



# Place-Based Approaches to Food System Resilience: Emerging Trends and Lessons from South Africa

*Bruno Losch and Julian May*

## INTRODUCTION

The emergence of a globalized food system, characterized by the industrialization of food, long-distance food supply chains and growing economic

---

B. Losch (✉)

Centre de Coopération Internationale en Recherche Agronomique pour le Développement, ART-Dev, University of Montpellier, Montpellier, France  
e-mail: [bruno.losch@cirad.fr](mailto:bruno.losch@cirad.fr)

B. Losch · J. May

DSI-NRF Centre of Excellence in Food Security, University of the Western Cape, Cape Town, South Africa  
e-mail: [jmay@uwc.ac.za](mailto:jmay@uwc.ac.za)

J. May

UNESCO Chair in African Food Systems, University of the Western Cape, Cape Town, South Africa

concentration, has been accompanied by a trend towards metropolitization (Sassen, 2001; Tefft et al., 2017). Among the consequences of growing populations concentrated in large cities are a heavy carbon footprint, rising sanitary risks, unhealthy ultra-processed food, economic and social exclusion, and unbalanced power relations that jeopardize democratic food choices (Lang, 2003; Puissant & Lacour, 1999). A place-based approach can help to address sustainability issues and contribute to relocalizing food supply chains and inclusive food environments (La Trobe & Acott, 2000).

This chapter posits that a territorial perspective that addresses place-based problems and their solutions can better reflect the reality of spatial dynamics. It will highlight how this perspective can contribute towards the development of resilient food systems. The food system paradox in South Africa, in which sophisticated food policies stand in contrast to poor food system outcomes, and recent state and civil society's responses to food system shocks illustrate how territoriality emerges as a solution when actors seek to build resilience.

The chapter will first summarize the systems approach, noting that some systems, such as those concerning food, operate in places that have unique physical attributes and social networks. We then explain what a place-based approach to food system change contributes. Following Harvey (2001), we emphasize that places become territories when specific conditions and actions take place, and suggest that these actions may not be state-led. As evidence of this, we then describe the South African policy context, noting the movement from the country's state-led 2017 National Food and Nutrition Security Plan (NFNSP) to the civil society-led responses to COVID-19 in 2020–2021 and the formation of Community Action Networks (CANs). Focusing on the Western Cape Province, and drawing on a systematic review of policy documents and research reports, we argue that these attempts to deal with shocks to the food system may constitute an embryonic place-based approach. This case study provides an example of a process that can be transferred to other contexts in which food systems present an inconsistency of sufficient food and a dense policy framework but with poor system outcomes and fragile resilience.

## FOOD SYSTEMS, PLACE AND RESILIENCE

Systems comprise a set of interacting or interdependent elements that function together as collective units, thereby forming a larger whole that

has properties greater than the sum of its component parts (Von Bertalanffy, 1968). Activities may be arranged in sub-systems, each with their own networks and dynamics, with multiple levels, actors and boundaries. Importantly, the geographic scale of systems governance is of relevance (McGinnis & Ostrom, 2014).

A system has the capacity to adapt, change or transform in response to internal or external stimuli (Baser & Morgan, 2008), and to generate both feedback and feedforward loops (Casti & Fath, 2008).<sup>1</sup> Adopting a systems approach reveals the trade-offs, synergies and unintended consequences of such change (Ostrom, 2000). Sustainability and resilience questions can then be identified, as well as leverage points for action. To be resilient, a system needs to maintain diversity, manage connectivity, respond to feedback, and have the capacities to self-organize and to learn. In doing so, a resilient system becomes polycentric: *“a governance system in which there are multiple interacting governing bodies with autonomy to make and enforce rules within a specific policy arena and geography”* (Schoon et al., 2015, p. 236).<sup>2</sup> For public policy, a systems approach can reveal problems of coordination and cooperation, as well as opportunities to break down barriers arising from segmented approaches where departments operate in silos (Sarapuu et al., 2014, pp. 263–264).

The production, distribution and consumption of food is one such complex adaptive system (Ingram, 2019). A food system comprises *“all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, distribution, preparation and consumption of food, and the outputs of these activities, including socio-economic and environmental outcomes”* (HLPE, 2017, p. 11). These actors and activities are embedded in *“broader economic, societal and natural environments”* (FAO, 2018a, p. 1). Regulatory institutions within the food system provide the context and rules within which the food system outcomes are produced (Ingram, 2019). Constitutional rights, international declarations, policies, strategies and local government by-laws are examples of these rules.

<sup>1</sup> Feedback loops permit responses to system disturbance to modify the system and so maintain the system’s health and function. Feedforward loops anticipate system disturbance, and allow for mitigating responses prior to the disturbance taking effect.

<sup>2</sup> The seven principles of building resilience are well summarised in Biggs et al. (2015).

Food systems have outcomes related to three goals essential for human existence and society resilience: food and nutrition security (FNS)<sup>3</sup>; livelihoods and economic inclusion; and environmental sustainability (OECD, 2021). This is presented as a ‘triple challenge’ since pursuing the goals can result in multipliers, trade-offs and externalities. Of significance for this chapter, addressing territorial balance has been identified as an additional goal (FAO, European Union and CIRAD, 2021).

All of these goals have place-based attributes. For example, food supply chains ensure both the availability and accessibility of FNS but with different spatial spans which may be short (low-input subsistence farmer to her/his family or smallholder supplying the local market) or long (agrochemical company to urban consumer via industrialized farms and multinational retail corporations). These have differing implications for nutrition, livelihoods, inclusion and sustainability (Coley et al., 2009; Morgan et al., 2019). Following the notion of the European Union (EU) Green Deal, the approach can be thought of as ‘farm-in-place’ to a ‘fork-in-place’, with food waste and loss occurring in each place as well as during the movement from place to place.

At this point, the polysemy of wording related to places should be addressed. Several words such as region, place, space and territory refer to geography, boundaries and spatial scales. There are no standard definitions and they are often used interchangeably. This is exacerbated by different meanings and usages between different languages (particularly English and other languages with Latin roots).

While spaces are neutral and a basic category of human life (Harvey, 2001), places are specific locations where things (from natural or human origins), living species and people are situated. As reminded by Relph (1985, p. 7), they are also “*an origin; it is where one knows others and is known to others; it is where one comes from and it is one’s own.*” The concept of territory can also relate to identity, usage and belonging, but is rather a social construct. This is the approach adopted in economic geography. A space becomes a territory when leaders organize it to optimize economic production (Harvey, 2001), when a coalition of actors share goals, and when networks of stakeholders mobilize local resources and dedicate them to a project.

<sup>3</sup> Food and nutrition security is now defined as possessing six dimensions: availability, access, utilisation, stability, agency and sustainability (HLPE, 2017).

Therefore, territories are spaces of coordination and contestation between actors, where local resources can be ‘activated’ through collective action and become an answer to a shared challenge, such as adaptation to globalization or to climate change (Campagne & Pecqueur, 2014; Storper, 1997). A territory takes into consideration multiple levels of spatial organization, nexus interactions and the roles they play. Central to the concept are the multiple boundaries or borders that are implied, how these are distinguished and how they are created, regulated and enforced. In this respect, the border of a territory is an institution rather than a line that simply demarcates a geographic location (Sassen, 2005).

Territories thus include: the network of actors, their strategies and their connection to other places; the linkages between dense urban centres, surrounding peripheral areas, burgeoning small and medium towns, and the rural hinterland; flows of food products along short or long-distance supply chains; and ecosystems dynamics related to natural processes and human activity (Blay-Palmer et al., 2018). A further implication is that community-based actions and local social networks are also place-bound.

Conceptual frameworks of the food system recognize that there are multiple embedded food systems, each with their own spatial boundaries (Borman et al., 2022). Firstly, the macro or global system is predominantly capitalist in nature, in which land and capital are privately owned, and food is a commodity to be acquired via market transactions. This can also be thought as the food regime, built on historical contradictions that generate crises, transition and transformation (Friedmann & McMichael, 1989).

Then there are meso-systems that are particular to a country or region. For example, Lapping (2004) refers to an American food system that is characterized by globalization, consolidation and industrialization, which succeeds in feeding the population of the USA (NRC, 2015) but less in nourishing it. Conflicting views exist about an African food system with opposite reporting about hunger, fragmentation and inefficiency (Pinstrup-Andersen, 2010), or about progression towards positive transformations (Tschirley et al., 2014). The very notion of a single food system for a continent is highly problematic due to the heterogeneity of contexts related to natural environments, population densities, agrarian systems and sociocultural patterns. However, in the case of Africa, the conditions of its integration in the world economy has resulted in important commonalities. Examples are the shared history of colonization; the adverse terms under which most countries have since been included into

the world food system; and the common purpose of pan-African integration and governance started with decolonialization and the creation of a continental organization (today the African Union) focusing on infrastructural investment, regional trade collaboration and regulation reforms illustrated today by Agenda 2063, the ‘One Africa Voice’ initiative or the Comprehensive Africa Agriculture Development Programme (ECA et al., 2021; Forum for Agricultural Research in Africa [FARA], 2021). Applied more usefully at the country level, such meso-analysis is able to reveal strong patterns, like a dichotomous food system in South Africa with concentrated and highly skewed access to land, capital and technology, in which the corporate sector exerts considerable power in guiding the system (Greenberg, 2017; Pereira & Drimie, 2016).

