



Western Cape Government Household Food and Nutrition Security Strategic Framework

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for public comment

Acknowledgments

The research that has informed this Strategic Framework is made possible by the willingness of the managers of provincial government departments, stakeholders throughout the food system value chain, NGOs and academics to come together, identify the most critical problems and volunteer their time and insights to develop strategic responses to improve food and nutrition security in the province.

The Strategic Framework was developed under the strategic guidance of Sibonile Khoza, Tristan Görgens and Shakira Maharaj of the Policy and Strategy Unit of the Department of the Premier, Western Cape, Professor Julian May of the NRF-DST Centre of Excellence in Food Security and Darryn Durno of SADC Research Centre. Additional guidance has been provided in the development of the Strategic Framework by Dr Jane Battersby-Lennard, Dr Scott Drimie, Julia Harper, and Professor Sheryl Hendriks.

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Executive summary

The Western Cape Government Strategic Framework on Household Food and Nutrition Security (Strategic Framework) adopts a food systems approach to analysing, interpreting and responding to the features of the wider food system that create and contribute to food insecurity. The food system comprises the activities, actors and institutions that grow, process, distribute, acquire, consume and dispose of food and how they interact with other systems and actors. The food system is intricate and characterised by interaction and interdependence with other systems such as health, social security, resources, economic opportunity, spatial planning, the state of agriculture and the environment. The operation of this dynamic system determines the availability, access, utilisation and stability of the supply of food. Therefore, by taking a proactive food systems approach, the Western Cape Government (WCG) seeks to identify and promote sustainable household food security solutions and improve the nutrition of people living in the province.

A number of trends have been identified in the Strategic Framework as key strategic issues for the future:

- Ongoing nutrition transition and impact on health;
- Long-term impact of under-nutrition of children;
- Continued duality of agricultural system with large commercial farms producing for formal value chains and most smallholders remaining marginal;
- Rapid urbanisation and increasing shift to buying food;
- Concentration of power in the food system;
- Significance of the informal sector;
- Scarcity of arable land and water;
- Policy silences regarding food and development planning;
- Impacts of climate change; and
- Increasing volumes of food waste.

The Food Security Strategic Framework is transversal, evidence based and contributes to a more coherent and targeted approach to addressing household food and nutrition insecurity in the Western Cape. It has been supported by a wide consultative process. The Food Security Strategic Framework articulates appropriate outcomes and objectives; linking programmes to the reduction of hunger, improvements in health, nutrition, and productivity supporting the realisation of all people living active and productive lives in the Western Cape. Building the foundation for a strategic approach to food, the Strategic Framework:

- Balances social and economic issues – supporting social protection and support for households as well as enabling opportunities, to empower individuals and households within the food system;
- Identifies interlinked agendas which need to be targeted simultaneously to affect the food system;
- Highlights existing programmes within the food security realm and identifies ways to maximise positive outcomes through a coordinated approach;
- Recognises gaps in current areas of focus of the WCG regarding food and nutrition and proposes responses;
- Identifies the importance of improving the availability of appropriate data on key issues that assist in identifying and responding to the key social, economic and demographic trends to better serve communities currently at risk of food insecurity; and
- Proposes a “whole-of-society” approach that will seek strategic partnerships with other spheres of the state and sectors of society to improve responses to food insecurity.

The Strategic Framework requires that governance mechanisms are identified to support the achievement of identified objectives by galvanising action and creating working relationships amongst all stakeholders. It therefore aligns with a “whole-of-society” approach to improving food security and nutrition in the province; deliberately crowding in a diverse range of individuals,

organisations and departments to identify strategic priorities and opportunities. This work will be pursued through the creation of governance mechanisms that will address specific challenges in the food system.

The Food Security Strategic Framework focuses on six pillars:

- Food assistance: Improved access to, and use of, nutritious food for children and vulnerable people by 2019
- Food awareness and safety: Improved food safety and awareness and healthier behaviour by 2019
- Food sensitive planning: Strategic integration of the food system into development planning by 2019
- Food resource management for the future: Sustainable use of land, water, energy and infrastructure by 2040
- Inclusive food economy: Access to nutritious food through the formal and informal food economy by 2040
- Food governance: Evidence-based integration of food security initiatives within the state, and with social partners

The Strategic Framework builds upon the multitude of interventions that have already been planned and undertaken by individual departments within the WCG. These range from direct interventions that provide targeted feeding to those which influence the operation of the wider food system. It seeks to provide an internal coherence to these initiatives to ensure that they add up to more than the sum of their parts. Furthermore, it identifies opportunities to amplify or deepen the impact of existing initiatives. The complexity of the food system, and the relatively limited powers of the provincial government, requires an iterative approach that seeks to build strong intersectoral partnerships to improve the food security of all the residents of the Western Cape.

Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
BFAP	Bureau for Food and Agricultural Policy
CASP	Comprehensive Agricultural Support Programme
CBO	Community-based Organisations
CoCT	City of Cape Town
COE	DST/NRF Centre of Excellence in Food Security
CTFR	Cape Town Functional Region
CTM	Cape Town Market
DA	Democratic Alliance Party
DAFF	Department of Agriculture, Forestry and Fisheries
DDS	Dietary Diversity Scores
DEA&DP	Provincial Department of Environmental Affairs and Development Planning
DEDAT	Provincial Department of Economic Development and Tourism
DFID	Department for International Development
DHS	Provincial Department of Human Settlements
DLG	Provincial Department of Local Government
DoA	Department of Agriculture
DoE	Department of Education
DoH	Department of Health
DoTP	Department of the Premier
DRDLR	National Department of Rural Development and Land Reform
DSD	Department of Social Development
DT&PW	Provincial Department of Transport and Public Works
DTI	Department of Trade and Industry
EAP	Economically active population
ECD	Early childhood development
EPWP	Expanded Public Works Programme
FAO	Food and Agriculture Organisation
FBO	Faith- Based Organisation
FET	Further education and training
GAB	Gap Analysis in Business
GDP	Gross domestic product
GEAR	Growth, Employment and Redistribution
GGP	Gross geographic product
GHG	Greenhouse gas
GHS	General Household Survey
GJ	Gigajoule
GMO	Genetically Modified Organisms
GMP	Growth Monitoring and Promotion
GVA	Gross value added
Hortgro	NGO supporting the horticulture industry
HDI	Human Development Index
HIV	Human immunodeficiency virus
HLPE	High-level Panel of Experts on Food Security and Nutrition
HSRC	Human Sciences Research Council
ICT	Information and communication technology
IDP	Integrated Development Plan

IFSS	Integrated Food Security Strategy
IGR	Intergovernmental relations
INP	Integrated National Plan
IPAP	Industrial Policy Action Plan
LED	Local economic development
MBFI	Mother- and baby-friendly initiative
MDG	Millennium Development Goal
MIG	Municipal Infrastructure Grant
MOD	Mass Opportunity and Development
MTEF	Medium-term expenditure framework
MTSF	Medium-term strategic framework)
MUAC	Mid-upper arm circumference
NCD	Non Communicable Diseases
NDP	National Development Plan
NGO	Non-Governmental Organisation
NPO	Non- Profit Organisation
NSNP	National School Nutrition Programme
NTP	Nutrition Therapeutic Programme
OECD	Organisation for Economic Co-operation and Development
PAP	Problem Analysis Project
PCC	President's Coordinating Council
PCF	Premier's Coordinating Forum
PDA	Provincial Department of Agriculture
PERO	Provincial Economic Review and Outlook
PGWC	Provincial Government of the Western Cape
PMA	Produce Market Association
PSDF	Provincial Spatial Development Framework
PSG	Provincial Strategic Goal
PSOs	Provincial Strategic Objectives
PSP	Provincial Strategic Plan
PT	Provincial Treasury
R&D	Research and development
RDP	Reconstruction Development Plan
RSEP	Regional Socio-Economic Programme
SA	South Africa
SANHANES	South African National Health and Nutrition Examination Survey
SASSA	South African Social Security Agency
SIP	Strategic Infrastructure Plan
SMME	Small, medium and micro enterprise
SMT	Senior Management Team
SOE	State-owned Enterprise
SONA	State of the Nation Address
SPV	Special-purpose vehicle
STATS SA	Statistics South Africa
TB	Tuberculosis
TJ	Terajoule
TOC	Theory of Change
TOR	Terms of Reference
TVETS	Technical Vocation Education and Training Centres

UNFA
VPUU
WCG
WCPSP

United Nations Fisheries Agreement
Violence Prevention through Urban Upgrading
Provincial Government of the Western Cape
Western Cape Provincial Strategic Plan

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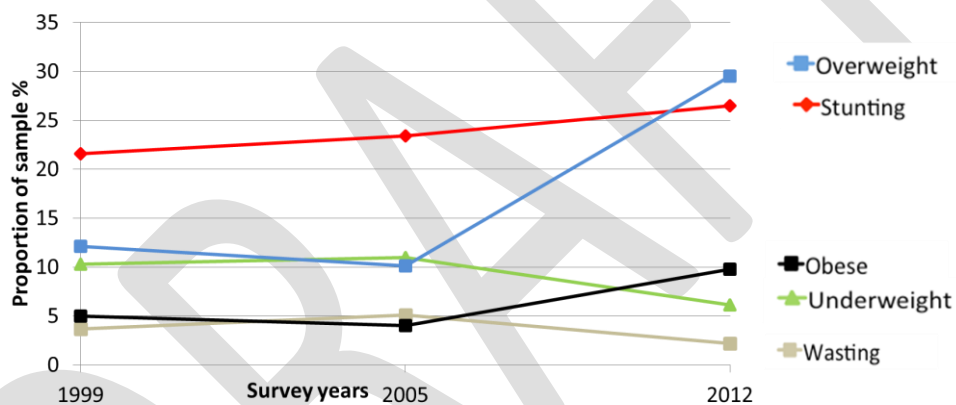
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1 Introduction

Food insecurity is generally understood as the lack of stable and continuous access to food to support a healthy and active lifestyle. The state of food security in the Western Cape is a complex picture. The 2016 Community Survey found that the Western Cape had the lowest percentage of households who ran out of money to buy food in the last 12 months at 13.2% (against a national average of 19.9%). The 2015 General Household Survey provides further nuance to this picture: it found that 17.4% of households in the Western Cape had inadequate food access (cutting back on quantity by reducing the size of meals or number of meals and/or eating a monotonous diet or undesirable foods), while 6.6% of households in the Western Cape had severely inadequate access to food (running out of food, going to bed hungry, or going a whole day and night without eating). Notably, however, the City of Cape Town had the highest rate of households with food insecurity across all of the metros in the country, with 31% of households reporting food access problems.

Data also indicates that South Africa is undergoing a "nutrition transition" where stunting, wasting and under-nutrition in young children is occurring alongside increasing levels of obesity and overweight in older children and adults¹.

Figure 1: Health trends in children in South Africa as a result of the nutrition transition²



Sources: NFCS 1999, NFCS 2005, SANHANES 2012)

Stunting rates are high both in boys (17.5%) and girls (13.9%) in the Western Cape, with Coloured children experiencing the highest rates of stunting amongst the race groups. Simultaneously, the percentage of boys in the Western Cape who are overweight is the highest in the country (18.2%) and the percentage of girls also ranked amongst the highest (19.1%) compared to their counterparts in other provinces³. Adult males have also been shown to have the highest body mass index (BMI) when compared to males in other provinces, with 26.9% of men in the Western Cape reported as overweight and 16.1% obese⁴. While the percentage of women in the Western Cape who are overweight is similar to the national rate (24.5%), the percentage who are obese is significantly greater than the national average (37.9%). This pattern has a significant impact on the rates of non-communicable diseases. For instance, 10.5% of adults in the Western Cape have

¹ McLachlan & Landman 2013

² DAFF, 2016

³ SANHANES, 2012

⁴ SANHANES, 2012

an elevated chance of developing diabetes⁵ and 11.2% have diabetes⁶, both of which are higher than the national average⁷.

While food insecurity is often considered a rural problem, the urban nature of the Western Cape (86% urbanised, with 18% living in informal settlements) means that, in absolute numbers, more urban households are food insecure than rural households. As indicated above, the City of Cape Town represents a particular pressure point which reflects the wider pattern of urbanisation and in-migration that characterise food insecurity in the Western Cape.

It is also no surprise that vulnerable groups are at greater risk of food insecurity, because economic power play such a large factor in determining access to food. Food insecurity in the Western Cape is most prevalent among black and Coloured population groups, with black African households making up 53% and Coloured households constituting 41% of those with inadequate access to food. Furthermore, female-headed households are more likely to be food insecure than male-headed households in the Western Cape.

It is with this context in mind that the WCG is taking a proactive position against food and nutrition insecurity. The vision for food security in the Western Cape is that all residents have access to and control over the physical, social and economic means to ensure sufficient, safe and nutritious food at all times, which meet their preferences, in order to meet the dietary requirements for a healthy life.

It is recognised that the definitive response to food insecurity is increasing incomes for poor households through increased decent employment. As such, any food security interventions need to be implemented in concert with initiatives that support economic growth, particularly in sectors which can also significantly contribute job creation to the province. Targeted economic growth and job creation is being pursued through a number of province-wide interventions, spearheaded by Project Khulisa. The Western Cape Food Security and Nutrition Strategic Framework is targeting specific shortcomings of the current food system to ensure that it serves all of the residents of the Western Cape.

The Strategic Framework aims to address food insecurity in the province by focusing on the following priorities:

- Effective food assistance strategies and improved nutritional safety nets for children and vulnerable adults;
- Improved nutrition and food safety capacity building to assist households and communities in monitoring their nutritional status;
- Improved WASH programmes in schools;
- Integration of food sensitivity in development planning of local and provincial government;
- Enhanced resource management strategies to ensure the continued local availability of diverse and nutritious food sources in the future;
- Improved support of the informal food sector and the emerging agricultural sector; and
- Improved transversal Food Governance.

To achieve these objectives the Strategic Framework will mobilise effective coordination of a range of government and non-government actors in addressing the multiple dimensions of hunger, food insecurity and nutrition. Considering the emphases on transversal design and implementation, the Strategic Framework will be led by the Chief Directorate: Policy and Strategy in the Department of the Premier, with priorities championed by relevant departments reporting to the Food Security Work Group.

The Strategic Framework articulates outcomes and objectives linking programmes to the reduction of hunger and improvements in health, nutrition, and productivity to support all people

⁵ Impaired glucose homoeostasis (HbA1c > 6.1 and < 6.5%)

⁶ HbA1c > 6.5%

⁷ SANHANES, 2012

living in the Western Cape in leading active and productive lives. A great deal of consideration has been given to balancing social and economic issues – supporting social support as well as enabling opportunities to enable the capabilities of individuals and households to assert choices about their food and nutrition. In addition, the development of the Food Security Strategic Framework has further brought to light the critical need to improve the availability of appropriate data on key issues that assist in identifying and responding to the key social, economic and demographic trends to better serve communities currently or potentially at risk of food insecurity.

Regarding governance, the Strategic Framework recognises the importance of building and strengthening partnerships through embracing “whole-of-society” approaches, maximising existing programmes to identify ways to capitalise on positive outcomes, and promote greater efficiency for stakeholders actively supporting the reduction of food insecurity.

The development of a strategic framework, rather than a strategy or policy, is an acknowledgement of the scale, scope and diversity of the food system in the Western Cape. The intention of this document is to give a clear indication of the strategic priorities of the WCG and identify appropriate programmatic responses. One of the primary functions of the Food Security Work Group will be to ensure that this becomes a living document. In practice this means the further development of implementation plans for each of the pillars identified in this document. This process should be led by the Food Security Work Group, with the formation of sub-work groups aligned with each of the pillars.

1.1 The process

The development of the Strategic Framework was transversal and consultative. Initially, leading academics developed input papers and briefs to stimulate and refine strategic options. In order to develop input papers they drew on the following material: SANHANES, the Population Census, Agricultural Census, annual General Household Survey and the Income and Expenditure Surveys and Living Conditions Survey produced by Statistics South Africa, the National Income Dynamics Survey, research undertaken by the African Centre for Cities, previous research commissioned by the Western Cape Government and the City of Cape Town and lessons from programmatic achievements in food security.

The priorities of the Strategic Framework were developed through an extensive consultative process, which has included a series of four workshops with business, NGOs, representatives from agriculture, health, social development, nutrition and government departments that will be closely involved in the adoption of this Framework. In-depth interviews were held with key stakeholders in government, business and civil society. Members of the drafting team also participated in processes for the preparation of a National Food Security and Nutrition Implementation Strategy. Through this process:

- The key problems were identified and strategic options for responding to these put forward by all actors, stakeholders and partners; and
- Mechanisms to influence attitude, behaviour and structural change were identified and pathways towards immediate, intermediate and long-term improvements in food security were mapped.

