**Public food procurement as a tool for building food system resilience in the UK**

Public institutions, as essential providers of meals to diverse communities, have a responsibility to support sustainable and equitable food systems through strategic procurement policies. By adopting robust sustainability criteria and supporting rural economies, they can strengthen food system resilience. By also ensuring nutritious food is accessible, public-sector catering plays a key role in the transition to a resilient, equitable food future.

Public institutions have the economic leverage to support farmers and food manufacturers who prioritise sustainable practices. Public food procurement - the provision of food in schools, hospitals, care homes, prisons, and government offices - accounts for a substantial 5.5% of total UK food sales at £2.4 billion annually [1]. Even within the context of UK schools alone, the significance of public food procurement is evident, with children consuming around 30% [of their daily food and drink during the school day](https://pubmed.ncbi.nlm.nih.gov/17213869/) [2]. Spending public money on healthy ingredients sourced from transformative farming practices can greatly benefit public health, food security and environmental sustainability. This can be achieved by sourcing produce from agroecological farming systems, which are characterised not only by a holistic approach that integrates ecological principles, reduces input consumption, and enhances biodiversity and soil health, but, more importantly, also address the social and political dimensions of the food system, aiming to challenge and dismantle the structures that have led to unsustainable and unjust agricultural systems. Agroecology goes beyond ecological principles to emphasise social equity, community empowerment, and food sovereignty, prioritising participation, local knowledge, and active farmer involvement at both the farm and community levels. By addressing power relations and governance, agroecology promotes responsible governance, human and social values of equity, accessibility, and inclusivity [3, 4].

The government’s 2022 initiation of a review process of the UK's public food procurement standards, governed by the Government Buying Standards for Food and Catering Services (GBSF), represents a critical moment for shaping the UK’s commitment to support health, equity, and environmental sustainability within the food system. Events in this ongoing process, however, highlight the need for a clear strategic direction and decisive action. Directions from both DEFRA's consultation in summer 2022, alongside Sir Keir Starmer’s more recent pledge under the new Labour government to direct half of public sector food spending towards local or environmentally certified food, signal a shift in procurement strategy. However, in contrast to this, the former government's May 2024 support announcement for the farming and food sectors notably omitted any mention of public procurement. In addition, former Environment Secretary Steve Barclay appointed Will Quince MP in April 2024 to conduct an independent review of public sector food procurement. Released shortly before the 2024 general election, this review reflects a broader pattern of brevity and lack of sustained impact in developments regarding public procurement. While Quince's recommendations, published on LinkedIn, prioritise operational and administrative improvements, including standardisation, innovation and data monitoring in support of small and medium sized enterprises and farmers, they do not sufficiently address the broader responsibilities of public procurement to support public health, social equity and overall resilience in the food and farming sector. As the Labour government implements its commitments, it will be crucial to assess how effectively these pledges will be translated into actionable policies that embed agroecological principles and prioritise sustainable food systems. This is especially important given the tendency to frame local and environmental standards as alternatives rather than as interconnected elements of a comprehensive approach, as well as the ambiguity surrounding definitions of 'local' and environmentally certified standards. Institutional meal provision, given its scale and buying power, can enhance the food and farming economy and ensure equitable access to nutritious meals. A robust plan is needed to integrate public food procurement into strategies for a resilient food system, including measures to drive sustainable and equitable food system transformation.

**Challenges in short and local supply chains**

Short, local supply chains centred around agroecological producers represent an ideal model for resilient food systems. However, due to economic and political conditions in recent decades, they have not received adequate support in the UK. The dominance of large-scale agribusinesses prioritising cost efficiency over sustainability, coupled with limited market access and insufficient support for local food initiatives, has diminished the viability of these short, local supply chains, leaving agroecological enterprises struggling to sustain their operations. Extensive research highlights the critical role of the currently missing 'infrastructure in the middle'[5]—facilities to aggregate, process, and distribute food—in enabling small- and mid-sized local farmers to reach larger markets without compromising their values or sustainable practices [5,6]. These essential localised ‘middle’ facilities support collective solutions that are central to agroecological production and foster the re-embedding of food systems within local economies [7]. Both farmers and small and medium sized enterprises in the food sector have a keen desire to shorten supply chains and keep food local. However, due to a persistent historical lack of investment in critical areas, they encounter significant challenges in accessing the necessary infrastructure, such as technology, equipment for aggregation, processing, storage, and transportation. Issues are evident across the industry, with the number of processing facilities having significantly dropped over recent years. While the decline of small abattoirs has received media and policy attention, independent local grain growers, for example, face similar challenges with a severe lack of cleaning, processing and storage facilities. Farmers and growers, regardless of the type of produce, often face the dilemma of having to sell to the global market unless they transport their goods across the country, which increases costs, carbon emissions, and workforce strain, ironically in the effort to keep food supplies as local as possible.

