

Revue internationale des études du développement

250 | 2022 People, Problems, Processes Varia

The Challenges of Food Supply: Actors, Places, and Links

Les défis de l'approvisionnement alimentaire : acteurs, lieux et liens Los desafíos del aprovisionamiento alimentario: actores, lugares y vínculos

PIERRE JANIN

p. 79-105 https://doi.org/10.4000/ried.1979

Abstracts

English Français Español

In a world faced with growing instability and inequality, food supply is a constant challenge for governments and societies. Beyond concrete organizational aspects, two fundamental issues are at stake: the strategic control of flows and the geographical and social relations operating within supply systems. This article focuses on the complementary approaches commonly adopted to address this question, rarely studied in recent years. By closely associating the field of resources and power, it shows that food supply is not simply a technical question of price, volumes and flows, but depends ultimately on the relations between different types of actors – governments, businesses, communities, trade networks, etc. – thus becoming a truly political issue. We observe that under certain authoritarian regimes (Gulf States, Latin America), the organizing state remains ever-present, while outside times of crisis (sub-Saharan Africa), there is greater scope for developing more informal dynamics.

Dans un monde d'instabilités et d'inégalités croissantes, l'approvisionnement alimentaire apparaît comme un défi permanent pour les gouvernants et pour les sociétés. Au-delà de ses modalités pratiques d'organisation, il renvoie à deux enjeux fondamentaux : celui de la maîtrise stratégique des flux et celui des liens géographiques et sociaux au sein des systèmes d'approvisionnement. Cet article introductif insiste sur les complémentarités des approches couramment mobilisées pour aborder cette question, récemment peu étudiée. En associant, de manière étroite, le champ des ressources et des pouvoirs, il rappelle combien la fourniture de denrées n'est pas seulement une question technique de prix, de volumes et de flux, mais dépend in fine des relations établies entre différents types d'acteurs : États, entreprises, collectivités, réseaux marchands... On constate que, dans certains contextes autoritaires (pays du Golfe, Amérique latine), la présence de l'État-organisateur reste incontournable, tandis que, hors crise (Afrique subsaharienne), une plus large place est laissée à des dynamiques plus informelles.

En un mundo de inestabilidades y desigualdades crecientes, el aprovisionamiento alimentario aparece como un desafío permanente para los gobernantes y las sociedades. Más allá de sus modalidades prácticas de organización, remite a dos desafíos fundamentales: el control estratégico de los flujos y de los vínculos geográficos y sociales en el seno de los sistemas de aprovisionamiento. Este artículo introductorio insiste en las complementariedades de los enfoques empleados habitualmente para abordar esta cuestión, poco estudiada en tiempos recientes. Asociando estrechamente el ámbito de los recursos y el de los poderes, recuerda en qué medida el suministro de bienes no es únicamente una cuestión técnica de precios, volúmenes y flujos sino que depende, en última instancia, de las relaciones establecidas entre diferentes tipos de actores: Estados, empresas, colectividades, redes de mercados, etc. Se constata que, en ciertos contextos autoritarios (países del golfo Pérsico, América Latina...), la presencia del Estado-organizador resulta ineludible mientras que, fuera de los contextos de crisis (África subsahariana), se deja más espacio a dinámicas más informales.

Index terms

Mots-clés: approvisionnement, système alimentaire, production agricole, commercialisation, politique d'importation, État, sécurité alimentaire

Keywords: food supply, food system, commercialization, food import, policy state, food security

Palabras claves: aprovisionamiento, sistema alimentario, producción agrícola, comercialización, política de importación, Estado, seguridad alimentaria



Introduction

- Food provisioning is a constant challenge for all stakeholders (governments, businesses, trade networks, families, etc.). It is not only complex to organize, but also difficult to control (Rapoport, 1993), especially in the unstable and insecure environments of many developing countries. Supply problems concern both urban and rural populations, even if the latter appear to take priority when intervention is necessary. Two fundamental issues are at stake: strategic control of flows (volumes, prices, forward planning) and geographical and social relations (the "connection", one might say, and the quality of relations). This article² seeks to shed light on their contours.
- As an interplay of actors, resources and geographical locations, food supply is always closely linked to a context. Time and space are key markers: they manifest as discontinuities or accelerations when resources become scarce or when trade shrinks or moves elsewhere; they express regularities when supply is more or less guaranteed and the price and quality variables do not aggravate inaccessibility. Beyond the expression of supply and demand, of a relationship between needs and capabilities, food supply is a political question involving compromises, alliances and competition that contribute to this distortion. Combining economics and politics, sometimes with a new interpretation of historical legacies, the analyses presented here illustrate the complexity of this question and the difficulty of ensuring adequate, sustainable supply (Janin & Fofiri Nzossié. 2019).

1. Complex Supply Systems: Products and Stakeholders Torn Between Value and Identity

- Food provisioning is a multisectoral activity, involving agricultural production, trading of food products and their social and geographical redistribution, making it difficult to pin down the scope of our analysis.³ It refers implicitly to the idea of ensuring adequate supply for the largest number which is not always the case. From a conceptual viewpoint, the question is as much that of transmission of risk (of shortage, inaccessibility, etc.) as of pooling or otherwise of resources.⁴ From the viewpoint of "consumers", supply can be analysed in terms of individual or collective rights and obligations (loss and lack of food rights and social and political means to restore them, responsibility towards populations that are vulnerable or dependent on others for food). Provisioning food also means making choices (Padilla, 1997). These choices may be constrained, sometimes giving rise to the idea of dilemmas (Rittel & Webber, 1973; Hattemer & Sierra, 2012), but may also depend on preferences (Bonnecase, 2016) that influence purchasing, preparation and consumption choices. Moreover, under normal conditions, food supply can also be viewed in terms of social distinctions in the choice of products bought and consumed (Chevalier, 2015), and of satisfaction (Héron, 2016).
- Supply dynamics depend on numerous variables, such as seasonal product availability, volume of products in circulation, wholesale and retail price levels, geographical distance and the state of transport infrastructures, etc. All are interlinked and exert a positive or negative influence on effective, timely supply, especially in highly insecure contexts, in conflict zones, in places where infrastructure is inadequate or in countries with an absentee or failed state. Food supply is also viewed in very different, even contradictory, terms by suppliers, shippers, regulators, consumers, etc. For experts and decision-makers, it plays a key role in "attaining food and nutritional security" (Reinert, 2015). It is also a vector of influence and change, for globalized and standardized products (pizzas, burgers, shawarma, tacos, etc.) and for the promotion of locally produced foods (Petrini, 2006; Ostrom, 2009; CAAAQ, 2008; Berton-Ofouémé, 2017). And the trading networks that organize food supply are, practically always, both responsive and adaptable.
- From local to global scales, a range of channels can be identified. These may be private, associative, familial, institutional (Bertrand, 1991; Wade & Lançon, 2015); commercial or non-commercial, between distant or neighbouring family units (Tawodzera, 2013), or in the form of transfers to households that are dependent on others for food (Frayne, 2010). The levels of stratification are equally numerous informal street peddlers, semi-informal small traders, traditional open markets, covered supermarkets and vast shopping malls against a backdrop of individualized practices and segmented purchasing power. We observe that urban behaviours in sub-Saharan Africa (primarily English-speaking) are quickly catching up with those of Latin America. They may be socially assigned, from a gender viewpoint for example (Allen & Sachs, 2009): women, mothers and wives play a key role in domestic food supply (and in small-scale processing), while regional and long-distance trade tends to be dominated by men.
- The temporal and spatial aspects of food supply are indissociable (Karg *et al.*, 2016): trade networks often have their own food information and collection networks, while at the other end of the supply chain, city-dwellers are changing the timing and modes of their food purchases. And studies of food supply have often been based, at different scales, on approaches combining geography and economics.
- The first approach looks at "urban-rural trade" at local or regional levels (Franqueville, 1997; Calas, 1999), but faces practical measurement difficulties. For more than a decade the question of local food systems has led to renewed interest in this approach, while the territorial approach, associating changes in production systems, in consumption models and external sourcing dynamics remains dominant, leading, for example, to a process of diversification across west Africa (OECD, 2013; Bricas et al. 2016)
- The second approach has been based, since the 1980s, on the notion of channels or circuits (Hugon, 1997; Padilla & Bencharif, 2001), focusing on the bottlenecks to be removed (Bilinsky & Swindale, 2005). These are detailed in the current analysis, in terms of food value chains and value sharing between actors while introducing the notions of justice and equity which add a whole new dimension to the terms of food security. There are several potential options for improving the margins of the different stakeholders. These include promoting the cultural and hence political value of certain foods



that are emblematic of a geographical area and a dietary culture, such as the corn pancakes of Venezuela (Vásquez Lezama, 2019). Organic and/or fair-trade labelling initiatives, taking sustainability into account, are another such example. The role of the food processing industry – via its processes and its sales structures – in facilitating long-distance transport of foods and their quality enhancement is also primordial. Here again, however, family producers generally obtain only a small share of their monetary value (Bonkena Bokombola & Mpanzu Balomba, 2019).