Micro-food systems have been identified as those operating at the level of the neighbourhood, workplace or household (Finney et al., 2012). This focuses attention on the food environment and the capabilities of the household when managing its food security, and also considers intra-household distribution and power (Harris-Fry et al., 2017; Westbury et al., 2021). Individuals negotiate access to food within the micro-food system, and ultimately, their digestive system transforms that food into energy, nutrients and waste—which could be named the nano-food system.

Adopting a territorial approach can help articulate these components of the food system, while addressing the complexity of processes related to food in a specific area. It emphasizes that food system actors don’t only produce, distribute and consume food in markets, they also live in places where the potential, constraints and plausible futures of that place matter, and where answers to challenges can be identified through collective action. It highlights the multi-dimensional nature of the food system, the diversity of its actors, their different levels of action and the need for coordination (Blay-Palmer et al., 2018; Caron et al., 2017, 2018; Cistulli et al., 2014).

As such, the territorial approach facilitates food system resilience through adaptation to changes and risk management. Risks directly affect the stability of food system outcomes through price fluctuations, sudden changes in policies, changing social relationships, unstable governments and armed conflicts (Freshwater, 2015). Moreover, repeated shocks gradually erode household livelihoods, as well as the food system resilience of the communities and places in which households are located (Davies, 1996).

Connection and complementarity between markets facilitated by globalization have always been and continue to be major answers to risks related to climate or socioeconomic and political events. These risks can result in shortages and price increases with huge impacts on food systems (Godfray et al., 2010). However, the adoption of a territorial perspective, with greater attention to the characteristics of places through local lenses, helps to mitigate the negative impacts of globalization (unsustainability of long-distance supply chains, growing economic and phytosanitary risks, exclusion and adverse inclusion due to concentration of wealth and power). It also helps to highlight within-country food system disparities related to unequal socioeconomic development (Giordano et al., 2019) often characterizing the most rural provinces or districts, ethnic communities or indigenous groups, as described by Cistulli et al. (2014) in South Africa, Ghana, Vietnam or the highlands of Latin America.

Nesting food systems governance at different geographical scales provides a link to the well-established literature on risk and vulnerability and the more recent focus on food system resilience (Béné et al., 2016; Bullock et al., 2017; Dury et al., 2019, and the current book). Some events, such as injury or illnesses from non-communicable disease, are specific to individuals or households and can be thought of as ‘idiosyncratic risk’ (Barrett, 2011). Others, such as drought or infectious disease, simultaneously affect many households in a community or region. This ‘covariate’ risk refers to the extent to which individuals, communities or sub-groups, structures and places, and indeed systems are likely to be damaged or disrupted by such shocks. The impact of HIV and AIDS is a well-documented example (Beegle et al., 2008).

The COVID-19 pandemic represents such a covariate risk, and an analysis of responses to the pandemic can provide information about the resilience of food systems (Bidisha et al., 2021; Gupta et al., 2020). Notably, the relevance of a place-based approach in articulating different levels of interventions was confirmed during the lockdowns that COVID-19 prompted. In many countries, local authorities have borne the brunt of any early response to disasters and are central in the enforcement of regulations concerning the use of space, including those relating to social distancing such as access to public facilities and the enforcement of restricted trading hours (Wright, 2020). But local governments are also proved to be well positioned to identify and help to implement nutrition-sensitive interventions targeting the vulnerable groups (FAO, 2020).

In a review of documents published since the start of the COVID-19 pandemic, Béné et al. (2021) found that food security was primarily threatened through both covariate and idiosyncratic disruptions to physical and economic access to food, with the former caused by lockdowns restricting mobility, and the latter by the loss in employment and or income. They found no evidence of disruptions to food availability, and limited evidence on utilization dimensions of food security. They interpreted lockdown interventions as disruptors to the stability aspect of FNS.

Béné et al. (2021) also note that the apparent resilience of the food system as a whole often came at the expense of smaller actors in the food system, while benefitting larger actor consolidations. For example, lockdowns meant that informal food vendors were unable to trade, while supermarkets that were given ‘essential service’ status, made large profits during these periods (Kroll et al., 2021). This points to the importance of understanding the manner in which food system governance responds to disruptions and operates at the level of a place rather than in aggregate (Kusumasari et al., 2010).

## EXPERIENCES OF TERRITORIAL APPROACHES TO FOOD SYSTEM MANAGEMENT

If there is a polysemy of wording related to places, there is also a diversity of experiences related to territorial approaches to food system management. These experiences adopt different perspectives, and it is important to consider the level of government, national or local, at which the policies or programmes have been designed.

National governments have long been, and continue to be, the main producers of public policies. Sectorial policies remain the backbone of governments’ actions, with sectorial growth as a core objective pushing spatial issues in the background. Indeed, widening regional inequality was once seen as a stage in economic growth that would follow an inverted U progression as the benefits of agglomeration trickled down (Williamson, 1965). As a result, the adoption of spatially blind policies was considered as a prerequisite for economic development even if its cost was growing territorial inequalities at a first stage (Varga, 2017). Influential international organizations such as the World Bank have been advocating for this approach: the World Development Report 2009 on Reshaping Economic



Geography being an example (World Bank, 2009). However, this conception has been criticized (Barca et al., 2012; Rodríguez-Pose, 2010), and there is evidence of the negative consequences of the rise in territorial inequality (Lessmann & Seidel, 2017). Other voices, like the European Union, particularly concerned with regional asymmetries and cohesion, and the OECD have been advocating for another approach recognizing the importance of the territorial level as a way to tailor strategies towards addressing local conditions (Barca, 2009; OECD, 2009; TP4D, 2018). This discussion is also emerging in Africa where structural challenges call for a paradigm shift towards territorial development (AfDB, OECD, UNDP, 2015; Losch, 2016).

Territorial approaches to food systems have emerged in this context (Forster et al., 2021). Still, it is necessary to clarify what is meant by the reference to a territorial approach, because some appellations can be misleading and the sectorial perspective often strongly remains behind a formal positioning on the territorial approach, which could be named ‘territorial-washing’. The OECD-FAO-UNCDF study titled “*Adopting a Territorial Approach to Food Security and Nutrition Policy*” (OECD/FAO/UNCDF, 2016) is provocative. It advocates for the adoption of a territorial approach, taking stock of the limitations of existing food security policies through a series of case studies in Cambodia, Colombia, Côte d’Ivoire, Morocco, Peru, and quicker assessments in Mali and Niger. The main issues identified relate to the priority given to agricultural interventions, the persistence of project-based approaches, the insufficient coordination between sectorial departments and levels of government, the weaknesses of decentralization and the lack of spatial differentiation (i.e. spatially blind policies), which prevents taking on board within-country inequalities and disparities. It also talks to the specificities of different contexts—for instance metropolitan regions, peri-urban and remote rural regions.

Based on this assessment and common issues identified across countries, in spite of significant differences, what is proposed as a territorial approach is to implement multi-sectorial integrated policies, to promote multi-level governance and coordination and the role of sub-national institutions, and to improve territorial information for a better regional targeting of interventions. These recommendations correspond before anything else to an objective of improving national policies by a ‘territorialization’ of priorities and planning, as illustrated by the 3 N Initiative

in Niger (Nigériens Nourish Nigériens)<sup>4</sup> or by the Green Morocco Plan (Faysse, 2015). Although space-based, the 3 N Initiative is far from a coalition of local actors identifying common challenges and adopting a shared vision of objectives and priorities.

Another example to mention is the experience of development corridors, which is sometimes presented as a way to engage in a territorial approach. Joining physical transport infrastructure with ad hoc facilities and services and bringing in the private sector through public-private partnerships, corridors are supposed to stimulate territorial development with improved connection to markets and reduced costs (Kuhlmann et al., 2011). Again, these corridors, now supported in many African countries, are examples of a top-down approach. They are in effect reproducing the extractive schemes of the colonial period, facilitating the transport of resources from the hinterland to the coast—a framework which has profoundly shaped the spatial pattern of many African countries (AfDB, OECD, UNDP, 2015). As such, corridors can create ‘tunnel effects’ with adverse impacts on the surrounding areas (Fau, 2019; Scholvin, 2021). If they offer better market opportunities with reduced transport costs and can stimulate activities, their attraction tends to marginalize neighbouring places (similar to a vacuum effect), thereby increasing spatial asymmetries. They also tend to benefit the better-off, who can quickly reap the benefits of the new infrastructure and can pave the way for outsiders. The Southern Agricultural Growth Corridor of Tanzania (SAGCOT) is a good illustration. Supposed to support agriculture and small farmers, it has been managed by foreign enterprises and has excluded smallholders (Byiers & Rampa, 2013).

