Putting Food onto the Urban Agenda:

How the City of Cape Town can increase access to sustainable and healthy diets through urban food governance.

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Plagiarism Declaration

I, Isabella Trapani, hereby declare that I know the meaning of plagiarism and that the dissertation that I hereby submit is all my own work.

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The research findings and recommendations do not represent an official view of the City of Cape Town.

Abstract

Rapid population growth, rising urbanisation, globalisation and technological progress have fundamentally changed how we produce and consume food. The majority of urban diets are now dominated by low intakes of fruit and vegetables and high intakes of highly processed, energy-dense and nutritionally poor foods. In Cape Town, South Africa, the impacts of this nutritional transition manifest themselves not only with hunger and undernutrition but also with overnutrition. Due to structural barriers in cities limiting access to healthy food, the urban poor are disproportionally affected by nutrition-related diseases. In addition to the impacts on human health, modern dietary patterns and food production significantly contribute to climate change, land-use change, deforestation and biodiversity loss, all of which threaten food and nutrition security. Considering these severe impacts on planetary health, urgent action enabling access to sustainable and healthy diets becomes imperative on both global and local scales. Local governments are at the forefront of the urban food challenge and can intervene through urban food governance; however, in South Africa, the food mandate is held by the national and provincial governments. This study reveals the strategic role the City of Cape Town can play when leveraging its constitutional powers, especially through mainstreaming food considerations into all municipal policies and processes, sustainable and healthy public procurement, regulating the private sector and supporting informal trade, encouraging sustainable local small-scale production of healthy food and the establishment of food gardens, expanding the local market structure, as well as through providing nutrition education. This research finds that despite the absence of an urban food mandate, there is great momentum for food to become a priority in the City of Cape Town. Remaining institutional challenges such as the lack of understanding of food security and the food system, political will, funding, capacity, and policy coherence must be overcome to tackle the urban food challenge. Multi-stakeholder collaboration was identified as a key element of effective urban food governance and should therefore be strengthened.

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List of Abbreviations

CoCT ..... City of Cape Town

CoP ..... Community of Practice

COVID-19 ..... Coronavirus Disease 2019

CSOs ..... Civil society organisations

DAFF ..... Department of Agriculture, Forestry and Fisheries

DoH ..... Department of Health

FAO ..... Food and Agriculture Organization of the United Nations

FPC ..... Food Policy Council

GHG ..... Greenhouse gas

Global Panel ..... Global Panel on Agriculture and Food Systems for Nutrition

HLPE ..... High Level Panel of Experts on Food Security and Nutrition

IFSS ..... Integrated Food Security Strategy

IPCC ..... Intergovernmental Panel on Climate Change

MUFPP ..... Milan Urban Food Policy Pact

NCDs ..... Non-communicable diseases

NDP ..... National Development Plan

NPFNS ..... National Policy on Food and Nutrition Security

RSA ..... Republic of South Africa

SAFL ..... Southern African Food Lab

SSIs ..... Semi-structured interviews

TEEB ..... The Economics of Ecosystems and Biodiversity

WCG ..... Western Cape Government

WHO ..... World Health Organization

WRI ..... World Resources Institute

WWF ..... World Wide Fund For Nature

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1. Introduction

Rapid population growth, rising urbanisation, globalisation and technological progress have fundamentally changed how we produce and consume food (Popkin, 1993). The majority of urban diets are now dominated by low intakes of fruit and vegetables and high intakes of animal-based products as well as highly processed and non-nutritious foods that are high in sugar, unhealthy fats and salt (Popkin, 2015). This shift, also referred to as nutrition transition, goes along with a rising occurrence of non-communicable diseases (NCDs) like type II diabetes, coronary heart disease, cancer and stroke (Popkin, 1993; Tilman & Clark, 2014). Especially in contexts of high inequality and poverty, the triple burden of malnutrition leaves "many people hungry, heavy, and sick" (Joubert, Battersby & Watson, 2018:72). In addition to the impacts on human health, the nutrition transition significantly contributes to climate change, land-use change, deforestation and biodiversity loss (Intergovernmental Panel on Climate Change [IPCC], 2019; The Economics of Ecosystems and Biodiversity [TEEB], 2018; Tirado von der Pahlen, 2017). In turn, the changing climate threatens food and nutrition security through rising temperatures, sea level rise, and increasing occurrence and severity of extreme weather events (TEEB, 2018). As a result, the current global food system threatens both people and the planet (Willet et al., 2019).

Considering how severely the nutrition transition impacts on planetary health, urgent action becomes imperative on both global and local scales. Improving access to healthy and nutritious foods is crucial in achieving international development goals such as the United Nations Agenda 2030 and the Paris Agreement (Willet et al., 2019). Indeed, food is increasingly seen as "the single strongest lever to optimise human health and environmental sustainability on Earth" (EAT-Lancet Commission, 2019:5).

As diet-related health issues are mostly experienced in urban areas due to particular systemic barriers to healthy and sustainable diets, local governments have the power to tackle these issues more directly and can thereby act as drivers of sustainable development (Conaré, 2019). Therefore, cities have great potential to shape dietary patterns by enabling access to healthy and sustainable food. This study is set in Cape Town, South Africa, where the impacts of climate change and the triple burden of malnutrition are already experienced (Ziervogel & Frayne, 2011). It investigates how the City of Cape Town can increase access to sustainable and healthy diets through urban food governance.

1.1 Background of the study: Food insecurity and climate change in Cape Town

Cape Town is one of the country's legislative capitals, located in the Western Cape province (Figure 1). The legacy of Apartheid has left its population with high economic disparity (Battersby et al., 2014). Complex challenges such as unemployment, poverty and food security present major challenges for a large number of citizens (City of Cape Town [CoCT], 2019).

Figure 1. Cape Town municipal government area (CoCT, 2019)

Although South Africa is a surplus food producer, its national food security has not been translated to the household level: Around 80% of households in Cape Town's low-income communities experience moderate to severe food insecurity, while a further 5% are mildly food insecure (Battersby, 2011). Moreover, due to a variety of systemic barriers, ranging from income poverty and food environments to infrastructure, housing and transport, there is little flexibility to choose healthier foods (Joubert, Battersby & Watson, 2018). As a result, levels of food and nutrition insecurity in the city remain high and non-communicable diseases are rising (Battersby et al., 2014). The reported deaths attributed to NCD's in the Western Cape are considerably higher than the national count (61% vs. 38.9%) (Western Cape Government [WCG], 2016:1).

The impacts of climate change in Cape Town are already evident with increasing mean annual temperatures, more frequent and intense heatwaves, decreasing annual average rainfall, increasing average wind speed and strength, and increasing intensity and frequency of storms and heavy rainfall events (CoCT, 2019:54). Sea level rise threatens many of Cape Town's inhabitants living in coastal areas. The 2015-2018 drought demonstrated the urgency to prepare for and mitigate future environmental shocks, as they can exacerbate existing challenges like poverty and food insecurity, especially in vulnerable communities (CoCT, 2019).

While changing environmental conditions will severely impact local food production, paradoxically, the wider food system is a significant contributor to climate change, environmental pollution and decreasing biodiversity (Tirado von der Pahlen, 2017). Thus, a transition towards a sustainable and healthy food system is imperative to ensure current and future food and nutrition security.

1.2 Problem statement: Limited urban food governance in Cape Town

Local governments are in a strategic position to intervene with the nutrition transition (Food and Agriculture Organization of the United Nations [FAO], 2018). Indeed, urban food policies have the potential to address a wide spectrum of challenges within cities like access to food, nutrition-related diseases, climate change and waste, and unemployment (Hawkes & Halliday, 2017). Especially in a context of high inequality and poverty like in Cape Town, addressing structural barriers to sustainable and healthy diets for low-income residents becomes imperative. Integrative approaches and mainstreaming food considerations into policies throughout all sectors are especially effective, as food system challenges are often unintentionally impacted or even induced by current policies (Battersby, 2012).

As of now, the City of Cape Town does not have a consolidated food system strategy and does not take on a wider food systems perspective. Existing food-related policies are isolated interventions and shaped by a focus on increasing urban food production (Battersby et al., 2014). Moreover, approaches on increasing access to food in South Africa are mainly determined by health indicators, disregarding environmental sustainability (Delport, 2019). If the environmental impacts of urban diets remain unaddressed, accelerating climate change keeps threatening future food security and thereby human health (Tilman & Clark, 2014). Limited research on South African urban food governance presents a significant barrier to effective policymaking (Smit, 2019). However, the Resilience Department in the City of Cape Town

is in the process of putting food onto the urban agenda by developing an urban food vision and strategy (CoCT, 2019).

1.3 Aims and objectives

The aim of this research is to explore how the City of Cape Town can increase access to both healthy and sustainable diets through urban food governance. This research is guided by the following sub-questions:

1) How does the City of Cape Town engage with urban food governance?
2) What role can the City of Cape Town play in increasing access to sustainable and healthy diets and shifting dietary patterns?
3) How can multi-stakeholder collaboration be strengthened for effective and inclusive urban food governance?

The findings of this thesis may be applied to improve current urban food governance in the City of Cape Town, thereby enhancing the level of sustainable food and nutrition security within the urban area.

1.4 Thesis organisation

This thesis is structured into eight chapters. First, the introduction provides the background and highlights the problem, as well as the aim and objectives of the research. Second, a review of relevant existing literature provides a theoretical foundation and places this research in the broader context. Third, the research methodology is explained, including research limitations and ethical considerations. After providing an overview of access barriers to sustainable and healthy food in Cape Town in the fourth chapter, existing national, provincial and local policies related to urban food governance are reviewed in the fifth chapter. Sixth, the results of the data obtained through the primary research are presented, before they are discussed in the seventh chapter. Finally, this work concludes by highlighting the findings of this research and providing recommendations for policy and further research.

2. Literature review

This thematic literature review explores the key concepts, perspectives and research gaps connected to the research problem. As Ziervogel and Frayne (2011) outlined, the links between food security, poverty and climate change in the context of urban development have been understudied but cannot be solved separately. Therefore, this chapter begins by making sense of the nutrition transition and its impacts on human and environmental health. Then, it explores the literature around sustainable and healthy diets, as well as the concept of food security in an urban context. Lastly, it investigates the rise of urban food governance and concludes with a synthesis of possible measures to increase access to sustainable and healthy diets. The literature in this review consists of both academic studies and publications from international organisations.

2.1 The nutrition transition

The nutrition transition is a global phenomenon conceptualised by Popkin in 1993 to describe the emerging global dietary changes, characterised by high amounts of sugar, saturated fat and refined foods as well as low amounts of fibre (Popkin, 1993:138). Often referred to as 'Western diet', intakes of highly processed foods, cheap vegetable oils and animal proteins have increased, while consumption of fruit and vegetables has decreased (Popkin, 1993, 2015). The nutrition transition is intertwined with global developments such as rural-urban migration, urbanisation, globalisation, economic growth, technological innovation for work, leisure and food processing, sedentary lifestyles as well as mass media growth and exposure to advertising (Popkin & Gordon-Larsen, 2004; Global Panel on Agriculture and Food Systems for Nutrition [Global Panel], 2017).

The rising power of big agribusiness and the expansion of supermarket developments, also referred to as 'supermarketisation', are connected to increased availability and affordability of and aspiration for foods that are highly processed, high in protein, and/or energy-dense (Popkin, 1993; Haysom, 2015; Battersby, 2017). Already in 1990, the World Health Organization (WHO) found that the food industry could indeed develop healthy and nutritious foods, but instead chooses to produce and advertise sugary, fatty and salty foods due to increased profitability (Popkin, 1993). Furthermore, urban planning and design and the increased participation of women in the economy have caused a shift away from home-grown and home-cooked foods and towards processed store-bought products (Popkin, 1998).

In comparison to industrialised countries, nutrition-related diseases in African cities are emerging more rapidly and at earlier levels of economic and social development (Vorster et al., 2011). Literature on the nutrition transition in Sub-Saharan Africa is relatively scarce (Vorster et al., 2011; Nnyepi et al., 2015). However, within the last decade, extensive research by Battersby, Joubert, Haysom, Crush, Frayne, Ziervogel, Drimie and others built a solid knowledge foundation on urban food and nutrition security in Cape Town and other secondary cities in Southern Africa.

Battersby (2017) and Haysom and Fusieni (2019) outlined the significant role of the private food sector in accelerating the nutrition transition in South Africa. In a context of energy and time poverty, ready-to-eat meals have become especially popular (Hunter-Adams, Battersby & Oni, 2018). Moreover, the demand for processed meat in South Africa has grown by 45.8% since 1994 (Ronquest-Ross et al., 2015), now representing an integral part of urban diets (Nielsen, 2020). Hunter-Adams, Battersby and Oni (2018) connect the rise in demand with heavy advertising portraying ready-to-eat meat as a cheap protein source, and with the perception of meat consumption as a symbol of economic status. Although supermarkets are increasingly frequented by poor urban dwellers due to their wide range of non-perishable products and less expensive bulk amounts, the expansion of supermarkets is driving out small shops and informal traders, which are essential to urban food security (Battersby, 2017). Research in Cape Town demonstrated that the informal market not only widens the range of procurement options, but most importantly caters to the needs of tight budgets by bulk breaking and offering flexible payment options (Battersby, 2011).

2.1.1 Health impacts

In line with Popkin's (1993) research on global urban populations, South Africa's urban food challenge manifests itself not only with hunger and undernutrition but also with overnutrition. Across the nation, 65.4% of women and 40.5% of men are overweight and 39.6% of women and 15.4% of men are obese (Global Nutrition Report, 2019:52). Current dietary trends result in a rise in chronic and degenerative diseases (Tilman & Clark, 2014; Joubert, Battersby & Watson, 2018; Popkin, 1993; TEEB, 2018). According to Willet et al. (2019:449), "unhealthy diets now pose a greater risk to morbidity and mortality than unsafe sex, alcohol, drug and tobacco use combined". Joubert, Battersby and Watson (2018) highlight that almost half of all deaths in South Africa are connected to poor nutrition and lifestyles. The urban poor are disproportionally affected by the triple burden of malnutrition,

not only due to existing barriers to healthy food consumption but also due to lower access to appropriate health care (Battersby & Haysom, 2016; TEEB, 2018).

Hunter-Adams, Battersby and Oni (2018) warn that especially the industrialised production of meat and processed meat products bear severe risks for food-borne diseases. This became evident with the largest global listeria outbreak in 2017 that was communicated by processed meat products in South Africa. However, nearly 80% of livestock production in South Africa is operated in high-density feedlots (von Bormann, 2019).

2.1.2 Environmental impacts

While the nutrition transition has already been linked to health consequences from its conceptualisation, its impact on the environment has only been discussed more widely in recent years (Tirado von der Pahlen, 2017; World Resources Institute [WRI], 2018; TEEB, 2018; Springmann et al., 2018; IPCC, 2019; FAO et al., 2020). The entire food system, including its impact on land-use change and deforestation, accounts for 57% of global greenhouse gas (GHG) emissions and the majority of biodiversity loss (TEEB, 2018).

Especially food waste, food processing and the consumption of animal products have significant environmental impacts. Oelofse and Nahman (2013) outline that one-third of all food in South Africa goes to waste. Von Bormann (2019) highlights that food processing is relatively energy and water-intensive compared to direct provision of wholegrains, fruit and vegetables. This is especially problematic in light of South Africa's water scarcity and dependence on coal-derived energy. Globally, processing and distribution account for 23% of food system GHG emissions (FAO, 2011). Godfray et al. (2018) and von Bormann (2019) found that the rise in demand for animal-based products goes along with greater water consumption, widespread land degradation, and increased pollution. Additionally, large amounts of grains and legumes are directed to concentrated feedlots (FAO, 2006b). Lastly, TEEB (2018) highlights that not only overfishing or depleting fish populations but also plastic pollution from food packaging pose significant threats to ocean health. In South Africa, around half of all marine resources have already reached their depletion capacity, while 15% are overexploited (World Wide Fund for Nature [WWF], 2011).

2.1.3 The Diet-Environment-Health Trilemma

As described above, unsustainable food production and consumption patterns have detrimental impacts on the environment and accelerate climate change, biodiversity loss and soil degradation. In turn, accelerating climate change not only threatens the availability of certain

foods due to the increasing frequency and severity of extreme weather events and natural disasters, but it also deteriorates soil quality and therefore the nutritional content of yields (Meybeck et al., 2018; Tirado von der Pahlen, 2017). Increased carbon dioxide is linked to reduced protein as well as mineral amounts, such as zinc and iron, in staple crops (Myers et al., 2017). The availability and nutrient quality of fish stocks will also be affected by rising sea temperatures and ocean acidification (Myers et al., 2017). Tilman and Clark (2014:521) call these complex interrelations the "diet-environment-health trilemma".

Meybeck et al. (2018) warn that impacts of climate change can displace communities due to water and food shortages. Moreover, Myers et al. (2017) add that rising climate change could contribute to political and economic conflict, price increases of staple foods, lower relative incomes, and reduced nutrient absorption due to emerging diseases. For these reasons, climate change might threaten food security and deteriorate health, leaving communities increasingly vulnerable, less resilient and less adaptive to climate change (Tirado von der Pahlen, 2017).

2.2 Sustainable and healthy diets

With accelerating rates of climate change, environmental degradation and diet-related public health challenges, an extensive research base emerged over the past years that link dietary patterns directly to human and environmental health (Tilman & Clark, 2014; WRI, 2018; Willet et al., 2019). Willet et al. (2019) claim that by shifting diets, local governments can leverage biodiversity protection, climate change mitigation, citizen's health, and food security. In contrast, merely focusing on sustainable food production does not account for the consumption of imported and unsustainable types of foods (Meybeck & Gitz, 2017). However, most national dietary guidelines, recommendations and studies still purely focus on outcomes for human health, without consideration of sustainability dimensions (Loken, 2020).

Based on nutrition recommendations by the WHO, the Global Burden of Disease Study, and further studies on healthy dietary patterns between 2003 and 2019, healthy diets have several characteristics: increased consumption of fruit and vegetables, legumes, nuts and whole grains, and reduced consumption of salt, free sugars and total fats as well as meat and dairy products (FAO & WHO, 2019:18). However, Macdiarmid (2013) outlines that healthy diets are not necessarily more environmentally friendly. Academics across the world have largely achieved consensus that consumption of animal products, especially meat and dairy, must

decline in order to protect planetary health (IPCC, 2019; WRI, 2018; Willet et al., 2018; Tirado von der Pahlen, 2017; Springmann, 2018). In turn, for a sustainable diet to be healthy, low-carbon foods that are highly processed and high in sugar, fat or salt, as well as water-intensive nuts and overfished species should be avoided (Tirado von der Pahlen, 2017).

