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Open questions about local food

Stéphan Marette¹

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Abstract

This article presents various questions relating to local food systems from a public economics perspective. Issues dealing with supply and demand are presented, followed by a few points concerning possible local policies. It highlights the fact that reinforcing local farming can be seen as an option for improving the resilience of food systems, although it is not a panacea. In particular, the proliferation of food labels limits the possibility of developing specific labels for new local foods.

Keywords Local food · Public economics · Local policies · Food labels · Proliferation of labels

Introduction

Local food systems have gained momentum all around the world. Many initiatives have flourished, as has a wide variety of organisations ranging from short supply chains with vague claims to official geographic indications (GIs). The term “local” may encompass either narrow locations or very large areas such as regions or even countries. As local food initiatives boom and continue to grow, it is worth examining the phenomenon to ascertain whether further action is necessary.

In this issue of the *Review of Agricultural, Food and Environmental Studies*, Stein and Santini (2022) present a critical overview of agronomic and economic literature and conclude that local food does not guarantee food security and does not necessarily have a lower carbon footprint than ordinary food systems. Despite highlighting these relative inefficiencies, they nevertheless point out that local food may also contribute to other goals that matter to citizens, such as rural development and a sense of community (see also Stein & de Lima, 2022). Although this contribution by Stein and Santini (2022) offers a very interesting overview of current debates, several questions remain unanswered, which deserve attention.

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The purpose of this short article is to discuss some of these open and/or overlooked questions. Firstly, we present some questions related to the supply side followed by issues linked to the demand side before addressing possible policies. These various aspects are addressed from a public economics perspective.

Supply-side questions

There are several issues relating to the supply of local foods that were overlooked by Stein and Santini (2022). In many areas, local agriculture is associated with a kind of “invisible innovation” relying on pioneering alternative farming practices in comparison with mainstream intensive agriculture. These innovations cover various practices such as permaculture, biodynamic farming, crop diversification, and farming without the use of chemical pesticides/fertilisers. Saladino (2021) also underlines the fact that local initiatives help safeguard food diversity by frequently cultivating rare foods and ancient varieties. In other words, some invisible “pioneers” involved in local food systems contribute to the resilience of agricultural production systems by experimenting with alternative solutions.

Some local actions also aim to reinforce supply security and territorial resilience. For instance, the city of Angoulême in France has developed a policy to reach a certain level of autonomy in the area to guarantee some kind of basic food security in the event of severe disruption or a major collapse of the food system (see Bolis, 2020).

These trends raise the question for economists of how to evaluate these invisible innovative initiatives to boost resilience. With regard to this thorny question, regulators are often unable to predict the probability of major disruptions. Despite the absence of a clear probability, local policies can be implemented for having an option value with local foods if a disturbance occurs. Stein and Santini (2022) point out that local food does not ensure food security compared with classic and intensive cultivation systems, which means that local systems are not a panacea but simply an interesting option.

Local food is not only a question of supply security but also an effective way of encouraging active citizenship, which is an important issue in developing inclusive societies. In poor neighbourhoods, Martin et al. (2017) showed that community gardens can boost people’s pride in growing and cooking their own produce, adding to their sense of self-esteem and encouraging their tendency to eat more fruits and vegetables. This leads to questions such as how to integrate these “positive” dimensions into a cost–benefit analysis to estimate whether or not a regulator should promote community gardens and/or devote land for gardening to schools or charity organisations. In more expensive areas in cities, is it more efficient to develop real estate programmes or keep gardens or arable crops for inclusive purposes? This, then, raises the question of the space dedicated to urban farming in cities, in particular when real estate is very expensive, preventing some people from finding affordable accommodation—which could be built on land devoted to gardening. Alternatively, can local farming be seen as a way of limiting urban sprawl?

In addition, vertical farming is another way of producing food in buildings using vertically stacked layers allowing for food production in a highly controlled environment. For some foods such as salads, aromatic herbs and spices, vertical farming seems an efficient technology compared with the classic cultivation of arable crops (see Federman, 2021). This mitigates the classic inefficiencies of local food underlined by Stein and Santini (2022) and raises the interesting question of whether or not basil or lettuce produced in Chicago or Tokyo can be sold as “local-vertical food” in nearby supermarkets. The question may seem provocative because the term “local” implies rural and natural practices that exclude “artificial” agriculture. Perambalam et al. (2021) show that consumers’ acceptance of these crops depends on the number of vertical farms that exist in the vicinity. However, the emergence of the designation “local-vertical food” promoted as efficient with a focus on a “proximity” agriculture depends on consumers’ acceptance, which is now being studied.

Demand-side questions

Analysing demand is important because consumers’ (mis)perceptions greatly influence consumption as well as farmers’ opportunities to sell their local produce. In many countries, consumers benefit from a wide range of opportunities to purchase foods in local markets or, sometimes, to join associations offering local fruits and vegetables. They may also be faced with an array of claims or labels indicating the origin of foods in stores or supermarkets. Several studies have shown that a positive premium is given to local food compared with equivalent produce grown elsewhere. From a meta-analysis of experimental studies measuring willingness-to-pay (WTP), Printezis et al. (2019) found significantly higher WTP for products labelled “local” compared with other products, but this premium for local produce varies depending on the type of “local” labelling used and the type of product.