Contrary to these policies designed at the national level, initiatives developed by local authorities correspond more effectively to a territorial approach to development and food system management. They need to be put in perspective with processes of decentralization, which have spread worldwide at different paces since the 1980s, with differences depending on the characteristics of the state and the political regime (Beard et al., 2008; Faguet, 2014). Roles attributed to local governments are heterogeneous, but food and food systems’ related issues are generally not in their mandates, even if local food system planning was identified as requiring

<sup>4</sup> <http://www.initiative3n.ne/>.

attention two decades ago (Buchan et al., 2015; Pothukuchi & Kaufman, 2000).

In most parts of Africa, state consolidation objectives have delayed effective decentralization. Where administrative decentralization has occurred, with the relocation of administrative functions and executive responsibilities to different levels of government, fiscal decentralization (i.e. transfer of revenue-generating power) has been more limited (Cabral, 2011; Conyers, 2007; Crooks, 2003; Smoke, 2003). As a result, the lack of local fiscal resources prevents effective and numerous interventions and food system governance is rarely on the agenda of local governments.

This situation explains why the entrance of local governments in the food policy space first occurred in major cities of the richer countries, where the existence of a larger fiscal basis offered enough room for manoeuvre for independent action from central governments and their budgets, and where food appears as a critical issue. Among the main reasons supporting this new status of food are the rising awareness of consumers (and voters) with regard to the importance of healthy food, and growing concerns about sustainability questions (e.g. type of agricultural practices and origin of the food supply and the related transport costs). The foregoing explains why initial interest focused on localized production and the promotion of urban agriculture.

Yet, some cities have embraced a broader scope and adopted a food system approach, with pioneers like Toronto in Canada, or Belo Horizonte in Brazil (Blay-Palmer, 2009; Friedmann, 2007; Rocha & Lessa, 2009). Since the early 1990s, these cities have engaged in developing their own vision and food system planning, using the full potential of urban-rural linkages existing with their large periphery. In that context, the FAO started its 'Food for the Cities' programme<sup>5</sup> in 2001, with the objective of building more sustainable and resilient food systems in the conditions of rising urbanization and environmental challenges, and to develop dialogue and partnerships.

These experiences contributed to the preparation of the New Urban Agenda (NUA), adopted by the Habitat III conference in 2016. This recognizes the importance of urban-rural linkages, the need to break away from silo thinking, and to support integrated urban and territorial planning and development (UN-Habitat, 2017). International dynamics and

<sup>5</sup> <https://www.fao.org/in-action/food-for-cities-programme/en/>.

mobilization initiated by these processes have resulted in the development of a network of cities, formalized in 2015, with an international protocol calling for the development of more sustainable and resilient urban food systems: the Milan Urban Food Policy Pact, signed by 210 cities.<sup>6</sup> The approach is fostering decentralization and cooperation mechanisms between cities which have been active in sharing their experiences (Magarini et al., 2017) and is converging with other city initiatives focusing on resilience, like the Resilient Cities Network<sup>7</sup> which includes a food component. Significantly, several cities hold their food initiatives under their resilience units, as it is the case for instance with Cape Town and Johannesburg in South Africa.

In that context, a new conceptual and policy framework has emerged. The City Region Food System (CRFS) formalizes a possible territorial approach to food system management (Blay-Palmer et al., 2018; Forster & Escudero, 2014). With reference to its own experience with the Food for the Cities program, the FAO started a CRFS programme in 2014. Its objective is “*Reinforcing rural-urban linkages for resilient food systems,*” the CRFS being defined as “*all the actors, processes and relationships that are involved in food production, processing, distribution and consumption in a given city region*”.<sup>8</sup> The programme is today developed in 13 countries in six continents.

The CRFS toolkit, developed by the FAO in 2018, presents a method for assessing the performance and functioning of food systems for a city region, including defining and mapping the city region, collecting data on the food system in the city region and analysing the data through assessments to develop an understanding of the relationships between food systems components and multi-dimensional sustainability indicators in the city region (FAO, 2018b). These include indicators that reflect improved health and well-being and increased access to food and nutrition: access to affordable, sufficient, nutritious, safe, adequate and diversified food that meet dietary needs. There are also indicators showing improved social and economic conditions for workers; building local food culture, food heritage and sense of identity; strengthening rural-urban linkages including food production and flows of food, nutrients, energy, water,

<sup>6</sup> <https://www.milanurbanfoodpolicypact.org/>.

<sup>7</sup> <https://resilientcitiesnetwork.org/?s=food>.

<sup>8</sup> <https://www.fao.org/in-action/food-for-cities-programme/en/>.

and income across rural and urban areas; and finally protecting ecosystems and environmental resources and reducing vulnerability and increasing resilience to shocks and disasters.

This standardization of the approach by the FAO has led to critics pointing to a rural bias with an emphasis on rural-urban linkages and food supply from neighbouring areas, preventing an effective vision and specific intervention on urban food security (Battersby & Watson, 2019) and the development of urban food-sensitive planning practices (Haysom et al., 2021; see also Battersby & Haysom, this volume). The toolkit approach, with priority given to flows and resource stock, is also possibly driving the focus away from governance, which is central to an effective territorial approach.

In spite of these growing decentralized experiences, the dominance of the de facto monocentric governance of food systems by the states remains. Rooted in the history of public policies, this top-down approach has been criticized over recent decades (Candel, 2014). The food system is complex; it includes many different stakeholders characterized by huge asymmetries in terms of incomes, assets and economic power; and it is characterized by a strong interdependency and interconnectedness between issues and actors. As such, a consensus has progressively emerged calling for a necessary shift towards a new approach which should be integrative and inclusive (Termeer et al., 2018). This moves away from the traditional monocentric governance towards an approach that may be considered as polycentric and paves the way for adaptive and collaborative governance. The case of South Africa is illustrative of this emerging trend.

### PLACE-BASED FOOD SYSTEM GOVERNANCE: RECENT EXPERIENCE IN SOUTH AFRICA

Historically, food system governance has been a central issue for the state. Food policies were designed and implemented by central governments, and this characteristic remains deeply rooted in the policy practice of most countries (Toussaint-Samat, 2009). Because food was first a question of supply, production was the central issue and ministries of agriculture have quickly taken the leading role in food security policies: a position that they continue to play in a large majority of countries, particularly in developmental states such as that aspired to by the South African government. It generally results in effective support from ‘strong’ ministries, like economy and finance and trade which can be explained by the growth

and employment potential of agro-food production. In the case of South Africa, this has been referred to as an implicit ‘Economic Growth’ coalition between these core ministries (Thow et al., 2018). Even if food security is recognized as a cross-sectoral issue, other ministries (such as health or social development) are in the ‘second line’. The result is a specific framing of food system issues, giving priority to production and food supply.

Based on a systematic literature review on food system governance in South Africa since the end of apartheid in 1994, Adeniyi et al. (2021) analyse these tensions and point towards the need for a new approach to governance. The literature reveals the importance of state policies: it particularly highlights a national paradox in which, despite the concerns of the Economic Growth coalition, South Africa is considered food secure, with the dietary needs of its population consistently exceeded by the food that is available. However, household food and nutrition insecurity is high when compared to countries of similar economic development.

To illustrate the national paradox, in 2015, 25% of the population lived below the national food poverty line (StatsSA, 2017a) and 27% of children under the age of 59 months were found to be stunted in 2016, a situation that has not improved despite two decades of appropriate policy interventions (Devereux et al., 2019). At the same time, 68% of adult women and 31% of men are either overweight or obese, which has translated into high prevalence of diet-related non-communicable disease (StatsSA, 2017b).

These sobering results are in contrast to a sophisticated food policy framework that is rooted in the interventionist tradition of the state, dating back decades. Contrary to other African countries, the colonial history has resulted in the development of a deep state with an autonomy of government since 1910, characterized by high centralization during the apartheid regime, and then the adoption of a limited federalism with the 1996 Constitution. Yet, food and nutrition security are enshrined as a basic human right in South Africa’s Bill of Rights, and the right to food for all people and the right to nutrition for children are set out in South Africa’s Constitution in Sections 27(1)(b), 27(2) and 28(1). Indeed, one of the first acts of the newly elected democratic government was to introduce a National School Nutrition Program (NSNP) in 1994 that was feeding 9 million children at the start of 2020.