In both approaches, supply tends to be viewed from a socio-technical angle, with stages, flows and products. Numerous studies have sought to describe the stages of bringing farm produce to market (Festas, 2006; Fofiri Nzossié, 2013), the functionality and complications of transport (Padilla & Bencharif, 2001), or developments in urban food retailing (Bricas et al., 2004). Others, often economists, have sought to spatialize price differences (Araujo-Bonjean et al., 2010; OECD, 2013) and to map the future coevolution of supply, demand and trade flows (Dualine foresight study by CIRAD and INRA in the early 2010s).

Looking beyond, the real question is that of the "quality" of the supply chain, from producer to end consumer (agri-food supply chain management or supply chain security). While the widely used terms "supply chain" and "value chain" are often employed more or less interchangeably, distinctions do exist: the first concerns logistical capacity to satisfy essential needs (WFP, 2013), while the second refers to the unequal distribution of margins across actors and sectors, thus defining the debate from the viewpoint of supply chain governance. Beyond the need to "supply at all costs", the field has expanded to cover questions of the health and nutritional quality of products brought to market? – under normal conditions and at times of crisis – and which are now the dominant theme in this field.

The plurality of governance regimes (Moustier & Renting, 2015; Cossi Hinnou *et al.*, 2016; Amanor, 2009), developed from the mid-1980s by Harriet Friedmann (food regimes), is rarely mentioned, however, except within agrarian and citizens' movements aiming to bring commercial relations back into the political arena. A large gap thus exists between those who talk about democratic governance and food justice (associations, farmers' organizations, trade unions, etc.) and those who address the question in purely technical terms (risk management). This political sociology of supply has the advantage of addressing the power relations between the different types of actors involved (Porter *et al.*, 2007), that remain linked to the historical trajectory of the social and spatial systems concerned (Ariyo *et al.*, 2001; Guyer, 1987).

Until recently, studies adopting an integrated approach were scarce, limited solely to those conducted in the late 1990s by Olivio Argenti, Maurizio Aragrande and Martine Padilla (Aragrande, 1997, Armendáriz *et al.*, 2016) on food supply and distribution systems (FSDS) in cities of sub-Saharan Africa. Applying considerable methodological precision, they aimed to guide decision-making for public action by presenting the plurality of scales and objectives.

More fundamentally, food provisioning is tied to the notion of a "food system" (Labonne, 1986; Rastoin & Ghersi, 2010), of which it represents both the central function and the practical formalization. In the same vein, some scientists use the allegory of a metabolizing organism to convey the full complexity of unstable supply dynamics (Bognon, 2014). In practice, the realities of food supply are much more prosaic, the aim being more to satisfy daily needs than to rethink global strategies, be they local or international (AFD, 2015).

In many respects, renewed interest in the theme of supply security – in the wake of the 2007-2008 global crisis – is based on growing awareness, at both technocratic and grass-roots levels, of the adverse effects of a globalization that fosters agricultural specialization on the basis of sometimes hypothetical comparative advantages; of the damage wrought by productivist farming models on biodiversity and health; and of the inexorable interplay of environmental, farming and food crises with cumulative and lasting consequences. Faced with uncertain sustainability, loss of trust and growing or perceived threats, the capabilities of supply systems (still lacking resilience) are being questioned, or even challenged (Pouch, 2009). They again raise the critical question of the function of the state, its role in food supply and its capacity to organize provision, during crisis or non-crisis periods, with heterogeneous groups of stakeholders: humanitarian organizations and developers, private operators, social intermediaries (trade unions, associations social media etc.).

In parallel, the food supply issue is gradually being reshaped around/with new commitments hammered out by the SDG agenda. For example, concern for sustainability is progressively favouring the emergence of local supply systems and the relocation of food production into urban⁹ or peri-urban areas (Parfitt *et al.*, 2010). Concern for equity, for its part, is fostering emphasis on the cultural heritage of local produce and/or more balanced value sharing; concern for independence is favouring a reduction in the traditional dependence (Coussy, 1990) of food systems on external trade (aid, imports, etc.). This is leading to debate on the reorganization of food supply chains, including in countries where supply is not problematic (Hinrichs, 2013).

A feature in this journal entitled *L'approvisionnement alimentaire entre ressources et pouvoirs* (Food provisioning: between resources and powers; Janin & Fofiri Nzossié, 2019) focused on the meso and macro levels of analysis to capture the full complexity of the food supply question. It looked in detail at public and collective action often involving a wide range of actors (private, voluntary sectors, etc.) This approach deliberately omitted food supply at the domestic level – whether market or non-market based – which corresponds mainly to practices of food purchase, preparation and consumption, and of food self-provisioning, all of which have been widely studied (notably via household panels for local and national surveys).

2. Supply Security: Flow Management Rather Than Local Production

Ensuring food supply security is a constant dilemma (Janin, 2021) whatever the scale of decision-making, the political regime or the level of development.¹⁰ Two options are available. The first involves creating sustainable conditions of diversified local food production. It has been tested in previous decades through national self-sufficiency policies and is returning to prominence in the context of the agri-food transition and the systemic crises confronting governments and societies. The second involves managing flows (more effectively than is the case for prices), whatever their origin or distance, even if this means transgressing the agro-ecological and societal conditions of production. Starting in the colonial period and until very recently, this option was clearly favoured at global level, shored up by pro-market policies (for rice and wheat, for



example).

19

There is no debate about the strategic nature of food supply when the populations concerned are poor and vulnerable, and shortages are severe. Such emergencies are rarely cause for controversy. In such situations, food supply needs almost inevitably prompt "immediate priority actions" even if this means applying Agamben's principle of "rules of exception", especially for authoritarian regimes that fear adverse media coverage and social unrest (Engels, 2013). In most cases, discussions about practical modalities 12 take place after the crisis is over, with adjustment of standardized intervention frameworks if required.

Food provisioning is all the more essential in contexts where flows are often unreliable due to inadequate resources, a lack of reactivity or the remoteness of certain displaced rural populations. Even more so in zones of endemic conflict (northeastern Nigeria, eastern Democratic Republic of Congo, Somalia, Syria, northern Iraq, etc.) where food produced or received via humanitarian aid organizations is liable to be seized, diverted or resold by armed groups. In situations of this kind, the violent control of food supply stems from unequal power relations and impresses its coercive stamp on bodies, in the Foucauldian sense of the term (Nally, 2011).

Outside crisis situations, food supply in many developing countries is still seen as a sovereign¹³ function of the state (Kelly & Swensson, 2017). "Like a good father", the State is charged with either creating the necessary conditions for the market to fulfil its food supply remit,¹⁴ or ensuring a minimum level of security by replacing the market if necessary – not always successfully (Mander, 2015),¹⁵ but with the constant aim of defining a medium-term strategic vision (Rastoin, 2015).

Recent history provides very contrasting examples of what organizing food supply signifies for a state. Let us take the example of India, a country with a public system to guarantee minimum purchase prices from producers, maintain stocks and redistribute them to the poorest consumers. This system gradually results in "a concentration of resources and hence indirect targeting both on certain regions and on certain categories of producers" (Lutringer, 2018) somewhat in breach of its equalizing role. China, for its part, is an ambivalent case of supply success. Thanks to a proactive agricultural policy, ¹⁶ it has built up strategic stocks (wheat, maize, soya, sugar and rice) that can be released in the event of poor harvests, but the country is also striving to reduce its growing dependence on food imports (Chaumet & Pouch, 2017). This takes the form of massive investments in arable land abroad (Chaumet, 2015) with a view to directing output towards its own market, at the risk of heightening geopolitical tensions (Mottet, 2016).