According to the FAO and WHO (2019:9), sustainable and healthy diets "promote all dimensions of individuals' health and wellbeing; have low environmental pressure and impact; are accessible, affordable, safe and equitable; and are culturally acceptable." Thus, they ensure optimal development and prevent all forms of malnutrition and diet-related NCDs while supporting biodiversity and planetary health (FAO & WHO, 2019). Due to the absence of scientific targets for sustainable and healthy diets, the EAT-Lancet Commission (2019) developed universal scientific targets for healthy diets and sustainable food production. If adopted globally, their 'planetary health diet' could feed the entire population and prevent diet-related diseases while staying within safe planetary boundaries (Willet et al., 2019). The diet is centred on whole foods like fruit, vegetables, nuts, and legumes while limiting animal products and ultra-processed foods to small amounts. Weekly consumption of animal products should be limited to 301g of meat and 1750g of dairy (Willet et al., 2019). The characteristics of the diet are supported by the World Cancer Research Fund, the IPCC (2019), and the WRI (2018).

Willet et al. (2019) emphasise that the diet can be adapted to local contexts and cultures; yet, the commission acknowledges the need for higher amounts of animal products in contexts of severe malnutrition. Hirvonen et al. (2020) underline the nutritional importance of increased intakes of animal products for children and malnourished people. However, in the South African context, cheap animal products available to low-income consumers include unhealthy processed meat products, such as polony and sausages, as well as lower quality meat cuts, which do not contribute to improved nutrition (Erasmus & Hoffman, 2017). Therefore, emphasis should lie on reducing the quantity of meat consumption while emphasising the nutritional and environmental quality of animal products. Nevertheless, Hirvonen et al. (2020) criticise the limited affordability of the planetary health diet due to the high costs of fruit, vegetables and animal-sourced foods. Thus, Drewnowski (2020) recommends national and local governments create price incentives by shifting subsidies and taxes for increased affordability of healthy and sustainable foods. Moreover, Sonnino, Moragues-Faus and Maggio (2014) highlight the significance of addressing wider systemic factors influencing food choices instead of only emphasising behavioural change. The following sections

will explore the concept of urban food security and emerging approaches to urban food governance.

2.3 Food security in an urban context

When the concept of food security was born in the 1970s, the focus of interventions was mainly on overcoming food shortages and ensuring sufficient food supply at all times (Maxwell, 1999). However, in the 1980s, Amartya Sen highlighted the coexistence of hunger and sufficient availability of food, and thereby shifted attention towards food access barriers (Patel, 2009). Consequently, food security had increasingly been acknowledged and treated as a multidimensional challenge. In 1996, food security was officially defined as "physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO, 2006a). Moreover, four dimensions were established as integral to ensuring food security: food availability, access, stability and utilisation (FAO, 2006a).

However, it has been argued that these dimensions are not representative of all food security challenges (High Level Panel of Experts on Food Security and Nutrition [HLPE], 2020). Rocha (2007) and Chappell (2018) emphasised the importance of another category: agency. Agency means that individuals and communities can make their own choices about which foods to eat, how they are produced, processed and distributed (HLPE, 2020:xv). This is especially relevant in contexts of high inequality, historical marginalisation and skewed power dynamics (Peter, 2003). It is therefore important that disadvantaged groups have access to information, the right to food, and take part in inclusive political spaces allowing them to shape the food system (HLPE, 2019).

In recent years, academia became aware of another missing food security dimension: sustainability (Morgan & Sonnino, 2010; Ziervogel & Frayne, 2011; Berry et al., 2015; Lang & Barling, 2012). This dimension describes the importance of long-term environmental sustainability of both food systems and diets. Berry et al. (2015) argue that this dimension is critical to protect the natural basis of global food production. If not mitigated adequately, climate change will have devastating effects on all dimensions of food security (Firdaus et al., 2019; Ziervogel & Frayne, 2011). As human and environmental health are inextricably linked through diets, it is not only important to ensure sustainable agricultural production, but also to shift towards sustainable and healthy diets (FAO & WHO, 2018; Willet et al., 2019). However, Sonnino, Moragues-Faus and Maggio (2014) argue that current food

security approaches neglect sustainability considerations of the wider food system, especially post-production. Ziervogel and Frayne (2011) highlight that tackling food security through ecological approaches gives local governments the power to create "wealthier, healthier and less environmentally consumptive cities" (2011:6). Table 1 illustrates the updated food security dimensions.

Dimension	**Focus**
Availability	Availability of sufficient quantities and quality of food.
Access	Economic, social and physical access to appropriate and nutritious diets without compromising other basic needs.
Utilisation	Supporting nutritional well-being and satisfying physiological needs through adequate diets, clean water, sanitation, electricity and health care.
Stability	Availability of and access to adequate foods at all times despite sudden shocks, political/economic crises and seasonal variabilities.
Agency	Power of individuals and groups to make decisions regarding food choices, production, processing and distribution.
Sustainability	Ensuring present food needs without depleting resources for future generations through sustainable food system practices.

Table 1. The extended dimensions of food security (based on FAO, 2006a; Berry et al., 2015; Peter, 2003)

Despite this conceptual shift, global strategies to tackle food insecurity have placed emphasis on production in rural areas – also referred to as a 'productionist' approach (Maxwell, 1999; Battersby & Watson, 2019a; Morgan, 2015). However, rapid urbanisation, the nutrition transition and the concentrated power of the private food sector have created unique food security challenges in cities (Haysom, 2014; Battersby, 2012). Already in 1998, Ruel et al. outlined the distinct urban challenges to food and nutrition security. Since then, the topic has gained wider attention (Battersby, 2012; Morgan, 2015; Crush & Frayne, 2011). Nevertheless, contemporary approaches to poverty and food insecurity in Africa still primarily target rural agricultural production (Crush & Frayne, 2011). Likewise, existing interventions to urban food insecurity have reinforced the productionist bias by focusing on urban agriculture, which fails to address the complexity of the urban challenge (Crush & Frayne, 2011; Haysom, 2014). Moreover, food security frameworks have mainly focused on undernutrition and less on other forms of malnutrition like micronutrient deficiencies and obesity (Pingali et al., 2019). With rapid urbanisation rates transforming Sub-Saharan Africa into a predominately urban region within the next decades, the extent of the urban food insecurity challenge is ever-increasing (Crush & Frayne, 2011).

While food insecurity in the urban context has already gained wider attention in the Global North, it has not been adequately recognised in the Global South (Smit, 2019). Research by the African Food Security Urban Network (Crush & Frayne, 2010) shows that chronic food insecurity is widespread across Southern African cities, while the reality of food security in urban areas differs from the rural context. This is demonstrated by generally adequate food supplies yet high levels of food insecurity in Southern African cities (Ziervogel & Frayne, 2011). Research by Battersby, Marshak and Mngqibisa (2016), Battersby and Haysom (2018), and Joubert, Battersby and Watson (2018) highlights a range of factors specific to urban areas affecting food security and food choices of urban dwellers. These will be explained in detail in chapter four. Inextricably linked to poverty and the nutrition transition, the reality of urban food insecurity calls for a different approach, taking into account all determinants specific to the urban context (Battersby & Haysom, 2016).

2.4 The rise of urban food governance

In a progressively urban world, cities have a critical role to play in the transformation towards sustainable, healthy and equitable food systems (Debru & Brand, 2019; Morgan, 2015; Haysom, 2014). For a long time, food challenges within cities had stayed invisible due to their complex interrelations – or simply "too big to see" (Steel, 2008:ix). Historically, food was considered within a rural, agricultural context, and therefore not integrated into urban planning (Pothukuchi & Kaufman, 1999). Maxwell (1999) viewed the invisibility and the rural bias, along with limited municipal budgets, capacities and competing priorities within city governments, as the main reasons for the lack of urban food mandates.

Despite their historical absence from food systems governance, cities are increasingly realising their important role (Morgan, 2015). Patel (2009) and Morgan (2015) claim the driver of urban food governance to be civil society: The food justice movements in 2001 and the community food security concept in the USA were milestones for the rising awareness of food security and sustainable agriculture in contexts of urban poverty. Ever since, these movements have been growing and fighting against corporate food regimes in cities due to their negative social and environmental impacts (Holt-Gimenez & Shattuck, 2011). Moreover, the FAO (2018) connects the increasing engagement of local government in urban food governance with the global food crisis in 2008, which had significant health consequences and caused hunger riots. The progressive emergence of nutrition-related diseases has further helped cities realise the need for intervention (Calori, 2018).

Over the last decades, many cities across the world have developed urban food policies and governance approaches. The wide range of urban food policies can address multiple challenges, such as food insecurity, malnutrition, environmental degradation and climate change, whilst boosting local economies (Hawkes & Halliday, 2017). Many urban food policies are targeted and isolated interventions, without tackling wider systemic issues (Hodgson, 2012). In contrast, integrated strategies are more effective and can tackle multiple challenges at once (Hawkes & Halliday, 2017). Especially important is the consideration of food issues across all urban policy areas, as even non-food related policies unintentionally interfere with the urban food system (Battersby, 2012). Nevertheless, isolated policies can still pave the way for the development of an integrative approach at a later stage (Hawkes & Halliday, 2017).

Over the last decades, numerous global and regional urban food networks emerged that develop extensive databases, facilitate knowledge exchange between cities and provide practical guidelines for the development and implementation of urban food policies (Conaré, 2019). Global examples are the Milan Urban Food Policy Pact (MUFPP), and the CITYFOOD and C40 Food Systems networks, whereas regional examples include Sustainable Food Cities in the UK and the African Food Security Urban Network. In 2019, a new coalition by C40, the MUFPP and the EAT-Foundation emerged: The C40 Good Food Cities Declaration supports local governments in transitioning towards urban food systems while promoting planetary health through public food procurement, shifting diets, reducing food loss and waste, and multi-stakeholder collaboration (C40, 2019).

Despite its rising global attention, most stakeholders concerned with urban food governance are situated in the Global North (Smit, 2019). However, "the noxious interplay of poverty, hunger and climate change" is most apparent in developing regions (Joubert, 2012 in Morgan, 2015:1380). Haysom and Fusieni (2019) and Smit (2019) argue that the urban food challenge in Africa has not been adequately addressed by academia and remains largely absent from urban policy agendas. Where urban food policies do exist, interventions are mostly uncoordinated and not part of an integrated strategy (Smit, 2019). Urban food governance in African cities faces unique challenges as political spaces are often characterised by uneven power dynamics and competing interests, hindering the development of coordinated and coherent approaches (Smit, 2019; Pereira & Drimie, 2016). For example, urban planning is often used to phase out the informal food sector instead of supporting its crucial contribution to urban food security (Smit, 2019). Many scholars view collaborative approaches as key to

effective urban food governance, involving a wide range of stakeholders across government, civil society, academia and the private sector (Haysom, 2014; Pereira & Drimie, 2016; Smit, 2019). Pereira and Drimie (2016) and Smit (2019) emphasise the need for considering uneven power dynamics and competing interests in the development and implementation of holistic urban food strategies for sustainable urban food security.

2.5 A menu of solutions: Possible urban food governance measures

The previous section outlined that the complexity of the urban food challenge calls for multidisciplinary and holistic approaches. Therefore, instead of implementing isolated policies that fail to address underlying barriers to food access and utilisation, local governments should develop comprehensive and cross-cutting urban food strategies to transform the whole urban food system (Battersby & Haysom, 2016). Furthermore, local governments can mainstream sustainable food security considerations into urban policies across all sectors, taking socio-economic and environmental externalities into account (Morgan, 2015; Battersby, 2012).

There is overwhelming consensus on the need to involve all relevant municipal departments and stakeholders to effectively overcome the existing multidimensional challenges (EAT-Lancet Commission, 2019; MUFPP, 2015; Global Panel, 2017; Battersby & Haysom, 2016). City governments, international institutions, civil society, businesses and researchers can develop co-governance systems to identify barriers and opportunities, overcome institutional constraints, foster synergies, and build capacity (Halliday, 2019; Matacena, 2016; MUFPP, 2015). Food Policy Councils serve as successful examples of formal collaborative governance structures (Matacena, 2016; Purifoy, 2014).

Previous research revealed a variety of actions cities can take to increase access to and encourage consumption of sustainable and healthy food for urban dwellers. Table 2 provides an overview of interventions.

Table 2. A menu of urban food governance measures

Policy Area	Instruments
Sustainable production of healthy foods	• Promoting local small-scale production, including urban agriculture and community gardens[1,3,6,7,8] • Providing incentives for sustainable production of healthy foods by local farmers and producers[1,3] • Transitioning to smaller-scale agro-processing[7] • Revise land use planning to enable access to land for local agroecological production in urban and peri-urban areas[3,4,8]
Food loss and waste	• Limiting food losses along the food value chain[1,3,8] • Implementing education and awareness campaigns for vendors and households[1,3,8] • Developing and promoting surplus food sharing schemes[1,3] • Improving waste management by separating food waste (composting, re-using waste as energy, etc)[1] • Advancing municipal sewage treatment to reduce pollution[1] • Encouraging closed-loop systems[7]
Distribution	• Facilitating market access for local small-scale producers[3,8] • Prioritising local supply chains and shorter distribution chains[3,7] • Improving food storage, processing, transport and distribution technologies and infrastructure[3]
Retail structure	• Supporting informal food markets through access to and upgrading of infrastructure and integration into market structure[3,4,8] • Expanding and strengthening local market structure[3,6,8] • Regulating retail environment to create healthy food environments[6,8]
Responsible marketing	• Developing food labelling policies based on health and sustainability indicators[1,8] • Developing healthy and sustainable food-based dietary guidelines[3,8] • Encouraging advertisement of healthy and sustainable foods, while limiting marketing of foods harmful to planetary health[1,8] • Setting price incentives for healthy and sustainable foods and taxing unhealthy and unsustainable food and beverages[1,2]

[1] EAT-Lancet Commission (2019)

[2] Halliday et al. (2019)

[3] MUFPP (2015)

[4] Global Panel (2017)

[5] Battersby & Haysom (2016)

[6] Morgan (2015)

[7] Battersby & Hunter-Adams (2020)

[8] HLPE (2020)

Policy Area	Instruments
Public food procurement	• Sourcing healthy and sustainable food and developing planetary health menus across all public institutions, including schools and hospitals[1,3] • Regulating food options in public areas, restricting unhealthy foods[1]
Food-sensitive planning and urban design	• Mainstreaming food security into urban policies across all sectors, especially into spatial planning, housing, infrastructure, sanitation, and public transport[4]
Education	• Developing education campaigns about the importance of diets promoting human and environmental health[1,3,4,8] • Supporting participatory approaches to education and training to strengthen local action[3]
Governance	• Developing an urban food charter to enhance planning for action[4,5] • Developing a comprehensive food strategy[1] • Establishing formal multi-stakeholder mechanisms for implementation[1,3,4,5] • Interdepartmental collaboration and multi-level policy coherence[1,4,5] • Mapping local initiatives[3] • Developing and revising urban food policies and plans[3] • Developing disaster risk reduction strategies[3] • Enhancing information systems for monitoring, accountability and policy development[1,3,4]

Table 2. A menu of urban food governance measures (synthesis of literature)

[1] EAT-Lancet Commission (2019)

[2] Halliday et al. (2019)

[3] MUFPP (2015)

[4] Global Panel (2017)

[5] Battersby & Haysom (2016)

[6] Morgan (2015)

[7] Battersby & Hunter-Adams (2020)

[8] HLPE (2020)

3. Methodology

This chapter explains and justifies the chosen research design by restating the research questions, discussing the research strategy that was developed to address these, presenting the data collection and analysis methods, and detailing ethical considerations. This thesis investigates how the City of Cape Town can increase access to sustainable and healthy diets through urban food governance. To unpack the complexities of urban food systems, sustainability and food security, multiple research methods were required: secondary research by reviewing existing literature and policies as well as primary research through interviewing food system stakeholders. The interviews were analysed thematically.

Qualitative research is characterised by investigating the "meanings, concepts, definitions, characteristics, metaphors, symbols, and descriptions of things" (Berg, 2009:3). One advantage of qualitative research is its great flexibility: The researcher may use open questions, which can evolve during the research process (Mayer, 2015). However, this flexibility may increase uncertainty within the research and risks the researcher's subjectivity influencing research outcomes. Therefore, a rigorous method is crucial to ensure reliability and objectivity, meaning that the research process can be replicated with equal results and interpretations (Morse, 1994; Silverman, 2006). According to Noble and Smith (2015), the design of methodological strategies determines the reliability and validity of qualitative research. Therefore, this chapter aims to ensure transparency in the methodological and analytical approach to strengthen the reliability, trustworthiness and validity of the research. The researcher made efforts to acknowledge personal biases and create transparency in the thought process during data analysis through the inclusion of verbatim citations from transcripts (Noble & Smith, 2015).

3.1 Research questions

The aim of this research is to explore urban food governance approaches for the City of Cape Town that can increase access to healthy and sustainable diets. The following sub-questions emerged from the theoretical foundation:

1) How does the City of Cape Town engage with urban food governance?
2) What role can the City of Cape Town play in increasing access to sustainable and healthy diets and shifting dietary patterns?
3) How can multi-stakeholder collaboration be strengthened for effective and inclusive urban food governance?

3.2 Research strategy

To answer the complex research questions, a variety of research methods were required. The collection of data consisted of three different methods: First, a preliminary literature review in order to build a theoretical foundation and to identify the research questions. Second, a review of the policy landscape that shapes urban food governance to identify national, provincial and urban mandates with relevance to Cape Town. Third, the conduction of semi-structured interviews with food system stakeholders to dig deeper into and answer the research questions.

3.2.1 Literature review

In preparation of this research, a thematic literature review was conducted to establish the research context and to identify knowledge gaps. Further, it built the foundation to develop the research questions and provided the necessary background. Existing literature was utilised to highlight the relevance of this research and to demonstrate understanding of the problem. Conducting the literature review was essential in designing the research strategy and choosing methods for the data collection and analysis (Galetta, 2013). It is important to note that a literature review is always influenced by personal observations, experience and understanding of the researcher, which makes reflexivity during the research process crucial (Galetta, 2013).