The last major overhaul of South Africa’s long-term strategy for social and economic development, the National Development Plan (NPC,

2011), identifies food security and rural transformation as enabling milestones for the eradication of poverty and reduction of inequalities by 2030. The National Policy for Food and Nutrition Security (NPFNS) gazetted in 2014 builds on the National Development Plan (NDP) and seeks to establish a platform for increasing, and better targeting, public spending in social programmes that impact on food security (DSD/DAFF, 2013). The policy is framed in terms of the recognition of the right to food in the South African Bill of Rights, and commits government to increasing access to production inputs for the emerging agricultural sector; leveraging government food procurement to support community-based food production initiatives and smallholders; and strategically using market interventions and trade measures which will promote food security.

The NPFNS acknowledges the complex nature of food and nutrition security and the importance of interventions that encourage increased access to affordable healthy food. However, due to weak consultative processes, the state-led NPFNS is argued to have led to policy directives that were “deemed inadequate by a wide cross-section of people” (Pereira & Drimie, 2016, p. 24). Notably, after reviewing the NPFNS, the South African Human Rights Commission (SAHRC) recommends a rethink of the food system and concludes that the policy “does not speak to the need for an interconnected system” (SAHRC, 2017, p. 23).

Despite the establishment of an inter-ministerial National Food and Nutrition Plan (NFNSP) in 2017 coordinated by the Office of the President (PMG, 2017), there has been little evidence of action from national government. Although the policy framework has been put in place, both the NPFNS and NFSNP lack the legislative structures necessary to achieve their goals and objectives (Hendriks & Olivier, 2015). Jacobs & Nyamwanza (2020) go further and call for the establishment of national and sub-national forums and the involvement of non-state actors in the coordination and monitoring of both the policy and the plan.

Moreover, the South African government has been unwilling to take direct interventions such as the management of food prices, despite cycles of food inflation. The Integrated Growth and Development Plan (IGDP) of 2012 mentions addressing high food prices, improving smallholder access to markets and support services, and the need for an integrated approach to ensuring food security. The country’s national agricultural policies also include strong support for food security, but again with no mention of nutrition. For example, the Agricultural Policy Action

Plan (APAP) 2015–2019 places emphasis on value-chain interventions to improve food security, and also notes the importance of research and innovation, climate-smart agriculture, trade, agribusiness development and support. Nutrition, affordability and safety are not given attention (May, 2021).

Adeniyi et al. (2021) show an analytical convergence in most of these policy documents towards a series of governance challenges which are related to the framing problem, already mentioned, and to the importance of fragmentation, siloization and (lack of) policy coherence. These core problems are aggravated by a weak coordination, limited institutional capacity, and a partial and inadequate stakeholder engagement.

Among the proposed identified solutions to these shortcomings are the need for a legislative framework, necessary to actualize existing rights and particularly the right to food, the improvement of stakeholders' participation and stronger institutions, as well as priority to be given to local food system governance (Haysom, 2015). If multiple levels of governance are necessary to address the food system complexity, a place-based approach is an opportunity for an effective understanding of food systems' issues, facilitated and improved stakeholder engagement, improved connection with local networks and grassroot movements, and the progressive adoption of a shared vision of the main challenges on which to focus action. However, the way local processes can develop and strengthen remains an open question. Experiences of food system governance in the Western Cape province of South Africa during the COVID-19 pandemic offers a case study of how place-based food system governance may be emerging.

Due to the limited federalism, South Africa's provinces have restricted competency for food system governance. Trade, industrial policy, health, social development, education, agriculture, environment and rural development are managed by the central government, although in some instances, provincial government holds the mandate for delivery. Local governments do not have any specific mandate related to FNS and food system management.

However, there is room for action and local governments do have relevant competencies, notably for zoning and trading regulations, markets and street trading (De Visser, 2019). They are often responsible for the delivery of electricity and potable water, both central to food safety. Therefore, they can, or could, influence food system outcomes through the protection of agricultural land and food trade regulation, supporting activities in the informal economy, balancing the role of large retailers



and supporting local food producers and traders. They can, or could, also improve access to healthy and nutritious food through advertising and support to farmers' markets. Budgets and human resources remain a major limitation to implementation and impact, with the exception of the metropolises.

Despite the Western Cape's prosperity when compared to other provinces and its well-established food system, the largest food economy in South Africa, the prevalence of the indicators of malnutrition among its population of 6.5 million is similar to national trends (StatsSA, 2019). The Western Cape Government (WCG) recognized the urgency for action and in 2014, set out to develop a food security strategy to complement its Provincial Strategic Plan. This strategy had to align with a National Policy on Food and Nutrition Security gazetted in 2014, as well as with other national policies such as those concerning land, water, health and sanitation. The process required dialogue and co-design between multiple agents and bodies of knowledge, as well as between multiple rationalities and multiple levels, a feature identified elsewhere to co-design policy (Himanen et al., 2016).

Termed 'Nourish to Flourish', this strategy commits to a wide range of interventions that address all food system outcomes, although the focus is on FNS. These include providing food and nutrition literacy interventions targeting diverse age groups; food-sensitive economic and spatial planning; influencing municipal planning for food and nutrition; promoting a climate-resilient low-carbon agricultural sector; and building an inclusive food economy that recognizes the role of informal traders as an important source of affordable food for low-income households (WCG, 2016). The strategy also addresses food security governance and the establishment of multi-stakeholder processes. Although the implementation of the strategy appears to have stalled prior to the pandemic, the response to COVID-19 in the Western Cape largely followed its 'whole of society' approach and appears to have had a positive impact (WCEDP, 2020).

Both the provincial government and the metropolitan government of the City of Cape Town have recognized their roles in regard to improving food security. Making use of an existing agreement with the Cape Higher Education Consortium (CHEC), a network for collaboration between the four universities of the province, research reports were commissioned to provide an information base (Adelle et al., 2020). These in turn recognized the complex nature of the food system and the nature of food security as a common good: an important improvement when compared

to existing national policy frameworks. The research base informed stakeholder workshops conducted during 2015. These provided opportunities to discuss the conventional collective action related to concerns of coordination, cooperation, and finding and keeping agreements at the local level (Poteete & Ostrom, 2008). The deliberations of these workshops fed into a draft strategy document approved by the provincial cabinet in 2016 for public comment, which has subsequently evolved into a programme of work that includes civil society (WCEDP, 2020).

Parallel processes took place in other forums related to food security including health, governance and agriculture (Adelle et al., 2020). Following public comment, a non-government organization, the Southern African Food Lab (SAFL) specializing in partnering convened additional groups of stakeholders including ‘Transformation Laboratories’. The purpose of these meetings was to develop projects to be implemented as partnerships between government and other actors in the local food system (Drimie et al., 2018).

These provincial dynamics of consultation and local debate have provided a fertile context which allowed further engagement and the implementation of a transdisciplinary community of practice on food governance in 2018. Based on an iterative process of shared knowledge and knowledge co-production (Adelle et al., 2021), this community of practice, still active in 2022, includes: decision-makers from provincial and metropolitan governments as duty bearers for the provision of food security as a public good; the private sector as the producers and suppliers of the food itself (from farmers to processors and retailers, including from the informal sector); and civil society organizations, including consumers, as final decision-makers as well as rights-holders.

In 2017/18, extreme drought put provincial and local governments to the test and revealed the potential of community mobilization (Robins, 2019). This was followed in March 2020 by the implementation by national government of a hard lockdown in response to the first COVID-19 cases. Among the first food system impacts in 2020 was the suspension of the National School Nutrition Program (NSNP). Restrictions on informal sector food traders, the prohibition of mobility across municipal boundaries and a strict curfew also affected food systems’ actors and consumers. Mitigation measures in the form of direct food assistance were slower to be implemented, and in the case of school feeding required

litigation before being addressed.<sup>9</sup> Even then, the reintroduction of the programme was slow and uneven (Section 27, 2020).

Responding to this in the Western Cape, multiple community-led initiatives facilitated the development of a vibrant and localized food debate and action. The continuation of school feeding through the Peninsula School Feeding Association was particularly important, but this also included coordination and advocacy such as Food Dialogues, organized in 2020 and 2021 (SAUFFT, 2020) and the Food Forum hosted by the Western Cape Economic Development Partnership (Triologue, 2021). Altogether they improved the local capacity to react to the COVID-19 crisis with the rapid development of community action networks (CANs), such as those in an umbrella organization ‘Cape Town Together’, which linked almost 200 such organizations.<sup>10</sup> These local networks, connected through information and communications technologies such as social media and WhatsApp<sup>®</sup> applications, contributed towards a localized and coordinated response to the crisis by civil society (Adelle & Haywood, 2021; Odendaal, 2021). In addition to addressing the immediate food and health crisis, a stated goal of the CANs was to “put the public back into the public sector” (Bust et al., 2021).

