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Need Of Innovation And Development For Local Food Production And Consumption

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ABSTRACT

Industrialized countries saw LFS as a viable alternative to the current food supply chain (MFS). Closeness and a local food supply chain constraint are their major traits. A broad variety of stakeholders, including scientists, have backed LFS because of their expectations that they would help advance sustainable development. Analytical framework for evaluating and summarizing frequent arguments in favor of LFS and comparing them with facts from real case studies as well as personal viewpoints is provided by the components of the food system. Local food production entrepreneurship is a topic of interest in this study because it ties in with key terms, research topics, and research results. The study's issue was found to have definitional errors based on a literature review. Marketing or the health advantages of local food seem to be the most often cited reasons in the evaluations of the study. In order to identify research gaps, proposals were made for empirical studies that may assist in igniting local entrepreneurship.

Keywords: Innovation, Development, Local Food, Production, Consumption

INTRODUCTION

Local food, in contrast to organic food, lacks a clear legal definition. Geographically speaking, it refers to the distance between producers and consumers. It's possible to think of local cuisine as including more than just where the food comes from; it may also include the person who grew it, the farm itself, and the surrounding area. The word "provenance," which refers to the technique or tradition of production that is attributed to local influences, seems to capture the core of this component of the definition of local cuisine. [1]

Small farmers, a wide variety of goods, and short supply chains are characteristic in local food markets, where farmers also execute marketing activities, such as packing, shipping, distribution, and advertising, for their products. Many small farms that sell directly to customers are situated in metropolitan corridors in the Northeast and the West Coast, according to the 2007 U.S. Census of Agriculture. [2]

"Small farms," as defined above, generated more revenue through direct-to-consumer (DTC) sales in 2007 than did "medium farms," as defined above, or "large farms," as defined above, with total farm sales ranging from $50,000 to $499,999. The 56 percent of all agricultural direct sales to consumers produced by local produce farms accounted for only 26 percent of all direct-to-consumer marketing farms. Other entrepreneurial activities, such as organic production, tourism, and custom work (planting, ploughing and harvesting for others), have a greater impact on direct sales to consumers than other farms. [3]

Access to and growth of local food markets are hampered by issues such as a dearth of distribution networks, a scarcity of resources in areas such as food safety laws and small farmers' limited ability to produce enough food to fill such markets. High-quality ingredients connected with local food production are making the topic more prominent in the media. But local cuisine isn't well recognised in the area or country. Food grown close to home is sometimes referred to as "traditional cuisine," "regional cuisine," and other similar words. However, there is a unique designation for the latter phrase. [4]

A wide range of academic disciplines and viewpoints have come together to highlight the significance of local food production and consumption. Sociology, anthropology, rural sociology, and community development were the primary fields of study in the early days of local food systems. Research on how food is produced, prepared, and stored as well as how it is shared within a specific cultural setting dominated most of this work. This research laid the foundation for understanding the more cultural aspects of food, which are likely driving the current surge in interest in regionally sourced cuisine. [5]

LITERATURE REVIEW

Simon Berner, Ulrike Seebacher and Hartmut Derler, (2019) A growing number of people are concerned about the sustainability, resilience, and fairness of urban food systems, which has prompted a surge in interest in the city's and region's local food supply. A total of 47 stakeholders participated in semi-structured interviews, and we analysed textual materials and computed food carrying capacity. Our findings imply that local decision-makers should support collaboration among agri-food stakeholders in order to promote local food in the target area. [6]

Guy Faure, Yuna Chiffoleau, Frédéric Goulet, Temple Ludovic (2018) Among other things, it focuses on fostering innovation by exploring methodologies, organisations, and various approaches for assessing innovation. Reflections and research from several scientific fields, fieldwork in France and numerous countries in the Global South, as well as experiences obtained by following and assisting creative actors, all go into this book. The book blends theoretical contributions on innovation with

classic case stories to illustrate its findings and debates. ' Teachers, professionals, students, and researchers are the target audience for this work. [7]