Under authoritarian regimes, there is a strong temptation for the state apparatus to maintain a central role in food supply, either because the national aspiration for food security is highly politicized, or because it manages access to resources in a patrimonial and redistributive manner. Egypt is a good example, but Venezuela is even more emblematic (Vásquez Lezama, 2019). Analysing the dramatic food situation of the Venezuelan population, Vásquez Lezama shows that it stems not from factors of policy or governance, but rather from a series of failings that include expensive subsidies for staple foods – via conversion of oil revenues – and corruptive practices within government-managed distribution networks. The deteriorating financial situation in Venezuela since 2013 has led to increased politicization of food distribution and ultimately to shortages whose effects are expressed via a massive population exodus.

The Gulf oil monarchies also provide interesting examples (Brun, 2019; Calais, 2019) of assertive national supply policies. With a structural deficit of locally produced grains and unfavourable production factors, these States have implemented determined, but very costly, agricultural policies and local channels for distribution of foodstuffs at moderate prices, but without managing to reduce reliance on external sources. In parallel, their rulers have bought large tracts of land abroad while organizing vertical integration of supply via private businesses. Given the centralized nature of power, here, doubtless more than elsewhere, implementation strategies rely heavily on the interplay of diplomatic and clientelist alliances. It is clear that state supply policies serve to shore up political power, as understood by Daniel Bournaud and Dominique Darbon (1000)

Conversely, in many other contexts, even if supply is seen as strategic, the state does not have, or no longer has, the power to act: the structural adjustment policies of the 1980s and 1990s have left their mark. Food provisioning has therefore been delegated to market actors (import and agri-processing oligopoly when the entrepreneurial fabric is sufficiently developed), from international agricultural traders¹⁷ down to markets at national and local levels. Until the food crisis of 2007-2008, these markets represented a credible solution for dealing with food supply shortages, despite the potential risk of soaring prices.

In the wake of this crisis, governments quickly introduced targeted policies to safeguard food supply security. These included ambitious hydro-agricultural revitalization programmes, acquisition of arable land in certain underpopulated regions, negotiation of private supply contracts with producer countries or agri-food groups, price controls and/or subsidies for certain essential products, etc. For some African countries, ¹⁸ this resulted in an oscillation between vigorous advocacy not always followed by concrete results and more media-oriented operations designed to spotlight partial successes. Generally speaking, however, these actions had little effect on supply pathways. Some remained limited, others proved costly, posing the risk of a return to the most obvious option of recourse to the market (thus illustrating the place of the entrepreneurial food regime).

Things have moved forward since then. Technical options for market regulation — to ensure high-quality supplies at stabilized prices — have been clearly identified (Galtier & Vindel, 2012), but have yet to overcome the lack of political commitment (Touzard & Temple, 2012). There is now a convergence of viewpoints about the need to strengthen the regulatory function of the state: they form part of a new cycle that is tending to rehabilitate its role (Janin, 2018). Here and there, in the countries of sub-Saharan Africa especially, public initiatives are developing, with support from funding agencies like the European Union, the Agence française de développement (AFD) and sub-regional institutions (Permanent Interstate Committee for Drought Control in the Sahel [CILSS]; West African Economic and Monetary Union, [UEMOA]). These initiatives aim to replenish grain reserves at regional and local levels and to create basic social safety nets in urban areas (resilience funds of the United Nations Food and Agriculture Organization [FAO], for example, since 2016) to ensure a minimum supply capacity for vulnerable populations. ¹⁹

At times of crisis, likewise, this will of the state may be expressed either through control of the social, ethnic/community and geographical allocation of humanitarian aid (as in Ethiopia or Zimbabwe), or through specific measures, via programmes (grain banks, food vouchers) and food distribution companies whose main function is to ensure the availability,



regularity and affordability of basic consumer products for urban populations.²⁰

Without such support, the supply difficulties faced by these populations will persist or even worsen in response to the dynamics of accelerating climate change. These include the growing commodification of resource factors (water, land, plants) and the greater inequalities that may ensue, leading to heightened food supply tensions between regions and between population categories. Moreover, in the absence of substantive public supply policies for cities – beyond subsidies for staples – the issue of urban food insecurity remains acute for populations with precarious incomes in a context of narrow and largely informal labour markets. An avenue now being considered is to reterritorialize policies and production via new relations between rural and urban spheres.

3. The Central Question of Links (Geographical and Social) and Power (Commercial and Political)

The notions of linkage and flow are central to the question of food supply.²¹ They take shape around a diverse range of products, territories and hubs, of rules and norms, to ensure the smooth functioning of trading systems. Looking beyond, we need to examine the very nature of the geographical and social ties linking territories and actors. And that of distance, likewise. The transfers between producer and consumer regions, the balancing of surpluses and deficits within sectors, across short distances (Goossens *et al.*, 1994), or much longer ones, with varying degrees of institutional oversight (Fromageot, 2005), are difficult to measure, and hence less well understood and referenced. These local and regional scales nonetheless "matter" a great deal in supply dynamics.

In many countries the "rural-urban" linkage of supply systems is historically and sociologically strong, even though many governments have reproduced an urban bias via cheap food policies, generally disadvantageous for small family producers.²² From the late 1980s, improving the functioning of national markets became a priority for certain structural adjustment programmes (Coussy, 1990). This was the case in Mali, for example, with the Programme de restructuration du marché céréalier, (Grain market restructuring programme [PRMC]). This resulted in the promotion of local supply channels, the expectation being that urban consumer demand would provide a stimulus for local production systems (Temple *et al.*, 2009), even if, in reality, the appetite of "consumers" for imported foods was gradually reducing the share of local grains consumed. Overall, this connection has worked well, as testified by the absence of urban grain supply disruptions in sub-Saharan Africa. Subsistence and family farmers, and market networks are able to satisfy the steady increase in demand (Moustier, 1999; Acloque Desmulier *et al.*, 2014), even in contexts where transport, health inspection and trade infrastructures are inadequate or largely informal (Chaléard *et al.*, 2002). Likewise, a non-negligible share of urban food supplies are sourced from urban and peri-urban agriculture (Bricas *et al.*, 2004), often very small-scale and labour-intensive, with multiple functions (economic, food, patrimonial, etc.), but increasingly subject to strong competition of usage (Abo-El-Wafa *et al.*, 2017).

Relations are not unidirectional: at certain times of year, rural and urban areas are in competition for access to food supplies. In fact, rural producers' demand for food purchased on the commercial market were wrongly underestimated for many years. These needs are not linked solely to sudden crises stemming from natural disasters and reduced crop yields, but also from cyclical events. At the same time, with the growing diversity of foods consumed in sub-Saharan African cities (wheat, rice and tubers, for example), the intensity of sub-regional trade is increasing. Moreover, rising inequalities in urban access to food are giving rise to a diverse range of supply markets, both formal and informal (Crush & Frayne, 2011). Small market stalls and shops are frequented by consumers on low incomes, while supermarkets tend to cater for the emerging middle classes.

Beyond the duality of market models, many authors have focused on the recent reshaping of relations between production, distribution and consumption. For the case of Brazil, for example, Lidiane Fernandes Da Luz and Renato S. Maluf (2019) examine the concept of the "political space" involving a plurality of food supply actors and systems. Social participation and the valuing of local food culture are effective levers for promoting access to quality food. These dynamics also appear to offer ways of meeting consumers' expectations, in terms of quality, but above all of proximity in a Latin American country where social and geographical distance is liable to heighten certain forms of (food) marginality.

Better still, the local dimension of supply is becoming a deep-rooted trend. After a period of low costs following the world crisis of 2007-2008, energy prices have increased relentlessly, pushing up the cost of long-distance transport. This has led to a geographical redimensioning of food systems. The concept of "local space" is now in vogue, extending the notion of the "foodshed" (Kloppenburg *et al.*, 1996). At the same time, relations between producers and consumers are being rethought (by scientists) and gradually reshaped (through certain community dynamics).

Multiple initiatives to strengthen local, alternative supply systems are developing across all continents (Chiffoleau, 2008; Deverre & Lamine, 2010; Van der Ploeg *et al.*, 2012; Watts *et al.*, 2005). Producers are increasingly encouraged by development institutions to participate in organizations set up to represent them, and to respond collectively to calls for bids to supply local markets or aid institutions. In parallel, this evolution has spurred the development of urban food planning and "city region food systems" (CRFS),²³ with bold territorialized supply choices by the local and regional institutions concerned (Pothukuchi & Kaufman, 1999). In the early 2000s, the FAO set up its "Food into Cities" programme,²⁴ which received priority status in 2010. This is a new angle of approach, as attention had, until then, focused primarily on the supply challenges of rural areas, in situations of scarcity especially.