3.2.2 Urban food governance review

Additionally, the researcher created an overview of relevant national, regional and local policies to identify the City's potential role and existing engagement with urban food governance. The researcher engaged with policy documents such as the South African Constitution, the Integrated Food Security Strategy, the National Development Plan, the National Policy on Food and Nutrition Security, the Western Cape Strategic Plan and the Strategic Framework for Household Food and Nutrition Security, the Cape Town Urban Agriculture Policy, Cape Town's Resilience, Environmental, and Climate Change Strategies as well as the Cape Town Food System and Food Security Study.

3.2.3 Semi-structured interviews

Semi-structured interviews (SSIs) with relevant stakeholders in Cape Town's food system were chosen as the third method of data collection in order to close knowledge gaps and gain more information about shifting diets, the role of local government in the urban food system,

possible interventions for the City of Cape Town, and exploring the opportunities and limitations of multi-stakeholder collaboration.

SSIs stand in contrast to structured interviews with a predetermined set and order of questions, and unstructured interviews without predetermined structure (Fylan, 2005:66). SSIs can be useful to gain a deeper understanding by exploring contradictions and agreements between research participants (Fylan, 2005). The interviews were designed as conversational dialogue around relevant topics, with open-ended questions and follow-up questions where necessary. The interviewer followed an interview guideline informed by preliminary research. This flexibility allowed for the exploration of unforeseen aspects during the conversation.

During the preparation and conduction of the interviews, the researcher reflected on the thought process, assumptions and decisions and evaluated how these may influence data collection, analysis, and reporting of the findings (Galetta, 2013). Disadvantages of SSIs are their time and labour intensity due to the necessary preparation, selection and recruitment of participants, conduction, transcription and analysis. Moreover, they require adequate sophistication of the researcher to successfully navigate the interactive interview dynamics (Adams, 2015).

3.2.3.1 Selection of Interviewees

The interviews were conducted with eleven food system stakeholders (Figure 2). The research participants were chosen based on their expertise and role in Cape Town's urban food system. Diversification of participants was important to ensure adequate representation of different sectors. Four participants were academics at two universities in the Western Cape focusing on urban food governance and multi-stakeholder collaboration in Cape Town. Another four interviewees represented civil society organisations dealing with food security issues and sustainable food systems in Cape Town. The last three participants were officials in two departments of the City of Cape Town.

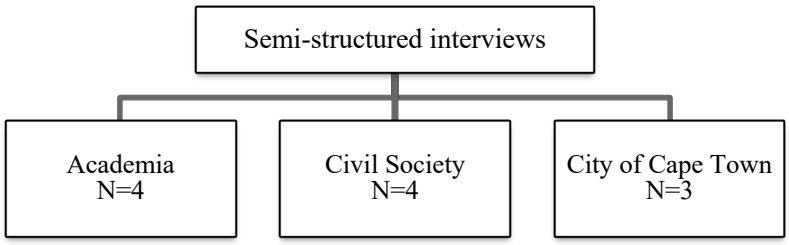

Figure 2. Sampling design of interviews

3.2.3.2 Interview questions and technique

The interview questions were open-ended and guided by the theoretical research foundation (Galetta, 2013). They covered four themes: the understanding of sustainable and healthy diets, the role of local government, urban food policy interventions, and multi-stakeholder collaboration. The questions were tailored to each interviewee and altered where necessary, based on an ongoing review. This allowed for greater responsiveness to changing narratives and the acquisition of different perspectives on relevant new findings. Each question was clearly connected to the purpose of the research (Galetta, 2013). A list of sample interview questions can be found in Annex 1.

The researcher carefully studied and adopted interview techniques for enhanced success. Based on Adams (2015), the interviewer aimed to demonstrate knowledge yet appear humble and open-minded. Questions were posed in a neutral and casual way and interviewees were not contradicted or interrupted. In cases of unclarity, examples or further elaboration were requested. Careful listening skills helped assess how the narrative unfolds and to allow space for its development. The interviews lasted one hour on average.

Due to the current global pandemic, the interviews were conducted via video and teleconference. All interviews were recorded with the permission of the interviewees and transcribed afterwards. This allowed for precise and thorough analysis and avoided biased interpretation by the interviewer.

3.2.4 Ethical considerations

Prior to conducting this research, the Faculty of Science Research Ethics Committee confirmed that the research is neither sensitive nor harmful (Annex 2; Approval code: FSREC 115-2019) and approved members of staff to participate in this research. Likewise, research approval was received by the City of Cape Town (Ref: PSRR-0202 and 24789).

This research followed Payne and Payne's (2004:68) three key elements of research ethics: informed consent of participation, possible termination of involvement, and protection of identities. All respondents voluntarily participated in the interviews after clear communication of the research purpose and were not pressured or bribed in any way. They were informed of the possibility to terminate their involvement for any reason at any time. The interviews were conducted in the least disruptive way and with respect to participants' time. All respondents signed a consent form which can be found in Annex 3. Furthermore, all data

was handled ensuring confidentiality. The interview transcripts are stored on a password-protected laptop.

The researcher intended to conduct this research without preconceptions whilst acknowledging that the role of the researcher may affect research outcomes. To minimise personal biases, the researcher adopted a continuous process of reflexivity and conducted, analysed and presented the research in the most objective way possible.

3.3 Data analysis

This study used thematic analysis as a method for "identifying, analysing and reporting patterns (themes)" within the interview transcripts (Braun & Clarke, 2006:79). Beyond simply organising and describing data, this method intends to interpret a research topic (Braun & Clarke, 2006). In Boyatzis' words, it is a way of "making sense out of seemingly unrelated material" (1998:4).

The process can be divided into six phases: First, familiarisation with the data by reading the transcripts multiple times. Second, generating codes throughout the dataset according to information relevant to the research questions. Third, creating initial themes based on coding patterns, as well as organising data into the thematic categories. Fourth, reviewing and refining the themes by comparing them against the dataset and examining their relevance for the research questions. Fifth, defining and naming the established themes after analysis of each theme. Lastly, creating an analytic narrative around the themes and contextualising the analysis relative to the secondary research outcomes (Braun & Clarke, 2019).

This thesis utilised an active, reflexive and organic coding process, which is considered crucial to the successful implementation of thematic analysis (Clarke et al., 2019). This means the researcher constantly reflected on the research process and its outcomes to control personal biases. Whilst a deductive process was used when developing the interview guideline based on the theoretical foundation, the interview transcriptions were coded inductively. This means codes were developed based on the interview data. The researcher utilised a semantic approach, meaning that coding and theme development were derived only from explicit text material, not from underlying meanings beyond the statements that interview participants have verbally expressed (Clarke et al., 2019). The analysis of the interview transcripts was supported through a qualitative data analysis software, NVivo, serving as a tool to enhance efficiency in developing and applying the codes.

Upon the completed analysis, the results were presented and discussed to answer the research questions. To ensure the reliability and validity of this research, the themes were illustrated with quotations from the transcripts.

3.4 Limitations

The primary research was subject to multiple limitations, some of which were unexpected and out of the researcher's control. One month into the study, a global pandemic (COVID-19) reached South Africa, leading to various research complications. The pandemic induced lockdown dramatically increased food insecurity in Cape Town. However, due to the early stage of the crisis, the current situation could not be integrated into the theoretical part of this research.

With the country on lockdown, physical access to stakeholders was impossible and virtual access difficult to facilitate. Therefore, only 11 of 15 planned interviews could be carried out. Despite recording the interviews to produce transcripts, disruptive audio quality due to their virtual nature impaired comprehension of some parts. Additionally, the communication via video limited the ability to create a relaxed conversation environment and put additional pressure on both interviewee and researcher. Likewise, interviews conducted via telephone compromised not only the ability to build a more personal connection but also the use and interpretation of visual communication.

The analysis was conducted by a single researcher, which can exacerbate potential personal biases. Similarly, interview preparation and conduction were performed by one researcher, which might influence participants' responses. Likewise, the interviewees might have provided biased responses. Furthermore, due to the time and labour-intensive conduction and analysis of interviews, this part of the study consumed the majority of the research capacity and led to overall time constraints.

Lastly, due to the pandemic, the researcher experienced personal difficulties and disruptions, which led to a lower time capacity to conduct and write up this research.

3.5 Method discussion and conclusion

Considering the research aim and objectives, as well as the context of this thesis, a qualitative multi-method research design with a thematic analysis can be justified as an appropriate choice. The benefits of this method are its flexibility and theoretical freedom to identify, analyse and report patterns of shared meaning among the research material (Braun & Clarke, 2006:5). The categorical organisation of the data ensure reliability and comparability of

analysis results. The analysis was characterised by an organic, inductive, reflexive and semantic coding approach, and constantly guided by the research aim and objectives. Reflexivity in research, analysis and presentation was essential to acknowledge and minimise the researcher's subjectivity. The various limitations were mostly connected to factors beyond the research design. Therefore, the strengths of the chosen methodology outweighed potential weaknesses.

4. The Context: Access to sustainable and healthy diets in Cape Town

Rising urbanisation, poverty and urban lifestyles have fundamentally changed the way people view, access and consume food in Cape Town. A wide range of factors from housing, infrastructure and transport, all the way to education and advertising both directly and indirectly influence food consumption in low-income communities. This chapter aims to unpack the underlying drivers of urban food insecurity in Cape Town.

4.1 Income and expenditure

Income is an essential determinant of food security in the city, as the majority of urban residents in low-income communities do not produce their own food (Battersby, 2011). Due to dependence on store-bought food, both a regular income and easy access to market structures are crucial for urban dwellers. Steady incomes are especially important as inflation and volatility in food, energy and water costs make urban residents more vulnerable to price shocks (Tacoli, 2019). Income and food prices become particularly relevant when considering that food expenditure can represent up to 75% of monthly incomes for the poorest 10% of the population (Battersby et al., 2014).

Nevertheless, this only represents one component of the high living costs in urban areas (Battersby & Haysom, 2018). Food expenditure often competes with other essential and unavoidable household expenses such as rent, utilities, transportation and school fees. To keep food expenses low, the cheapest foods tend to be prioritised, most of which are highly processed and non-nutritious. In fact, Temple and Steyn (2011) found that healthier food options are consistently more expensive than processed foods (by 69% on average). Thus, limited economic accessibility of food has direct health consequences for the urban poor (Battersby & Haysom, 2018). In contrast, greater economic purchasing power can translate to saving costs on food while increasing quantities, as it enables bulk purchases which decrease the price per unit (Tacoli, 2019).

On the other hand, higher incomes among the urban poor often translate to higher caloric intakes, not necessarily increasing overall food security (Mahadevan & Hoang, 2015). Increasing household incomes may also be connected to more time spent at work, limiting the time available for fresh food preparation. Thus, diets in Cape Town's low-income areas are often low in diversity and nutrition (Battersby, 2011). As outlined in the literature review, these dietary changes have negative impacts on both human and environmental health.

4.2 Geography and infrastructure

Simply focusing solutions on economic access to food neglects the underlying systemic barriers to urban food security and depoliticises the issue (Battersby & Haysom, 2018). Shaped by the former Apartheid system, low-income areas in Cape Town are often located far away from economic hubs in the city centre. Due to the poor quality of public transport, many urban dwellers face time-intensive commutes to work, which limits their time capacity to prepare home-cooked meals (Joubert, Battersby & Watson, 2018). Limited transport options and networks also affect the ability to access formal retail, and therefore cheaper food, and impede bulk purchases.

Moreover, many households in poorer communities do not have continuous access to electricity and clean water for safe food storage and preparation due to the City's poor provision of infrastructure (Battersby et al., 2017). Thus, packaged and pre-cooked foods are prioritised. Likewise, increased availability and easy accessibility to these foods, especially near transport hubs, make it challenging for consumers to make healthy food choices, despite informal vendors also offering fresh produce (Battersby, 2019). Therefore, combining infrastructure development (electricity, water, sanitation and transport) with regulating the types of food available in urban environments is crucial to achieving food security.

Other geographical determinants that influence diets are access to health care and neighbourhood safety. Health issues compromising micronutrient absorption despite intake of nutritious foods are common among poorer communities (Hickel, 2016). Moreover, a high prevalence of crime can affect how and where citizens feel safe to source food (Malambo, 2018; Cannuscio et al., 2010).

4.3 Market and retail structure

Access to nutritious food is furthermore determined by available channels to purchase food. Although most of Cape Town's low-income households (94%) source food from supermarkets due to their larger variety, perceived quality and higher food safety, and relatively lower prices for bulk amounts, they only tend to do so once a month (Battersby, 2011:24; Battersby, 2019). Despite the belief that supermarkets accelerate access to food, many low-income consumers face challenges such as limited opportunities to afford and store bulk purchases, restricted access to transport, and poor opportunities to refrigerate perishable food. The unequal distribution of supermarkets leads to considerably higher amounts of formal supermarkets per household in high-income areas (Battersby & Peyton, 2014:158). Therefore, the

majority of people rely heavily on frequent purchases from small shops and informal traders in their close proximity (Battersby, Marshak & Mngqibisa, 2016; Battersby, 2011:25). The informal food sector offers great flexibility to customers, such as breaking down bulk items into small affordable units and offering payments on credit. However, due to informal traders' limited access to refrigeration, water, waste management and sanitation, food safety is a concern for the City (Battersby, Marshak & Mngqibisa, 2016).

Local government tends to favour the supermarket expansion to overcome 'urban food deserts', as formal market channels are thought to bring greater efficiency and are a symbol of modern urbanisation (Battersby, 2019). However, the rapid expansion of supermarkets in low-income areas is mostly carried out as part of shopping centre developments in combination with fast food outlets. These food environments influence consumers' choices, encouraging consumption of unhealthy food and adding to the aspiration for "modern" diets (Battersby & Haysom, 2018). Moreover, supermarkets in low-income neighbourhoods mostly offer lower varieties of fresh produce but high amounts of affordable pre-packaged and highly processed foods, leading to higher consumption of such (Joubert, Battersby & Watson, 2018). Thus, instead of increasing access to sustainable and healthy foods, the supermarketisation paradoxically accelerates the nutrition transition (Battersby, 2019). Furthermore, the dominance of just four corporate players in the food system (Shoprite/Checkers, Pick n Pay, Spar and Woolworths) drives out smaller retailers and informal traders (Battersby, 2017).

4.4 Dietary preferences and sustainability

The desire for modern urban diets has decreased the consumption of traditional foods (Battersby & Haysom, 2018). A recent study (Nielsen, 2020) demonstrated that across all regions and demographics, fruit and vegetables are consumed only four times per week on average, while the majority of South Africans (84%) eat meat on a daily basis. Though the largest proportion of food intake is starch (41%), animal products like meat, eggs and dairy represent 34% of the average plate. Fruit and vegetables, however, only represent 13% of food intake. Although vegetables and fruit are perceived as healthy, there is very little understanding of plant-based diets (Nielsen, 2020). Likewise, Pereira, McLachlan and Battersby (2015) found that low-income consumers are indeed informed about the nutritional benefits of high fruit and vegetable consumption. However, due to their higher perishability and costs as well as the time needed to prepare fresh foods, urban dwellers prefer processed and packaged foods that are ready for consumption. Furthermore, long-term impacts of poor diets only

emerge with time, which hides their link to daily consumption habits (Pereira, McLachlan & Battersby, 2015). The fact that the emerging trend towards diets rich in highly processed foods and animal products negatively impacts planetary health underlines the importance of increasing access to foods that are not only healthy but equally sustainable.

4.5 Conclusion

This chapter demonstrated that poor access to sustainable and healthy diets in Cape Town is a multidimensional and complex issue. It runs much deeper than the obvious determinants of food access, such as food prices and physical proximity to stores and traders. Instead, the nutrition transition in Cape Town is shaped by poverty, poor infrastructure and transport systems, industrialised food, and the dominance of large private sector actors. The latter is seen with the supermarketisation and the explosive emergence of fast food stores (Joubert, Battersby & Watson, 2018). Thus, instead of simply blaming unhealthy dietary choices on citizens and offering nutrition education, most important remains resolving underlying causes of food insecurity (Pereira, McLachlan, & Battersby, 2015). Therefore, the transition towards healthy and sustainable diets calls for a holistic and integrative approach, touching on all areas of the urban food challenge. The following chapter investigates the power of the City of Cape Town to address the multidimensional urban food challenge and its engagement with urban food governance.

5. Existing policy landscape shaping urban food governance

Despite South Africa's constitutional obligation to enable access to sufficient and adequate food, existing barriers in the urban context are poorly understood. Therefore, urban food governance approaches on a municipal level have remained extremely narrow, and national strategies fail to tackle the visible and invisible systemic flaws of the urban food system (Battersby & Watson, 2019b; Haysom, 2014). In order to identify the City of Cape Town's role in increasing access to sustainable and healthy diets, it is imperative to consider the wider policy landscape. As South African municipalities are not independent of other spheres of government, food-related national and provincial policies will be reviewed to examine existing approaches to urban food governance. This overview is not exhaustive but rather demonstrates the evolving narrative.

5.1 Republic of South Africa

The South African Constitution guarantees everyone the right to "sufficient food and water" (Republic of South Africa [RSA], 1996:11). To realise this right, the state is obligated to "take reasonable legislative and other measures, within its available resources" (RSA, 1996:11). South African food policies historically focused on increasing food availability but failed to adequately address access and utilisation (Drimie, 2016). This becomes evident within the 2002 Integrated Food Security Strategy (IFSS), aiming to strengthen coordination of existing food security programmes (RSA, 2014:3). Despite its appreciation for the need to address the entire food system, including production, marketing, distribution, consumption and nutrition, the responsibility of implementation remained with the departments of Agriculture (DAFF), Health (DoH), Social Development and Basic Education (Battersby et al., 2014). This led to a main focus on food production, along with emergency food-based interventions, school feeding programmes and nutrition education, all of which are managed by the national and provincial governments (Battersby et al., 2014:23). Without an urban focus and biased towards productionist solutions, the IFSS mainly impacted on national food security rather than tackling systemic causes of household food insecurity (Drimie & Ruysenaar, 2010).

