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Investigating the South African Food Insecurity Paradox: A Systematic Review of Food System Governance in South Africa

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Food Security SA Working Paper Series

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SUMMARY

South Africa presents a paradox of a country which is nationally food secure, with a wealth of institutions and targeted food policies, a strong research system and developed social welfare programmes, but where under- and over-nutrition persist. This paradox has major consequences for the people and the economy, and the importance of food and nutrition insecurity has resulted in massive research investment and analyses over the last decades. This was a major incentive for engaging in a systematic literature review with the objectives of providing a synthesis of what is known with regard to food system governance in South Africa, highlighting the main governance challenges, and identifying persistent knowledge gaps.

The review highlights the central role of the national government in food system governance, while provinces are mainly in a position of implementing national policies, with few exceptions, and municipalities do not have any specific mandate related to food issues and lack resources for effective initiatives, with the exception of major metros. Other actors contribute to food system governance, but they are characterised by major asymmetries: in the private sector, a core group of actors holds solid positions in farming, processing and retail, and sideline the multitude of other stakeholders; very diverse civil society organisations, who are significant contributors in the food system, have limited impact due to their fragility.

Surprisingly, due to the major consequences of the food insecurity paradox, past and current research show that a diagnosis exists. It focuses on major food system governance issues which are related to: a priority given to food production and food supply, in spite of a recognition of the cross-sectoral dimension of food security; policy fragmentation between departments and programmes, and weak coordination mechanisms, which results in policy incoherence; and a partial and inadequate stakeholder engagement due to the domination of top-down approaches and a ‘tick-the-box’ type of participation.

Many solutions to these governance challenges have already been identified and proposed. These include the need for a legislative framework to actualise existing rights (and particularly the right to food enshrined in the Constitution), adequate coordination mechanisms with a dedicated agency, better stakeholders’ engagement through a larger role to be given to local governments.

The status quo that currently exists within food system governance, however, leads to questions about the willingness of the state for change and its possible abdication in governing the food system. This abdication is rooted in the characteristics of the post-apartheid South African political economy. The choice to fully deregulate the agri-food sector has resulted in the rising economic power of the private sector, its oligopolisation and financialisation, and a *de facto* private food system governance. The corporate sector is major determinant of prices and pricing, imposes its own food standards to producers and consumers, influences urban spatial planning and, as such,

shapes the food environment, weights on the framing of the problems and the design of solutions, and positions itself as an indispensable partner of policy interventions.

To address this situation of continuing food and nutrition insecurity which contradicts constitutional rights and the objectives of the National Development Plan (NDP), new knowledge and the dissemination of existing knowledge are necessary for an informed public debate and a better food democracy. It relates to an effective investigation of the ‘agri-food complex’, notably corporate share ownership and situations of straddling between private and public spheres. A better understanding of what prevents consumer awareness of the ills of the food system is also critical for an improved civil society engagement.

This improved knowledge has to be supported by an effective institutionalisation of dialogue between stakeholders which must escape top-down practices, foster inclusiveness, transparency and mutual accountability, and strengthen the position of civil society organisations. A better civil society engagement will be facilitated by the adoption of a place-based approach to food system governance which is key for a progressive move towards a polycentric, adaptive, and collaborative governance of the food system.

KEYWORDS: South Africa; food system; governance; food security; food policy; government; private sector; civil society organisations; political economy

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List of Abbreviations

ABC	Agricultural Business Chamber
ADSA	Association for Dietetics in South Africa
ANC	African National Congress
APAP	Agricultural Policy Action Plan
ASGISA	Accelerated and Shared Growth Initiative for South Africa
CAQDAS	Computer-aided qualitative analysis software
CFE	Consumer food environment
CGCSA	Consumer Goods Council of South Africa
CIRAD	French Agricultural Research Centre for International Development
CNE	Continuing Nutrition Education Programme for Dietitians and Nutritionists
CoE-FS	DSI-NRF Centre of Excellence in Food Security
COSATU	Congress of South African Trade Unions
CSO	Civil society organisations
CSER	Corporate social and environmental responsibility
CSR	Corporate social responsibility
DAFF	Department of Agriculture, Forests and Fisheries
DALRRD	Department of Agriculture, Land Reform and Rural Development
DBE	Department of Basic Education
DPME	Department of Planning, Monitoring and Evaluation
DSD	Department of Social Development
EPWP	Expanded Public Works Programme
FAO	Food and Agriculture Organization of the United Nations
FBSA	FoodBank South Africa
FES	Food Emergency Scheme
FLAG	Food Legislation Advisory Group
FNS	Food and nutrition security council
GDA	Guideline Daily Amount
GEAR	Growth, Employment and Redistribution strategy
GEPF	Government Employee Pension Fund
GHS	General Household Survey
ICLEI	Local Governments for Sustainability
IFSNTT	Integrated Food Security and Nutrition Task Team
IFSS	Integrated Food Security Strategy
INP	Integrated Nutrition Programme
ISD	Institute for Social Development
JSE	Johannesburg Stock Exchange
M&E	Monitoring and evaluation
MLAR	Market-led agrarian reform
MNC	Multinational corporation
NCDs	Non-communicable diseases
NDP	National Development Plan

NFNSP	National Food and Security Plan
NGP	New Growth Path
NIDS	National Income Dynamics Study
NPFNS	National Policy on Food and Nutrition Security
NSSA	Nutrition Society of South Africa
NUMSA	National Union of Metalworkers
PHA	Philippi Horticultural Area
PIC	Public Investment Corporation
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
RDA	Daily Recommended Allowance
RDP	Reconstruction and Development Programme
SAA	Social Assistance Act
SACN	The South African Cities Network
SAFEX	South African Futures Exchange
SAFL	Southern Africa Food Lab
SAFSC	South Africa Food Sovereignty Campaign
SAHRC	South African Human Rights Commission
SANHANES	South African National Health and Nutrition Examination Survey
SASA	Sugar Association of South Africa
SASSA	South African Social Security Agency
SPC-O	National Strategy for the Prevention and Control of Obesity
SPPC-NCDs	Strategic Plan for the Prevention and Control of Non-Communicable Diseases
StatsSA	Statistics South Africa
UMR ART-Dev	Joint Research Unit Actors, Resources and Territories in Development
UP	University of Pretoria
UWC	University of the Western Cape
WTO	World Trade Organization

1. Introduction: Why a systematic review about food system governance?

1.1. Background and positioning

Twenty-seven years after the advent of democracy, South Africa's inability to significantly transform the lives of the poor and address a massive income and wealth inequality is a major developmental failure. Despite being a leading economy and the most industrialised country in Africa, 52.2% of South Africa's population was living in poverty in 2017¹ (Zizzamia et al., 2019), and the country is world champion of inequality; "the top 0.01% (about 3,500 adults) own a higher share of wealth than the bottom 90% as a whole (about 32 million [adult] individuals)" (Chatterjee et al., 2021: 1).

Closely related to the poverty and inequality conundrum is the persistent issue of food and nutrition insecurity. Despite significant efforts made at resolving this impasse in the country, the threat of food insecurity still looms large and has defied solutions. This threat is further compounded by the seemingly paradoxical dynamics of food poverty amidst plenty. Although South Africa produces enough food to feed its population (and is able to import what it needs), and is thus food secure at the national level, considerable numbers of households remain food insecure today while many individuals are reported to be hungry or at risk of hunger. In 2017, 24.7% of households were living under the food poverty line² (Zizzamia et al., 2019) – a situation which has further deteriorated in relation to the COVID-19 pandemic (van der Berg et al., 2021).

Nationally, food security indicators show that progress in resolving food insecurity has remained protracted. According to Statistics South Africa (StatsSA), about 20% of South African households have inadequate access to food (StatsSA, 2018). This figure reflects a slow pace of change considering estimates from other surveys. The 2012 South African National Health and Nutrition Examination Survey (SANHANES) established that about 26% of South Africans were food insecure and 28.3% were at risk of hunger (Misselhorn and Hendriks, 2017; Megbowon and Mushunje, 2018; Kroll et al., 2019). In the 2013 General Household Survey (GHS), 11.4% of households sampled had experienced hunger in the 30 days before the survey, while about 21% of households reported having inadequate access to food (Hendriks, 2013). Despite differences in estimates and reporting, what is disturbingly evident is the persistence of food insecurity. The situation is particularly critical for children, with 11% of them living in households where they were still experiencing hunger in 2016 (nationally) - with an even more dire situation (about 20%) in the North West and KwaZulu-Natal provinces (Sambu, 2021).

1 Using the Statistics SA's upper bound poverty line (UBPL) of R1 503 per person / month (in 2017 rands).

2 Using the Statistics SA's food poverty line (FPL) of R515 per person / month (in 2017 rands), value below which individuals are unable to purchase or consume enough food to supply them with the minimum per-capita, per-day energy requirements.

Nutrition data also present a depressing outlook. Data from the 2008 National Income Dynamics Study (NIDS) indicated that stunting and underweight in children co-occurred with overweight and obesity in adults in about 12% of households (McLachlan and Landman, 2013). Pereira and Drimie (2016), using the 2012 SANHANES survey (Shisana et al., 2013), remind us that the prevalence of overweight was 20.1% and 24.8% among men and women respectively, while that of obesity was 10.6% and 39.2%. Kroll et al. (2019) report that 68.5% of women and 34.2% of men in urban South Africa were either overweight or obese. Further, there was no discernible decline in child stunting between 2013 and 2016 (Kroll et al., 2019). Stunting affects children in rural areas and in households living on commercial farms more than elsewhere due to limited access to food and national fortification programmes (Pereira, 2014). These statistics are illustrative of the persisting co-existence of under-nutrition and over-nutrition in South Africa.

Since the commencement of the democratic era, the South African state has enunciated the right to food to everyone and the right to a basic nutrition to every child the highest level by enshrining these rights in the 1996 Constitution and its Bill of Rights (sections 27 and 28). It is one of the very few countries in the world to have constitutionally guaranteed these rights (Pritchard et al., 2016). Since then, different spheres of governments have succeeded in putting together a plethora of policies and programmes, either directly or indirectly related to the reduction of food and nutrition insecurity, and which have all evolved over time. Nutritional programmes have been implemented to promote behavioural change, to increase food fortification and to tackle some other factors responsible for malnutrition. Social welfare programmes have expanded greatly in order to reduce poverty and food insecurity. Also, overarching developmental policies of government have alluded to and addressed the imperative of improving food security. Yet, these initiatives have proven insufficient to significantly improve the food and nutrition security status of South Africans and the “*slow violence of malnutrition*” continues (May et al., 2021: 24). Therefore, food insecurity appears to be a major paradox in South Africa at the beginning of the 21st century: food and nutrition insecurity remain prevalent despite a proliferation of policies, programmes and initiatives designed to eliminate it.

This lack of appreciable progress in food security has resulted in many research undertakings since the mid-2000s, stimulated by dedicated funding and strengthening research networks. They have contributed to extensive debates attempting to unravel the conundrum which have slowly and unevenly trickled down into civil society. However, despite diverse recommendations emanating from these endeavours — some of which being taken on board by government — the situation remains the same, and it raises fundamental questions: Why, despite the profusion of policies and programmes and the deployment of significant resources, has there not been a significant, positive shift in food and nutrition security? Why does the puzzle of national food security and household food insecurity persist? Why is national food sufficiency accompanied by significant rates of malnutrition? Are these issues individual or structural or systemic?

To comprehend these contradictory observations, the existing literature on food security issues in South Africa offers many keys of understanding. This literature is massive and diversified, both in terms of topics and disciplinary approaches, and it appears challenging to untangle causalities in order to identify the core issues, what is at stake, and what processes are underway. This is why, over the years, food insecurity has progressively been considered as one of the outcomes of the food system, together with social welfare or environmental sustainability (Ericksen, 2008; Ingram, 2011; Pereira and Ruysenaar, 2012; Ledger, 2016a; Hospes and Brons, 2016).

The food system, defined as the entire range of food-related activities involving the production, processing, distribution, consumption and waste of food (Ericksen, 2008), is characterised by complex sets of interactions which are responsible for the food security results obtained in any given locale. Paying attention to the system that produces the outcome is, therefore, imperative in order to effectively tackle the issue of food insecurity. The food system approach focuses on clarifying the nexus between and among diverse activities along food commodity chains, diverse interactions across government levels and spatial scales, diverse issues related to food security outcomes, as well as the wide-ranging environmental and socioeconomic-associated dimensions (Termeer et al., 2018).

The foregoing interconnectedness, as well as the multiplicity of feedbacks across the system, reflect the complexities in comprehending food systems as a concept. As a result, resolving the food security issue emanating from the system has increasingly been commonly perceived as a ‘wicked’ problem (Pereira and Ruysenaar, 2012; Candel, 2014; Pereira and Drimie, 2016; Moragues-Faus et al., 2017; May, 2017; Adelle et al., 2020). Wicked problems are “*policy problems that are not only complex, but also ill-defined, ambiguous, contested, and highly resistant to solutions*” (Candel, 2014: 597). They are not easily solved, or are “*momentarily solved only to re-emerge, altered, and needing to be resolved*” (May, 2017: 13). They are reflective of the combination of political, social, and technical impasses that traverse spatial, sectoral and temporal scales; therefore, resolutions arrived at with an overarching effect on such multifaceted issues using a single-issue lens would result in conflict among stakeholders and further complication of the issues (Pereira and Ruysenaar, 2012). A typical characteristic of wicked problems is their resistance to solutions emerging from the recognition that efforts geared towards solving yesterday’s problems have altogether resulted in today’s problems (Candel, 2014).

The complexities surrounding food systems around the world have attracted the attention of diverse stakeholders and institutions who have devoted attention to tackling the detrimental outcomes resulting from the phenomenon. Evidently, achieving positive outcomes for food systems cannot be realised through romantic plans or the mere adoption of new technologies (Candel, 2014), but must involve several contributions and interventions from the government, non-government, private sector and civil society organisations (CSOs) (Candel, 2014; Shamah-

Levy et al., 2017). The foregoing has led to the increasing recognition and incorporation of the role of governance within wider food system debates (Candel, 2014; Ledger, 2016b; Pérez-Escamilla et al., 2017).

Here, governance is understood to comprise not only the rules, norms, regulations and institutions that shape interactions, but also the actors involved, and their actions, interests and values (Eakin et al., 2017). Food system governance can thus be referred to as the rules, conditions and processes through which interests and responsibilities within the food system are articulated. Comprehending the governance structure of the food system is certainly critical as it is a major determinant of the outcomes of the system, including food and nutrition security (Ledger, 2016a, 2016b).

Yet, despite this progressive recognition of the importance of food system governance, the current understanding of South Africa's food system governance remains problematic, and it has been confirmed by the authors' experience when participating in policy related debates, both at the local and national levels.

1.2. Review's aim, perspective and objectives

Recent research provides partial answers about the influence played by different actors in South Africa's food system and highlights the constant tensions and contestations between actors around the food system objectives. But identifying and understanding the positions of these diverse actors in the food system — as well as the policy environment and conditions under which these positions are constantly negotiated, and how these positions impact the design of the policy framing — remain critical.

The choice was made to engage in a systematic review of literature on food system governance in South Africa for three main reasons: (i) to improve the understanding of the governance of the food system; (ii) to take stock of the wealth of existing research, which has been developed adopting very diverse focuses and released under many different formats (journal articles, books and book chapters, working papers, briefs, research reports); and (iii) to consolidate this current knowledge. An investigation with this focus has never been performed, but Pereira's seminal work on *The Future of South Africa's Food System* (2014)³ and Misselhorn and Hendriks' review (2017)⁴ on food insecurity, which partly intersect the current systematic literature review, need to be mentioned. These two contributions end their reviews in 2014 and it is important to note that 53% of the references in the current review were published after that date, which illustrates a recent and growing research engagement.

³ This research, which adopts a larger scope, undertook a systematic literature review covering the period 1999–2014.

⁴ This research covers the period 1995–2014 and focuses on empirical work undertaken at the sub-national level.

This systematic review seeks to examine how actors and power relations, policies and institutions influence South Africa's food system, and the conditions under which this takes place. Generally, it seeks to answer the following question: what is the state of South Africa's food system governance, and how does it affect food and nutrition security?

The review, whose preliminary results were presented by the authors at the 4th International Conference on Global Food Security (December 2020), uses a political economy lens to assess the existing governance arrangements in the food system. Because political economy places power at the heart of the analysis, it helps to address the differential power relations, as well as the outcomes of such relations (Anderson et al., 2019; Duncan et al., 2019). Whereas many mainstream approaches depoliticise (issues in) the food system and focus on market and the economy, political economy politicises food system issues, placing actors and the power relationship between them at the centre of its inquiry (De Schutter, 2019). In essence, this approach is preferred as the relations of power between actors within the food system are critical determinants of governance and policy choices and, ultimately, the outcome of the food system. In addition to their own conviction, the authors were also encouraged to focus on the political dimension of the persisting food insecurity in South Africa by debates within the CoE-FS⁵.

More specifically, the objectives of the review are to:

1. Take stock of and critically investigate the existing analyses and appraisals of South Africa's food system.
2. Identify, describe and appraise the different components of food system governance.
3. Identify challenges relating to food system governance.
4. Highlight their connection with persistent food and nutrition insecurity.
5. Identify gaps in current knowledge.

⁵ These debates particularly occurred during the 2019 annual meetings of the CoE-FS held in De Doorns, Western Cape. They led to the renaming of the related research programme within the CoE-FS which is now called "Governance, Power and Public Engagement in the Food System".

2. Exploring the literature

2.1. Review methodology

Systematic reviews are defined as “carefully organized, comprehensive and transparent studies of previous research on a particular topic that follow written protocols that specify their central objectives, concepts, and methods in advance” (Littell and Corcoran, 2010: 313). Systematic methods of review require a significant amount of structure, organisation and involve a phased course of action in order to achieve study objectives. The structure behind the process assists in facilitating trustworthiness and legitimacy of claims made (Candel, 2014).

Given the complexity and ambivalent nature of food governance as a concept, a systematic review was deemed appropriate as it assisted in assessing evidence from a diverse body of research or literature. As a first step therefore, search terms relevant to the research question were identified which is presented in Table 1. The identification of these terms was also informed by previous systematic reviews on food system governance (Candel, 2014; Hospes and Brons, 2016) and food system and food insecurity in South Africa (Pereira, 2014; Misselhorn and Hendriks, 2017).

The review covers the period 1994 to 2020. This choice is justified by and relates to the change in the political regime and the start of the democratic era in South Africa from 1994. New institutions and a new set of policies were progressively implemented which had to deal with and move from structural patterns inherited from apartheid.

As summarised in Table 1, a search query was defined based on three domains: food system, governance, and location. Keywords identified for food system and its outcomes include ‘food system’, ‘food security’ and ‘nutrition security’. For governance, ‘policy’ and ‘administration’ were also considered in cases where researchers used these words as a substitute or interchangeably with governance, because food governance also includes rules and / or policies set out to regulate the activities within the food system.

Another requirement considered is that sources should either focus on South Africa or at least allude to issues relating to the country’s food system governance. Also included in the search strategy are key terms relating to the publication year, language and document type. While the ‘WITH/NEAR’ in the table was deliberately considered in the search in order to include documents that used any of the terms from the first two domains, the ‘AND’ term was applied to ensure that studies relating to South Africa, published between 1994 and 2020, written in all languages, with a limitation to articles, books, book chapters and proceeding papers were considered. The foregoing therefore informed the search query generated on the databases.

Table 1: Search strategy

	Domain 1: Food system and outcomes	Domain2: Governance	Domain 3 Location	Others
Keywords	Food system, food security, nutrition security	Governance, administration, policy	South Africa	Year of publication (1994 - 2020; document type (must be articles, books, book chapters or proceeding papers)
Search terms	food (WITH/ NEAR) *security, food system*, nutrition* security	*governance*, AND administration*, *policy*	South Africa AND	1994-2020; articles, books, book chapters or proceeding papers

NB: * is used to tell a 'search string' to include prefixes and suffixes to the keyword in the search.

2.1.1. Data collection

The process of data collection was developed using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses methodology (PRISMA) which uses the following steps: identification, screening, eligibility and final selection (Moher et al., 2009). These stages are displayed in Figure 1 below. A systematic search in the Scopus and Web of Science databases was conducted in July 2019 and updated in July 2020 on words related to governance of the food system in South Africa (using the key search terms identified above). This was complemented by grey literature including those from relevant food security or system organisations in South Africa (such as those from government ministries and agencies, CSOs and research institutions) identified through a search on Google for 'food system governance in South Africa'.

a. Identification

Essentially, the methodology of data collection proceeded with the first stage which entails the systematic search for relevant research materials in two databases. The Scopus database was used to search for articles related to food system governance in South Africa (1994-2020). For Web of Science, the database included documents only starting from 1996, hence the search period was between 1996 and 2020. The search for both databases was conducted in July 2020. To identify materials, search queries were developed including keywords selected in the search strategy, and these were tailored to the requirements of each database (see annex 1). For both databases, the keywords used, and the results returned are summarised in Table 2. 1 789 items were identified

and, after merging the two databases, the duplicates were removed, and the total number of results was reduced to 1 217.

For the grey literature, only the first four pages were read, and articles were only added if they were documents (and not web pages) and if they were related to food systems and its governance in South Africa. This procedure generated 20 more documents which were added to the retrieved database, thus resulting in a total of 1 237 documents. It is significant to note that no documents were written in languages other than English.

Table 2: Keywords and results returned in databases

	Keywords	Hits from Scopus	Hits from Web of Science
1.	'food security' with 'governance' or 'administration' or 'policy' and 'South Africa'	82	48
2.	'food security' and 'South Africa'	1 015	810
3.	'food system' and 'South Africa'	80	57
4.	'food policy' and 'South Africa'	42	18
5.	'nutrition security' with 'governance' or 'administration' or 'policy' and 'South Africa'	4	2
6.	'nutrition policy' and 'South Africa'	77	13
5.	Combination of queries (merging of results)	1 035	852
6	Limiting to articles, books, book sections and those written in English Language	1 018	771
7.	Merging the databases	1 217	

b. Screening and eligibility

The second stage involves successive screening of documents through the application of the inclusion and exclusion criteria. The criteria are:

Inclusion criteria

1. Papers that are theoretical or empirical research
2. Papers that provide insights on food security in South Africa
3. Papers that provide insights on food systems in South Africa
4. Papers that provide insights on food system governance in South Africa; people / actors, processes, policies and institutions that shape the food system and / or the resulting food security outcomes.

Exclusion criteria

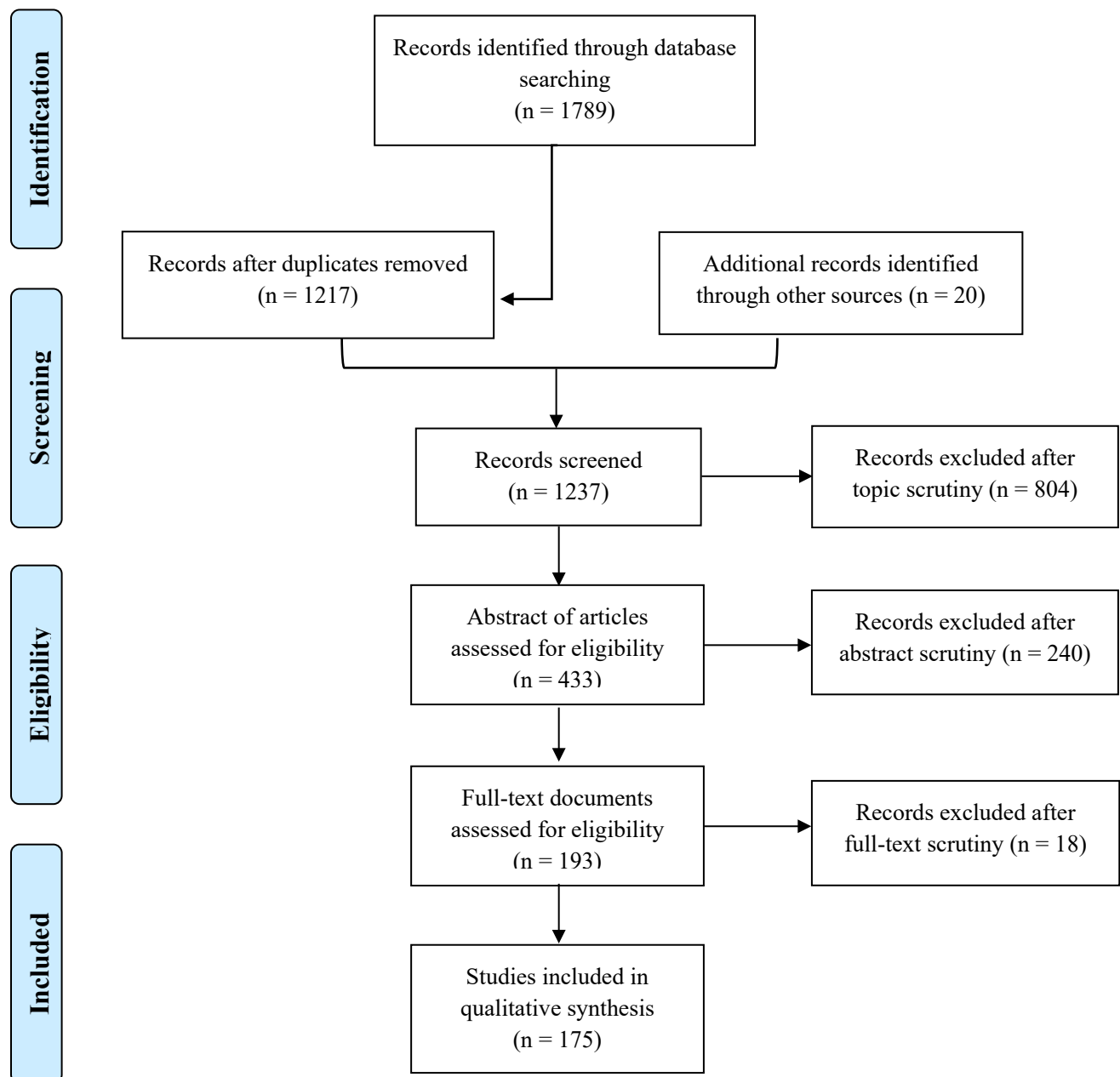
1. Paper does not provide insight about food security in South Africa
2. Paper does not provide insight on South African food system
3. Paper does not provide insight on the prevailing food system governance in South Africa.

Any record which does not address any of 1, 2 and 3 is ineligible.

All topics and abstracts were loaded in Mendeley Software for screening using the above inclusion and exclusion criteria. The number of documents was further reduced as follows:

- After reading the topics of research or documents, 804 were excluded and number of relevant documents was reduced to 433
- Abstracts of remaining 433 documents were read. Based also on the criteria, 240 items were excluded and the documents were further reduced to 193
- The full texts of these 193 documents were exported to Mendeley and read, and 18 documents were thereafter excluded. A total of 175 documents was therefore used for the systematic review (see Fig.1).