Caron, P., Ferrero y de Loma-Osorio, G., Nabarro, D. et al. (2018) For us, the 2030 Agenda for Sustainable Development is the beginning point for agricultural and food system policy. We've figured out what kind of food system change is required. Food systems must ensure that everyone has access to nutritious and healthful food. It's also important that they represent sustainable farming and food value chains. As a last step, they should work to slow the pace of global warming and increase the country's ability to adapt to it. Outlying regions require renovation for the fourth time. There must be a convergence of local and global priorities, as well as the improvement of regional development approaches, in order to put this transformation into action. It also involves the use of relevant indicators to aid decision-making. [8]

Report of the Secretary-General (2017) Science, technology and innovation (STI) have a critical role in ensuring food security by 2030, with a specific focus on developing countries, according to this report. Three sections make up the report: The paper also highlights the contributions of Member States on outstanding practises and lessons gained for the implementation of STI for food security. [9]

Steven C. Dellera, David Lamieb, and Maureen Stickel (2017) Research on local and regional food networks is examined critically in this review, which finds that most of the present research lacks a solid theoretical foundation and quantitative rigour. Planning and implementing a healthy food system for a community or area relies heavily on community development practitioners and planners who are adept at distinguishing between factual, research-based data and speculative, advocacy-based analyses. [10]

RESEARCH METHODOLOGY

To address the problem of LFS from this third standpoint, we concentrate on an ex-ante assessment in our research.

After a brief introduction to LFS, this study examines the impacts of LFS that are commonly contested by a variety of interested parties and presents data from the scientific literature to refute their claims. An extensive literature study is used to perform the meta-analysis.

When it comes to the search, a presumption was made, specifically that the search would be focused on publication titles, since these titles often include terms that describe a study's topic. Using the search terms "local food," "local food," and "entrepreneurship," and "local food" and "producer," an analysis of the content of all articles that came up was undertaken.

In 2005, a book with a title using keywords from a search engine was released. As a consequence, papers published after that date were considered for inclusion in the study. (Table 1).

Table 1 "Number of publications devoted to the analyzed topic indexed in Wo S and published inyears 2005–2018"

Year of Publication	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2015-2018
Publications including "local food"	17	37	23	33	38	70	67	69	98	86	156	145	167	149	1155
Publications including "local food+ entreptreneurship"	1	0	0	0	0	0	0	0	0	0	0	1	1	1	4
Publications including "local food + producer"	1	1	0	0	0	0	0	0	0	1	2	1	3	1	10
Total	19	38	23	33	38	70	67	69	98	87	158	147	171	151	1169

Authors went through search engine results and looked over the abstracts of every papers that came up. Though it was found to be irrelevant, we nonetheless examined the paper's content to offer, for example, multiple definitions of the word "being local".

Two viewpoints were used in the authors' analysis: the study subject and its relationship to a specific geographic place. The investigation took five months to complete.

ANALYSIS

Regional Products, Traditional Product, Local Product—Definitional Issues

Regional, traditional, and local products are sometimes used interchangeably, making it difficult to distinguish between the two words Customers and producers may

misinterpret the results of production data and the reasons for their actions in this circumstance. After putting "local food" into Google, we only receive results for phrases like "cuisine" and "dishes," not for local food goods.

'Traditional speciality guaranteed' trademarked foodstuffs are regulated by “Regulation (EU) No. 1151/2012 of the European Parliament” and the “Council of the EU”. According to EC No. 510/2006, regional goods are defined in terms of where they are produced. When a food product is labelled with a "designation of origin" or "geographical indicator," it refers to the name of a particular area, specific location, or in certain situations, an entire country:

- when the quality or qualities of the product are mostly or completely attributable to the specific geographical environment,
- and where the manufacturing, processing, and preparation of the product takes place in a specified geographic area.

