. Overall, LFAs suffered due to local food economies being perceived as "a leisure pursuit as opposed to essential retail" (Farm Shop), "middle class" (Community Gardens), and "hobbyist" (Local Food Partnership). This seems to have been a particular issue for farmers' markets during lockdown, who also experienced a backlash on social media:

When I posted [an advert for an upcoming farmers' market] in the local community group there was a few people, mainly people who haven't attended the market, who were quite negative and quite, you know "this isn't essential and you shouldn't be doing this" ... and there was a few people saying like "oh why, because you're artisan beer and sausages" and blah, blah, blah "that's not essential." (Farmers' Market)

There was also an apparent lack of support from local and central government for LFAs. Several of the interviewees commented on a lack of guidance and support from local authorities. In some cases, local authorities indeed placed direct restrictions on LFAs' ability to operate, such as not allowing farmers' markets to remain open. LFAs also found support to be lacking from central government, as they were often ineligible for COVID-19-linked business grants and financing schemes. In contrast, the centralised food system was seen as a major recipient of government support at all levels:

And of course during the height of the pandemic the government was helping the supermarkets – I mean they had to help people get food – but what they were doing was helping the supermarkets and offering them all kinds of tax breaks and things, which weren't being offered to the smaller fruit and veg shop like here in town. (CSA)

This lack of systemic support for LFAs at a time of acute crisis compounded the physical and psychological toll of responding to the COVID-19 pandemic. The sustained efforts of LFAs to work at capacity (and in many cases push beyond it by working longer hours) was widely reported by interviewees (see also Sanderson Bellamy et al., 2021). Those LFAs that saw a sudden increase in demand described their experience as being "traumatic," "overwhelming," "exhausting," "stressful," "a baptism of fire."

There were 4 of us [staff members] and 2 of the 4 said that they felt they should self-isolate for various reasons, so it was basically left to me and one other guy to be packing fish for [everyone] ... The phone didn't stop ringing and you picked up the phone and there was often very lovely old vulnerable people just so happy and grateful to be speaking to a person ... And it was just like if I don't put the phone down on you now I haven't got the time to physically put the fish in a box that is going to a customer ... You never had enough time in the day to do what you needed to do ... I mean I had nose-bleeds and was fainting and all that kind of stuff, I was really exhausted you know. (Fish Box)

Equally, those LFAs that saw a downturn during the first wave, such as farmers' markets, had to cope with the distress of seeing their livelihoods and businesses suddenly becoming unprofitable and facing the prospect of closure:

We normally get about 1,500 people through the door and I think that day we saw a couple of hundred people. So I can remember very clearly just standing outside the hall just going "I'm going to have to go home," you know just in bits ... we're standing here going like "God it's dead, there's no-one here." So it was really, really difficult, and that was the last market we ran. (Farmers' Market)

## 6 | FROM RESILIENCE TO TRANSFORMATION?

So far, our discussion has focused on the persistence and adaptability aspects of LFAs' resilience in the first wave of COVID-19. In this final section we turn our attention to the third aspect, transformability: the capacity to bring about a radical shift which fundamentally changes the wider system. COVID-19 presents an opportunity for positive transformation of the UK food system (Sanderson Bellamy et al., 2021), where LFAs could take a more prominent role and the system become more diverse and resilient as a result. The adaptive capacity of UK LFAs discussed in the previous section

demonstrates the potential for LFAs to have such a transformative effect. However, there is little evidence of such a shift so far (Mitchell et al., 2020).

## 6.1 | Poorly developed aspects of social capital

We suggest that two sets of factors are playing a role in preventing LFAs from bringing about a transformation of the wider UK food system. The first concerns themes discussed in the previous section on vulnerabilities, relating to poorly developed aspects of LFAs' social capital. Whilst a "middle-class" image caused problems for certain LFAs such as farmers' markets, this also has broader consequences, preventing LFAs from being transformative on an ongoing basis. It seems that LFAs can have the "wrong kind" of social capital to enter mainstream policy debates, which undermines their capacity for political action:

It's really complicated in Bristol because obviously we have a Mayor and he is great but he's entirely, and understandably, equalities focused ... And there is a little bit of a sort of foody bubble in Bristol that's quite white and middle class, and he's quite anti that white middle class thing. And he tends to put anybody that's talking about food in that bubble. (Community Gardens)

Other research on the resilience of local-level organisations has pointed to poorly developed linking social capital as producing such a lack of transformative capacity (Bernier & Meinzen-Dick, 2014). Strong linking social capital would be characterised by vertical relationships and the ability to influence policy. The "image problem" LFAs suffer from seems to preclude the building of such linking capital. Addressing this perception of being a niche middle-class hobby and showcasing the significant societal and food security contribution of LFAs then emerges as a key area for further action.