Figure 1: Systematic review process



2.1.2. Data analysis and synthesis

The data analysis was developed as follows. Firstly, the details of the 175 identified documents were recorded in MS Excel. These details include the title and method of study, type of document, year of publication, geographical focus and thematic focus. Eligible documents were then exported into Atlas.ti software which was used for the synthesis of the studies. Atlas.ti is a computer-aided qualitative analysis software (CAQDAS) which assists in the management and organisation of textual data. Through the attachment of codes to certain text passages, Atlas.ti provides organisation to unstructured textual material (Smit, 2002; Lewis, 2016). Selected articles and documents were therefore read and coded using Atlas.ti software. Coding in Atlas.ti also assisted in facilitating an iterative approach to data analysis which would otherwise have been difficult to achieve through note cards, spreadsheets or word-processing applications (Lewis, 2016).

The approach to the synthesis of data for the systematic review was interpretive. Similar to the argument of Lewis (2016), an integrative approach to the review was problematic given the heterogeneity of eligible studies. Integrative syntheses are basically preoccupied with summarising the data through the pooling of data and is more deductive, relying on the definition of concepts from the beginning. Interpretive syntheses on the other hand involve induction and interpretation, and are basically conceptual in process and outcomes, and the product is not an aggregation of data but theory (Schick-Makaroff et al., 2016: 175). Interpretive approach to reviews “*achieves synthesis through subsuming the concepts identified in primary studies into a higher-order theoretical structure*” (Dixon-Woods et al., 2005: 46). Inductive coding was used for the purpose of the analysis. Inductive approach to data analysis entails the building of patterns, categories and themes from the bottom up, through organising data into “*increasingly more abstract units of information*” (Cresswell, 2009: 175). The objective is to undertake some form of interpretive inquiry in which case, researchers endeavour to make meaning of what they hear, see or understand. As a result, articles were read and re-read in order to identify similar patterns and concepts. This process was basically an iterative process — going back and forth, involving constant reflection about the data, interrogating the data, coding and re-coding all through the process (Creswell, 2009).

The coding process was done in phases. During the first phase, which is often referred to as first stage coding, open coding was used to identify and categorise ideas or notions by closely examining the data. In other words, coding of small segments of data (in the studies) which essentially represent ideas or concepts that describe or relate to the phenomena under study was undertaken. The second stage involved the examination of how codes intersect or are related, the refinement of codes and consolidation of codes into categories. Similar codes were grouped together or merged into higher-order categories to form more definite and complete descriptions or assessment of phenomena (Lewis, 2016). In cases where ‘everyday’ words were used as code names, these were renamed to reflect what was prevalent in the evidence base. The final stage involved the merging of codes and categories into code groups to form emergent patterns or themes

from the analysis. The emergent categories, patterns and themes provided the basis for identifying critical arguments emanating from the review.

2.1.3 Review limitations

Some limitations of the study can be identified, most of which are similar to those of all systematic reviews. First, the findings of any systematic review of literature depend both on the keywords and search strategy used, as well as the inclusion and exclusion criteria set out. Although our study utilised a broad list of keywords in searching the databases, there is a possibility of missing out on some important publications due to the profusion of words being used in food systems governance research. Inadequate referencing can also be an issue. Importantly, a major term in the research — ‘food system’ — has only recently gained traction in the literature. It is thus possible that important studies that used other terminologies to refer to the food system might have been omitted.

Given that databases mostly include peer-reviewed journal articles, some other relevant documents which are not journal articles, like working papers, might have been missed in the search process. In addition, despite the application of a strict methodological process throughout the review, the authors acknowledge that there is possibility for some form of subjectivity due to the qualitative approach applied first to the screening of documents from databases, and, importantly, to the assessment of included studies. Despite these limitations, the study was able to contribute towards deepening the understanding of food system governance in South Africa.

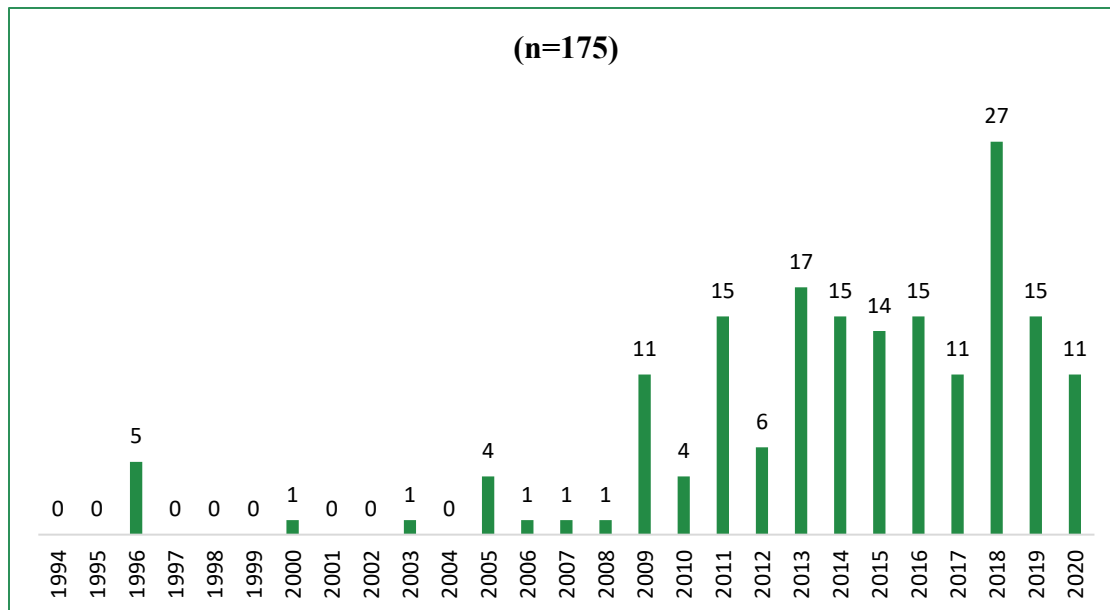
2.2. General characteristics of reviewed literature

The section presents an analysis of the final 175 documents considered for the review. Attention was paid to the following characteristics: year of publication, localisation, method of research, main thematic focus and relevant topical issues raised by the studies.

2.2.1. Overview: timeline and type of publication

Out of a total of 175 documents, only 14 documents were published between 1994 and 2008 (Figure 2). With effect from 2009, however, there has been a significant increase in the number of publications. This is reflective of the growing attention given to issues relating to the South African food system and its governance following the food price crisis of 2007 / 08 and its continuation in 2010 / 2011. From 2009, with only two exceptions, a minimum of 11 selected documents were published every year. About 30% (n=53) of the literature included were published in the last three years. The foregoing highlights the fact that the food crisis raised awareness about food-related issues and escalated research on food system governance (Candel, 2014; Hospes and Brons, 2016). Research on food system governance in South Africa is growing given the increased acknowledgement of the need to pay attention to food governance in order to resolve food system issues in the country.

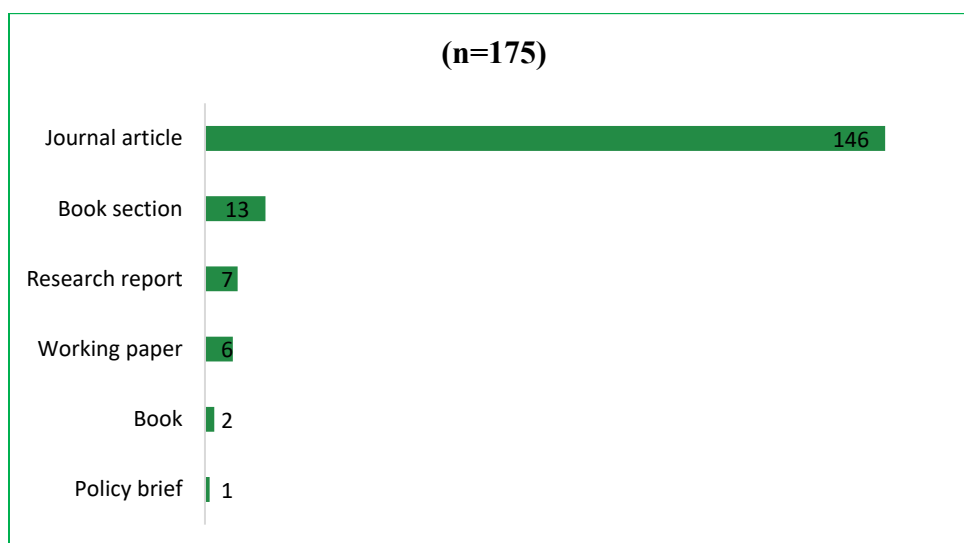
Figure 2: Number of publications per year



Source: Authors' computation.

Figure 3 shows that a great majority (83%) of reviewed documents were journal articles. Only 13 documents were book sections, seven were research reports. Also, seven research working papers and one policy brief were published during the time period, and only two books were published books on the topics under review.

Figure 3: Type of publication



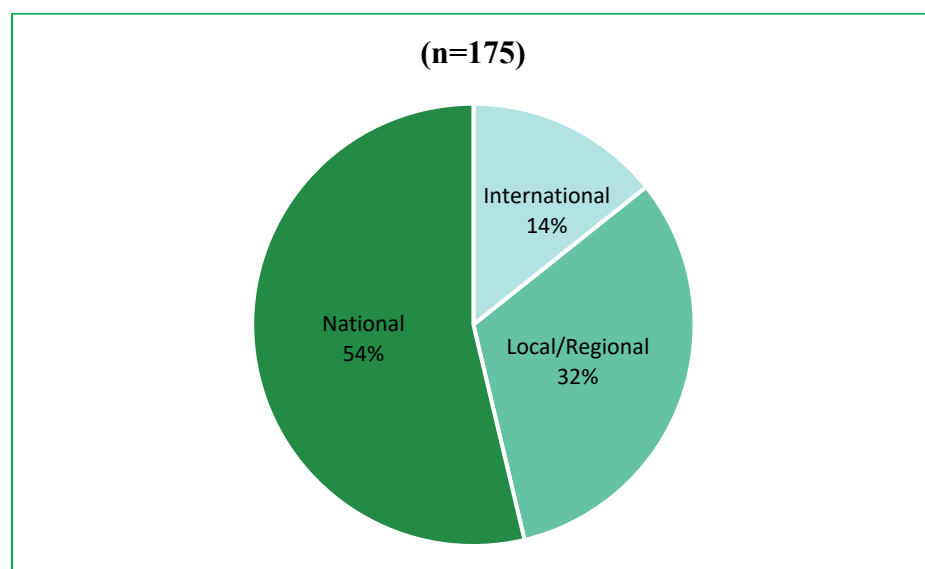
Source: Authors' computation.

Analysis indicates that 146 articles were published in 84 journals. Only 16 journals had more than one article in the list of records, the major exception being *Agrekon*, a journal focusing on food, agricultural and resource economics mainly in Southern Africa, with 20 articles. Other journals with up to three selected articles were: *Food Security* (n=11); *Development Southern Africa* (n=9); *Sustainability* (n=6); *Urban Forum* (n=6); *Journal of Peasant Studies* (n=5); *Food Policy* (n=4); *Development in Practice* (n=3); *Globalizations* (n=3); and *NJAS-Wageningen Journal of Life Science* (n=3).

2.2.2. Geographical focus

In terms of the specific locale the research focused on, or in which it took place (Figure 4), 54% (n=94) of the reviewed literature had a national focus, and 32% (n=52) a local or regional focus on a community, city, local government, province or any other particular location within South Africa. Studies considered international are those with either a global focus but with particular mention of South Africa in the research, or multi-country studies which include South Africa. About 14% (n=24) of the literature were in this category.

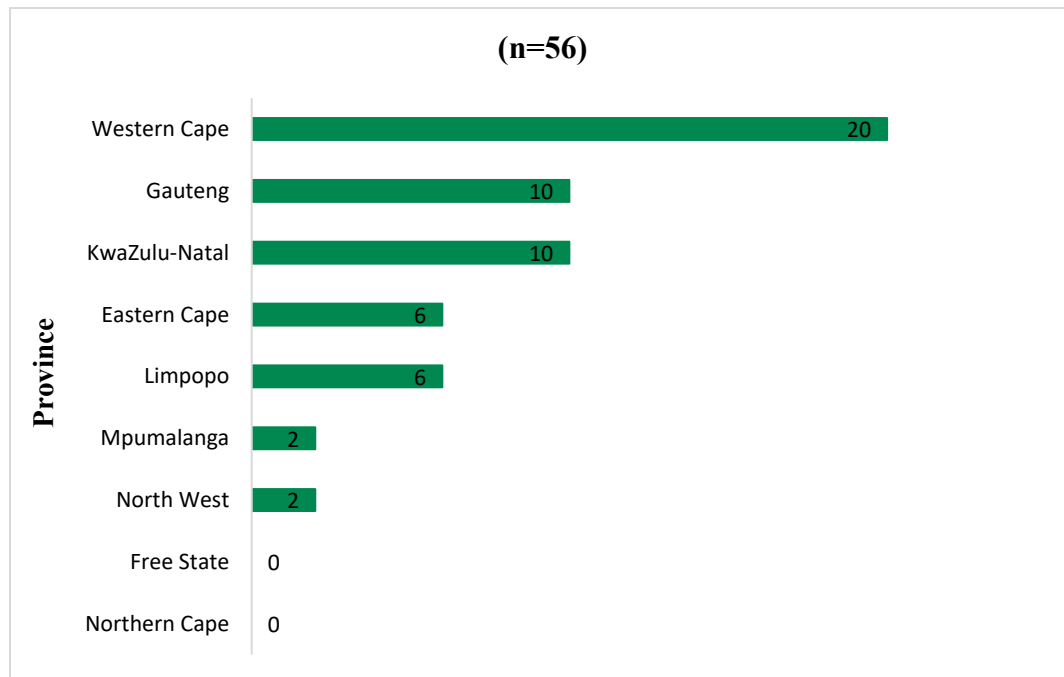
Figure 4: Study coverage or study boundary



Source: Authors' computation.

Analysis of studies at the provincial level (Figure 5) indicates a strong geographical focus with: 20 out of the 56 studies in the Western Cape province (36%), 10 in the Gauteng and in KwaZulu-Natal provinces. All other provinces count for less than 30% of the total. None of the selected studies was undertaken in either Northern Cape or Free State provinces.

Figure 5: Location of local / regional studies by province



Source: Authors' computation.

2.2.3. Thematic focus and topical subjects

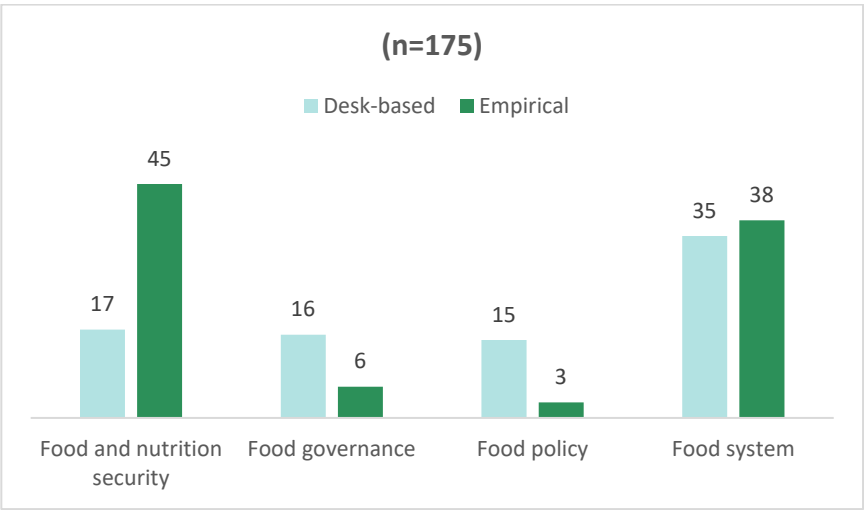
While the reviewed literature can be categorised based on their overarching thematic focus (Figure 6), attempt was also made to undertake a topic-document analysis (see Table 3 below). Four broad themes were identified. These are: food and nutrition security, food system, food policy and food governance. The view that food governance is an emerging research area in South Africa was supported by the fact that there were only 22 documents (13%) which focused exclusively on food governance issues. Although given the multiplicity of perspectives of what food system governance entail, many of the reviewed literature provided insights to the concept even though some did not explicitly refer to it. Whereas about 35% (n=62) and 42% (n=73) of the reviewed literature focused on food and nutrition security, and food system respectively, 10% (n=18) was on food policy.⁶

The methods adopted by the publications were also categorised into desk-based research and empirical research. The latter refers to research where conclusions drawn mainly emanate from empirical evidence involving some form of qualitative and / or quantitative data collection from research sites. Analysis indicates that 92 and 83 publications are empirical and desk-based

⁶ Food policy refers to and includes all public policies related to food (from production to consumption) promulgated or disseminated as laws, regulations, plans and strategies by different levels of government or public agencies from local to global (international organisations).

research, respectively. However, majority of the publications with a specific focus on food policy and food governance are desk-based (Figure 6). In line with the findings of Hospe and Brons (2016), many of the publications in the food governance category emphasised the need for more empirical research on food governance.

Figure 6: Method of research and main study focus



Source: Authors’ computation.

While the aims, methodological and disciplinary contexts significantly differed across selected studies, there were important topics related to the research question that came to the fore during the analysis. These, and their respective meanings or descriptions, are presented in Table 3.

To give an indication of the literature’s characteristics in terms of topical issues that were brought to light, a topic-document analysis was performed in Atlas.ti. The above topics (and several others) were used as codes (either first-stage codes or higher-order codes) in the software.⁷ This analysis served two purposes. First, it assisted in giving a sense of the documents in which an issue was mentioned. In essence, the analysis gave an indication of the number of studies / documents in the selected literature which alluded to a particular topic. Secondly, the ‘groundedness’ of a code (how much it appears) in each document serves as an indicator of the relevance of the paper in discussing the topic. In other words, the more quotations of a code (or topic) are in a document, the more re

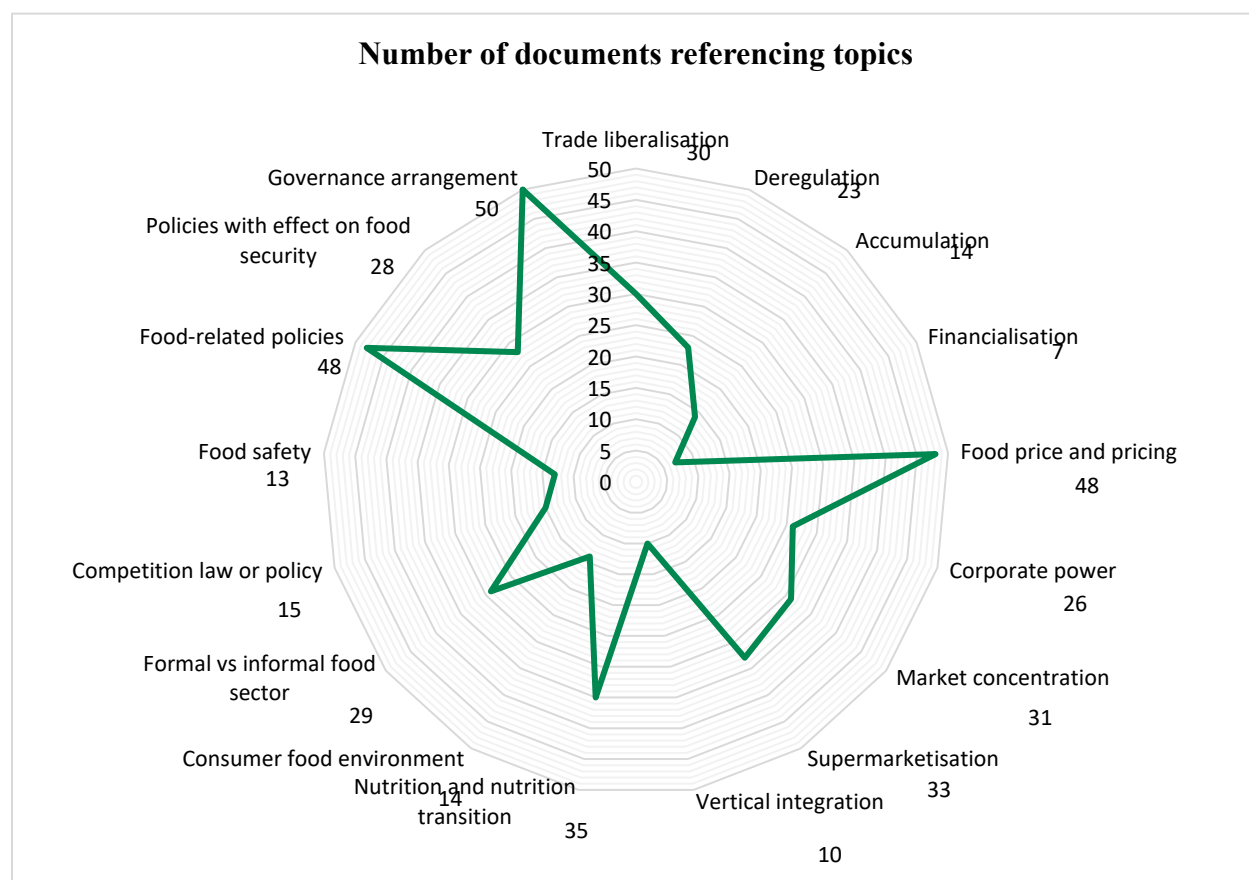
7 During the analysis, relevant texts of an article relating to a particular topic were highlighted or quoted and assigned to codes. Quotations are, therefore, phrases, sentences or extracts from the documents that are assigned into a code or codes. The number of times a code appears in a document represents the number of quotations in the document relating to the code. To operationalise the topic-document analysis, the Code-Document Occurrence feature in Atlas.ti was used.

Table 3: Description of topical issues

S/N	Topic	Description
1.	Trade liberalisation	Removal or reduction of tariff and non-tariff barriers in food trade
2.	Deregulation	Elimination or reduction of government regulation in a particular (food) industry, more often with the intention of fostering competition within the industry
3.	Accumulation	The pursuit of profit including or involving the re-investment of part of profit in existing or new assets (productive or financial) with an objective of increasing returns
4.	Financialisation	Growth in both financial capital as well as interests and stakes of financial markets and institutions in the food sector
5.	Food prices and pricing	Wholesale and retail prices and how these are determined
6.	Corporate power	Power and authority that food corporations wield to shape decisions, activities and outcomes of the food system
7.	Market concentration	The degree through which market shares are concentrated between a small number of firms across the food value chains and its implication
8.	Supermarketisation	The rapid growth of supermarkets' shares in retail, its drivers and implications
9.	Vertical integration	Combination of two or more stages of production or activities within the value chain in one firm, which hitherto were undertaken by separate firms
10.	Nutrition and nutrition transition	Diet and its relationship to health, as well as shifts in dietary consumption patterns of individuals (e.g., increased intake of animal products and processed food)
11.	Consumer Food Environment	The environment in which consumers make their food choices and the related influencing factors (e.g., culture, advertising)
12.	Formal vs informal food sector	The relationships, intersections and contradictions between formal (registered enterprises) and informal (non-registered or household enterprises) production or trade units
13.	Competition law / policy	Anti-competitive practices and policies to stem them. Policies to ensure that competition is not undermined or obstructed in ways that are harmful to the society and the economy
14.	Food safety	Issues relating to the production, handling, preparation and storage of food in ways that reduces risk to food-borne illnesses, or the lack thereof
15.	Food-related policies	Policies that focus essentially on food or food security from production to consumption
16.	Policies with effect on food security	Overarching developmental policies of government with effect on food security (e.g., social grants and their impact on food access)
17.	Food governance	Contexts and mechanisms through which food system actors' interests are articulated and decisions to address the multifarious issues related to food are made, implemented and sustained (FAO, 2011)

Figure 7 presents a summary of the number of documents that highlighted a particular issue, and somewhat gives an indication of how much these issues are considered critical in the South African food system.

Figure 7: Topic-document analysis



Source: Authors' computation.

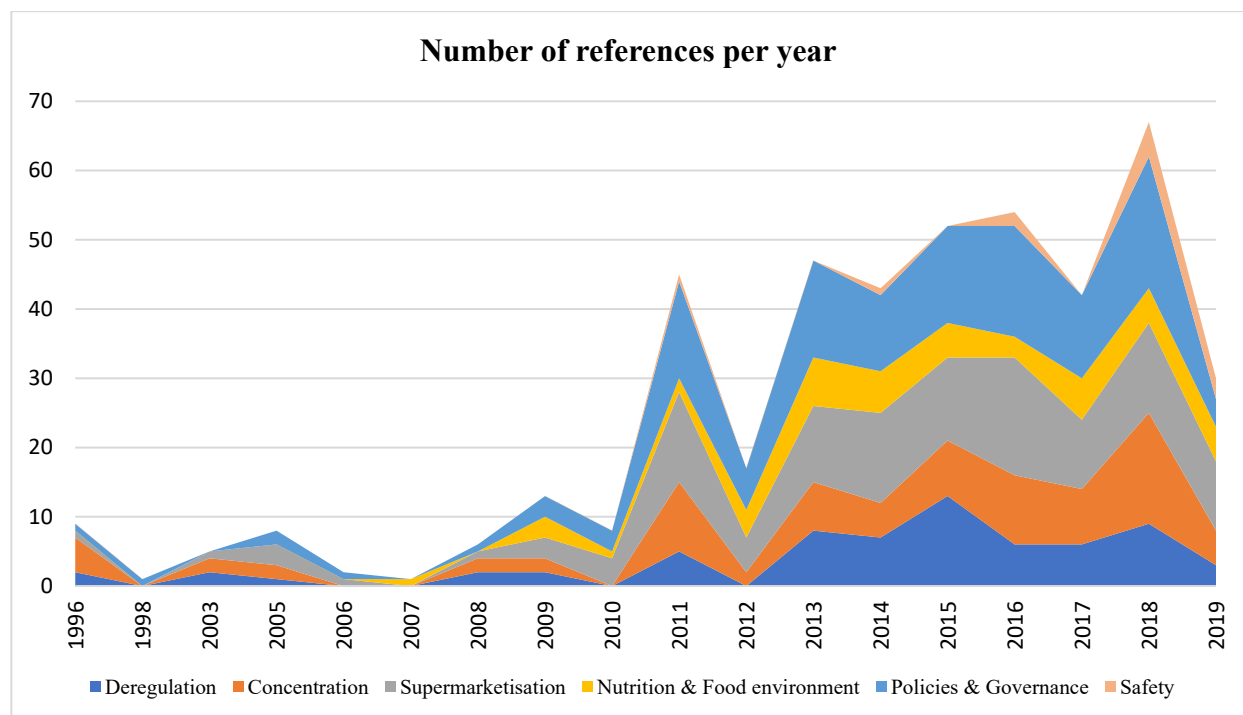
The main studied topics are governance arrangement (n=50), and food-related policies (n=48) and food prices and pricing (n=48). Other major topics include: nutrition and nutrition transition (n=35), supermarketisation (n=33), market concentration (n=31), trade liberalisation (n=30), formal versus informal food sector (n=29), corporate power (n=26), policies with effect on food security (n=28), and deregulation (n=23). Annex 2 provides the main references with the highest number of quotations in relation to the topic.