As a result the Strategic Framework is not only informed by academic or development thinking, but critically by the people most affected by food and nutrition in the province.

1.2 The need for a provincial strategic framework for food and nutrition security

Food security is enshrined as a basic human right in South Africa's Bill of Rights. The right to food for all people and the right to nutrition for children are set out in sections 27(1)(b), 27(2) and 28(1)(c) of the Constitution. In accordance with international human rights conventions, the country has a responsibility to progressively realise the right to food and ensure conditions that

are conducive to the realisation of these rights. In the case of basic nutrition for children, the right is unqualified and is not dependent on the availability of government resources. Food security is also an explicit goal of the National Development Plan requiring deliberate action on the part of government to identify and address food insecurity through all spheres of government. Access to food is a directive principle in Chapter 10 of the Western Cape's Provincial Constitution. The Western Cape Government recognises this responsibility and the urgency for action and has set out to develop a Food Security Strategic Framework to complement the Provincial Strategic Plan.

South Africa is considered food secure at the national level, and in most years has adequate agricultural production to feed its population of 54 million people. Despite this, household food insecurity in South Africa is at unacceptable levels when compared to countries of similar economic development. This is reflected in the persistence of income poverty, a high prevalence of child malnourishment, a high prevalence of micronutrient deficiency together with an increasing share of the population being overweight or obese, and associated increases in the prevalence of non-communicable disease (NCD).

Production patterns, land uncertainty, climate change, business practices and consumer preferences put future national household food insecurity in question. Strategies to deal with these and other issues have thus far failed to deal adequately with the multifaceted challenges that confront South Africa's food system⁸⁹¹⁰¹¹. The rapidly changing context of national food security is a result of both *long wave stresses* such as climate change, and *short wave shocks* such as food price volatility. This means that solutions that may have worked in the past are no longer viable in the current context. Innovative responses and solutions are required that fundamentally reconsider the causes of food insecurity. To date, initiatives have often been fragmented, piecemeal and difficult to bring to scale. Changes are necessary if progress is to be made towards achieving food security and adequate nutrition.

The consequences of widespread household food insecurity threaten wider social security, significantly impair labour productivity and place a heavy burden on health and social security systems¹². The human potential and productivity losses due to under-nutrition seriously constrain economic development, limiting individual lifetime earnings and gross domestic production. Rising prices can spark social unrest, destabilise fragile economies and set back development progress. Rising demand for food and fuel, coupled with resource depletion and inadequate governance of the food system has increased the fragility of the food economy, giving rise to calls for a fundamental redesign of how food is produced, processed, distributed, accessed and utilised. Furthermore, risks need to be proactively planned for as a national food security emergency could have serious implications for the logistics chain. As the recent drought has been a reminder, a maize shortage can place sudden increases in demand on port, rail and other transport infrastructure.

Adding complexity to the issue, the socio-economic and spatial characteristics of the Western Cape produce a context for food security that is somewhat distinct from the rest of South Africa. Food production plays a significant role in economic activity, source of exports to regional and international markets and job creation – the highly efficient agricultural sector is largely export orientated, contributing to 15.1% of provincial exports and growing. The hunger and malnutrition experienced by households in the province have less to do with spatial remoteness or limited economic activity, but rather to marginalisation from the mainstream economy and barriers to access and affordability for the poorest households. Most of the population live in urban settlements, and urban food insecurity and inadequate nutrition tend to be concentrated in dense informal settlements and backyards.

⁸ Drimie and McClachlan, 2013.

⁹ Hendriks, 2014.

¹⁰ Oxfam, 2014.

¹¹ Pereira, 2014

¹² Hendriks and Olivier, 2015.

It is against this backdrop that the Food Security Strategic Framework has been developed. Despite the province's constitutional and policy mandate, as well as comparative prosperity and well-established food system, many people do not enjoy the right of access to adequate food guaranteed in the Constitution and many children are at risk of malnourishment¹³. Hence, in developing a strategic response, the provincial government intends to take measures to contribute to the progressive realisation of this right. The Provincial Government recognises the complexity and multidimensional nature of food insecurity. As such, the Food Security Strategic Framework aligns with the National Development Plan (NDP), 2012 and the National Policy on Food and Nutrition Security, 2013.

2 Conceptual framework

2.1 What is food security?

Internationally, food security is defined as: "When all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active healthy life"¹⁴. The National Policy on Food and Nutrition Security defines food security as "Access to and control over the physical, social and economic means to ensure sufficient, safe and nutritious food at all times, for all South Africans, in order to meet the dietary requirements for a healthy life"¹⁵. Both definitions cover four inter-related elements of **availability, access, utilisation** and a **stable supply** of food. The utilisation of food should be adequate to meet the nutritional needs of citizens as determined by age, sex, weight and height as well as the level of physical activity, and biological factors. Food security takes account of vulnerability, and goes beyond stating that every person should have enough food for today, implying that all people should be able to secure enough food to meet their needs in the future. The WCG also finds that the consideration of "preference" is also critical – relating to the social, cultural or religious needs of individuals regarding food. As such, the WCG adopts the national definition, and includes the notion of "preference", understanding that food security is when all people in the Western Cape have access to and control over the physical, social and economic means to ensure sufficient, safe and nutritious food at all times, which meet their preferences, in order to meet the dietary requirements for a healthy life.

The figure below illustrates the four main dimensions of food security. Food and Nutrition Security place emphasis on food as a commodity (availability and access) whilst nutrition security takes the person as the point of departure to ensure that sufficient nutrients are consumed and absorbed efficiently and effectively in our bodies.

Figure 2: Interrelationship between food and nutrition security

Dimension	Food security		Nutrition security	Stability
	Availability	Access	Utilisation	Governance
Description	Adequate supply of food at the national or sub-national levels including levels of production, stock levels and net trade	Ability of individuals and households to acquire food, generally relating to income, expenditure, markets and prices	The way the body makes the most of the various nutrients in food, relating to nutritional content of food, storage, hygiene, feeding practices, food preparation, dietary diversity, intra-household distribution of food, life stage, social behaviours and health status	Ensuring the optimal availability, access and utilisation of food at all times for all people associated with government programming and planning and the attitude and behaviours of people

¹³ WCG, 2014.

¹⁴ FAO, 1996.

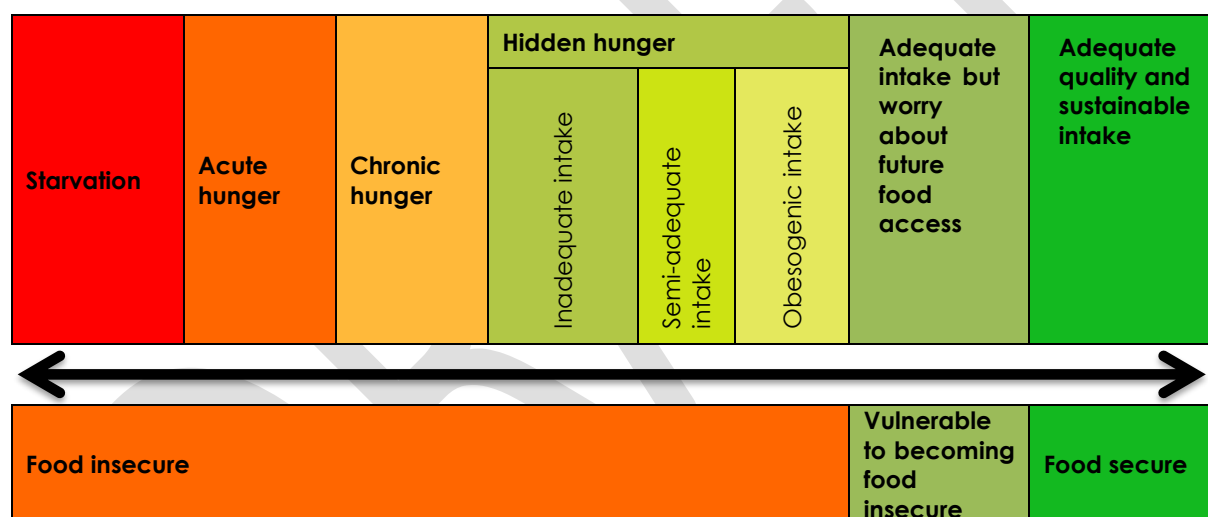
¹⁵ DAFF, 2013.

Source: Adapted from the FAO

At the level of the individual or household, food insecurity can be thought of as a range of stages reflecting increasing deprivation of basic food and nutrition needs (Figure 1). This implies that food (in)security can change over time – shifting an individual back and forth along a continuum over time and over their life course as they are affected by the long-term influences and short-term shocks influence. Food (in)security is not a linear progression, and changes in food security status can be temporary, cyclical, medium term or long term. They can be triggered by sudden reductions in the ability to produce or access enough food such as illness, the loss of employment or a grant, or a disaster such as a shack fire or flood. Food insecurity is often also seasonal, affected by the availability of crops, or by other demands on the household budget.¹⁶

As with other forms of deprivation, households may anticipate such possibilities of food insecurity, and take precautions in an attempt to reduce or mitigate their risks. They may diversify their options for obtaining food, save or borrow, increase their productive activities, move to places where there are better opportunities, or adapt their behaviour in order to reduce their consumption through migration, scrimping or changing their diet. Such short-term coping strategies could also erode household livelihood strategies, and their capacity to withstand shocks and as a result, increase longer-term vulnerability to food insecurity. Food security interventions should not only aim to save people from dropping back into worse states of food insecurity, but to move them along the continuum towards food security and resilience.

Figure 3: The food (in)security continuum¹⁷



Source: (Hendriks, 2015).

2.2 A food systems approach

The food system comprises the activities, actors and institutions that grow, process, distribute, acquire, consume and dispose of food and how they interact with other systems and actors. The food system is complex and characterised by interaction and interdependence with other systems such as health, energy, land and water. The operation of this dynamic system determines the availability, access, utilisation and stability of food.

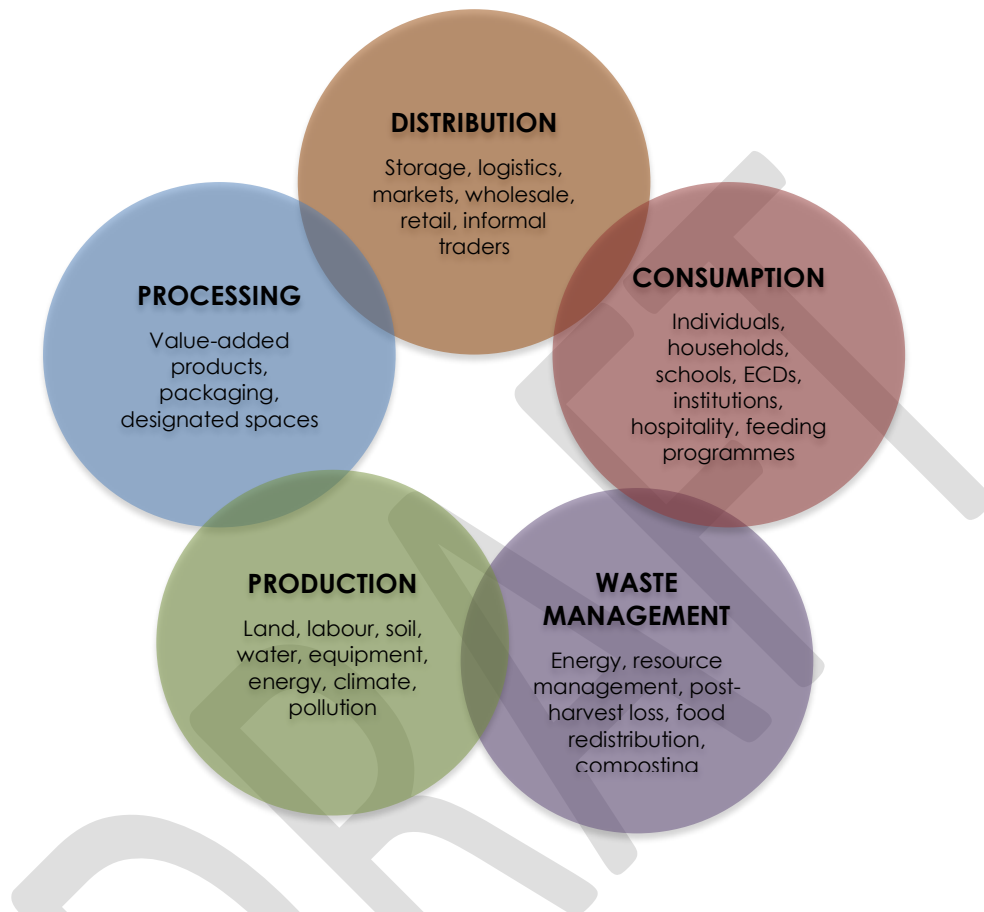
A food systems approach draws on the interconnected relationships between various actors working to improve food security throughout the value chain, to enhance outcomes related to

¹⁶ Hendriks, 2015.

¹⁷ The Food (in)security continuum, as described by Sheryl Hendriks (2015), does not represent a linear pathway, but rather demonstrates phases of deprivation that individuals can experience over their life course.

availability of, access to, and utilisation of appropriately nutritious food. This strategic systems approach emphasises the importance of interactions of actors, stakeholders and partners across levels of government, the private and non-profit sectors on various scales (as illustrated in Figure 3).

Figure 4: Representing the food system



By its nature, food governance systems are fragmented and cut across the usual boundaries between sectors, administrative levels, temporal and spatial scales, public and private spheres, as well as science and policy. The South African food system is characterised by a dichotomy comprising the formal, commercial sector that is capital-intensive, vertically integrated and connected with international agribusiness and international finance. This contrasts with a larger number of poorer, small-scale farmers and informal traders that operate at the margins of the formal system. Poverty and economic marginalisation are not however separate from the former, instead these “two economies” are inherently intertwined thus arrangements within and governance of food systems are at the heart of production, availability, distribution of, and access to affordable nutritious food¹⁸.

To ensure optimal food security the governance system must be made more coherent and harmonised, better integrated and coordinated, and more inclusive¹⁹. Moreover, food security strategies that seek to improve food system governance bring stakeholders in communities together to address linked issues related to food²⁰. To address the root causes of food insecurity, a food systems approach advocates for addressing forms of structural inequality that are at the

¹⁸ Du Toit, 2009.

¹⁹ Candel, 2014.

²⁰ Sidiki et al, 2015.

foundation of household challenges, whilst also providing targeted relief and support in partnership with relevant actors.

By adopting a food systems approach, and drawing on a network of key actors, stakeholders and partners, the Strategic Framework aims to improve the governance arrangements, coordination and integration of food and nutrition security programming; thus improving the effectiveness and efficiency of food and nutrition security interventions and delivering benefits in a more targeted and appropriate manner.

3 Context

3.1 Population overview

As per the Census 2011 there are 5.8 million residents in the Western Cape. 86% of the province's population resides in urban areas and 36% of urban dwellers live in informal settlements. Over the past decade the population of the Western Cape has grown rapidly, at about 100 000 people each year.

- The number of women in the reproductive age group (15-49 years) has increased from 1.4 million in 1996 to 1.7 million in 2015.
- The province's share of the total population of South Africa has grown from 10.6% in 1996 to 11.3% in 2015.
- The Western Cape also has the longest life expectancy in South Africa (64 years for men, 66 years for women) resulting in the increase of a potential vulnerable group.
- The province had a net in-migration of 157 000 people from other provinces, and a further 84 000 people from outside South Africa between 2011 and 2015²¹²²²³.

3.2 Availability

The Western Cape currently sustains good levels of agricultural output (quality and quantity), yet the pressures of climate change, resource constraints (especially water) and logistics or distance to markets (transport cost and carbon footprint) will become an increasing challenge in time.

3.2.1 Production and processing

Although the Western Cape is in the most part an urban province and only 7.3% of households participate in agriculture²⁴ in the province, agriculture is a critical component of the provincial economy, and the linkages between agriculture and the manufacturing and service sectors are noteworthy²⁵. Value added in Western Cape agriculture (R14.7 billion in 2011) accounts for 23% of national agricultural value added (R64 billion) whilst the regional economy only accounted for 14.2% of national GDP in 2013.