Quality is the most significant feature of a regional cuisine item. It's because they're made using the best ingredients available. Climate and natural terrain may also influence the features of the goods. Aside from their uniqueness, regional products in the European Union are also considered part of the continent's history and cultural legacy.

Global food producers and food marketers have long recognised the necessity of branding and labelling food items with regional links. Premia are often introduced by this sort of interaction. Protected Geographical Indication, Protected Designation of Origin, and Traditional Specialty Guaranteed are the three forms of certifications available for regional products. When referring to an agri-food product, the first of the three symbols is used to designate its origin. There should be a defined area for the production and preparation of these products.

To be eligible for the Protected Geographical Indication designation, a product's name must be linked to the area, location, or country where it was grown or harvested. However, this is different from the Protected Designation of Origin in that just one stage of manufacturing must occur in a specific location.

Because local items are produced in smaller batches and using local sources, they are more environmentally friendly. So in other words, from a social, environmental, and economic perspective, this method of production is excellent. Since it's so unique, it has the ability to draw visitors from all over the world as well as just one community. This method of manufacturing can also be used to implement sustainable development policies. To achieve this, the fundamental objective is to fulfil current demands while simultaneously guaranteeing that future generations' needs are addressed. This is called development. There must be a preservation of the natural

ecosystem in order to accomplish this Samples of regional and traditional cuisine, together with their definitions, are shown in Table 2.

Table 2 "Comparison of regional, traditional, and local product based on the previously presenteddefinitions"

Comparative Criterion	Regional Product	Traditional Product	Local Product
EU Certification	Yes	Yes	Yes/No
Traditional manufacturing method	Yes/No	Yes	Yes/No
Listed on the Traditional polish product list	No	Yes	No
Associated with a specific region	Yes	Yes	Yes
Production (all phases of production) located in a specific region	Yes/No	Yes/No	Yes
Ingredients originating from in house production	Yes	Yes/No	Yes/No
Produced on a small scale	Yes	Yes	Yes/No
Example	Heather Honey fromBory Dolnośląskie (Poland), Parma Ham (Italy), Cheddar(Great Britain)	Raspberry Syrup from Dolina Baryczy (Poland), Chorizo (Spain)	Strunga Winery Wines(Romania), Černá Hora Brewery Beers e.g., Matouš (the Czech Republic)

When it comes to terminology, literature and law, definitions may be hazy, as shown by the data in the table. There are many different ways to define "local food," according to Granvik et al., which might lead to misinterpretations of the phrase.

As a result, a whole new term, "local food," was coined. Non-certified, non-mass produced, made utilising the greatest quality ingredients from verified producers in the same region, and intimately related with the town or hamlet where the production is taking place, with attention for sustainable development policy issues.

Definition of LFS

Scientific literature does not agree on a definition of local food supply (LFS), but in most situations distances and connections between the different phases of this process are the most important considerations. Here, we define the food supply chain as including only actions that take place within a single geographic area from agricultural food production through consumption. Agricultural labour and raw

supplies, such as animal feed, are incorporated to lend weight to this idea. It doesn't matter whether you're talking about a city, a state, or even a nation, as long as you're able to facilitate personal connections between producers and customers. What matters most is the data that's been tucked away in the product itself.

For most people, LFS was the dominant form of food production until the nineteenth century, even if human mobility has always produced in changes in dietary preferences and food plant species. LFS are now mostly unimportant in wealthy countries. This change has been made possible by advances in logistics and food processing. According to a 2005 survey, 20% of Austrians stated they purchased food directly from farmers at least once a week. Direct marketing activities were maintained by 36 percent of Austrian farmers as of 2004; nevertheless, only 12 percent of Austrian farmers generated more than 20 percent of their income from this kind of advertising; (BMLFUW, 2006). Furthermore, the quality has altered as well. In the past, LFS has mostly transported bulk commodities. In today's market, it seems that quality, originality, and specialisation are significantly more essential to customers than they were in the past.