Cuba is very specific case of large-scale political action leading to the gradual construction of an urban farming system in response to a very disabling situation of geo-economic isolation (Mestiri, 2019). However, despite strong state involvement, the strategic goal – of covering the food needs of the capital – was not really achieved. It began with a phase of land redistribution and cooperativism, followed more recently by practical measures of agricultural innovation (the *organopónicos*) and the concurrent opening of local markets.

There are now many such examples of locally based food systems, from Europe to Latin America. They reflect a strong convergence between movements advocating the recognition of certain contractual forms of peasant and organic farming,



food sovereignty and the social economy. Clearly, this shift will not take place without strong public commitment (via the creation of legal mechanisms) on the part of local public and community structures (canteens, schools, nurseries, prisons), like that of the Food Acquisition Program (PAA)²⁵ to support local producers in Brazil (Moruzzi Marques & Le Moal, 2015).

Alongside the notions of linkage and flow, the second key component for a renewed reading of supply systems is that of the rationales and practices of the actors involved (Hatcheu Tchawe, 2003), and the associated power relations. Central to the connections between production and distribution systems, between rural spaces and urban markets, are the multiple types of relationship, alliance, dependency, bargaining and even collusion between stakeholders (Robineau, 2013): between peasant producers/organizations and traders; between business and political elites; between humanitarian and public actors. Whatever the level of development, security or stability of a given area, food supply involves a set of activities that require technical know-how, good relational capital and considerable adaptability.

Norms and rules must also be taken into account. While they play a notable role in times of crisis, serving almost to regiment the interventions of state and humanitarian actors (Enten, 2017), ²⁶ constraints are less marked for local and regional trade networks that often operate under more flexible conditions – that they nonetheless sometimes transgress – thanks to privileged relations with the state apparatus or to an oligopolistic position (Poussart-Vanier, 2006). In reality, it is often they who handle the logistics of aid redistribution. ²⁷ But the list of unfulfilled promises about retail prices for tax-exempted imported foods during the food crisis of 2007-2008, did not cast them in a positive light (Janin, 2008).

This question of the social and political construction of markets and of the commercial powers in place applies to numerous situations in Africa. In Burkina Faso, for example, Samuel Pinault (2019) studied the "distribution of market power" via a field survey of grain traders. It operates at three levels: that of the structure of trade, that of the social organization of trade, and that of the strategies deployed. This market power is not limited to an informational advantage but is also bolstered by the seasonality of food availability, by transfers and speculation. And, at greater cost to the small family producers concerned, while competition between traders exists, it is socially regulated, notably in terms of price. This bears little resemblance to the desired framework for policies aiming to improve market functioning.

Conclusion

Beyond these analyses, it is important to mention a point so far only briefly mentioned in this assessment of food supply issues. Food supply methods and rationales will change radically in response to the imperative of sustainability, an objective that, with varying degrees of urgency, will reshape modes of production, processing and consumption. Strong top-down political action is obviously needed to provide incentives and a regulatory framework, but there are also numerous opportunities for civic action by "consumer-actors", at the price of major confrontation with the other established powers. In return, this action will promote the expression of multiple aspirations, sometimes difficult to satisfy, liable to create instability or contradictions. Between nutritional quality, affordability, environmental footprint and societal value creation, which priorities will win the day? It is already becoming clear that better contextual and territorial grounding is needed to develop actions – and policies – that are more efficient, more sustainable and better accepted. This opens up a whole new avenue of research on how diverse systems can work together – rather than compete – to achieve greater food security and satisfaction.

Bibliography

Abo-El-Wafa, H., Yeshitela, K., & Pauleit, S. (2017). Exploring the Future of Rural-Urban Connections in Sub-Saharan Africa: Modelling Urban Expansion and Its Impact on Food Production in the Addis Ababa Region. *Geografisk Tidsskrift-Danish Journal of Geography*, 117(2), 68-81. https://doi.org/10.1080/00167223.2017.1350926

DOI: 10.1080/00167223.2017.1350926

Acloque Desmulier, D., Gasselin, P., & Rouillé d'Orfeuil, H. (Eds.) (2014). Agricultures familiales : trajectoires, modernités et controverses (I). Revue Tiers Monde, 220(4). https://doi.org/10.3917/rtm.220.0011

DOI: 10.3917/rtm.220.0011

AFD (Agence française de développement) (2015, June). Les profondes mutations des consommations alimentaires en Afrique. *Question de développement*. AFD. https://www.afd.fr/fr/ressources/les-profondes-mutations-des-consommations-alimentaires-en-afrique

Allen, P., & Sachs, C. (2009). Women and Food Chains: The Gendered Politics of Food. International Journal of Sociology of Food and Agriculture, 15(1), 1-23. https://dof777f0-44f0-4115-a90d-3efac4187b3c.filesusr.com/ugd/efa020_833abd44567e47e8b7bec21e23587d76.pdf

Amanor, K. S. (2009). Global Food Chains, African Smallholders and World Bank Governance. Journal of Agrarian Change, 9(2), 247-262. https://doi.org/10.1111/j.1471-0366.2009.00204.x

DOI: 10.1111/j.1471-0366.2009.00204.x

Araujo Bonjean, C., Brunelin, S., & Simonet, C. (2010). Prévenir les crises alimentaires au Sahel: des indicateurs basés sur les prix de marché. Document de travail, n° 95. AFD.

Arditi, C., Janin, P., & Marie, A. (Eds.) (2011). La lutte contre l'insécurité alimentaire au Mali : réalités et faux semblants. Karthala.

Ariyo Ayodele, J., Voh, J. P., & Ahmed, B. (2001). Long-Term Change in Food Provisioning and Marketing in the Kano Region, 1960-2000. Working Paper, n° 34. Drylands Research. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.522.8128&rep=rep1&type=pdf

Armendáriz, V., Armenia, S., & Atzori, A. S. (2016). Systemic Analysis of Food Supply and Distribution Systems in City- Region Systems: An Examination of FAO's Policy Guidelines towards Sustainable Agri-Food Systems. *Agriculture*, 6(4), 65. https://doi.org/10.3390/agriculture6040065

DOI: 10.3390/agriculture6040065

Aragrande, M. (1997). Les approches disciplinaires de l'analyse des SADA. Aliments dans les villes. FAO. http://www.fao.org/3/a-xo268f.pdf

Berton-Ofouémé, Y. (2017). L'accès à l'alimentation dans les grandes villes (Asie, Afrique, Caraïbes). L'Harmattan.

Bertrand, J.-P., Théry, H., & Waniez, P. (1991). Les Japonais et la mise en valeur des Cerrados au Brésil : pour quelle maîtrise de l'espace et de l'approvisionnement alimentaire ?. Économie rurale, 202-203, 58-64. http://www.documentation.ird.fr/hor/fdi:010012181



Bilinsky, P., & Swindale, A. (2005). Months of Inadequate Household Food Provisioning (MIHFP) for Measurement of Household Food Access: Indicator Guide. FANTA/USAID/FHI 360. https://www.fantaproject.org/sites/default/files/resources/MAHFP_June_2010_ENGLISH_v4.pdf

Blay-Palmer, A., Santini, G., Dubbeling, M., Renting, H., Taguchi, M., & Giordano, T. (2018). Validating the City Region Food System Approach: Enacting Inclusive, Transformational City Region Food Systems. *Sustainability*, 10(5), 1680. https://doi.org/10.3390/su10051680

DOI: 10.3390/su10051680

Bognon, S. (2014). Les transformations de l'approvisionnement alimentaire dans la métropole parisienne. Trajectoire socio-écologique et construction de proximités. Thèse de doctorat en géographie, université Paris 1 Panthéon-Sorbonne. https://tel.archives-ouvertes.fr/tel-01175746/file/SBognon_these.pdf

Bonkena Bokombola, P. & Mpanzu Balomba, P. (2019). La performance de la chaîne de commercialisation des feuilles de manioc à Kinshasa et dans son hinterland. Revue internationale des études du développement, 237, 35-63. https://doi.org/10.3917/ried.237.0035 DOI: 10.3917/ried.237.0035

Bonnecase, V. (2016). Le goût du riz. Une valeur sensorielle et politique au Burkina Faso. *Genèses*, 104(3), 7-29. https://doi.org/10.3917/gen.104.0007

