

Food system analysis versus value chain analysis: a conceptual approach for “meeting urban food needs”

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Abstract

The theme of “urban food needs” has been discussed in various scientific fields over the last forty years, its aspects ranging from the sociological to the nutritional. At the same time, several interdisciplinary methodological approaches have been developed in these scientific fields. The Food and Agriculture Organization of the United Nations (FAO) has developed several complex methodological approaches to meeting urban food needs, mainly in countries and regions experiencing food insecurity. Food Supply and Distribution Systems (FSDSs) have been used to achieve the goals of reducing poverty, increasing food supply and improving environmental conditions for wholesale and retail markets within the urban context. At the same time, a Sustainable Food Value Chain (SFVC) approach attempts to develop value chains for food products in a sustainable manner while aiming to develop dimensional components such as socio-economics, urban planning and so on. The aim of this paper is to discuss the conceptual approaches of FSDSs and SFVC methodologies in terms of increasing food availability in urban centres at lower prices, especially for disadvantaged groups. To achieve this, the paper offers a critical approach towards the concepts and epistemological elements of each method. The results will demonstrate how each can help increase food supply while simultaneously “meeting urban food needs”.

1. Conceptual Framework

1.1 Framework

Food Supply and Distribution Systems (FSDSs) are understood to be complex systems that include all activities related to the production and distribution of food in the city. The underlying principle of FSDSs is the creation of a conceptual grouping of factors that identifies a chain of causes and effects generated by all agents involved in all of the activities needed in the system. Being a system in which there is functional reciprocity, the possible conceptual approaches that can emerge from it are closely linked to what is happening on the ground, in the practices of people’s activities and lives (Aragrande and Argenti, 2001; Ericksen, 2008; Reardon and Timmer, 2012).

A Sustainable Food Value Chain (SFVC) is understood to be a systematic structure that coordinates all agents and their economic activities within a food chain, from the production of food to its availability for final consumption. However, this method also highlights two other situational roles within its analysis: the inclusion of all subsystems and the expected effects of added value on the sustainability of the chain as a result of the economic development of the agents involved (Silva, Souza Filho, 2007; Webber, 2007; Bowersox *et al.*, 2013; Donovan *et al.*, 2013; Neven, 2014).

1.2 Objectives, paradigms and limits

Food supply and distribution systems

According to Aragrande and Argenti (2001), the guiding principle behind FSDSs comes down to the ability to identify the components that ensure and delimit the model's efficient application, which entails three macro issues: the quality and quantity of supply; the accessibility of the product to low prices; and the anticipation and prevention of disruptions in supply. FSDSs identify which components are volatile and, to some extent, self-regulated by the market and by economic assumptions. On the other hand, they identify which endogenous and exogenous components are less flexible and subject to FSDSs results in achieving their objectives.

The efficiency of the system within the urban context depends on a sort of "dynamism" required for FSDSs. This premise is based on the ability to identify and predict, within the time needed to respond to the system, tangible changes to the physical, infrastructural and behavioural components spurred by market regulations (Aragrande, n.d; Aragrande and Argenti, 2001; Argenti and Marocchino, 2007; Ericksen, 2008; Reardon and Timmer, 2012). As such, the goals of an FSDS could be defined as follows:

- a) [to] determine whether there is a correlation between urban growth and socio-economic factors on the one hand, and FSDS efficiency and dynamism on the other;
- b) [to] identify the processes of change, adaptation and modernization (exogenous and endogenous, spontaneous and induced) which the FSDSs must adopt in the short, medium and long terms in order to meet urban food requirements adequately. (Aragrande and Argenti, 2001:31).

The limits of FSDSs are identified in conceptual terms by their dialectical ability to perceive and comprehend all of the possible activities related to the production and distribution of food and their connections and relationships of cause and effect. When applied to a food system, their main limitation is this: the negative externalities of their intrinsic complexity.¹

Sustainable food value chain

The goal of an SFVC, in general, is the maximization of commercial profit at each stage of the productive chain, springing from the assumption that companies should explore the limit of the momentary values consumers are willing to pay in order to acquire a particular food product (Webber, 2007; Bowersox *et al.*, 2013; Donovan *et al.*, 2013; Neven, 2014).