Expectations of stakeholders on LFS and their possible effects

LFS is often supported by the sustainable development normative framework. To achieve social and intergenerational justice, this paradigm may be regarded as a discursive bargaining process between all key participants in the food system (Penker and Payer, 2005). It's not just one facet of sustainability that's taken into account, but all three. It is difficult to classify personal health, according to Hofer and Stalder (2000), as a fourth dimension of sustainability alongside the other three, but it is related to food consumption. We widen the word "personal health" to encompass a bigger idea of "personal well-being" in order to take into account the relevance of individual opinions, judgements, and consequences of food intake activities. In our perspective, the personal part of food consumption does not fall within the social component, but rather deserves its own category. Examples of LFS outcomes that have been extensively predicted by stakeholders and mentioned in scientific literature are included in Table 3. (for exemplary sources see the following section). The four-dimensional sustainability framework categorises them as a group.

Table 3 "Frequently expected effects of LFS as observed in ex-post evaluations of case studies"

Dimension of sustainability	Expectations
Ecological	Reducing environmental effects of transportation like emissions of air pollutants

	Reducing specialization and intensification in agriculture through a more diverse local land use
	Conserving traditional agricultural landscapes
	Fostering envrionmentally friendly production methods (organic production, protection of localbiodiversity, reduced chemical inputs)
Economic	Increasing the regional added value
	Reducing prices of seasonal products
	Creating employment opportunities
	Raising the income for farmers and food manufacturers
	Reducing local dependencies on external market forces and reducing market power of processing and distribution businesses
Social	Keeping agricultural production and small manufacturing enterprises in the region
	Conserving traditional production techniques and consumption patterns (cultural identity)
	Creating small and manageable structures
	Increasing security of food supply
	Increasing awareness about environmental and social effects of consumption (embeddedness-effect)
	Raising social justice locally and internationally
	Increasing community power and personal relationships
Personal well-being	Providing food for better health and nutrition
	Providing fresher and better tasting food as well as specialities
	Increasing satisfaction of farmers (and processors) with their jobs

Effects on the environment

Reducing the distances between the various tiers of the food supply chain is an important consideration for promoting local food systems (LFS). This assumption may lead to a reduction in greenhouse gas emissions and other air pollutants, which might have a good effect on the environment. This assumption, while accurate in the majority of cases, does not always hold up in every situation. Emissions from combustion engines, in particular, are highly dependent on the distance travelled and the mode of transportation utilised. Shorter distances may lead to higher transportation emissions if they are matched by inefficient transportation and underutilised loading capacity.

There are many additional aspects of agriculture's role in the food chain that have an impact on the environment in addition to transportation and storage. While there are no hard and fast criteria for determining how important each step is, environmental impacts from transportation may even be insignificant (Jungbluth, 2000).

Agricultural management is crucial to food production and the preservation of the natural environment. It's easy to confuse local food systems (LFS) with organic farming, but that's not always the case. Due to a rise in the demand for locally produced goods and a decline in input products like feed imported from ecologically sensitive locations across the world, a shift away from the mainstream toward a more local food system may have a beneficial impact on land use in the future. Demand for a larger variety of locally produced foods may also assist traditional agricultural landscapes. Land-users' ecological behaviour is unlikely to change, despite this. There may be an additional burden on the environment due to a shortage of available regional land resources and increasing production intensities in order to fulfil local demands." For Great Britain, a case study found that land resources were insufficient to support present diets (Cowell and Parkinson, 2003). It will be difficult in certain areas to substitute imported feed in the production of meat and dairy products with local resources. Certain items, like as vegetables in temperate climes, may need the use of energy-intensive methods like heated greenhouses.