The 2012 National Development Plan (NDP) envisions eradicating poverty and decreasing unemployment and inequality by 2030 (RSA, 2012). The NDP recognises food insecurity as both a consequence and a cause of poverty and inequality, thus acknowledging poor access to food (RSA, 2014). It aims to strengthen coping mechanisms to food price inflation through

creating employment opportunities, increasing agricultural productivity, reducing food prices and creating financial safety nets (RSA, 2012). Moreover, it highlights the need for a multi-stakeholder approach to increase household food security and transition toward sustainable food systems (RSA, 2012:53). Further, by acknowledging the interconnection of food and nutrition security, the plan prioritises nutritional intake over caloric sufficiency and calls for an increase in fruit and vegetable production rather than crops and grains for export (RSA, 2012:231). This wider perspective of food security within the NDP makes it a much stronger approach than the IFSS and represents an important foundation for emerging food policy (Drimie, 2016; Battersby et al., 2014).

Intending to realise the constitutional imperative on the right to food, the government developed a National Policy on Food and Nutrition Security (NPFNS) in 2014. As a more comprehensive update of the IFSS, it aims to address the complex issue with an interdisciplinary approach, leveraging synergies between government and civil society (RSA, 2014:15). However, the strategy puts the onus on the individual, blaming the "lack of knowledge and resources" for poor food choices (RSA, 2014:4). Consequently, proposed measures such as education and better food management, food safety nets, and increased food production fail to tackle the complexity of food insecurity. Moreover, the strategy reinforces the rural bias by neglecting urban factors contributing to food insecurity. Lastly, climate change is only framed as a threat to agricultural production, disregarding the wider food system as a contributor to climate change (RSA, 2014:16). Thus, while the government aims to encourage healthy eating habits with strategic programmes by the DoH, it ignores the environmental impacts of diets. On the other hand, programmes by the DAFF fail to integrate an urban lens and are mainly focused on economic growth, rural development and sustainable use of natural resources – disregarding food processing, distribution and consumption (Thow et al., 2018).

To conclude, South Africa‘s national approach to food security does not address the urban reality of the food challenge. With interventions that barely go beyond rural development and agricultural production, the urban context remains unchanged. Moreover, there is little overlap between environmental and nutrition-related strategies (Delport, 2019). A much wider approach is needed, taking into account not only systemic barriers in urban areas but also impacts of the wider food system (processing, distribution, marketing and consumption) on food security and the environment. Likewise, the informal food sector is entirely disregarded by national policies and strategies (Drimie, 2016). While the emergence of food-

related strategies and policies such as the NDP indicate attempts of an integrative approach, existing measures are in reality developed in isolation and remain largely uncoordinated (Nkwana, 2015; Thow et al., 2018). The lack of policy coherence presents a major barrier to food security, social and environmental welfare. Therefore, it is critical to ensure that policy objectives are not undermined but supported by existing strategies and programmes (Drimie, 2016:4). There is an urgent need for an integrative and holistic approach to transforming the food system, tackling both food and nutrition security in an environmentally sustainable way. It is especially important for national government to recognise the role that cities can play in the food system. Municipalities are closer to existing local challenges and can be key players in facilitating cooperation between government and civil society, the lack of which represents one of the main barriers to implementation (Thow et al., 2018).

5.2 Western Cape Government

Provincial governments in South Africa serve to implement national strategies and plans. Constitutionally allocated provincial powers related to the food system are health, education, environmental affairs and development planning, housing, social development, economic development, transport and public works, welfare services, and agriculture (de Visser, 2019:4; Battersby et al., 2014:43).

In contrast to its predecessor, the WCG Strategic Plan 2019-2024 considers food security a priority. The current plan acknowledges the connection between limited access to healthy food and malnutrition; the impact of spatial planning and transport on individual food choices and physical access to food; the increasing availability of unhealthy food; as well as the limited accessibility and affordability of healthy food (WCG, 2019). As household food insecurity is also connected with violence and crime due to increased psychological stress and physiological decline, the government aims to intervene through food security support strategies (WCG, 2019).

The WCG adopts a collaborative "whole-of-society" approach, leveraging and supporting the role of "every organisation, institution, community, household and individual" for development (WCG, 2019:15). This includes collaboration with all government spheres.

The provincial strategic plan refers to the "Nourish to Flourish Strategy" for implementation, also known as the Strategic Framework for Household Food and Nutrition Security (WCG, 2016). This strategy was developed in 2016 and has a threefold aim: protecting citizens while addressing underlying problems that shape the food economy; ensuring the management of

resources; and allowing people access to fresh and nutritious food. The programme consists of six pillars (Table 3). Notably, it envisions a food system that is both healthy and sustainable, and explicitly integrates supporting the informal sector. Within the strategy, the WCG outlined its establishment of a Food Security Work Group that is tasked with several responsibilities: Alongside the coordination of and strategic guidance for all relevant stakeholders, and the alignment of relevant policy and strategy processes across provincial departments, it is also responsible for the adequate monitoring and evaluation of internal processes (WCG, 2016). Despite the strategy's enormous potential to address the complexity of the urban food challenge, it remained a draft. Nevertheless, its integration into the Provincial Strategic Plan shows promising signs for future uptake.

Pillars	Objectives	Proposed measures
Food Assistance	Improved access to, and use of, nutritious food for children and vulnerable people by 2019	Promoting food gardens Nutritional support Promoting breastfeeding Expanding school feeding programmes
Food Awareness and Safety	Improved food awareness, food safety, and healthier behaviour by 2019	Strengthening educational programmes on nutritious and safe food, hygiene and water safety
Food-sensitive Planning	Strategic integration of the food system into development planning by 2019	Integrating food security into spatial development frameworks Integrating food sensitive planning and design guidelines Incorporating food sensitivity principles into municipal assessment
Food resource management for the future	Integration of climate change responses into all aspects of the food systems by 2030	Promoting a climate-resilient low-carbon agricultural sector and sustainable use of water, soil and energy Better managing and reducing food waste Providing farmers with training on sustainable farming Boosting climate disaster risk reduction and management for agriculture
Inclusive Food Economy	Improve access to nutritious food, particularly for poor households, through the formal and informal economy by 2030	Establishing by-laws for informal food trading in municipalities Supporting local fresh food markets, emerging farmers, and skills development in the food sector
Food Governance	Evidence-based integration of food security implementation and planning	Strengthen the Food Security Governmental Work Group Encouraging multi-stakeholder collaboration Improving monitoring, evaluation and research Supporting technology and innovation for household food security

Table 3. Nourish to Flourish Strategy (WCG, 2016)

5.3 City of Cape Town

This section aims to identify the role of the City of Cape Town in increasing access to sustainable and healthy diets and investigates its evolving engagement with urban food governance. Due to the long invisibility of the urban food challenge, municipal engagement has been slow (Haysom, 2014). As food-related responses in national frameworks are mainly driven by the national and provincial governments, with local governments supporting implementation, food has largely remained absent from the urban political agenda (Haysom, 2014). The City acknowledges that systemic risks and possible disruptions in the food system are not adequately addressed by current policy and planning due to the absence of a consolidated municipal food governance vision (CoCT, 2019). Some of the barriers to the effective development of an urban food governance approach in Cape Town have been its productionist bias as well as its poor understanding of the complex lived reality of urban food insecurity (Battersby et al., 2014). Moreover, municipal government funding is dependent on provincial government, which impedes long-term planning (Daniels, 2012 in Haysom, 2014).

Constitutionally, it is the role of local government

> "to ensure the provision of services to communities in a sustainable manner; to promote social and economic development; to promote a safe and healthy environment; and to encourage the involvement of communities and community organisations in the matters of local government […] within its financial and administrative capacity" (RSA, 1996:74).

Despite limited legislative space for local governments to intervene in the food system, several relevant competence areas are constitutionally allocated to municipalities (Table 4).

Municipal powers related to the urban food system	
Public services	**Regulation of the private sector**
Electricity and gas reticulation	Markets
Water and sanitation services	Street trading
Municipal public transport	Licensing and control of undertakings that sell food to the public
Refuse removal, refuse dumps and solid waste disposal	Trading regulations
Municipal planning	Billboards and the display of advertisement in public places
	Municipal abattoirs

Table 4. Municipal powers related to the urban food system (RSA, 1996; de Visser, 2019:7, Haysom, 2014)

Many departmental processes and interventions have significant impacts on food access and utilisation. Figure 3 provides an overview of relevant policies and programmes by City departments.

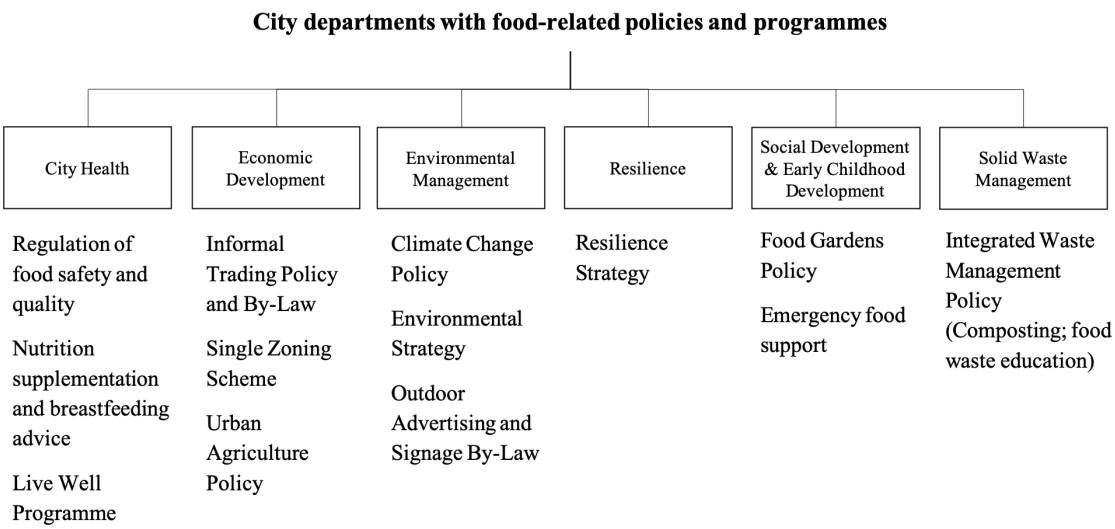

Figure 3. Food-related urban policies and programmes (CoCT, 2020; Haysom, 2014; de Visser, 2019)

The Environmental Management Department notably includes food in two frameworks: the Climate Change Policy intends to "identify climate impacts of the entire food system" (including processing, distribution, utilisation, and consumption) as well as to promote urban agriculture, regional food sourcing and "reduced consumption of highly carbon intensive agricultural products" (CoCT, 2017a). The Environmental Strategy merely mentions the promotion of local food production, urban agriculture, and green procurement (CoCT, 2017b). The department is further responsible for the protection of natural resources and the prevention of pollution, essential to a resilient food system (Haysom, 2014), as well as for the regulation of advertisement in public places, influencing food choices (de Visser, 2019).

Besides managing the Urban Agriculture Unit, the Economic Development Department introduced an Informal Trading Policy and By-Law, and a Single Zoning Scheme in 2013, regulating the informal sector in a restrictive way (Battersby, Marshak & Mngqibisa, 2016). Thus, the high regulatory burden on food traders in low-income areas hinders a thriving local food economy (de Visser, 2019).

Visible in Figure 3, the departments of City Health, Social Development and Early Childhood Development, Solid Waste Management, and Resilience shape the urban food system through their programmes, some of which will be discussed in the following sub-chapters.

As outlined in chapter four, access to food in urban areas is determined and influenced by infrastructure, housing, transport and spatial planning and design. Therefore, the following departments play an important indirect role in Cape Town's food system: Water and Sanitation, Utilities, Electricity Generation and Distribution, Human Settlements, Transport, Urban Management, Recreation and Parks, and Property (Haysom, 2014). Further, the Spatial Planning and Design Department controls building development and agricultural land. By determining the balance between retail and housing space, the department has a direct influence on designing food environments (Haysom, 2014). Additionally, recurring conflicts between prioritisation of agricultural land and building development highlight the importance of integrating food system considerations into land use (de Visser, 2019).

As demonstrated, many city departments directly or indirectly shape the food system. However, the current absence of an overarching urban food strategy leads to a lack of interdepartmental collaboration, siloed interventions or neglecting impacts of existing government processes on the food system (Haysom, 2014). The following section will examine the City's engagement with key urban food governance issues in more detail.

5.3.1 Urban Agriculture Policy

As a pioneer in South Africa, the City of Cape Town adopted an Urban Agriculture Policy (UAP) in 2007 intending to contribute to household food security of the "poorest of the poor", boost sustainable economic development, redistribute land for agricultural development to previously disadvantaged people, and to support skills development among citizens. Moreover, the policy aimed to integrate urban agriculture into future development planning (CoCT, 2007).

While its adoption marked an important first step for the City's engagement with urban food governance, the policy failed to reach its potential (Visser, 2012 in Haysom, 2014). As an isolated policy focused on food production, the UAP does not represent an adequate solution to the complexity of urban food security. Battersby et al. (2015) criticised that the most vulnerable citizens without necessary resources such as time, money, land and equipment are expected to grow their own food, without the City acknowledging nor addressing systemic barriers in the broader food system. As a result, since its adoption, uptake of urban agriculture has remained low, and the poorest of the poor represent only a small fraction of urban farmers (Battersby et al., 2015).

Moreover, contradictory to its intentions, urban farming often benefits more affluent groups instead of contributing to the household food security of vulnerable communities (Crush et al., 2011). Additionally, Battersby and Marshak (2013) argue that income generation through urban agriculture is limited due to the lack of integration into existing markets and the weak market structure. However, the non-material benefits of urban agriculture should not be overlooked, as urban farming in Cape Town has been shown to contribute to social interaction and a sense of belonging (Tembo & Louw, 2013). To improve the impact of the UAP, Battersby et al. (2015) recommend better monitoring and evaluation systems, collaboration with NGOs and improving access to land.

In 2013, the City introduced a Food Gardens in support of Poverty Alleviation and Reduction Policy, encouraging the establishment of sustainable food gardens to enhance food security in low-income areas. Parts of the yield are directed to early childhood development centres to provide nutritional meals (CoCT, 2013).

5.3.2 Food System and Food Security Study

Realising the need for greater understanding of the complex urban food challenge, the City commissioned a study on the components, effectiveness and flaws of the urban food system and the status of food insecurity in Cape Town (CoCT, 2013 in Haysom, 2015; Battersby et al., 2014). Moreover, the City hoped to get an overview of the key players within the food security space in and out of government, and to identify potential municipal responses (Battersby et al., 2014). Notably, the City acknowledged the importance of a systems approach and multidimensional solutions (Visser, 2015).

Many of the findings on the drivers of urban food insecurity have already been discussed in chapter four. Importantly, the study revealed that the City can play both a direct and an indirect role across all levels of the wider food system – especially through improved management of spatial planning and urban design, planning and building development, environmental resources, informal trading and economic development, transport systems, waste, electricity services, housing, community health services, as well as early childhood and youth development (Battersby et al., 2014:48-53). Moreover, the researchers found that existing policies undermine citizens' access and utilisation of food, highlighting the need for integrating food considerations into all policy areas. Additionally, a wider food systems perspective is missing in the City's environmental policies, involving only the environmental impact of food production (Battersby et al., 2014).

To tackle the identified challenges beyond implementing targeted solutions in separation, the study concluded with the overarching recommendation to develop a Food System and Food Security Strategy (Battersby et al., 2014). Internal training of city officials was recommended to mainstream understanding of the complex urban food challenge, as well as the development of a Food System and Food Security Charter to allow for effective long-term planning. Further recommendations include the protection of critically important agricultural areas within the city, and integrating concerns around the informal food sector and food security into retail development and retail environments to enable access to affordable and nutritious food (Battersby et al., 2014:d).

Despite the City's demonstrated interest in engaging with the food system, the valuable findings and the availability of extensive information on the urban food system, implementation of its recommendations has not followed.

5.3.3 Conflicting political interests: The Philippi Horticultural Area debate

The ongoing debate around the Philippi Horticultural Area (PHA), a privately-owned agricultural zone surrounded by low-income communities, demonstrates how antagonistic political interests within the municipality can threaten urban food security. The area's relatively high productivity due to its unique soil characteristics and drought resilience makes it a critical source of food for the urban food system (Indego, 2018; Battersby & Haysom, 2012). Moreover, the 1,884ha large zone is of great ecological importance to the city and contributes to the sustainability of both the food system and urban development, and to climate change resilience (Indego, 2018:9). The PHA not only serves as a vital source of employment for low-income workers in Cape Town, but it also increases the affordability of food in the city due to its voluminous outputs and its strategic location minimising transport costs (Battersby et al., 2014:99). Therefore, the PHA is especially important for smaller retailers and the informal food sector. The flows of affordable vegetables into adjacent food-insecure areas are crucial for increased availability of healthy food and dietary diversity (Battersby et al., 2014).

Notwithstanding its critical importance for the City, the PHA has been threatened by urban encroachment for decades. Previously approved plans for housing development already led to a loss of around 900ha (Indego, 2018). Despite legislative measures to protect the land as a "Critical Natural Area", parts of the PHA are still under threat (Indego, 2018:14). Haysom, Crush and Caesar (2017) argue that the lack of an urban food governance strategy has fuelled

the fight over the land. While the City's multiple efforts to conduct valuations of the land show their interest in the PHA, the ongoing fight around the land and the uncertainty around protective measures demonstrate conflicting political interests and incoherence in the policy space. Therefore, there is a need for greater legislative recognition, protection and support of productive urban agricultural spaces like the PHA (Battersby et al., 2014).

5.4 Emerging urban food governance processes

As outlined, despite the City's increasing interest in engaging with the food system, conflicting political interests prevail. Without an integrated food strategy, existing urban interventions are carried out in isolation. Nevertheless, in 2015, the City of Cape Town joined an international food policy network by signing the Milan Urban Food Policy Pact (MUFPP). Furthermore, with the launch of the Resilience Strategy in 2019, the urban food challenge has regained momentum. Lastly, the City has recently co-developed a Food Systems Vision for 2050 with partners from civil society, academia and the provincial government. This subchapter investigates these emerging urban food governance processes.

5.4.1 Milan Urban Food Policy Pact

By signing the MUFPP, the City acknowledged its strategic role in urban food governance and expressed its commitment to

> "develop sustainable food systems that are inclusive, resilient, safe and diverse, that provide healthy and affordable food to all people in a human rights-based framework, that minimise waste and conserve biodiversity while adapting to and mitigating impacts of climate change" (MUFPP, 2015).