The second part of the analysis involves the time of emergence of the different topics which gives an interesting overview of the nature and orientation of the food system governance and food security debate in South Africa. To do this, and for the sake of graphic visibility, the year 2020 was excluded because the review only covers about half of that year, and the major topics were further merged into categories. Trade liberalisation, deregulation and financialisation were merged and referred to as *deregulation*; accumulation, food prices and pricing, corporate power, market

concentration and vertical integration were referred to as *concentration*; supermarketisation and formal versus informal sector were merged and referred to as *supermarketisation*; nutrition and nutrition transition and consumer food environment were referred to as *nutrition and food environment*; and competition law / policy, food-related policies, policies with effect on food security and governance arrangement were all merged and referred to as *policies and governance*. Food safety was not merged. The analysis is presented in Figure 8.

Generally, the chart is indicative of the rise in food system governance research in South Africa and the change in focus. In the late 1990s and early 2000s, the focus was mostly on deregulation, concentration and supermarketisation, and these three domains remained a significant part of the food system research over the period. From the food price crisis and its consequences at the end of the 2000s, policies and governance emerged significantly as new topics and they have steadily gained traction over the years. The discussion of supermarkets' rise, and the related formal versus informal trade debate, increased and consolidated from 2013, while nutrition issues and food environment appear as a new field of research. Food safety, which was absent in the literature until the mid-2010s, emerges as a new topic as a consequence of a sanitary crisis in the country (listeria outbreak in 2017-18) which raised attention on safety risks in industrialised food chains.

Figure 8: Chronology of topical issues emerging from reviewed literature



Source: Authors' computation.

2.3. Other references used in the working paper

In addition to these 175 documents resulting from the review process, 41 others were used to consolidate the review. They were mostly used in the introduction to better position the food system governance discussion in the South African context. They are identified in the list of references.

Among these additional sources, 24 are not specific to South Africa and correspond to literature on: systematic review methodology (7); global food systems and food security (11); and state action, public policies and economic liberalisation (4). Further, 17 additional references are specific to South Africa and were considered useful to support the analysis. They relate to: the South African political economy and the macro-economic context (4); government publications (7); and food system, food security and land reform (6). This last group corresponds to documents which were not identified in the databases by the search strategy but which the authors came across during the writing process and found particularly relevant.

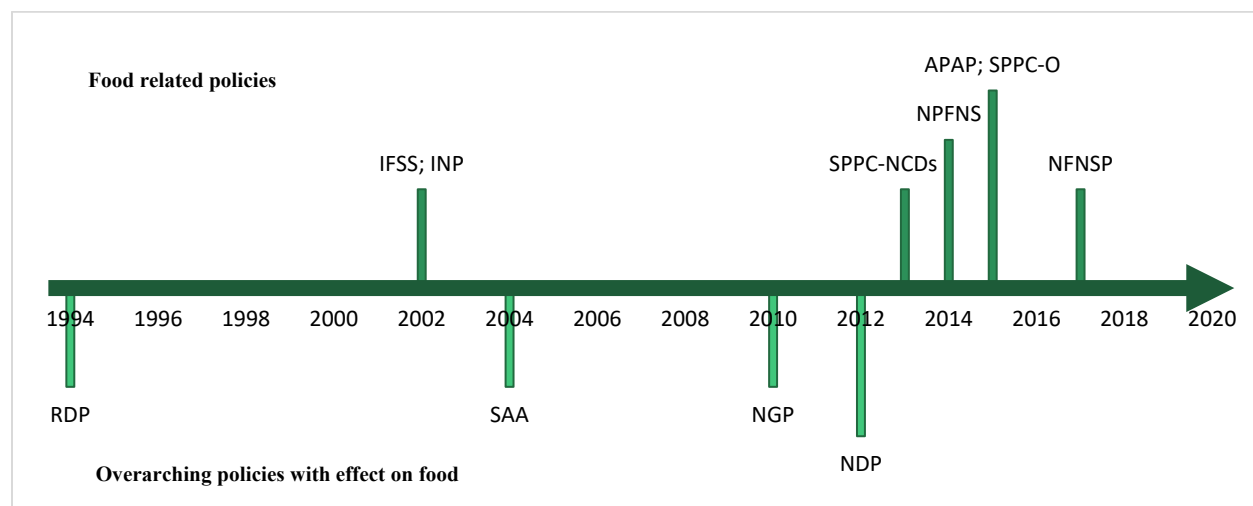
3. Overview of food system governance in South Africa: policies, actors and patterns

This chapter presents a first overview of the food system governance landscape in South Africa. First, food policies are examined and chronologically reviewed, which helps to identify what have been the major changes in public action. Second, the different categories of public and private actors participating in the food policy space are presented, highlighting their direct or indirect contribution in food system governance. Finally, a first discussion of the existing food system governance patterns is proposed.

3.1. South Africa's food policy landscape

South Africa's food policy landscape is one that is broad and far-reaching. However, for the purpose of this review, attention is given to the most relevant policies, and these are categorised into two groups. First are those that relate directly to food, food security and the food system. Second are the overarching policies implemented by the government, but which have effect on, allude to or make provision for the food system or food security. Figure 9 presents a timeline for the emergence of these main policies.

Figure 9: Emergence of main food-related policies and overarching policies with effect on the food system and food security



Source: Authors.

Note: Difference in bar height is only to facilitate the reading.

RDP – Reconstruction and Development Programme; IFSS – Integrated Food Security Strategy; INP – Integrated Nutrition Programme; SAA – Social Assistance Act; NGP – New Growth Path; NDP – National Development Plan; SPPC-NCDs – Strategic Plan for the Prevention and Control of Non-Communicable Diseases; NPFNS – National Policy on Food and Nutrition Security; APAP – Agricultural Policy Action Plan; SPC-O – Strategy for the Prevention and Control of Obesity; NFNSP – National Food and Nutrition Security Plan.

3.1.1 Food-related policies

Several major policies have landmarked the food policy space. However, it is important to mention upfront that South African food policy is not about the food system as a whole, but is mostly focusing on food security (Termeer et al., 2018), which is only one of the outcomes of the food system. This choice is possibly a consequence of the status of a right given to food security by the 1996 Constitution (sections 27 and 28 of the Bill of Rights), *de facto* attributing to this objective a high level of attention in government's action.

South Africa's first comprehensive food security policy was adopted in 2002. Referred to as the *Integrated Food Security Strategy* (IFSS), the policy's overarching aim was the eradication of food insecurity, malnutrition and hunger by 2015 (Jacobs, 2009; Koch, 2011; Haysom, 2015). Its strategic objectives include household food production and trading, improvement of income generation, and enhancement of employment opportunities. Other objectives focused on the improvement of nutrition and food safety and the provision of avenues for stakeholder dialogue and capacity building (McLachlan and Thorne, 2009).

Gazetted in 2014 by the South African government, the *National Policy on Food and Nutrition Security* (NPFNS) developed a more comprehensive approach towards addressing the country's food security. The policy which was developed by the departments of Agriculture and Social Development attempts to link food security with nutrition and was premised on five pillars. These are: improved nutritional safety nets; improved nutrition education; enhanced alignment of investments in agriculture with local economic development; improved market participation of the emerging farmers by leveraging on government procurement schemes and public private partnerships; and food and nutrition security risk management (Gildenhuys, 2017). Essentially, the policy emphasises availability, accessibility and affordability of safe and nutritious food for South African households (Thow et al., 2017, 2018; Boatemaa et al., 2018). Like the IFSS, it also proposes to harmonise the different strategies and programmes being implemented by stakeholders (SACN, 2015; SAHRC, 2017).

The *National Food and Nutrition Security Plan* (NFNSP) released in 2017 is the most recent food security policy. It aims at improving food security and nutrition and its development was led by the Office of the Deputy President and the Department of Planning, Monitoring and Evaluation (DPME) in the Presidency, but it included several government departments and non-state actors, a clear departure from previous plans and policies. Its strategic objectives included the establishment of a multi-sectoral food and nutrition security (FNS) council which would oversee alignment of policies, institutional coordination and implementation, the establishment of inclusive local food chains to aid food access, the expansion of social protection and livelihood programmes, as well as scaling up of nutrition interventions. Others are the development of an integrated communication plan to influence food decisions of South Africans, and the development

of monitoring and evaluation (M&E) and risk management systems to oversee progress and risks, respectively.

The other main food-related policy documents are more specific and address a specific segment of the food system or food-related thematic areas. The South African *Integrated Nutrition Programme* (INP) was established early, in 2002, to deal with and prevent malnutrition in all its forms, and was targeted at nutritionally vulnerable groups and individuals (Termeer et al., 2018; Boatemaa et al., 2018). This was done through the initiation of several interventions within the programme including growth monitoring and promotion, food provision, micronutrient supplementation, food fortification, nutrition education and promotion, among others (Labadarios et al., 2005; Schönfeldt and Gibson, 2009; Faber et al., 2011; McLachlan and Landman, 2013; Boatemaa et al., 2018; SACN, 2015). The programme was being coordinated by the Department of Health's Nutrition Directorate and aims to establish linkages with other departments, although the responsibility for the school nutrition programme has been transferred to the Department of Basic Education (DBE). Some of the legislations regarding nutrient intake refer to the *Foodstuffs, Cosmetics and Disinfectants Act of 1972*. One can mention the regulations relating to the 'Iodisation of salt' published in 2001, the mandatory fortification of wheat flour and maize meal which was published in 2003, as well as the 'Regulation relating to trans-fat in foodstuffs' (2011), and the 'Reduction of sodium in certain foodstuffs' (Schönfeldt et al., 2018).

The *Strategic Plan for the Prevention and Control of Non-Communicable Diseases* (SPPC-NCDs), initiated in 2013, detailed actions on how to achieve targets set out in the South African Declaration on the Prevention and Control of NCDs⁸ (Schönfeldt et al., 2018; Boatemaa et al., 2018). Some of the targets of the plan include the reduction of the prevalence of people with raised blood pressure by 20% and mean population intake of salt to less than 5g per day, both by 2020 (Schönfeldt et al., 2018). The SPPC-NCDs also mandates cooperation among relevant departments to achieve these targets (Thow et al., 2018). In another vein, the *Strategy for the Prevention and Control of Obesity* (SPC-O), which was developed in 2015, focused on the prevention and control of obesity through a multi-sectoral approach. The strategy aims to reduce the prevalence of obesity by 10% in 2020, and puts forward a dietary guideline, as well as guidelines on food labelling, and regulations for (some kinds of) advertisements (Boatemaa et al., 2018). The *Health Promotion Levy on Sugary Beverages* (commonly named 'sugar tax') was proposed by the National Treasury in 2016 but came into effect in 2018. The policy was introduced in response to the recommendations of both the Strategy for the Prevention and Control of Obesity and the SPPC-NCDs. The policy introduced an incremental tax of R0.0229 per gram of sugar on drinks with added caloric sweeteners (Boatemaa et al., 2018). In addition to these major policy documents, diverse national legislations have been put in place to support the implementation of food safety standards. Three government departments (Health, Trade and Industry, and Agriculture, Forestry and Fisheries), each with differing responsibilities and mandates, are in charge of food safety regulations. Food safety risk

⁸ Main food-related non-communicable diseases are diabetes, cholesterol, obesity and hypertension.

prevention and management rely on the enforcement of existing regulations, and communication through food safety education is led by the Department of Health (Boatema et al., 2019).

The *Agricultural Policy Action Plan* (APAP) (2015–2019) focuses on a discrete number of value chains identified as critical to meeting the objectives of the NDP (see 3.3.2). These objectives are contribution to food security, job creation, economic growth and positive trade balance, as well as value of production. The plan differentiates between sectoral and transversal interventions, with the latter being those interventions that cut across sectors including the Fetsa Tlala⁹ Integrated Food Production intervention which seeks to support subsistence and smallholder farmers with increasing their hectares under cultivation to 1 million by 2018-19 (Thow et al., 2017). Specifically, APAP focuses on sectors with high potential for job creation, particularly export horticulture, and as a result, it was emphatic about the need to improve commercial production (Greenberg, 2017b).

3.1.2. Overarching policies with effect on the food system and food security

At the general level of the country's development, the 1994 *Reconstruction and Development Programme* (RDP), a policy focusing on the reconstruction of post-apartheid South Africa, prioritised food security as a major policy objective. Through this policy, government gave precedence to increasing public expenditure to improve food security (Kirsten, 2015; Gildenhuys, 2017) and, consequently, efforts were made to increase public spending in social programmes such as school feeding schemes, social grants and public works programme. Other measures relating to food security in the policy included nutrition education and land reform so as to increase employment (Gildenhuys, 2017).

Facing macroeconomic difficulties, the government developed a new macroeconomic policy framework in 1996, called the *Growth, Employment and Redistribution strategy* (GEAR). Fully focusing on economic structural adjustment and targeting fiscal, monetary and trade objectives, food issues were ignored. GEAR was replaced in 2005 by the *Accelerated and Shared Growth Initiative for South Africa* (ASGISA) which did not prioritise agriculture and the food economy either. Food security came back in the national strategy in 2010 when government introduced the *New Growth Path* (NGP). Focused on the enhancement of economic growth and creation of employment and equity through infrastructure investment and public-private partnerships, the new policy highlighted food insecurity as an issue and agriculture as a core component of the solution (Hendriks, 2013; Hendriks and Olivier, 2015; GCRF-AFRICAP, 2018). It emphasised the fact that achieving food security is contingent on economic growth that leads to job creation. Part of the measures proposed by the policy included land reform in order to encourage smallholder schemes, and commercial farming among others.

⁹ Meaning 'End Hunger' in Setswana, one of the official languages of South Africa (and also of Botswana), mostly spoken in the North West province.

The 2012 NDP is the most recent major overall strategy. Designed by the National Planning Commission, it mainly focused on eradicating poverty and reducing inequality by 2030. Essentially, the plan advances a developmental state approach; it views the state as a major driver of change, noting that the desired change can be facilitated through state interventions and investments (Hendriks, 2013; Hendriks and Olivier, 2015; SACN, 2015). The plan was emphatic about aligning economic growth with development needs (Hendriks, 2014; Hendriks and Olivier, 2015; Strydom and Struweg, 2016), and highlights the significance of employment creation and economic prosperity as a strategy for reducing poverty and food insecurity. Furthermore, it emphasises cooperation between private and public actors to achieve social development goals.

More specific is the Social Assistance Act (SAA) enacted in 2004. It has the aim of providing cash transfers to support households. Through this policy, the South African government has introduced diverse types of social grants which include the child support grant, foster-child grant, care dependency grant, disability grant and the older persons grant (Koch, 2011). Since the introduction of the Act, a significant number of South Africans have benefitted from the receipt of social grants. About 46% of South African households receive at least one form of social grant (Boatemaa, 2018), while 22% of the country's population are dependent on social grants as their main source of income (Hendriks, 2014). The Competition Act 89 of 1998 and its 2018 amendment must also be mentioned. The Act concerns every economic sector and is of course important for the regulation of the food sector. It establishes a Competition Commission responsible for the investigation, control and evaluation of restrictive practices, abuse of dominant position, and mergers.

3.2. Actors and interests in the governance of the food system

Diverse sets of actors are involved in food system governance. They have differing interests which shape their actions — or inactions — within the food system and they can broadly be categorised into three: government at different levels, private actors, as well as CSOs and other actors. In the section that follows, these actors and their interests are examined.

3.2.1. The specific position of government

Although food system governance is not the exclusive preserve of the state, governments have executive powers and they develop strategies, policies and action plans. As reviewed in the previous section, these interventions are plentiful and multifarious, which gives public actors a pre-eminence in the policy space. As such, they play a significant role in the governance of the system where they connect with the other actors and institutions.

According to Pereira and Ruysenaar (2012), government has the responsibility to manage interactions and intersections between food and society, to play a leading role in the administration of both formal and informal rules within the food system, and to also give special consideration to

the most vulnerable within the system. The latter is very much related to the interventionist role of the state as claimed by rights-based, public health and / or sustainable development proponents (Pritchard et al., 2016; Otero et al., 2018).

However, adopting a broad historical perspective, it is important to remember that everywhere in the world, food and agriculture have always been an “*affair of state*” (Coulomb et al. 1991: 1), because providing enough nutriment to the population was, and continues to be, critical for political stability. Government’s reaction to the food price crisis of 2007 / 2008 and its aftermath is an eloquent reminder. As such, agricultural and food policies have for long been a core — and generally the first — component of public policies and states were systematically interventionist (Chang, 2009). Securing food supply was a primary objective which was then completed by securing access, stability and safety.

This is the rationale of food policies and social assistance programmes which have been critical for supporting access to food (e.g., in South Africa, social protection, food aid, and access to income through work programmes). They were developed along with standards and regulation for both domestically grown and imported food, for food labelling, and the state also implemented oversight functions in food retail environments and food manufacturing (Libman et al., 2015; Warshawsky, 2013, 2016; Greenberg, 2017a).

Behind the abundance of food policies in South Africa is a wealth of public actors. This situation is exacerbated by the three-tier system of government at national, provincial and municipal levels. South Africa includes the national government, nine provinces and various types of municipalities: eight metropolitan, 44 district and 226 local municipalities. It results in 28 national departments, 103 provincial departments, and 278 municipal councils, to which must be added about 170 public entities (agencies, commissions, councils, etc.).

The 1996 Constitution adopts the principle of co-operative government, with a dedicated national department (Cooperative Governance and Traditional Affairs), and the various levels of government must co-ordinate their actions and legislation. However, the Constitution has created a limited federalism and provinces have reduced exclusive competency (e.g., provincial roads, cultural matters and museums, tourism, as well as liquor licenses and abattoirs). Their legislative and executive powers are concurrent with the national sphere and can be exercised to the extent of their administrative capacity. Therefore, agriculture, environment, human settlements, urban and rural development, education and health, which are critical to food system governance, are shared areas and, in practice, departments in provincial governments are mostly implementing national policies and programmes. Some provinces have engaged in strategic thinking about food security, like Gauteng with its *20-Year Food Security Plan*, prepared in 2011 but never finalised. The Western Cape Government is the only provincial government which fully developed and completed its own strategy. Prepared in 2015–2016, its *Household Food and Nutrition Security*

Strategic Framework, named *Nourish to Flourish*, was approved by the cabinet but remains as a draft and has not been implemented so far (Western Cape Government, 2016).

Local governments do not have any specific mandate related to food security and food system governance. Though, they have some room for action due to their competencies for spatial planning, land use, trading regulations, markets, and street trading (Hospes and Brons, 2016; Battersby and Watson, 2018; De Visser, 2019, Haysom et al., 2020). In addition, they are often responsible for the delivery of electricity and potable water, both central to food safety. However, some metropolitan municipalities, which have policy capacity, have developed strategies with direct or indirect reference to food issues. This is the case of the food resilience strategy of the City of Johannesburg and of the global resilience strategy of the City of Cape Town.

Due to these constitutional limitations to more significant roles for municipalities and provinces in the governance of the food system, national departments are *de facto* the key players. In their review of national government responsibilities for food policy making, Pereira et al. (2020) take stock of 15 departments directly or indirectly engaged in food policy. According to the DPME in charge of coordinating the implementation of the 2017 NFNSP, there are four key national departments with direct strategies and interventions related to food and nutrition security (DPME, 2020): the Department of Agriculture, Land Reform and Rural Development (DALRRD), the Department of Health, the Department of Social Development (DSD), and the DBE.

Other food system dimensions are partially and indirectly addressed by the Department of Forestry, Fisheries and Environment or by the Department of Public Works and Infrastructure. In the later, the Expanded Public Works Programme (EPWP) includes the Sustainable Land-based Livelihoods programme, managed in collaboration with Environmental Affairs, which offers employment related to natural resources management. Other departments like Trade and Industry, Higher Education, Science and Innovation, or Water and Sanitation are also in charge of different domains related to the food system. In total, about half of the 28 national government departments have a direct or indirect role in food system governance (see Table 4). Together with many government agencies, they manage over 50 programmes that address food insecurity and malnutrition which remain the core target of governmental action (DPME, 2020).

Table 4: Main national departments involved in food system governance

Ministry of Agriculture, Land Reform and Rural Development	Various programmes and plans related to agriculture and rural development, Agriculture Research Council 2002 IFSS, 2014 NPFNS, 2015 APAP
Ministry of Social Development	Early Childhood Development centres 2004 Social Assistance Act incl. child support grant 2014 NPFNS
Ministry of Health	Regulations for fortification, salt and sugar content, food labelling 2002 INP, 2013 SPPC-NCD, 2015 SPC-O
Ministry of Basic Education	National School Nutrition Programme since 2004
Presidency / Department of Planning, Monitoring and Evaluation	Coordination between departments and ministries 2017 NFNSP
Ministry of Finance / National Treasury	VAT levy rebate on main staples, sugar tax, customs and excise
Ministry of Higher Education, Science and Innovation	Various research programmes, management of intellectual property rights Council for Scientific and Industrial Research, National Research Foundation, Human Sciences Research Council, Centres of Excellence
Ministry of Forestry, Fisheries and Environment	Various programmes and plans related to forestry and fisheries, biodiversity and resource management, adaptation to climate change, chemicals and waste management
Ministry of Water and Sanitation	National Water Act, Water and sanitation master plan
Ministry of Public works and Infrastructure	Expanded public works programme
Ministry of Trade, Industry and Competition	Food imports and exports regulations
Ministry of Human Settlements	Housing Code, housing assistance programmes
Ministry of Cooperative Governance and Traditional Affairs	Coordination between levels of government

Source: Compiled from Pereira et al. (2020), DPME (2020).

3.2.2. Private actors: the many and the few

The role private actors play in food system governance in South Africa has been a contentious issue. While there is the argument that through innovation and other initiatives private actors directly impact the food system and can somewhat influence its governance positively, most authors point that in many instances, private actors have immensely contributed to escalating food system issues. Private actors are prominent along the agri-food value chains; they include input providers, producers (individual farmers and farm businesses), processors, wholesalers and retailers. They also include those providing extension and financial services, logistics and commercial infrastructure, such as malls which are a major avenue for supermarket development.

Before going further in highlighting the role of these private actors in the food governance space, it is apposite to point out major asymmetries between them. Indeed, in almost all categories across the entire value chain, the power differential among actors is massive, with overarching implications on contributions to food governance issues. Food (primary) producers are made up of a limited number of big (mostly white-owned) farms, which contribute to the bigger share of production in many value chains, and numerous small-scale farmers ranging from those who produce to sell to subsistence producers. According to StatsSA (2020), about 2.6 million households are engaged in a type of agricultural activity, for sales, self-consumption or leisure, but 215 000 farming households only have a commercial activity, and 40 000 registered commercial farmers produce 80% of the total value of agricultural output.

Food processing and retail are dominated by a few big firms while informal food retailers, albeit significant in many places, continue to operate at the margins. There are also financial companies and property developers who invest heavily in the food sector. However, the focus here is mostly accorded to the dominant private actors in the food markets, whose interests and influence generally prevail over those of others who lack leverage for collective action.

Summarised in Table 5 are the dominant private actors in the South African food sector. Some of them are present in several segments and therefore are in a position to bear down on the organisation of value chains (see chapter 5).

It is important to touch on the structure of ownership of these corporations as it might provide insights into their interests and actions. While there was little mention of the ownership structure of these big food corporations in the reviewed literature generally, Greenberg's work (2017a) offered extensive insights into this structure. His paper reflects the 2016 situation and changes in ownership have occurred since then. Evidence points towards an institutionalisation of share ownership, which refers to the significant increase in the control of businesses by institutional shareholders such as pension funds. Financial institutions that are listed under the Johannesburg Stock Exchange (JSE) have majority shares in many of the big-food companies. Of notable mention is the Public Investment Corporation (PIC) which manages the funds of the Government Employee Pension Fund (GEPPF). The PIC is the largest investment fund in South Africa, managing assets of about R1.6 trillion in 2014 and has about 13% of total market capitalisation on the JSE (Greenberg, 2017a). The PIC / GEPPF is a major shareholder in many of South Africa's food corporations, an indication that they have significant control over these companies.

Table 5: Main businesses within South African food value chains

Value chain stage	Main actors
Inputs	Animal feed: Meadow Foods, Epol, Foodcorp, Nutri Feeds, Afgri Animal Feeds, Nova Feeds, VKB Agriculture, De Heus Machinery: Afgri, Barloworld Agriculture, Bell Equipment, Deere & Co, Agco, Dipla, Landmech Fertiliser: Sasol, Foskor, Omnia Seed: Pioneer Hi Bred/Pannar, Monsanto, Zaad Agri-services: Afgri, Sewes, NWK
Logistics	Bidvest, Barloworld, Imperial, Unitrans
Primary production	Cattle feedlots: Karan Beef, Bull Brand/Kolosus, EAC Group, Sparta Beef Pig feedlots: Kanhym Estates Vertically integrated poultry production: Astral Foods, Afgri, Rainbow, Country Bird, Sovereign Foods, Quantum Foods Grain storage and handling: Senwes, Afgri, NWK
Food processing (packaged foods)	Tiger Brands, Pioneer Foods, AVI, RCL Foods, Nestle SA, Unilever SA
Food wholesale	Massmart, Spar
Food retail	Shoprite, Woolworths, Pick n Pay, Spar, Massmart
Consumer food service	Yum Brands (KFC), Spur Corp. (Spur, Panarottis, John Dory's, etc.), Famous Brands (Wimpy, Steer's, Debonair's, etc.), Nando's, McDonalds

Source: Compiled from Greenberg (2017a).

Other JSE-listed companies with significant shareholding interest in the leading food corporations include: Remgro, with significant interest in Unilever SA, RCL Foods, Distell and Grindrod; Zeder, with substantial interest in Pioneer Foods; and Brait, which acquired and delisted Premier Foods (Greenberg, 2017a). Lately, ownership and control have followed the global capital expansion trajectory with foreign control gaining momentum at the expense of domestic control. For instance, Monsanto has acquired two of the leading seed companies in the country (Sensako and Carnia), while SAB Miller, one of the three leading corporations on the JSE, has been acquired by a prominent global company, AB Inbev.

Corporates' interest in contributing to the resolution of the issues within the South African food system intensified around 2009-10 following the 2008 international food price crisis, as well as the allegation of collusion and subsequent enquiry in 2008 by the Competition Commission — the national regulating agency for the maintenance of 'fair' competition (Pereira et al., 2013). The

continued scrutiny by the Competition Commission on possible collusion between private companies initially constrained their ability to collaborate with each other (Hamman et al., 2011; Pereira and Ruysenaar, 2012). However, the continued food insecurity and food system challenges have somewhat heightened the interest of private actors in engaging in cross-sectoral collaborations both among themselves and with other stakeholders (Pereira and Ruysenaar, 2012).