The Western Cape is a region characterized by extreme resource inequalities, resulting in communities that, although spatially proximate, are socially distant (Mears & Bhati, 2006). This has produced ‘cities of islands’ (Writers Community Action Network, 2020). To overcome this, partnering has been key, involving different forms of collaboration according to the specific issues being addressed. Although partnering strategies have been widely used by local governments (Greve, 2015), they may be demanding in the context of food system governance in which there are fundamental differences in priorities, substantial material stakes and low levels of trust. In the case of the Western Cape, achieving successful partnerships required “moving at the speed of trust” as well as compromises, incentives and the enforcement of duties and rights. Despite this, the CANs still experienced push back by both local political leaders and the national government (Bust et al., 2021).

<sup>9</sup> On 17 July 2020, a consortium of NGO successfully litigated against the Minister of Basic Education to reinstate the NSNP (Section 27, 2020).

<sup>10</sup> See <https://capetowntogether.net/> for more details.

Although still work in progress, the interventions and activities in the Western Cape since 2017 have shown the potential to produce poly-centric forms of system governance and to engage in the pathway of a possible collaborative governance. They have required a dialogue between multiple agents and bodies of knowledge, as well as between multiple rationalities and multiple levels. As was shown, such dialogue is not necessarily initiated by the public sector and is unlikely to be proposed by the private sector even if some stakeholders, such as farmers, have strong incentives for collective action but generally lack adequate information. Key to the notion that these interventions may be nascent territoriality is the claim that they emerged when communities realized that “When you know that it is your neighbours who have empty cupboards, it is a political act to start cooking. As we cook, food becomes a vehicle for the sharing of social and cultural practices, as well as politicizing the hunger in the first place – generating learning, consciousness and human connection” (Writers Community Action Network, 2020).

In the case of the Western Cape, food system resilience during the COVID-19 pandemic has required assertive action on the part of consumers and civil society with the realization that they indeed hold rights for which others bear duties to fulfil. It is likely that some issues will still need to be resolved by the enforcement of duties and rights as contained in the national laws of South Africa, including the international treaties it has endorsed. As in other contexts, ensuring resilience has required litigation and civil society actions including consumer boycotts, social media campaigns and protests in order to put pressure on government and the main food corporate businesses (Huang et al., 2015). A possible outcome of these responses, and a possible objective, is the progressive adoption of a collaborative governance of the food system, where collaboration and consensus building are the rule.

The experiences since the start of the pandemic in the Western Cape may not be unique as similar responses have been documented elsewhere (Nemes et al., 2021; Zhan & Chen, 2021; Zollet et al., 2021). Within South Africa, CANs have spread to other provinces and have adopted similar modes of operation.<sup>11</sup> Alongside this, some umbrella associations of CANs are identifying a more ambitious agenda. One such association, Gauteng Together, states that it intends re-orientating the work of the

<sup>11</sup> For example, Eastern Cape (<https://easterncapetogether.co.za/>) and Gauteng (<https://www.gautengtogether.org/>).

CANs into a “*critical mass disruption agenda*” through the integrated zones to set up a CAN in every neighbourhood to “*save the soul of the nation*” (Nortier, 2021).

Taken together, local responses to the food system challenges arising from COVID-19 highlight how embryonic territorial approaches to addressing such challenges may contribute towards:

- rebalancing power, rebuilding capability to act, invest and influence at the local level: local governments, districts or ad hoc local cooperation bodies such as CANs help to identify the effective challenges and possible solutions through the agency and mobilization of the diversity of their stakeholders and constituents;
- building better and more resilient connections between institutions and resources, especially ecological resources: shared diagnoses and co-elaborative scenarios about plausible futures can help to design adequate strategies;
- strengthening the connection between food and innovation by building on local food cultures: local knowledge and local debate can help to build on the specific resources of a place (to be differentiated from generic resources which can be found everywhere);
- re-establishing and strengthening local flows of food and information between rural and urban areas, reducing unnecessary long-distance trade, promoting livelihoods and local multipliers.

This is not to imply a return to the localization approach ably critiqued by Born & Purcell (2006), but rather the recognition of the potential role of local governments and local actors to guide place-based food systems towards goals of economic inclusion, environmental sustainability, equity and social justice. Certainly, the long value chains, which define most present-day food systems, necessitate territorial approaches to be embedded in global contexts so that the interplay between local and global causes and effects can be clarified and understood. Furthermore, territorial approaches to food system research and development must align with national policies and commitments, including social protection measures, trade policy and corporate regulation, all of which influence food system activities and outcomes.

## CONCLUSION: THE SPIRIT OF PLACE

Despite the usefulness of toolkits of indicators and activities, like those developed in the City Region Food System (CRFS) programme presented above, local government policy development concerned with food security, and the manner of its implementation, will depend both upon the actions, negotiations and relative powers of those engaging in the process, as well as those that do not. Changing the food system is likely to produce individual and collective costs, some of which will be borne by actors who are not duty holders, nor hold rights that can be realized. A changing food system also produces new beneficiaries, some of whom are free riders able to benefit without making any contribution. Building food systems that are resilient to disruptions requires addressing the distribution of costs/benefits and how/whether these are to be managed.

Re-localizing food systems and food systems governance can significantly contribute to resilience, reduce ecological footprint and costs of transportation and transaction, foster rural-urban linkages and local activities, strengthen the social fabric, promote local food and the related cultural heritage, and enhance natural resources management and the development of new uses and services. In the context of system shocks such as COVID-19, the unintended consequences of mitigation interventions can be more quickly identified and addressed. This included expanding social protection coverage through the provision of distress grants or disaster relief, providing food parcels and permitting essential economic activities such as informal food trading.

Implementing a territorial approach to food systems in the context and the aftermath of COVID-19 in South Africa will require more than community action networks. There is a need to address funding shortages, donor and practitioner fatigue and the pull towards returning to pre-pandemic practices in the food system. Already by November 2020, 33% of the CANs in Gauteng had stopped their operations (Mahwai, 2020). To move forward, it may be necessary to draw on the existing mandate and tools of local governments and to combine the relative strengths of both state-led and community-led approaches. New forms of innovative governance will be needed to do this. This could include establishing communities of practice that build on knowledge co-production techniques, developing food charters and implementing food policy councils. Buchan et al. (2015) detail some of additional actions that are already undertaken by local governments.

To do so will require interactions with the full array of food system actors (consumers, farmers, processors, distributors, retailers, government and so forth) who are pivotal in determining food system outcomes. Although there may be failures to reach agreement, an approach to identify and provide answers to local problems can gain traction. Furthermore, a process that involves local stakeholders will facilitate territory formation, an important outcome in its own right. In this respect, the territorial approach has shown that it is well suited to addressing collective action problems concerned with the resilience of food systems, and the urban-rural interface on which they often rest.

## REFERENCES

- Adelle, C., & Haywood, A. (2021). *Engaging Civil Society Organisations in Food Governance in the Western Cape: Reflections from emergency food relief during Covid* (Food Security SA Working Paper Series, Working Paper 8).
- Adelle, C., Kroll, F., Losch, B., & Görgens, T. (2021). Fostering communities of practice for improved food democracy: Experiences and learning from South Africa. *Urban Agriculture & Regional Food Systems*. <https://doi.org/10.1002/uar2.20007>
- Adelle, C., Pereira, L., Görgens, T., & Losch, B. (2020). Making sense together: The role of scientists in the coproduction of knowledge for policy making. *Science and Public Policy*, 47(1), 56–66.
- Adeniyi, D., Losch, B., & Adelle, C. (2021). *Investigating the South African food insecurity paradox: A systematic review of food system governance in South Africa* (Food Security SA Working Paper Series, Working Paper 9).
- AfDB, OECD, UNDP. (2015). *African Economic Outlook 2015. Regional development and spatial inclusion*. OECD Publishing.
- Barca, F. (2009). *An agenda for a reformed cohesion policy: A place-based approach to meeting European Union challenges and expectations*. European Commission.
- Barca, F., McCann, P., & Rodríguez-Pose, A. (2012). The case for regional development intervention: Place-based versus place-neutral approaches. *Journal of Regional Science*, 52(1), 134–152.
- Barrett, C. B. (2011). Covariate catastrophic risk management in the developing world: Discussion. *American Journal of Agricultural Economics*, 93(2), 512–513.
- Baser, H., & Morgan, P. (2008). *Capacity, change and performance: Study report*. European Centre for Development Policy Management.