There are many sub-sectors of agriculture in which the province holds a comparative advantage. The Western Cape is the largest supplier of milk in South Africa, responsible for more than 25% of the country's milk production. Wheat remains an important crop in the Western Cape, supplying the bulk of the country's needs. Fruit and wine production is concentrated in the province and has had considerable success in gaining access to diverse international markets. Aquaculture is a new and expanding industry found in and around Hermanus (Overstrand).

²¹ Stats SA, 1999.

²² Stats SA, 2015.

²³ Stats SA, 2015a.

²⁴ Stats SA, 2012

²⁵ WCG, 2013

Table 1: Agricultural commodities and production areas, Western Cape

	Horticultural products (51%)	Animals & animal products (42%)	Field crops (7%)
Commodity	<ul style="list-style-type: none"> • Apples, pears & peaches (39.8%) • Wine (28.2%); table grapes (11.7%) • Potatoes & onions (8.7%); • Citrus (5.8%) • "Other" vegetables (5.8%). 	<ul style="list-style-type: none"> • Poultry (51%) • Cattle (29%) • Sheep (12%) • Ostrich (6%) • Pigs (2%) 	<ul style="list-style-type: none"> • Wheat (75%) • Maize (13%) • Barley (11%)
Key production areas	Cape Winelands, Cape Metro, West Coast and Overberg	Paarl & Worcester, Goodwood, Malmesbury, Swellendam and Oudtshoorn	Two-thirds of field crops are produced in Malmesbury, Moorreesburg, the Piketberg regions (West Coast) and Caledon and Bredasdorp (Overberg).

The processing of the Western Cape's agricultural output, worth R28.5 billion in 2011, is an integral part of regional economic production and employment creation. Activities such as winemaking, fruit, vegetable and fish canning, dairy products and baking add value to primary agricultural output and are key sources of economic growth and development in the provincial economy. However, many of these activities are export orientated and thus vulnerable to changes in the global economy, affecting opportunities for small producers and increasing competitive pressures on established producers.

Research indicates that the Western Cape is able to supply adequate levels of food for current populations and likely population growth in the coming decade. *Availability* of food is thus not anticipated to be a critical food security challenge in the province. However, future agricultural output, sector development, and opportunities are sensitive to security of tenure, climatic variability, labour relations, the cost and reliability of energy, innovation, and addressing barriers to entry for smaller-scale businesses.

The SmartAgri Plan presents the "road map" for the agricultural sector to move towards a more productive and sustainable future, despite the uncertainties around specific climate projections. The Plan is a joint effort that seeks to ensure the continued growth and competitiveness of the whole agricultural value chain. Through its focus on innovation, the Plan allows the climate change challenge to serve as the catalyst for realising a new socially and ecologically just and productive agricultural sector. Equipped with the SmartAgri Plan, the agricultural sector will develop the necessary resolution to find new operational models under growing resource constraints and rapidly evolving global markets. This vision must also speak to the necessity of creating a resilient and diversified food system capable of tackling the issue of food and nutritional insecurity.

The transition of the agricultural sector may well, in some areas at least, need to take a "leapfrog" approach as opposed to incremental steps, particularly in aspects of social change and optimised resource use approaches. If embraced, such an approach could open agriculture to new technologies, investment opportunities and jobs in the green economy, that are all requirements for the building of climate resilience. The SmartAgri Plan, as a whole, tries to balance such transformative change against more measured and incremental changes so as to ensure continued stability and retention of livelihoods.

3.2.2 Agricultural resources management

Land use

In 2002, the total number of commercial farming units in the Western Cape stood at 7 185, but had decreased by 7% in 2007 to 6 653 units. This steady decline in the total number of farming units in production is a result of the agglomeration of farms, rather than a reduction in the total area under production.

Land reform fits into a larger debate around the need for agrarian reform in the country that will include marginalised farmers and communities in the country's food system. Given the trend highlighted above, the land reform process has been criticised as being token, with the incorporation of a few select black farmers into formal value chains being overshadowed by the ongoing consolidation of agribusiness throughout the system. This trend, however, has been identified as requiring urgent action and the WCG is placing an emphasis on ensuring that land reform beneficiaries receive the kind of support they need to run sustainable and competitive businesses.

Unlike other provinces in South Africa, where subsistence agriculture is prevalent, there is almost no traditional subsistence agriculture in the Western Cape. However, pockets of smallholder agriculture do exist, with the Department of Agriculture estimating the numbers at approximately 10 000 farmers based on a survey in 2010. There are high barriers to entry for smallholder farmers, manufacturers and retail outlets to be a part of the increasingly competitive and commercial formal food system in South Africa, on which South Africans are becoming increasingly reliant²⁶.

Water availability and quality

The agricultural system is vulnerable to a range of shocks and stressors. Environmental change has become particularly pertinent. The availability and quality of water has a direct bearing on the production of food, including the volume of yields and the cost of production. Natural water resources are unevenly distributed across the country, with more than 60% of the surface flows arising from only 20% of the land area²⁷ and since the agricultural sector currently consumes 60% of the total water resource in the country, any increase in irrigation for growing food would impact the water and energy systems²⁸. According to a recent review undertaken by the University of Cape Town (UCT), water resources are already stressed in much of the Western Cape with a low level of assurance for agricultural use²⁹. Climate change is likely to increase this stress through increasing demand, increasing evapotranspiration, and more variable rainfall. Due to the rainfall seasonality, agriculture is dependent on irrigation water and storage capacity is essential.

Water quality is a major risk, which could worsen, impacting high-value export crops. In terms of water safety, only 6% of the Western Cape's rivers are in a natural condition, and 14% are classified in a poor condition. Pollution is a major issue in the rivers of the province. In addition to uncertainty about rainfall, rising temperatures as a result of climate change has brought about concern of mycotoxins that are formed on plant products in the field and during storage³⁰. Rainfall changes may also lead to changes in the availability of trace elements and/or heavy metals in plants and soils and this is something that would require monitoring. Pathogenic bacteria in foods and water following extreme weather conditions should be addressed, particularly in agricultural water in the Western Cape. Water conservation and water demand management should be implemented to improve irrigation efficiencies, wherever gains can be made. The SmartAgri plan provides clear direction on how the WCG should pursue this.

²⁶ Hamann et al., 2011.

²⁷ Carter & Gulati, 2014.

²⁸ Benhin, 2006.

²⁹ Smart Agri, 2015.

³⁰ Miraglia et al., 2009.

Post-harvest losses and waste management

Postharvest losses and waste are not only of economic concern to the sector, but have negative implications for food security as well. Research from the FSI suggests that food losses and waste in South Africa could be costing society approximately R 21.7 billion per annum or 0.82% of annual GDP. Key contributors to post-harvest losses relate to cold chain inefficiencies, particularly mixed-load transportation. Other contributing factors are a lack of infrastructure and appropriate food-related knowledge.

The findings highlight the importance of reducing post-harvest losses as a complementary strategy for assuring food security. Reducing post-harvest losses does not only prevent the direct loss of food and money, but also indirectly reduces the waste of inputs and value-added costs such as fertiliser, fuel, electricity, packaging and scarce natural resources such as fresh water.

Much work is needed along with retailers to better understand the losses incurred. Efforts to control and reduce the incidence of postharvest losses and waste through evidence-based practice and policy are hampered by the lack of reliable data. Currently retailers measure this independently and are hesitant to have data shared or analysed and released into the public domain. Research also needs to be conducted into the amount of food waste created by households, differentiated by income, and possible responses identified.

Human capital development

Skills within the agricultural and agri-processing sector are a concern. Within the food value chain, skills and human capital are essential for maximising the potential of the other resources and inputs. Critical to the realisation of a more resource-efficient and sustainable farming environment are the increase in training centres and opportunities, improving farming knowledge and the increase of the use of appropriate technology.

There has also been a call for policy and legislature regulations to support innovative sustainable resource management. In particular the value of agricultural extension officers has been emphasised as supporting the development of producer capacities to understand, manage and respond to resource management and environmental challenges.

Human capital development goes beyond production and requires a strategic approach to capacity building across the food system to ensure household access to food. This requires that stakeholders within the food system are sensitised, capacitated and incentivised to participate in the food system in constructive ways for households. This requires developing appropriately skilled individuals who have an understanding of nutrition, food access and food safety in areas such as sustainable resource management, development planning and food trading.

3.2.3 Food systems value chains

Agri-business generates competitive exports. Agriculture & agri-processing exports, measured at 31% of output in 2011, accounted for more than a third of the cumulative growth of total (i.e. including services) provincial exports over the period 2000 to 2012. Far from being a sunset industry, agri-business has gained renewed significance in the 21st century. New industries are being developed with significant potential in terms of value addition, exports and (lesser-skilled) employment creation. However, at the same time agri-business in South Africa continues to consolidate with implications for new entrants in a highly controlled environment. Both agriculture and the agri-processing industry in the region have substantial competitive advantage, not only in relation to the other provinces, but also internationally in terms of export growth. Research indicates that increases in employment and profitability within the food system including increased opportunities for small-scale business entry into the value chain will lead to multiple positive effects including increased access for all consumers and a proportional increase in the number of households whose food security capabilities are improved.

The Western Cape has a comparative advantage in a number of important food commodities that should be used as champions for shorter value chains. These include dairy, fruit production, horticulture and wheat. The processing firms outside the Cape Metro play an integral part in the

development of rural towns and agricultural processing could provide opportunities for new industries and small business development, which supports the objectives of inclusive growth.

The Western Cape Government has placed a particular focus on agri-processing through Project Khulisa, which has identified economic sectors with high job creation and sector growth potential. Agri-processing currently contributes R12 billion in GVA and accounts for 79 000 formal jobs. Under a high growth scenario, the sector's GVA contribution is estimated to increase by up to R26 billion in 2019, and it could add a further 100 000 formal jobs over the same period³¹.

The WCG aims to grow agri-processing in the Western Cape through Project Khulisa by:

- Exploring new infrastructure projects;
- Improving regulation for this industry; and
- Promoting and supporting Western Cape products locally and abroad.

Part of Project Khulisa will focus on increasing local production facilities, developing agri-parks, incentives, promoting skills development, testing facilities, and inland containers. The parks will be a hub for farmers, where they are able to receive the business support they need to grow their agri-enterprises. In addition, Project Khulisa will develop appropriate irrigation infrastructure to support production (including efforts to increase the volume of water in the Brandvlei Dam)³². The emphasis in Project Khulisa, however, is on job creation, exports and economic development and so it is likely to have an indirect impact on local food security.

3.3 Access

Food access has generally been linked to income and strategies to improve food access have focused on increasing income for expenditure through social protection and local economic development. These are important, however it must be noted that inadequate access cannot be just a problem of inadequate income, but of the pricing structure of the food system. Recent work by BFAP has found that for a household to consume a "balanced daily food plate", it would have to have an income of around R5 630³³. According to Census 2011, 61.5% of Cape Town's households earn less than R6 400 per month; this places a high proportion of Cape Town's households in a position of vulnerability to food insecurity if the BFAP figures are accepted. Other research found that healthier foods were generally more expensive than their less-healthy equivalents. For example, research³⁴ in small towns in the Western Cape comparing the prices of six commonly consumed foods with healthier versions of those foods (e.g., whole-wheat bread in place of white bread) found that healthy foods typically cost between 10% and 60% more when compared on a weight basis (Rand per 100 g), and between 30% and 110% more when compared based on the cost of food energy (Rand per 100 kJ). In practical terms this means that for an adult male, the healthier diet costs R10.20 per day more (69% more) and for a household with five occupants, the increased expenditure on food by eating a healthier diet is approximately R1 090 per month (>30% of the total household income for most of the population). With healthier diets being more expensive, in the South African context obesity is often a manifestation of food insecurity, leading to non-communicable diseases such as diabetes. There is a need to consider the factors that influenced the structure and pricing mechanisms operating within the food system, as well as simply equating food insecurity with household poverty.

³¹ <http://acceleratecapetown.co.za/project-khulisa-western-cape-high-growth-sector-focus/>

³² <http://www.gov.za/speeches/major-infrastructure-projects-double-size-western-cape-agri-processing-sector-28-sep-2015>

³³ BFAP, 2012.

³⁴ Temple NJ, Steyn NP, Fourie J, De Villiers A. Price and availability of healthy food: a study in rural South Africa. *Nutrition* 2011; 27:55–58.

3.3.1 Income, poverty and household economics and access to food

Households rely primarily on the market for food access. Although nationally Stats SA reports that only 12.8% of total consumption is spent on food and non-alcoholic beverages, there is considerable variation between areas and social groups. For example, an evaluation of households participating in urban food gardens in the Western Cape found that 60% spent more than 30% of household incomes on food, making them very vulnerable to food insecurity due to price increases or loss of income³⁵. The Pietermaritzburg Agency for Community Social Action (PACSA) publishes an annual Food Price Barometer Report which tracks the monthly price of a minimum nutrition food basket. In this report, they detail household vulnerability linked to food prices, as well as household vulnerability linked to debt and debt repayment³⁶. The direct relationship between income and food flags the importance of economic opportunities and secure employment options to mitigate food insecurity.

The recent SANHANES survey disaggregated hunger and food insecurity at a national scale not just into rural and urban areas, but rural formal, rural informal, urban formal and urban informal. It found that the largest percentage of people reporting hunger was in rural formal areas (37.0%), followed by urban informal areas (32.4%)³⁷. Furthermore, the risk of hunger was found to be greatest in urban informal areas (36.1%)³⁸, followed by rural informal (32.8%)³⁹ areas. In the Western Cape, it is critical to recognise that the vast majority of people live in urban areas, with people in informal urban areas representing a particularly vulnerable group given the high prevalence of hunger and risk of hunger in those areas. Despite the urbanity of food insecurity, particularly in the Western Cape, it is clear that there are also rural areas that require targeted support.

Nonetheless, Cape Town had the highest Human Development Index (HDI) in the province in 2010 (0.74), against a provincial average of 0.71, but the proportion of malnourished children under five (3.2 per thousand) was the highest in the province (provincial average 3.0 per thousand)⁴⁰. This suggests that there are particular food security problems within the urban context that need further examination and different approaches.

Typically where programmes are targeted to urban areas, it is generally through a focus on agricultural production. The predominant rural understanding of food insecurity and the primary location of food security programming within the Department of Agriculture, Forestry and Fisheries (DAFF) have further reinforced this approach. However, there is a need for a different approach to food security programming that considers approaches to ensuring food and nutrition security that do not overemphasise food production and processing interventions. Urban households are predominantly dependent on the market (formal and informal) for their access to food. The AFSUN 2008 and 2013 surveys found that own production was not a common or frequent source of food for residents of low-income areas (5% of households in the 2008 survey, and 2.3% in the 2013 survey). There is a need to develop new urban food security responses that extend beyond urban agriculture and that consider means to improve market access to households to purchase affordable and nutritious food.

3.3.2 Urban agriculture and subsistence

Although most analysts agree that the direct contribution of urban agriculture to food security is small, support for this activity remains part of the policy toolkit⁴¹. Recent research has demonstrated that the viability of community development through urban agriculture extends beyond viewing the benefits in narrow economic terms. Applying a sustainable livelihood

³⁵ Kaymandi, 2015.

³⁶ Pietermaritzburg Agency for Community Social Action, 2015. Food Barometer report

³⁷ Shisana, et al., 2013.

³⁸ Shisana, et al., 2013

³⁹ Shisana, et al., 2013

⁴⁰ WCG, 2012.

⁴¹ City of Cape Town, 2007.

framework to urban agriculture in Cape Town has shown that increasing the resilience of livelihoods does not depend only on financial capital, but human, social, physical and economic capital as well. As is found in research throughout Africa, as well as in South Africa, the majority of the cultivators are middle-aged and older women who are household heads. Four types of urban agriculture occur in Cape Town, namely home cultivation, group cultivation, institutional cultivation and non-profit garden centres. Each type is unique in terms of structure, requirements and benefits. Urban agriculture in the Western Cape is primarily occurring through the effort of a few key NGOs. These NGOs operate in the Cape Flats, where over 6 500 cultivators are estimated to operate⁴². In addition, the WCG has made a significant effort to support urban agriculture in the Western Cape, with the Department of Agriculture reporting having implemented 103 community food gardens, 33 school food gardens, and 1 356 households in the 2014/2015 year alone.