## 6.2 | Systemic factors

The second set of factors that prevents LFAs from being transformative relates to systemic factors and power structures beyond their immediate control. "Transformation involves breaking down the resilience of the old and building the resilience of the new" (Folke et al., 2010, p. 7) and this requires transformative governance (Sanderson Bellamy et al., 2021). But as yet there have been no signs of a necessary food governance shift. Indeed, the COVID-19 pandemic has re-entrenched the government's reliance on the centralised food system and big retailers (Mitchell et al., 2020; Sanderson Bellamy et al., 2021).

The documentary analysis component revealed systemic factors preventing the kind of transformation that might see LFAs take a larger role in the UK's food system. Whilst one UK Parliament research briefing paper (Llanos & Border, 2020) notes a more resilient UK food system could be achieved through greater diversity, and that this diversity could involve a greater role for local food, such consideration was lacking from the more prominent reports. For example, a serious consideration of the local food sector was not included in The National Food Strategy (Dimbleby, 2020, 2021), or the report by the Select Committee on Food, Poverty, Health, and the Environment (House of Lords, 2020). In the National Food Strategy (Dimbleby, 2021), procurement features as a key mechanism to allow smaller producers to access public food contracts, but there is no consideration of local food in the strategy's transformative ambitions. Notably, despite engaging extensively with the impacts of COVID-19 on the UK food system, these reports fail to mention the contributions to food security made by LFAs. No consideration is given to the prospect of moving towards a more territory-based food system in the future.

This limited consideration of the potential role of local food in the policy sphere is a significant obstacle preventing LFAs from being transformative. This is also indicative of a UK food system which is itself lacking PAT resilience and is stuck in a "rigidity trap" (Hodobod & Eakin, 2015; Mitchell et al., 2020). It is also important to recognise that food system transformation can often be driven by shocks and disturbances (Pereira et al., 2020), and that the first COVID-19 wave was certainly not the end of those. In the future, the UK food system will be faced with the challenges of subsequent waves of COVID-19, their associated political and socio-economic impacts, and the impacts of other disturbances such as climate change and Brexit. As devolved administrations publish their national strategies, greater emphasis may be given to LFA, given the influence of foundational economics in Welsh policy, for instance, and campaigns for a "good food nation bill" in Scotland. This turbulent and uncertain future presents an opportunity for LFAs to be transformative,

but concerted effort is required to address the weaknesses in LFAs' social capital and the systemic factors which have so far prevented this.

## 7 | CONCLUSIONS: LOCAL FOOD SYSTEMS AND TRANSFORMATIVE RESILIENCE

Existing food scholarship tells us that greater levels of diversity in the UK food system would provide improved food security resilience in times of crisis. However, the capacity of the local food sector to provide food security resilience depends on the resilience of the local food system actors (LFAs) themselves (cf. Hodbod & Eakin, 2015; Kirwan & Maye, 2013; Wilson, 2012). In order to examine the resilience of UK LFAs, this paper examined their persistence, adaptability and transformative capacity during the first wave of COVID-19. We found that the impacts of COVID-19 had been diverse, with some LFAs thriving whilst others struggled to survive. LFAs' resilience was influenced by their characteristics of persistence and adaptability, and aspects of social capital.

The COVID-19 pandemic has reinvigorated debates around the role for local food systems in the agri-food transition. The importance of ensuring resilience of food systems to shocks such as the pandemic has led some to call for greater diversification of markets, livelihoods, and agro-ecologies through a stronger (re)territorialisation of food chains (Bakalis et al., 2020; HLPE, 2020). In this perspective, local food systems are conceptualised primarily in relation to supply chains, and mobilised as tools for the maintenance of the status quo. For many analysts, however, this status quo is itself not resilient, or, rather, is a form of undesirable resilience — a continuation of a system which continues to produce and compound societal and ecological harms (Zollet et al., 2021). Local food systems, that is food systems characterised by a strong ecological and societal embeddedness, are, in contrast, starting to be seen as a source of transformative resilience for the post-pandemic era.