As part of their efforts in contributing to food system governance, many private actors within the food system have integrated corporate social responsibility (CSR), and then social and environmental responsibility (CSER), into their businesses, as such reflecting the evolving public debate. Defined as a company's contribution to society through its business concerns, as well as its social, environmental and philanthropic initiatives (Hamman et al., 2011), CSER has entailed an extension of focus from profit to the society in general. It came to the fore in appreciation of the social costs of economic activity and offered the opportunity for businesses to use their corporate power for more socially responsible and desirable objectives (Pereira and Ruysenaar, 2012). Among the actors, however, food retailers have more active, comprehensive and visible CSER initiatives (Igumbor et al., 2012; Pereira et al., 2013; Pereira, 2014; Ledger, 2016b), which is a direct reflection of their position and power within the food system and their closer proximity to consumers which they serve.

As a way of achieving CSER aims of food corporates, partnerships with CSOs have been increasingly prevalent in South Africa. Collaboration between food corporates and CSOs was also facilitated by the inability of the latter to access sufficient funding from government which meant that corporates could come in to offset some of these shortages (Warshawsky, 2014). These have included the provision of funding for CSOs to implement both food and non-food related programmes. Specifically, food manufacturers and retailers were estimated to give about R500 million in funding to food CSOs annually (Warshawsky, 2014). The CSER policy of Tiger Brand (a major South African manufacturing company) aspires to contribute one percent of its profit after tax to community development with food security as a core area of intervention (Ledger, 2016a).

The philanthropic practices of corporates are also evident in the donation of food (food bank initiatives) and support of small businesses. The latter has focused more on improving smallholders' access to markets and environmentally sustainable practices among them. Many small-scale farmers are being supported by linking them to the markets so as to ensure the viability and sustainability of these farmers' businesses (Hamman et al., 2011). Woolworths and Pick n Pay, according to Pereira et al. (2013), also committed to sourcing 90-95% of fresh produce from local suppliers as part of their contribution towards building the resilience of the food system. Woolworths, which is one of the major retailers in South Africa, has an initiative referred to as *Farming for the Future* which seeks to contribute towards environmental resilience by

collaborating with farmers to incorporate environmentally sustainable practices in their work (Pereira, 2014).

In 2009, FoodBank South Africa (FBSA) was established as a collaborative effort involving government, NGOs and private businesses, and food banks were set up in four major South African cities (Warshawsky, 2011, 2016a). A number of food companies actively support the FoodBank initiative which seeks to improve food access for the poor. This is done through the donation by food corporates of surplus food (especially food which has passed its sell-by date but not its use-by date) which would otherwise be wasted or recycled. In Johannesburg, the process involves food retailers and manufacturers supplying food to the food bank warehouses; such food is thereafter distributed to CSOs and finally, CSOs give out food to actual people (Warshawsky, 2011).

3.2.3. CSOs and the academia: insiders at the fringe

A range of actors besides the state and private sector are involved in the governance of South Africa's food system. These principally include CSOs and the academia (research community). Although this category of actors is diverse, CSOs remain by far the most dominant and far-reaching among this heterogeneous set of actors in the governance of the food system. In his several works on this topic, Warshawsky categorised food security CSOs into three: food security non-governmental organisations, food security community-based organisations, and food security social movements (Warshawsky, 2013, 2014, 2015, 2016b).

The merits of CSO participation in food governance were highlighted by Candel (2014). First, CSOs can provide knowledge and evidence of food insecurity and on governance gaps which are unknown to policymakers. Second, they are able to bring food governance closer to the vulnerable, thus enhancing the legitimacy and effectiveness of food-related interventions. Third, they have the ability to establish linkages between government departments and / or governance levels, and as such facilitating co-operation and integration. Fourth is their ability to offer the capacity which could be deficient within government structures. Indeed, the foregoing is also valid for other identified non-government and non-business actors.

Notwithstanding their importance, and as is the case globally (Candel, 2014; Termeer et al., 2018), participation of this set of actors in the governance of the South African food system remains inherently limited. Rather, their involvement is majorly skewed towards intervention on specific issues like urban farming, food assistance programmes and / or social service delivery. Warshawsky (2011, 2014) argues that, in line with neoliberal inclinations, South African food security CSOs have been somewhat co-opted into the provision of social services or emergency food relief (as also evident during the COVID-19 crisis), as opposed to challenging the status quo. In terms of involvement in the development and implementation of policies, civil society remains marginalised (Koch, 2011). Thow et al. (2017) argue that CSOs had limited involvement in the development of the 2014 NPFNS, although there were proposals in the policy to include them at

the implementation stage. Among the CSOs, many of their activities are not well integrated as operation in silos were self-evident (Koch, 2011).

Warshawsky (2014) contends that food security CSOs in South Africa lack the institutional capacity and resources to double as both a watchdog and service deliverer. They are faced with challenges related to absence of long-term funding support coupled with ineffective funding mechanisms from the state, thus resulting in enduring uncertainty for them (Warshawsky, 2013, 2015), while food security NGOs rely (sometimes inordinately) on the private sector.

Social movements are well-known for their advocacy and desire to effect structural change. In South Africa, advocacy is often championed by organisations who have been at the forefront of contesting the structure of the country's political economy. These have included the National Union of Metalworkers (NUMSA) and the Congress of South African Trade Unions (COSATU). Kirsten (2015) notes that labour unions, including COSATU, and consumer lobby groups were highly critical of the role of food manufacturers and retailers in the two events of food price spikes in South Africa. Moreover, their advocacy for the introduction of a regulatory body to monitor and control food prices and international food trade (Ramabulana, 2011; Pereira, 2014; Pereira and Drimie, 2016), as well as consequent investigations by the Competition Commission (Kirsten, 2015), represent efforts to change the dynamics of the food system.

According to Warshawsky (2014), many of these social movements are those with interest in food system issues as opposed to being strictly food system social movements. They focus on aspects of the food system like work conditions in agriculture and land distribution. The 2012 farm workers strike led to a 52% increase in the minimum wage of farm workers (Greenberg, 2015) and several of these movements have also championed calls for land redistribution and agrarian reform (Pereira and Drimie, 2016). On the whole, their modus operandi is inclined towards resisting, rather than succumbing to or collaborating with the prevailing power structures within the agri-food system (Pereira and Drimie, 2016).

However, if Warshawsky (2014) contended the near-absence of food system social movements, which was potentially reducing the ability of the CSOs to bring about the desired transformation of the South African food system, the emergence of the food sovereignty debate in the country has changed the landscape (Greenberg, 2013, 2015; Pereira, 2014; SAHRC, 2017; Siebert, 2020; Satgar and Cherry, 2020). Globally, food sovereignty movements gained traction as a critique of the emphasis on global markets to meet food needs of individuals and nations. The core focus of food sovereignty movements is on the ecological and social significance of a diverse production structure with emphasis on the diversity of actors being involved in production activities (Greenberg, 2013, 2015). Food sovereignty seeks to promote local production for local consumption and affirms agroecology as a sustainable alternative to large-scale industrial agriculture (Satgar and Cherry, 2020). Over the years, it has extended from a movement for

national self-sufficiency into a movement focusing on the rights of people to achieve self-sufficiency (Pereira, 2014).

Organisations and initiatives which have food sovereignty as a core objective in the country include: the African Centre for Biodiversity; the Agrarian Reform for Food Sovereignty Campaign; the Cooperative and Policy Alternative Centre; and the Surplus People Project (Siebert, 2020). At the forefront of the charge for food sovereignty is the South Africa Food Sovereignty Campaign (SAFSC). The SAFSC emerged in 2015 and operates as an alliance with about 50 organisations on its platform. It aims to unify grassroots struggles for food sovereignty and focuses on ensuring “*systemic change led from below by small-scale food producers, consumers and citizens*” (Satgar and Cherry, 2020: 327).

Simultaneously, ‘alternative food networks’ have emerged. These represent a form of social movement critique of both the manner in which food is produced (Pereira and Drimie, 2014), and a lack of connection or linkages between food producers and consumers (Chitja and Mabaya, 2014; Haysom, 2015). These networks include the pro-organic organisations, that are increasingly gaining recognition, and those in favour of food labelling and certification, such as Fair Trade and the Forest Stewardship Council (Pereira and Drimie, 2016). They echo and connect with CSOs, NGOs and community-based organisations which have been advocating for urban farming, or supporting and developing urban farming initiatives as a way to deal with food insecurity, foster new activities, improve livelihoods and incorporate urban dynamics into the food policy space (Battersby and Marshak, 2013; Haysom et al., 2017; Khan, 2017; Paganini et al., 2018; Kanosvamhira and Tevera, 2020), even if its effective impacts remain limited or uncertain (Crush et al. 2011; Khumalo and Sibanda, 2019; Olivier, 2019). This movement supporting urban farming contributed to its formal recognition, like in Cape Town where an urban agriculture unit was established within the municipality. In Cape Town, the City’s action was, however, progressively reduced to a support to food gardens, with a narrower objective of poverty alleviation, therefore reducing the food system dimension of interventions (Haysom et al., 2017). Food farming initiatives also appear as a way to contribute to the reshaping of the food system through the promotion of local food networks, bringing closer producers and consumers, stimulating local networks, and reducing the food system’s footprint (Wills et al., 2009; Thom and Conradie, 2013; Siebert, 2020).

Due to their structural fragility (Warshawsky, 2014), the contribution of CSOs to food system governance has been more action-oriented than policy-oriented, the food sovereignty campaign being an exception. However, a rare effort at incorporating these set of actors into the governance of the food system has been through the activities of multi-stakeholder forums or initiatives.

Notable among these is the Southern Africa Food Lab (SAFL)¹⁰ which is housed under the umbrella of the Food Security Initiative at Stellenbosch University. The SAFL brings together diverse stakeholders to collaborate in resolving the challenges plaguing the food system (McLachlan and Thorne, 2009; Hamman et al., 2011; McLachlan et al., 2015; Drimie et al., 2018). Essentially, it is a form of social innovation lab providing transformative spaces within which complex socio-ecological problems are tackled (Drimie et al., 2018). Civil society and the academia are prominent actors in this forum which seeks to foster dialogue, learning, collaboration and co-creation with a view to achieving food system transformation (McLachlan et al., 2015; Drimie et al., 2018). It represents an effort to cooperate to influence food governance which is devoid of the government taking the lead. It is evident from the reviewed literature that the active involvement of CSOs and the research community in the Food Lab is influenced by its independence from the government.

Another initiative is the Food Legislation Advisory Group (FLAG), which, unlike the Food Lab, is a multi-stakeholder forum set up by the government (Department of Health) to engage with stakeholders on food safety issues (Thow et al., 2017). More recently, the CoE-FS has engaged in an effort to consolidate cooperation between scientists and government officials, as well as other stakeholders in the food policy space. A food governance community of practice was developed in the Western Cape province since 2017 and gathers CSOs; private sector; farmers', informal traders' and consumers' associations; as well as local government representatives and academics, who identify topics for discussion, new investigation and can suggest new ways for improved food security and food system governance (Adelle et al., 2020). This approach to food system governance has also been initiated in the Gauteng province and also developed more broadly virtually from March 2020 in adaptation to the restrictions related to the COVID-19 crisis.

3.3. Characteristics of existing food system governance patterns

The review of food governance actors and their modes of action allows a preliminary discussion of the patterns characterising the governance of the food system, pattern meaning here the organisational and operational framework of governance. The state, with its many entities, policies and programmes, appears as the dominant player in the system, while private actors and CSOs seem to contribute at the periphery of the decision process through, respectively, their corporate social and environmental responsibility initiatives, and their many ground-based interventions or resistance actions.

Many authors are very critical of South Africa's food system governance patterns noting that they reflect a monocentric approach positioning the state at the centre, therefore lacking the appreciation of the multi-layered and inter-sectoral nature of the food system (Hamman et al.,

¹⁰ <https://www.southernafricafoodlab.org/>

2011; Drimie and Ruysenaar, 2010; Pereira and Ruysenaar, 2012; Pereira, 2013; Pereira, 2014; Candel, 2014; Pereira and Drimie, 2016; Ledger, 2016b; Termeer et al., 2018).

When looking at the poor outcomes characterising the South African food system paradox, it appears that the ‘too many’ policies have resulted in ‘too little’ effects. They have proven to be unsuccessful given the complex dynamics of the food system and the wicked nature of food insecurity (May, 2017). According to Pereira and Ruysenaar (2012), this monocentric approach permeates since the 2002 IFSS and in most policy responses of the government. They further argue that the inability of the state to conceive and implement a multidimensional response to the 2008 food crisis is also illustrative of the limitations of the monocentric approach to food governance. For Ledger (2016b), there is a tendency on the part of the state to neglect the possible role of non-state actors in food system governance, often viewing them as mere system participants and, as such, impeding policy effectiveness.

Authors have noted signs of a possible evolution towards a more inclusive approach, which would be a step in the direction of a polycentric governance model where non-state actors would directly contribute (Pereira and Ruysenaar, 2012; Pereira, 2013). Koch (2011), for instance, argues that the 2002 IFSS was conceived as a multi-sectoral approach with various stakeholders being involved in its development; but it was not translated into action. Other signs of a possible transition acknowledging the need for more multi-stakeholder collaboration were reflected in the preparation and drafting of the NDP, where the role of stakeholder engagement was recognised as a means of driving change in the country. However, the statement has also remained wishful thinking (Pereira and Drimie, 2016).

As Termeer et al. (2018) point out, there are discrepancies between objectives that tend to encourage polycentric governance and their implementation within the South African food system. In essence, intention is not action; the state remains the key actor and shows a lack of resolution to adapt and / or transform its approach to food system governance. In addition, according to the same authors, the existing governance does not meet the criteria corresponding to effective food system governance given that, invariably, its aims are constricted to the reduction of food insecurity. They are narrowly conceptualised and reflect the action of a particular department, principally the one in charge of agriculture. Evidently, the governance of the food system needs to move beyond this narrow conception and to incorporate all other stakeholders in the system in addition to the state.

4. Food system governance challenges: what is known and proposed

A fundamental issue limiting progress towards food and nutrition security and integrated food system management in South Africa relates to the lack of a formal effective food system governance. This in no doubt is influenced by a lack of appreciation of the complex, adaptive, multi-layered and inter-sectoral nature of the food system which has consequently resulted in an overemphasis of the role of some particular departments and a limited framing of food system challenges and solutions. This chapter unpacks challenges relating to food system governance and highlights existing proposals for their resolution from the reviewed literature.

4.1. Examining South Africa's food system governance challenges

South Africa's food policy and governance challenges are multifarious. Taken together, the problems related to the ways the food system is managed, and to the ways policies are designed and implemented, have resulted in adverse effects on the country's food system. Indeed, many of the identified problems are symptomatic of the absence of formal effective food system governance. Evidently, the country remains locked in the traditional and monocentric approach to food system governance which is unsuitable to address the 'wicked problem' of food insecurity and the complexity of the food system.

Several challenges have been identified in the literature. They relate to the framing of the food system, the fragmentation of policy answers and the lack of policy coherence, which reflect a weak coordination, a limited institutional capacity and the insufficiency of stakeholder engagement.

4.1.1. Framing, fragmentation and policy coherence

a. Diverse framings of the problem

One of the major challenges in the governance of South Africa's food system relates to the multiple ways in which food system issues are framed, and also, to a lack of uniformity in the conceptualisation of food (in)security. A number of studies highlighted the divergence in stakeholders' views of the causes and effects of food system issues, a situation exacerbated by the lack of available food system data, particularly at the local level (Battersby, 2019a).

If this divergence is indicative of the complexity of the system, it also serves as a major constraint to effective food governance policies (Koch, 2011; Hendriks, 2014 Thow et al., 2017, 2018; Pereira and Drimie, 2016; Candel, 2018). The polarising perspectives among stakeholders and the diversity in interpretation of food system problems constitute a significant difficulty in resolving food governance challenges (Koch, 2011) and has contributed to food policy inconsistency. It also reflects a lack of a system perspective in problem framing (Boatema et al., 2018).

In their assessment of food policy coherence in South Africa, Thow et al. (2017) and (2018) identified three conflicting food governance coalitions with different perspectives on the causes and policy responses to food and nutrition insecurity, namely: the economic growth, the food security and agricultural production, and the health coalitions. The economic growth coalition represents the dominant one and is aligned with the NDP. It frames the problem of insecurity as mainly due to individual level factors, such as lack of income and a lack of knowledge regarding healthy eating. It is exemplified by the focus on employment, economic growth and personal education as critical parts of the solution. This coalition prioritises food trade and food industry, and supports industry-led growth.

The food security and agricultural production coalition sees the challenge of food insecurity as mainly an issue of production and accessibility and is principally aligned with the food and nutrition security policy (2002 IFSS, 2014 NPFNS). This productionist framing highlights the role of the Department of Agriculture which has been responsible for the formulation and implementation of the policy (Haysom, 2015). It emphasises the importance of local markets, affordable and accessible food, and the need for support to producers and consumers (role of social grants).

The health coalition frames the problem of malnutrition as principally arising from the presence of unhealthy food environments, in which unhealthy foods are easily accessible and affordable while they are also heavily marketed. Consequently, actors within the coalition conceive the solution to be the provision and availability of healthy affordable foods within the food system. Despite the interest and advocacy of the health coalition, Thow et al. (2017, 2018) contend that their influence seems limited, failing to extend considerably beyond health documents.

b. Fragmentation and ‘siloesation’

Fragmentation and ‘siloesation’ have so far characterised the governance of the South African food system. As different government departments deal with aspects of the food insecurity conundrum, fragmented initiatives, undesirable overlaps and duplication of roles and responsibilities have become pervasive. Several studies noted that policies and programmes within the food system are mostly fragmented, thus impacting negatively on their effectiveness (Van Rooyen et al, 1996; McLachlan et al., 2015; Pereira and Drimie, 2016; Boatemaa et al., 2018; Termeer et al., 2018). Warshawsky (2011) and Gildenhuis (2017), for instance, note that more than eight governmental departments have differing operational food security programmes which are being managed in silos without linkages to each other. Further fragmentation is also evident within and across different levels of government, national, provincial and local. For Boatemaa et al. (2018), silo programmes emanated partly due to the failure to manage working groups, committees and councils responsible for implementing food security initiatives.

However, fragmentation is not necessarily a negative condition, particularly given the ‘wicked’ nature of the food insecurity conundrum. As Candel (2014) argues, fragmented networks are often in a better position to provide capacity, to adapt to unanticipated situations, while at the same time allowing for flexibility and learning. Additionally, as is the case with food security, fragmented networks allow for specialisation which is, invariably, an indispensable element of the response to complex problems (Candel and Pereira, 2017). The onus is thus to harness and coordinate fragmented governance systems to achieve desired results (Candel, 2014). Though, Termeer et al. (2018) note that even if fragmentation may potentially enhance innovativeness of the system, excessive (contradicting) fragmentation may have negative implications.

c. Policy incoherence and lack of integration

The literature also alludes to the lack of coherence and integration of policies which has had an adverse effect on their effectiveness (Drimie and Ruysenaar, 2010; Hendriks and Olivier, 2015; Hunter-Adams et al., 2018; Termeer et al., 2018; Thow et al., 2017, 2018). Arguably, the fragmentation of policy efforts is implicated in the problem of policy integration. Whereas the potential for fragmentation to allow for specialisation is acknowledged (Candel and Pereria, 2017), this becomes problematic when these policies which are motivated by different notions and interests of diverse actors do not speak to each other or cohere. Reconciling diverse priorities of government such as economic growth, health and social development has proven to be challenging as there are constant tensions, contestations and sometimes blurriness in terms of overarching policy objectives, which inadvertently have resulted in incoherent policy provisions relating to food and nutrition security.

As Thow et al. (2018) argue, policy incoherence emanates as a result of tension between policy objectives and lack of synergies across government departments so as to achieve desired results. Policy incoherence is evident in economic policies, such as those in trade and food, which are antagonistic to nutrition and health policies (Hunter-Adams et al., 2018; Thow et al., 2018). This, for instance, is exemplified in the prioritisation of trade and investment liberalisation that contributed to reducing food prices but has also resulted in the development of highly processed food and the attendant rise in diet-related NCDs, both of which seems discordant with nutrition policies.

Furthermore, there was the contention that within policies and programmes, sub-programmes domiciled in separate government departments are being implemented separately without genuine integration (Drimie and Ruysenaar, 2010; Hendriks, 2014). The 2002 Integrated Nutrition Programme (INP) which was situated within the Department of Health was envisioned to be inter-sectorial in nature, with linkages expected to be created with other departments such as Agriculture (i.e. food gardens), Education (i.e. school feeding programme), and Social Development (i.e. child grant). However, integration between these departments in relation to the objectives of the INP was weak (Termeer et al., 2018). Similarly, Drimie and Ruysenaar (2010)

observed that sub-programmes within the 2002 IFSS were weakly integrated. For instance, integration within the Food Emergency Scheme (FES), which was initiated in 2002 / 2003 in order to deal with rising food prices and deteriorating poverty levels for vulnerable groups, was basically reduced to informal interactions between departments.

4.1.2. Coordination, institutional capacity and stakeholder engagement

a. Weak coordination

Active coordination, which is important in food system governance as it allows for reconciling and / or harmonising various stakeholder interests whilst also facilitating intersectoral collaboration, has been deficient in South Africa. There was the assertion in the literature that policy implementation is severely constrained due to a lack of adequate institutional arrangements to ensure effective coordination of programmes and activities of both state and non-state actors (Pereira and Drimie, 2016; Boatemaa et al., 2018).

The foregoing was the case with the IFSS policy, as weak institutional coordination was implicated in the failure to effectively implement the policy (Drimie and Ruysenaar, 2010; Koch, 2011; Pereira and Ruysenaar, 2012; Warshawsky, 2014; Candel, 2014; Hendriks, 2015; Pereira and Drimie, 2016; Termeer et al., 2018). Despite the policy's goals of integration, government departments responsible for implementing the policy were insufficiently coordinated. Under the IFSS, effective coordination was encumbered by an inadequate definition of mandates and responsibilities for different actors and stakeholders, limited communication, minimal sharing of experiences and incoherence between the national and provincial tiers of government, as legislated through the Constitution (Drimie and Ruysenaar, 2010). The responsibility to coordinate departments was largely assigned to the Department of Agriculture which was incapacitated to perform the role given its conceptual (agricultural) bias, and its lack of administrative capacity and political authority to ensure collaboration (Drimie and Ruysenaar, 2010; Pereira and Ruysenaar, 2012; Termeer et al., 2018). The specific unit created to facilitate the process — the Integrated Food Security and Nutrition Task Team (IFSNTT) —although having the mandate, lacked the direct authority or control to promote the needed intergovernmental coordination (McLachlan and Thorne, 2009).

Notwithstanding the coordination flaws of the IFSS which has been well documented, the succeeding 2014 NPFNS has also manifested similar issues (Pereira and Drimie, 2016). Furthermore, in the 2017 NFNSP, a National Food and Nutrition Advisory Committee which, according to the policy document, should supposedly provide advice on policy implementation, is yet to be constituted (Boatemaa et al., 2018). Although the 2017 NFNSP has a relatively better overarching view of food governance due to the coordination responsibility of the Office of the President, doubts exist about the effectiveness of this policy directive as lines of accountability, implementation and coordination remain vague (SAHRC, 2017). Termeer et al. (2018) contend

that although the NPFNS shows glimpses of this arrangement, it is still inherently limited partly due to poor inter-sectoral consultation and limited authority to effectively coordinate.

b. Limited institutional capacity

Dealing with such a complex issue as the governance of the food system requires that very nuanced and adaptable capabilities are situated in institutions playing the lead role in food governance. However, weak institutional capacity was widely reported as a major impediment in the way of effective food governance (Drimie and Ruysenaar, 2010; Koch, 2011; Pereira and Ruysenaar, 2012; Candel, 2014; Kirsten, 2015; Hunter-Adams et al., 2018). Lack of adequate and comprehensive capacity is evident in the process of policy development, the quality of designed policies and the consequent deficiencies in implementation. The limited existing capacities are mostly situated within few sectors or departments of government, while others relevant also to food security have been neglected.

As Drimie and Ruysenaar (2010) and Candel (2014) argue, of significant importance is not only the capacity but also where such capacity lies institutionally. While the capacity to implement the 2002 IFSS was situated within the Department of Agriculture, Forests and Fisheries (DAFF), thus leading to a considerable neglect of many issues which are not directly related to agricultural production, the 2014 NPFNS was designed by the DAFF and the DSD as an attempt to link food and nutrition security. The 2017 NFNSP was located with the Presidential Office asserting a supposed willingness of governmental coordination and leadership on the issue. Notwithstanding this change in policy design and responsibility, institutional and administrative capacities needed to drive policy objectives remain deficient within responsible government structures. Termeer et al. (2018) contend that the failure of food policies in South Africa is partly due to a lack of transformative capacity to facilitate change.

c. Limited stakeholder engagement

A number of studies in the review confirm that necessary stakeholder consultation and engagement in food policy development and implementation, and generally in food governance, have been limited (McLachlan and Throne, 2009; Drimie and Ruysenaar, 2010; Taylor, 2013; Hendriks, 2014; Pereira and Drimie, 2016; Thow et al., 2017, 2018; SAHRC, 2017; Boatemaa et al., 2018; Termeer et al., 2018).

The 2002 IFSS and the 2017 NFNSP, for instance, have been criticised because of their limited inclusion of private and CSO actors, and for being primarily government focused (Drimie and Ruysenaar, 2010; Pereira and Drimie, 2016; Termeer et al., 2018). According to Boatemaa et al. (2018), the implementation of the food and nutrition security policy was supposed to be advised by the National Food and Nutrition Advisory Committee which should comprise different actors and stakeholders, but the committee is yet to be instituted.

Generally, the level of engagement of CSOs in the process of developing food policies was noted to have been largely minimal (McLachlan and Throne, 2009; Drimie and Ruysenaar, 2010; Thow et al., 2017, 2018; SAHRC, 2017). Another case of inadequate consultation within the government, even if more specific, was that of the sugar tax which was initially introduced by the National Treasury, but then adopted by the National Assembly without any amendment and further consultations, despite some concerns within the Treasury and some CSOs (Boatema et al., 2018).

Certainly, failure to leverage on the expertise and interests of important actors within the food system limits the scope and efficacy of food governance efforts. The lack of stakeholder engagement has led to an inadequate grasp of the complex issues characterising the South African food system and limited buy-in from stakeholders and actors within the system, both of which have had an adverse effect on policy implementation (Pereira and Drimie, 2016).

4.2. Already proposed solutions to food system weaknesses and governance issues

Given the enormity of challenges the South African food system is confronted with, the reviewed literature shows a constant preoccupation about proposing solutions to the persisting issues. These have revolved around how food security can be ensured with a particular focus on how to organise the food system to achieve better and equitable outcomes, and how food governance can be improved.

4.2.1. Policy change and governance solutions addressing food system weaknesses

For many studies, addressing the inequalities that exist within the food system was identified as an essential step towards ensuring improved outcomes. It includes better support to and a recognition of the role played by the different stakeholders, and a necessary attention to the informal sector and to local dynamics which can facilitate and foster stakeholders' participation.

a. Support to poor households

A number of studies reflected on the importance of the system of social support and the impact of social grants on households' livelihoods (Altman et al., 2009; McLachlan and Thorne, 2009; d'Agostino et al., 2018; Waidler and Devereux, 2019; Jonah and May, 2020). However, the discussion of their effectiveness in eradicating food insecurity has been much debated.