¹ The models' endogenous limits (infrastructural constraints such as resources for its execution and analysis, supply of agricultural products, etc.) and exogenous limits (regional and national political dimensions, national macroeconomic contexts, etc.) are not explored in this section.

Economic growth in an SFVC is based on a premise of economic development that hinges on the capitalization of a productive activity created by growth in earned income and profit maximization. This premise directly associates increased job salaries, affected directly or indirectly by the value chain, with increased labour productivity, which, in turn, is deemed possible by the capitalization.

Therefore, it is assumed that sustainability in the chain will occur through the equitable distribution, depending on its involvement, of income and profit earned in the aggregation of value. The application of an SFVC is premised on the rational economic behaviour of agents and on an environment of perfect and free competition, in which each agent has access to its corresponding portion provided in the activity (Bowersox *et al.*, 2013; Donovan *et al.*, 2013; Neven, 2014).

One might suggest that the main conceptual paradigm of an SFVC is one in which the model of analysis assumes control over the economic rationality expected of economic agents. That is to say that an SFVC develops its whole dialectic based on a rational expectation of agents' economic behaviour, mainly through the beneficial effects that increased productivity will bring to the productive sector (more products at lower costs) and to the work that is, in some form or another, involved (higher salaries and better working conditions).²

1.3 Instruments

Food supply and distribution systems

FSDSs are proposed as an interdisciplinary method of analysis. This prerogative is essential if analytical responses are to contain credible information to promote or develop urban food systems, within a comprehensive understanding of causes and effects, associated with a prevalence for participatory processes in research techniques. The idea permeating this approach is one of removing potential inequities between expected and achieved results, while incorporating a sensitivity in the analytical scope towards socio-economic issues in all stages of the study (Aragrande, n.d; Aragrande and Argenti, 2001, Argenti and Marocchino, 2007; Ericksen, 2008; Reardon and Timmer, 2012).

Sustainable food value chain

An SFVC is also a dynamic system that involves the causal identification of agents' behaviour within a value chain. This vision is central not only to identifying the stages involved in the chain, but also to

² Clearly, the limits of an SFVC can be inferred from the limits of the neoclassical model of economic growth (Stiglitz, 1990; Solow, 1999), given that its guidelines presuppose the regulatory role of the market, in line with the creation and maintenance of an economic environment favourable to that market, and the necessarily limited participation of the public sector in all of its spheres. As such, we mention only this theoretical limitation here and leave others to be explored with the themes that will be developed in subsequent sections.

preparing strategies and interventions to be adopted for economic development that mitigate the main, rather than situational, constraints (Silva, Souza Filho, 2007; Donovan *et al.*, 2013; Neven, 2014).

The added value in the aggregated supply of a particular food product increases as a result of the opportunities for aggregation in each of its stages. In other words, the added value is generated by the difference between a reduction in non-wage costs of production created by increased productivity and an exploration of the maximum price that consumers are willing to pay for a food product. The guiding approach of an FSDS is limited to economics (Webber, 2007; Bowersox *et al.*, 2013; Donovan *et al.*, 2013; Neven, 2014).

2. Contributions and comparative analysis: complex food system meeting urban food needs

2.1 Operational efficiency:

FSDSs and SFVCs are of different orders of magnitude for reasons that have to do directly with scale of measurement, evaluation and applicable contexts. However, their stated objectives can be interpreted as an expectation of an increased supply of food products available to consumers at lower prices in the medium and long term.

FSDSs assume this variable to be essential to their approach in terms of a market's efficiency and dynamism, given that exploiting a market's opportunities and correcting its distortions are at the heart of their interventions. These opportunities can be extrapolated to the economic dimension when identified in other niches of intervention, such as widening the scope of urban planning to include food needs, or stressing the importance of informal markets (or vendors) without attempting to include them in the legal-financial system (while including them in regulations to ensure food quality and safety).