The pact intends for municipalities to adopt comprehensive and interdisciplinary approaches, connecting food policies with other urban challenges. It not only calls for multi-stakeholder collaboration to develop food-related policies and initiatives but also for policy coherence between all government spheres. Cities should integrate food into all policies, reviewing existing urban policies that potentially present barriers to a sustainable, healthy and resilient urban food system (MUFPP, 2015).

The MUFPP (2015) emphasises establishing a municipal interdepartmental government body, a multi-stakeholder food policy and planning structure, an urban food strategy, an inventory of local food initiatives and practices, strengthening data management, as well as developing food emergency assistance and resilience plans. The MUFPP further recommends promoting sustainable and nutritious diets through "education, health promotion and

communication programmes, with special attention to schools, care centres, markets and the media" (MUFPP, 2015).

Some of the recommendations within the MUFPP, such as acknowledging the importance of the informal food sector, supporting informal traders through training on food safety and waste management, and encouraging traders to sell sustainable and healthy food, seem particularly relevant to the Cape Town context. Nevertheless, the MUFPP places equal emphasis on environmental and health considerations around food, the former of which is currently neglected within national, provincial and municipal frameworks applicable to Cape Town. As addressed in chapter 2.3, both factors must be mainstreamed into food-related policies to build a resilient urban food system. Developing sustainable and healthy dietary guidelines for consumers, businesses and public procurement is a vital step into this direction (MUFPP, 2015).

5.4.2 Resilience Strategy

The City of Cape Town developed a Resilience Strategy in 2019 to strengthen the city "against sudden potential shocks of the future […] while addressing the underlying chronic stresses which weaken [their] ability to respond" (CoCT, 2019:7). They understand resilience as individual, communal, organisational, institutional and systemic capacity "to survive, adapt and thrive" irrespective of "chronic stresses and acute shocks" (CoCT, 2019:6).

Food insecurity is considered as one of the prioritised chronic stresses of the City, representing a constant challenge for vulnerable citizens and lowering resilience to climate change (CoCT, 2019). Economic and environmental shocks and stresses are understood as barriers to accessing affordable and nutritious food. The City also acknowledges the need for enhanced understanding of the complex food system, the lack of which is perceived as a significant factor adding to food system vulnerability (CoCT, 2019).

The establishment of food as an overarching policy priority within the strategy is unprecedented in the City. Under the primary goal to "promote a culture of health" (CoCT, 2019:33), the City envisions a strengthened food system that enables vulnerable communities to access affordable and nutritious food. To achieve this, the City aims to develop an Integrated Food Systems Programme as well as a food vision and strategy, developed in collaboration with multiple levels of government as well as civil society. By drawing on previous research, the City intends to identify targeted municipal food system interventions. Lastly, the City wants

to increase its capacity to respond to potential future urban food system disruptions (CoCT, 2019).

The City anticipates improving the overall health of its citizens by increasing access to physical exercise and nutritious food, and thereby decreasing the rate of non-communicable diseases and improving mental health. Therefore, it will expand and scale up the *Live Well Challenge*, an eight-week programme to holistically improve well-being through exercise, education, healthy eating, and mental health support (CoCT, 2019).

Although without specific mention of food, other relevant targets in the strategy include promoting environmentally sustainable and socially responsible public procurement of goods and services, acknowledging and supporting the informal economy in Cape Town, as well as engaging the private sector in building urban resilience (CoCT, 2019).

The Resilience Strategy is an important process for urban food governance and a promising way forward. Prioritising food within the strategy will undoubtedly help transform current perspectives on food in the City. While the current focus lies on the social dimension of resilience by improving health and well-being through nutritious food, there are missing links to the environmental sustainability of diets and the food system. How this will be integrated into the Food Systems Programme remains to be seen.

5.4.3 Cape Town Food System Vision

As part of a competition by the Rockefeller Foundation in May 2020, the City of Cape Town participated in the development of a vision for resilient food system governance for 2050. Building on the Resilience Strategy, the process was led by civil society and involved academia, municipal and provincial government. The coalition was chosen as a semi-finalist, subject to winning a prize of USD 200,000 to help its realisation (Food System Vision Prize, 2020).

The vision sees food as the heart of development, driving both social and environmental welfare (Currie, 2020). Its aims are enabling access to sustainable and healthy diets for all, shifting perspectives on food and overcoming the triple burden of malnutrition. Notably, within the vision, sustainable diets are understood as mainly plant-based, which is in line with current concepts of sustainable and healthy diets (FAO & WHO, 2018; Willet et al., 2019). Leveraging the whole-of-society approach by the WCG, collaborative governance structures are viewed as key determinants to success, involving relevant stakeholders across the entire food system (Currie, 2020). Essential to realising the vision is recognising the

interlinkages of all city departments with the food system and integrating a food lens into all decision-making processes across the city (Currie, 2020).

Successful participation in the competition would not only have meant great progress for raising awareness around the importance of urban food governance but could have also served as a financial incentive to increase political will. However, the City was not chosen as a finalist (update, August 2020 – Food System Vision Prize, 2020).

5.5 Conclusion

Due to interdependent government spheres, the multidimensional food challenge in Cape Town can only be addressed through coherent multilevel governance. Reviewing the existing food policy landscape revealed that urban food security is still poorly understood by the government and primarily addressed with productionist interventions. National policy fails to capture the urban dimension of sustainable food systems and food security. At the same time, promising provincial government frameworks that do address the urban food challenge have remained drafts.

Despite its adoption of isolated urban food policies, the City of Cape Town has, over the years, expressed increasing interest in engaging with the food system. Especially the Resilience Strategy and the Food System Vision indicate efforts to find a home for food within the City. However, the ongoing debate around the PHA demonstrates prevailing antagonistic political interests within the City. Moreover, the environmental sustainability dimension of diets often remains absent in existing policy frameworks. It is unclear how this will be better integrated into future strategies.

Due to these findings, interviews with food system stakeholders were conducted to further investigate opportunities and barriers to effective urban food governance in Cape Town.

6. Results

The thematic analysis of the interviews revealed five themes, four of which are closely aligned with the research questions. A set of sample interview questions can be found in Annex 1. The conversations revolved around shifting diets, the role of the City in increasing access to sustainable and healthy food, potential urban food governance interventions, as well as around the role of other food system stakeholders and multi-stakeholder collaboration. A fifth theme emerged due to the COVID-19 pandemic. The participants highlighted that many of their responses were influenced by the pandemic's impacts on food security. To protect the interviewees' identities, they were given acronyms (academia A1-4; civil society CS1-4; city officials CO1-3).

6.1 Shifting diets in Cape Town

The first theme that emerged from the conversations was the nutrition transition in Cape Town. The participants described how urban diets have evolved over time, such as losing traditional and culturally appropriate diets that were rich in whole foods and plant proteins (CS1). Some participants noted a mindset shift that emerged along with the rural-urban migration. One example was the stigma around eating vegetables: especially in townships, eating vegetables would be "associated with being weak, being sick, being from the countryside; the urban people eat fried food, eat meat" (CS2). Another argument was that urban dwellers prefer the convenience of purchasing food instead of growing their own vegetables (CS3). Other participants noted the high prevalence of easily accessible and cheap foods that are low in nutrition, a lot of which are imported. One participant added: "We're dealing with a system in which fresh produce is more expensive than processed garbage" (CS4).

Participants of all three groups highlighted the "meat-intensive food culture across all the different cultural divisions" (CS2). Especially the high consumption of imported low-quality chicken was highlighted as problematic. However, a city official noted that "most poor people don't eat a lot of meat. It's the middle class" (CO3). The need for reduced consumption of animal protein was recognised by five participants. One participant stated: "I think we all know that in terms of climate change, as well as health, that to have the world shifting to what's currently a mainstream Western meat-centred diet is just not an option" (CS2). However, participants highlighted that animal products should not be completely removed from diets, as "different cultural contexts have different needs and requirements and access to different foods that may sometimes require animal products" (CS1).

6.1.1 Structural barriers to sustainable and healthy diets

All participants agreed on the need to shift diets due to health and environmental impacts. However, structural barriers in the South African food system were brought to attention:

> "These conversations about getting people to eat healthier are often done outside of the context of how and why people eat what they eat. So outside of the context of thinking about the kind of energy poverty question, the time poverty question, all of those kinds of issues" (A4).

A city official explained that the City tries to work around these structural barriers by offering information to communities on how to cook and safely store food without electricity. The same official highlighted the need for a mindset shift from curing to preventing poor health: "[...] the health system becomes responsible for the health of people; people don't think to take responsibility for their own health" (CO1). They disagreed with people perceiving healthy food as much more expensive, as "animal produce is obviously much more expensive" (CO1). Moreover, they suggested that "the community can produce [vegetables] themselves as well" (CO1).

Another city official was concerned that they are "not quite sure how we get people to eat more healthy food", as higher incomes would not necessarily translate to better diets (CO3). Due to the high prevalence of socio-economic constraints, a city official highlighted the need for a multi-pronged and whole-of-society approach, emphasising the importance of "making healthy food choices available and accessible, but also changing behaviour and making healthy food choices the norm" (CO2).

6.1.2 Understanding of sustainable and healthy diets

One city official expressed that ensuring access to sustainably produced food is "the real challenge" (CO2). Some participants understood sustainable and healthy diets as "less meat, more fruits and vegetables, locally grown things that add more diversity" (CS1), and an emphasis on "high protein grains and pulses and beans" (CS1). Another city official outlined that the South African food-based dietary guidelines encourage the daily consumption of fruits, vegetables, starch and meat. Healthier options should be chosen - "decrease fat, decrease salt, decrease sugar" (CO1). The same official outlined that from an economic, health and environmental perspective whole foods and plant protein "would definitely be the way to go" (CO1).

Another participant outlined the need to look "at the whole food system, or the whole food value chain" (CS1). In terms of production, high-quality indigenous crops, in particular,

were found to be “more adapted for contexts [...] and cultural preferences” (CS1) and to benefit biodiversity and the environment.

6.2 The role of the City of Cape Town for sustainable and healthy diets

Participants highlighted that the City can play a significant role in increasing access to sustainable and healthy diets: “The city level is probably the best place to put it, because local government is so close to the community” (CO2). However, participants expressed that the “municipality doesn’t have a lot of tools for intervention” (CS2) and “in an economy like ours, which is so much about what the market dictates, it is really difficult to intervene” (A1).

6.2.1 The lack of an urban food mandate

Participants emphasised the absence of an urban food mandate, despite recognition within the City that “local government should have some role” (CO2). The missing mandate was found to create dependence on the national and provincial governments, while poor alignment and communication between different levels of government were perceived as problematic.

A city official (CO3) expressed concerns about the prevailing productionist bias across South Africa. As the food mandate is mainly situated within the DAFF, a participant noted that funding goes to rural instead of urban areas: “National government tries desperately hard to hold onto the food security mandate [...] I think there is a pretty strong agrarian lobby” (A3).

Other participants agreed that without a mandate, “put bluntly - we don't get money for it” (CO3). The city official elaborated that this is used as an excuse for inaction: “the City of Cape Town says, *‘Well, I don't actually have to do food stuff. I don't have the budgets. So, it's not something that I'm going to focus on’*" (CO3).

Moreover, participants highlighted that without a food unit, interventions are spread among different departments. Separately managing urban agriculture, resilience, spatial planning and informal retail would mean “there's no longer-term strategic planning in that process” (A3). One participant added the missing mandate could be “potentially freeing, because if they choose to do something, they're not necessarily restricted” (CS4).

An academic pointed out that the Food System and Security Study in 2014 might have been commissioned with the intention of finding “a way to say it wasn't their mandate, rather than

trying to figure out what was the mandate" (A4). However, they mentioned that "there have always been people within city government who have had an interest in food security and, to a lesser extent, food systems" (A4).

Several participants outlined the City's current proactive attempt to understand its role in the food system: "the City is in its infancy in developing its response to food security and sustainability" (CO2). A city official mentioned plans of activating local government mandates and integrating food considerations into planning processes: "So, not necessarily creating new mandates but finding a way of inserting food into existing local government mandates" (CO3). However, they highlighted the need for a common understanding of the food system and its relation to food security across the City, as food security would still be understood as humanitarian aid and urban agriculture within the City (CO3).

6.2.2 Political will

The majority of participants outlined that despite recognising the need for intervention, political will is not sufficient in the City to make food a political priority: "Food has to be at the top of the agenda. Which it hasn't been in the city – '*oh, province is sorting it out, we're just supporting*'" (CO3). This was connected to a lack of funding for food-related projects. In addition, two participants highlighted antagonistic interests within the City that had prevented food from becoming a priority, especially under the previous mayor. One academic (A4) used the example of political conflicts around the Philippi Horticultural Area, while another academic expressed concerns around "politicians [being] deeply worried about their four- or five-year term" (A3).

However, participants across all divisions highlighted the "phenomenal momentum" (CS4) for food to become a political priority due to the City's evolving engagement with the food challenge, the Resilience Strategy and the increasing presence of food working groups. Additionally, a participant outlined that winning the food vision competition could drive changes, as securing funding "forces the City to engage beyond their internal structures, and then makes them think a bit wider" (A4). One participant underlined the importance of the recent shift in political leadership, due to the current progress officials achieved in the food space under the new mayor. Some participants also viewed the current crisis as a catalyst for the City's recently increasing engagement with food security. One participant revealed: "Political will isn't the problem. I think allocation of resources is the problem. But I don't think

it will remain a problem for a long time based on the momentum we've seen" (CS4). He added:

> "There are enough officers in the City of Cape Town working on the question of food, and they are developing a proposal to step forward. So, if that proposal doesn't have any traction, then we can revisit the question of political will" (CS4).

6.2.3 Food champions

In order to build political will, participants discussed the importance of food champions. "It is about finding a political champion within the institution. So, finding a politician and a powerful official who will take it on" (A4). Participants identified several officials in the City and province who demonstrate understanding of the complex food challenge and dedication to driving change. However, an academic pointed out: "they don't necessarily have any power to change anything within government. So, they're kind of there almost in their personal capacity" (A2). Several participants viewed the Resilience Unit as a potential driver of change regarding political priority. An academic said: "the Resilience Strategy is very lucky because there are three very senior officials who manage the Resilience Strategy. They have a lot of authority [and] power in the city" (A3). Nevertheless, one participant expressed doubts: "Whether it's enough? I'm not sure. But I think it is about finding that powerful ally" (A4).

6.2.4 Mobilisation

Academic and civil society participants outlined food needs to be politicised for it to become a priority: "When people are protesting […], that's what the politicians focus on" (A3). Mobilisation of people was seen as "key to get the government to listen" (CS1). However, a participant stated: "We haven't seen people rioting in the streets to demand access to affordable whole foods" (CS3). One participant highlighted the enthusiasm in communities "about wanting to mobilise behind the lack of access to food" (CS1). However, they highlighted that especially women would be too busy dealing with the challenge to protest. Moreover, several participants outlined the shame connected to the topic: "it is always framed as: *'it's your fault that you have these issues'*" (CS1).

6.2.5 The City's existing engagement with food security and the food system

Participants outlined the following existing municipal interventions relevant to increasing access to sustainable and healthy food (Figure 4). Urban agriculture and regulation of informal trade were identified as the City's main interventions in the food system.

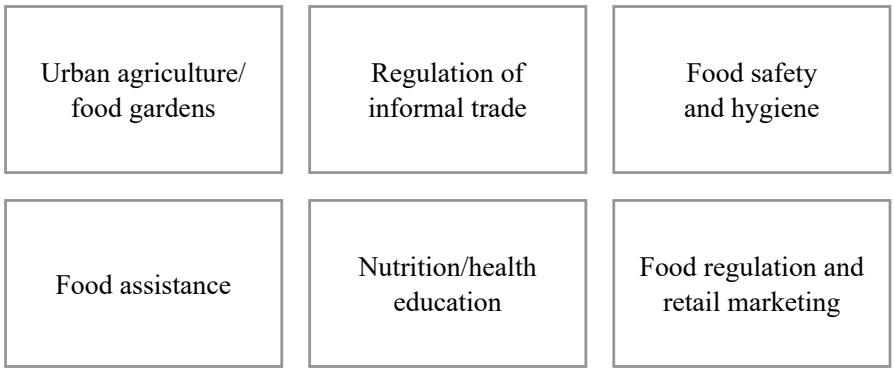

Figure 4. Existing food system interventions by the City of Cape Town (as outlined by participants)

One participant explained that the City views the informal sector from an economic, regulatory perspective (CO3). Whereas one participant (CS3) expressed concerns that the City would not acknowledge the importance of the informal sector, another participant (CS2) perceived the City to realise its significance and to show willingness to work with and not against informality. Nevertheless, two participants (CS2; CO3) explained that the complexity of the informal sector would make it hard for the City to deal with. Two city officials also outlined that the City Health Department provides training to communities and informal traders on food safety and hygiene, ensures "compliance of safety regulations" (CO2), and offers "basic nutritional counselling and provision of nutritional supplements" (CO2). One official presented the City's *Live Well* programme, a preventative programme to encourage healthy lifestyles of individuals, who can then "spread the word to their households" (CO1).

The city officials also provided vague answers regarding further interventions such as food regulation and food retail marketing but could not provide any details on this work.

6.2.6 Resilience Strategy

The Resilience Strategy was described as having "brought food back onto the agenda" (A2). Most interviewees perceived the strategy as a sign of progress, representing "a policy and strategy foundation for work in the food system to go forward" (CS2).

Several participants highlighted the recent work of the Resilience Department: mapping out existing food work across departments in order to take on a system-wide approach, as well as identifying existing mandates and opportunities for intervention. Moreover, some participants revealed that the Resilience Unit had been mapping existing food work by NGOs as well as the food flows into the urban food system, and overall building knowledge on the food system.

Three participants discussed the proposal of the food programme by the Resilience Department, co-developed with academic partners: “Food as a thing is not a thing in the City of Cape Town yet, but the resilience programme is giving it a home and framing it” (CO3). A city official disclosed that the food programme aims to review the Urban Agriculture Policy due to its limited success, set up urban food gardens and link them to fresh produce markets. They also emphasised the integration of a focus on preventing food disruptions, which are anticipated due to the pandemic.