Several authors noted that social grants have been critical to the survival of poor households and contributed to improving household food security (Van Vuuren, 2012; Trefry et al., 2014; Hendriks, 2014; Shisanya and Hendriks, 2014; Mkhawani et al., 2016; Misselhorn and Hendriks, 2017; Ngema et al., 2018). Waidler and Devereux (2019) observe that the Older Person's Grant had a positive effect on dietary diversity index of recipients' households. Chakona and Shakleton (2019), in their study of three South African towns (Dundee, Harrismith and Richards Bay), observed that households receiving social grants were more food secure than those who did not.

But other studies argue that social grants alone cannot eliminate food insecurity as the money is insufficient to meet household needs (Jacobs, 2011; Battersby, 2012; Hendriks, 2013, 2014; Caesar and Crush, 2016). Beyond some positive impacts, Chakona and Shackleton (2019) and Waidler and Devereux (2019) also raise the limitations of that type of intervention. Misselhorn and Hendriks (2017) argue that these grants could be an obstacle to long-term food security because it could potentially disincentivise households from engaging in economic activities like investing in household food production, thus reinforcing deagrarianisation trends (Pereira, 2014). Greenberg (2015) reminds that social grants cannot be a long-term economic solution and divert from the need for an improved economic environment which provides opportunities for people to engage actively and productively.

However, in the light of the recent COVID-19 pandemic, social grant protection payments were found to be highly valuable (especially in the short run) in insulating against ‘black-swan’ type of shocks such as that brought on by the pandemic (Arndt et al., 2020). Essentially, the COVID-19 pandemic has demonstrated the continued relevance of having in place a social grant package especially for low-income households given their considerably higher rate of dependence on grant payments and the nature of jobs they are mostly engaged in (low educated, casualised labour, lacking flexible work arrangements) (Arndt et al., 2020).

b. Support to small-scale farmers

The literature argues for the greater participation of small businesses that are often marginalised in the agri-food system. For small-scale farmers, better access to resources and opportunities was seen as critical to unlocking their potential and boosting their production (Kirsten, 1996; Le Roy et al., 2000; Valente, 2009; McLachlan and Thorne, 2009; Biénabe et al., 2011; Oni, 2011; Tobin et al., 2012; Misselhorn and Hendriks, 2017; Ngema et al., 2018; Thow et al., 2018; Oluwatayo, 2019). These include access to market and credit facilities, infrastructure provision and the removal of barriers to entry which exist within the system (access to information, purchase requirements). Smallholders’ integration into food value chains was stressed as one of the most critical issues. Here, pressing supermarkets to source from smallholders was considered a major strategy to achieve the foregoing (Gibbon, 2003; D’Haese and Van Huylenbroeck, 2005).

Ending anti-competitive actions through a more effective application of the Competition Act also appears in the proposed recommendations (McLachlan and Landman, 2013). Creation of more farmers’ markets as an alternative to the conventional retail channels was pointed as a way to facilitate access to market for farmers, link them directly with consumers, eliminate auxiliary costs and foster competition with the corporate food sector (Crush, 2011; McLachlan and Landman, 2013; Libman et al., 2015; Thow et al., 2018).

The imperative of resolving the persisting land access issue was also emphasised by many other authors (Shisanya and Hendriks, 2011; Kepe and Tessaro, 2014; Greenberg, 2015). Improved access to land was recognised as important to ensure increased production and improved livelihoods for smallholders. Kepe and Tessaro (2014) argue that the ways in which food security relates to the land reform process, especially in communal areas, has been understated and this should be addressed. For Greenberg (2015), it was expedient that the base for ownership of economic assets is widened which could only happen through a just and equitable resolution of the land question in South Africa.

c. Recognition of informal sector's contribution

The literature also highlighted the importance of developing policies and strategies to better support and improve the informal sector. Yet, there has been persistent discussion about the ability of the informal food retail sector to deliver foods that meet food safety standards. Boatemma et al. (2019) argue that regulating the informal food sector has been problematic as actors within the sector were not registered or licensed. Further, the sector is replete with vendors with no training on hygiene and sanitation which ultimately increases food safety risks (Smit, 2016; Boatemaa *et al.*, 2019). On the contrary, Battersby (2019b) asserts that the perception that the informal sector offers 'bad' food is inherently flawed as evidence has proven they can sell good food. This perception, she notes, is abetted by the preconceived notion of the state that the informal food retail sector is inherently problematic. This has, in turn, led to the disparities evident in urban planning and public health regulations disadvantaging the informal food retail sector.

The lack of support for the informal sector was extensively demonstrated during the recent lockdown which followed the outbreak of the COVID-19 pandemic in South Africa. Despite food being regarded as an essential service, the informal food sector was confronted with the challenge of operating during the lockdown. Many of the actors within this sector were barred from operating given strict requirements for permits which was not the case in the formal sector. According to Wegerif (2020), while many municipalities had a permitting system in place, many others did not and were confounded as to how to swiftly implement this amidst the crisis. The forgoing resulted in loss of income for informal food traders, increased transport costs to access food, increased risks of contracting the virus and increased food insecurity.

As a critical step towards supporting the sector, a mindset shift and a thorough understanding and acknowledgement of the role of the informal food sector were considered important for the development of effective policies, because the sector is performing well in food provisioning, particularly among the urban poor, and as a generator of employment, and also due to its strong linkages with the formal food sector (Battersby, 2011; Battersby et al., 2016; Tawodzera, 2019; Competition Commission, 2019; Wegerif, 2020). A policy environment which facilitates the ability of informal food traders to participate in food distribution and retail has the potential of improving food system outcomes (Mabhaudi, 2019; Tawodzera, 2019; Competition Commission,

2019). Given concerns of stringent conditions being imposed on informal food traders, Battersby et al. (2016b) stressed the importance of achieving a balance between regulation and support for informal food traders. Tawodzera (2019) and Wegerif (2020) also highlighted the need to put in place better infrastructure and funding support for the informal food sector in order to enhance their operations.

d. Support to local dynamics and relocation

Developing resilient local food economies was proposed by a few authors as a strategy to overcome the negative effects of the modern food system and move towards a more equitable and sustainable food system (Kelly and Schulschenk, 2011; McLachlan and Thorne, 2009; McLachlan and Landman, 2013; Siebert, 2020). According to Kelly and Schulschenk (2011), increasing localisation of the food system can contribute towards reducing food insecurity and developing resilience to shocks. The localisation strategy, they further argue, should not only be limited to efforts to increase local production of food but must also include plans to enhance localised food processing, distribution and retail.

Localisation of the food system also entails exploring the potentials of local food networks and marketing channels (Kelly and Schulschenk, 2011; McLachlan and Landman, 2013; Siebert, 2020). Accordingly, authors suggested the development of local markets, community supported farming initiatives and cooperatives. Many of such initiatives serve to connect consumers more directly with producers. This kind of linkage was, in turn, seen as a major means of developing a stronger local food system. Furthermore, this alternative tends to shorten value chains thus potentially reducing food cost and increasing farmers' profits. To facilitate this evolution however, there is the need to develop key infrastructure and regulations with the potential to support local aggregation, distribution and sale of food (Kroll et al., 2019).

4.2.2. Food system governance improvements

Many authors focused on possible improvements in the governance of the food system itself. The main recommendations refer to policy coherence and the need for a legislative framework, stakeholders' participation, institutions' improvement, the importance of local governance, and the adoption of an adaptive and collaborative mode of governance.

a. Need for an overarching legislative framework

Despite the obligation placed on the government by section 27(2) of the Constitution to ensure the right to food of every South African, there has been no framework act on food security to actualise this right (Koch, 2011; Hendriks and Olivier, 2015; Gidenhuys, 2017). The implication is that existing food policies are not enforceable and legally binding. Given that noncompliance with policy directives does not carry the same weight as noncompliance with a legislative provision, it

has consequently resulted in gaps in the implementation as well as in the inability to enforce and hold responsible units accountable.

Generally, a framework act serves the purpose of institutionalising a complex process of regulation which demands the bundling of diverse interests (Koch, 2011), and coordinating the implementation of associate national policies and strategies (Gildenhuis, 2017). In South Africa, the administration model ensures that for policies that are legislated, line departments or structures concerned are mandated to present their annual performance plans and budget for approval by legislature (Hendriks and Olivier, 2015). This arrangement ensures that such government entities are held accountable for any deviation from plans or policy directives.

This is why an overarching legislative framework on food security was identified as an urgent piece of legislation needed to ensure individuals' right of access to food as constitutionally enshrined (Koch, 2011; Hendriks, 2014, 2015; Gildenhuis, 2017; SAHRC, 2017). The importance of such legislation lies in its potential to serve as a coordinating instrument and basis for the development and implementation of national policies and strategies relating to food security (Gildenhuis, 2017). It was also envisaged that coordination and accountability between and among actors would be strengthened through the framework. Further, the legislation would ensure a more effective oversight, strengthen the justiciability of the constitutional right to food and render actors culpable for their actions and / or inactions. Certain actors would also be empowered to work towards achieving the right to food. Gildenhuis (2017) argue that such legislation can potentially guide the state, making sure that adequate mechanisms are put in place to meet its obligations.

Such a decisive change in the positioning of food security in the nation's agenda would open the way for improved policy coherence which has been called by several studies (Van Rooyen et al., 1996; Thow et al., 2015; Candel and Pereira, 2017; Thow et al., 2018). Arguments for the development of coherent, integrated and inclusive policies recall that policies must be complementary and reinforce each other, as opposed to contradicting each other. Hendriks (2014), for instance, suggested an appraisal of national food security and nutrition programmes and their re-alignment to ensure coherence.

Candel and Pereira (2017) put forward a recommendation that policy formulation on food should not be limited to the overarching food strategy but must incorporate policy efforts across sectors and levels. This, they argue, require strong political will, multi-stakeholder engagement and collaboration, as well as buy-in across sectors. In another vein, Thow et al. (2015, 2018) argue for a balance between the food system priorities of government in order to ensure improved food and nutrition security, noting that economic objectives must be articulated in such a way that they are not in opposition to food security and nutrition objectives. This is important in order to overcome the adverse effect of the current fragmentation of policies and their implementation.

b. Improvement of stakeholders' engagement

Given the multi-sectoral and multi-scalar nature of the South African food system and the dense web of related activities, its complexity is broadly acknowledged by many authors and emphasis was placed on the need to foster multi-stakeholder engagement, dialogue and collaboration, considered as a way to embrace the diverse perspectives and interests of the multiple actors within the system (Koch, 2011; Pereira and Ruysenaar, 2012; Pereira, 2013; Pereira, 2014; Pereira et al., 2014; Pereira and Drimie, 2016; Gildenhuis, 2017; Drimie et al., 2018; Adelle et al., 2020). A major group of actors whose role was considered important in moving towards a more democratic food governance are CSOs. While noting that spaces for stakeholder engagement and lobbying had mostly favoured corporations, Thow et al. (2018) advocated for increased engagement with CSOs, seeing this as crucial to the improvement of food system outcomes.

The merits of moving towards an improved stakeholder engagement is to get policies that are potentially responsive to the needs of the diverse actors, particularly those marginalised within the food system (Pereira and Drimie, 2016). It also has the potential of strengthening the problem identification process, thus resulting in well-thought-out, coherent and generally acceptable solutions. Such an approach should not only be focused on the outcome but must also prioritise the process, and in such a way that learning and co-creation are achieved (Pereira and Drimie, 2016). Here, dialogue among stakeholders is considered essential to facilitating and ensuring innovative action within the food governance space (Drimie et al., 2018). Adelle et al. (2020) emphasised the importance of knowledge co-production in which case knowledge travels between stakeholders who then have the responsibility of articulating such information, as against a top-down approach which is characterised by limited stakeholder involvement and situations where information is passed from the researcher or the expert to other stakeholders.

c. Strengthening of institutions

There was a strong case for improved institutional capacity and coordination in the literature. For several authors, creating and strengthening institutions to plan, coordinate and implement responses to food system issues in an inclusive and systemic manner was seen as critical to improving outcomes of the food system (Pereira and Ruysenaar, 2012; Candel and Pereira, 2017; Boatemaa et al., 2018). For instance, Pereira and Ruysenaar (2012) argue for the creation of institutions flexible and responsive enough to the complex and dynamic nature of the food system and which would be adept in utilising a combination of coherent top-down and bottom-up approaches to address the main problems in the system. Emphasis was also laid on the need for institutional strengthening to cut across all relevant departments at the different levels of government (Van Vuuren, 1996; McLachlan and Thorne, 2009; Pereira and Ruysenaar, 2012).

As a way of achieving improved coordination, Candel and Pereira (2017) and Thow et al. (2018) identified the potential of boundary spanning procedures and structures, such as the DPME in the Presidency, whose work shapes the programmes of several government departments. Along

similar lines, Gidenhuys (2017) suggested the establishment of a National Food and Nutrition Security Authority in order to achieve improved coherence, coordination and oversight. The composition of such coordinating body, Gildenhuys (2017) argues, must reflect the multi-sectorial nature of the food system and should comprise representatives from relevant government departments and other food system actors. It is important to reiterate that a Food Council was proposed in the 2017 NFNSP but was not effectively implemented yet.

d. Priority to an improved food system governance at the local level

If local governments do not have specific mandates related to food system governance, they have some levers related to zoning, advertising, trading rules and markets (De Visser, 2019). They can — or could — influence the availability, access, utilisation, and stability of food security 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. However, in practice, budgets and human resources remain a major limitation for an increased role of municipalities, with the exception of the metropolises.

This is why the importance of a clear food security mandate for local governments was advocated in order to ensure accountability and definite responsibilities for departments with food-related portfolios. There were recommendations that local municipalities should develop and implement food security strategies and oversight structure, including the organisation of food emergencies and multi-stakeholder engagements and actions (McLachlan and Thorne, 2009; SACN, 2015). To achieve this and to be able to engage with the difficulty of food system management, it is expedient that capacities are developed further at the municipal level (SACN, 2015).

This role for local governments is in line with arguments for multiple levels of governance in order to address the complexity of the food system (Haysom, 2015a, b; Battersby, 2017; Battersby and Watson, 2019). Moving to a more place-specific form of food system governance was seen as crucial to developing and implementing effective food security interventions. This approach to governance lays emphasis on context and an in-depth understanding of the local food system through a multistakeholder process (Battersby and Watson, 2019). In advancing this notion, Haysom (2016) alludes to the territorial paradigm which emphasises a space and scale-oriented approach to food system governance and focuses on the ways in which food flows are governed in the interests of the local community. The approach *“facilitates a governance role focusing on the nature and conditions of food system actions of a particular place”* (Haysom 2015: 269).

According to Haysom (2016), the shift towards more local engagements in food system governance is already underway in municipalities such as Stellenbosch and Cape Town in the Western Cape province. The approach emerging in these municipalities seeks to involve wider stakeholders' groups and actors at the community scale, and also represents a departure from the

traditional project-driven approach to interventions. It is illustrative of place-specific food system governance and positions the municipality governments (cities) at the centre of such processes. Here municipality governments have the responsibilities of convening stakeholders and ensuring a participatory process (ibid.).

This advocacy for an improved governance at the local level meets with the emergence of alternative food networks. Alternative food networks, Haysom notes (2015, 2016), have the belief that food production and consumption are more closely tied economically, socially and spatially. They include local food movements promoting agroecology, organic agriculture and a just food system (Pereira and Drimie, 2016; Satgar and Cherry, 2020). It also meets with food sovereignty movements such as the SAFSC. As a way of unifying grassroots struggles for food sovereignty, the SAFSC places emphasis on transformative practices from below that constitute new forms of power and grounds food system resilience in communities and cities (Satgar and Cherry, 2020).

e. Towards collaborative and adaptive governance approaches

Facing the many challenges of the food system and the limits of the *de facto* monocentric approach resulting from the position of the state, the need for improvement is undebated. A consensus has progressively emerged around the notion that there must be a shift towards a more integrated and inclusive approach to the governance of the food system, which should be polycentric, adaptive, and collaborative (Pereira and Ruysenar, 2012; Pereira, 2013; Candel, 2014; Termeer et al., 2018).

The reasons are that the food system is a complex and adaptive system which is characterised by interdependency and interconnectedness. As such, the incorporation of the different stakeholders in the governance of the system is key. Moreover, the governance needs to be adaptive in such a way that it is “*holistic, interactive, flexible, and capable of dealing with uncertainty, change, and surprise*” (Pereira and Ruysenaar, 2012:49). This necessary change is the condition for acknowledging and managing the power dynamics of various actors within the food system and for dealing with the persisting issue of food insecurity and the inefficiency of segmented approaches (Pereira and Drimie, 2016).

5. Understanding the limited progress in food system governance outcomes

So far, the review has shown that diverse solutions, both simple and complicated, have been proposed to ensure positive food system outcomes. While several of these have been progressively activated, many others have been implemented half-heartedly or jettisoned outright. The review has also revealed that not only has the South African government directly or indirectly expended considerable resources at improving food system outcomes, several other actors also did: corporate businesses through their CSER interventions, CSOs through their support programmes, CSOs, NGOs and the academia through their proposals for improving the status quo. Yet, the persisting issues remain and not much has changed as regards to food system outcomes.

In this chapter, attempt is made to unpack the reasons for the seemingly ‘unchanging nature’ of the paradoxical outcomes of the South African food system. The chapter commences with an overview of South Africa’s political economy in the democratic era, with a focus on two major issues which have been indirectly and directly impacting the food system: land reform and agri-food sector deregulation. This is followed by a review on market concentration in the food system and the resultant power dynamics between and among food system actors, in relation to state’s abdication to effectively regulate. Finally, the chapter reflects on the phenomenon which is both a cause and effect of the concentration of power within the food system: private food governance. It argues that private food governance has contributed significantly to the seemingly lack of food security and nutrition resilience in the country.

5.1. South Africa’s political economy context post-1994

South Africa’s political economy in recent times is characterised by regime change and the major turn towards democracy in 1994, and the consequent undertaking of a broad range of legislative, institutional and socioeconomic reforms. Many of these were focused on correcting the prejudices and inequities of the apartheid regime. As Thompson and Wissink (2018) note, the African National Congress (ANC) government in 1994 inherited a stagnating economy, a bureaucracy tailored to serve largely a minority sub-group, and a society marked by enormous poverty, unemployment and inequality.

The policies of the past 27 years have thus majorly focused on the reduction of poverty and inequality, the delivery of basic services, and the expansion of access to economic opportunities and social safety nets for the large majority of the population. The ideology behind the formulation of these policies has been either a hybrid or unmixed and successive ideals of a ‘developmental state’ and a ‘neoliberal state’. Whereas the latter emphasises the importance of free markets, free trade, privatisation and decreased public regulation in order to ensure social and economic prosperity, the former, according to Kirsten (2015), is based on the standpoint that only the state can deliver development, thus advancing a strong role for the state to improve the socioeconomic status of the population. An instance of the constant vacillation and / or tensions between the two

policy orientations, as Narsiah (2002) notes, is seen in the movement from the 1994 RDP (a developmental policy) to the 1996 GEAR policy, adopting a fully neoliberal agenda which continues to frame current government's actions.

Although notable reforms have been undertaken in perhaps all sectors of South Africa's economy since 1994, of relevance to this review are those on land and the agri-food sector, which can be considered as cornerstones of the South African political economy debate and have deeply impacted the food system.

5.1.1 The land reform debate

Among the many issues South Africa currently grapples with in terms of ensuring a just, efficient and sustainable food system, and by extension its quest for socioeconomic development, land reform represents an immense and persistent concern. Indeed, it is well known that the dualism evident in South Africa's agrarian structure was historically engineered in the interest of white agrarian, mining and industrial capital through a systematic process of forced migration and dispossession (Pereira, 2014). The policies relating to apartheid as it concerns land were clearly articulated in the *Natives Land Act* of 1913, the *Development Trust* and the *Land Act* of 1936, as well as the *Group Areas Act* of 1950 and its many updates. These together divided up South Africa into areas reserved respectively for whites and blacks, with the former having exclusive access to about 87% of the nation's land (Ottaway, 1996; Kepe and Tessaro, 2014).

Land reform was borne out of the need to correct the unjust and racially biased distribution of access to land perpetrated through the legacy of colonialism, apartheid and dispossession. Generally, it seeks to make land available and accessible for the landless, including the return of land or offering of alternatives to people who had unjustly lost their land, as well as making available secure tenure rights where they are non-existent (Kepe and Tessaro, 2014). Besides the social justice perspective of addressing the inequity of more than one century of black and coloured people's formal dispossession from their land by the colonial authorities, land reform is undeniably a development imperative. It was needed in order to reduce Inequality and contribute to lifting many South Africans out of poverty. It was required so that the livelihoods of smallholders, many of whom lack access to land, could be improved. Hence, it derives from the larger debate around agrarian reform and the need to incorporate marginalised farmers and smallholders into the country's food system (Termeer *et al.*, 2018).

To respond to these issues, the post-apartheid government has implemented several land reform initiatives. The scope of the reform, as encapsulated in the 1997 *White Paper on South African Land Policy*, can be broadly categorised into three: land redistribution, land restitution and tenure reform. Land restitution aims to restore land or provide compensation to people who were dispossessed of their land during the apartheid era (van der Merwe, 2014; Hendriks and Olivier, 2015; Hall and Cousins, 2018). Greenberg (2015) alluded to this as outrightly political and a matter

of correcting past injustices, rather than being about the economics. However, there are occasions where economics overrides political justice, in which case claimants are encouraged to settle for material compensation when the land is in commercial use, or alternatively enter into a joint venture agreement with existing users of such land (Greenberg, 2015).

Land redistribution seeks to increase black ownership of land in rural South Africa and hence create an equitable distribution of land (van der Merwe, 2014; Hall and Cousins, 2018). Here public resources are utilised in facilitating such ownership especially in areas where it was hitherto proscribed. While acknowledging the political justice dimension of land distributions, the economic imperative was explicit as it seeks to improve commercial activities and livelihoods of marginalised groups (Greenberg, 2015).

Tenure reforms have the objective of improving the security of tenure of individuals, groups and communities within rural and semi-urban areas (van der Merwe, 2014; Hendriks and Olivier, 2015). It also deals with the right of farm workers and dwellers living on private farms, as well as the rights of residents in the former black homelands (bantustans), particularly the relations between these residents and traditional leaders regarding land inheritance and ownership (Greenberg, 2015; Hall and Cousins, 2018).

Much of the land reform effort has followed the market-led agrarian reform (MLAR) approach, in which case land owners are fully compensated based on market price for voluntarily selling their land (Tobin et al., 2012). This ‘willing seller, willing buyer’ arrangement relied on support from government who made loans and grants available for beneficiaries, so that they are able to make offers on white-owned land (Tobin et al., 2012). Greenberg (2013) argues that this was an implicit pact to avoid conflict with the highly capitalised and thriving large-scale commercial sector, as clearly evident in the adequate protection of rights to property in the new Constitution — and therefore part of the political compromise embedded in the change of regime. The implication was that large-scale commercial farm owners had the upper-hand in negotiations and in decisions on whether to sell or not, thus having a degree of control over the reform process (Greenberg, 2013, 2015).

There is a consensus in literature around the fact that land reform has been anything but a success. It has had limited impact and has failed to transform the lives of marginalised farmers and workers who had hoped it would be life-changing. It is plagued by issues around lack of productivity of re-allocated lands and slow redistribution rate. In 2009, 4% of land had been transferred through the programme as against the 30% transfer target set by government (McLachlan and Thorne, 2009). Essentially, the approach to the reform is described as minimalist as it did not ensure that supposed beneficiaries are able to press their claims to land, secure access to such land, while being able to also defend such rights against illegitimate claims from others (Thornton, 2009). Some of the problems affecting the implementation of the programme is brought about by lack of

adequate information and communication on land reform to beneficiaries, inadequate government support, lack of adequate institutional capacity to facilitate implementation, as well as inefficient systems to register rights (Thornton, 2009; Hamann et al., 2011).

Given the historical circumstances in the former reserves, many beneficiaries lacked the required skills to practice agriculture on an improved scale, so as to take advantage of the reform provisions. There are wide contestations over whose hands communal lands are in in the new reform provisions. Traditional authorities, who had control over access to communal land during the apartheid era, were also resistant to the changes the reform process will bring about as they felt these would undermine their powers and privileges (Pereira et al., 2014; Greenberg, 2015). Efforts to bestow administration of communal lands exclusively on these authorities had also been met with resistance at the law courts (Greenberg, 2013, 2015). Among other problems were: excessive distance between locations of new land and current residence of beneficiaries; the offering of large land tracts rather than sub-dividing the land, resulting in a difficulty of full usage for productive purposes (Valente, 2009). This development, ascribed to the government's determination to maintain a strong agricultural sector, did not only lead to the imposition of unsuitable farm sizes on people, but also insisted on them forming producers' groups which were not a preferred option (Tobin et al., 2012). In a study of land reform beneficiaries in Limpopo, Tobin et al. (2012) note that as a result of the emphasis on large-scale commercial operations, some beneficiaries set up unrealistic goals which will inevitably not come to fruition.

Ultimately, not much has changed in land ownership, and indeed inequality patterns in South Africa. This limited progress was confirmed by the 2019 *Presidential Advisory Panel on Land Reform and Agriculture* (Republic of South Africa, 2019). Land reform proceeded in a reformist, incremental fashion taking into cognisance the political and economic dynamics of the country. This, Ottaway (1996) had earlier envisaged, noting that the approach would not lead to wholesale changes; that there would be limited land redistribution with much of the land still remaining under the control of large-scale commercial farmers. Not only is the land reform process inherently problematic, but the effort has not been matched with a comprehensive rural development plan capable of leading people out of poverty and food insecurity.

To resolve the ongoing land issue, Greenberg (2015) argues for the urgency of sufficiently addressing the political and justice questions that plague the nation; more particularly expanding the base of ownership of economic assets. This would include, among others, a more efficient and speedy process of land transfer, the breaking up of large tracts of land into smaller fragments to enhance access for smallholders, and a more refined and deliberate approach to equalising the distribution of economic assets in the country (Greenberg, 2013).

5.1.2. The agri-food sector deregulation

The deregulation of South Africa's agri-food sector in the early 1990s represents a major form of restructuring of the sector which has had overarching implications on the food system. Up until the early 1990s, agricultural commodities were subjected to different kinds of control schemes under the *Marketing Act* of 1968 (Bernstein, 1996; Tsheola, 2004). During this period, price control, import control and the granting of permits, licenses and quotas were regulatory mechanisms put in place and administered by several parastatals of government (Kirsten, 2015).