Local producers seeking to supply to public caterers in the current system would encounter significant constraints due to a lack of resources such as transport, storage, cooking facilities, and skilled staff. Public canteens typically rely on pre-prepared or partially processed foods, prioritising convenience over cooking from scratch, limiting the demand for fresh, locally sourced ingredients that require more preparation time and resources, which undermines the capacity of small-scale, agroecological producers to compete in the public sector procurement system. Furthermore, smaller local suppliers often lack the knowledge and skills coupled with time to compete for public tender contracts. This includes for example also knowing when large public sector framework contracts are up for renewal.

Recent research developed against the backdrop of the Bath and Northeast Somerset pilot, often cited as a best practice in UK public procurement reform towards the dynamic purchasing approach, has highlighted that local producers face challenges related to the demand for just-in-time supply chains, compounded by a sense of mistrust and perceived inefficiencies in their engagement with public procurement [8]. Dynamic procurement is characterised by flexible contract arrangements that allow institutions to procure in smaller quantities, thereby opening public procurement to a broader range of bidders and enabling them to join or exit as needed. This adaptability, along with contracts that can be tailored over time, enhances responsiveness to fluctuating market conditions. However, it does not provide the stability that suppliers need to foster economic resilience and develop robust local supply chain networks. Local suppliers seek to cultivate reliable buyer relationships as they require stable, long-term contracts to make the investments to scale up and satisfy the demands of institutional caterers.

Many enterprises already practicing and supporting agroecological methods have attempted to serve local communities by working with public institutions – with little success. One of our research participants, an organic vegetable grower, supplies a school with potatoes free from conventional chemical preservatives, supporting the school's goal of offering healthier and more sustainable meals. However, the potatoes must be cut into even pieces, pre-cooked, and portioned into plastic before they can be used in the school kitchen. To meet the school’s needs, the grower had to set up the processing machinery on-site at their own facility. This is one of many examples which demonstrate how governmental efforts to establish a platform that allows local canteens to connect with local producers, as suggested in Will Quince’s review, will be of limited help without addressing the fundamental infrastructural deficiencies at various levels of the system.

**Inefficiencies in the UK food production and consumption**

The UK's food production is inefficient and reliant on imports, failing to provide sustainable and balanced meals in public institutions [9]. Despite over 70% of the land available being used for agriculture [10], sustainable agroecological methods are almost non-existent, with only 3% of farmland used for organic production. Most land is dedicated to industrial livestock production, which had severe negative impacts on the environmental sustainability and economic resilience of the food system. About 40% of the arable land available is used to grow feed grains for industrial livestock, yet the UK still imports 25% of its total feed cost. According to numbers published by DEFRA, in 2020 alone, livestock farmers spent £5.6 billion on 30 million tonnes of animal feed, the largest input cost in UK agriculture. Meanwhile, the fresh produce sector remains underdeveloped, producing only 17% of the fruit and 55% of the fresh vegetables consumed.

Also, with a view on consumption, the UK food system is highly inefficient with poor nutrition representing a major burden to the NHS. Poor quality school food specifically has a historic legacy in the UK which is strongly intertwined with the principle of tendering out school meals provision to private companies. Going back to the Education Act reform of 1980 [11], policies customarily treat school meals as a commercial service, rather than a service provided for the child's benefit. This approach was further entrenched by the 1988 Local Government Act, which mandated competitive contract tendering for local services, emphasising cost over quality in procurement decisions. As a result, low-cost priorities have become deeply ingrained in public food procurement, especially amid persistent budgetary constraints. In public procurement, cost-efficiency is prioritised over quality, resulting in the sourcing of products that would not meet the standards commonly upheld by UK supermarkets. This can include imported meats, eggs, and other produce from countries with less stringent regulations. While Jamie Oliver's advocacy in the mid-2000s brought these issues to the forefront of public consciousness, unhealthy and substandard meals are still widely accepted as the norm, with occasional reports highlighting the poor quality of food served in schools. In addition to that, the procurement landscape is complex, especially for school meals, which are managed by a mix of local authorities, single academies, and multi-academy trusts—often all within the same regional area. The stranglehold of wholesalers like Bidfood and Brakes, whose market dominance is reinforced by long-term contracts, can limit the flexibility and choice of buyers. In the context of such institutional diversity and fragmented organisation of public sector procurement, each organisation operates independently, setting its own standards and priorities and negotiates on their own terms of budget constraints, contract requirements, and administrative policies. This lack of coordination across various governance structures hinders the development of cohesive practices that could prioritise nutritious, sustainably sourced food and makes it difficult to uphold unified standards and to leverage collective buying power effectively.