Urban agriculture's contribution is not necessarily one of scale of economic benefit, but contributes to holistic community development by fulfilling all five of the sustainable livelihood capitals. Urban agriculture can contribute to social capital formation by stimulating positive interaction between farmers and the surrounding community, between farmers and NGOs, as well as by promoting gender equality. Urban agriculture also contributes to increased life skills, self-confidence and inclines people to eat healthily, all of which contribute to the formation of human capital. Urban agriculture contributes to natural and physical capital by encouraging people to re-use litter in creative ways, to look after public spaces and to create healthy ecosystems. Urban agriculture can be also seen as one way in which citizens can participate in their own food sovereignty. Nonetheless, urban agriculture must be recognised as a useful but not critical component of any strategy for food security and nutrition.

3.3.3 Market forces and structural challenges

The majority of both the urban and the rural population rely on purchasing their food from formal and informal food retailers⁴³. Supermarkets have been able to expand into lower income areas by out-competing local wholesalers and small retailers on cost and quality in most of their product offerings. Informal traders also often source their own produce from supermarkets and wholesalers, in addition to the fresh produce markets, but less so directly from farmers.

It is essential to understand why households make the decisions they do around food consumption and therefore where the points of intervention by the government might be. A particular area for reflection is the expansion of the supermarkets and what their impact on food security might be. Supermarkets are rapidly expanding their market presence in rural and low-income urban areas.

In essence supermarkets can be seen as both enablers and constrainers with regard to food security within the food system. However, there is some concern regarding the role of supermarkets in facilitating consumers to choose affordable but nutritionally poor foods in low-income areas.

Of major concern is the lack of an urban food policy that takes into account the rapid urbanisation underway in South Africa and the repercussions that this is having on the food system's ability to provide food to urban dwellers. This is compounded by the absence of municipal-level food security and nutrition strategies.

The South African food system has been radically altered by the effects of rapid urbanisation, the globalisation of food trade and the subsequent concentration of agri-business, emphasising the role of the private sector in shaping the food system. Deregulation in the South African agricultural sector began in the 1980s with substantial changes in South Africa's regulations being made in order to comply with the WTO regulations. The net effect of these changes is that the South African agricultural sector is increasingly exposed to the shifts of international markets⁴⁴.

⁴² Olivier, 2014.

⁴³ D'Haese and Van Huylbroeck, 2005.

⁴⁴ Doyer, et al., 2007.

Hence the competitiveness of South African agribusiness, due to the openness of South Africa's market, means that international food price shocks (such as those in 2007/08) are almost fully transmitted down to local wholesale and retail prices, making poor households extremely vulnerable to food price increases. Furthermore, there are clear trends towards cooperation and coordination in the South African agribusiness supply chain and in the South African food sector.

The food and nutrition impacts of this expansion have received little attention from policy makers. The increased presence of supermarkets and attendant malls has generally been viewed as good for local economic development and is assumed to lower the cost of food for poor residents. However, researchers have challenged these assumptions. There are concerns that supermarkets have made highly processed and potentially unhealthy foods more spatially and economically accessible, without necessarily increasing accessibility to, or reducing the price of fresh produce. There are also concerns that the presence of the supermarket could negatively impact informal food retailer, who serve as a vital source of food for the poor^{45,46}. Responding to this AFSUN has suggested that the food security needs are best met by having a mix of retail options available, as different types of retailers meet the range of needs of consumers more effectively than supermarkets alone.

3.4 Utilisation

Utilisation refers to the way the body makes the most of the various nutrients in food, relating to nutritional content of food, storage, hygiene, feeding practices, food preparation, dietary diversity, intra-household distribution of food, life stage, social behaviours and health status. It is therefore important to consider factors that shape households' utilisation of food. For example, the lack of adequate refrigeration or storage shapes purchasing habits in terms of volumes and categories of food bought. These same factors affect informal traders, who are important sources of food for the poor, therefore shape their purchasing patterns, pricing and food spoilage. There are a number of factors at the household scale and beyond that impact a household's ability to access sufficient nutritious food. These include stability of income, housing characteristics, household structure, as well as characteristics of the neighbourhood food system and geographical location. These factors contribute to the negative health and nutritional outcomes attributed to food and nutrition insecurity.

3.4.1 Health and nutrition

Data indicates that South Africa is undergoing a 'nutrition transition' where stunting, wasting and under-nutrition in young children is occurring alongside increasing levels of obesity and overweight in older children and adults. This is known as the "double burden" of malnutrition, which is a situation where overweight and obesity exist side by side with under-nutrition in the same country^{47,48}.

In the past 15 years, food availability has transformed dramatically with processed and packaged food being much more affordable and easily available. These foods are often high in fat, salt and sugar. Hence, this public health concern is largely centred on access and consumption patterns of South Africans who often do not have access to a healthy diet, or may choose less healthy food, and an expanding role of the corporatisation of food through supermarkets. It is thus important to understand why people's diets have changed.

⁴⁵ Battersby, 2011.

⁴⁶ Ligthelm, 2008.

⁴⁷ Drimie and McLachlan, 2013.

⁴⁸ McLachlan and Landman, 2013.

Obesity, overweight and diabetes

National figures show that overweight and obesity has increased in South Africa. This is supported by local-level surveys^{49,50} undertaken in the Western Cape. The SANHANES reports that South Africa shows classic signs of a nutrition transition, with the highest fat and sugar scores found in the youngest age groups, in formal urban areas in those provinces that were largely urbanised. The lowest fat and sugar scores were found in the older age groups in rural areas in those provinces where the least urbanisation has taken place⁵¹.

An increase in obesity is raising health concerns around a concurrent increase in non-communicable diseases with the issue being most acute amongst women in South Africa. For instance, at a national level, the rate of overweight and obesity was significantly higher in females than males (24.8% and 39.2% compared to 20.1% and 10.6% for females and males, respectively). At the provincial level, the Western Cape is one of the provinces with the highest rate of obesity amongst girls (7.25%) compared to other provinces⁵². In terms of adults, it has been reported that males in the Western Cape have a 10% greater prevalence of overweight and obesity compared to national levels⁵³.

This increase in overweight and obesity needs to be seen in light of the steady increase in the per capita food supply of fat, protein, and total calories in South Africa. In addition, salt intake is also in excess of recommended levels. Older children and girls are more affected, and among teenagers, 27.9% of girls are overweight compared to only 4.7% of boys.

Nationally, the prevalence of diabetes increased from 5.5% to 9.0% for people over 30 years of age between 1998 and 2013, representing about 2 million diabetes cases. There were also about 2 000 more cases of new amputations and 8 000 of blindness caused by diabetes annually.

Dietary diversity and malnutrition

Hunger and malnutrition remain pervasive problems in the Western Cape, both in rural and urban informal settlements. Around 1 million people in the province (17%) consume diets of low dietary diversity, suggesting inadequate nutrition. Dietary diversity (DDS) is a measure of the nutritional quality of a population's diet, as well as an indicator of the access dimension of household food security. An assessment of the Food Security Programme in the Western Cape in 2015 reported that households tend to reduce the quality and quantity of food to deal with food shortages, compromising nutritional status. Research in the Western Cape in 2011 on the health of children identified that a significant proportion of children in the province were undernourished. The proportion of malnourished children under five (3.2 per thousand) was the highest in Cape Town (compared with a provincial average of 3.0 per thousand).

Underweight, stunting (low height for age) and wasting among younger children are of particular concern as these conditions have long-term negative consequences for the morbidity as well as the cognitive development of children and are ultimately detrimental to society at large. Stunting affects a higher proportion of children than underweight or wasting across all age and gender categories. Prevalence of stunting was 20.7% and underweight and wasting in children were 5.6% and 1.2% respectively. Among children 0 to 5 years old, 18.4% were stunted compared to 7.5% and 9.7% of children 6 to 10 and 11 to 18 years old respectively, and an unexpectedly high prevalence (5.1%) of wasting was observed among the youngest children. These are indicators that food insecurity may be an increasing challenge amongst children.

While there are many causes of child malnourishment, there is increasing evidence that some of these are related to the unhealthy environment in which many children live. As an example, intestinal worms (soil-transmitted helminths) have been linked to environmental enteropathy and

⁴⁹ Koornhof, 2014.

⁵⁰ Duraao et al., 2011.

⁵¹ SANHANES, 2013

⁵² SANHANES, 2013

⁵³ <http://www.sun.ac.za/english/Lists/news/DispForm.aspx?ID=2429>

reduced ability to absorb nutrients from food that has been consumed. The most recent research (2005) in primary schools located in formal areas of Cape Town reported a prevalence of 56%⁵⁴.

Furthermore, the low prevalence of exclusive breast feeding and early weaning is another factor that is thought to contribute towards children's poor nutritional outcomes. South Africa has one of the lowest exclusive breast feeding rates in the world, and in 2003, research showed that only 8% of children younger than six months were exclusively breastfed while 20% were never breastfed⁵⁵.

3.5 Stability

Food security programming has been fragmented and generally focused on short-term fixes rather than implementing more long-lasting and appropriate structural changes within the food system. Stability, in the context of food security, refers to the ability to sustain optimal access to food for populations over time, including adequate food stocks and continuous supply. Stability is affected by different factors, including: climate change, inadequate agricultural resources (water, land, etc.), crop failure, civil conflicts, market or price instability, and household-level events such as loss of employment or income. Furthermore, open borders allow for the easier flow of food and contribute positively to the stability of supply. The actions of governments are critical to ensure the stability of food and nutrition security. Government departments and non-government partners need to work closely together to develop and manage integrated transversal programmes that facilitate systemic change.

3.5.1 International framework

South African government policy and action is guided by various international and continental frameworks that bind all spheres of government to make progressive progress towards realising the right to food for all. These include the Universal Declaration of Human Rights (1948) and the UN General Assembly Resolution 67/174 on the Right to Food (2012). This right is enshrined in the Constitution of South Africa. The post-2015 development agenda adopted by the United Nation's Summit in New York in September 2015 reaffirmed the importance of food security and nutrition. Sustainable Development Goal 2 (SDG) is "End hunger, achieve food security and improved nutrition and promote sustainable agriculture". Within this context, targets 2.1 and 2.2 are particularly relevant:

- By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.
- By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.

3.5.2 Key national agreements, plans and strategies

The right to food is a constitutional right within South Africa, as established in Section 27(1)(b) and 28(1)(c). The Constitution requires that "...the state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of this right".

The National Development Plan (NDP) suggests a wider set of engagements and better integration between departments to ensure food and nutrition security. A key feature of the NDP's engagement with food and nutrition security is its connection of food security to the wider food system. The NDP identifies the need to reduce the cost of food and "a stable food inflation environment". The NDP calls for greater investment in the agricultural and agri-processing sectors, as areas of SMME growth for job creation and to redress skewed ownership patterns, and

⁵⁴ Fincham and Dhansay, 2006.

⁵⁵ DoH, 2007.

a need to increase fruit and vegetable production in order to better align the sector to nutritional intake guidelines. This is a marked divergence from generally received agricultural development plans that have focused on grains and crops for export.

The New Growth Path (NGP) is South Africa's vision to place jobs and decent work at the centre of economic policy. It sets a target of 5 million additional jobs by 2020, and sets out the key employment drivers and the priority sectors that the country will focus on over the medium term. The NGP set targets of increasing the smallholder sector by 300 000 households, ensuring 145 000 additional jobs in agri-processing, and upgrading conditions for 660 000 farm workers.

Both of these high-level plans are supported by the first cycle of the Medium-term Strategic Framework (MTSF: 2014–2019) for the rural sector. The establishment of food security within the national development agenda has thus influenced transversal and departmental programmes to mitigate food and nutrition insecurity. Notable strategies and programmes include:

- The National Policy on Food and Nutrition Security (NPFNS) gazetted in 2014;
- The Roadmap for Nutrition in South Africa (2013–2017);
- DAFF Programmes including the Integrated Growth and Development Policy for Agriculture, Forestry and Fisheries (IGDP); the Agricultural Policy Action Plan (APAP); the Industrial Policy Action Plan (IPAP); and
- The Comprehensive Agriculture, Forestry, Fisheries and Rural Development National Investment Plan (CAADP).

Table 2: Key national policy and programme frameworks

Name	Objectives
National Policy on Food and Nutrition Security, 2014 (NPFNSS)	NPFNS aims to provide a broad framework for the fulfilment of the Constitutional mandates, maximise synergies between DAFF, DoH, DSD, DRDLR and the Presidency and sets out to enhance food security through five pillars: <ol style="list-style-type: none"> 1. Availability of improved nutritional safety nets 2. Improved nutrition education 3. Alignment of investment in agriculture towards local economic development 4. Improved market participation of the emerging agricultural sector 5. Risk management
Roadmap for Nutrition in South Africa 2013–2017	The Roadmap seeks to direct nutrition-related activities in the health sector to the achievement of the sector's four focus areas: <ol style="list-style-type: none"> 1. Increasing life expectancy 2. Decreasing maternal and child mortality 3. Combating HIV and Aids and decreasing the burden of disease from Tuberculosis 4. Strengthening health system effectiveness The Roadmap repositions nutrition and nutrition-related issues and actions prominently in the healthcare system with particular reference to the Strategic Plan for Maternal, Neonatal, Child and Women's Health (MNCWH) and Nutrition in South Africa, emphasising the intersectoral nature of nutrition.
National Integrated School Health Policy	The National Integrated School Health Policy aims to contribute to the general health of school-going children as well as the environmental conditions in schools, and address health barriers to learning. Policy objectives include: <ol style="list-style-type: none"> 1. To provide preventive and promotional services that address the health needs of school-going children and youth with regard to both their immediate and future health; 2. To support and facilitate learning through identifying and addressing health barriers to learning;

	<p>3. To facilitate access to health and other services where required; and</p> <p>4. To support the school community in creating a safe and secure environment for teaching and learning</p>
DAFF programmes	<p>The Department of Agriculture, Forestry and Fisheries is directly engaged with food security in many ways. The Integrated Growth and Development Policy for Agriculture, Forestry and Fisheries (IGDP) and the Agricultural Policy Action Plan (APAP) with the National Development Plan (NDP), the New Growth Path (NGP), and the Industrial Policy Action Plan (IPAP), to assist in the achievement of employment creation through inclusive growth, and comprehensive rural development and food security.</p> <p>Key national DAFF programmes implemented at provincial level include: Food garden projects established in 2009; <i>Ilima-Letsema</i> assisting vulnerable farming communities to achieve increase in agricultural production established in 2011; the Comprehensive Agricultural Support Programme (CASP) training for improved production of fruit, dairy, grain, training, crop established in 2011; and the Nutrition Security Strategy and <i>Fetsa Thlala</i> programme improving access to safe and nutritious food.</p>
Comprehensive Agriculture, Forestry, Fisheries and Rural Development National Investment Plan (CAADP)	<p>CAADP is a South African investment plan under the African Union Commission/NEPAD Comprehensive African Agricultural Development Programme that focuses on strengthening and adding value to agrarian and rural development programmes under the National Development Plan. The agenda calls for the improvement of existing policies and strategic plans; and the need for a coordinated approach for effective development of the agricultural sector in the face of global crisis with the potential to undermine development efforts aimed at combating poverty, hunger, food insecurity and the triple burden of malnutrition (under-nourishment, micronutrient deficiencies and obesity).</p>
DSD programmes	<p>Key national DSD programmes have focused on implementing a comprehensive social security programme distributing social grants for both financial and food aid. In particular the Sustainable Livelihood Programme in partnership with the DoH provides access to appropriate nutrition and social support services for children, their primary caregivers and households at risk of hunger.</p>
DoE programmes	<p>The national DoE is responsible for providing food to poor and hungry learners under the National School Nutrition Programme and Health Promoting Schools Initiative in partnerships with the DoH.</p>
DPW Programmes	<p>The DPW offers food for work programmes for unemployed persons.</p>
DoH programmes	<p>The DoH manages an Integrated Nutrition plan (INP), an umbrella for various direct and indirect nutrition interventions, prioritising the promotion, protection and support of breastfeeding, micronutrient supplementation programmes and therapeutic feeding including:</p> <ul style="list-style-type: none"> • Nutrition therapeutic programme (NTP) that provides nutrition rehabilitation to undernourished or nutritionally compromised patients; • Growth monitoring and promotion (GMP), a preventive and promotional activity to monitor child growth and detect nutritional deficiency and diseases early; • Infant and young child nutrition including the mother- and baby-friendly initiative (MBFI), to promote protect and support breastfeeding; • Nutrition promotion, education and advocacy for healthy living; • Food service management; and • Community-based nutrition interventions for social mobilisation on nutrition related aspects.