In this sense, for FSDSs, the articulation between agents who are directly or indirectly involved is also an essential component in all stages of the method's application. Given the incidental nature of the constraints and their possible responses, it is assumed that direct agents are given greater responsibilities. Therefore, the operational efficiency of FSDSs depends on, and is limited by, the more vulnerable dimensions to be developed by the method.

As for an SFVC, the neoclassical economic axioms of economic growth are the primary engines driving the method's efficiency when applied to a value chain (Stiglitz, 1990; Solow, 1999). This means promoting the economic capacity of each agent in the chain to explore current and future market opportunities, and correcting structural constraints. This efficiency is associated with increased productivity, which in turn and through the model's automated mechanisms, generate the economic and financial benefits expected, such as higher incomes and profit and the maximization of labour, in two ways (growth in jobs and regulation of the salaries of existing jobs).

In an SFVC, its complete functioning and success is critically dependent on micro and macroeconomic environments, given that public policies and authorities are called on to guarantee the legislative mechanisms of the self-regulated market while maintaining the central economic role of companies in this regard. This, in turn, makes the model essentially dependent on a certain degree of macroeconomic stability and a homogeneity of information available to agents.

2.1.1 Inclusiveness

In the two methods, the social or, so to speak, socio-economic and political dimensions are not subject to direct intervention by the model's application. The term 'economic inclusion' in this study means to include or allow the inclusion of a group of people who, in some form or another, are prevented from gaining access to the economic conditions that are expected and acceptable in the context to which the group pertains.³ For both methods, this type of economic inclusion occurs indirectly when it is considered situational or as a positive externality of the method's application.

For FSDSs, it is expected that economic inclusion will reach agents involved in the food system through a cascading effect on production and distribution caused by corrections and improvements in that system. A common example is the expected economic inclusion of disadvantaged informal vendors, such as poor women who are responsible for their family's economic livelihood in many countries in the global South. In this example, economic inclusion can be caused by two effects: a direct effect, when a public policy aims to improve the economic conditions of the group's commercial activities, and an indirect effect, when this group is able to gain access to lower-priced and higher quality food products, which, in turn, aggregate greater margin in end consumption.

For an SFVC, this type of inclusion occurs essentially as a result of increased productivity, on the one hand, and workers' salaries on the other, as shown previously. In expecting that the sustainable development of companies involved in a product chain will improve the socio-economic conditions of the poorest and most disadvantaged groups, the model believes in an economic mechanism for transmitting and distributing these revenues.

One example of inclusion in an SFVC is economic development that creates more jobs with "fair" salaries for the disadvantaged population, which, in turn, will have more income available for food. Another is its positive effect (or improvement in terms of the economics of a value chain) on the supply of products when these products are exposed to free market competition, thus lowering prices and making them more accessible to disadvantaged groups.

³ The term "inclusion" is used to include within a specific status a group of people who find themselves to be in a disadvantaged (or excluded) position in relation to the majority in the society to which they belong. Society is strictly defined by the geographical and political limits of the territory under analysis. While we agree that this definition is lacking in various epistemological aspects, that is not the goal of our study. We intend only to work with the concept of "inclusion" mentioned above.

In terms of possible improvements to social (in the broad sense) or spatial and habitational conditions, both methods have no direct effect, precisely because of their conceptual natures. However, these effects are expected to reach these components in an indirect manner, as explained above, in the economic dimension through the income available to disadvantaged families and groups. A further indirect effect is through public policies, as shown earlier, in which a political alignment of local, regional and national powers is expected to favour corrections to the groups' social and spatial dimensions. In other words, both methods may contribute to identifying these social and spatial needs in the context under study.

Finally, but of no less importance, is the potential reduction in the unequal distribution of income. Although FSDSs do not specifically address this issue, they are clear about which benefits can be brought about when the method is applied and developed. An SFVC approaches the issue through the economic dimension by assuming that its application will generate positive effects on income distribution among the agents involved, depending on their relative "importance" within the chain.