While the work of the Resilience Unit was described as “deeply pragmatic” (A3), some participants voiced doubts. One participant suggested that placing food within the Resilience Strategy legitimises the City’s responsibility but ”restricts food to a very specific paradigm [i.e. resilience]” (CS4). Another participant questioned how embedded the Resilience Strategy is into the wider city function - if political leadership changes, “will it stay, or will it go?” (A3). Referring to the missing urban food mandate, they highlighted the Resilience Unit’s dependence on provincial actors with “old views of the food system” (A3). Likewise, one participant expressed that the programme’s success is dependent on funding for the Resilience Department (A4). They also warned about the potential loss of a bigger programmatic vision and that it could fall back into the City’s historic urban agriculture bias. A different participant recommended a “much more clear and strategic focus in terms of design and the pressure points which we are seeking in order to facilitate change” (A1).

City officials highlighted the importance of interdepartmental collaboration, as it brings in different expertise and networks. However, the officials outlined several challenges that come with the dependence on other departments, such as differing ideas, poor communication and difficult coordination within the City – “Who takes responsibility? On whose scorecard is it measured? How do we measure it?” (CO2).

6.2.7 The Milan Urban Food Policy Pact and the Nourish to Flourish Strategy

Several participants pointed out that the MUFPP was signed by the previous mayor to establish local networks and international partnerships. Two city officials were not familiar with the pact, whereas another revealed that they only found out about it recently: “It is not something that is being measured. It’s not something that’s been implemented. But it is something that we are definitely integrating into our food work now” (CO3).

Likewise, a participant (A2) revealed that the Nourish to Flourish Strategy was merely published for public comment but never passed. However, they perceived the process of

developing the strategy as having increased momentum for food. A city official (CO3) commented that it had no political traction, as there was no department driving the strategy. They added that it was being revised and submitted to cabinet just before the pandemic.

6.2.8 The lacking environmental dimension

When asked about the environmental dimension of diets, two city officials emphasised that the work in the City Health Department merely focuses on healthy eating and nutrition, whereas other departments are responsible for sustainability. Likewise, another city official acknowledged that the work of the Resilience Department has not connected food with climate change. Regarding the absence of the food system's environmental resilience within the Resilience Strategy, participants, including city officials, either did not know or gave differing answers. One participant (CS4) supported the framing of food within the social dimension of resilience due to the malnutrition challenge. They emphasised the low environmental impact of farming around Cape Town and highlighted the City's advanced efforts in biodiversity protection and environmental restoration. They also suggested that wider actors should advocate for the environmental sustainability of the food system once dedicated working groups emerge. A city official answered that food is integrated into the City's climate work: "Even if it isn't bedded down in the Resilience Strategy, it is being kind of dealt with elsewhere" (CO3). In contrast, one academic (A4) perceived the environmental dimension of the food challenge to be poorly understood within the Environmental Department. Another participant emphasised the integration of environmental sustainability within the Food System Vision, as it envisions a climate-neutral, agroecological, and circular food system (CS4).

6.3 Opportunities for intervention

Opportunities for municipal intervention were identified as the third theme within the conversations. Participants from all divisions pointed out the need for holistic or multipronged approaches to increase access to sustainable and healthy diets due to the complexity of the food challenge. Therefore, they suggested that sustainable production, increasing access to food and nutrition education need to go hand in hand. Participants also emphasised that the City should "[find] out what people want on the ground" (CS1). Table 5 provides an overview of all suggested interventions, followed by specific statements.

Policy Area	Instruments
Education	Raising awareness around sustainable and healthy diets to encourage behavioural change
Sustainable and healthy public procurement	In combination with information for increased understanding among citizens
Food gardens	Raising awareness about shifting diets Enabling participatory spaces to find bottom-up solutions Creating combined closed-loop food market gardens
Market structure	Developing market infrastructure Integrating small-scale farmers into markets to facilitate access to healthy food that is sustainably produced locally
Sustainable local small-scale production of healthy food	Protecting and supporting peri-urban agricultural areas Municipal land reform to enable small-scale food production
Supporting informal trade	Removing regulatory barriers while improving existing trade: - Provision of storage space - Easier registration mechanisms - Developing trading plans Promoting the sale of healthy food
Regulation of the private sector	Regulation of advertising and developing labelling guidelines Fiscal reform (taxation and financial incentives) Critical reflection on shopping centre applications
Institutional changes	Development of a food charter Establishment of a food system and food security department Integrating a food lens into all decision-making processes across all departments Food-sensitive urban planning and design Activating and allocating existing mandates, mapping responsibilities Increasing common understanding of food system through training Data management Planning for different disaster scenarios

Table 5. Opportunities for intervention (as outlined by participants)

Academic and civil society participants highlighted the enormous potential of sustainable and healthy public food procurement: "[the City has] an R8 million food procurement budget, which is quite enough to create market demand for certain types of products" (CS4). Two academics underlined the importance of supporting this approach with educational

interventions to increase understanding among citizens and thereby contributing to behavioural change. A city official emphasised: “You can't just give people food or make vegetables and fruits accessible. You've got to do it simultaneously with a behaviour change approach” (CO2). Another participant suggested adopting a similar approach to the City’s effective efforts on “consumer awareness and behaviour change around electricity scarcity, around water scarcity” (CS2). However, some participants pointed out that behavioural change is not enough when people cannot make a choice: “if you haven't got the money to buy the stuff that you should be buying, it's not really going to work” (CO3). Moreover, when “telling other people what to do, the urge to push back is strong” (CS2).

Civil society participants and one city official suggested food gardens as a way of engaging “people in food system practices” (CS4): “Food gardens are not the answer, specifically in cities, and specifically in places like Cape Town. But [...] growing food does get people thinking about the food system” (CS1). One participant provided an example of a closed-loop market garden in Antananarivo, Madagascar, as a possible intervention for the City of Cape Town: “You can see the whole value chain in one space, from production and fertiliser to growing the produce, using it in the neighbouring school, to the composting” (CS4). Another participant outlined the potential of agro-ecological hubs to raise awareness about nutritious and culturally appropriate diets and “working with surrounding communities to understand how they access food, how they choose their food [...] and [getting] a community level solution to the dietary problems there” (CS3).

In terms of supporting local, sustainable and decentralised small-scale farming, civil society participants particularly highlighted the need to support the PHA due to its short value chain and provision of nutritious produce. Moreover, one participant recommended increased investment into “market infrastructure across the municipality” (CS2) at a community level to facilitate access to healthy food that is sustainably produced locally and to enable farmers “more direct access to more diverse markets, storage and hygiene, and collection points and security” (CS2).

Supporting informal trade was outlined as a high-potential intervention by the majority of participants, including all city officials. In particular, working with vendors to promote healthy food was described as the “most transformative change” (CS4). Instead of working against informal traders, it was suggested that the City work with them “to mitigate the biggest risks associated with informality” (CS2). Thereby, they would also be able to “encourage adoption of formality in a transitional way” (CS2). In contrast, another participant

recommended “[legitimising] informal vendors without formalising the policy approach, which can underpin some of that” (CS4).

Many participants suggested that “the state has a far greater role to play in managing and controlling” the private sector (A3). However, two city officials highlighted the limited power to intervene in the private sector on a local government level.

The last area of intervention revolved around institutional changes within the City. One city official suggested the establishment of a department or unit whose “only focus is on the food system and food security” (CO3). Alternatively, an academic proposed embedding food into “all government departments” (A3). Several participants advised activating existing mandates and allocating mandates through spatialising the “food system across the City of Cape Town” (CO3). An academic commented that “mapping out who's responsible for various components within government” would provide a “sense of a system-wide approach, which has been largely absent” (A4).

The research participants also identified challenges to municipal interventions, particularly the lack of funding and political will. Moreover, some participants highlighted insufficient flows of information, poor understanding, lacking capacity and challenging coordination within the City.

6.4 Multi-stakeholder collaboration

To facilitate implementation and transformation, all participants stressed the importance of multi-stakeholder collaboration to leverage synergies and facilitate implementation.

6.4.1 The role of other food system stakeholders

Participants identified the role of academia as providing knowledge and advice, highlighting faults and raising awareness around food system challenges. One participant described them as a “watchdog at a structural level” (A2). Further, they outlined their convening power for multi-stakeholder collaboration to ensure balanced participation. A city official emphasised the value of the City’s academic Food Systems Advisory Group. They reflected that if the City had not consulted them during the pandemic, it would have made decisions that would not have been “in the interest of the food system” (CO3).

The role of civil society organisations (CSOs) was described as “seeing what needs to change, calling for that change to happen, and holding the actors to account” (CS3). Moreover, they could provide understanding “of vulnerabilities within the food system in the form

of households and individuals, [...] capacitating and empowering networks of women-led solutions [and] ensuring funding flows to places that need it" (CS3).

A city official noted that, within the City, CSOs may be perceived as "a bit threatening to put it lightly" (CO2). Collaborating with CSOs would "get really messy, and it also gets political. [...] And the moment it gets political, it becomes dangerous" (CO3). Therefore, the City would currently avoid it, as "it could be counterproductive" (CO3). Similarly, one academic connected civil society with potential conflict due to "deeply ideological positions" (A3). Nevertheless, city officials noted the increasing realisation of the critical role of CSOs during the pandemic, especially through the Community Action Networks (CANs). A civil society participant advised that supporting them would be "a really good short-term goal which could have quite drastic long-term food system outcomes" (CS4). A city official perceived their value as "[getting] a better understanding of what people's lives are like, just in terms of building empathy, and understanding of each other" (CO3).

While all participants acknowledged the power of the private sector in the food system, most participants raised concerns about big business. Several participants highlighted that the private sector would prioritise profits and therefore be unwilling to change: "if the food system changed radically, they will lose out" (A2). A civil society participant noted: "They respond to demand. So, if there is enough demand for certain types of goods, they will fulfil it and pass the associated costs on to the consumer" (CS4).

Nevertheless, a participant pointed out that "demonising them is not appropriate", as big business could also be a force for good (CS4). Several participants suggested that retail should offer price incentives for sustainable and healthy foods, enable wider participation by citizens of low-income, promote fresh produce, adjust store designs to encourage healthier food choices, and support small-scale farmers. An academic participant expressed the importance of including the private sector in collaborative platforms but emphasized that "they need to be held to account in that space" (A3).

6.4.2 Existing multi-stakeholder collaboration

The research participants mentioned five different collaborative platforms in Cape Town (Figure 5), each with slightly different but overlapping participants, audiences and methods.

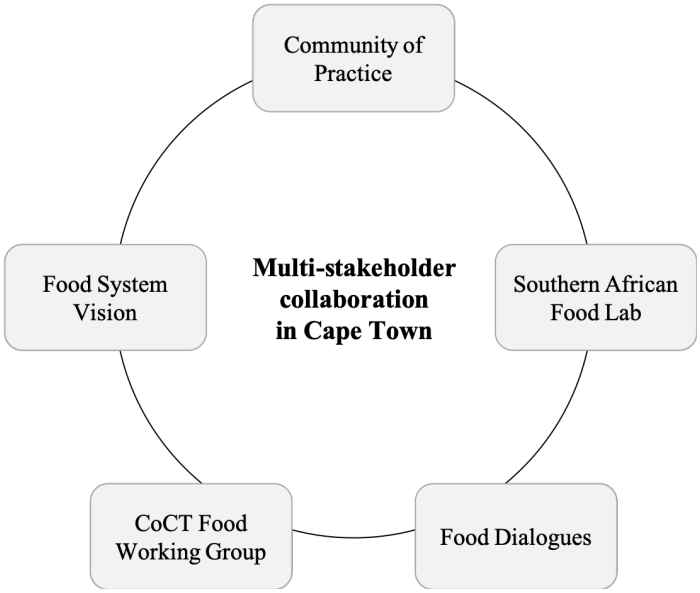

Figure 5. Existing collaborative platforms in Cape Town (as outlined by participants)

The Community of Practice (CoP), facilitated by the University of the Western Cape, was described as a network of stakeholders, including people "from different sectors of society" (A2). It explicitly does not involve large private sector actors, as "the only people that don't think that there's a problem with the food system is the private sector" (A2).

In contrast, the Southern African Food Lab (SAFL) was explained as connecting diverse stakeholders, including the private sector, to address challenges in the food system: "The one powerful thing about dialogue is that it actually brings people that are often in conflict together into a designed space" (A1). By creating unlikely alliances and strategically identifying "weak points in the dominant system" (A1), the SAFL aims to increase mutual understanding and facilitate collaboration.

Food Dialogues was mentioned as a "non-threatening platform that can be used to accelerate the participation of these currently marginalised voices in discussions about urban food systems" (CS2).

Although a city official explained the City's cross-sectoral Food Working Group that emerged from the Resilience Strategy as "more of an internal thing" (CO3), they highlighted its close collaboration with academia and provincial government. They added: "it is kind of loose, so it depends on what the issue is" (CO3): "Where we see a need for input from the public sector, the private sector or whatever, we will go and ask. The intention is not to exclude those kinds of conversations" (CO3).

Lastly, the Food System Vision "followed a strong stakeholder process which had inputs from academia, civil society, not as much private sector as would be valuable, and certainly from government" (CS4). It was described as an engagement tool, connecting the city with a wider range of food stakeholders: "the value of the vision was the process, not the output" (CS4).

6.4.3 Opportunities and challenges of multi-stakeholder collaboration

Summarised in Table 6, participants outlined various opportunities of multi-stakeholder collaboration, such as avoiding duplication and enabling a platform for accountability. Two participants noted the wider set of knowledge, perspectives and reach that is achieved through collaboration. One participant highlighted that external stakeholders could provide important institutional memory, having previously been part of projects "that they've never even heard of, that were exactly in line with what they're supposed to be doing" (CS3). Another participant added that connecting the right people can "unlock something that hopefully will stimulate a change" (A1). Moreover, collaboration would be essential to drive action, as academics and civil society could "only take it to a certain point [...]. But you need to have City driving actual action to really make change" (CS1). Furthermore, bringing stakeholders together could challenge power dynamics and break the status quo (A2).

On the other hand, several participants highlighted inclusivity and adequate representation as major challenges to multi-stakeholder collaboration. One participant noted the difficulty of integrating underrepresented voices "in a way that is sensitive and appropriate" (A4). Another participant added that the level of engagement may be difficult to allow meaningful contribution from grassroots voices due to a "disparity of context" (CS4). Moreover, one participant admitted: "We're still being quite patronising, quite middle class in how we're doing things" (A3). Likewise, a participant mentioned that existing platforms consist of "intentionally the same old people: overwhelmingly white, affluent, in formal structures and so on" (CS2).

Participants were concerned about finding maturity to collaborate in view of differing perspectives (A3). If not carefully designed and curated, "conflict will emerge very quickly" (A1). A city official highlighted: "You can't always know what [people's agendas] are, and you can't always assume that you're all on the same agenda" (CO3).

While one participant highlighted the importance of collaboration to form a "big voice to counter" big agribusiness (CS1), another participant added: "it is very difficult to challenge

private sector" (A4). A city official underlined that the private sector prioritises profits without considering issues like gender equality and racial history, "whereas, we've really got to work through these issues before we can actually collaboratively work together" (CO3).

Other participants addressed the lack of capacity and the challenge of driving collaborative platforms. A city official also outlined misalignment issues when collaborating with academics and civil society due to different institutional processes. Other challenges mentioned include "the bureaucracy of creating those partnerships" (CO2), and low communication.

Opportunities	Challenges
Avoiding duplication	Lack of inclusivity and diversity
Provision of institutional memory	Conflict and power imbalances
Stimulating change	Lack of capacity
Enabling accountability	Misalignment in processes
Challenging power dynamics and the status quo	Communication
Wider reach, knowledge and power	Bureaucracy of creating partnerships

Table 6. Opportunities and challenges of multi-stakeholder collaboration

To facilitate multi-stakeholder collaboration, participants highlighted the need for increasing transparency in objectives, processes and partnerships, as well as for making use of global networks and frameworks for guidance. Further, they suggested identifying the strengths of different stakeholders and maintaining communication to avoid a lack of input. Managing a more even spread of different actors was also outlined as an important factor. Moreover, it was emphasised to find ways to ensure implementation: "for that collaborative governance to happen, it does need to be a belief that whatever suggestions are made will get acted on" (A3).

6.4.4 Food Policy Council

Research participants discussed the potential of a Food Policy Council (FPC) in Cape Town. Some participants suggested it would add consistency, create a sense of duty, enable holding the state accountable, and contribute to "its influence and legitimacy" (A2). One participant used the example of Antananarivo's FPC to demonstrate that outcomes "were more likely to have impact and didn't require as much lobby" (CS4). A city official outlined the existence

of an officially constituted multi-stakeholder platform on water governance[9] that has proven successful. However, they explained that a formal platform might require a political champion within the City, and therefore suggested to "work more informally until we can take it up to that more formal level" (CO3).

However, some participants were against establishing a formal structure. One academic (A4) stated that more flexibility instead of a single rigid structure might be more suitable: "if you have a degree of fluidity, if you've got these multiple kinds of networks involved, different kinds of voices can emerge at different points" (A4). They referred to existing collaborative platforms, each having slightly varying audiences and modes of engagement: "I think it's about getting the widest set of voices you can, and possibly also about not having anyone feel like they own this" (A4). Likewise, some participants perceived a formal structure not to be necessary: "just because there are formal FPCs in Western countries doesn't necessarily make us feel that we have to [...] copy that" (A2). Another participant suggested a loose structure would mean "muddling through, and it's messy, and risks falling apart. But on the other hand, it is more responsive and organic" (CS4). They also expressed concerns: "Who sits on the policy council? How do you manage the power differentials in that we have a very unequal society?" (CS4). Likewise, one participant highlighted: "It's going to take a lot of work to have it come together in a way that's ethically appropriate, representative and meaningfully participatory" (CS2). However, the previous participant noted: "I don't necessarily see what the difference between a group of committed people who are working towards policy development in a consistent manner would be" (CS4).

6.5 COVID-19 Pandemic

The last theme was derived from the current pandemic influencing participants' perspectives on the food challenge in Cape Town. Participants highlighted that the pandemic and the resulting lockdown could increase the City's understanding of food security and the food system, as it brings greater attention to the complex challenge. The crisis was perceived to have already increased the City's understanding of the informal sector's important role in providing food in low-income communities. Moreover, city officials reported that the City also realised the value of other stakeholders, such as CSOs, in the local food system.