DOI: 10.3917/gen.104.0007

Bourmaud, D., & Darbon, D. (1990). La politique du pain : les mots et les choses (Kenya et Zimbabwe). *Politique africaine*, 37, 32-44. http://www.politique-africaine.com/numeros/pdf/o37032.pdf

Bricas, N., Pichot, J.-P., & Wack, A.-L. (Eds.) (2004). L'alimentation des villes. Cahiers Agricultures, 13(1), 8-165. https://revues.cirad.fr/index.php/cahiers-agricultures/article/view/30416

Bricas, N., Tchamda, C., & Martin, P. (2016). Les villes d'Afrique de l'Ouest et du Centre sont-elles si dépendantes des importations alimentaires?. *Cahiers Agricultures*, 25(5). https://doi.org/10.1051/cagri/2016036
DOI: 10.1051/cagri/2016036

Brun, M. (2019). Produire et se nourrir dans les monarchies du Golfe : Une économie politique des approvisionnements agricoles et alimentaires. Revue internationale des études du développement, 237, 65-87. https://doi.org/10.3917/ried.237.0065
DOI : 10.3917/ried.237.0065

CAAAQ (Commission sur l'avenir de l'agriculture et de l'agroalimentaire du Québec) (2008). Agriculture et agroalimentaire : assurer et bâtir l'avenir. Rapport final. CAAAQ. http://www.caaaq.gouv.qc.ca/documentation/rapportfinal.fr.html

Calas, B. (1999). Les paradoxes des rapports villes-campagnes à travers l'analyse du ravitaillement kampalais. In Chaléard J.-L., & Dubresson A. (Eds.). Villes et campagnes dans les pays du Sud. Géographie des relations (88-103). Karthala.

Calais, D. (2019). Abu Dhabi au défi de la sécurité alimentaire : l'approvisionnement des villes comme expression du pouvoir et de la hiérarchie sociale. Revue internationale des études du développement, 237(1), 89-114. https://doi.org/10.3917/ried.237.0089 DOI : 10.3917/ried.237.0089

Chaléard, J.-L., Moustier, P., & Leplaideur, A. (2002). L'approvisionnement vivrier des villes en Guinée : entre fragilité et dynamisme. Autrepart, 23(3), 5-23. https://doi.org/10.3917/autr.023.0005

DOI: 10.3917/autr.023.0005

Chaumet, J.-M. (2015). Nourrir la Chine : géopolitique d'un défi alimentaire. *Hérodote*, 156(1), 73-92. https://doi.org/10.3917/her.156.0073

DOI: 10.3917/her.156.0073

Chaumet, J.-M., & Pouch, T. (2017). La Chine au risque de la dépendance alimentaire. PUR.

DOI: 10.1051/ocl.2012.0466

 $Chevalier, S. \ (2015). \ Food, Malls \ and \ the \ Politics \ of \ Consumption: \ South \ Africa's \ New \ Middle \ Class. \ \textit{Development Southern Africa}, \ 32(1), \ 118-129. \ https://doi.org/10.1080/0376835X.2014.965388$

DOI: 10.1080/0376835 X.2014.965388

Chiffoleau, Y. (2008). Les circuits courts de commercialisation en agriculture : diversité et enjeux pour le développement durable. In Maréchal, G. (Ed.). Les circuits courts alimentaires. Bien manger dans les territoires (21-30). Educagri Éditions.

DOI: 10.3917/edagri.colle.2008.01.0019

Cossi Hinnou, L., Mongbo Roch, L., Sanyang, S., & Kamanda, J. (2016). Plateforme d'innovation et gouvernance des chaînes de valeur du riz local au Bénin : entre jeux de pouvoir et démocratie interne. 10e Journées de recherches en sciences sociales. Inra/Sfer/Cirad, 8-9 décembre.

Coussy, J. (1990). Politiques agro-alimentaires et programmes d'ajustement structurel en Afrique sub-saharienne. In Blanc-Pamard, C., Bonnefond, P., Couty, P., & Marchal J.-Y. (Eds.). Dynamiques des systèmes agraires : la dimension économique (13-37). Orstom. http://www.documentation.ird.fr/hor/fdi:30728

Crush, J., & Frayne, B. (2011). Supermarket Expansion and the Informal Food Economy in Southern African Cities: Implications for Urban Food Security. $Journal\ of\ Southern\ African\ Studies,\ 37(4),\ 781-807.$ https://doi.org/10.1080/03057070.2011.617532

DOI: 10.1080/03057070.2011.617532

Delisle, H. (1998). La sécurité alimentaire, ses liens avec la nutrition et la santé. Revue canadienne d'études du développement, 19(4), 307-329. https://doi.org/10.1080/02255189.1998.9669789

DOI: 10.1080/02255189.1998.9669789

Deverre, C., & Lamine, C. (2010). Les systèmes agroalimentaires alternatifs. Une revue de travaux anglophones en sciences sociales. Économie rurale, 317, 57-73. https://doi.org/10.4000/economierurale.2676

DOI: 10.4000/economierurale.2676

Egg, J., & Herrera, J. (Eds.) (1998). Échanges transfrontaliers et intégration régionale en Afrique subsaharienne. Autrepart, 6. http://www.documentation.ird.fr/hor/fdi:010014748

Elbehri, A. (Ed.) (2013). Rebuilding West Africa's Food Potential: Policies and Market Incentives for Smallholder-Inclusive Food Value Chains. FAO. http://www.fao.org/docrep/018/i3222e/i3222e00.htm

Engels, B. (2015). Contentious Politics of Scale: The Global Food Price Crisis and Local Protest in Burkina Faso. Social Movement Studies, 14(2), 180-194. https://doi.org/10.1080/14742837.2014.921148

DOI: 10.1080/14742837.2014.921148

Enten, F. (2017). Temporalités des systèmes d'alerte précoce et extraversion de l'État éthiopien (2003-2016). *Politique africaine*, 145(1), 65-83. https://doi.org/10.3917/polaf.145.0065

DOI: 10.3917/polaf.145.0065

Fernandes da Luz, L. & Maluf, R. (2019). Social Participation in Political Spaces and the Valuing of Culture as Empowering Resources to Promote Access to Quality Food in Brazil. Revue internationale des études du développement, 237(1), 115-136. https://doi.org/10.3917/ried.237.0115

DOI: 10.3917/ried.237.0115

Festas, L. (2006). Enjeux et dynamiques du commerce de produits alimentaires à Bobo-Dioulasso (Burkina Faso) et Tamale (Ghana).



Université Paris 10-Nanterre.

Fofiri Nzossié, É.-J. (2013). Les déterminants de l'offre alimentaire vivrière dans les villes du Nord du Cameroun. Thèse de doctorat en géographie économique, Ngaoundéré, université de Ngaoundéré, http://agritrop.cirad.fr/575093/

Franqueville, A. (1997). Les espaces géographiques du ravitaillement urbain. Cadre conceptuel. Aliments dans les villes. FAO. http://www.fao.org/3/a-x6987f.pdf

Frayne, B. (2010). Pathways of Food: Mobility and Foodtransfers in Southern African Cities. *International Development Planning Review*, 32(3-4), 291-310. https://doi.org/10.3828/idpr.2010.10

DOI: 10.3828/idpr.2010.10

Fromageot, A. (2005). Dépasser l'enclavement : le maraîchage des savanes et l'approvisionnement d'Abidjan. *Espace, populations, sociétés*, 1, 83-98. https://doi.org/10.4000/eps.2726

DOI: 10.4000/eps.2726

Galtier, F., & Vindel, B. (Eds.) (2012). Gérer l'instabilité des prix alimentaires dans les pays en développement : une analyse critique des stratégies et des instruments. AFD. https://www.afd.fr/fr/ressources/gerer-linstabilite-des-prix-alimentaires-dans-les-pays-en-developpement-une-analyse-critique-des-strategies-et-des-instruments

Goossens, F., Minten, B., & Tollens, É. (1994). Nourrir Kinshasa. L'approvisionnement local d'une métropole africaine. L'Harmattan.