In both situations, a potential re-balancing of income distribution may be an expected and desirable effect, and should occur as a positive externality of the models' applications. Neither model deals with corrections that fall outside this logic, given that the poor or unequal distribution of income (or the high concentration of income held by a rich minority) in the majority of poor countries is a conjunctural, structural and often inertial problem.

2.1.2 Economic Sustainability: continuity; profitability; poverty reduction; economic growth.

The economic sustainability of FSDSs and SFVC interventions is appraised continuously and indispensably. As mentioned earlier, both models work with economic axioms to structure interventions in the economic activities of food systems and value chains, respectively. The primary factor affecting economic sustainability is the generation and maximization of profit within a capitalist approach.

Agents involved in economic activities are subject to interventions of this nature insofar as incomes earned by whatever means are, in theory, ensuring the sustainability of the activity and the availability of incomes for workers affected by those activities. By these same principles, one would expect there to be a trend towards a medium- and long-term period of economic sustainability. Here, we will explore only these elements that give rise to other conceptual discussions, in addition to discussions about the capitalist system.

For FSDSs, the goal of reducing poverty in the context under study appears to be founded on other factors beyond the income available for the poorest families. Clearly, this premise is central to the method's approach, both in the creation of a supply of formal labour and in the lowering of prices for food products, as guaranteed by the principles of "efficiency" and "dynamism". In terms of economic

growth, FSDSs do not deal with it directly. Once again, this is an expected effect of the model's application, in the context under analysis, by the same neoclassical axioms of economic growth (Stiglitz, 1990; Solow, 1999).

However, the method envisions an interdisciplinary diagnosis of the food system for the urban context under study and as such, the diagnosis is expected to include socio-economic, political, spatial and habitational dimensions. Hence, the case study proposed by FSDSs may provide information and recommendations that allow local and regional public authorities to intervene in the thematic areas underlying food systems, such as providing basic sanitation in areas affected by commerce, developing the trade in highly nutritional products and making them more accessible to the poorest areas and groups.

In other words, FSDSs seem to assume that a policy to reduce poverty can have other political and dimensional aspects beyond the consumptive capacity of the poorest families and groups. Poverty, as shown here in its variation in access to food, appears to escape the logic of greater available income and access to consumption.⁴

In an SFVC, poverty reduction is seen as an inevitable effect of the model's application, given that the model presupposes full and equal distribution, proportional to the income earned by each of the agents involved in the economic activities in the value chain. Others argue that this effect ought to occur through competition, on the assumption that companies tend to be more profitable and productive in a competitive environment, creating new jobs and paying workers "fair" salaries (Neven, 2014; Bowersox *et al.*, 2013).

However, perhaps it is premature to assume that increased productivity would necessarily generate growth in jobs or improved salaries, given that such a situation should only be expected if growth did not occur as a result of technology or a reduction in the marginal costs of production. Increased productivity in this scenario could also be generated by reducing the number of agents involved in the same activity, thereby reducing the components that measure competitiveness without there being any market concentration.

A different discussion could be initiated with respect to the distribution of income proportional to the role of each economic agent within the value chain. This presupposition springs from the premise that full and free competition exists without oligopolies and monopsonies in every stage of the chain. This approach could be problematic for several reasons. On the one hand, the capitalist system does not assume such distribution as an axiom (its opposite is observed in the tendency towards wealth concentration, as seen in the West). On the other hand, by changing the scale of analysis from the local

⁴ For further information on the consumption index as a poverty indicator, see Sousa (2012).

to the transnational and global, mainly in the poorest regions of the world, one finds an economic environment with high market concentration.

When a local economy depends on a food product that is produced or sold by a small number of economic agents, the product's availability in the local market and its price formation can become more vulnerable to market alterations or corporate strategies. Perhaps these kinds of questions should precede any attempts to implement the sustainable value chain models promoted by SFVC. In extreme cases in which market concentration reaches global proportions, SFVC interventions would be limited in other areas that escaped this type of situation.

While it is not our goal here, we should highlight the possible effects of sustainability in the public sector in both models. It would not be premature to state that for SFVC and FSDSs (although stronger and clearer in the former) the public sector is expected to behave as a political facilitator in the development of economic agents' productive capacity, while acting in an economically rational and capitalistic manner as an economic agent in itself.