Economic effects

A major argument against LFS is based on economies of scale, a justification that is comparable to that of environmental impacts. Using comparative advantages is more difficult because of the lower efficiency of smaller production units and the lack of free commerce between different regions. This might have a negative impact on economic growth in the region, since regional exporters and importers may lose market share and labour demand. As a result, LFS expenses are expected to rise. However, there may also be economic advantages to LFS in the area. Farmers and local processors' increased revenues and regional added value may help spur economic growth and create new jobs. Some food system intermediate phases are not required, which reduces marketing expenses. Six goods were compared as an example by Mathijs and coworkers (2006). Farmer prices were higher than in the MFS on every item whereas consumer prices were lower on 5/6 items, the researchers found. It's important to point out that this study didn't include any highly processed foods; instead, it focused on fresh fruits, vegetables, and meat. Taking manufacturing costs into account when assessing local revenues is necessary. Increasing levels of processing may alter this favourable pricing condition in a manner similar to the ecological implications.

Effects on the social system

It's possible that social consequences of LFS are the least contentious, but it's tough to quantify. Some of these issues are connected to the food system's reduced geographical and organisational distances. Consequently, Sage (2003) anticipates that producers and consumers will be able to create tighter links, resulting in greater understanding of the external social, economic, and environmental consequences of

food consumption. Consumers who utilise local resources and are able to observe the impact of their own consumption decisions are typically assumed to adopt more sustainable habits or use consumption activities to accomplish a broader range of objectives. This is an example of the second kind of behaviour: purchasing locally produced goods in an effort to preserve the area's traditional scenery. Many of the ideas of embeddedness may be found in the Linux File System (LFS). Despite the fact that LFS lowers the distance between producers and consumers, it is uncertain if this will also increase feedback loops - an information bias in both directions will remain nonetheless - and lead to more sustainable behaviour on the part of both consumers and producers. When it comes to ensuring socially desirable manufacturing processes, big companies and legislative measures such as environmental payments may be more successful than individual interactions because of their well-established brands and credentials. In terms of social justice and community power, there are several questions about the influence of LFS on these concepts. Despite the fact that farmers and small processors may be socially recognised, and certain LFS, such as community supported agriculture, may provide as a basis for democracy, economic disparities may develop if they are not distributed evenly among the country's citizens. In 2006, (Born and Purcell) As a result, "local" isn't just another word for "local".

Effects on personal well-being

Personal well-being is a common expectation when it comes to LFS products. Foods from LFS are said to be better for you in every way, including being more nutrient-dense, having a greater flavour, and being more recently harvested. LFS is considered as a benefit because of its focus on niche items rather than universally available commodities. As far as fresh and less processed food is concerned, these arguments are logical since they are both healthier and more flavorful. Reduced livestock travel may have an impact on the quality of the products as well. Fresh vegetables and fruits may be possible to develop perishable varieties that are not ideal for industrial production but are nutritious and tasty if the distance between harvest and consumption is decreased. There is no guarantee that LFS will have the features stated. Storage and processing methods, where MFS has a technical edge, also influence flavour, freshness, and nutritional content. Shorter distances between harvest and consumption aren't always equivalent to freshness, especially for goods that aren't used during the harvest season.

The LFS system, as well as its goods, is seen as a way to enhance one's sense of well-being. Producers may benefit from this via enhanced work satisfaction or increased earnings, while consumers may benefit from this through improved purchasing experiences. According to Mathijs et al. (2006), farmers' self-assertion of the value of their work is more important than the commercial system. Some people may benefit from having a close connection with their customers, while for others, it may be a

hardship.

CONCLUSION

In addition to its health benefits, local food is related with the concept of sustainable development. It is commonplace in literature to see state and non-governmental activities supporting local production. For the sake of critical debate, we've compiled common arguments in favour of LFS and set them up against facts and reasons in opposition. As local food production and consumption may include a wide range of activities, the majority of these benefits are reciprocal and dependent on the specifics of every given situation. Any good implementation is challenged by the trade-offs between distinct aims and the route dependencies. Because food systems and their influence on society and the environment, economy and personal well-being cannot be ignored, it is imperative that they be evaluated.

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