The process of market deregulation and liberalisation of the agri-food sector that South Africa embarked on in the early 1990s sought to effectively reduce government's direct role in food price determination and marketing whilst also encouraging import liberalisation. The rationale for this was the notion that deregulation would lead to improved efficiency in food production, manufacturing and marketing, and that liberalisation would ensure the integration of South African agriculture into global agriculture commodity markets (Bernstein, 1996; Kirsten, 2015). The process was also to align with the economic restructuring efforts that were already underway in many parts of the world and to ensure compliance with the World Trade Organization's (WTO) regulations regarding the opening up of the economy through reductions in trade tariffs and minimal government intervention in markets (Pereira, 2014; Termeer et al., 2018). What is important to note at this juncture, is that the process gained the support of big agri-food corporates and white farmers who had benefitted immensely from the apartheid era regulations (Kirsten, 2015). On the opposite of what they benefitted from in the old regime, these interest groups clamoured minimal government intervention to mitigate their risks in the new developmental South African state.

The minimalist stance of the government regarding market intervention has assisted in ushering in an era of corporate control on food value chains and therefore on the food system. Further abetting this was the amendment of the *Cooperatives Act* in 1993 which ensured the removal of cooperative assets from farmers' control, and their consequent privatisation and corporatisation, thus further shifting the balance of power in favour of big corporates (SACN, 2015; Greenberg, 2017; Ducastel and Anseeuw, 2018).

The 1996 *Marketing of Agricultural Products Act* however brought about some structural changes into the agri-food industry, and remains, to date, the major piece of legislation on agricultural marketing in South Africa. The Act effectively deregulated the agri-food sector and dismantled agricultural control boards, transferring their assets and the responsibility to manage them to private commodity associations set up for each commodity chain (Tsheola, 2014). Greenberg (2015) notes that the assets were held in trusts and were essentially to be used for servicing diverse private interests and integrating small-scale black farmers into the commercial sector. Government's involvement in agricultural financing and the provision of subsidies were curtailed.

The state's role was consequently limited to the provision of some quality control measures, and to some support to research and development (Greenberg, 2015).

While few studies highlighted gains from South Africa's deregulation effort to include increased productivity and efficiency, as well as expanded market access and opportunities for entrepreneurial farmers (Kirsten, 2015, McLachlan and Thorne, 2009; Koch, 2011; Pereira, 2014), the dominant view is the notion that deregulation has produced clear winners and losers (Traub and Jayne, 2008; Jacobs, 2011; Greenberg, 2013; McLachlan and Thorne, 2013; 2017; Pereira, 2014; Ledger 2016b; Battersby et al., 2016; Tsheola, 2014; Haysom, 2017, Hall and Cousins, 2018). Indeed, many studies have been highly critical of the deregulation process which resulted in increased consolidation of agribusinesses, with a growing number of large commercial farms and a concomitant decline in the number of mid-sized farms (McLachlan and Thorne, 2013; Greenberg, 2013; Pereira, 2014; Battersby et al., 2016; Haysom, 2017; Hall and Cousins, 2018). South African research is meeting the generalised clamour and discourse around deregulation, which did not take into consideration, as in many developing countries, the peculiarities of capitalist development. In South Africa, local capitalism is rooted within the history of dispossession and racial inequalities inherited from the apartheid regime (Bernstein, 1996; Traub and Jayne, 2008). Consequently, South Africa's agri-food system deregulation has further entrenched inequality (Jacobs, 2011; Greenberg, 2013; Ledger 2016b; Battersby et al., 2016).

5.2. The development and consolidation of private food system governance

As a result of apartheid regime outcomes and of the last 27 years of economic liberalisation, South Africa's food system is one with high levels of concentration across the entire food chain. The ensued corporate power has given big food corporations a determinant role in shaping the prevailing food governance. High level of market concentration is evident in food production, but more markedly pronounced in food processing and retail. In that context, the performance of the South African state in carrying out governance functions within the food system has been limited and it raises the hypothesis of an abdication which has resulted in the consolidation of private food system governance.

The section highlights how market concentration has developed over the years as well as its effects. It also unpacks how concentration has contributed to the profusion of supermarkets in the country, and the consequences of the 'supermarketisation' process. It finally discusses the lack of state leadership which has progressively facilitated the growing role taken by the private sector.

5.2.1. Market power at play

Evidence abounds of market concentration along the entire food value chain, from the producer to the retailer.

a. Market concentration

From production to packaging

In food production, market concentration has increased significantly. Indeed, the reduction in the number of farm units has not translated into reduction in the area under production which is indicative of consolidation (Pereira, 2014; Greenberg, 2017). Commercial white farming units, for instance, declined by 25% between 1995 and 2002. However, the income and market share of these farms have increased greatly. While 6% of agricultural companies accounted for 40% of gross farm income in the 1980s (Bernstein, 1996), 5% of these firms earned more than 50% of all farm income in 2002 (Hall and Cousins, 2018), and 0.6% of commercial farming units were noted to have generated about 33% of farm income in 2007 (Greenberg, 2017). Four companies had about 54% of market share in cattle feedlots in 2010 (Greenberg, 2017) and, according to Hall and Cousins (2018), the domestic seed market is essentially in the hands of two companies today (Monsanto and Pioneer), which both account for 90% of the share in maize, wheat and sorghum seed market. These companies, along with Syngenta, also currently dominate the domestic pesticide market.

There are also high levels of concentration in food processing. The three largest South African food manufacturers are Tiger Brands, Pioneer Foods and RCL Foods, with their large-scale operations being complemented by those of non-South African multinational corporations, particularly Unilever and Nestlé (Greenberg, 2017). According to Ramabulana (2011), about two-thirds of the total maize meal was produced by 22 large-scale millers, among which the top four accounted for approximately 40% of the total maize meal market share. In 2013, three of the big South African food manufacturers (Tiger Brands, Pioneer Foods and Premier Foods) accounted for about 60% of white maize milling in the country (Greenberg, 2017), and 87% of the wheat milling market share was held by four large-scale milling companies (Haysom, 2017). Pereira (2014) asserts that these large firms are all vertically integrated along the wheat-to-bread value chain and produced about 90% of the nation's total wheat flour.

Furthermore, about 52% of total packaged-food sales was generated by the 10 largest packaged-food companies, half of which are South African manufacturers, with Tiger Brands having the largest share (Igumbor, 2012; Pereira, 2014; Hunter-Adams, 2018). In the same manner, 65% of the soft-drink market share was held by three large multinational companies: Coca-Cola Co., PepsiCo Inc., and Danone Group (Igumbor, 2012; Pereira, 2014), which all have linkages with South African companies. For instance, Coca-Cola and Pepsi are bottled by SABMiller and Pioneer Foods, respectively (Igumbor, 2012). In the local tomato processing sector, Tiger Brands accounts for 75% of the total market share (Ledger, 2016b), while according to Haysom (2017) two companies control about 50% of the broiler meat industry, and about 65% of the total commercial milk is processed by four firms, an estimate also referred to by SACN (2015).

Concentration in value chains has also been accelerated by a process of dual consolidation which refers to the different ways in which big agri-food corporates patronise each other, while small-scale businesses are increasingly excluded. Invariably, the big supermarket chains discussed below prefer to deal with big producers, a process facilitated by their centralised procurement systems which favour suppliers and producers who can assure sufficient volumes, consistent quality and other specified standards (Battersby et al., 2016; Ledger, 2016b). A prominent supermarket chain, for instance, was noted to procure 80% of its fresh produce from only 10 agri-food companies (Battersby et al., 2016). Moreover, there is evidence of a confluence of export standards and domestic export standards, as these supermarkets also procure from farmers who export (Ramabulana, 2011; Ledger, 2016b). Fast food chains have also established linkages with large soft-drink companies through agreements regarding the provision of refreshments in restaurants. In the bread-baking industry, despite their innovative pricing and quality strategies, small processors are still constrained by the anti-competitive tendencies of leading players, many of whom are also their major suppliers of raw materials (Pereira, 2014). As a result of the foregoing, as well as the lower transaction costs emanating from dealing with few suppliers, it is extremely challenging for small businesses to gain entry into these chains (Battersby et al., 2016; Ledger, 2016b).

Food retail

Literature has a strong focus on the astronomical levels of concentration in South Africa's food retail sector. In 2003, four main supermarket chains (Shoprite-Checkers, Pick n Pay, Spar, and Woolworths) accounted for about 50-60% of all food retail (D'haese and Huylenbroeck, 2005; Battersby, 2016), and this increased to 68% by 2010 (Battersby, 2017). But within the formal food retail segment only, these four companies accounted for about 97% of all food sales (Pereira, 2014; Ledger, 2016b; SACN, 2015; Haysom, 2017).¹¹ However, the Competition Commission (2019) reports a lower total estimate of 72% for these companies. In a related vein, the top five corporations in consumer food or fast-food service¹² had a 61% market share in the segment (Greenberg, 2017a). Irrespective of the differing statistics highlighted above, big retailers' market share in the food retail sector has predictably yielded massive profits: in 2014, the 'big five'¹³ had a profit of R14.5 billion, which was almost three times the profit of the big five food manufacturers (Greenberg, 2017).

Evidence of 'supermarketisation', which corresponds to the rapid expansion of supermarkets — a worldwide process where South Africa is among the champions, abounds in literature. To give a flavour of the quick expansion process, Shoprite opened 104 new stores in 2013, while it also planned to open an additional 101 stores between February and June 2014. In what Battersby (2017) refers to as the 'mallification' of the retail environment in South Africa, land used for retail

11 With Shoprite-Checkers (38%), Pick n Pay (31%), Spar (20%), and Woolworths (8%).

12 Yum! Brands, Spur Corp, Famous Brands, Nando's, and McDonald's.

13 Shoprite-Checkers, Pick n Pay, Spar, Woolworth, and Massmart.

increased 89 times between 1970 and 2010.¹⁴ Between 2007 and 2015, there was an 84% increase in the number of shopping centres in South Africa (from 1 053 to 1 942), the sharper growth being in Cape Town¹⁵ (Battersby, 2017; Battersby, 2019b). These numbers are all suggestive of the continued expansion of big food retailers that are always anchor tenants in all of the developed shopping centres. Moreover, not only are South African supermarket chains expanding locally: their operations have also extended into other parts of Africa. Between 1995 and 2012, Shoprite opened 131 supermarkets of its chains in 16 African countries (Battersby and Peyton, 2016).

The supermarkets' power within the food value chains has been increased by their leading role in the process of vertical integration, which has had direct implications for small-scale businesses. As part of their in-house activities, many of the supermarket franchises are increasingly incorporating much of the value-additions to final food products into their businesses, like specific branding and labelling (Chitja and Mabaya, 2014; Greenberg, 2015; Pereira, 2014; Battersby, 2016; Ledger, 2016b; SAHRC, 2017; Competition Commission, 2019). This process has allowed these big corporates to manage strict quality standards and to maintain a competitive advantage.

In addition, the practice of rebates payment by suppliers to supermarket chains (Competition Commission, 2019), which consist in a percentage of payback based on total sales, can be compared to a toll fee for doing business with the major retail companies. These practices have marginalised and severely constrained the ability of small businesses to gain access to the shelves of the big retailers (McLachlan and Landman, 2013; Pereira, 2014).

The way the social welfare system has been developed has also contributed to the consolidation of supermarkets. Indeed, social grants are designed in such a way that payments are made to qualifying individuals who receive the South African Social Security Agency (SASSA) card. This card, implemented since 2012, can be used as a debit card for purchases. As opposed to the informal food sector where cash is mostly used for transactions, big food retailers are well suited for card transactions and they have therefore been able to capture much of the grant money which is spent in their supermarkets (Ledger, 2016b). With annual payment in the region of R150 billion per annum (Battersby, 2017), this massive support has essentially strengthened the position of big retailers.

It is thus unsurprising that major supermarket companies, working closely with developers, are enthusiastic about extending into townships and rural areas in a bid to accumulate more profit (Ledger, 2016b). Indeed, collaboration with the real estate business is necessary because the retail industry requires access to land and buildings which necessitates significant capital expenditure (Competition Commission, 2019). The issuance of long-term exclusive leases to the big food

¹⁴ 207 000m² in 1970, 5 572 846m² in 2002, and 18 418 073m² in 2010.

¹⁵ From 89 centres in 1994 to 235 in 2012 (164%).

retailers in shopping centres constitute ways in which their dominance is further asserted and expanded.

Last but not least, if the main drivers of supermarketisation correspond to internal operational dynamics within the value chains — procurement systems and practices, economies of scale, branding (Igumbor et al, 2012; McLachlan and Landman, 2013; Tsheola, 2014; Pereira, 2014; Battersby and Peyton, 2016; Battersby, 2017) — external factors must not be underestimated. They are related to the changing nature of the South African society rooted in a major shift towards urbanisation and the related de-agrarianisation process of the economy (D’Haese and Huylenbroeck, 2005; Pereira et al., 2013; Peyton et al., 2015; Battersby, 2016). These critical changes have deeply modified the nature of work and the way of life, with a very significant amount of time dedicated to transport, reducing time available for individuals and households for food preparation (Battersby, 2012; Pereira, 2014). It has also modified the relation to food.

b. Exclusion and financialisation

Market concentration has had various implications on the South African food system and there are divergent opinions regarding its impact on the food system and food security. With regard to supermarkets, some studies highlighted the positive contributions of supermarkets and their role in improving food security. They offer lower food prices compared to traditional retail outlets due to their economies of scale (D’Haese and Huylenbroeck, 2005; Ramabulana, 2011; Battersby, 2012; Pereira, 2014; SACN, 2015). It is also argued that consumers are assured of food quality and safety at supermarkets as these retail chains tend to adhere to stringent quality standards (Pereira, 2014). But it also comes with a price, and quality food is generally out of the reach of many consumers (Crush and Caesar, 2014; Libman, 2015). Another reason for acclaiming supermarkets was also the market opportunities for local farmers they offer (Pereira, 2013).

However, most studies have been highlighting the negative consequences of the type of supermarkets expansion which occurred in the country in the last 30 years. Authors identify two main issues reflecting two opposing dynamics: a trend towards exclusion with the marginalisation of small businesses and the adverse impact on poor household strategies; and the financialisation of the sector where supermarketisation consolidates the dynamics already at play.

First, as already reported, supermarket expansion has led to the increasing exclusion and marginalisation of small businesses. Evidently, many small retailers find it difficult competing with supermarkets on the basis of price and variety, and the development of big retailers has caused a shrinking of their profit margins. As a result, many small and informal retailers have been forced out of business (Battersby, 2011, 2012; Peyton et al., 2015; Battersby and Peyton, 2016; Battersby, 2017; Siebert, 2020). Furthermore, the Competition Commission (2019) identified two other issues: the more convenient location of supermarket chains implies that some convenience shopping which ought to have taken place at small retail outlets have moved to the leading retail

chains; and the stipulation and enforcement of trading hours in some municipalities have taken out another advantage of the informal sector — its flexibility — to the benefit of supermarkets. Together, these processes have led to a decrease in formal and informal food trade employment, and deeply impacted the sustainability of informal food economies (Peyton et al., 2015; Battersby et al., 2016; Battersby, 2017; Greenberg, 2017b; Competition Commission, 2019).

A second illustration of these marginalisation effects is about the operational model of supermarkets which does not fit with the food provisioning and consumption strategies of poor households (SACN, 2015; Peyton et al, 2015; Battersby and Peyton, 2016; Caesar and Crush, 2016; Battersby, 2017). A significant number of households accesses food from informal retailers on a credit basis but this is being eroded owing to the gradual disappearance of these informal businesses (Battersby and Peyton, 2016). More importantly, it is asserted that the growing expansion of supermarkets limits consumers' food retail alternatives which may actually lead to reduced food security. Diverse retail environments and / or options engender the capacity of households to find the most affordable prices, thus enhancing the stability of their access to food. When these variety of options are eroded, food access may shrink with consequences on food security (Battersby, 2019b).

The other critical issue is about the contribution of supermarketisation to the consolidation of financialisation of the food system. This financialisation has proceeded in diverse ways and is increasingly seen as a combination of the expansion of multinational corporations (MNCs), the rise of agri-investment companies and of foreign ownership, the institutionalisation of share ownership, mergers and acquisitions, and the development of futures market (Greenberg, 2017a).

This development of MNCs is confirmed by the significant presence of Monsanto and Pioneer Hi-Bred in the seed sector, and of Nestlé, Unilever, Danone and Coca-Cola in agro-industries, which has consolidated after trade liberalisation and deregulation (Greenberg, 2015). Not only have these MNCs expanded greatly in South Africa, but their expansion has also been accompanied by a gradual dilution of local ownership and a rise in foreign ownership of some of the large agri-food businesses in the nation, including Massmart, SABMiller and Afgri. About 54% of Woolworth shares and 49% of Tiger Brands were foreign-owned in 2012 (Pereira, 2014; Greenberg, 2017a).

Institutionalisation of share ownership, which refers to the increase in the control of businesses by institutional shareholders such as pension funds, is increasingly evident in South Africa. Ironically workers, whose pension funds are active players¹⁶ in such entities, lack both individual and collective powers over the investment decisions, because their shares are atomised and the control is exerted from the top through management (Greenberg, 2017a). Furthermore, in recent years, there has been an emergence of agri-investment companies who buy stock-listed shares in the

¹⁶ This is the case of the PIC, in charge of the GEPPF's management, presented in chapter 3.

agri-food system (Greenberg, 2017a; Hall and Cousins, 2018, Ducastel and Anseeuw, 2018). The establishment of a formal commodities (futures) market, the South African Futures Exchange (SAFEX), has also contributed to the consolidation of this process. Haggblade et al. (2015) contends that on SAFEX, maize crop is traded over 10 times due to speculation and hedging activities by traders and farmers. These trading and speculative activities have been implicated in the continued surge in prices of commodities (Kirsten, 2015).

c. The ‘benefits of responsibility’

Beyond their profitability objectives, big private companies have formally engaged in CSER. The main areas of this progressive move have been their contribution to food programmes and their investments in nutritionally improved food products. However, there is a widespread contention that food corporates have benefitted immensely from their CSER initiatives. They have been a way to highlight their contribution to society in general and to food security in particular, notably to the benefits of disadvantaged households. As such, CSER initiatives have been a powerful way to improve their brand and public image (Warshawsky, 2014) and to respond to the denunciation of their negative impacts on the food system (Pereira, 2014).

Corporates have played a significant role in institutionalising food programmes particularly through their investment in food banks and their support to food CSOs. If these funding initiatives have been critiqued as being analogous to charity which really does not address underlying issues, they have also been lauded for their contribution to addressing food insecurity. But it is important to note that this strategy has consolidated their profitability because it facilitates access to processed foods by more consumers (Warshawsky 2014). In addition, food donations appear as a cost-saving strategy (Ledger, 2016a) because some of these foods are on the verge of expiration or would have expired anyway, and giving the food away saves retailers and manufacturers the potential waste-management cost.

The other area of action is innovation and development of new food products with high nutrition quality, supported by advertising and improved labelling. These investments can definitely contribute to food security objectives (Pereira, 2013), but they also meet private companies’ objectives and support their expansion strategy with a new range of trendy products. Simultaneously, CSER assists in deflecting debates from the main issues, in particular why food is unaffordable for many households. In the end, food security is increasingly seen as a business opportunity by food corporates and a way to maximise their profits (Hamman, 2011; Pereira, 2014).

5.2.2. The abdication of the state

A plethora of evidence points to the fact that the state’s performance in governing the food system has been below par. A major observation is the lack of leadership and political will (McLachlan and Thorne, 2009; Koch, 2011; Haysom, 2015; McLachlan et al., 2015; Boatemaa et al., 2018;

Termeer et al., 2018), which has brought about an absence of creativity, resources, capacity and incentives, and consequently resulted in a lack of urgency to resolve food system issues and open up space for dialogue (McLachlan and Thorne, 2009; Koch, 2011).

A good illustration from reviewed studies is the government's inability to effectively enforce standards and regulations which has contributed considerably to increased food safety risks (Schönfeldt et al., 2018; Boatemaa et al., 2019). The challenges related to food safety include the outbreak of diseases, problems relating to handling and packaging, issues of mislabelling, capacity constraints as well as regulatory shortcomings. Among examples were allegations that some local wheat buyers buy cheap and lower quality wheats from the international market, mix it with higher quality locally produced wheat, and thereafter package and sell the mixture as locally produced wheat (de Wet and Liebenberg, 2018). In a similar vein, existing practices in the poultry industry like 'reworking' expired chickens to extend their selling date, or the act of brining chickens which significantly add salt and sugar intakes for consumers, have been another area where quality standards have been questioned in spite of a new legislation finalised in 2016 (Ledger, 2016a). The most striking and dramatic example has been the listeriosis outbreak in 2017 and 2018, when 1 049 confirmed cases of listeriosis led to 209 deaths, the highest ever recorded in history (Hunter-Adams et al. 2018). The outbreak was traced to two food processing companies whose range of contaminated processed meat products ultimately found its way into food stores.

The foregoing calls, with no doubt, into question the effectiveness of South Africa's food safety regulations and practices. The lack of interaction between regulating departments, conflicting responsibilities, lack of adequate capacity to enforce standards, and poor coordination of regulatory processes have rendered the enforcement of the regulatory processes quite ineffective and are *de facto* a renunciation to act effectively. As noted by Termeer et al. (2018:91), political will is needed in order to challenge "*vested interests, dominant ideologies, bureaucratic traditions, political cultures, and distribution problems in the food system*". This missing will has contributed to unsatisfactory policy outcomes. Warshawsky (2016) argues that South African state's interventions within the food system has been lukewarm, beset with unfulfilled promises, and is suggestive of a state that privileges political control over social change.

In order to understand the reason behind the lack of leadership and will, there have been calls for a broader approach to food system governance which is much wider than legislation or regulation directly related to food, but includes all other institutional or stakeholder arrangements that impact on the structure of the agri-food system (Ledger, 2016b). These comprise power and its allocation, both of which affect and are affected by a particular governance structure. Accordingly, the role of the state in food system governance can also be articulated in terms of its relations with private interests to produce specific modes of regulation and regimes of accumulation (Warshawsky, 2011). So far, the state has leaned more towards the notion that market is able to redistribute wealth

and that economic growth would lead to job creation and, in the long run, ensure sufficient access to food for all South Africans (Pritchard et al., 2016; SAHRC, 2017).

More specifically, some of the literature argues that the state has implicitly been an enabler of corporate activity (and capital accumulation), thus allowing for the emergence of private food governance with attendant negative consequences for the food system, as well as food security and livelihoods goals of the nation (Greenberg, 2013, 2015, 2017a; Pritchard et al., 2016; Ledger, 2016a; Battersby, 2017; Hall and Cousins, 2018). There was the assertion that the state's inclination towards deregulation has tended towards favouring corporate interests and supporting their concentration and that, rather than address the structural ills that plague the food system, government has simply focused on the use of social grants and food gardens as food welfare strategies (Greenberg, 2015, Pritchard et al., 2016; Hall and Cousins, 2018; Siebert, 2020). These latter strategies, Pritchard et al. (2016) argue, are only a way of mitigating impoverishment, and allow the pursuit of liberalised economic growth and neoliberal logics. As already mentioned, Battersby (2017), for instance, notes the keenness on the part of major retailers to strategically locate their stores in places where it would be easier for them to capture social grant money.

Evidently, the state's position on how the food system should work, which has informed its actions, seems increasingly ambivalent despite the constitutional provision to ensure food access for all South Africans. Indeed, South Africa is one of the few nations of the world where the right to food for individuals is constitutionally guaranteed by its 1996 Bill of Rights (Pritchard et al., 2016). As a consequence, and due to the sobering food security figures, the state has been boldly criticised for its incapacity to achieve this goal (Drimie and Ruysenaar, 2010; Kock, 2011). Ruysenaar (2013), for instance, argues that government's response has been anything but coherent.

The literature also alludes to the slow uptake of food governance at the local level. In particular, the absence of a clear and formal mandate for cities and municipalities to intervene in the food system was highlighted by few studies as a major governance gap that has made it difficult for them to address the systemic drivers of food insecurity (Battersby, 2012, 2020; SACN, 2015; Haysom, 2015, 2017; Battersby and Hunter-Adams, 2020). Responsibility for planning, coordinating and implementing responses to food system issues is somewhat articulated at the federal and provincial levels, with clear mandates given to some government structures. However, at the local or municipal level, there is no clear mandate on planning and coordination of the local food system, even if some room for manoeuvre exists (De Visser, 2019). This lack of a clear mandate means there are no dedicated budgets and other resources for cities and municipalities to intervene in the system (SACN, 2015; Battersby, 2020). It has also aided the transference of food governance responsibilities to the private sector (Haysom, 2016). The foregoing definitely confirms the hypothesis of an abdication by the state of its possible decisive role in changing the rooted unequal characteristics of the food system.

5.3.The manifestations of private food system governance

The preceding sections have expounded on how economic deregulation and state renunciation led to increased market concentration which, in turn, intensified corporate hegemony within the food system. This corporate power has resulted in the rise of private food governance, which refers to the creation and implementation, and / or development of types of contracts, private norms, codes of conduct, ‘voluntary’ agreements, and rules and standards, progressively regulating and shaping professional and trading activities and the food system as a whole (Fuchs and Kalfagianni, 2010; Cafaggi and Renda, 2012). Indeed, the near absence of effective public regulation, coupled with the actions or inactions of several stakeholders who have resigned themselves to the workings of the dominant system (due to their dependency on private sector ‘subsidies’), have together presented big food corporates with the opportunity and power to practically govern the food system. This process is not specific to South Africa; it has been observed internationally and analysed by many scholars. It corresponds to the development of the corporate food regime described by Greenberg (2017a) as the corporate’s material and discursive domination on the food system.

In practice, it means that big food companies have the greatest input — direct or indirect — into policies relating to food processing, spatial planning, and food regulation (Ledger, 2016a and b). This results on the one side from their pro-active behaviour. Illustrations are public consultation in the spatial planning processes, which has always been skewed, with private actors largely dominating the consultative process (Battersby, 2017), or their continued interventions in the field of nutrition initiatives (Greenberg, 2017a). But on the other side, corporates can also oppose or show their bad will, like their reluctance to formally participate into policy discussions. According to Pereira et al. (2013), there is limited engagement between private and public sectors, and dialogue has been far from adequate, with many engagements often characterised by hostility (Hamman, 2011). It is also expressed by their opposition to any form of regulatory mechanism to control food prices, with an overarching argument that such intervention would distort markets. For instance, the Agricultural Business Chamber (ABC) contends that regulating the economy will erode competition with adverse implications on the ability and incentives of agri-food businesses to innovate and create better products and services (Ramabulana, 2011).

From the reviewed literature, private food governance manifests itself in five ways: (i) on food prices and pricing; (ii) through the emergence of private food standards; (iii) with the development of a new consumer food environment contributing to the nutrition transition, (iv) with urban spatial restructuring affecting informal food trade; and (v) through processes of co-optation which result in the silencing of alternatives.

5.3.1. Food prices and pricing

Quite often, there has been an overemphasis on the importance of income in determining food access and, in extension, food security, which has resulted in obscuring the role of food prices.