- Battersby, J., & Watson, V. (2019). The planned 'city-region' in the New Urban Agenda: An appropriate framing for urban food security? *Town Planning Review*, 90(5), 497–519.
- Beard, V., MirafTAB, F., & Silver, C. (2008). *Planning and decentralization: Contested spaces for public action in the global South*. Routledge.
- Beegle, K., De WeerdT, J., & Dercon, S. (2008). Adult mortality and consumption growth in the age of HIV/AIDS. *Economic Development and Cultural Change*, 56(2), 299–326.
- Béné, C., Bakker, D., Rodriguez, M. C., Even, B., Melo, J., & Sonneveld, A. (2021). *Impacts of COVID-19 on people's food security: Foundations for a more resilient food system*. International Food Policy Research Institute.
- Béné, C., Headey, D., Haddad, L., & von Grebmer, K. (2016). Is resilience a useful concept in the context of food security and nutrition programmes? Some conceptual and practical considerations. *Food Security*, 8(1), 123–138.
- Bidisha, S. H., Mahmood, T., & Hossain, M. B. (2021). Assessing food poverty, vulnerability and food consumption inequality in the context of COVID-19: A case of Bangladesh. *Social Indicators Research*, 155(1), 187–210.
- Biggs, R., Schlüter, M., & Schoon, M. L. (Eds.). (2015). *Principles for building resilience: Sustaining ecosystem services in social-ecological systems*. Cambridge University Press.
- Blay-Palmer, A. (2009). The Canadian pioneer: The genesis of urban food policy in Toronto. *International Planning Studies*, 14, 401–416.
- 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>
- Borman, G. D., de Boef, W. S., Dirks, F., Gonzalez, Y. S., Subedi, A., Thijssen, M. H., Jacobs, J., Schrader, T., Boyd, S., Hermine, J., & van der Maden, E. (2022). Putting food systems thinking into practice: Integrating agricultural sectors into a multi-level analytical framework. *Global Food Security*, 32, 100591.
- Born, B., & Purcell, M. (2006). Avoiding the local trap: Scale and food systems in planning research. *Journal of Planning Education and Research*, 26(2), 195–207.
- Buchan, R., Cloutier, D., Friedman, A., & Ostry, A. (2015). Local food system planning: The problem, conceptual issues, and policy tools for local government planners. *Canadian Journal of Urban Research*, 24(1), 1–23.
- Bullock, J. M., Dhanjal-Adams, K. L., Milne, A., Oliver, T. H., Todman, L. C., Whitmore, A. P., & Pywell, R. F. (2017). Resilience and food security: Rethinking an ecological concept. *Journal of Ecology*, 105(4), 880–884.
- Bust, L., Dambisya, P., Davies, B., & Patientia, R. (2021, April 22). Bottom-up responses: Lessons from Cape Town's Community Networks that inspired



- collective action in a time of crisis. *International Health Policies*. Retrieved 19 December 2021, from <https://www.internationalhealthpolicies.org/featured-article/bottom-up-responses-lessons-from-cape-towns-community-networks-that-inspired-collective-action-in-a-time-of-crisis/>
- Byiers, B., & Rampa, R. (2013). *Corridors of power or plenty? Lessons from Tanzania and Mozambique and implications for CAADP* (ECDPM Discussion Paper, No. 138). European Centre for Development Policy Management.
- Cabral, L. (2011). *Decentralisation in Africa: Scope, motivations and impact on service delivery and poverty* (FAC Working Paper, 20). Future Agricultures Consortium.
- Campagne, P., & Pecqueur, B. (2014). *Le développement territorial: une réponse émergente à la mondialisation*. Charles Léopold Mayer.
- Candel, J. J. L. (2014). Food security governance: A systematic literature review. *Food Security*, 6(4), 585–601. <https://doi.org/10.1007/s12571-014-0364-2>
- Caron, P., Ferrero y de Loma-Osorio, G., Nabarro, D., Hainzelin, E., Guillou, M., Andersen, I., Arnold, T., Astralaga, M., Beukeboom, M., Bickersteth, S., Bwalya, M., Caballero, P., Campbell, B. M., Divine, N., Fan, S., Frick, M., Friis, A., Gallagher, M., ... Verburg, G. (2018). Food systems for sustainable development: Proposals for a profound four-part transformation. *Agronomy for Sustainable Development*, 38, 41. <https://doi.org/10.1007/s13593-018-0519-1>
- Caron, P., Valette, E., Wassenaar, T., Coppens d'Eeckenbrugge, G., & Papazian, V. (Coord.). (2017). *Living territories to transform the world*. Quae Editions.
- Casti, J. L., & Fath, B. D. (2008). Ecological complexity. In S. E. Jorgensen & B. D. Fath (Eds.), *Encyclopaedia of ecology* (Vol. 1). Amsterdam.
- Cistulli, V., Rodríguez-Pose, A., Escobar, G., Marta, S., & Schejtman, A. (2014). Addressing food security and nutrition by means of a territorial approach. *Food Security*, 6(6), 879–894.
- Coley, D., Howard, M., & Winter, M. (2009). Local food, food miles and carbon emissions: A comparison of farm shop and mass distribution approaches. *Food Policy*, 34, 150–155.
- Conyers, D. (2007). Decentralisation and service delivery: Lessons from Sub-Saharan Africa. *IDS Bulletin*, 38(1), 18–32.
- Crook, R. C. (2003). Decentralisation and poverty reduction in Africa: The politics of local-central relations. *Public Administration and Development*, 23(1), 77–88.
- Davies, S. (1996). *Adaptable livelihoods: Coping with food insecurity in the Malian Sahel*. Macmillan Press.
- Devereux, S., Jonah, C., & May, J. (2019). How many malnourished children are there in South Africa? What can be done? In K. Roelen, R. Morgan, & Y. Tafere (Eds.), *Putting children first: New Frontiers in the fight against child poverty in Africa*. Ibidem Press.

- De Visser, J. (2019). *Multilevel government, municipalities and food security* (Food Security SA Working Paper Series No. 005). DST-NRF Centre of Excellence in Food Security.
- Drimie, S., Hamann, R., Manderson, A. P., & Mlondobozi, N. (2018). Creating transformative spaces for dialogue and action. *Ecology and Society*, 23(3).
- DSD/DAFF. (2013). *National Policy on Food and Nutrition Security*. Department of Social Development, Department of Agriculture, Forestry and Fisheries.
- Dury, S., Bendjebbar, P., Hainzelin, E., Giordano, T., & Bricas, N. (Eds.). (2019). *Food systems at risk. New trends and challenges*. CIRAD; FAO. <https://doi.org/10.19182/agritrop/00080>
- ECA, AUC, FAO, AUDA-NEPAD, WFP, UNICEF, IFAD, AfDB, Akademiya2063, and RUFORUM. (2021, March 4). *Background paper. Regional Dialogue: African Food Systems. Seventh Session of the Africa Regional Forum on Sustainable Development*. Retrieved 7 June 2021, from <https://www.uneca.org/sites/default/files/TCND/ARFSD2021/Documents/Regional%20Dialogue%20-%20African%20Food%20Systems%20Background%20Paper%20-%20EN.pdf>
- Faguet, J. P. (2014). Decentralization and governance. *World Development*, 53, 2–13.
- FAO. (2018a). *Sustainable food systems: Concept and framework*. Food and Agricultural Organization.
- FAO. (2018b). *City Region Food System Toolkit*. Food and Agricultural Organization.
- FAO. (2020). *Cities and local governments at the forefront in building inclusive and resilient food systems: Key results from the FAO survey “Urban Food Systems and COVID-19.”* Food and Agricultural Organization.
- FAO, European Union and CIRAD. (2021). *Food Systems Assessment—Working towards the SDGs: Interim Synthesis Brief—September 2021*. <https://doi.org/10.4060.cb6887en>
- FARA. (2021). *Strengthening African agricultural research and development towards an improved Africa food system: One Africa voice towards the 2021 UN Food Systems Summit* (Policy Brief). Retrieved 12 July 2021, from <https://www.interacademies.org/event/strengthening-african-agricultural-research-and-development-towards-improved-africa-food>
- Fau, N. (2019). Development corridors. *EchoGéo* [Online], 49. <http://journals.openedition.org/echogeo/18170>. <https://doi.org/10.4000/echogeo.18170>
- Faysse, N. (2015). The rationale of the Green Morocco Plan: Missing links between goals and implementation. *Journal of North African Studies*, 20(4), 622–634.