This view is in line with the economic neoliberalism that has been conferred on Latin America since the 1970s and in several countries in Sub-Saharan Africa since the 1990s. The so-called structural adjustment policies are nothing more than the ratification of a government policy that takes an exclusivist approach towards the state's social functions. In both examples, one can easily find in their economic histories various situations in which the ends became separated from the means, particularly in socio-economic terms.

Therefore, SFVC and FSDSs should be attentive, not only to the contextual economic analyses that they propose, but also to the national political scenario and the transnational exchange of agricultural goods. Similarly, when a context under study includes a strong pattern of imports, the corresponding importance of global scenarios of finance, speculation and food production should be respected in local decisions and in the expected results of the models' applications.

2.2 Overview analysis of outputs – limits and externalities

The main question put forward in this study is this: What is the role of FSDSs and SFVC in increasing, improving or mitigating problems in the supply of food in cities? This question extends, in turn, to the ideal scenario of supplying food at a lower price in favour of the poorest groups while simultaneously promoting local socio-economic development.

We may not be able to answer this question, given our belief that careful empirical studies should be carried out so as to ensure theoretical and empirical feedback for the method and the context under analysis. Nonetheless, in taking up the premises underlying the methods, we can say that both have the potential capacity to promote food supply in cities at prices lower than what currently exists.

This assumption is derived from a theoretical and methodological appreciation of both approaches within their own specific contexts. For FSDSs, the goal is expected to be achieved in two ways: one is structural, promoting the efficiency and dynamism that the food market requires, in this case; the other is situational, anticipating a number of strategies that should be adopted by public authorities to maximize the benefits and goals identified in the FSDSs.

For an SFVC, the goal is expected to be achieved strictly through economic means, as previously mentioned, by the (potentially) beneficial socio-economic effects from increased economic productivity and labour, both of which are, in turn, outcomes of the economic development envisaged by the method. As such, an SFVC would enable more people to gain access to food products in a value chain because of lower prices and increased family incomes resulting from the maintenance and creation of new jobs with (economically) “fair” salaries.

Believing only in market regulation to generate these socio-economic effects could be problematic in the absence of public policies to correct the economic distortions inhibiting free competition in the market. For instance, the opposite is shown in several so-called developed countries, such as subsidies for orange production in the United States or agricultural subsidies in various European countries. The question to ask, then, is why one would expect such economic regiments to function in developing countries or those without poverty.

Let us then tease out several conceptual indicators that we can identify in the course of our study. As we have tried to demonstrate, both methods depend highly on economic axioms – or more precisely, neoclassical axioms of economic growth – to answer those questions, where the development of social or socio-economic components is contingent on economic growth (Stiglitz, 1990; Solow, 1999). In this study, we will not examine the effects of economic growth, as it would require us to revive the epistemologies of “economic growth” within and beyond the capitalism and economic neoliberalism practiced in the twenty-first century.

FSDSs are identified as a complex system lacking certain macroeconomic conditions, particularly when proposed as a diagnosis based on various levels of fieldwork and when economic agents are involved in the initial process of research. Another important task is to act as a balance between the public and private sectors in coordinating the strategies and measures required for developing production and distribution in a food system.

Therefore, in general terms, the FSDSs method is based on the premises of: a) improving the economic, social and political dimensions of distribution and marketing in a food system; and b) increasing the efficiency of the market and supplying lower food prices, particularly for the poorest groups. Within these objectives, the method takes up the idea of a private sector that behaves in a beneficent manner in social terms. Such behaviour can only occur under the supervision of

government in all spheres of its activity, so as to ensure equality of the law on both sides: that of private interests and that of social interests.

One cannot assume, from the start, that FSDSs in themselves carry an intrinsic characteristic that generates socio-economic benefits for the poorest groups. This assumption is only provable by ad hoc economic analysis. However, these benefits should be guaranteed through the aforementioned role played by political decision makers, through corporate responsibility on socio-economic issues and through monitoring by civil society vis-a-vis their expectations and the changes proposed by the method.