However, the global food price spikes recorded in 2007 / 08 and continuing in 2011 / 12 resulted in a situation where the world's poor found it difficult to afford food, and South African poor were similarly affected through price shocks transmission (Schönfeldt et al., 2010; Taylor, 2013; Tsheola, 2014; Wakeford and Swilling, 2014; Kirsten, 2015; Van Wyk and Dlamini, 2018).

In the South African debate, rising food prices is now seen as a pressing issue with regards to its implication on food security of households, particularly the poor and vulnerable (Ledger, 2016a). It reduces resources available for food purchase while also eroding income (Hendriks, 2005; McLachlan and Thorne, 2009; SACN, 2015). Yet, the consumer price index for food has consistently been above the general price index (Jacobs, 2011) and Rangasamy and Nel (2014) noted that the disparity between food prices and general prices intensified after the deregulation of the food system. They also observed that food price shocks are not temporary but more persistent; their magnitude has increased over time; and domestic food price increases have generally exceeded international food price movements.

This situation can be explained by the weight of food corporations in the food economy where they dominate both manufacturing and retailing and use their power to set the rules of engagement with other actors in the value chains (Ledger, 2016a and b; Greenberg, 2017a). In this unequal relationship, both producers and consumers have emerged as 'price takers' as corporations largely determine prices at both ends of the system.

Ledger's (2016a) analysis of the retail margins for fruits and vegetables illustrates how the farming gate-retail price gap has increased greatly, confirming how producers get less than what they should be getting, and consumers pay more than what they should be paying. This asymmetry is consolidated by the rebates payment to big supermarket chains by their suppliers, described above (5.2.1), qualified as huge and unjustifiable by the Competition Commission (2019) — a practice which is also directly impacting the competitiveness of small and emerging players in the food retail sector. In addition, although manufacturers have less overall market power than retailers, they assert their market power over producers by dictating prices, while the leading manufacturers are in a relatively stronger bargaining position with retailers (Ledger, 2016b). Consequently, the big food corporations have somewhat arrogated the food pricing responsibility to themselves, using their market power resulting from concentration, and the dominance of self-regulation which has contributed to the incessant increase in the prices of food (Bernstein, 1996; Traub and Jayne, 2008; Jacobs, 2011; Greenberg, 2013; Pereira, 2014; Hall and Cousins, 2018).

While market-led reforms were supposed to foster competition, anti-competitive behaviours have increased dramatically. A number of studies highlighted this issue, alluding to the several cases of price fixing and collusion within the system (McLachlan and Thorne, 2009; Hamman, 2011; Jacobs, 2011; Pereira and Ruysenaar, 2012; Pereira, 2014; Kirsten, 2015; Pereira and Drimie, 2016; Ledger, 2016b; De Wet and Liebenberg, 2018; Hall and Cousins, 2018; Competition

Commission, 2019). Many of these cases were adjudicated by the Competition Commission, which found a number of the large agri-food companies guilty of collusion and price fixing (Hall and Cousins, 2018). The cases have mostly involved the leading food manufacturers (including Tiger Brands, Pioneer Foods, Nestlé, Parmalat, and Clover), as well as leading food retailers.

These dynamics have resulted in price inflation and the exorbitant prices of food have also restricted consumer's choice as many consumers are priced out of the purchase of good quality food thus exacerbating food insecurity. They also definitely wield significant influence on inflationary trends in the economy.

5.3.2. The emergence of private food standards

Given the minimalist stance of the government regarding market intervention and the importance of corporate power, big food corporations have used this power to play an overriding role in the *de facto* regulation of the food system through the setting and enforcement of private food standards. In particular, big retail chains have emerged as custodians of standards, dictating what should be supplied, how and in what form. Generally, it was argued that the development and consolidation of procurement systems of supermarkets framed by their own standards are increasingly constituting barriers particularly for small businesses (D'Haese and Huylenbroeck, 2005; Pereira, 2014).

The literature highlighted the fact that many smallholders continue to struggle with the requirements of volume, quality and safety imposed by big food retail chains (D'Haese and Huylenbroeck, 2005; McLachlan and Landmann, 2013; Pereira, 2014; Chitja and Mabaya, 2014). Small-scale agricultural producers are often at the mercy of supermarkets as decisions on what to produce, the amount to produce and the methods of production are increasingly specified by these retail chains. Specifically, such conditions or requirements include product standardisation, certifications such as organic farming certificates, food quality and safety regulations, and packaging criteria (Pereira, 2014; Peyton et al., 2015). Many of these require significant costs difficult to put in place by smaller producers.

Supermarket chains have seemingly set themselves up to create and reinforce the notion that their operations are incompatible with the character of smallholder agriculture. Stringent standards requirements by supermarkets and consistent requests for the supply of large volumes of products have brought about the emergence of preferred networks of suppliers and the increasing exclusion of smallholders from these networks. (Ramabulana, 2011; Tsheola, 2014; Peyton et al., 2015; Ledger, 2016a; Battersby et al., 2016; Haysom et al., 2017; Greenberg, 2017). Thereby, the growing expansion of supermarkets comes together with the squeezing out of small retailers and the continued shrinkage of smallholders' supply outlets, resulting in the consolidation of big businesses.

Evidently, big retailers are responsible for deciding who a supplier is and how much suppliers get paid. The enforcement of standards has also resulted in increased risks and costs for suppliers, while reducing the costs for these big retailers. Ledger (2016a) argues that the requirements for certain aesthetic standards particularly on some agricultural produce (e.g., fruits' colour and shape) constantly makes growers to overplant so as to allow for the losses associated with discarding those produce that fail to meet the requirements. Similarly, big retailers make suppliers responsible for spoilage or breakage of products arising from supermarkets' actions, thus increasing further the costs for small businesses (ibid.).

Privately imposed standards constitute sources of power for big retailers to further assert control over smaller firms. Conversely, the standards have constrained the ability of small businesses to participate and benefit from the food system, and in many instances, have put some of them out of business. And the others have progressively been compelled to transfer decisions that affect their businesses to food corporates.

5.3.3. Consumer food environment and the nutrition transition

The consumer food environment (CFE) is certainly a key determinant of people's food consumption preferences and habits. The CFE refers to the environment in which decisions and choices about food are made by consumers (Greenberg, 2017a). Essentially, the concept relates to the external environmental factors that *"enable, constrain and shape people's food purchase and consumption patterns in several ways related to food availability, accessibility and affordability, and desirability"* (Kroll et al., 2019:4). Indeed, many social, psychological, cultural and economic factors, all of which are external, shape the choices people make about what to eat (Greenberg, 2017a).

a. Shaping the environment

The development of the powerful South African food industry and retail has resulted in a food environment where unhealthy food is easy to access (Igumbor 2012; Libman et al 2015; Thow et al. 2015, Hunter-Adams et al, 2018; Kroll et al., 2019). The rise of obesogenic food environments, particularly the increase in the rate in which soft drinks and highly processed foods have become more affordable and accessible, is being abetted by globalisation and trade liberalisation policies (Thow et al., 2015). Evidence indicates that between 1998 and 2012, sale of soft drinks increased by 106%, while there was almost a 10% increase in the value of the market for packaged foods (Thow et al., 2015). Between 2005 and 2010, sales of snack bars, noodles and ready meals increased by more than 40% (Igumbor et al., 2012). In a study by Kroll et al. (2019), about 57% of food outlets in Khayelitsha, a township of Cape Town, were found to provide significant access to obesogenic foods, while 71% of household respondents had diets that surpassed the thresholds for obesogenic foods. The above examples illustrate the challenge of unhealthy food environments that South Africa is currently confronted with.

Corporations, particularly food retailers and manufacturers, are wielding a lot of influence on the CFE. Their strategic positioning and decisions “*alter the availability, affordability and acceptability*” of the food they produce to suit their own profit objectives (Igumbor et al., 2012: 2). The diverse ways in which corporations influence the CFE are increasingly seen in their product formulation and innovation, capitalist-driven and consolidated procurement practices, advertising strategies, and impact on spatial planning with the proliferation of supermarkets particularly into lower income areas, thus increasing access to highly processed foods for the poor (Igumbor *et al.*, 2012; Pereira, 2014; Greenberg, 2017a; Thow *et al.*, 2018; Kroll et al., 2019).

Referring to the ways in which food producers hide behind or use innovation to influence choices, Greenberg (2017a) posits that producers, in their drive towards innovation, have the inclination to shape demand by creating ‘new’ products rather than merely responding to consumer demands (*ibid.*). They also work assiduously to increase the availability and accessibility of their produce not only in formal channels, but also in the informal retail sector where ultra-processed foods and soft drinks are increasingly more available (Igumbor *et al.*, 2012; Kroll et al., 2019). As a result, through their direct contact with consumers in food outlets, retailers have been acknowledged to exert a lot of influence on the CFE, thus shaping consumer understanding and preferences around food issues (Pereira, 2013).

Marketing, sales promotions and advertising are important tools used by food manufacturers and retailers to influence food choices in South Africa. Igumbor et al. (2012) and Pereira (2014) allude to the several promotional catchphrases used by manufacturers and retailers which emphasise and sometimes overrate their products as rich sources of fibre, energy and vitamins. Moreover, advertising currently takes up a significant chunk of television programming including those programmes that children are exposed to. 16% of children TV programming advertisements in 2006 were for food products, and 57% of these were adverts associated with foods of poor nutritional quality (Igumbor et al., 2012). The foregoing calls to scrutiny how food advertisements in media channels which influence consumers are being regulated (Pereira, 2014). While some food companies in 2009 voluntarily took action by making a pledge to limit advertisements on TV and in schools for children aged 12 years and below, monitoring which would have reflected the success or failure of adherence has been abysmal (Igumbor et al., 2012).

There has also been a rise in public-private partnerships in the food sector which has resulted in a blurring of lines between private and public food regulation. Greenberg (2017a) shows how evident is the self-promotion drive by food companies who are increasingly positioning themselves as nutrition companies, hence expanding their sphere of influence from the production of food to issues of malnutrition, obesity among others. As an example, in response to calls to regulate the consumption of ultra-processed foods and to improve nutritional status of South Africans, there have been initiatives by food corporates focusing on nutrition education, seeking to inform and educate consumers about the nutritional composition of their products. This is evident in the

voluntary actions by brands such as Coca-Cola, Tiger Brands and Spar to put Guideline Daily Amount (GDA) labels on their products, as a way of signifying to consumers the amount of specific nutrients available in the product and its proportion in relation to the Daily Recommended Allowance (RDA) (Igumbor et al., 2012; Pereira, 2014). Also, replete within their CSER documents are statements promising to ensure healthy products and sustainability. For instance, Unilever South Africa affirmed its commitment towards improving the fat composition of its products through the reduction of saturated fat and the increase of essential fats (Igumbor et al., 2012; Pereira, 2014).

The role of corporates in defining dietary guidelines is a major way in which they shape consumers' preferences, the food system, and therefore influence its governance. Between social responsibility and profit, the former is always side-lined. For instance, the *Food Safety Initiative* contributed significantly to the development of both the *South African Food Guide* and the *South African Food-Based Dietary Guidelines*. However, this initiative was constituted by the Consumer Goods Council of South Africa, whose members are manufacturers, wholesalers and retailers. The absence of a comprehensive national database on nutrition composition gives food producers the opportunity to refer to and use unappropriated food composition tables which can be inaccurate to the South African consumer (Schönfeldt et al., 2018). As a result, and evidently, the Food Safety Initiative's contributions to the dietary guidelines have been driven by corporate interests (Greenberg, 2017a). In a related vein, but with a defensive positioning, developing a far-reaching agenda for the prevention of NCDs within the food system has often been met with opposition by corporates who oppose changes to both the structural and non-structural factors contributing to NCDs (Libman et al., 2015).

b. Contributing to the nutrition transition

According to Greenberg (2017a), this development (corporates positioning as nutrition specialists) is a major contribution to the psycho-social determinants of food choices, such as status, aspiration, the need to belong, as well as other social desires, which all go a long way in shaping the food choices that people make. At the end, the corporates have capitalised on this by creating demands for those products which reinforce these psycho-social dimensions and at the same time maximises their profit margins.

This massive process has resulted in the increased availability and accessibility of unhealthy foods which, in turn, has negatively affected the food and nutrition security status of South Africans. It demonstrates the nutrition transition of South Africa with a shift away from traditional diets towards the consumption of more processed foods that are high in fats, salt and sugar, resulting in the co-existence of under-nutrition (including wasting and stunting) and over-nutrition, a phenomenon used in referring to either overweight or obesity. This trend is confirmed by the continued increase in both the per capita food supply of total calories, fat and protein, as well as

salt intake, contributing further to obesity and nutritional deficiencies (Igumbor, et al., 2012; Pereira, 2014; Greenberg, 2017a).

A key feature of the nutrition transition is the increased drive by corporates to privilege taste over nutrition which have resulted in significant investment in their research and development (Otero et al., 2018). These authors further assert that the new diets do not only comprise those greatly supplemented with condiments, candy bars, chips / crisps and French fries, but now include breakfast cereals and meats that are becoming increasingly processed. In South Africa, the high consumption of predominantly starchy staples such as bread, maize and rice, processed foods, and low consumption of fruits and vegetables have been widely reported (McLachlan and Landman, 2013; Misselhorn and Hendriks, 2017). Put differently, many South Africans are now used to the consumption of ‘globalised’ foods with high-energy content as opposed to high-nutrient foods (Faber et al., 2011; Misselhorn and Hendriks, 2017; Otero et al., 2018).

Essentially, drivers of the prevailing nutrition transition in South Africa can be broadly categorised into two: changes in the socioeconomic environment; and the imperative of business profitability. The new environment includes the liberalisation of international trade, which has contributed to observed increased availability of highly processed foods (Pereira et al., 2014; Thow et al., 2015; Otero et al., 2018), as well as urbanisation which is partly responsible for the dietary shift (McLachlan and Throne, 2009; SACN, 2015; Misselhorn and Hendriks, 2017; Greenberg, 2017b; Bowden et al., 2018; Jonah and May, 2020). As more and more people migrate into urban South Africa, many have embraced the consumption of the cheaper ultra-processed foods as opposed to the traditional foods they were once used to. At the individual level, highly processed foods and cheap fast foods become highly desirable due to changes in income, new leisure activities, and work patterns, including the associated scarcity of time related to working hours, and long commuting time resulting from the continuing spatial segregation inherited from apartheid era. On the other hand, business profitability imperative results in various strategies to increase profit margins and market share of their products. These include greater investment in, and exposure to food advertising and promotion which continue to influence the perception of people with regard to food, and ultimately their food choices (Pereira et al., 2014; Thow et al., 2015).

Consequent to the dietary shift that is manifesting in South Africa, an epidemiological transition is also currently underway. This transition is characterised by an overlap of health issues coming from malnutrition with those used to be associated with affluence (Otero et al., 2018). More particularly, it is typified by changes in disease burden including a rise in the incidence of diet-related NCDs such as diabetes and hypertension. There is growing evidence that the increase in overweight / obesity levels, partly due to rising per capita supply of ultra-processed and energy-dense food, has led to an increase in the incidence of NCDs in South Africa (Pereira, 2014; Thow et al., 2015; SACN, 2015; SAHRC, 2017; Hunter-Adams, 2018). In 2004, diet-related NCDs along with respiratory diseases already accounted for about 12% of the nation’s overall disease

burden (Igumbor, 2012). According to Greenberg (2017b), five of the leading causes of death in South Africa are linked to nutrition. It is thus unsurprising that the cost to society of dealing with this disease burden has been enormous. In 2010, cardiovascular diseases were estimated to cost South Africa between 8 and 10 billion rand (SACN, 2015), while between 2006 and 2015, accumulated losses to the nation's GDP from diet-related NCDs were in the region of USD 1.9 billion (Greenberg, 2017a). The foregoing points to a stark reality: the South African state and society at large currently bear a significant part of the (financial) burden related to the nutrition transition resulting from the corporatisation of food.

5.3.4. Corporate power in spatial planning and the marginalisation of the “others”

High levels of food insecurity in urban areas, particularly in informal settlements (Battersby, 2011; Jonah and May, 2020), are significantly driven by the structure of the urban food system. The system is such that urban residents majorly rely on the greatly concentrated and consolidated formal market-based food economy which, in turn, relies on the cash economy (Ruysenaar, 2013; Warshawsky, 2013; Crush and Caesar, 2014). The big food corporates largely hold the power within the urban food system, as they do more generally with the South African food system, but their stranglehold is even more visible due to the importance of shopping malls where their logos are highly displayed.

The control corporates assert is not only evident in their pricing mechanisms as well as the exercise of their buyer and bargaining power, but is now increasingly perceptible in urban planning. There is growing evidence of urban planning prejudices in favour of private business concerns as well as the ‘capture’ of public agency by private interests. The urban food system thus seems to be characterised by the relative absence of food system planning which has further abetted the expansion of big food corporates and consolidated their power within the system (Ledger, 2016b; Battersby, 2017; Haysom et al., 2017; Competition Commission, 2019; Haysom et al. 2020).

The process which is currently underway and clearly evident relates to the shaping of markets through effective spatial plans which have a major role in mallification and the continuing rise of corporate retailing. First, planning decisions are increasingly influenced by a vision of a good city which should be modernised and formalised. Thus, there has been a clear interest in mall development as this is perceived as symbolic of modernisation (Battersby, 2017). This is an argument used by politicians to gain support from their constituents which explains the rapid mall development in small towns. The imperative of economic growth and the prioritisation of public-private partnerships as a catalyst for development is another major rationale. Consequently, planning has often been sacrificing small and informal businesses. The time and cost constraints related to rezoning have been burdensome for small businesses to bear. At the same time, the entrance of supermarket chains in a new location often results in a situation where small and informal businesses may need to relocate to new sites zoned for business use which are not necessarily affordable for them (Competition Commission, 2019). Finally, it is difficult for local

citizens to express opposition to new malls. On land already zoned for mixed uses (e.g., economic activities and housing), participation is not required. And where participation is mandatory as is the case in rezoning, it has been critiqued as being nothing more than a ‘tick-box’ exercise where the participation process is hijacked by powerful individuals and groups with vested interest in the proposed development (Battersby, 2017).

A good illustration of the spatial formatting power of private interests is the Philippi Horticultural Area (PHA) in Cape Town. The PHA currently covers about 2 400 hectares of high-value agricultural land as its geography and geology comprise a massive aquifer (water table) and rich sandy soil. Utilised by many small-scale farmers, the PHA supplies majority of the vegetables consumed in Cape Town. Despite all these assets, parts of the area have been earmarked for housing development, completed with complementary private schools and shopping centres giving the floor to big retail chains (Ledger, 2016a; Haysom et al., 2017). Yet, due to its geological features, the engineering cost for a home in the proposed development was estimated to be significantly higher than the housing subsidy for low-cost housing being provided elsewhere, an indication that the development does not pay specific attention to the poor. Nevertheless, the development application was approved by the City of Cape Town and hectares of land with very good agricultural potential is being lost, thus representing a typical example of what could be named food insensitive planning. The issue has been a matter of several litigations challenging the approval of the proposed development (Haysom et al., 2017).

Another case of urban planning bias is seen in the way transport infrastructure and transport subsidy (particularly for public-transport systems) are organised and how it privileges big food corporates. Because supermarket chains favour public transport nodes due to their attendance, transport systems channel commuters near supermarkets and as such they indirectly contribute to people’s food choices. These nodes tend to exclude alternative markets that the poor could access (Ledger, 2016a; Battersby and Peyton, 2016). On the other hand, access to market for smallholders to sell their produce is constrained given the absence of public transport for them (i.e., subsidised). Ledger (2016a) further bemoaned the absence of comparative (or even little) investment in retail spaces which support small businesses.

Evidently, as illustrated, there is a failure on the part of spatial planning policies to sufficiently support or address issues relating to urban agriculture, informal food trading and ultimately food security of the poorest (Battersby, 2011, 2017; Crush et al., 2011). Many studies investigated how the informal food sector is mostly neglected by the government, its agencies, as well as policy makers (Battersby, 2011, 2019; Ruysenaar, 2013; Peyton et al., 2015; Battersby et al., 2016; Haysom et al., 2017; Greenberg, 2017b; Kroll et al., 2019; Tawodzera, 2019). It confirms a failure on the part of public policies to fully acknowledge the role of the informal market in food provisioning and the interconnectedness of both the formal and informal sectors in the overall food system (Battersby, 2011; Peyton et al., 2015; Kroll et al., 2019). As argued by Battersby, the

antipathy towards the informal food sector with regards to urban planning is evident in “*exclusionary zoning schemes, (their) forced removals and lack of integration into neighbourhood planning*” Battersby, 2019b:9).

5.3.5. Discursive power, co-optation and the distortion of alternatives

Corporates also exercise discursive power by pursuing a dominant framing of both the issues affecting the South African food system and suggested solutions. Discursive power generally refers to the power and ability to shape narratives and / or normative discourses. It entails all generally held ideas and perceptions which give legitimacy to any particular course of action. Corporates have a great influence in agenda-setting and policy development while those adversely affected by the system remain marginalised.

There are many ways in which food corporates exercise their discursive power in South Africa. This is evident in the several popular framings around the issue of food insecurity. These include, inter alia, the framing of the challenge of food insecurity as an individual problem and its associated connections with lack of income and employment, the need for increased food production framing, as well as narratives around market participation (or the lack of it). A lot of emphasis has been laid on these two narratives with a concomitant neglect of the influence and power of food corporates, which are supposed to be knowledgeable, in the food system governance discourse, particularly through their co-optation practices.

a. Food and nutrition insecurity as an individual problem

Generally, there is an overriding inclination to frame the issue of food insecurity as an individual problem. This entails advancing notions such as ‘people cannot access food because they are poor’, or ‘people are obese because they make unhealthy food choices’ or ‘people are overweight because they do not exercise enough’.

Such narratives have further gone on to shape some of the solutions. These have included calls from all sides — the corporate sector, the government and some academics — for individuals to take more responsibility by getting more income and access to employment, or making better food choices (Ledger, 2016a). The latter recommendation has, in turn, led to an increased discourse on nutrition education and shaped efforts to incorporate nutrition education in food-related policies. The 2014 NPFNS, for instance, has, as one of its pillars, a focus on improved nutrition education to achieve better consumer literacy and enhanced meal planning. While these are important issues, some more pertinent ones are disturbingly left unexplored. For example, as Ledger (2016a) affirms, the nutritional-knowledge assessment included in the 2013 SANHANES survey indicates that there is little nutritional knowledge gap between poor people and not-so-poor people. People are considerably knowledgeable about nutrition but being poor adversely affects people’s food choices in spite of appreciable nutritional knowledge.

In so far as food security was seen as a problem of income, there has also been an emphasis on job creation in order to raise income. While this may be largely true, it has become a continuing narrative that has contributed to deflecting from some other important issues regarding why food is unaffordable (Ledger, 2016a). In parallel, there have been constant renewed calls for increasing social safety nets and food charities as opposed to dealing with the structural issues of the food system, which somewhat corresponds to a welfarist approach to the problem of food accessibility. As Warshawsky (2011) and Ledger (2016a) both noted, rather than addressing the problem and the underlying reasons why people are food insecure, attention has focused on the symptoms of the problem and contributed to the development of social service structures to feed the hungry.

b. More food production and market participation as the necessary response

In another vein, the oversimplification of the problem of food insecurity to inadequate food production has also persisted over the years. To resolve the problem therefore, there must be increased focus on agricultural production. This framing is explicit in many food security policies of the government, such as the 2002 national IFSS and the 2014 NPFNS. The establishment of the Directorate of Food Security within DAFF, with many of the staff naturally having agricultural training background, has contributed and is a further testament to the overemphasis on agricultural production as a solution to the food insecurity challenge (Ledger 2016a).

The lack of market participation of small businesses and particularly smallholders in food value chains is another recurring theme based on the prevailing narrative that small businesses are in large part excluded from the mainstream food economy. The solution is thus their inclusion in the mainstream, with large farm businesses, agro-processors or big retailers requested to patronise small-scale farmers and processors. An in-vogue development has been the inclusive business models, where smallholders get market access and technical upgrading through a ‘merger’ with a larger farm or a vertical integration with downstream players. They are formally legal joint ventures between a ‘commercial partner’ and ‘beneficiaries’ who can be smallholders or rural communities, and they are run based on their profitability and commercial viability. In practice, the beneficiaries are providing their land and labour force and the commercial partner brings its financial capacity, productive assets and skills. Fully aligned with the market and private-driven development, the impacts of these models on beneficiaries can be very narrow in terms of incomes and changing livelihoods, due to repayments and shared costs, as well as skill development if the commercial partner does not play enough its role of mentor (Chamberlain and Anseeuw 2018).

These models fail to take into consideration the various ways in which these processes of ‘inclusion’ may actually be exploitative in nature, a term referred to as ‘adverse inclusion’ by Ledger (2016a, b). Incontrovertibly, the terms within which actors are included, rather than the fact of inclusion, are often of greater importance in determining the outcome for any ‘integrated’ participant (ibid.).

The blind spot of this narrative is the continued omission of corporates' influence and power, the effects of these, as well as how to mitigate against these effects. A critical look at Gauteng's *20-Year Food Security Plan* released in 2011, as reported by Ledger (2016a:97), reflects the problematic framing of the food insecurity conundrum. The opening statement of the document is a perfect illustration of the current bias: it posits that "*food insecurity is caused by inadequate access to enough food (due to inadequate household productions, insufficient income and weak purchasing power) to meet individual dietary requirements*". The solution therefore is self-evident: produce more and increase people's income. While four of the six pillars (solutions) in the plan have a productionist inclination, none considered the price of food as a major factor contributing to weak purchasing power. Considering that most South Africans access the bulk of their food from the retail sector, Ledger (2016a) highlighted the high profit margins accruing to retailers owing to the rising difference between farm gate and retail prices of food and was also critical of the absence of engagement and public debate around such issues. Big food corporates and their activities, she argues, are largely absent from public scrutiny, with probably the exception of some food safety and labelling legislations which, by the way, are the responsibility of other departments with limited linkages to the Directorate of Food Security within DAFF.

c. Food corporates know... and must be supported

As with Fuchs and Kalfagianni's argument that food corporates have emerged as custodians and guardians of consumer interest (2010), this is also increasingly evident in South Africa as these actors have positioned themselves as 'educators', knowing what the issues are, what consumers want and should be doing, and offering products which purportedly address these needs. For instance, Mialon et al. (2020) report that, in May 2018, Nestlé launched the *Nestlé for Healthier Kids Initiative* in the premises of the DBE, with both actors organising several events to educate children on healthy eating. These authors further noted that many of the corporates' initiatives in schools were branded thus shaping children's preferences. The Sugar Association of South Africa (SASA) has also developed a *You & Sugar* website which claims to offer science-based facts to guide and equip people to make informed decisions (Mialon et al., 2020). Coca-Cola's Beverage Institute for Health and Wellness in Southern Africa prides itself to be a resource for health professionals on the science of beverages, hydration and active living, and somewhat argues that "*all calories are equal so therefore it doesn't matter what food you eat; it is only the amount that matters*" (Greenberg, 2017a: 485). That type of message weights on consumers' opinion and preferences, even if a counterargument exists showing that refined sugar is calorie-dense and offers little nutrients relative to some other foods (Greenberg, 2017a).