 $\label{lem:Guyer} \textit{Guyer, J. I. (Ed.) (1987)}. \textit{Feeding African Cities: Studies in Regional Social History}. \textit{ Manchester University Press. DOI: } 10.4324/9780429444838$

Hatcheu Tchawe, E. (2003). L'approvisionnement et la distribution alimentaires à Douala (Cameroun) : logiques sociales et pratiques spatiales des acteurs. Thèse de doctorat en géographie, université Paris 1 Panthéon-Sorbonne. http://www.cartographie.ird.fr/publi/Hatcheu.pdf

Hattemer, C., & Sierra, A. (2012). L'approvisionnement alimentaire de Lima au défi de la planification stratégique. 13e Conférence N-Aerus, La ville inégalitaire, espace contestés, gouvernance en tension. Paris, Gemdev/université Paris 8/UMR Prodig, 22-24 novembre

Héron, R. (2016). Les mangeurs urbains burkinabè, entre satisfaction et sécurisation alimentaires. Thèse de doctorat en socio-anthropologie, université Paris 1 Panthéon-Sorbonne. https://hal-paris1.archives-ouvertes.fr/tel-01578922

 $Hinrichs, C. C. (2013). \ Regionalizing Food Security? Imperatives, Intersections and Contestations in a Post-9/11 World. \textit{Journal of Rural Studies}, 29(4), 7-18. \ https://doi.org/10.1016/j.jrurstud.2012.09.003$

DOI: 10.1016/j.jrurstud.2012.09.003

Hinrichs, C. C. (2003). The Practise and Politics of Food System Localization. *Journal of Rural Studies*, 19(1), 33-45. https://doi.org/10.1016/S0743-0167(02)00040-2

DOI: 10.1016/S0743-0167(02)00040-2

Hossain, N., & Kalita, D. (2014). Moral Economy in a Global Era: The Politics of Provisions During Contemporary Food Price Spikes. *The Journal of Peasant Studies*, 41(5), 815-831. https://doi.org/10.1080/03066150.2014.895328 DOI: 10.1080/03066150.2014.895328

Hubert, B. (2006). Introduction. Sécuriser l'alimentation de la planète. In Hubert, B., & Clément, O. (Eds.). Le monde peut-il nourrir tout le monde ? Sécuriser l'alimentation de la planète (11-22). IRD Éditions/Éditions Quae.

Hugon, P. (1997). Pluralité des filières d'approvisionnement alimentaire dans les villes d'Afrique francophone. Aliments dans les villes. FAO. http://www.fao.org/3/a-xo269f.pdf

Hrabanski, M. (2011). Souveraineté alimentaire. Mobilisations collectives agricoles et instrumentalisations multiples d'un concept transnational. Revue Tiers Monde, 207(3), 151-168. https://doi.org/10.3917/rtm.207.0151 DOI: 10.3917/rtm.207.0151

 $\begin{tabular}{ll} IPC Global Partners (2021). Integrated Food Security Phase Classification. Technical Manual Version 3.1. Evidence and Standards for Better Food Security and Nutrition Decisions. \\ https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/manual/IPC_Technical_Manual_3_Final.pdf \\ \end{tabular}$

Janin, P. (2021). L'autonomisation alimentaire de l'Afrique en perspective. In Abis, S. (Ed.). Le Déméter 2021, 61-78. https://doi.org/10.3917/iris.abis.2021.01.0063

DOI: 10.3917/iris.abis.2021.01.0063

Janin, P. (2018). Les politiques alimentaires en Afrique de l'Ouest : réponse au risque ou facteur d'insécurité ?. In Grégoire, E., Kobiané, J.-F., & Lange, M.-F. (Eds.). L'État réhabilité en Afrique. Réinventer les politiques publiques à l'ère néolibérale (165-188). Karthala. http://hal.ird.fr/ird-01525293/document

DOI: 10.3917/her.131.0092

Janin, P., & Fofiri Nzossié, E.-J. (Eds.) (2019). L'approvisionnement alimentaire entre ressources et pouvoirs. Revue internationale des études du développement, 237(1). https://www.cairn.info/revue-internationale-des-etudes-du-developpement-2019-1.htm

Karg, H., Drechsel, P., Akoto-Danso, E. K., Glaser, R., Nyarko, G., & Buerkert, A. (2016). Foodsheds and City Region Food Systems in Two West African Cities. Sustainability, 8(12), 1175. https://doi.org/10.3390/su8121175 DOI: 10.3390/su8121175

 $Kelly, S., \& Swensson, L. F. J. (2017). \ Leveraging \ Institutional \ Food \ Procurement \ for \ Linking \ Small \ Farmers \ to \ Markets: \ Findings \ from \ WFP's \ Purchase for \ Progress \ Initiative \ and \ Brazil's \ Food \ Procurement \ Programmes. FAO. \ http://www.fao.org/3/a-i7636e.pdf$

Kloppenburg, J., Hendrickson, J., & Stevenson, G. W. (1996). Coming in to the Foodshed. *Agricultural and Human Values*, 13(3), 33-42. https://doi.org/10.1007/BF01538225

DOI: 10.1007/BF01538225

Labonne, M. (1986). L'autosuffisance alimentaire en question. In Bricas, N., Courade, G., Coussy, J., Hugon, P., & Muchnik, J. (Eds.). Nourrir les villes en Afrique subsaharienne (357-367). L'Harmattan. http://www.documentation.ird.fr/hor/fdi:23934

Lavers, T. (2013). Food Security and Social Protection in Highland Ethiopia: Linking the Productive Safety Net to the Land Question. $Journal\ of\ Modern\ African\ Studies$, 51(3), 459-485. https://doi.org/10.1017/S0022278X13000402 DOI: 10.1017/S0022278X13000402

Luo, J., Ji, C., Qiu, C., & Jia, F. (2018). Agri-Food Supply Chain Management: Bibliometric and Content Analyses. Sustainability, 10(5), 1573. https://doi.org/10.3390/su10051573

DOI: 10.3390/su10051573

Lutringer, C. (2018). Le ciblage des politiques agricoles en Inde : les implications pour les paysans du système d'approvisionnement public. *Cahiers Agricultures*, 26(4). https://doi.org/10.1051/cagri/2017027 DOI : 10.1051/cagri/2017027

 $\label{lem:masses} \begin{tabular}{lll} Maestre, M., Poole, N., \& Henson, S. (2017). Assessing Food Value Chain Pathways, Linkages and Impacts for Better Nutrition of Vulnerable Groups. Food Policy, 68, 31-39. https://doi.org/10.1016/j.foodpol.2016.12.007 \\ \end{tabular}$

DOI: 10.1016/j.foodpol.2016.12.007

Mander, H. (2015). State Food Provisioning as Social Protection. Debating India's National Food Security Law, Right to Food Study. FAO. http://www.fao.org/3/a-i4957e.pdf

Marsden, T., Banks, J., & Bristow, G. (2000). Food Supply Chain Approaches: Exploring Their Role in Rural Development. *Sociologia Ruralis*, 40(4), 425-438. https://doi.org/10.1111/1467-9523.00158

DOI: 10.1111/1467-9523.00158

Mestiri, R. (2019). La contribution de l'agriculture urbaine à l'approvisionnement alimentaire de La Havane : vers la construction d'un système agraire urbain en temps de crise. Revue internationale des études du développement, 237(1), 137-164. https://doi.org/10.3917/ried.237.0137

DOI: 10.3917/ried.237.0137

Mormont, C. (2007). Pourquoi un programme centré sur la souveraineté alimentaire. In Charlier, S., & Warnotte, G. (Eds.). La souveraineté alimentaire : regards croisés (9-10). UCL/Presses universitaires de Louvain.

Moruzzi Marques, P. E., & Le Moal, M. F. (2015). Le Programme d'acquisition d'aliments (PAA) au Brésil : l'agriculture locale et familiale au cœur de l'action publique en vue de la sécurité alimentaire. *VertigO*, 14(1). https://doi.org/10.4000/vertigo.14824 DOI : 10.4000/vertigo.14824

Mottet, E. (2016). Autosuffisance et sécurisation alimentaire chinoise : quelle stratégie régionale ?. Diplomatie, 79, 87-91.

Moustier, P. (1999). Complémentarité entre agriculture urbaine et agriculture rurale. In Smith, O. B. (Ed.). Agriculture urbaine en Afrique de l'Ouest: une contribution à la sécurité alimentaire et à l'assainissement des villes (41-55). CRDI/CTA. https://agritrop.cirad.fr/47908/

Moustier, P., & Renting, H. (2015). Urban Agriculture and Short Chain Food Marketing in Developing Countries. In De Zeeuw, H., & Drechsel, P. (Eds.). Cities and Agriculture: Developing Resilient Urban Food Systems (121-138). Earthscan Routledge. http://publications.cirad.fr/une_notice.php?dk=580432

Nally, D. (2011). The Biopolitics of Food Provisioning. Transactions of the Institute of British Geographers, 36(1), 37-53. https://doi.org/10.1111/j.1475-5661.2010.00413.x

DOI: 10.1111/j.1475-5661.2010.00413.x

OECD (2013). Settlement, Market and Food Security https://www.oecd.org/publications/settlement-market-and-food-security-9789264187443-en.htm

Ostrom, M. R. (2009). Community Supported Agriculture as an Agent of Change. In Hinrichs, C. C., & Lyson, T. A. (Eds.). Remaking the North American Food System: Strategies for Sustainability (99-120). University of Nebraska Press.