Existing procurement specifications are both insufficient and poorly monitored. A UK parliamentary inquiry revealed that the Plan for Public Procurement policy had not been audited in six years, leaving no evidence of its impact on food service or the supply chain. The only relevant report, from the Department of Health in 2007, showed 48% non-compliance in hospital food [12]. Various exemptions further weaken implementation. While certification bodies and advocacy groups offer guidance for institutions willing to change, without political backing, local council support, and a procurement framework for sustainable food, institutions find it impossible to implement changes, especially with tightening budgets.

As shown by the case of the long-term collaboration between the potato grower and the school, best practice examples in public food procurement do exist. Programs are also emerging across the country, for example, the Soil Association’s Food for Life early years and schools schemes, or the Menus of Change initiative being adopted by several UK colleges and universities. However, only a few local authorities have committed to a cohesive ‘whole place’ approach. Scotland, with its Good Food Nation legislation, leads in this area by mandating sustainable procurement and food education in public institutions. In England and Wales, similar initiatives such as Food for Life rely on voluntary participation, meaning that for these to succeed, exceptional dedication is needed from individual institutions or food champions, such as school chefs, alongside of the ability and willingness of producers to invest in resources to accommodate institutional requirements.

**Pathways to sustainable food procurement**

Increasing consumption of sustainably produced foods within the public sector can provide an essential lever for transforming both the UK’s food consumption and production. The effectiveness of public procurement as a strategy for change has been demonstrated in sustainable public kitchens overseas, notably in the Scandinavian countries, where initiatives to increase organic food consumption have led to positive cascading effects throughout the food system [13, 14].

Copenhagen’s successful conversion to 90% organic food in public kitchens since 2017 reveals a strategic commitment to ecological well-being. Denmark's approach is marked by dedicated conversion management, prioritising agroecological production, and investing in comprehensive training for kitchen staff. In sharp contrast, the UK's approach to change primarily focuses on enabling smaller British producers to join suppliers through an online portal. While streamlining procurement is essential, Copenhagen's example highlights the importance of a more holistic approach—enabling access to organic produce, sourcing seasonally where grown, and empowering kitchen professionals and the wider school community to support and engage in sustainable practices.

Given the UK's current limited capacity for sustainable food production, achieving meaningful sustainability and food security goals necessitates intentional international sourcing in the short to medium term. The UK food system faces not only the challenge of bringing fresh, local, and environmentally sustainable food to public institutions but also the need to scale up agroecological production domestically. Public institutions, as stewards of public resources, have a responsibility to support societal goals by adopting sourcing policies that foster local enterprise growth. By prioritising small- and medium-sized farmers and investment in local infrastructure for aggregation, processing, and distribution, public procurement can drive a shift away from purely cost-based supply chains dominated by competitive pricing and externalised costs.

As an initial step to address the complexity and fragmentation in school food procurement, establishing mandatory standards for school food, —enforced by existing bodies like Ofsted potentially working with local authorities and informed by dedicated organisations such as School Food Matters—will be essential. This approach would address inconsistencies in meal quality and sustainability stemming from the fragmented procurement landscape across local authorities and academy trusts. A unified framework will hold all schools accountable to clear benchmarks, streamline procurement practices, leverage collective buying power, and ensure consistent standards across diverse school governance structures. To truly improve the UK's food security and ensure equal access to quality food, these standards must go beyond simply supporting the existing local economy and be aligned with broader food and farming strategies that actively support UK farmers and growers in transitioning to future-proof, sustainable methods of production. Consequently, the government’s commitment to a specific percentage target for sourcing needs to be about foods produced with agroecological production methods in the first place, rather than sourcing from any British (or more local) suppliers.

Agroecology refers to a holistic approach to farming that integrates ecological principles into agricultural practices. In on-farm practices, the focus is often on improving efficiency by reducing the consumption of inputs. This includes substituting conventional inputs, such as chemical fertilizers and synthetic pesticides, with alternatives that support sustainable agriculture. Additionally, technological solutions such as the use of genetically modified organisms are explored. The overarching goal is to promote sustainability through decreased reliance on inputs, increased biodiversity, and improved soil health. Distinct farming practices encompass crop choice (including crop spatial distribution, and crop temporal successions), crop fertilisation management (including splitting fertilisation, biofertilisers and organic fertilisation), irrigation management (especially drip irrigation), tillage management (thus, direct seeding and reduced tillage), weed, pest and disease management (including biological pest control, and the use of natural pesticides), as well as the wider management of landscape elements (thus, the interactions among agricultural, natural, and human-managed ecosystems). In a broader sense, agroecology encompasses a range of practices designed to enhance diversity, resilience, and sustainability and prioritises local knowledge, farmer participation, and social equity, advancing food sovereignty and equitable markets while fostering resilient, community-centred food systems, valorising various ecological processes and ecosystem services such as nutrient cycling, biological N fixation, natural regulation of pests, soil and water conservation, biodiversity conservation, and carbon sequestration [3, 4].