3.5.3 Western Cape provincial plans and strategies

Provincial plans and strategies are aligned with the NDP and other national agendas, and, when driven by provincial departments also aligned with the Provincial Strategic Plan (PSP) 2014–2019. The PSP outlines five overarching Provincial Strategic Goals (PSGs) that seek to:

1. Create opportunities for growth and jobs;
2. Improve education outcomes and opportunities for youth development;
3. Increase wellness, safety and tackle social ills;
4. Enable a resilient, sustainable, quality and inclusive living environment; and
5. Embed good governance and integrated service delivery through partnership(s) and spatial alignment.

Although the Strategic Plan does not explicitly mention food security, nutrition support in poorer communities is identified as a means to promote social inclusion and poverty alleviation under Strategic Goal 3. Other key provincial policies and strategic frameworks that make reference to food security and nutrition are:

- The Provincial Spatial Development Framework
- OneCape 2040
- The Green Economy Strategic Framework
- The Western Cape Agricultural Strategic Plan ; 2015/2016–2020/21
- The Western Cape's Climate Change Response Strategy
- The Western Cape's Social Development Strategy
- Western Cape Climate Change Response Framework and Implementation plan for the Agricultural Sector – 2016

Table 3: Key provincial policy and programme frameworks

OneCape 2040	OneCape 2040 is a plan to bring about a province in which the environment in the Cape should produce a healthy, safe, enabling and accessible living and working atmosphere that capitalises on the region's unique lifestyle offering. With regard to food security it highlights an Ecological Transition to sustainable low-carbon resource use; and Settlement Transition to healthy, accessible, liveable, multi-opportunity neighbourhoods.
Provincial Spatial Development Framework (PSDF)	Food insecurity is explicitly mentioned as a future risk challenge in the PSDF along with water deficits. The guiding principles of the framework for a more sustainable spatial logic include: Spatial justice (use of land by disadvantaged communities); Sustainability and resilience; Spatial efficiency (compaction, mixed-use, neighbourhood work opportunities); Accessibility; Quality and liveability (balance of individual and community facilities; quality public space).
Green Economy Strategy	Green Economy Strategy positions the Western Cape as the leading green economic hub in Africa and specifically recognises the risk posed by climate change. Three of the six objectives are linked to food security <ul style="list-style-type: none"> • Diversified, climate-resilient agricultural sector and expanded value chain; • Emerging market leader in resilient, liveable and smart built environment; and • Secure ecosystem infrastructure.
Western Cape's Climate Change Response Strategy (WCCRS 2014)	The WCCRS was approved by Western Cape Cabinet in 2014. The Strategy is developed as a coordinated climate change response. It aims to guide the implementation of innovative projects and research for opportunities that combine a low-carbon development trajectory with increased climate resilience, enhancement of ecosystems and the services they provide, and economic stability and growth. The WCCRS identifies food security as one of its nine focus areas, and promotes sustainable labour-intensive farming, farming practices that are in harmony with nature, water technologies that

	reduce consumption and increase efficiency, and argues for a focus on issues of access to, and the nutritional content of, food.
Western Cape Agricultural Strategic Plan 2015/2016–2020/2021	The plan has a production-focused approach to ensuring food security, through the Food Security sub-programme of the Programme for Farmer Support and Development. It recommends the promotion of food gardens, emergency feeding schemes, food production on government land, commonage land and research farms.
Western Cape Infrastructure Framework (WCIF)	The WCIF, founded on the PSP, OneCape 2040 and Green Economy Strategy Framework, promotes an optimised model of infrastructure provision that is sustainable with low-carbon resource use. The WCIF outlines important transitions for five sectors, including water, energy and waste management.
Western Cape's Social Development Strategy	The strategy identifies the promotion of food security within the sub-programme Poverty Alleviation and Sustainable Livelihoods, with a focus on the promotion of social inclusion and poverty alleviation through the provision of nutritional support and EPWP opportunities.
Provincial climate change response framework and implementation plan (SmartAgri)	The SmartAgri Plan is aimed at creating sustainable climate-smart responses for increased resilience in agriculture. The Strategic Priorities of the Framework and Implementation Plan are: <ol style="list-style-type: none"> 1. Promote a climate-resilient, low-carbon agricultural sector that is productive, competitive, equitable and ecologically sustainable across the value chain; 2. Strengthen effective climate disaster risk reduction and management for agriculture; 3. Strengthen monitoring, data and knowledge management and sharing, and lead strategic research for climate change and agriculture; and 4. Ensure good co-operative governance and joint planning for effective climate change response implementation for agriculture.

4 Pillars of the Western Cape Household Food and Nutrition Security Strategic Framework

The Strategic Framework seeks to address the typical challenges of poor alignment and coordination of the food security “challenges” evident in South Africa and elsewhere. These challenges are largely the complex outcome of inadequacies in the food system, hence a food systems approach to ensuring food and nutrition security in the province has been designed to address the real, underlying causes of food insecurity.

Figure 5: Contexts, challenges and strategic approaches

Dimension	Food security		Nutrition security	Stability
	Availability	Access	Utilisation	Governance
Context	<ul style="list-style-type: none"> Although the Western Cape currently sustains reasonably good levels of agricultural output the pressures of climate change, resource constraints and logistics/distance to markets will become an increasing challenge in time. 	<ul style="list-style-type: none"> Many people in the province, especially those living in informal urban settlements are indigent and unable to access sufficient, nutritious food Children are especially disadvantaged and their development is stunted as a result of inadequate access. 	<ul style="list-style-type: none"> Hungry people are micronutrient deficient in the Western Cape and increasing numbers of people in the province are eating unhealthy, unsafe foods, and children are not receiving nourishing food. These factors combine to undermine the health of the population and escalate health-related costs and burdens on society. 	<ul style="list-style-type: none"> Food security programming has been fragmented and generally focused on short-term fixes rather than implementing more long-lasting and appropriate structural changes within the food system.
Challenge	<ul style="list-style-type: none"> Ensuring optimal supply of diverse and nutritious food into the future 	<ul style="list-style-type: none"> Ensuring adequate access to food for all people living in the Western Cape 	<ul style="list-style-type: none"> Ensuring appropriate nutrition-related attitudes and behaviour for individuals to maintain their health 	<ul style="list-style-type: none"> Improving provincial programme effectiveness and efficiencies
Strategic approach	<ul style="list-style-type: none"> Improved food resource management 	<ul style="list-style-type: none"> Assistance to access food 	<ul style="list-style-type: none"> Increased food awareness and safety 	<ul style="list-style-type: none"> Better coordinated and integrated food governance
	<ul style="list-style-type: none"> Improved food-sensitive spatial planning A more inclusive food economy 		<ul style="list-style-type: none"> Food- and nutrition-sensitive government 	

The priorities of the Strategic Framework are illustrated as six core pillars as illustrated in Figure 5 below.

Figure 6: Pillars of the Western Cape Household Food and Nutrition Security Strategic Framework

PILLARS	FOOD ASSISTANCE	FOOD AWARENESS AND SAFETY	FOOD-SENSITIVE PLANNING	FOOD RESOURCE MANAGEMENT FOR THE FUTURE	INCLUSIVE ECONOMY	FOOD
OBJECTIVES	Improved access to, and use of nutritious food for children and vulnerable people by 2019	Improved food safety and awareness and healthier behaviour by 2019	Strategic integration of the Food System into development planning by 2019	Integration of climate change responses into all aspects of the food system by 2030	Improve access to nutritious food, particularly for poor households, through the formal and informal food economy by 2030	
PROGRAMMES	<ol style="list-style-type: none"> 1. Provincial indigent and vulnerable populations intervention 2. Promotion of self-provisioning 3. Nutritional support for individuals at risk of malnutrition 4. Promoting, supporting and protecting breastfeeding and improved complimentary feeding 5. Using schools and ECDs as sites of opportunity 	<ol style="list-style-type: none"> 1. WOW programme 2. The first 1000 days campaign 3. Healthy Eating Guide 4. Events 5. WASH programme 	<ol style="list-style-type: none"> 1. Integrate food sensitivity into Provincial Spatial Development Framework in order to influence Municipal SDFs 2. Include and adapt the principles of food-sensitive planning and design into the model zoning scheme bylaw 3. Food-sensitive planning and design guidelines for land use management in the province 4. Including food-sensitivity principles into existing municipal assessment criteria 	<ol style="list-style-type: none"> 1. Promote a climate-resilient, low-carbon agricultural sector that is productive, competitive, equitable and ecologically sustainable across the value chain 2. Promote the sustainable use of water, soil and energy 3. Strengthen effective climate disaster risk reduction and management for agriculture 4. Improve food waste reduction and management 5. Build farmer capacity for sustainable farming 6. Including food sensitivity principles into existing municipal assessment criteria 	<ol style="list-style-type: none"> 1. Introduce model bylaw for municipalities for informal food trading as well as guidelines for implementation 2. Investigate opportunities to support local-level fresh food markets in the Western Cape 3. Investigate the impact of emerging farmers on the food system and ways to support their contribution to food security 4. Support skills development in the food economy 	
FOOD GOVERNANCE						
OBJECTIVE: Evidence-based integration of food security implementation and planning						
PROGRAMMES: Strengthen Food Security Governmental Work Group; Establish a multi-stakeholder process to create public private partnerships; Develop or leverage existing monitoring and evaluation systems and research opportunities; Performance management; Leverage, showcase and expand the use of technology and innovation in household food security solutions						

4.1 Pillar 1: Food assistance

Objective: Improved access to, and use of, nutritious food for children and vulnerable people by 2019

4.1.1 Rationale

The provision of direct assistance for food security and nutrition is recognised in international, national and provincial policy.

While the Western Cape is outperforming many other provinces in terms of food security indicators, evidence reflects that food insecurity in the region, particularly with respect to indigent people and children, is still cause for concern. This is largely owed to the fact that not all households in the Western Cape are able to:

- Buy the food they need for a healthy lifestyle;
- Access supportive social security systems; or
- Grow enough appropriate food to sustain themselves.

Food choice largely depends on income, food price and knowledge⁵⁶. Compounding this, many households do not utilise food to maximise nutritional benefit. As such, the motivations for the Food Assistance Pillar are:

- Poverty among marginalised groups has produced a highly vulnerable indigent population. Twenty-one per cent of households in Cape Town, and between 15 and 20% in the other municipalities in the province, are categorised as indigent, suggesting that most of those who are below the food poverty line can be considered to be indigent.
- Many poor households are unable to access food through the current food system.
- Coping strategies or inability to cope with barriers to the food system has generated a complex situation where obesity (linked to poverty) exists side by side with under-nutrition and micronutrient deficiencies. Data from the National Income Dynamics Study found that there is both an over-nourished adult and an under-nourished child in one out of every eight South African households.

Having recognised critical issues related to food and nutrition, the WCG encourages breastfeeding, healthier eating and early childhood nutrition and strengthening family foundations are among the priorities of the Provincial Strategic Plan (2015–2019), the provincial draft HealthCare 2030: Road to Wellness, the Kangaroo Mother Care Policy and Guidelines and Cape Town Declaration on Wellness of 2011. In addition, the WCG has emphasised the importance of exclusive breastfeeding for infants for the first six months, followed by complimentary feeding through the Breastfeeding Restoration Policy. With regard to indigent households, municipalities are following national guidelines by providing support through a package of basic social services.

While efforts are ongoing, they would benefit from improved coordination and targeting to prioritise the food needs of indigent adults, vulnerable children, and people at risk of malnourishment.

4.1.2 Programmes

The Food Assistance pillar of the Food Security Strategic Framework will build healthy adults and children, giving particular focus to those individuals who cannot adequately nourish themselves. This pillar focuses on programmes that:

- Provide assistance for food security of indigent and vulnerable households by improving access to food through social protection, and supporting opportunities for the self-

⁵⁶ SAHANES 2013

- provision of nutritious food.
- Provide assistance to vulnerable people at clinics with micronutrient deficiencies.
- Promote, support and protect breastfeeding, and encourage appropriate and adequate complementary feeding.
- Use schools and Early Childhood centres as sites of opportunity for feeding and nutrition.

Programmes targeting indigent populations

Programme 1: The Provincial Indigent and Vulnerable Populations Intervention

In order to reach groups that are highly vulnerable to food insecurity and malnutrition, the WCG and local government will continue to work with national government to facilitate access to the appropriate grants and programmes. This work is led primarily by the Poverty Alleviation and Sustainable Livelihoods Programme in the Department of Social Development. There are two core set of interventions: (1) the provision of temporary work opportunities and income to unemployed people while offering them workplace experience and skills training (EPWP programme); and (2) targeted feeding to those experiencing hunger and malnutrition that fall outside the Nutritional Therapeutic Programme of the Department of Health (DOH).

In order to facilitate more effective targeting of the programme towards the neediest households, municipalities are encouraged to maintain up-to-date indigent lists. To support this process, the Food Security Work Group (described in Pillar 6: Governance) will review indigent data guidelines to assist with the standardising of definitions and data collection. It is recognised that specific community agents such as ward committee members, religious leaders and teachers are well positioned to identify indigent households.

Programme 2: The Promotion of Self-Provisioning

The national Department of Agriculture, Forestry and Fisheries (DAFF) currently implements programmes that include food garden projects that are implemented by the provincial department. These target both rural and urban food security by supporting urban agriculture, community food projects, household food production, new gardens and rehabilitating abandoned projects. The WCG has made a significant effort to support these projects in the Western Cape, with the Department of Agriculture reporting having implemented 103 community food gardens, 33 school food gardens, and 1 356 households in the 2014/2015 year alone.

A recent evaluation of the programme concludes that community gardens may have a larger impact on food security than household gardens, and that there are several areas in which the Programme can be strengthened.

Programme Management Areas:

- Improving the targeting of beneficiaries
- Clarifying community garden management and ownership processes
- Monitoring and evaluating the programme

Programme Implementation Areas:

- Reviewing the scale and composition of garden input and equipment
- Addressing issues relating to the reimbursement of labour and sharing of benefits from the gardens
- Providing ongoing and responsive training/advice support and mentoring
- Improving stakeholder collaboration

Immediate interventions to resolve Programme Management issues include developing up to date indigent lists as described in Programme 1 to improve targeting, and identifying which provincial departments are supporting the departments. In addition, it highlighted that food gardens are most effective where households have a source of income. Where possible, households targeted for food gardens will also be targeted for complementary income or livelihood initiatives such as the Expanded Public Works Programme (EPWP) to further support the success of the programme.

Regarding the programmatic implementation issues, the Food Security Working Group described under Pillar 6: Governance needs to critically engage with these issues as it is recognised that this intervention, while extensive and significantly resourced, requires greater outcomes-based reflection on how food gardens could provide sustained nutritional support to households, schools and communities. It should also investigate the use of complimentary programmes, such as courses in food preparation, storage, health and safety, seed saving and compost making, to improve the effectiveness of these interventions.

Programmes targeting populations at risk of malnutrition

Programme 3: Nutritional Support for Individuals at Risk of Malnutrition

The DoH has been responsible for the Integrated Nutrition Plan (INP), which is an umbrella for various direct and indirect nutrition interventions. While this has been replaced by the National Food Security and Nutrition Strategy, several sub-programmes remain relevant for this component of the Food Assistance Pillar and will form part of the provincial response to the implementation of the Food Security Framework:

- The mother- and baby-friendly initiative (MBFI), breastfeeding support groups, antenatal education and healthy living focus on maternal, infant and young children's nutrition.
- Growth monitoring and promotion (GMP) is a preventive and promotional activity whereby growth is measured and interpreted to facilitate communication and interaction with caregivers to ensure adequate child length, height and MUAC, as well as early detection of nutritional deficiency and diseases.
- The nutrition therapeutic programme (NTP) provides nutrition rehabilitation to identify undernourished or nutritionally compromised patients (children and adult) based on a set of inclusion criteria by providing specialised nutritional products. In 2014 it was reported that more than 20 000 vulnerable⁵⁷ children and adults in the province received specialised nutrition supplements annually for a minimum period of six months.
- Nutrition Rehabilitation for Malnourished Children targets growth faltering children between 0 and 59 months who have not shown enough improvement after inclusion in the NTP. During this intervention, children are regularly monitored for growth and draft care plans are developed to outline how growth targets for children will be achieved. In addition, links are established with the child's local clinic for routine services, and peer counselling (where appropriate) and nutritional education is provided to the caregiver.
- Finally, promotion of the Department of Health's revised Food-based Dietary Guidelines 2012 (FBDG) and promotion of Paediatric FBDG should be undertaken by all branches of provincial government involved in food security. These are:
 - Enjoy a variety of foods.
 - Be active!
 - Make starchy foods part of most meals.
 - Eat plenty of vegetables and fruit every day.
 - Eat dry beans, split peas, lentils and soya regularly.
 - Have milk, maas or yoghurt every day.
 - Fish, chicken, lean meat or eggs can be eaten daily.
 - Drink lots of clean, safe water.
 - Use fats sparingly. Choose vegetable oils, rather than hard fats.
 - Use sugar and foods and drinks high in sugar sparingly.
 - Use salt and food high in salt sparingly.