This renewed interest in local food systems in the wake of COVID-19 is significant. For many years, debates around local food systems in the Global North have been preoccupied with the ways in which even the most well-intended initiatives end up supporting exclusions and injustices of neoliberal food systems (Goodman et al., 2012), while those centred on the Global South have been preoccupied with the capacity of local food systems to meet nutritional and economic needs of farmers. New empirical data from across the world has shown, however, that during the COVID-19 pandemic local food systems contributed to food system resilience in a number of ways, including maintaining access to food during disruptions to mainstream food chains, and directly addressing food injustice and insecurity which the pandemic exacerbated (Béné et al., 2021; Dombroski et al., 2020; Nemes et al., 2021; Paganini et al., 2020; Zollet et al., 2021). As a result, across geographies, scholars are speaking up about the place of local food systems in transformative resilience of the food system as a whole (Altieri & Nicholls, 2020; Clapp & Moseley, 2020).

This shift in resilience debates from persistence to transformation, Darnhofer (2021) argues, requires shifting attention from cataloguing elements of resilience (“what is there”), to better understanding processes that enable resilience (“how things work”). In the context of local food systems, participation of LFAs in governance is seen as a crucial element in achieving transformative resilience (Clapp & Moseley, 2020; Paganini et al., 2020; Zollet et al., 2021). However, how to achieve this governance participation is not clear. In this paper we argued that such governance participation requires appropriate social capital which would enable LFAs to be recognised as legitimate participants in mainstream political debates. Our findings indicate that in the UK, and England in particular, both local food actors, and the local food sector as a whole, are lacking in this political (or linking) capital. The social capacities to instigate positive change and bounce forward is therefore inhibited by policy (as a systemic force). This lack of political capital has also meant that, in spite of a wave of optimism amongst local food systems' supporters (Dynamic Food Procurement, 2020; Soil Association, 2020a; Soil Association & Friends Provident Foundation, 2020; Sustain & RSPB, 2021), and alignment around the potential of public procurement innovation and local government (anchor institutes), these actors have so far been unable to use the shock of COVID-19 to drive a food system transformation. Systemic factors, such as the UK governments' privileging of large food retailers and the limited consideration of local food in the policy sphere continue to be significant barriers to LFAs' transformative capabilities.

To participate in existing governance regimes, the local food sector needs to enhance their political social capital. Hunt (2015) argues that this demands building more effective coalitions, and during the pandemic we observed significant activity among local food and the broader sustainable food movement campaign groups in this vein. Still, we find that political social capital needs to be further harnessed. What is most pressing is alliances that move local food beyond

a single-issue topic. This overcomes defensive localism autarky, articulating instead local food as *part of* place-centred community resilience strategies that foster social capacities. This also mobilises localism across multiple issues (climate change, biodiversity, wellbeing, etc.) to address systemic food system challenges. We see this happening already through local food partnerships and community food networks. These social capital building mechanisms have untapped potential to influence policy and unlock the transformative resilience capacity of local food systems.

## ACKNOWLEDGEMENTS

This work was funded by the Economic and Social Research Council, grant number ES/V004107/1. We would like to thank the members of our expert advisory board for their time and the invaluable contribution they made to this project: Tom Andrews, Soil Association, Sustainable Food Places; Jyoti Fernandes, Land Workers Alliance; Vicki Hird, Sustain; Tom Macmillan, Royal Agricultural University; Gary Mitchell, Social Farms & Gardens Wales and Open Food Network; Ben Raskin, Soil Association; Jenny Rose, Farm Retail Association; Natasha Soares, Better Food Traders; Nick Weir, Open Food Network; and Jimmy Woodrow, Pasture-fed Livestock Association.

## DATA AVAILABILITY STATEMENT

The data are available only on request due to privacy/ethical restrictions.

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## ENDNOTE

<sup>1</sup> The projects expert advisory board was made up of representatives from the following organisations involved in the local food sector: The Open Food Network, The Soil Association, Sustain, Better Food Traders, Pasture-fed Livestock Association, Sustainable Food Places, The Land Workers Alliance, Farm Retail Association, The Royal Agricultural University, and Social Farms & Gardens Wales.

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**How to cite this article:** Jones, S., Krzywoszynska, A. & Maye, D. (2022) Resilience and transformation: Lessons from the UK local food sector in the COVID-19 pandemic. *The Geographical Journal*, 188, 209–222. Available from: <https://doi.org/10.1111/geoj.12428>