This knowledgeable status of big food businesses is consolidated through packaging and advertisements that are used to appeal to consumers, assuring them of nutritional benefits. For instance, Unilever's Rama Margarine comes with the argument that it is fortified with beneficial vitamins and highly nutritious. Similarly, Tiger Brands' Albany Bread and Nestlé's Maggi Noodle are, according to their advertisements, rich in vitamins and fibre (Igunmbor et al., 2012).

One of the strategies employed by food corporations is to emphasise their role in the economy and how curtailing and / or regulating some of their activities, as well as introducing some taxes, would lead to loss of jobs and livelihoods. For instance, SASA argued when the sugar tax was discussed that such tax would shrink the sugar industry and lead to job losses (Mialon et al., 2020).

In another vein, there appears to be a mutually reinforcing relationship between problem framing and data generation within the food system. The ways in which the issue of food security is framed have had an effect on the kinds of data being generated and how these are disaggregated. Conversely, these data have shaped interpretations as well as the policy and programmatic response of the government (Battersby, 2019a). The very limited formal governance of the food system, particularly the lack of clear formal mandates for management or interventions, has negatively affected the generation of data on components of the food system and has left food corporates with the prerogative. The previous monitoring and regulation of food flows by the government has been relegated following the dissolution of marketing boards at the onset of liberalisation. Limited data is accessible and today the narrow capacity of the state to monitor is concentrated on the informal sector and justified by the necessary attention to food safety standards in the perceived riskier informal sector. Yet, the dramatic 2017-18 listeria outbreak has laid bare the need to concentrate food safety efforts on the big players too (Hunter-Adams et al., 2018).¹⁷ The increasing consolidation and concentration within the food system has resulted in a situation whereby significant data are held by food corporates who are mostly unwilling to share them. The effect therefore is that traceability within the food system has become increasingly murky (Battersby, 2019a).

d. Food corporates' co-optation strategies

It can be argued also that food corporations have developed a co-optation strategy to prevent certain forms of resistance and maintain the status quo in framing. In other words, there is an inconspicuous ploy by food corporations to co-opt institutions and entities which hitherto may want to explore alternatives. This is evident in their CSER strategies and their public-private partnerships, and reflected in their sponsorship agenda, as well as their nutrition, health and wellness initiatives.

While the state plays a leading role in regulating basic food nutrition, it relies on the advice of scientific advisors many of whom are located in, or affiliated with food corporations (Greenberg, 2017a; Mialon et al., 2020). Indeed, there exists several alliances between major food companies and government departments and agencies with the objective of improving the health of South African populace through nutrition education. A case in point is the comment of the Minister of

¹⁷ South Africa experienced the largest ever recorded outbreak of listeria (*Listeria monocytogenes*). 1 049 confirmed cases and 209 deaths were recorded.

Education who noted that the collaboration is a gold standard in partnership between the public and private sectors — a statement made in April 2019 during the launch of a new nutrition centre where the DBE collaborates with Tiger Brands (Mialon et al., 2020). Food corporations also widely provide support (especially financial) to associations, CSOs and researchers. The Association for Dietetics in South Africa (ADSA) and the Nutrition Society of South Africa (NSSA), which influence public policy, have strong ties and receive significant funding from food corporations¹⁸ (Greenberg, 2017a; Mialon et al., 2020). Tiger Brands was also a sponsor of the Heart and Stroke Foundation of South Africa; the Consumer Goods Council of South Africa (CGCSA) was an official partner of the National Nutrition Week; and Nestlé and SASA were sponsors of the Continuing Nutrition Education (CNE) Programme for Dietitians and Nutritionists in 2019 (Mialon et al., 2020).

Certainly, it will be difficult on the part of such associations or even CSOs with significant funding from the food corporates to maintain scientific neutrality and / or put forward notions that do not align with the interests, operations or activities of their sponsors. The foregoing has indeed gone on to legitimise food corporations as global nutrition, health and agri-food experts. Validating this role further is the fact that they have now assumed responsibility as custodians of standards for both healthy foods through their health and wellness initiatives, and agricultural advancement by virtue of them replacing, for the most part, the public sector in crop research and development (Ledger, 2016b; Greenberg, 2017).

Not only does food corporations' co-optation strategy have the objective of preventing or resisting the exploration of alternatives which could undermine their hegemonic position, currently they are also succeeding in co-opting some emerging alternatives and as such positioning themselves as progressive actors in the food space.

A major example is the capture of the market for organic food products and the introduction of so-called premium specialty foods. These range of products are part of 'alternative food' promoted by networks which emerged as a social movement critique of the growing disconnect between consumers and how food is produced (Haysom, 2015; Pereira and Drimie, 2016). Indeed, big food retail outlets are responsible for 90% of organic sales with farmers' markets, health shops and box schemes accounting for the remaining 10% (Biénabe et al., 2011). The dominant purchase outlets for organic food include Woolworths and Pick n Pay. Based on the reviewed literature, as at 2011, Woolworths' range of organic products was over 300 while organic sales for Pick n Pay grew by 100% between 2007 and 2008 (Biénabe et al., 2011). The case of the Karoo lamb illustrates how food corporates use their strategy to influence consumer preferences towards organic food products. Biénabe et al. argue that despite a somewhat low consumer interest nationwide, retailers have worked aggressively to revive demand for the product by *“developing both tailor-made*

18 Among the main sponsors of ADSA are Tiger Brands (Gold sponsor) and Unilever and Pick n Pay (Silver sponsors).

certification schemes and proactive marketing strategies based on the romanticism and wholesomeness associated with the Karoo region” (Biénabe et al., 2011:48).

General conclusion

At the end of this long journey into 27 years of literature on food system governance in South Africa, what are the results of the investigation of the food insecurity paradox at play in the country? A country which is nationally food secure with sufficient food available and a capacity to import, with a deep state resulting in a wealth of institutions and targeted food policies, with a strong research system and developed social welfare programmes, but where under- and over-nutrition persist with major consequences for the people and the economy.

Very early in this research, the discrepancy between developed and sophisticated food and nutrition security strategies and the sobering outcomes in terms of food and nutrition indicators appeared as a central question to be answered. The massive research undertakings on food and nutrition security, the diversity of analyses and policy recommendations, and the existing contradictory views and observations justified the choice of engaging in a systematic literature review. The objectives were to critically investigate the existing analyses of the food system, to identify and describe the characteristics of food system governance — a common issue in the literature — to ascertain the main governance challenges and their consequences on food system outcomes and, finally, to identify persistent knowledge gaps.

The visible part: the central role of the state and the challenges of food system governance

The systematic review has given the opportunity to take stock of the main existing policies, directly related to or indirectly impacting the food system, and to better understand the main characteristics of the key actors involved in its governance. The review has highlighted the central role of the state and its different levels of government, revealing the institutional thickness of policy production and public management. It has revealed the diversity of the private sector characterised by major asymmetries, with a core group of actors in farming, processing and retail being *de facto* in a situation of domination over a multitude of other stakeholders — small farmers (from subsistence to commercial) and informal traders. It has demonstrated the diversity and fragility of the civil society organisations who are significant contributors in the food system but with limited impact on its governance.

This preliminary overview of policies and actors revealed a major governance pattern where the state has a central position characterising a monocentric type of governance, even if the other actors can contribute. The state designs strategies and policies, produces legislation and regulations, decides budgets and implements programmes. The national government has the main role, with a key position taken by the ministry in charge of agriculture; provinces are mainly in a position of implementing national policies with limited attempts to develop provincial food security strategies; municipalities do not have any specific mandate related to food issues and lack resources to engage in local initiatives, with the exception of some metros.

The systematic review then led to a better understanding of the reasons explaining the poor food system outcomes characterising the food insecurity paradox. From the wealth of reviewed literature, it appears that the diagnosis exists; it has been made by many authors adopting different perspectives but with a converging identification of a series of recurring issues, which all are challenges to improved food system governance.

Among the main governance challenges in the South African food system is first a framing problem. Even if food security is recognised as a cross-sectoral issue, the key position of the ministry in charge of agriculture results in a priority given to food production and food supply. Due to the importance of sectorial growth in terms of national growth, employment, trade and fiscal revenues, this positioning is the outcome of an implicit coalition between agriculture and core ministries like economy and finance and trade. It results *de facto* in giving other critical ministries for food and nutrition security, like health or social development, a ‘second seat’. The “health coalition” is definitely weaker and this situation is clearly reflected in the budget of the last NFNSP of 2017. Other coalitions framed around food sovereignty and calls for social justice will possibly emerge in the future, but they remain incipient.

Another critical governance challenge identified by the literature is the importance of policy fragmentation — a consequence of the multiplicity and thickness of existing initiatives and programmes, aggravated by the segmentation of governmental action between ministries, including competition about budgets. It results in siloisation and, *in fine*, a problem of policy coherence. These issues are aggravated by weak coordination mechanisms between departments, with sometimes limited institutional capacity, and a partial and inadequate stakeholder engagement, due to a narrow approach based on a ‘tick-the-box’ type of participation. It definitely prevents alternative views which could help to better adapt the policy objectives.

In addition to a shared diagnosis of what are the main problems, the reviewed literature also shows that many solutions have already been identified and proposed. Among these solutions are the need for a legislative framework, necessary to actualise existing rights and particularly the right to food enshrined in the Constitution. This would make the government not only responsible of implementing adequate policies but also accountable of their outcomes with regard to food and nutrition security and the sustainability of the food system. The improvement of stakeholders’ engagement is the other major proposal. It is critical to get a better identification of problems on the ground, to address the effective situation of the most marginalised, and to identify dialogue-based solutions.

The strengthening of institutions is another identified area of progress. It is not only about capacity within the different departments, but rather about the adequate coordination mechanisms which are necessary to provide a much-needed flexibility to identify the core problems and adapt to an evolving context. This proposal has also led to the suggestion to establish a boundary-spanning

authority or agency (similar to the DPME in the Presidency) to be in charge of food and nutrition security, or the food system in general. Finally, an improved food system governance at the local level appears as a key answer for adequate diagnoses and well-targeted interventions. It implies a clear mandate for local governments which must be supported by adequate capacity support in terms of resources.

All these proposed solutions converge on the necessary shift towards a new approach of food system governance. The monocentric approach under state management has clearly showed its limits and a progressive move towards toward a polycentric, adaptive, and collaborative governance is the necessary step forward.

At that stage of the investigation of the food insecurity paradox, the core question of what explains the paradox itself was still to be explored. Why so little has changed to improve the outcomes despite a clear and detailed diagnosis and proposed solutions for possible improvement? Why does governance remain so inefficient?

The elusive part: the growing role of private food system governance and the shaping of the food environment

This continuing questioning led the authors to look at some critical characteristics of the post-apartheid South African political economy, where unequal access to land and markets is a strong reminder of the history of dispossession of the black majority. A close look at the land reform debate reveals the state of power between key players with an official willingness for change and the nearly status quo. Attention was also paid to the agri-food sector deregulation which was decided by the state. It prevented solutions to existing inequalities and paved the way for the growing power of private interests.

The reviewed literature provides a wealth of evidence on the rising economic power of the private sector in the agri-food system. The evolution over the last three decades is a spectacular illustration of how market power has developed, based on growing economic concentration in production, processing and retail, consolidated by opportunistic behaviours of major corporate companies. In addition to strengthening their market shares, they were able to take full benefit of their corporate environmental and social responsibility initiatives to better position themselves for influencing the food policy space. This process has resulted in further exclusion of small producers and informal traders, both submitted to the oligopolistic position of big retail companies. It also resulted in a growing financialisation of the agri-food sector with a rising role taken by asset managers, as such increasing dramatically the asymmetry between actors.

Looking simultaneously at the rise of private economic power in the food system, the existing diagnosis of governance problems, and the lack of effective change towards an improved

governance despite possible solutions, the discussion of the abdication of the state established itself as evidence. There is a lack of willingness of the state for change and to engage in effective governance improvements — a critical issue which has been clearly stated by many scholars.

Therefore, contrary to the first overview which was highlighting the central role of the state in the governance of the food system, these results coming out of the review offer a new perspective where what is at play is the staggering development of private food system governance in South Africa.

This private governance expresses itself in the capacity of the corporate sector to influence prices and pricing, to impose its own food standards and to progressively marginalise the other actors in the physical environment through its major influence in urban spatial planning. Evident is the development of a reinforcing loop between market power and private standards: while big food corporates use their power to create privately imposed standards, these standards constitute new sources of power for them to further assert control.

The rising power of corporate governance is also confirmed by its capacity to shape the food environment for producers (through new norms and standards) and consumers (through advertising, home-made dietary guidelines, sponsorship including in school activities) in a way which contributes to growing profits. It simultaneously results in a direct impact on the nutrition transition of the country with the progressive dominance of industrialised food. Finally, private governance is confirmed by the capacity of big companies to influence the framing of the problems and the design of solutions, and to divert attention from the structural issues which are related to rooted and rising inequalities. Their co-optation strategies are decisive in positioning themselves as indispensable partners of policy interventions.

This situation where private interests are taking over collective interest highlights the major contradiction between state abdication and the objectives enshrined in the Constitution, which gives every South African the right to food and every South African child the right to adequate nutrition. This contradiction is also evident with the objectives of the NDP which targets the eradication of poverty and the reduction of inequalities by 2030.

The need for further research and perspectives for an improved food democracy

Addressing this conundrum opens new perspectives and calls for further research investment into the political economy of South Africa (and the political economy of the agri-food sector in particular), with the critical question of what the South African state is in 2021. The question of the nature of the state is a central question in the field of political economy. There is no positive and absolute definition of the state due to its multidimensional complexity and as such “*the state is not a it*” (Kitching, 1985: 122). The state is not a neutral shapeless thing. The state is at the

crossing of multiple influences and is the expression of a balance of power between contradictory interests. Therefore, a critical interrogation about its effective role is important. Does it act as a mediator of differing interests that are at play in the food system? Does it decide trade-offs based on political priorities which are in themselves contingent on its own nature?

To progress, it is important to continue the research initiated by pioneering works discussed in the review, and to investigate further the characteristics of the existing embedded interests in the agri-food system. It is much needed to understand in detail corporate share ownership and how different corporations are bound together through cross-participation, resulting in an ‘agri-food complex’ rooted into national capitalism in connection with global capitalism.

It is necessary to investigate who are the corporate businesses’ physical shareholders — or those of the financial institutions which are controlling them — and to identify if they are holding political positions in the state system. Such connections could reveal situations of straddling between private and public spheres, as such giving possible keys of understanding of current food system governance and state abdication. This new knowledge is necessary for an informed public debate, an improved democracy, and therefore a better food democracy.

In addition to the question of the state, research on consumer awareness of the ills of the food system and its governance, is lacking. How the level of consumer awareness has impacted upon “resistance from below” (or the lack of it) is therefore shrouded in uncertainty. What is obvious however, is that people resistance within the food system is insignificant compared to what is witnessed within poverty and employment debates.

The foregoing connects with a major avenue for the improvement of food system governance which relates to civil society engagement and a more inclusive stakeholder participation — a theme raised in many literature pieces in the review, as already mentioned. The idea of *food democracy* which has the potential to contribute to offsetting the limitations of food system actors, while curbing their excesses given its focus on representative democracy and the fostering of necessary connections to activate citizen’s demand for change should be given due consideration. More engagement can be reached through an institutionalisation of participation. As such dialogue platforms like food councils, which are under discussion, can be an option under the condition that they are not top-down driven but characterised by inclusiveness, transparency and mutual accountability. Equally important is the necessary support to CSOs and their members in terms of training and facilitated access to information which are prerequisites for their effective engagement.

The need for an improved civil society engagement connects with the importance of adopting a place-based approach to food system governance — another theme coming out of the review — because the local level offers the grain texture facilitating stakeholder engagement: people live in

places, and this is where a common vision of a desirable future can be discussed, where local challenges can be identified, and solutions debated.

The place-based approach is also the opportunity to reconnect with the other dimensions of the food system which are missing in the current South African food policy framework. They are related to sustainability and natural resources management, local economic development, employment and incomes, which are so critical for socio-economic progress, inequality reduction, and a better territorial balance.

This has to do with the development strategy of the country and the critical need to address major challenges related to inequalities and environmental and socioeconomic sustainability: What type of growth is to be prioritised in the new international context and under the constraints posed by climate change?

Here, the option of supporting the development of more localised food systems could be a part of the answer, a way to revitalise the South African territory, and to mitigate the growing risks related to an unsustainable and continuing trend toward 'metropolisation'. All these interconnected issues are open areas for further research, for addressing the recurring food insecurity paradox and food system governance issues, and for an effective contribution of the food economy to the sustainable socioeconomic progress of the South African nation.

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¹⁹ References highlighted in grey were not identified through the systematic review process. See section 2.3. for further comments.

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Annexes

Annex 1

Search query for systematic review on food system governance in South Africa

Search strategy

	Concept 1: Food system and outcomes	Concept 2: Governance	Concept 3 Location	Others
Keywords	Food system, food security, nutrition security	Governance, administration, policy	South Africa	Published between 1994 and 2020; must be articles, books, book chapters or proceeding papers
Search terms	food *security, food system*, nutrition* security	(WITH/ NEAR) *governance*, administration*, *policy*	AND South Africa AND	1994-2020; articles, books, book chapters or proceeding papers

Search query for Scopus

#1 (TITLE-ABS-KEY ("food *security") AND TITLE-ABS-KEY ("South Africa"))

#2 TITLE-ABS-KEY (("food
*security" W/10 (*governance* OR administration* OR *policy*)) AND "South
Africa")

#3 (TITLE-ABS-KEY ("food system*") AND TITLE-ABS-KEY ("South Africa"))

#4 (TITLE-ABS-KEY ("food policy*") AND TITLE-ABS-KEY ("South Africa"))

#5 TITLE-ABS-KEY ("food
system*" W/10 (*governance* OR administration* OR *policy*)) AND TITLE-ABS-
KEY ("South Africa"))

#6 TITLE-ABS-KEY ((("nutrition
*security" W/10 (*governance* OR administration* OR *policy*)) AND "South
Africa"))

#7 TITLE-ABS-
KEY ((("nutrition" W/10 (*governance* OR administration* OR *policy*)) AND "South
Africa"))

#8 TITLE-ABS-KEY ((("nutrition policy*") AND ("South Africa")))

#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8

(((TITLE-ABS-KEY ("food *security") AND TITLE-ABS-KEY ("South Africa"))) OR (TITLE-ABS-KEY (("food *security" W/10 (*governance* OR administration* OR *policy*)) AND "South Africa")) OR ((TITLE-ABS-KEY ("food system*") AND TITLE-ABS-KEY ("South Africa"))) OR ((TITLE-ABS-KEY ("food policy*") AND TITLE-ABS-KEY ("South Africa"))) OR ((TITLE-ABS-KEY ("food system*" W/10 (*governance* OR administration* OR *policy*)) AND TITLE-ABS-KEY ("South Africa"))) OR (TITLE-ABS-KEY ((("nutrition *security" W/10 (*governance* OR administration* OR *policy*)) AND "South Africa"))) OR (TITLE-ABS-KEY ((("nutrition" W/10 (*governance* OR administration* OR *policy*)) AND "South Africa"))) OR (TITLE-ABS-KEY ((("nutrition policy*") AND ("South Africa"))))) AND (EXCLUDE (PUBYEAR , 1984)) AND (LIMIT-TO (PUBYEAR , 2020) OR (LIMIT-TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2018) OR LIMIT-TO (PUBYEAR , 2017) OR LIMIT-TO (PUBYEAR , 2016) OR LIMIT-TO (PUBYEAR , 2015) OR LIMIT-TO (PUBYEAR , 2014) OR LIMIT-TO (PUBYEAR , 2013) OR LIMIT-TO (PUBYEAR , 2012) OR LIMIT-TO (PUBYEAR , 2011) OR LIMIT-TO (PUBYEAR , 2010) OR LIMIT-TO (PUBYEAR , 2009) OR LIMIT-TO (PUBYEAR , 2008) OR LIMIT-TO (PUBYEAR , 2007) OR LIMIT-TO (PUBYEAR , 2006) OR LIMIT-TO (PUBYEAR , 2005) OR LIMIT-TO (PUBYEAR , 2004) OR LIMIT-TO (PUBYEAR , 2003) OR LIMIT-TO (PUBYEAR , 2002) OR LIMIT-TO (PUBYEAR , 2001) OR LIMIT-TO (PUBYEAR , 2000) OR LIMIT-TO (PUBYEAR , 1999) OR LIMIT-TO (PUBYEAR , 1998) OR LIMIT-TO (PUBYEAR , 1997) OR LIMIT-TO (PUBYEAR , 1996) OR LIMIT-TO (PUBYEAR , 1994)) AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE , "re") OR LIMIT-TO (DOCTYPE , "cp") OR LIMIT-TO (DOCTYPE , "ch") OR LIMIT-TO (DOCTYPE , "bk"))

Scopus search performed on 2 July 2020.

Search query for Web of Science

#1 ("food *security" NEAR/10 (*governance* OR administration* OR *policy*) AND "South Africa")

#2 ("food *security" AND "South Africa")

#3 ("food system*" AND "South Africa")

#4 ("food policy" AND "South Africa")

#5 (("nutrition *security" NEAR/10 (*governance* OR administration* OR *policy*) AND "South Africa"))

#6 ((("nutrition policy*") AND ("South Africa")))

(#6 OR #5 OR #4 OR #3 OR #2 OR

#1) **AND LANGUAGE:** (English) **AND DOCUMENT TYPES:** (Article OR Book OR Book Chapter OR Proceedings Paper)

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI
Timespan=1996-2020

Web of Science search performed on 3 July 2020.

Search word for Google

“food system governance in South Africa”

Google search performed on 18 July 2020.

Annex 2

Most relevant documents vis-à-vis selected topics

S/N	Topic	Main references²⁰
1.	Trade liberalisation (n=30)	Thow et al. (2015); Otero et al. (2018); Greenberg (2013); Tsheola (2014); Gibbon (2003); Greenberg (2015); Kirsten (2015)
2.	Deregulation (n=23)	Traub and Jayne (2008); Tsheola (2014); Bernstein (1996); de Wet and Liebenberg (2018); Ledger (2016a); Greenberg (2013); Pereira (2014); Battersby et al. (2016); Greenberg (2017); Hall and Cousins (2018); Ledger (2016)
3.	Accumulation (n=14)	Hall and Cousins (2018); Cousins et al. (2018); Ledger (2016a); Greenberg (2017); Pereira (2014); Bernstein (1996)
4.	Financialisation (n=7)	Greenberg (2017); Competition Commission (2019); Hall and Cousins (2018); Greenberg (2015); Haggblade et al. (2015); Kirsten (2015)
5.	Food prices and pricing (n=48)	Van Wyk and Dlamini (2018); Wakeford and Swilling (2014); Rangasamy and Nel (2014); Ledger (2016a); Mkhawani et al. (2016); Pereira (2014); Kirsten (2015); Jacobs (2011); Mkhabela (2013); Schonfeldt et al. (2010); Gumede (2011)
6.	Corporate power (n=26)	Competition Commission (2009); Ledger (2016b); Ledger (2016a); Greenberg (2017); Gibbon (2003); Battersby (2017); Hall and Cousins (2018); Bianabe et al. (2011); Pereira (2013); Greenberg (2015); Battersby (2019); Mialon et al. (2020)
7.	Market concentration (n=31)	Greenberg (2017); Pereira (2014); Ledger (2016a); Igumbor et al. (2012); Bernstein (1996); Traub and Jayne (2008); Ledger (2016); Ramabulana (2011); Pereira et al. (2013); Haysom et al. (2017); Competition Commission (2019)
8.	Supermarketisation (n=33)	Peyton et al. (2015); Battersby (2017); Battersby and Peyton (2016); D'haese and Huylenbroeck (2005); Pereira (2014); Battersby et al. (2016); Tsheola (2014); Pereira (2013); Ledger (2016a); SACN (2015); Libman et al. (2015); Ledger (2016b); Caesar and Crush (2016); Battersby (2019); Crush and Caesar (2014); Competition Commission (2019)

20 References displayed are those with the highest number of quotations in relation to the topic.

S/N	Topic	Main references²⁰
9.	Vertical integration (n=10)	Pereira (2014); Ledger (2016b); SAHRC (2017); Peterson et al. (2019); Ledger (2016a)
10.	Nutrition and nutrition transition (n=35)	Otero et al. (2018); Kroll et al. (2019); Thow et al. (2015); Pereira (2014); McLachlan and Landman (2013); Igumbor et al. (2012); Misselhorn and Hendriks (2017); Battersby (2017); McLachlan and Thorne (2009); Greenberg (2017); Schonfeldt and Gibson (2009)
11.	Consumer Food Environment (n=14)	Kroll et al. (2019); Igumbor et al. (2012); Greenberg (2017); Battersby (2019); Thow et al. (2015); Libman et al. (2015); Schonfeldt et al. (2018); Pereira (2014)
12.	Formal vs informal food sector	Battersby (2016); Peyton et al. (2015); Peterson et al. (2019); Battersby (2011); Haysom et al. (2017); Competition Commission (2019); Tawodzera (2020); Wegerif (2020); Marumo and Mabuza (2018); Bowden et al (2018); Battersby (2012); Pereira (2014)
13.	Competition law/policy (n=15)	Competition Commision (2019); Pereira (2014); Ledger (2016); Jacobs (2011); Hamann et al. (2011); Hall and Cousins (2018)
14..	Food safety (n=13)	Boatema et al. (2019); Schonfeldt et al. (2018); Hunter-Adams et al. (2018); Ledger (2016a)
15.	Food-related policies (n=48)	Makhura (1996); Boatema et al. (2018); Gildenhuis (2016); Thow et al. (2018); Schonfeldt et al. (2018); Kirsten (2015); Ledger (2016); Van Rooyen (1996); Labadarios (2005); Hendriks and Olivier (2015); Battersby et al. (2016); SACN (2015); Candel (2018); Koch (2011); Drimie and Ruysenaar (2010)
16.	Policies with effect on food security (n=28)	Gildenhuis (2016); Hendriks and Olivier (2015); Ledger (2016a); Gibbon (2003); Battersby (2017); Hall and Cousins (2018); Bianabe et al. (2011); Pereira (2013); Greenberg (2015); Battersby (2019)
17.	Governance arrangement (n=50)	Candel (2014); Pereira and Ruysenaar (2012); Pereira (2013); Hamann et al. (2011); Warshawsky (2011); Boatema et al. (2019); Pereira et al. (2013); Koch (2011); Ledger (2016b); Tsheola (2014); SACN (2015); Termeer et al. (2018); Pereira and Drimie (2016); Hunter-Adams et al. (2018); Haysom (2015); Pritchard et al. (2016); Ledger (2016a); Pereira (2014); Drimie and Ruysenaar (2010); Battersby (2017); Candel (2018); Battersby et al. (2016);

S/N	Topic	Main references ²⁰
		Drimie et al. (2018); Haysom (2015); Adelle et al. (2020); Mialon et al. (2020)