⁵⁷ Western Cape Department of Health, 2014. Integrated Nutrition Programme Document

Programmes targeting children

Programme 4: Promoting, Supporting and Protecting Breastfeeding and Improved Complimentary Feeding

The South African Constitution recognises the absolute right of children to adequate nutrition, and the progressive right of all to food security.

The WCG recognises that the first 1 000 days of life following conception are critical to a human's development. Moreover, the administration acknowledges that malnourishment can begin in the foetal period, and has emphasised nutrition and health during this period as one of the core facets to improve outcomes for children in terms of safety, health and education.

Breastfeeding is a primary strategy used to enhance infant nutrition and improve child survival worldwide. The World Health Organisation (WHO) recommends that mothers should practise exclusive breastfeeding (EBF) for the first six months of the infant's life, with the timely introduction of complementary food thereafter, and continued supplementary breastfeeding for up to two years and beyond. The intention of globally increasing EBF to at least 50% of infants in the first six months of life was stated in the 2014 International Conference on Nutrition, the Rome Declaration on Nutrition and the Post-2015 Development Agenda. South Africa supports this recommendation, as shown by the resolution of the 2011 Tshwane declaration for the support of breastfeeding.

While the country has been shown to have very high breastfeeding initiation rates (75 to 97%), the 1998 and 2003 South African Demographic and Health Surveys showed very low cumulative EBF rates of 7% at 0 to 5 months (1998) and 8% at 0 to 6 months (2003). This trend has remained consistent – according to the South African National Health and Nutrition Examination Survey (SANHANES-1), in 2014 only 7% of children aged ≤ 6 months were exclusively breastfed.

The early introduction of supplementary feeds and mixed feeding are the most common infant-feeding practices in South Africa. In 2014, according to the SANHANES-1 survey, the average age for the introduction of solid food in the country was 4.5 months. In addition, almost two-thirds (64%) of children were given solid or semi-solid food before the age of six months. Both of these feeding practices carry a high risk of infections, diarrhoea and malnutrition, as well as reducing the amount of breast milk consumed by infants. Addressing the low prevalence of exclusive breastfeeding in the Western Cape is a priority of the Food and Nutritional Security Framework as this has the potential to make a significant and lasting impact on childhood malnutrition.

The provincial Health Department is already active in the area of maternal, infant and young children's nutrition, including the mother- and baby-friendly initiative (MBFI), communication, and integration of breastfeeding into Basic Antenatal Care Services and Community-based Services. The WCG will continue to supply breastfeeding communication and support through the Breast-feeding Peer Counsellor Programme. The Programme is centred on peer-to-peer knowledge sharing relating to breastfeeding protection, promotion and support, as well as follow-up and referral services for mothers who need them.

One of the most commonly cited factors for the early cessation of breastfeeding is that the mother had to return to work. Mothers are also often ill equipped to negotiate optimal infant feeding practices with role players such as employers. The Western Cape Department of Health (DoH) has already adopted a Breastfeeding Policy which permits employees to take two breaks of up to 30 minutes each during their work day for breastfeeding or expressing milk. In addition, the policy stipulates that the supervisor and manager should ensure reasonable provision be made within the workplace to accommodate breastfeeding employees. Considering that the WCG is a major employer in the province, it would be of significant benefit for the DoH Breastfeeding Policy to be adopted across the WCG.

In addition, as a champion of breastfeeding, the WCG will advocate for safer and more appropriate facilities for women in the workplace who are breastfeeding children up to the age of six months. In particular, interventions will include:

- Advocacy for the establishment of breastfeeding-friendly workplaces, including day centres;
- Establishment of an Infant and Young Child Feeding Work Group;
- Finalisation of a policy on Human Milk Banking; and
- Monitoring of the implementation of Regulation 991: Foodstuffs, Cosmetics and Disinfectants Act (54/1972) which provides regulations relating to foodstuffs and young children.

Programme 5: Use Schools and Early Childhood Development Centres as Sites of Opportunity

The WCG is already making a widespread and concerted effort to ensure that children are food secure. A compelling overview of the evidence⁵⁸ suggests that:

Child Hunger is a Health Problem

- Hungry children are sick more often, and more likely to have to be hospitalized,
- Hungry children suffer growth impairment that precludes their reaching their full physical potential,
- Hungry children incur developmental impairments that limit their physical, intellectual and emotional development.

Child Hunger is an Educational Problem

- Hungry children ages 0-3 years cannot learn as much, as fast, or as well because chronic undernutrition harms their cognitive development during this critical period of rapid brain growth, actually changing the fundamental neurological architecture of the brain and central nervous system,
- Hungry children do more poorly in school and have lower academic achievement because they are not well prepared for school and cannot concentrate,
- Hungry children have more social and behavioural problems because they feel bad, have less energy for complex social interactions, and cannot adapt as effectively to environmental stresses.

Child Hunger is a Workforce and Job Readiness Problem

- Workers who experienced hunger as children are not as well prepared physically, mentally, emotionally or socially to perform effectively in the contemporary workforce,
- Workers who experienced hunger as children create a workforce pool that is less competitive, with lower levels of educational and technical skills, and seriously constrained human capital.

There are, therefore, a range of compelling reasons to ensure that childhood hunger is addressed as effectively as possible. The interventions already underway include:

- The national Department of Education (DoE) is responsible for providing food to identified needy schools so that they can learn effectively by providing meals. This is achieved through the National School Nutrition Programme (NSNP). The NSNP is funded through a Conditional Grant for Quintile 1 to 3 learners (primary and high school learners) and requires learners to be fed for 190 days per annum. Of the conditional grant, 96% is utilised for feeding, 3.5% is used for the operational costs and 0.5% is spent on nutrition education and sustainable food production. Under the NSNP, the WCG feeds over 457 000 learners from 1 028 schools. It has also introduced a breakfast meal for learners and improved the nutritional value of the meal. The WCG currently provides meals to 40% of learners in specific quintile 4 schools that have been identified as needing food support.
- The WCG is providing 120 meals at 181 schools learner at MOD centres. In this intervention, funding is allocated to service providers who provide a menu of one sandwich and one

⁵⁸ Cook and Jeng, 2009

fruit per learner. In alignment with guidelines, sandwiches must contain either peanut butter, anchovy spread, etc. MOD YearBeyond Feeding is providing 100 meals at 22 of the MOD schools⁵⁹.

- The WCG provides R8 per child for 264 days to feed children at registered After-school Care Facilities (ASC Facilities). Currently, 6 234 children are receiving meals in ASC Facilities. Learners are mainly fed soup and sandwiches, and the menu is at the discretion of the facility.
- The WCG also supports registered ECD centres. Centres receive funding to feed the children for 264 days. At this point, the WCG is feeding 65 000 children at ECD facilities. While the menu is at the discretion of the centre, menus should include breakfast, a mid-morning snack, lunch, and a mid-afternoon snack. It is recognised that almost half of ECD centres in the province are unregistered, meaning that they do not qualify for support from the WCG. In order to become registered, ECDs must be fully compliant with the Norms and Standards articulated within the Children's Act 38 of 2005⁶⁰. In order to utilise ECD centres as a site of opportunity, they must prove compliance and become registered facilities. The WCG will work with NGOs in the ECD space to collaborate on ECD registration support in order to support this.
- In addition to direct feeding programmes, support playgroups are supported with an education approach by training caregivers on nutrition and hygiene. However, it should be recognised that Out of Care intervention playgroups can apply for funding for food.

The Food Security Strategic Framework aims to improve School, MOD and ECD centres and ASC facility feeding schemes by developing the quality and safety of food fed to learners in the short term through improved coordination, monitoring and evaluation.

The Department of Cultural Affairs and Sport (DCAS) and DotP are currently auditing the quality of MOD centres, and this exercise will be leveraged to investigate the quality of meal nutrition and feeding procedure on site.

Incorporating this work that has already been initiated by departments, the WCG will undertake an evaluation of the existing feeding programmes to understand the scale, quality and geographical footprint. The evaluation will seek to understand the implementation of the programme in detail to understand the realities of the implementation of the feeding schemes. The evaluation should reveal detailed analysis of the efficiencies and challenges of the programme, and how the implementation of the programme can be improved.

4.2 Pillar 2: Food awareness and safety

Objective: Improved food safety and awareness and healthier behaviour by 2019

4.2.1 Rationale

Inappropriate eating practices are an important cause of both under-nutrition and over-nutrition. The SANHANES (2013) reported that the diet of South Africans is lacking diversity, with an average Dietary Diversity Score of 4.2 (4 is the cut-off level for dietary adequacy)⁶¹. Labadarios et al. point out that dietary diversity differs significantly across the Living Standards Mean (LSM), with people in lower LSM groups⁶² having dietary diversity scores lower than 4. This reflects monotonous diets, which are cause for concern. In lower LSM groups, diets mainly consist of starches as well as meat/fish, dairy and non-vitamin A-rich vegetables⁶³.

⁵⁹ this is a top up – total school coverage is still 181 schools

⁶⁰ South African Department of Social Development, 2005. Children's Act

⁶¹ SANHANES, 2013

⁶² Labadarios et al. 2011. How diverse is the diet of adult South Africans?

⁶³ Barnard, P, 2014. The PACSA Minimum Food Basket

Although 18% of the total sample of SANHANES reports high fat intake, younger age groups were more likely to report high levels than older groups, with 24.3% of the 15 to 24 year group, and 19.9% of the 25 to 35 year group having a high fat intake. A similar pattern is reported for sugar intake with the highest rate of a high sugar score.

Another aspect of poor diet is South Africans' low intake of fruit and vegetables⁶⁴. Furthermore, mean levels of three vitamins associated with intake of fruit and vegetables (folate, vitamin A and vitamin C) are lower than the recommended intakes. These factors contribute towards an increase in the prevalence of overweight and obesity. In turn, overweight and obesity have been associated with the increasing incidence of non-communicable diseases (NCD). NCDs account for 40% of all deaths in South Africa. In the Western Cape 17 to 25% of the burden of disease is attributed to NCDs.

Malnutrition is also linked to the physical environment in which people live, especially in the case of children. Inadequate and unsafe water, poor sanitation, and unsafe hygiene practices are the main causes of infections of the intestinal tract. Improved sanitation and hygiene and access to safe water can reduce the frequency and severity of child infections and during pregnancy, including diarrhoeal disease. Ingestion of faeces and soil contribute to the risk in polluted environments such as dense shack settlements where human overcrowding and animals, such as goats, are present.

In terms of access to water and sanitation, 31% of all children in South Africa live in households that do not have adequate water on site or adequate sanitation. This means that between 5 and 6 million children are exposed to the risk of intestinal tract infection. Although the GHS 2014 reports that the majority of households in the Western Cape do have access to RDP standard sanitation (94.6%), and that 98.9% had access to water either in their dwellings, off site, or on site, the environment in dense informal settlements increases the risk of infections arising from inadequate access to water and sanitation, and makes it difficult to sustain adequate hygiene practices (WASH). In South Africa, it has been estimated that there are over 60 000 cases of childhood diarrhoea per month and approximately 9 000 child diarrhoeal deaths in the same year (Stats SA, 2010). Chronic and repeated microbial infections of the gut such as helicobacter pylori or intestinal worms (soil-transmitted helminths – STH) are also a concern and have been linked to environmental enteropathy and reduced ability to absorb nutrients from food that has been consumed.

The Food Safety and Awareness pillar will leverage existing programmes and communication strategies to disseminate information regarding food quality and safety to individuals. In addition, this pillar will highlight WASH programmes, giving particular attention to school. This pillar focuses on programmes that:

- Empower people with information regarding nutritious and safe food for infants, children and adults; and
- Share information regarding hygiene and water safety.

4.2.2 Programmes

Programme 1: Western Cape on Wellness (WOW!) Programme

The WCG supports healthy eating and healthy lifestyles through The Western Cape on Wellness (WoW!) Programme. This initiative promotes and activates a range of health-related physical activities and healthy eating through team leaders to expand and sustain a culture of wellness at and across workplace, community and school levels. It aims to change lifestyles by increasing levels of physical activity and by eating healthier food. WoW! seeks to create a "culture of wellness" at all levels of society in the Western Cape. Adopting a partnership approach, the

⁶⁴ Nel and Steyn, 2002 report that South Africans consume around 200 grams of fruit and vegetables per person per day, which is half of the recommendation made by the WHO of 400 grams per day.

provincial Department of Health provides training and support and will mentor WoW! participants on having a healthy lifestyle.

WoW! trains leaders in workplaces, schools and communities in collaboration with the universities of the Western Cape. Leaders complete a competency test for certification, and are supplied with a WoW! Kit (starter pack) to facilitate a range of integrated, health-related physical activities and healthier eating. Leaders are seen to be key contact persons for the initiative with responsibility for all communication, mobilising and motivating participating teams, and for repeat participant assessments and M&E data collection.

WoW! will:

- Use national and global events such as World Health Day to focus attention on wellness and health eating;
- Promote enjoyable health-related physical activities and healthier eating through the workplace, schools, and community-based institutions;
- Use social media to promote wellness and healthy eating and to champion the WoW! Leaders; and
- Hold annual award ceremonies to acknowledge excellence and to encourage peer support.

Programme 2: The First 1000 Days Campaign

The WCG recognises that infant and child nutrition is a critical component of an individual's long-term health. As such, the First 1000 Days: Right Start, Bright Future Initiative is a priority of the WCG. The goal of the initiative is to ensure optimal wellness for children and the community at large by improving outcomes for children in terms of nutrition and health, safety and education through promoting nurturing care at home and opportunities for early learning.

The Programme includes significant communication which targets areas of Nutrition and Health, Nurture, Care & Support and Safety, Protection & Stimulation for children within the first 1000 days of life.

Programme 3: Healthy Eating Guide

The nutrition of learners has shown to be a cause of concern, with the National Risk Behaviour Survey reporting that a high proportion of South African learners in grades 8 to 11 regularly consumed food items high in fat, such as fast foods, cakes and biscuits. Salt intake has also been found to be in excess of recommended levels.

The Western Cape Government has produced a Health Eating Guide in collaboration with private sector and civil society partners. This Guide targets school tuck shops and provides information on healthy eating patterns, including recipes and food preparation guidance. It also provides important health lifestyle information.

These guidelines include:

- School tuck shops should sell fresh fruit and can include vegetables in curries, sandwiches, wraps and soups;
- High-fibre foods that prevent constipation and can prevent certain types of cancers should be encouraged. These include:
 - Fresh and dried legumes such as beans, peas, chickpeas and lentils
 - Whole-wheat and other whole-grain breads such as rye
 - Whole-wheat pasta and noodles
 - Cereals such as bran and muesli
 - Brown rice
- Dairy products that provide important nutrients such as calcium should be encouraged. Tuck shops should sell dairy products such as milk, unsweetened yoghurt and maas.

The WCG will discourage the sale of unhealthy foods in or near schools by working with school governing bodies, teachers and vendors.

Programme 4: Events

National and Global events provide an opportunity to showcase excellence and to raise awareness. The Western Cape Government will use these events to celebrate the achievements of government, communities and the private sector. These events will also be used to promote all aspects of the Food Security strategic Framework.

Events may choose to mark:

- World Hunger Day (28 May)
- Nelson Mandela International Day (18 July)
- World Breastfeeding Week (1–7 August)
- National Nutrition Week (9–15 October)
- National Obesity Week (15 –19 October)
- World Food Day (16 October)
- Africa Day for Food and Nutrition Security (31 October)

Programme 5: WASH Programme

The primary responsibility for providing water and sanitation services and education in South Africa is placed within municipalities. However, the Western Cape Government, together with national government, has the constitutional responsibility to support and strengthen the capacity of local government in the fulfilment of its functions regarding the provision of WASH. This may include providing support for the construction of water and sanitation infrastructure, but more commonly concerns about maintaining standards of access to water and sanitation facilities in schools, hospitals and clinics, including maintenance and repairs.