- Finney Rutten, L., Yaroch, A. L., Patrick, H., & Story, M. (2012). Obesity prevention and national food security: A food systems approach. *International Scholarly Research Notices*, 2012.
- Forster, T., & Escudero, A. G. (2014). *City regions as landscapes for people, food and nature*. EcoAgriculture Partners.
- Forster, T., Penagos, A., Scherr, S., Buck, L., & Ramirez, E. (2021). *Territorial approaches for sustainable development. Stocktaking on territorial approaches—Experiences and lessons*. GIZ.
- Freshwater, D. (2015). Vulnerability and resilience: Two dimensions of rurality. *Sociologia Ruralis*, 55(4), 497–515.
- Friedmann, H. (2007). Scaling up: Bringing public institutions and food service corporations into the project for a local, sustainable food system in Ontario. *Agriculture and Human Values*, 24, 389–398.
- Friedmann, H., & McMichael, P. (1989). Agriculture and the state system: The rise and decline of national agricultures, 1870 to the present. *Sociologia Ruralis*, 29(2), 93–117. <https://doi.org/10.1111/j.1467-9523.1989.tb00360.x>
- Giordano, T., Losch, B., Sourisseau, J. M., & Valette, E. (2019). Risks of increasing territorial inequalities. In D. Sandrine, B. Pauline, H. Etienne, G. Thierry, & B. Nicolas (Eds.), *Food systems at risk. New trends and challenges* (pp. 83–86). CIRAD-FAO. <https://doi.org/10.19182/agritrop/00099>
- Godfray, H. C. J., Crute, I. R., Haddad, L., Lawrence, D., Muir, J. F., Nisbett, N., Pretty, J., Robinson, S., Toulmin, C., & Whiteley, R. (2010). The future of the global food system. *Philosophical Transactions of the Royal Society*, 365, 1554. <https://doi.org/10.1098/rstb.2010.0180>
- Greenberg, S. (2017). Corporate power in the agro-food system and the consumer food environment in South Africa. *The Journal of Peasant Studies*, 44(2), 467–496.
- Greve, C. (2015). Ideas in public management reform for the 2010s. Digitalization, value creation and involvement. *Public Organization Review*, 15(1), 49–65.
- Gupta, A., Zhu, H., Doan, M. K., Michuda, A., & Majumder, B. (2020). Economic impacts of the COVID-19 lockdown in a remittance-dependent region. *American Journal of Agricultural Economics*, 103(2), 466–485.
- Harris-Fry, H., Shrestha, N., Costello, A., & Saville, N. M. (2017). Determinants of intra-household food allocation between adults in South Asia—A systematic review. *International Journal for Equity in Health*, 16(1), 1–21.
- Harvey, D. (2001). *Spaces of capital: Towards a critical geography*. University of Edinburgh Press.
- Haysom, G. (2015). Food and the city: Urban scale food system governance. *Urban Forum*, 26(3), 263–281. <https://doi.org/10.1007/s12132-015-9255-7>

- Haysom, G., Battersby, J., & Park-Ross, R. (2021). *Food sensitive planning and Urban design—A blueprint for a future South African city?* (Food Security SA Working Paper Series, Working Paper 007).
- Hendriks, S., & Olivier, N. (2015). Review of the South African agricultural legislative framework: Food and nutrition security implications. *Development Southern Africa*, 32(5), 555–576.
- Himanen, S. J., Rikkonen, P., & Kahiluoto, H. (2016). Codesigning a resilient food system. *Ecology and Society*, 21(4), 41.
- HLPE. (2017). *Nutrition and food systems*. A report by the High-Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security.
- Huang, T. T., Cawley, J. H., Ashe, M., Costa, S. A., Frerichs, L. M., Zwicker, L., Rivera, J. A., Levy, D., Hammond, R. A., Lambert, E. V., & Kumanyika, S. K. (2015). Mobilisation of public support for policy actions to prevent obesity. *The Lancet*, 385(9985), 2422–2431.
- Ingram, J. (2019). Food system models. In M. Lawrence & S. Friel (Eds.), *Healthy and sustainable food systems*. Routledge.
- Jacobs, P., & Nyamwanza, A. (2020, August 28). Food for thought: Until policy meets action, hunger and poor nutrition will stalk the land. *Daily Maverick*. Retrieved 18 December 2021, from <https://www.dailymaverick.co.za/article/2020-02-28-food-for-thought-until-policy-meets-action-hunger-and-poor-nutrition-will-stalk-the-land/>
- Kroll, F., Battersby, J., Haysom, G., Drimie, S., & Adelle, C. (2021). *Leveraging Informal Trade: Governance strategies to cultivate resilient, inclusive food economies* (Policy Brief 1/2021). DSI/NRF Centre of Excellence in Food Security.
- Kuhlmann, K., Sechler, S., & Guinan, J. (2011, June 14). *Africa's development corridors as pathways to agricultural development, regional economic integration and food security in Africa*. Regional Economic Integration and Food Security in Africa. Retrieved 6 January 2022, from <https://ssrn.com/abstract=3694895> or <https://doi.org/10.2139/ssrn.3694895>
- Kusumasari, B., Alam, Q., & Siddiqui, K. (2010). Resource capability for local government in managing disaster. *Disaster Prevention and Management*, 19(4), 438–451.
- Lang, T. (2003). Food industrialisation and food power: Implications for food governance. *Development Policy Review*, 21(5–6), 555–568.
- Lapping, M. B. (2004). Toward the recovery of the local in the globalizing food system: The role of alternative agricultural and food models in the US. *Ethics, Place and Environment*, 7(3), 141–150.
- La Trobe, H. L., & Acott, T. G. (2000). Localising the global food system. *International Journal of Sustainable Development & World Ecology*, 7(4), 309–320.

- Lessmann, C., & Seidel, A. (2017). Regional inequality, convergence, and its determinants—A view from outer space. *European Economic Review*, 92, 110–132.
- Losch, B. (2016). *The need for a paradigm shift towards territorial development in sub-Saharan Africa* (Rimisp Working Paper Series, 185). RIMISP. <http://rimisp.org/publicaciones-documentos/documentos-de-trabajo/>
- Magarini, A., Nicolarea, Y., Dansero, E., & Bottiglieri, M. (2017). Urban food policies: Decentralized cooperation and African cities. *Revue internationale des études du développement*, 232(4), 67–93.
- Mahwai, L. (2020). *Evaluation report for the Ahmed Kathrada Foundation on the 'Gauteng Together Initiative'*. Auwal Socio-Economic Research Institute. Retrieved 19 December 2021, from <https://www.kathradafoundation.org/download/gauteng-together-report/>
- May, J. (2021). A political economy of persistent food insecurity in South Africa. In A. Oqubay, F. Tregenna, & I. Valodia, *The [Oxford] handbook of the South African economy*. Oxford University Press.
- McGinnis, M. D., & Ostrom, E. (2014). Social-ecological system framework: Initial changes and continuing challenges. *Ecology and Society*, 19(2), 30.
- Mears, D. P., & Bhati, A. S. (2006). No community is an Island: The effects of resource deprivation on urban violence in spatially and socially proximate communities. *Criminology*, 44(3), 509–548.
- Morgan, E. H., Hawkes, C., Dangour, A. D., & Lock, K. (2019). Analyzing food value chains for nutrition goals. *Journal of Hunger & Environmental Nutrition*, 14(4), 447–465.
- Nemes, G., Chiffolleau, Y., Zollet, S., Collison, M., Benedek, Z., Colantuono, F., Dulstrud, A., Fiore, M., Holtkamp, C., Kim, T. Y., Korzun, M., Mesa-Manzano, R., Reckinger, R., Ruiz-Martínez, I., Smith, K., Tamura, N., Viteri, M. L., & Orbán, É. (2021). The impact of COVID-19 on alternative and local food systems and the potential for the sustainability transition: Insights from 13 countries. *Sustainable Production and Consumption*, 28, 591–599.
- Nortier, C. (2021). *Gauteng's community action networks saved lives in a crisis—Now it has to prepare for the long haul*. Retrieved 19 December 2021, from <https://www.dailymaverick.co.za/article/2021-03-03-gautengs-community-action-networks-saved-lives-in-a-crisis-now-it-has-to-prepare-for-the-long-haul/>
- NPC (National Planning Commission). (2011). *National Development Plan 2030: Our future, make it work*. National Planning Commission.
- NRC (National Research Council). (2015). *A framework for assessing effects of the food system*. The National Academies Press. <https://doi.org/10.17226/18846>