To assist procurers in identifying agroecological products, establishing clear labelling and certification frameworks is necessary. In the absence of formal agroecological certifications, procurement buyers can use organic products as a practical baseline, as many organic practices share principles with agroecology. Standards could thus include a mandate for sourcing at least 50% of food from organic agriculture. Additionally, collaboration with organisations that advocate for agroecology can further aid in pinpointing suppliers who use agroecological methods, such as agroforestry, advanced soil health practices such as composting, and diverse cropping systems that enhance ecosystem resilience. These partnerships would provide procurement teams with a clearer pathway to identifying and sourcing from producers who meet agroecological standards.

Secondly, to achieve the goal of sourcing primarily from British farms on the medium and long term, investment in processing, storage, and distribution infrastructure is paramount. While DEFRA currently supports small and mobile abattoirs, efficient local food production requires a more comprehensive support. A resilient food system necessitates investment in local food industries beyond livestock, such as grain and vegetable processing facilities. Additionally, these industries require robust transport, storage, and distribution infrastructure to ensure products move effectively and safely from farm to table. Establishing local food hubs and cooperatives helps small-scale farmers and producers aggregate their products to supply the quantity and variety needed for institutional catering. This infrastructure is essential to a functional local supply chain in which the quality of local produce is maintained and food waste minimised while products are kept within local markets.

Bringing locally produced food to public institutions, offering long-term purchasing contracts and a simplified tendering process, as suggested in current government reviews, can be beneficial for local producers. However, year-round, large-scale supply of uniform goods is fundamentally at odds with agroecological principles, which emphasise the adaptation of crops and livestock to local environmental conditions, biodiversity and seasonal variability. Transitioning to truly local (therefore seasonal) and sustainable (therefore inconsistent) public procurement also requires public institutions to be stable, reliable, and flexible buyers. To enable public procurement sourcing from agroecological suppliers, institutional caterers need to buy into a process rather than a set of products – they need to commit to supporting the growth and development of sustainable practices over time, rather than just selecting available products as needed. Simplified tendering alone will therefore not suffice if local farmers cannot depend on the government as a consistent buyer. Flexibility in procurement necessitates that public kitchens have the facilities and staff knowledge to cook from scratch and plan meals according to seasonal availability. Upgrading public kitchens and training their staff to handle fresh, seasonal produce demands significant initial investment. However, in the long term, this approach reduces costs due to higher staff satisfaction and the economic benefits of purchasing in-season produce, as well as by promoting public health.

Finally, making sustainable and seasonal food a standard in public kitchens will help normalise it, shifting public perceptions over time. Promoting seasonal eating to communities and consumers across the UK will contribute to a more sustainable and resilient food system while supporting the agroecological transition. This will help communities reconnect with their local food heritage, while enhancing food security and reducing dependency on global supply chains. Education campaigns and community programs can further play a role in raising awareness about the benefits of seasonal eating, helping the cultural transition in public procurement and educating individuals to make informed choices that align with sustainable food production practices.

As an immediate effect of the government committing to a percentage target of food from agroecological production systems for the public sector, security and economic stability can be provided for both farmers committed to sustainable practices and the food manufacturers who source from them. Reliability demonstrated by public buyers enables UK farmers and businesses to commit to future-proof production methods, while gradually increasing their contributions to the public food supply. Moreover, by serving healthier meals, public institutions can directly address food inequality, enhance public health, reduce healthcare costs, and improve overall productivity.

In the medium to long term, focusing public food procurement on fresh, seasonal agroecological products generates widespread economic, ecological, and public health benefits. Increased demand for these products encourages more farmers to adopt sustainable practices, improving soil quality, ecosystem health, and crop resilience, while reducing environmental impacts such as pollution and greenhouse gas emissions – improving security and resilience across the food system [15]. Establishing agroecological food as a standard option in public institutions, helps create a ripple effect; as these foods become more visible in schools, hospitals, and government facilities, consumers will gradually become more familiar with them and better understand their advantages. In addition, educational initiatives, promotional campaigns, and community engagement efforts can facilitate this transition, enhancing public knowledge of agroecological practices and their benefits. As the public becomes more accustomed to and aware of the benefits of agroecological food, private sector demand will also rise, prompting further transitions to sustainable farming. This shift will further benefit rural communities by creating meaningful jobs in production, processing, distribution, and food preparation, strengthening food security and supply chain resilience.

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**Competing Interests**

The authors declare no competing interests.