Although schools in the Western Cape perform well in terms of the availability of reticulated water and municipal flush sanitation, support to WASH in schools and ongoing adherence to the National Norms and Standards for School Infrastructure in terms of providing children with high-quality hygiene education and a safe WASH environment in schools remains a priority. These requirements include:

- Ensuring that schools have sufficient toilets and hand-washing facilities to meet learners' needs, based on a recommended learner: toilet ratio of 35:1 and a learner: washbasin ratio of 60:1;
- Ensuring that all toilets and washbasins should be in clean, working order, and that learners are provided with soap and clean water to wash hands after using the toilet and are provided with access to proper toilet paper;
- Collaboration of hygiene education initiatives and programmes that will be strengthened between various government departments, as well as with civil society organisations that are engaged in WASH activities in communities and schools.

Regarding ECD centres, the WCG supports activities by the City of Cape Town to implement water-harvesting tanks at ECD sites and will investigate opportunities to support other municipalities in the Western Cape to implement similar initiatives. The Emthonjeni Programme that has been pioneered by the Violence Prevention through Urban Upgrading Programme is orientated at developing safe public spaces for ECD outreach and community development by transforming water-collection spaces into safe spaces. The WCG will investigate opportunities to leverage such initiatives for the sharing of information regarding WASH and safety.

The WASH Programme will focus on sharing information with the public regarding hygiene and safety practices. Initiatives will include:

- The inclusion of an assessment of WASH processes in schools into the evaluation of feeding schemes (identified in Programme 5 in the previous pillar);
- Promotion of improved sustained hygiene practices, particularly hand-washing and in the preparation of fresh food, water safety and environmental sanitation practices;
- Events such as Global Hand-washing Day (15 October) will be used in addition to ongoing communication campaigns and social media;
- Promotion of sanitation and water provision that provides greater choice and access to

- safe and reliable water supplies and clean and private sanitation facilities in households, communities and schools; and
- Protection and management of the local water environment to prevent pollution, especially pollution arising from human and animal faeces.

The deworming initiatives being run by the Department of Education are a key complementary programme as it improves the ability of children to absorb the nutrients from food that has been consumed.

4.3 Pillar 3: Food-sensitive planning

Objective: Strategic integration of the food system into development planning by 2019

4.3.1 Rationale

There is a substantial opportunity for food security to be improved through the explicit inclusion of the food system into development planning mechanisms and processes. The deliberate consideration of the influence of the built environment and infrastructure on the access, location, transport and distribution of nutritious food to the public has the potential to make a significant contribution to shifting the underpinning dynamics that influence availability and access.

Proactively considering food security as an outcome in future development planning provides the opportunity to consider the impacts of development planning on food security, and spatially embed food into the rural and urban landscape.

The concept of Food-sensitive Planning and Urban Design (FSPUD) that has been developed internationally is useful as a conceptual tool to enable the design of planning-led food system and food security interventions.

In the context of the province, this would be translated as Food-sensitive Design and Planning. Spatial Planning and Land-use Management in the Western Cape is regulated by legislation at all three spheres of government:

- The Spatial Planning and Land-use Management Act, 2013 (Act 16 of 2013) (SPLUMA) and the Municipal Systems Act, 2000 (Act 32 of 2000) at national level;
- The Western Cape Land-use Planning Act, 2014 (Act 3 of 2014) (LUPA) and the Western Cape Land-use Planning Act Regulations, 2015 at provincial level; and
- The Municipal Bylaws on Land-use Planning at municipal level.

With the recent introduction of SPLUMA, LUPA and the recently updated Provincial Spatial Development Framework (PSDF), the WCG has a significant tool set to start grounding the food security agenda into the development planning arena. For instance, the implementation of SPLUMA in 2013 and LUPA in 2014 has required municipalities to develop or refine both land-use planning and zoning scheme bylaws. This presents an opportune time to place a greater strategic focus on food security in land-use considerations.

While the current iterations of LUPA and the PSDF highlighting the consideration of agricultural land⁶⁵, the Food Security Strategic Framework recognises that production is one part of the food value chain. As such, the Food-sensitive Development Planning Pillar aims to ensure that planners assess the impact of their decisions at the five phases of the food system: production, processing, distribution, consumption and waste management.

Development planning (in the public service) has three key implementation tools at a policy level:

- Protecting land and indicating land of high agricultural or food production value through

⁶⁵ It refers to the need for 'special consideration to the protection of prime agricultural land'

- spatial development frameworks;
- Promoting the use of land as part of the enabling social and economic environment through mechanisms such as zoning schemes (land-use schemes); and
- Developing management and the regulation of land use through zoning guidelines and the administration of land-use applications, specifically relevant for agri-processing, wholesale retail and trade markets – which is a municipal function.

Development planning in its current form contributes in various, valuable ways to the development of holistic integrated settlements. This is evident in the new, more appropriate mixed-use and mixed-income development initiatives, densification strategies and the globally recognised goal of sustainable cities and regions. Development planning also allows for the inclusion and consideration of additional factors, such as climate change, risk and vulnerability, the most significant issues that could impact food security and settlement development alike.

These sentiments come through strongly in the plans of the WCG, such as the Provincial Strategic Plan 2014–2019 (PSP), the PSDF and the City of Cape Town Densification Strategy. The integrated, holistic demeanour of development planning makes allowance for the inclusion of principles that will contribute to the sustainability and liveability of spaces. Food sensitivity is one such integrative principle. Three main tools to achieving appropriate development planning are: SDFs, zoning or land-use schemes and incentives (either direct financial incentives or, more typically, through the structuring of the regulatory environment to provide exemptions to encourage particular kinds of activity). The use of these tools at a more strategic level could greatly contribute to the consideration of food security issues into development planning. The programmes below attempt to reflect these strategic paths in order to usher food security issues into development planning.

The WCG has a mandate, along with all of the other spheres of government, provided by the NDP which marks food security as one of the key issues to be addressed in the country. As has been outlined throughout this Strategic Framework, food insecurity at a household level has a number of direct impacts on a range of the other responsibilities and services that provincial and local governments are responsible for. It is therefore in the interests of these two spheres to identify those opportunities they have within the remit to improve the operation of the food system. Therefore, while this Strategic Framework recognises that local municipalities do not have a direct food security mandate (South African Cities Network, 2015), they retain control over a range of key functions that are critical in the food value chain (such as waste, water, transport, zoning, retail planning, energy and local area governance), and therefore need to be proactively developed and assessed with household food security in mind.⁶⁶

The Food-sensitive Planning Pillar is influenced by the Food-sensitive Planning and Urban Design Principles⁶⁷. These principles are articulated to guide provincial departments and municipalities on how to introduce food-sensitive planning and food security thinking into their operations and plans. Within the current legislative context the WCG has an opportunity to guide and assist local municipalities through the revision of the PSDF. There is an opportunity to include food-sensitive planning concerns into the Model Zoning Scheme Bylaw. This would prompt inclusion of the issues around food-sensitive planning into the provincial and municipal spatial development and land-use planning arena.

⁶⁶ South African Cities Network. 2015 A study on current and future realities for urban food security in South Africa; South African Cities Network. 2015. Looking beyond urban agriculture: Extending urban food policy responses; South African Cities Network. Retail planning as a means to support food security: A role for urban planning; Pouthukuchi, K. and Kaufman, J. 2000. The Food System: A stranger to the planning field.

⁶⁷ Jonathan et al, 2011

4.3.2 Programmes

Programme 1: Integrate Food Sensitivity into the PSDF in Order to Influence Municipal SDFs

In terms of SPLUMA, all three spheres of government must be guided by their own SDF when taking decisions relating to land use and development. However, SDFs should be developed through intergovernmental processes, and must reflect alignment between the provincial and local government SDFs. Furthermore, when considering land-use applications local government authorities must ensure that they are aligned both with the local SDF and the PSDF. With this in mind, introducing food sensitivity into the PSDFs is the first step in influencing land use management at the municipal scale.

In particular, the following food-sensitive principles should form the basis for the integration of food-sensitive planning into provincial and municipal planning⁶⁸:

- Consider the entire food value chain in planning and design of spaces, facilities and in placing infrastructure;
- Allow for a variety of food-related choices by acknowledging peoples' right to choose what, where and how they consume and produce food;
- Allow for integrated spaces that would allow for social interaction such as recreational space, community celebration, whilst serving an environmental and economic function;
- Allow for spaces and mechanisms that would encourage food sharing, food production and exchange;
- Enable and support initiatives that will provide adequate access to nutritious food;
- Prioritise the provision of healthy, sustainable food choices by making the choice easy and convenient;
- Conserve existing urban, peri-urban and rural ecosystems while also exploring conservation farming, low-carbon and resilient agri-processing, increasing biodiversity and prioritisation of equitable surface water access;
- Proactively address risk and vulnerability associated with climate change, in the planning and design of spaces, for example drought planning, flood planning and diversification of food supply;
- Increase resilience by not planning for all spaces and resources and making allowances for potential future space uses;
- Ensure that planning decisions strongly consider the value of access to close-proximity productive land and experienced producers;
- Elevate the importance of the informal food economy;
- Where possible, leverage positive incentives rather than restrictive legislation to direct informal and private sector utilisation of space and related opportunities;
- Maintain affordability by design in spatial planning, infrastructure and service delivery; and
- Implement an appropriate "post-use" recycling and reuse mechanisms in place, which would promote a resource-efficient food system.

These general principles would need to be expressed in the right way at the appropriate scale. It should be noted that many of these principles have strong resonance with good urban design and planning principles and so lend themselves to integration into existing planning systems.

The exact nature of the inclusion of food-sensitive planning into the PSDF needs to be investigated thoroughly by an interdepartmental group led by the Department of Environmental Affairs and Development Planning. This group should report to the Food Security Working Group (discussed in greater detail in Pillar 6: Governance) which will ultimately be responsible for ensuring that food-sensitive planning is integrated into development planning processes.

⁶⁸ FSPUD Principles by Jonathan et al (2011:12), Food-Sensitive Planning and Urban Design: A conceptual framework for achieving a sustainable and healthy food system

Programme 2: Include and Adapt the Principles of Food-sensitive Planning and Design into the Model-zoning Scheme Bylaw

Zoning designates the type of permitted land use in a region, for example agricultural, residential or industrial land. As per SPLUMA, municipal zoning schemes should “determine the use and development of land in order to promote economic growth, social inclusion, efficient land development and minimal impact on public health, the environment and natural resources⁶⁹”. Municipalities are the only sphere that is constitutionally empowered to make and adopt detailed laws pertaining to land-use management. While the province may assist by producing bylaw guidelines, it is up to the municipality to adopt these schemes.

According to SPLUMA (2013), zoning schemes should be developed within five years from its enactment. As such, at the time of this Framework’s development, many local municipalities were in the process of developing zoning schemes, which provides an opportunity for municipalities to deliberately include food-sensitive planning and design into zoning schemes.

The Model Zoning Scheme Bylaw, developed by DEADP, aims to represent a best practice for the Local Municipalities. The Model bylaw would benefit from greater attention to food security and the inclusion of the concept in the following elements:

- Land-use descriptions and development parameters. It describes the different zones, the purpose of each zone, the primary use and consent use applicable to each zone;
- Provides details on the rectification of errors, location, distances, boundaries and extent of each zone;
- Makes provision for occasional uses, non-conforming uses, deemed zoning and overlay zones; and
- Enforcement procedures.

Overlay zones are special zones placed over base zones, used to add rights to land parcels⁷⁰. Opportunities will be investigated to incorporate overlay zoning schemes into the Model Zoning Scheme bylaw or municipal zoning scheme as they could provide a good incentive mechanism to assist municipalities in incorporating the food security agenda into their developments.

Programme 3: Develop Food-sensitive Planning and Design Guidelines for Land-use Management in the Province

Similarly, Section 53 of the LUPA allows the minister of DEADP to promulgate guidelines for land-use management in the province. Although municipalities are not compelled to follow these guidelines, they communicate the strategic position of the province, and set out relevant advice to municipalities about the strategic use of land, including the urban edge, transport hubs, small-scale allotments that could serve initiatives such as food gardens, informal trading spaces or market places. The guidelines will provide municipalities with guidance on initiating food-sensitive design and planning by looking at aspects such as distribution and retail weaknesses in the regulation and control of access to healthy and nutritious foods and enable value chain development that specifically leads to denser networks and shortens the distance between producers and consumers.

Programme 4: Including Food-sensitivity Principles into Existing Environmental and Developmental Planning Assessment Criteria

An opportunity exists for food-sensitive planning to be introduced to local municipalities through the various methods of local municipal assessments, including the assessment of Integrated Development Plans (IDPs). IDPs are overall frameworks for the development of regions for the next five years. The IDP indicates how municipalities will direct their resources and energy to overcome existing challenges, and achieve future goals. The ongoing revision of the IDPs will

⁶⁹ SPLUMA 2013: 35

⁷⁰ Centre for Land Use Education, 2005 Available: https://www.uwsp.edu/cnr-ap/clue/Documents/PlanImplementation/Overlay_Zoning.pdf

provide ample opportunity to include food-sensitive planning and design elements into municipal development plans. Including food sensitivity into the IDP assessment criteria will place greater emphasis on food security at the municipal level.

An opportunity also exists to use the environmental assessment criteria to assist in introducing a food security consideration into the various development and environmental applications made to both the WCG and municipalities. The NEMA principles serve to guide the management of the environment and provide a foundation to support the addition of food security considerations into environmental assessment criteria. NEMA aims for sustainable development, socially, environmentally and economically. Due to the integrated nature of food security, addressing the issue will directly contribute to this goal of sustainable development.

The integration of criteria related to innovative municipal interventions in the food system to increase access into competitive processes, such as the Greenest Municipalities Competition, can provide a positive incentive for municipalities to innovate with regards to food security.

4.4 Pillar 4: Food resource management for the future

Objective: Integration of climate change responses into all aspects of the food system by 2030

4.4.1 Rationale

Agriculture, food processing and distribution are highly sensitive to deteriorations in soil quality, availability of water, supplies of energy, disasters such as floods or droughts, as well as changes in the general quality of the environment. There are, therefore, significant risks posed by climate change to the food system. However, the food system also places significant stresses on the natural environment. The agricultural sector is the single largest user of water in the Western Cape and is a growing contributor of greenhouse gas (GHG) emissions.

A response that deals with both these risks, therefore, has the potential to both improve the sustainability of the provincial food system as well as support mitigation and resilience efforts within the province. This pillar draws together the various aspects of the Western Cape Climate Change Response Strategy (WCCCRS, 2014), and the Western Cape Climate Change Response Framework for the Agricultural Sector (the SmartAgri Plan, 2016). When read together these present a comprehensive approach to improving the sustainability of food production in the province.

The agriculture sector is a major element of the Food System in the Western Cape – contributing to the production of food that people eat as well as a key sector of employment and economic growth through domestic sale and export. Deregulation of the sector in 1996 saw an increase in innovation, diversification of crops and farm unit consolidation. Currently, the Western Cape is characterised by well-established, high-value agri-industries, with fairly high labour intensity, good added-value potential, and a strong export component.

The Western Cape Climate Change Response Framework and Implementation Plan for the Agricultural Sector indicate that there may be a mild increase in the average temperature within the Western Cape. The Western Cape is therefore regarded as relatively climatically stable although this remains a threat to agricultural production. Indeed it reports that the agricultural sector has already been responding to a period of steady warming since the 1990s by shifting crop production practices, more sustainable land-filling practices and increased efficiency in irrigation.

Nonetheless, it is still critical to understand and prepare for climatic risks to the agricultural sector because the sector is so sensitive to environmental and climatic disruption⁷¹. The agriculture sector is especially sensitive to extreme climatic conditions (such as extended periods of drought or flooding) and disasters associated with the climate (such as increased fires). Further

⁷¹ DEADP, 2015. The Western Cape Climate Change Response Framework for the Agricultural Sector

compounding such sensitivities are stress factors owing to a growing urban population which is making increasing – and competing – demands on land, food and water. While the agricultural sector has proven adaptive until now, proactive steps are required to ensure greater forward-looking resilience of the sector.

The Western Cape Government is implementing a number of initiatives which contribute to climate resilience. Climate change considerations and initiatives need to be integrated into a wider, joined-up sectoral effort to push the agricultural sector towards long-term resilience.

The purpose of this Pillar is to enable and inspire farmers, agri-business entrepreneurs and food gardeners to proactively make decisions to support a resilient future. This is to ensure that government support is given to resilient crops and conservation farming and facilitate a more integrated, coordinated and cooperative response to climate change in the agricultural sector for the purpose of establishing food security for the future.