Padilla, M. (1997). La sécurité alimentaire des villes africaines : le rôle des SADA. Aliments dans les villes. FAO. http://www.fao.org/DOCREP/003/AB788F/AB788F00.HTM

Padilla, M., & Bencharif, A. (2001). Approvisionnement alimentaire des villes: concepts et méthodes d'analyse des filières et marchés. In Padilla, M., Ben Saïd, T., Hassainya, J., & Le Grusse, P. (Eds.). Les filières et marchés du lait et dérivés en Méditerranée: état des lieux, problématique et méthodologie pour la recherche (262-279). CIHEAM. http://om.ciheam.org/om/pdf/b32/CI011675.pdf

PAM (Programme alimentaire mondial) (2013). Gestion de la chaîne d'approvisionnement des aliments nutritifs spécialisés. PAM.

Parfitt, J., Mark, B., & Macnaughton, S. (2010). Food Waste Within Food Supply Chains: Quantification and Potential for Change to 2050. *Philosophical Transactions of the Royal Society B*, 365(1554), 3065-3081. https://doi.org/10.1098/rstb.2010.0126 DOI: 10.1098/rstb.2010.0126

Partenaires globaux IPC (2012). Cadre intégré de classification de la sécurité alimentaire. Manuel technique version 2.0. Preuves et normes pour une meilleure prise de décision en sécurité alimentaire. FAO. http://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/1_IPC_Manual2_FR.pdf

Petrini C. (2006). Bon, propre et juste. Éthique de la gastronomie et souveraineté alimentaire. Éditions Yves Michel.

Porter, G., Lyon, F., & Potts, D. (2007). Market Institutions and Urban Food Supply in West and Southern Africa: A Review. *Progress in Development Studies*, 7(2), 115-134. https://doi.org/10.1177%2F146499340600700203 DOI: 10.1177/146499340600700203

Pinaud, S. (2019). Le commerçant, le paysan et la distribution du pouvoir de marché dans la Gnagna (Burkina Faso). Revue internationale des études du développement, 237(1), 165-188. https://doi.org/10.3917/ried.237.0165

DOI: 10.3917/ried.237.0165

Pothukuchi, K., & Kaufman, J. L. (1999). Placing the Food System on the Urban Agenda: The Role of Municipal Institutions in Food Systems Planning. *Agriculture and Human Values*, 16(2), 213-224. https://doi.org/10.1023/A:1007558805953

DOI: 10.1023/A:1007558805953

Pouch, T. (2011). La résurgence de la souveraineté alimentaire. Économies et Sociétés, AG(10), 1719-1735. http://www.iamm.ciheam.org/ress_doc/opac_css/index.php?lvl=notice_display&id=32020

Pouch, T. (2009). Malaise dans l'approvisionnement alimentaire du monde. Géoéconomie, 50(3), 117-123. https://doi.org/10.3917/geoec.050.0117

DOI: 10.3917/geoec.050.0117

Pourcet, G. (1986). Le système d'approvisionnement d'Antananarivo en crise. In Bricas, N., Courade, G., Coussy, J., Hugon, Ph., & Muchnik, J. (Eds). Nourrir les villes en Afrique subsaharienne (215-230). L'Harmattan.

Poussart-Vanier, M. (2006). Jeux d'acteurs dans le système alimentaire burkinabè. Normes, conflits et compromis dans le marché céréalier et la gestion de l'aide alimentaire. Thèse de doctorat en sociologie, IEDES/université Paris 1 Panthéon-Sorbonne, http://horizon.documentation.ird.fr/exl-doc/pleins_textes/divers13-07/010041087.pdf

Rapoport H. (1993). L'approvisionnement vivrier de Kinshasa (Zaïre): stratégies d'adaptation à la crise du système alimentaire. Cahiers de sciences humaines, 29(4), 695-711. http://horizon.documentation.ird.fr/exl-doc/pleins_textes/pleins_textes_4/sci_hum/39288.pdf

Rastoin, J.-L. (2015). La sécurité alimentaire en Méditerranée : l'impératif d'une vision stratégique régionale. Annales de l'Inrat, 88, 144-163. https://doi.org/10.12816/0028860

DOI: 10.12816/0028860

Rastoin, J.-L., & Ghersi, G. (2010). Le système alimentaire mondial. Concepts et méthodes, analyses et dynamiques. Éditions Quae. DOI: 10:3917/quae.rasto.2010.01

Reinert, K. A. (2015). Food Security as Basic Goods Provision. World Medical & Health Policy, 7(3), 171-186. https://doi.org/10.1002/wmh3.151

DOI: 10.1002/wmh3.151

 $Rittel, H. W. H., \& Webber, M. M. (1973). \ Dilemmas in a General Theory of Planning. \textit{Policy Science, 4}(2), 155-169. \ https://www.jstor.org/stable/4531523$

DOI: 10.1007/BF01405730

Robineau, O. (2013). Vivre de l'agriculture dans la ville africaine. Géographie des arrangements entre acteurs à Bobo-Dioulasso, Burkina Faso. Thèse de doctorat en géographie et aménagement de l'espace, université Paul-Valéry Montpellier 3. https://tel.archives-



ouvertes.fr/tel-00917958/file/2013_robineau_arch.pdf

Robineau, O., & Soulard, C.-T. (2017). Comprendre la complexité des liens ville-agriculture : intérêt d'une approche par le système agriurbain. Le cas de Bobo-Dioulasso, Afrique de l'Ouest. *Nature Sciences Sociétés*, 25(1), 36-47. https://doi.org/10.1051/nss/2017013
DOI: 10.1051/nss/2017013

 $Tawodzera, G. \ (2013). \ Rural-Urban \ Transfers \ and \ Household \ Food \ Security \ in \ Harare's \ Crisis \ Context. \ \textit{Journal of Food and Nutritional Disorders}, 2(5). \ https://doi.org/10.4172/2324-9323.1000128$

DOI: 10.4172/2324-9323.1000128

Temple, L., Ngassam, S., & Nkamleu, G. (2009). Filières d'approvisionnement en ignames de Douala et changements technologiques. Économies et sociétés, développement, croissance et progrès, AG(31), 1899-1912. https://hal.archives-ouvertes.fr/hal-00802701/document

Touzard, J.-M., & Temple, L. (2012). Sécurisation alimentaire et innovations dans l'agriculture et l'agroalimentaire : vers un nouvel agenda de recherche ? Une revue de la littérature. *Cahiers Agricultures*, 21(5), 293-301. https://doi.org/10.1684/agr.2012.0577

DOI: 10.1684/agr.2012.0577

Van der Ploeg, J. D., Ye, J., & Schneider, S. (2012). Rural Development Through the Construction of New, Nested, Markets: Comparative Perspectives from China, Brazil and the European Union. *Journal of Peasant Studies*, 39(1), 133-173. https://doi.org/10.1080/03066150.2011.652619

DOI: 10.1080/03066150.2011.652619

Vásquez Lezama, P. (2019). Les distorsions des politiques d'alimentation de la "révolution bolivarienne" : crise de l'approvisionnement et politisation des contrôles au Venezuela. Revue internationale des études du développement, 237(1), 191-210. https://doi.org/10.3917/ried.237.0191

DOI: 10.3917/ried.237.0191

Wade, I., & Lançon, F. (2015). Urbanisation, changements des habitudes alimentaires et transformations rurales en afrique de l'Ouest. Global Development Network Conference: Agriculture for Sustainable Growth: Challenges and Opportunities for a New "Green Revolution". Benguérir, GDN, 11-13 juin. https://agritrop.cirad.fr/576436/1/Lancon-Urbanisation_changements-Com_2015.pdf

Watts, D. C. H., lbery, B., & Maye, D. (2005). Making Reconnections in Agro-Food Geography: Alternative Systems of Food Provision. *Progress in Human Geography*, 29(1), 22-40. https://doi.org/10.1191%2F0309132505ph5260a