In this sense, several contingent precautions should be taken to maximize these mechanisms that benefit society in socio-economic terms. For instance, FSDSs should anticipate and prevent the formation and presence of monopolies and oligopsonies, particularly in wholesale and retail markets. Endogenously, FSDSs call into question the following: How is it possible to articulate mutually beneficial characteristics in the public and private domains? The best answer that the method provides is to create representative committees of all economic agents (market managers, businesses, vendors, consumers, etc.) involved in the management of market infrastructures, with a focus on creating and maintaining a competitive market for food products.

Meanwhile, an SFVC is proposed as a system capable of capturing the various orders of magnitude involved in analysing a value chain for a food product. Its method is strongly supported by the neoclassical axioms of economic growth, in which results are distributed equally among economic agents (in proportion to their roles) through the maximization of labour productivity (Stiglitz, 1990; Solow, 1999).

In terms of the socio-economic benefits expected from the model's application, an SFVC also lacks the same premises identified earlier in FSDSs in equal measure of importance. However, what differentiates them in this regard is the capacity of an SFVC to restructure itself within an economic system because of its mononuclear (value-based) nature and its typically capitalist axioms.

An important characteristic of SFVC is the assumption of a possible trade-off between increased labour productivity and a reduction in jobs. This is patent in various long-term economic studies, especially in countries in situations of poverty and in an environment of unequal competition. In general terms, the method attempts to answer this trade-off by promoting the capacity for spatial and sectorial labour mobility within the value chain when these increments in production and human capital are expected to occur.

Several aspects of the FSDSs and SFVC approaches deserve attention. Firstly, one should consider the importance of inter-institutional cooperation between economic agents through the involvement of public institutions and authorities (local, regional, national) and civil society organizations. In this

regard, the institutional sphere is the nucleus for inclusive and responsible cooperation between agents and institutions, reaching consumers who are not involved in social organizations; that is, the poorest groups.

Secondly, while FSDS and SFVC seek to identify the role of informal commerce in food systems in a way that avoids mitigating or subjecting it to the logic of economics, it would be important to adopt a more assertive posture towards the potential restrictions on the tax system. The questions that arise in this regard are: Should the tax system promote or weaken the informal distribution system? What is needed to attract informal vendors to the tax system and, at the same time, improve (or not harm) food distribution? How can tax evasion be dealt with in informal retail markets, other informal activities and street vendors? The answers may be found within the food system and value chain, alongside an approach that adequately understands the analytical limits of each method, which aside from being methodological, are also contextual (FAO, 2007).

Before we proceed further, however, we should make a specific observation about SFVC. This method seems to demonstrate that in one of its possible scenarios, all informal activities are removed from the economic system, in assuming a linear logic between reduced informality and increased tax revenues and direct investment in social welfare policies. This linearity may not be directly applicable to poor countries, seeing as the opportunity cost of strengthening tax collection could be a reduction in the supply of food to the poorest populations, given their heavy reliance on the production and sale of food (FAO, 2007).

We now return to our comments on FSDSs and SFVC. Another conceptual argument that can be perceived in both approaches is the defence of, and belief in, the need for a strong presence of the private sector in food systems and in production and distribution chains, where it should be more effective and fruitful. This supposition is true only within the theoretical function of private companies. Self-regulated markets with monopolies have proven, throughout Western history, to be unrealistic in terms of their socio-economic effects on poor communities (as well as countries and regions) in the medium and long term.

Therefore, FSDSs and SFVC need to be more assertive regarding the presence of high concentrations of power in the market in any economic activity relevant to the context being analysed, especially in wholesale and retail markets. The methods should promote an economic and political environment that enables the full use of benefits that a combination of the two sectors – the public and private spheres – might generate. At the same time, the needs and interests of civil society should be shielded from the potential externalities that this partnership may generate, mainly in terms of food availability for the poorest populations.