The premium for local food generally correlates to other factors such as the organic factor. For example, in Ay et al. (2017), it was shown that organic premiums are significantly higher for local wines compared with the organic premium for non-local wines. The main question about the possible premiums for local foods concerns the proliferation of labels indicating the origin of foods (see Marette, 2014). In other words, will premiums be significant for producers developing new labels focusing on local dimensions or typical characteristics?

Creating a new label or using a new claim that will have a significant influence on consumer purchases is challenging because, as labels for sustainable and local food proliferate, it is becoming increasingly difficult for farmers to build a reputation for a new label indicating sustainable and/or local food. As demonstrated by Yokessa and Marette (2019), the declining influence of additional labels/claims means that the marginal effect of any new local label is likely to decline and could even tend towards zero when other labels/claims appear on the packaging.

This limited effect on sales owing to the proliferation of labels is likely to apply to new labels or designations of “local-vertical foods” or “local-urban foods” if these are chosen by producers from urban areas. It seems unlikely that these labels will emerge in many countries because, for many consumers, the local dimension of food







is implicitly related to a pastoral image. For urban dwellers, food production in their neighbourhoods may seem less typical or less natural than produce from a rural area further from their city, even if the farm is close enough to be perceived as “local”. This raises the question of the perimeter of local production, which should be narrow enough to make sense in terms of proximity and belonging to a community but broad enough to reach urban consumers. The perimeter of local production indicated by a label may also depend on the type of food: market gardeners offering fruits and vegetables can be relatively close to cities and supermarkets, while fields for growing cereal or grazing cattle are generally far from cities.

By focusing on French consumers’ perceptions of various labels, Table 1 from Marette et al. (2021) underscores the weak impact of labels indicating the origin of the product. We show that the Organic Label (AB) and the Label Rouge (a high-quality label) are clearly seen as the best for guaranteeing quality and guiding participants’ future purchases. Apart from the AB (Organic) Label and Label Rouge, other labels seem to have a weaker role, with a low percentage of participants mentioning them. The two labels indicating a local dimension, namely the European GI and the French Origin for products, received limited support from consumers (fewer than 15% of participants mentioned these labels in response to the questions of Table 1). This leads to the following questions: which label should farmers choose to promote the quality of their products? Should a local regulator help develop a local label in the context of label proliferation? Is a GI with strict rules regarding food production and quality the best solution?

Local regulation questions

Many cities and regions are trying to develop local farming and/or local gardening. Cities and/or local authorities sometimes provide subsidies to farmers based on criteria related to local activities or short supply chains. This leads us to wonder

Table 1 Opinions of existing labels in France (% of respondents)

	Organic	Label Rouge	GI ^c	French Origin	Bleu Blanc Coeur	Nutri-Score	Don't know
Labels							
The best quality ^a	19.6%	37.0%	1.4%	10.1%	5.8%	15.2%	10.9%
The most useful for purchasing ^b	21.7%	23.9%	3.6%	13.7%	4.4%	23.1%	9.4%

From Table 4 in Marette et al. (2021) focusing on ham. ^a From the exit questionnaire in Marette et al. (2021), the exact question was “Which label (or claim) is the most efficient in ensuring high-quality meat?” ^b The exact question was “Which label (or claim) seems the most useful for guiding your future purchases of ham?” ^c For GI the official European label was shown

whether or not these subsidies are legitimate if the sustainability of many local food systems is not guaranteed, as suggested by Stein and Santini (2022).

In order to be effective, these local public policies should be designed to integrate all the previous open questions mentioned in the two previous sections, which is very challenging. How can these “positive” dimensions be integrated into a cost–benefit analysis to estimate whether or not local farming should be promoted? There is no unequivocal answer because many situations correspond to a case-by-case context with idiosyncratic, local specificities.

One point involving the local resilience of food systems mentioned in the “supply-side” section should be emphasised. The local resilience of agricultural production systems is an important question, but local initiatives are not a panacea, simply an interesting option. For crops such as cereals with major risks of diseases, the system’s resilience is also linked to its integration into international trade that is based on intensive systems. The interesting option of local farming systems should be developed along with initiatives to increase the sustainability of intensive crop systems, such as crop diversification or gene editing to improve plants. Local farming using alternative practices can be seen as a precursor for intensive agriculture to try to improve its sustainability.

Conclusion

This simple article marks a step towards examining local foods, a topic that appears to be important for the future of food systems. The questions of this paper were mainly developed using the tools of public economics, and they need to be enhanced with approaches from agronomy, sociology, and political science.

Ultimately, the answers to these questions are relevant to both public debates and political decisions. Whatever decisions are taken, being frank about the various issues raised in this paper is challenging but necessary to guarantee both the sustainability and the efficiency of local food systems.

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