Notes

- 1 While supply difficulties in rural areas, outside periods of crisis or conflict, tend to be predictable and cyclical, they occur more randomly and erratically in urban settings.
- 2 This article has been published in french: Janin, P. (2019). Les défis de l'approvisionnement alimentaire : acteurs, lieux et liens. Revue internationale des études du développement, 237, 7-34. https://dx.doi.org/10.3917/ried.237.0007
- 3 The question of provisioning also ties in with that of food security through its focus on "analysis of processes to ensure sustainable management of supplies and to provide guarantees of security considered trustworthy by the various stakeholders" (Hubert, 2006).
- 4 In absolute terms, the scope of analysis goes further, with questions on the sustainability of food production and consumption models in a context of depletion and fragilization of resource factors.
- 5 For some foods, a label of origin or organic certification has been obtained, or is pending, thanks to concerted action by the state, socioeconomic actors and consumers (acheke in Côte d'Ivoire, pepper and honey in Cameroon, rooibos or bush tea in South Africa).
- 6 This type of research now occupies a growing place (Luo $et\ al.$, 2018). For a definition of "food supply chain", see Marsden $et\ al.$ (2000).
- 7 This approach emerged later in sub-Saharan Africa than in other geographical regions (Delisle, 1998). The Nigerian crisis in 2005 was foundational for ready-to-use-therapeutic foods (RUTF) to treat severe malnutrition, while the demands of city-dwellers became shaped by the growing media coverage of globalized foods and the expansion of supermarket product ranges.
- 8 The restructuring of power relationships within food supply systems is both a promising field of analysis and a natural channel for public or civic action.
- 9 Contributing to food independence while minimizing loss and waste.
- 10 For example, with Brexit imminent, and amid concerns about low levels of self-sufficiency (25% for fruit and vegetables), the British government appointed an under-secretary of state for food in September 2018.
- 11 Especially in situations of conflict where the immediate survival of children is threatened and where the need for action is a foregone conclusion.
- 12 Is it preferable to distribute food, vouchers or cash? Can retail prices realistically be controlled without a system of coercion? Is it ethical to ask for something in exchange?
- 13 The term is used here in its standard sense with reference to the intersecting notions of food independence and self-sufficiency (Pouch, 2011), and not in relation to the various social and transnational movements (Hrabanski, 2011) that lay claim to the political objective of "food sovereignty", in terms of access to sufficient food of adequate quality, and control over the processes and factors of agricultural production (Mormont, 2007).
- 14 This central regulatory role is clearly key to the emergence of "pathways to deliver nutritious food" to vulnerable populations (Maestre et al., 2017).
- 15 In situations of shortage, this assumption of responsibility is not only an aspiration, but a demand expressed through popular protest (Hossain & Kalita, 2009).
- 16 Support for agricultural research, increased production subsidies, stabilization of domestic market prices, massive investment in the construction of rural and irrigation infrastructure.
- 17 This worldwide trade in staples is largely explained by specialization choices inherited from the colonial period, based on comparative advantages.
- 18 Initiatives in 2008 include la Grande offensive pour l'alimentation et l'abondance (Major offensive for food and abundance [GOANA]) in Senegal, the Initiative riz (Rice initiative) in Mali, and the Offensive régionale pour la production alimentaire et contre la faim (Regional offensive for food production and against hunger) of the CILSS, all of which spoke of rapid, planned and effective action.
- 19 This initiative is based on the cash transfers, food vouchers and food-for-work programmes set up since 2007-2008 in several countries, delivering resources gradually and repeatedly to the poorest populations, in both rural and urban areas: Productive Safety Net Programme (PSNP), in Ethiopia; Oportunidades, in Mexico City; National Rural Employment Guarantee Scheme (NREGS), in India. They ensure a minimum capacity of family self-supply, but with no guarantees over the long term. In the Ethiopian programme, food security, nutrition and land tenure security are tightly and positively interlinked (Lavers, 2013).
- 20 Examples include the network of grain banks in Mali in 2005 (Arditi et al., 2011), and the Mission de régularisation et d'approvisionnement des produits de grande consommation (Mission for regularization and provisioning of consumer products [MIRAP]),



in Cameroon, created in 2011.

- 21 The term "agri-urban system" is also used by some. (Robineau & Soulard, 2017).
- 22 The idea of restoring balance via vigorous incentive policies (Elbehri et al., 2013) is indeed emerging, but is still at an early stage.
- 23 A city region food system can be defined as "the complex network of actors, processes and relationships to do with food production, processing, marketing, and consumption that exist in a given geographical region that includes a more or less concentrated urban center and its surrounding peri-urban and rural hinterland; a regional landscape across which flows of people, goods and ecosystem services are managed" (Blay-Palmer et al., 2018, p. 3).
 - 24 http://www.fao.org/fcit/food-marketing/en/
 - 25 This was a component of the "Zero Hunger" programme implemented by Lula's government from 2003.
- 26 Especially visible since the creation of a harmonized framework for analysis and treatment of food and nutritional crises (Integrated Food Security and Humanitarian Phase Classification) drawn up jointly by the FAO and the World Food Programme (WFP) in 2006 and regularly improved since then (IPC Global Partners, 2021).
- 27 It is also important to bear in mind the constraints they often face: difficult access to bank loans, uncertain quantity and quality of locally produced food, decaying transport infrastructure, multiple police controls and abusive taxation (Pourcet, 1986; Egg and Herrera, 1998)
 - 28 And hence sensitive to differences in needs and expectations, and of the need to maintain supply diversity (Hinrichs, 2003).

References

Bibliographical reference

Pierre Janin, "The Challenges of Food Supply: Actors, Places, and Links", Revue internationale des études du développement, 250 | 2022, 79-105.

Electronic reference

Pierre Janin, "The Challenges of Food Supply: Actors, Places, and Links", Revue internationale des études du développement [Online], 250 | 2022, Online since 21 October 2022, connection on 26 December 2022. URL: http://journals.openedition.org/ried/1979; DOI: https://doi.org/10.4000/ried.1979

About the author

Pierre Janin

With a PhD in geography and HDR (Habilité à diriger des recherches), Pierre Janin is a research director at the Institut de recherche pour le développement (IRD). He headed the Développement et sociétés joint research unit from July 2013 to December 2018. His fieldwork in West and Central Africa focuses on development and, more specifically, agricultural and food issues, food insecurity and the governance of food and nutritional crises. He has been joint editor of Revue internationale des études du développement since June 2015. As of 2022 he is a mentor of the Young Team associated with IRD (JEAI) "Gouvernance locale des crises migratoire et alimentaires au Cameroun et au Mali" (Local governance of migration and food crises in Cameroon and Mali) and coordinates the capitalization study of the programme "Transition des systèmes agricoles et alimentaires sur les territoires" (Transition of territorial farming and food systems) conducted in five countries (Benin, Burkina Faso, Colombia, Peru, Togo) (coordinated by Acting for Life and funded by the Agence française de développement).

Recent publications

Janin, P. (2021). L'autonomisation alimentaire de l'Afrique en perspective. In Abis, S. (Ed.). Le Déméter 2021 (61-78). IRIS éditions. https://doi.org/10.3917/iris.abis.2021.01.0063

Janin, P., La Valle, N., Lhuissier, A., & Ribémont, T. (2021). Batailles de la faim: jeux d'acteurs, d'échelles et de pouvoir. In Janin, P., La Valle, N., Lhuissier, A. & Ribémont, T. (Eds.). Les batailles de la faim, Tracés, 19(41), p. 1-6. https://doi.org/10.4000/traces.12520 Héron, R., & Janin, P. (Eds.) (2020). La sécurisation alimentaire, Projet SAOATI. Groupe Nutriset-IRD/Université Paris 1 Panthéon-Sorbonne/Les Editions Zigzag.

Héron, R., & Janin, P. (2019). L'alimentation aujourd'hui : sécuriser et satisfaire. Socio-anthropologie, 39, 9-23. https://doi.org/10.4000/socio-anthropologie.5104

By this author

Editorial [Full text]

Problems, Processes and Populations: Miscellaneous Fields and Issues

Éditorial. Problèmes, processus et populations : terrains et questions

Editorial. Problemas, procesos y personas: ámbitos y cuestiones de investigación

Published in Revue internationale des études du développement, 250 | 2022

Copyright



Creative Commons - Attribution-NonCommercial-NoDerivatives 4.0 International - CC BY-NC-ND 4.0

https://creativecommons.org/licenses/by-nc-nd/4.0/