One final comment, which is more of a question: How can FSDSs and SFVC overcome the eventual productive constraints on producers with less economic power, typical of poor regions, as a result of the actions of international transgenic seed companies? These constraints are on at least on two levels: the loss of traditional seeds in a local community and an increased reliance on seeds owned by international companies, as highlighted by the proposed transnational law for southern African countries. The formation of monopolies in the “seed business” could be an important issue for urban food (Mayet, 2012).

3. Final remarks and conclusion

Both models disregard the existence of a market in formal terms, given that their premises and axioms are based on the supply side. In this sense, a potential paradigm for both could be the negative externalities of the market from the growth in food supply, or even the effects of increased supply on the concentration of productive activity when in the hands of an elite, which would hinder the beneficial socio-economic effects expected from the maximization of market efficiency. Not to mention, of course, the models’ heavy reliance on public policies to correct market distortions and allow for improvements in macroeconomic development. Table 1 shows a summary of the items dealt with in this study.

What emerges out of this question is the need to differentiate between the productive elite and the socio-economic elite. Even without the support of socio-economic data, one can easily observe that in several countries in situations of poverty or with serious socio-economic problems, the two elites are conflated into one. This means that both models should be attentive to capitalist expropriations of productive profit and labour productivity, which the capitalist system allows by concentrating such results and economic benefits in the hands of a few agents, even if they are made up of a group of small producers.

Table 1. Summary table of FSDSs and SFVC

	FSDSs	SFVC
Objectives	physical inputs non-financial services financial services Economic sustainability social matters urbanism matters environmental issues	physical inputs non-financial services financial services Economic sustainability
Paradigms	environmental externalities economic growth x economic development complex systems approach	Economic, social and environmental negative externalities "invisible hand" technological progress x labour productivity
Instruments	case study socioeconomic development urban development systemic efficiency	Economic approach neoliberalism market efficiency
Inclusiveness	by the Market and wage growth (economic) public policies positive externalities	by the Market and wage growth (economic)
Economic Sustainability	market efficiency neoliberalism systemic approach	market efficiency neoliberalism "invisible hand"
Limits	dependence of local authorities and public policies for social matters urban planning in food system	everything not controlled by Economics models dependence of local authorities and public policies for social matters
Negative externalities	inputs concentration unequal income distribution	inputs concentration unequal income distribution

Source: Prepared by the author based on References.

Both models defend a political premise that appears to be at the heart of twenty-first century development approaches, particularly in poor countries: decentring. It is important to highlight that decentring does not merely mean to decentre the interventional actions of public policy, as understood by the concept of “decentralization”. Decentring aims not for a distancing of government from political and socio-economic decisions, but rather an institutional opening up of this decision-making sphere to include other political and socio-economic agents.

When SFVC and FSDSs deal with questions about the participation of corporations and civil society in issues associated with food-based economic activities, they are talking about decentring. In this sense, the goal being defended in this study is to include economic agents of various dimensions in these questions, each of whom would be given a role representative of their position within the socio-economic analysis in question.

Last but not least, we might point out that SFVC and FSDSs can be mutually complementary when applied in a specific context of low socio-economic development. On the one hand, an SFVC could play a decisive role in the medium term by encouraging the development of one or more value chains for first-order foods when there is a deficiency in infrastructure or market competitiveness for a local

or regional product. Its effects on the productive activity would emerge rapidly and significantly by increasing the supply of products at lower prices.

On the other hand, FSDSs could have wider effects in the long term, as its systematic nature has a tendency to capture potential variable components within the food system. This would enable it to create the mechanisms required for the expected dynamism of the market in the face of changes to the supply and demand of food and the strategies of economic agents. At the same time, in being closely linked to socio-economic and spatial aspects, a feature of FSDSs is their ability to predict future food scenarios, which allows them to anticipate or at least mitigate potential structural changes in the socio-economic context under study over a long time frame.

As such, the complementarity being argued for here seeks to highlight the idea that both models can capture market alterations and socio-economic, political and spatial changes in different ways and over different periods of time. As such, each model is capable of generating contextual responses within its own capacities and analytical limitations of intervention.

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