- Odendaal, N. (2021). Recombining place: COVID-19 and community action networks in South Africa. *International Journal of E-Planning Research (IJEPR)*, 10(2), 124–131.
- OECD. (2009). *Regions matter: Economic recovery, innovation and sustainable growth*. OECD Publishing. <https://doi.org/10.1787/9789264076525-en>
- OECD. (2021). *Making better policies for food systems*. OECD Publishing. <https://doi.org/10.1787/ed93d80a-en>
- OECD/FAO/UNCDF. (2016). *Adopting a territorial approach to food security and nutrition policy*. OECD Paris Publishing.
- Ostrom, E. (2000). Collective action and the evolution of social norms. *The Journal of Economic Perspectives*, 14(3), 137–158. <https://doi.org/10.1257/jep.14.3.137>
- Pereira, L., & Drimie, S. (2016). Governance arrangements for the future food system: Addressing complexity in South Africa. *Environment: Science and Policy for Sustainable Development*, 58(4), 18–31.
- Pinstrup-Andersen, P. (2010). The African food system and human health and nutrition: A conceptual and empirical overview. In P. Pinstrup-Andersen (Ed.), *The African food system and its interaction with human health and nutrition*. Cornell University Press.
- PMG (Parliamentary Monitoring Group). (2017). *National food and nutrition security policy implementation plan: Operation Phakisa for Agriculture, Rural Development and Land Reform: Progress report*. Parliamentary Monitoring Group [online]. <https://pmg.org.za/committee-meeting/25488/>
- Poteete, A. R., & Ostrom, E. (2008). Fifteen years of empirical research on collective action in natural resource management: Struggling to build large-N databases based on qualitative research. *World Development*, 36(1), 176–195.
- Pothukuchi, K., & Kaufman, J. L. (2000). The food system: A stranger to the planning field. *Journal of the American Planning Association*, 66(2), 113–124.
- Puissant, S., & Lacour, C. (1999). *La métropolisation: croissance, diversité, fractures*. Anthropos Research & Publications.
- Relph, E. (1985). Geographical experiences and being-in-the-world: The phenomenological origins of geography. In D. Seamon & R. Mugerauer (Eds.), *Dwelling, place and environment: Towards a phenomenology of person and world* (pp. 15–31). Springer.
- Robins, S. (2019). ‘Day Zero’, hydraulic citizenship and the defence of the commons in Cape Town: A case study of the politics of water and its infrastructures (2017–2018). *Journal of Southern African Studies*, 45(1), 5–29.
- Rocha, C., & Lessa, I. (2009). Urban governance for food security: The alternative food system in Belo Horizonte Brazil. *International Planning Studies*, 14, 389–400.

- Rodríguez-Pose, A. (2010). Economic geographers and the limelight: The reaction to the World Development Report 2009. *Economic Geography*, 86, 361–370.
- SAHRC (South African Human Rights Commission). (2017). *The right to access to nutritious food in South Africa*. South African Human Rights Commission.
- Sarapuu, K., Læg Reid, P., Randma-Liiv, T., & Rykkja, L. H. (2014). Conclusion: Lessons learned and policy implications. In P. Læg Reid, K. Sarapuu, L. H. Rykkja, & T. Randma-Liiv (Eds.), *Organizing for coordination in the public sector: Practices and lessons from 12 European countries*. Palgrave Macmillan.
- Sassen, S. (2001). Cities in the global economy. In R. Paddison (Ed.), *Handbook of Urban Studies* (pp. 256–272). Sage.
- Sassen, S. (2005). The global city: Introducing a concept. *Brown Journal of World Affairs*, 11(2), 27–43.
- SAUFFT (South African Urban Food and Farming Trust). (2020). *Food Dialogues. Report 2020*. SAUFFT.
- Scholvin, S. (2021). Getting the territory wrong: The dark side of development corridors. *Area Development and Policy*, 6(4), 441–450.
- Schoon, M. L., Robards, M. D., Meek, C. L., & Galaz, V. (2015). Principle 7: Promote polycentric governance systems. In R. Biggs, M. Schluter, & M. L. Schoon (Eds.), *Principles for building resilience: Sustaining ecosystem services in social-ecological systems* (pp. 226–250). Cambridge University Press.
- Section 27. (2020). Retrieved 18 December 2021, from <https://section27.org.za/national-school-nutrition-programme/>
- Smoke, P. (2003). Decentralisation in Africa: Goals, dimensions, myths and challenges. *Public Administration and Development*, 23, 7–16. <https://doi.org/10.1002/pad.255>
- StatsSA. (2017a). *Poverty on the rise in South Africa*. Retrieved 19 December 2021, from <https://www.statssa.gov.za/?p=10334>
- StatsSA. (2017b). *South Africa Demographic and Health Survey (SADHS)*. Retrieved 28 September 2021, from [http://www.statssa.gov.za/?page\\_id=6634](http://www.statssa.gov.za/?page_id=6634)
- StatsSA. (2019). *Towards measuring food security in South Africa: An examination of hunger and food inadequacy* (Report No. 03-00-14). Retrieved 19 December 2021, from <http://www.statssa.gov.za/publications/03-00-14/03-00-142017.pdf>
- Storper, M. (1997). *The regional world: Territorial development in a global economy*. Guilford Press.
- Tefft, J., Jonasova, M., Adjao, R., & Morgan, A. (2017). *Food systems for an urbanizing world*. World Bank/Food and Agricultural Organization.
- Termeer, C. J. A. M., Drimie, S., Ingram, J., Pereira, L., & Whittingham, M. J. (2018). A diagnostic framework for food system governance arrangements:



- The case of South Africa. *NJAS—Wageningen Journal of Life Sciences*, 84, 85–93. <https://doi.org/10.1016/j.njas.2017.08.001>
- Thow, A. M., Greenberg, S., Hara, M., Friel, S., du Toit, A., & Sanders, D. (2018). Improving policy coherence for food security and nutrition in South Africa: A qualitative policy analysis. *Food Security*, 10(4), 1105–1130. <https://doi.org/10.1007/s12571-018-0813-4>
- Toussaint-Samat, M. (2009). *A history of food*. Wiley.
- TP4D. (2018). *Fostering territorial perspective for development. Towards a wider alliance* (White Paper). AFD, BMZ, Cirad, European Commission, FAO, GIZ, Nepad, OECD, UNCDF.
- Trialogue. (2021). Connect, communicate, collaborate: How to mitigate a food crisis. In *The Trialogue Business in Society Handbook, 2021*. Retrieved 17 December 2021, from <https://trialogue.co.za/wp-content/uploads/2021/11/BIS-2021.pdf>
- Tschirley, D., Haggblade, S., & Reardon, T. (Eds.). (2014). *Population growth, climate change and pressure on the land—Eastern and Southern Africa* (99 p). ISBN 978-0-9903005-2-6.
- UN-Habitat. (2017). *Implementing the New Urban Agenda by strengthening rural-urban linkages*. United Nations Human Settlements Programme.
- Varga, A. (2017). Place-based, spatially blind, or both? Challenges in estimating the impacts of modern development policies: The case of the GMR policy impact modeling approach. *International Regional Science Review*, 40(1), 12–37.
- Von Bertalanffy, L. (1968). *General systems theory*. George Braziller.
- WCEDP (Western Cape Economic Development Partnership). (2020, October 22). *Report: Western Cape Food Forum*. Retrieved 19 December 2021, from <https://wcedp.co.za/wp-content/uploads/2020/12/Western-Cape-Food-Forum-Report-22-October-2020.pdf>
- WCG (Western Cape Government). (2016). *Western Cape Government household food and nutrition security strategic framework*. Retrieved 19 December 2021, from [https://www.westerncape.gov.za/sites/www.westerncape.gov.za/files/assets/140916\\_wcg\\_household\\_food\\_and\\_nutrition\\_security\\_strategic\\_framework.pdf](https://www.westerncape.gov.za/sites/www.westerncape.gov.za/files/assets/140916_wcg_household_food_and_nutrition_security_strategic_framework.pdf)
- Westbury, S., Ghosh, I., Jones, H. M., Mensah, D., Samuel, F., Irache, A., Azhar, N., Al-Khudairy, L., Iqbal, R., & Oyeboode, O. (2021). The influence of the urban food environment on diet, nutrition and health outcomes in low-income and middle-income countries: A systematic review. *BMJ Global Health*, 6(10), e006358.
- Williamson, J. G. (1965). Regional inequality and the process of national development: A description of the patterns. *Economic Development and Cultural Change*, 13(4, Part 2), 1–84.



- World Bank. (2009). *World Development Report 2009: Reshaping economic geography*. World Bank.
- Wright, C. (2020). Local government fighting Covid-19. *The Round Table*, 109(3), 338–339.
- Writers Community Action Network. (2020). *Cape Town together: Organizing in a city of Islands*. ROAR: Foundation for Autonomous Media. Retrieved on 18 December 2021, from <https://roarmag.org/essays/cape-town-together-organizing-in-a-city-of-islands/>.
- Zhan, Y., & Chen, K. Z. (2021). Building resilient food system amidst COVID-19: Responses and lessons from China. *Agricultural Systems*, 190, 103102.
- Zollet, S., Colombo, L., De Meo, P., Marino, D., McGreevy, S. R., McKeon, N., & Tarra, S. (2021). Towards territorially embedded, equitable and resilient food systems? Insights from grassroots responses to COVID-19 in Italy and the city region of Rome. *Sustainability*, 13(5), 2425.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