[9] Section 80 Water Committee

Furthermore, the pandemic was seen as highlighting the City's own role in the food system, potentially resulting in increasing urban powers and gaining new tools for intervention. As one participant outlined: "Sometimes you need a horrendous problem for it to be noticed" (A2). Some interviewees expressed their hope for transformative change, as "disruption is an opportunity to move" (A2). Others expressed concerns about the province and the City falling back into old thinking, as there is currently a focus on emergency food aid and urban agriculture. Lastly, a participant noted: "the big project now is to get them to think through how that [engagement] becomes embedded in how the city functions when the crisis dissipates" (A3).

7. Discussion

The results painted a complex picture of how the urban food challenge is dealt with in Cape Town, and how local government can intervene. This chapter aims to unpack the findings in relation to the research questions in order to identify how the City can increase access to sustainable and healthy diets through urban food governance.

7.1 How does the City of Cape Town engage with urban food governance?

The findings of this research revealed several challenges caused by the missing urban food mandate, such as the City's lack of capacity and dedicated funding to solve the food problem, as well as its dependence on provincial and national governments. While this study revealed that there is not enough political will in the City to make food a political priority, it suggested that this could be changed through the mobilisation of civil society and food champions within the City. The findings underlined what had already emerged from the theoretical foundation: Without a consolidated food vision and strategy, the City had primarily been engaging with the food challenge through isolated initiatives like urban agriculture, managing informal trade, ensuring food safety and hygiene, as well as providing nutrition education and food assistance. While Hodgson (2012) criticises the fragmented development of urban food policies, Hawkes and Halliday (2017) outline their potential to pave the way for developing integrated strategies at a later stage. Indeed, the findings of this study show the City of Cape Town's increasing engagement with urban food governance, evident with the adoption of the Resilience Strategy, the proposal of a food programme and the development of the Food System Vision. Remaining key challenges, such as the missing urban food mandate, political will, and the overlooked environmental dimension in food-related work, will be discussed below.

7.1.1 The lack of an urban food mandate

While the food mandate in South Africa is still held by the national and provincial governments, the Global Panel (2017) emphasises the need for local government to be mandated in order to effectively intervene in the urban food system. The results of this research highlighted several challenges arising from the missing urban food mandate, such as the dependence on provincial and national government combined with poor alignment and communication across multiple governance levels. This was connected to a lack of funding for food-related projects, which was already reflected by Haysom (2014). The dependence on higher

government levels suggests the need for support, increased communication and coherence across all government spheres.

Further, participants outlined that the food mandate is mainly being held by the DAFF and influenced by the agrarian lobby, which reinforces the emphasis on food production. The productionist bias and the poor understanding of urban food insecurity by the City were also outlined in the Food System and Food Security Study (Battersby et al., 2014). Poor understanding throughout all government spheres was equally reflected in interviews across all participant groups, which underlines the need for internal training of government officials to achieve a common understanding of the complex food challenge. The missing urban food mandate was also connected to the absence of both a food department and a wider food strategy. In view of this, the Resilience Strategy revealed intents to develop a food strategy, the importance of which is emphasised by previous research but was not discussed by participants (Battersby et al., 2014; MUFPP, 2015).

7.1.2 Political will, mobilisation of civil society and food champions

The absence of political will was identified as a major barrier to urban food governance in Cape Town. According to Hawkes and Halliday (2017), political buy-in for urban food policies is critical to achieving transformation, especially across electoral cycles. Notably, one participant suggested that the City's increasing engagement with the food challenge demonstrates the existence of political will to some extent. Other participants agreed on the current momentum for food to become a political priority, which, according to Moragues-Faus et al. (2013:15), is vital for further engagement in urban food governance.

When political will is absent, Moragues-Faus et al. (2013:15) suggest civil society groups raise awareness and create alliances to demonstrate the validity of their objectives. This was also recommended by civil society and academic participants of this study, who explained the lack of mobilisation with their observation that the onus for securing food and making the right choices is still put on the individual and connected with shame. Nevertheless, some participants perceived mobilisation to be key for the government to listen. In contrast, the city officials viewed the politicisation of the food challenge as problematic, despite their acknowledgement of the critical role that CSOs play in the food system. As outlined in the literature review, the food justice movements in 2001 and the riots caused by the global food crisis in 2008 previously led city administrations to engage with food governance (Patel, 2009; Morgan, 2015; FAO, 2018). Likewise, the amplified food insecurity due to the

COVID-19 pandemic might increase mobilisation around food and lead to government action. The idea that the crisis could be a catalyst for increased understanding of the food system and food security by the City was emphasised by several participants.

To put food onto the urban agenda, participants outlined the need for a food champion. This finding is consistent with Hawkes and Halliday (2017) and Moragues-Faus and Morgan (2015:1561), who outline that food champions are key enabling agents for building political commitment to urban food governance. This study revealed that the City already has committed officials that demonstrate great interest in tackling the food challenge, suggesting that there could soon be a food champion within the City.

7.1.3 Increasing engagement

This study highlighted the City of Cape Town's increasing engagement in urban food governance and the ongoing process of identifying their role. The adoption of the Resilience Strategy was perceived as paving the way for food to become a political priority. Although it was found to have no relation to the MUFPP, the work of the Resilience Department is in line with many of its recommendations, such as the development of food resilience management plans and disaster risk reduction strategies - the need for which was outlined by the current COVID-19 crisis. Moreover, ongoing internal processes such as mapping urban food flows and existing food work by CSOs as well as responsibilities and mandates of city departments are recommended within the MUFPP (2015). Battersby and Hunter-Adams (2020) highlight the importance of visualising interrelations of city departments with the food system to identify the role of local government in the urban food system despite the absence of a mandate.

Participants revealed concerns around the proposed food programme being dependent on political support and funding due to the absent food mandate. Based on existing recommendations by Battersby et al. (2014), and in view of the great momentum for food in the City, these concerns could potentially be overcome through the establishment of a food department. This would simultaneously build the capacity needed to drive an interdepartmental strategy, the importance of which was outlined in previous research (MUFPP, 2015; Global Panel, 2017; Battersby & Haysom, 2016). Likewise, additional capacity could tackle challenges such as poor communication and difficult coordination.

The Food System Vision was outlined as potentially increasing political will through securing external funding and engaging with wider food system actors. Although not being chosen

as a finalist, one participant emphasised its value as an engagement tool, as it facilitated a wide multi-stakeholder process. The value of multi-stakeholder collaboration is supported by existing research and will be discussed in chapter 7.3.

7.1.4 The missing wider environmental perspective

The results of this study indicate that the environmental dimension of food production and consumption has mostly been disregarded by current food system interventions. This is underlined by statements of city officials, who emphasised that their focus lies on improving health and acknowledged the missing connection of their food work with climate change.

The framing of food in the Resilience Strategy in the context of health and well-being stands in contrast to the strategy's overarching aim of protecting citizens from future environmental shocks. It fails to acknowledge the environmental impacts of the current food systems as a threat to future food security and thereby health. As outlined in contemporary literature, both environmental and health externalities must be addressed to ensure planetary health (Battersby & Hunter-Adams, 2020; FAO & WHO, 2018; Willet et al., 2019). These findings suggest the lack of a holistic perspective on the food system and food security within the City. This is mirrored in the NPFNS 2014, where climate change is merely framed as a threat to agricultural production without considering the contribution of the wider food system to climate change. The fact that the environmental impact of the whole food value chain is integrated into more recent policy frameworks by the Environmental Department (CoCT, 2017a) indicates that there is indeed awareness but no wider holistic view across the City.

While one participant outlined that local production does not threaten the environment, other participants called attention to the negative impacts of importing highly processed and meat products on both health and the environment. Meybeck and Gitz (2017) emphasize that, due to the mixture of exports and imports, the environmental impact of local food production does not translate to the environmental impact of local diets. Thus, greater attention needs to be paid to the environmental sustainability of what is offered and consumed in Cape Town.

In view of food systems resilience, Halliday (2019) suggests encouraging demand for sustainably produced food, and Loken (2020) emphasises the importance of achieving clear scientific consensus on sustainable and healthy diets. The findings of this study suggest overall agreement on the changing dietary patterns in Cape Town in line with the nutrition transition (Joubert, Battersby & Watson, 2018), and on the need to shift dietary patterns to improve human health and protect the environment. In congruence with previous research

(Willet et al., 2019; Loken, 2020), participants agreed that, despite its cultural value in South Africa, meat consumption should be reduced to shift towards sustainable and healthy diets. A city official's statement regarding excess meat consumption only affecting the middle class is disproven by the recent Nielsen study (2020), showing that consumers across all income groups consume a significant amount of meat on a daily basis.

As attested by a city official, the national food-based dietary guidelines suggest limiting lean meat consumption to 560 g per week while increasing intakes of fruits, vegetables and legumes (Vorster, Badham & Venter, 2013). A recent study by Springmann et al. (2020) found that if these guidelines are followed, South Africa's GHG footprint would already be reduced by 19.27% but still exceed planetary boundaries for food. In contrast, if the scientific targets of the Planetary Health Diet are followed, limiting meat consumption to only 301g and dairy consumption to 1750g per week, food-related GHG emissions in South Africa would be reduced by 61.4% (Springmann et al., 2020). In view of persisting undernutrition across the municipality, higher amounts of animal products might be required in some population groups. Nevertheless, the City could update nutritional guidelines locally to guide their food-related interventions according to both health and environmental indicators, as emphasised by the MUFPP (2015) and the HLPE (2020).

7.2 What role can the City of Cape Town play in increasing access to sustainable and healthy diets and shifting dietary patterns?

The research findings revealed that the City is strategically well-placed to increase access to sustainable and healthy diets due to their proximity to the challenge. Although some participants expressed concerns about the City's limited tools for intervention and control over the private sector, the theoretical foundation of this research (see Table 4) indicates that the City has a range of levers at hand to impact on food security and the food system. Hawkes and Halliday (2017) emphasise the importance of identifying and leveraging municipal powers for effective urban food governance. Thus, the results of this study revealed eight areas for municipal intervention: education, public procurement, food gardens, local market structures, small-scale production, supporting informal trade, regulating the private sector and institutional change (Figure 6).

All instruments were outlined in contemporary literature, as seen in Table 2. This increases the legitimacy of the research findings and indicates which policies would be suited to the local context. In congruence with previous research (Smit, 2019; Battersby et al., 2014),

interviewees emphasised the importance of a holistic and inclusive approach. The following will discuss how these interventions can help increase access to sustainable and healthy diets.

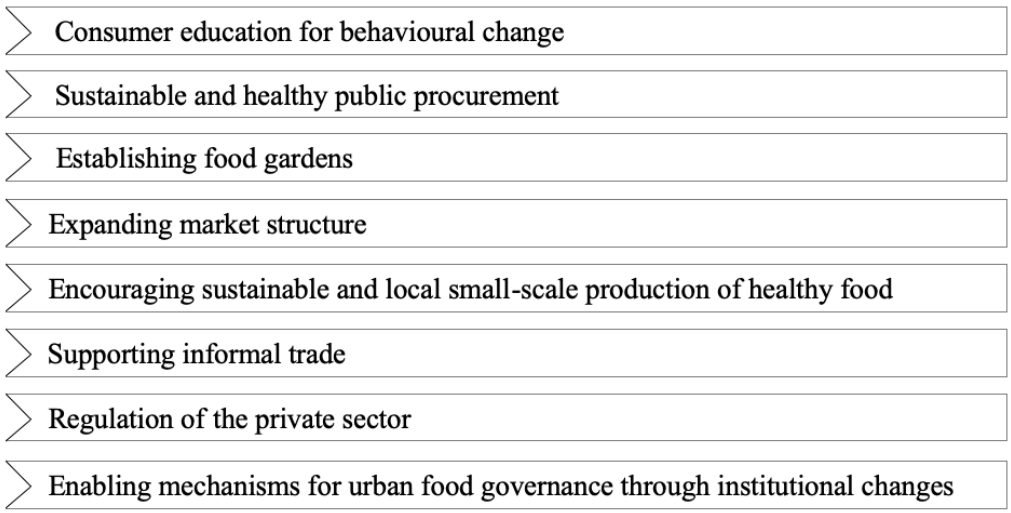

Figure 6. Areas for municipal intervention (results)

7.2.1 Education, public procurement, food gardens and market structure

Consumer education was identified as a key intervention for the City to challenge existing stigmas, norms and aspirations around certain foods. Reports by the EAT-Lancet Commission (2019), the MUFPP (2015), the Global Panel (2017), and the HLPE (2020) emphasise the significance of educational interventions for behavioural change. Participants suggested this should be part of a multi-pronged approach. Addressing wider systemic factors influencing food choices is supported by Sonnino, Moragues-Faus and Maggio (2014). Education was also an element in two other interventions: sustainable and healthy public procurement, and food gardens.

Combining sustainable and healthy public procurement with education was perceived as important for increasing consumer understanding for shifting diets, and is in line with research by Matacena (2016). The results of this study suggest that the City's significant budget would be enough to stimulate demand. Likewise, sustainable and healthy public procurement is emphasised as a high-potential intervention within existing literature (MUFPP, 2015; EAT-Lancet Commission, 2019; C40, 2019). Although without specific mention of food, the City's Environmental Strategy and Resilience Strategy aims to ensure "that public procurement becomes increasingly environmentally and socially responsible" (CoCT, 2019:80; CoCT, 2017b). As the Resilience Strategy also includes developing guidelines for each

commodity group, the City should integrate both health and environmental sustainability indicators into public food procurement guidelines that are suitable to the local context. These local dietary guidelines could also be used to inform consumers and producers (MUFPP, 2015).

Food gardens were recommended not only to increase local small-scale food production but more so as a way of engaging people with the food system and raising awareness about healthy and sustainable diets. This is supported by Battersby and Hunter-Adams (2020), who emphasised that urban agriculture interventions should only be part of a wider strategy. It was furthermore proposed to use food gardens as participatory educational spaces to finding inclusive bottom-up solutions to the food challenge. Innovatively combining closed-loop food market gardens, as suggested by one participant, correlates with existing recommendations for integrating local small-scale farmers into market structures and encouraging closed-loop production systems (MUFPP, 2015; Morgan, 2015; HLPE, 2020; Battersby & Hunter-Adams, 2020).

Previous research also supports the recommendation of expanding existing market structures (MUFPP, 2015; Morgan, 2015). This intervention would not only increase the availability and accessibility of locally sourced healthy and sustainable produce but also improve livelihoods of small-scale farmers and informal traders.

7.2.2 Small-scale production, informal retail, and big business

The participants placed emphasis on encouraging sustainable and local small-scale production of healthy food in peri-urban areas. Battersby and Hunter-Adams (2020), the MUFPP (2015) and the HLPE (2020) highlight that this would improve the availability of nutritious food, shorten supply chains, increase proximity to markets and promote biodiversity, thereby reducing economic, health and environmental costs to the consumer and stimulating both local employment and income. In view of antagonistic political interests around the PHA, participants particularly emphasised the value of its protection, which is mirrored in Haysom, Crush and Caesar (2017). Moreover, due to limited accessibility to land in peri-urban areas (Battersby, 2012), one participant highlighted the need for municipal land reform to enable small-scale production.

Research participants viewed supporting informal trade as one of the most transformative interventions. Since informal traders are most frequently accessed in low-income communities, they play a great role in encouraging sustainable and healthy consumption (Battersby,

2011). This is acknowledged within the Resilience Strategy and the Nourish to Flourish Strategy. However, in line with Smit (2019) and Battersby and Watson (2019b), who outlined that African cities often intend to phase out the informal sector, some participants still perceived the City to be working against informality. Instead of undermining the informal sector by being too focused on regulation, Battersby, Marshak and Mngqibisa (2016) recommend working with informal vendors to increase food safety and reduce spoilage through developing the necessary infrastructure and facilities, incentivising the sale of healthier foods, and integrating informal retail into food system planning. These recommendations were all found within the interviews, which underlines their importance. However, participants' views on formalisation differed. Whereas one participant suggested that supporting the informal sector could advance the formalisation process, another participant highlighted the importance of legitimising informal trade without formalising it. This debate emphasises the complexity of dealing with informality and indicates the need for inclusive approaches to adequately support informal trade.

Although some participants highlighted the City's limited power to control the private sector, all participants emphasised the need for regulation of and collaboration with business in order to make healthy and sustainable food more available and affordable. In line with Battersby (2017), the results suggest that large private sector actors play a significant role in accelerating the nutrition transition. However, Morgan (2015) finds that supermarkets remain largely unaddressed by urban food policies. Thus, critically reflecting on retail environments, such as shopping centre developments, was identified as an opportunity for intervention, and is supported by Battersby (2017). Moreover, in line with Drewnowski (2020) and Halliday, Platenkamp and Nicolarea (2019), participants recommended shifting subsidies and taxes to encourage the production and consumption of sustainable and healthy food. The need for regulating food advertising was highlighted by participants due to the existence of stigma around eating vegetables and the desire to eat fried food and meat. Increasing exposure to advertising was found to accelerate the nutrition transition and fuel aspiration for certain foods, such as meat (Hunter-Adams, Battersby & Oni, 2018). These are areas over which the City has power (see 5.3) and in which it could drive sustainable changes in consumer behaviour. Lastly, in view of the suggestion to introduce food labels, updated nutritional guidelines suitable for the local context can once again be useful to guide the private sector (MUFPP, 2015; HLPE, 2020).

7.2.3 Creating enabling mechanisms for urban food governance

Finally, this research revealed the importance of creating an enabling environment for urban food governance through institutional changes within the City. This area of intervention is most significant, as it is central to the effectiveness of all other interventions and to creating a comprehensive food strategy. Integrating a food lens into urban policies across all sectors and adopting food-sensitive urban planning and design seem especially crucial, as the theoretical foundation (see chapter 4) revealed that even non-food related policies and municipal processes unintentionally interfere with the urban food system (Battersby, 2012).

Likewise, mapping responsibilities of different departments to activate existing mandates, which is currently done by the Resilience Department, seems critical to leverage municipal powers in view of an absent urban food mandate (MUFPP, 2015). On this account, de Visser (2019) highlights the constitutional urban power and obligation to provide infrastructure services such as electricity and water, essential to food utilisation. Thus, instead of only working around poor access to energy and water, as outlined by a city official, the City should scale up efforts to ensure service delivery. As previously addressed, public transport and housing are other important elements that should be improved by the City (Battersby et al., 2014).

The research participants outlined many elements already recommended within the Food System and Food Security Study by Battersby et al. (2014): the development of a comprehensive strategy, internal training of city officials to increase understanding, as well as the development of a food system and food security charter for effective long-term planning. The latter is a good starting point that can be used as a ”tool to get food onto the agenda of public- and private sector actors” (Halliday, Platenkamp & Nicolarea, 2019:100). The establishment of a food department or unit was endorsed by several participants, including city officials, and would certainly build additional capacity and attract funding. However, one participant warned from falling into silos when establishing a separate city department. Thus, in line with the MUFPP (2015), it is important to adopt a multi-pronged approach – having a municipal interdepartmental government body driving a comprehensive food strategy while mainstreaming food considerations into all departments.

Other MUFPP indicators include the development of mechanisms for data collection, monitoring and evaluation, which was also emphasised by an academic participant. As outlined in the interviews, the current work by the Resilience Department has initiated other processes that are in line with the MUFPP, such as food emergency assistance, food resilience and disaster management plans, as well as creating an inventory of local food initiatives, the

importance of which became apparent during the pandemic. Lastly, creating institutional mechanisms for multi-stakeholder collaboration was emphasised by all participants, and will be discussed in 7.3.

7.2.4 Further considerations

As outlined, many of the proposed interventions are aligned with the MUFPP. One city official confirmed the intent to integrate the pact into their planned food programme. Moreover, the proposed interventions overlap with the Nourish to Flourish to a significant extent; however, the strategy is missing measures to regulate the private sector and promote sustainable and healthy public procurement. Moreover, both the Nourish to Flourish Strategy and the MUFPP highlight the importance of reducing food waste and providing food assistance, which was not reflected in the interviews. Thus, the City could leverage existing frameworks and strategies and expand them with the insights gained from this and further research.

Absent in the findings of this study was the so-called "missing middle", the various stages between production and consumption (Sonnino, Tegoni & de Cunto, 2019). As food processing facilities are often situated within city boundaries, Battersby and Hunter-Adams (2020) emphasise the potential for city governments to incentivise the uptake of smaller-scale agro-processing, producing minimally processed food that is sourced locally. The MUFPP (2015) further highlights the importance of improved storage, transport, distribution and infrastructure to decrease environmental impacts and economic costs.

Lastly, in view of the highlighted challenges to implementation, the way forward can only be paved by increasing funding, political will, and capacity, and improving information flows, understanding, and coordination within the City.

7.3 How can multi-stakeholder collaboration be strengthened for effective and inclusive urban food governance?

The results of this study indicate that food system stakeholders beyond the government play a significant role in Cape Town's urban food governance. The importance of multi-stakeholder collaboration was not only emphasised by all participants but was also a recurring theme in both literature (Smit, 2019; Pereira & Drimie, 2016; Battersby & Haysom, 2016; Global Panel, 2017) and existing policies. Especially the NDP, NPFS, WCG Strategic Plan, Nourish to Flourish Strategy, Resilience Strategy and the Food System Vision highlight the need for a collaborative or "whole-of-society" approach. This suggests that there is political buy-in and willingness to cooperate on all government levels.

This study identified five different platforms for multi-stakeholder collaboration in Cape Town, convened in different ways and by different stakeholders, though with overlapping participants. The interviews revealed the existence of uneven power dynamics and conflicting interests between stakeholders, which is equally reflected by Pereira and Drimie (2016) and Smit (2019). The participants' perception of the private sector being unwilling to change, prioritising profits and passing down external costs to consumers was already outlined by the WHO (Popkin, 1993). Existing research clearly connects big private sector actors to the nutrition transition (Popkin, 2015; Battersby, 2017). While this leads to some collaborative platforms excluding the private sector, such as the Community of Practice, others like the Southern African Food Lab explicitly seek to challenge its power and create strategic alliances through dialogue. In fact, Halliday (2019:63) warns that a later involvement of private sector actors might prove challenging if decisions that are not in their interest have already been made. Thus, collaborative governance platforms should include the private sector, thereby enabling different stakeholders to actively steer the direction of private interests and hold private actors accountable. As highlighted by participants and previous research (Global Panel, 2018), the private sector could be a force for good, especially through increasing the availability and affordability of and aspiration for sustainable and healthy foods. Indeed, Halliday (2019:63) states that "civil society and private sector actors bring their own arsenals of resources and instruments to complement those of the public sector". Nevertheless, as outlined by several participants, it is also important to have spaces for dialogue without the private sector. This supports the idea of having multiple collaborative platforms.

The results revealed that City-led collaboration tends to exclude civil society, which can be explained by the City perceiving them as a threat and avoiding politicisation of food. Interestingly, one academic warned about potential conflicts with CSOs, while another academic highlighted the transformative aspect of carefully designed conflict. Nevertheless, Halliday (2019:63) warns that a collaborative platform excluding civil society "will be unable to propose policy changes to the system within which it operates". Likewise, participants highlighted the critical role of civil society in raising awareness of challenges on the ground and holding government accountable. The results showed that the current crisis has increased the City's appreciation of CSOs and enhanced their understanding of food insecurity. This could potentially encourage collaboration, thereby leveraging synergies, and improve government responses to the food challenge. Although Morgan (2015:1389) outlines the valuable role of civil society in orchestrating partnerships and strategies, he warns that the new dynamics of

co-governance could make them "sacrifice their radical voice for the semblance of political influence". This indicates the importance of creating spaces in which concerns can be expressed freely.

7.3.1 Improving multi-stakeholder collaboration

Participants outlined several ways to improve multi-stakeholder collaboration. First, through ensuring inclusivity and balanced participation, as well as through overcoming challenges like conflict and asymmetrical power dynamics. This is in line with research by Smit (2019) and Morgan (2015). Likewise, Moragues-Faus and Morgan (2015:1596) recommend reshaping uneven power dynamics and warn from "excluding needs and interpretations of those not readily accessible to these spaces", as well as from excluding more radical voices. In line with the updated food security dimensions, individuals and communities should have agency to take part in inclusive political spaces (HLPE, 2020). To move forward, the City could leverage the convening power of academia in collaborative spaces for facilitating dialogue. As independent "watchdogs", academics could ensure inclusive participation, navigate power dynamics, and hold actors accountable. The findings of this research suggest that the City has already built trust in academia, as they actively seek out and value their advisory.

Second, participants suggested increasing transparency and accountability as well as enhancing communication and implementation, which is also outlined in Moragues-Faus and Morgan (2015). Based on the findings, the necessary capacity for the latter two might be achieved through a dedicated food systems department or unit driving the collaborative platform. In addition, officially allocating a food mandate to local governments might increase necessary funding for facilitation and implementation.

Moreover, participants found that the City could benefit from knowledge exchange through global networks. Halliday (2019:70) suggests that networks "can give cities a louder collective voice with regard to food policy. The local level could thus have more influence over higher levels of food system governance". Therefore, existing partnerships such as the MUFPP should be harnessed, and new networks could be joined, potentially increasing the sense of commitment and facilitating implementation.

7.3.2 Food Policy Council

Although not universally supported by participants, the insights provided by this study suggest that a Food Policy Council would represent a viable opportunity to improve urban food governance in Cape Town. As political will within the City was found to be weak,

establishing a formal structure for collaboration could increase its legitimacy and influence, leading to more impactful outcomes. These findings are reflected in studies by Matacena (2016) and Purifoy (2014). Moreover, the results of this study revealed that it could aid consistency, create a sense of duty and enable accountability of actors, which is supported by previous research (Moragues-Faus & Morgan, 2015). Halliday (2019:64) underlines that high-level mayoral commitment to a platform "enables (and often obliges) departments and agencies to review their food-related policies".

Nevertheless, a suitable collaborative model for the local context should be identified by evaluating "local government structure, political will, and social capital levels" (Halliday, 2019:65). In view of existing power imbalances between stakeholders and the potential lack of inclusivity, not all participants supported the establishment of an FPC. Thus, finding ways to enable inclusive participation of a wide range of actors, especially grassroots voices would be crucial for a formal platform to be effective. Facilitation by independent and evidence-focused actors such as academia could ensure balanced participation. Likewise, Halliday, Platenkamp and Nicolarea (2019) argue that an FPC facilitated independently of local government would be more resilient to changes in political leadership.

Furthermore, the establishment of a formal structure would not mean discontinuing existing ways of collaboration. On the contrary, these could mainstream external voices into the formal platform. Remaining concerns around a rigid structure potentially being less responsive and flexible stand in contrast to the absent obligation for participation and implementation in loose collaborative structures (Matacena, 2016). The latter would risk critical stakeholders such as private sector actors and government officials pulling out. Therefore, this study suggests that an inclusive and balanced formal structure for collaborative governance could boost the efficacy of existing collaborative platforms and facilitate implementation.

7.4 Research limitations and recommendations for further research

The generalisability of these results is subject to certain limitations. Despite efforts to integrate a wide range of perspectives, this study was limited by the lack of insights into the City's Environmental Department, the private sector and grassroots voices. The small number of participants further limit the validity of this research. Finally, the current pandemic could not adequately be taken into account due to restricted opportunities for primary research. However, all participants acknowledged that the pandemic influenced their

responses. As the interviews were carried out over a time span of four months, the dynamic situation of the pandemic naturally changed how each interviewee perceived the crisis.

If the debate is to be moved forward, a better understanding of dealing with informal trade needs to be developed in order to make practical recommendations for the City of Cape Town. Additionally, considerably more work is required to determine interventions around the "missing middle" between production and consumption. Likewise, further research is necessary to determine locally appropriate nutritional guidelines that respect planetary boundaries. Lastly, a greater focus on different methods of collaborative governance in Cape Town could produce interesting findings that could inform how to engage with multi-stakeholder collaboration more effectively.

8. Conclusion

This thesis aimed to investigate how the City of Cape Town can increase access to sustainable and healthy diets through urban food governance. Previous research has revealed detrimental consequences of the nutrition transition for both health and the environment, which underlines the importance of shifting food consumption patterns. However, a variety of structural barriers in the food system specific to the urban context hinder many people from accessing and choosing the right foods, emphasising the need for an urban approach.

Although there is high potential for cities to address the food challenge locally, the South African food mandate is held by the national and provincial governments, reinforcing the bias towards rural areas and productionist interventions. The results of this study highlighted that the absence of an urban food mandate results in several challenges, such as the lack of funding and capacity as well as dependence on higher government levels. This emphasises the need for increased coherence, communication and support between multiple government spheres. Moreover, weak political will and antagonistic interests within the City were found to be major barriers to making food a priority within the City. However, this study suggests that food champions within the City and mobilisation of civil society have the potential to enhance understanding by local government, build political will and accelerate action.

The City's previous urban food governance interventions consisted of isolated policies without integration into a wider food strategy. Promising frameworks, such as the MUFPP and the provincial Nourish to Flourish Strategy, failed to gain political traction. However, this study revealed that there is currently great momentum for food to find a home in the City due to the increasing engagement with urban food governance. This is most prominent with the City prioritising food in the Resilience Strategy and participating in wider multi-stakeholder processes such as the development of a municipal Food System Vision. It remains to be seen how these developments will be advanced by the City.

Nevertheless, this study highlighted the lack of a wider environmental perspective of the food system and food security in existing governance processes. Currently, the main focus within municipal processes lies on the social dimension of food access, with human health being a priority. In view of the pressing threats of climate change, the lacking holistic approach impedes transitioning to a resilient food system in the long term. Thus, this research emphasises the need for greater attention to the environmental dimension of diets and the wider food system. To move away from the health bias, the development of locally

appropriate sustainable and healthy dietary guidelines can be useful to inform existing and future strategies and interventions.

The findings of this research demonstrated that the City does have a significant role to play in increasing access to sustainable and healthy diets. Indeed, this study identified several courses of action that lie within the urban powers to intervene in the food system. These are found in the following areas: education, sustainable and healthy public food procurement, food gardens, expanding local market structures, encouraging sustainable and local small-scale production of healthy food, supporting informal trade, and regulating the private sector. Further interventions around food assistance, food waste and the food value chain can be integrated into the toolbox of actions by leveraging existing frameworks such as the MUFPP and the Nourish to Flourish Strategy. Most important, however, remains creating an enabling environment for urban food governance within the City through institutional changes. This includes not only developing a food charter and a food strategy to guide food system interventions but also integrating food considerations into all municipal processes and decisions. Moreover, a dedicated food unit or department could ensure the necessary capacity and funding to drive an interdepartmental strategy.

Multi-stakeholder collaboration was outlined as extremely important as it allows for leveraging synergies between actors, inclusive participation in policymaking, and accelerating implementation of food system interventions. The findings of this study have significant implications for the understanding of how multi-stakeholder collaboration in Cape Town can be strengthened. In view of uneven power dynamics and antagonistic interests, it is central to ensure collaborative governance is based on inclusivity and balanced participation. Therefore, facilitation by an independent and evidence-focused entity such as academia is recommended. Moreover, transparency, accountability and implementation should be enhanced to ensure effective collaboration. A Food Policy Council would be a viable option to increase commitment and the sense of duty, and to legitimise decisions. However, this should be established independently of existing collaborative structures, as these can be levers to include a wider range of voices and leave spaces for dialogue without the private sector.

Lastly, the current COVID-19 pandemic highlighted the critical role of the City, civil society and the informal sector for urban food security. Thus, it could be a catalyst for transformation, due to the accelerated understanding of the food challenge, the increased collaboration between different stakeholders and new tools for intervention. It remains to be seen how the disruption will be used to move towards a resilient, sustainable and healthy food system.

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Annex

Annex 1. Guideline for semi-structured interviews

Theme 1: Sustainable and healthy diets

1. What is your understanding of a sustainable and healthy diet? Which guidelines do you base your work on?
2. What is your perspective on recent publications on sustainable and healthy diets that focus on whole food plant-based diets with minimal consumption of animal products?
3. Do you think it would be possible to shift towards sustainable and healthy diets in the local context?
4. How do you view and approach strategies for shifting dietary patterns? Where are the opportunities for intervention?
5. How do you understand limiting factors of accessing a sustainable and healthy diet for low-income consumers?
6. Does the City of Cape Town consider environmental considerations of dietary patterns?

Theme 2: The role of local government

1. How does the City of Cape Town understand their urban food governance mandate?
2. What role does the City play in increasing access to sustainable and healthy diets?
3. What do you expect the role of the City to be in the food system?
4. How does the role of the City in the food system differ from regional and national government?
5. Where are the major limitations and opportunities for transformation and interventions in urban food systems governance?
6. How do you see the City's role in transforming the urban food system?
7. What food system interventions by the City are planned or already in place? How are they being implemented? What are the biggest challenges for implementation? How is it being monitored?

8. The City of Cape Town has signed the Milan Urban Food Policy Pact and province has developed the Nourish to Flourish Strategy, providing extensive recommendations for urban food governance. How far do you see the City of Cape Town in terms of implementation? What is the reason for the implementation gap? How can these challenges be overcome?
9. What limitations are currently in place?
10. Could you tell me more about the details of the plans outlined in the Resilience Strategy?
11. Does the Resilience Strategy consider the environmental sustainability dimension of the food system?
12. What are the next steps the City of Cape Town should take? What policies are needed to make progress on its goals?

Theme 3: Collaboration with other food system stakeholders

1. How do you understand the role of other food system stakeholders such as academia, civil society and the private sector?
2. Have you already had experience working on projects with other food system stakeholders? What were the benefits and opportunities? What were the challenges?
3. What are the major limitations of a collaborative approach with the City of Cape Town? How might these be overcome?
4. How could the City of Cape Town foster collaboration between stakeholders? What support is needed from the City?
5. What do you think about establishing a formal Food Policy Council in Cape Town?

Annex 2. Research ethics approval

UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

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6 December 2019

Isabella Trapani
Department of Environmental and Geographical Science

The role of local governments in increasing access to sustainable and healthy diets for all: Possible strategies for the City of Cape Town to transform its urban food system.

Dear Isabella Trapani

I am pleased to inform you that the Faculty of Science Research Ethics Committee has approved the above-named application for research ethics clearance, subject to the conditions listed below.

- Please ensure that you secure written permission to interview UCT staff.
- Work on the inconsistency between the application and the consent form. The consent form stipulates the use of photography and video whereas the application form only mentions audio. This needs to be streamlined, with a motivation for the use of photos and video if needed (or the deletion of these items from the consent form).
- Implement the measures described in your application to ensure that the process of your research is ethically sound; and
- Uphold ethical principles throughout all stages of the research, responding appropriately to unanticipated issues: please contact me if you need advice on ethical issues that arise.

Your approval code is: **FSREC 115 - 2019**

I wish you success in your research. Yours sincerely

Signature Removed

Dr Shari Daya
Chair: Faculty of Science Research Ethics Committee

Cc: Dr Jane Battersby (Supervisor)

Annex 3. Consent form

DEPARTMENT OF ENVIRONMENTAL & GEOGRAPHICAL SCIENCE

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Informed Voluntary Consent to Participate in Research Study

Project Title: The role of local governments in increasing access to sustainable and healthy diets for all: Possible strategies for the City of Cape Town to transform its urban food system.

Invitation to participate, and benefits: You are invited to participate in a research study conducted with urban food system stakeholders in Cape Town. The study aim is to assess the potential and possible barriers of urban food strategies and policies. I believe that your experience would be a valuable source of information, and hope that by participating you may gain useful knowledge.

Procedures: During this study, you will be asked to answer several questions.

Recording: We may record audio as part of the study. These will be used for transcripts in order to include direct statements within the research. If you object to this, please indicate below.

Risks: There are no potentially harmful risks related to your participation in this study.

Feedback: You will receive feedback about the results of this research by receiving a written copy of the results.

Disclaimer/Withdrawal: Your participation is completely voluntary; you may refuse to participate, and you may withdraw at any time without having to state a reason and without any prejudice or penalty against you. Should you choose to withdraw, the researcher commits not to use any of the information you have provided without your signed consent. Note that the researcher may also withdraw you from the study at any time.

I agree to participate in this research (tick one box) ☐ Yes ☐ No _____ (Initials)

I agree to be audio-recorded ☐ Yes ☐ No _____ (Initials)

_____	_____	_____
Name of Participant	Signature of Participant	Date
_____	_____	_____
Name of Researcher	Signature of Researcher	Date