Drawing on inspiration from the WCCCARF, the resource pillar identifies three Strategic Focus Areas:

- Develop climate-resilient agricultural sectors which remain competitive;
- Develop early warning systems and responses to disasters; and
- Reduce food waste and improve food waste management.

4.4.2 Programmes

Programme 1: Promote a Climate-Resilient, Low-Carbon Agricultural Sector that is Productive, Competitive, Equitable and Ecologically Sustainable across the Value Chain

As per the Western Cape Climate Change Response Framework and Implementation Plan for the Agricultural Sector, climate-smart agriculture aims to reduce agricultural vulnerability to a changing climate, as well as reducing the carbon footprint of the sector. In order to achieve this, the WCG will focus on sharing forward-looking and current information regarding agro-climatic zones, and support economic opportunities for climate-responsive crops.

Knowledge Sharing about Agro-climatic Zones

The WCG has been implementing a number of "no regrets", enabling interventions regarding farmers in the Western Cape. These measures include encouraging conservation farming, and implementing the Fruitlook project as a measure to manage irrigating fruit crop in a judicious way. Furthermore, the WCG plans to provide advice and support for access to locally suited, climate-resilient crop and livestock cultivars/breeds, as well as provide knowledge and advice, and support access to technologies and resources for climate-resilient food gardens at household, school and community level.

The WCG is working to develop a forward-looking picture of the agricultural landscape in the Western Cape by identifying Relatively Homogeneous Farming Areas (RHFA) and outlining expected climate change impacts on agriculture for each area. Using these regions, the WCG had developed suitability maps to indicate which crops are appropriate for which region. The WCG is able to share information with farmers to encourage climate-resilient or climate-appropriate farming in specific regions. The WCG will update the crop suitability maps to reflect current shifts and possible future new production areas of legacy crops. In addition, the WCG will invest in current climate-resilient crops with potential to scale up and out, as well as identify and invest in future new crops in suitable production areas.

Identify Market Opportunities for Climate-responsive Crops

To further the sustainable agenda in the agricultural sector, the WCG will support the development of climate-resilient and -responsive agricultural value chains and food systems through the following priorities:

- Develop and invest in low-carbon and resilient agri-processing and value-adding opportunities using climate-resilient crops with a low water and carbon footprint;
- Develop markets needed for new products developed as a result of climate change;

- Identify high-value export crops at risk which may benefit from greater opportunities for processing to absorb fruit damaged by climate events, and develop new investment opportunities; and
- Investigate opportunities for alternative low-carbon transport fuels (pre- and post-farm-gate), including biofuels, and lower carbon modes of transport to markets.

Programme 2: Promote the Sustainable Use of Water, Soil and Energy

Embed Greater Water Security Practices in Food Production

Agricultural activities utilise 55% of water used in the province⁷². With South Africa, and the Western Cape, being water-stressed regions, the agriculture industry needs to consider water efficiency in order to balance production outputs and water sustainability.

The Western Cape Sustainable Water Management Plan (2012) aims, amongst other objectives, to “develop, promote and implement effective and efficient water conservation and water demand management”.⁷³ The WCG has adopted the position that farmers are cognisant of the impact of decreased water availability on their crops or livestock, and have been responsive to the changing environment. In order to contribute to public knowledge and awareness, the WCG will conduct research into water-efficient crops, and investigate platforms to share information with farmers in ways that they find accessible.

In addition, the WCG will prioritise the following initiatives:

- Manage and maintain agricultural water infrastructure to reduce losses and risk, and pursue the feasibility of new water infrastructure in areas of greatest need under climate change;
- Strengthen assurance of equitable surface water access for agriculture through forward-thinking licensing incorporating climate change considerations, and enforcement of licence conditions;
- Increase effectiveness and efficiency of agricultural water use by promoting water-saving irrigation systems and scheduling and increased use of FruitLook. It is an online, open-access project aimed at encouraging more efficient farming through information sharing. The platform uses satellite imagery and the weather information platform to monitor vineyards and orchards. In particular, the platform reports on data related to crop growth, crop water use and leaf nitrogen content. Fruitlook has proved a successful intervention regarding information sharing with fruit farmers, supporting over 270 active users (2015-16)⁷⁴;
- Promote sustainable and compliant groundwater use and management for agriculture through a better understanding of the groundwater system and safe abstraction rates, monitoring, and land management to increase infiltration;
- Improve catchment management (including the clearing of invasive alien plants, wetland and riparian protection and rehabilitation) for increased water flows and flood attenuation, through job creation and farmer incentives; and
- Promote co-operative water-quality management initiatives in polluted river systems used for agriculture.

Protect and Support Improved Soil Health

As is reflected in the SmartAgri Plan, soil health is a critical component of the farming sector, which could be under threat of climactic risks such as fires or flooding. Recognising this, the WCG has been targeting improved soil resilience through conservation agriculture methods, which

⁷² DEADP, 2015. The Western Cape Climate Change Response Framework and Implementation Plan for the Agricultural Sector

⁷³ DEADP, 2012. The Western Cape Sustainable Water Management Plan

⁷⁴ http://www.fruitlook.co.za/file_handler/documents/original/view/111/FruitLook-Summary.pdf

relies on minimum soil disturbance, maximum soil cover and crop rotation⁷⁵. Regarding conservation farming, the WCG will prioritise:

- Increasing the uptake of conservation agriculture through the provision of long-term evidence regarding the production, financial and environmental benefits;
- Increase the spatial extent of conservation agriculture practices through awareness, Education, training and extension activities;
- Drive greater uptake of conservation agriculture through active and collaborative support structures (e.g. CAWC, commodity organisations, WCG: Agriculture);
- Address initial inhibitory financial hurdles and create long-term financial incentives to sustain the expansion of conservation agriculture practices; and
- Expand research on the carbon sequestration and GHG emission aspects of conservation agriculture in a broad range of Western Cape commodities and contexts.

In addition to conservation farming, the WCG will also support proactive soil management for flood and erosion prevention and mitigation co-benefits through the restoration of ecological infrastructure. This should increase landscape productivity, socio-ecological resilience and soil carbon sequestration.

Showcase Energy Efficiency and Renewable Energy Case Studies

Food production is dependent on inputs such as water, land and energy, but is also under threat due to the increasing costs of those resources, coupled with a possible increased need for energy and water use. At the same time, South African agriculture is coming under increasing pressure from international consumers and markets to reduce emissions of Green House Gas (GHG) and associated embodied emissions⁷⁶.

The uptake of energy-efficient and renewable energy technologies and approaches within the agricultural sector is driven by the need to secure reliable energy, as well as a conducive regulatory environment for such technologies and approaches. As such, it is critical for the WCG to supply trustworthy information and professional service providers regarding:

- On-farm and factory energy auditing and recommendations for improvements in energy efficiency; and
- Technical and financial designs for renewable energy installations.

To fulfil this need, the WCG will:

- Generate information based on tried-and-tested approaches to increasing energy use efficiency and developing renewable energy generation capacity on farms and in the agricultural value chain;
- Gather information on financial models and mechanisms which can support investments by farmers and the value chain players at different scales; and
- Make such information freely available using a range of web and print media.

Programme 3: Strengthen Effective Climate Disaster Risk Reduction and Management for Agriculture

In this programme, the WCG will focus on integrating climate change into joint flood and drought planning, and improve early warning systems through the following priorities:

- Improve cooperative drought and flood planning (and other climate extremes) incorporating climate change risks;
- Improve early warning systems in cooperation with farmers and role players; and

⁷⁵ DEADP and DoA, 2016. Climate Change Response Framework and Implementation Plan for the Agriculture Sector of the Western Cape Province

⁷⁶ DEADP and DoA, 2016. Climate Change Response Framework and Implementation Plan for the Agriculture Sector of the Western Cape Province

- Integrate Food Sensitivity into Municipal Disaster Risk Plans.

In order to protect infrastructure and investments in agriculture from climate disasters, the WCG will build and maintain infrastructure, and plan capital investment to accommodate resource constraints and extreme weather events. Regarding human capital, the WCG plans to build local capacity in farmers and farm workers regarding fire fighting and firebreak management, and support of the fire protection associations. In addition, the WCG will incentivise proactive climate disaster risk reduction by incentivising proactive on-farm climate disaster risk reduction, and providing local knowledge and guidance on good financial management to survive bad years.

In terms of institutional mechanisms, the WCG will:

- Strengthen cooperative systems to monitor and respond rapidly to pest- and disease-related crises brought on by climate change, including fast-release financial mechanisms; and
- Strengthen and optimise the WCDOA Disaster Risk Reduction and Management Unit's role by evaluating the human and financial capacity of the unit.

Programme 4: Improve Food Waste Reduction and Management

The extent of food waste within South Africa, and the Western Cape, is unacceptable. Food waste per annum was estimated to be in the realm of 9.04 million tonnes⁷⁷. Research suggests that food losses and waste in South Africa could be costing society approximately R 21.7 billion per annum or 0.82% of annual GDP. International research indicates that the causes of food waste in low-income countries are mainly connected to financial, managerial and technical limitations in harvesting techniques, storage and cooling facilities in difficult climatic conditions, infrastructure, and packaging and marketing systems. By contrast, the causes of food waste in medium/high-income countries mainly relate to consumer behaviour and to a lack of coordination between different actors in the supply chain⁷⁸. It is likely that the primary drivers of food waste in the Western Cape are related to the latter rather than the former. However, a great deal more needs to be done to understand the primary causes of food waste in the Western Cape. The WCG will investigate the status quo of food waste and identify opportunities, along with partners, to intervene.

Food waste also has a compounding effect on the environment in South Africa, where landfilling has historically been considered the cheapest and most practical method of managing food waste. However, scarcity of land as well as gas emissions are increasingly demanding that innovative and proactive means of food waste management be considered. This is demonstrated by the phasing out of landfilling food waste in South Africa⁷⁹. This should be energetically promoted in the Western Cape.

Programme 5: Build Farmer Capacity for Sustainable Farming

The WCG aims to build capacity for farmers to proactively address climate change through sustainable farming practices and resource management. To achieve this, the WCG will focus on the following:

- Building capacity amongst farmers regarding conservation farming practices;
- Developing capacity regarding efficient and sustainable water management and irrigation; and
- Continue to implement the LandCare Programme to encourage community groups to responsibly manage and conserve natural resources in their local area⁸⁰.

⁷⁷ Oelofse and Nahman, 2013

⁷⁸ Gustavsson et al. 2011

⁷⁹ Oelofse and Nahman, 2013

⁸⁰ ⁸⁰ <http://www.daff.gov.za/daffweb3/Programme/LandCare/guidelines>

Programme 6: Integrate Food Sensitivity into Municipal Assessments

The Greenest Municipality Competition is an annual local municipal assessment to determine the successes of local municipalities in implementing sustainable resource management, energy efficiency, urban beautification, compliance and institutional arrangements and public participation⁸¹. This competition has given municipalities a platform to showcase their environmental sustainability achievements. Similarly, the Blue Drop and Green Drop statuses are incentive-based assessments regarding the quality of water services of municipalities.

The WCG will partner with the National Department of Water and Sanitation on ways to include a broader scope of assessment into the Blue and Green Drop assessments to include the food-sensitive planning and design theme into the assessments.

4.5 Pillar 5: Inclusive food economy

Objective: Improve access to nutritious food, particularly for poor households, through the formal and informal food economy by 2030

4.5.1 Rationale

The City of Cape Town Epic Report⁸² suggests that the informal sector in Cape Town represents a diverse set of economic activities, but is dominated by wholesale and retail businesses. Informal trade⁸³ is often concentrated in transport hubs, or areas with high pedestrian or public transport traffic. As an extremely dynamic and responsive economy, the informal food economy is difficult to quantify. However, estimates reflect similar narratives that the informal economy is mainly made up of women traders, most of whom deal with food⁸⁴. Moreover, it is understood that the Informal sector in South Africa (and in the Western Cape) services a significant proportion of low-income households. Research shows that while most low-income households in Cape Town complete monthly shopping trips, mainly at supermarkets, their weekly and daily purchases are predominantly made at small shops or take-away vendors and informal traders or street food traders⁸⁵. As such, it is a critical component of the food system. As well as key points of food access, the sector must also be recognised as a place of opportunity for economic development. For these reasons, we have explicitly targeted the informal trade sector in the Strategic Framework.

Regarding agriculture, the NDP and Nine-point Presidential Plan both emphasise the role of smallholder farmers in the revitalisation of agriculture and agro-processing value chains. Smallholder farmers have the potential to support diversification of locally available food, and contribute to shorter food value chains at the community level. Furthermore, lower fuel and transport costs could positively impact both the price of food for the consumer, as well climate change outcomes. As such, the WCG will investigate opportunities to support emerging farmers who contribute directly to food security.

The aim of this pillar is to expand opportunities in markets for small producers and traders in the food system in order to bring about greater economic inclusion, and support for household-level nutrition and food security. In particular, the Strategic Framework is focused on providing support to:

⁸¹ Mossel Bay Municipality, 2012

⁸² City of Cape Town, 2015. Epic Report, Sector Focus: Informal Sector, Quarter 2

⁸³ In line with Statistics South Africa, the Strategic Framework adopts an employment based definition of the informal sector, defining it broadly as establishments employing fewer than five people, who do not pay income tax, as well as own-account workers whose businesses are not registered for income tax or value-added tax.

⁸⁴<http://www.polity.org.za/article/the-informal-sector-in-south-africa-women-street-traders-in-durban-part-1-2013-05-13>

⁸⁵ Battersby, J., 2011. Urban food insecurity in Cape Town, South Africa: An alternative approach to food access. *Development Southern Africa*, 28(4), pp.545-561

- Smallholder farmers in order to shorten local food value chain and deepen local forces of food security; and
- Informal traders trading fresh produce in order to ensure greater food access for low- and middle-income households

4.5.2 Programmes

Programme 1: Introduce Model By-Law for Municipalities for Informal Food Trading as well as Guidelines for Implementation

Policies that focus on informal trade typically focus on the livelihoods the sector provides to traders. This Framework goes beyond this notion to recognise the contribution informal traders make to household food security, especially to middle- and low-income households. Informal traders seeking to sell food, particularly fresh produce, may require additional space, infrastructure such as access to water, or stands that are able to adequately display their wares which may make it more difficult to compete with other types of traders. The focus of this programme is to identify opportunities to leverage a model bylaw to ensure that informal traders selling fresh produce or nutritious food are adequately supported so that they are able to compete with those selling non-food items.

The model bylaw will include the following:

- Recognition of the role that informal traders play in food security at the community and household level (particularly regarding low- and middle-income families);
- Prioritisation of food traders (particularly fresh produce traders) when determining the distribution of trading permits and the rules for informal traders;
- Prioritisation of the needs of food traders (particularly fresh produce traders) in trading plans developed by municipalities; and
- Formal consultation of informal traders in the design of policies and plans that would affect their livelihoods.

The Food Security Workgroup will prepare a model bylaw that supports the trading of fresh food. This should undergo a regulatory impact assessment (RIA) process before it is promoted.

The guideline document should provide guidance to local authorities about how to tailor this bylaw to local contexts. However, it should provide guidance about how to do this with a wider consideration of the interaction between the planning system and the informal market. It is well documented that space and spatial placement are critical to the survival of informal traders. In particular, the relationship between formal retail spaces such as shopping centres in informal settlements or poorer areas and the informal market needs to be understood better. The role – and strategic and spatial positioning within the wider urban form – of spaces for informal trade needs to be considered in IDP processes. In particular, their role in facilitating access to particular types of food needs to be considered and planned for in IDPs. Informed by such analysis, for example, municipalities may decide that where planning permission is being sought for large formal retail spaces in informal settlements or poorer communities, explicit planning and provision would have to be made for spaces for informal traders in the surrounds. It is, however, imperative that where such initiatives are undertaken, informal traders are proactively involved to ensure that functional trading spaces are cultivated⁸⁶. The guideline should provide guidance on how to conduct this wider analysis and begin to formulate local plans that integrate considerations about the role of food access through the informal market into different aspects of the planning system – from the IDP and SDF down to specific bylaws.

⁸⁶ Sassen, 2014 and Nteta, 2015

Programme 2: Investigate Opportunities to Support Local-level Fresh Food Markets in Commercial Zones in the Western Cape

The WCG will investigate opportunities for municipalities to provide additional support for fresh produce markets to shorten local value chains. In particular:

- The Food Security Workgroup will identify reliable data sources to predict growth in food insecurity in the Western Cape; and
- The Food Work Group (detailed in Pillar 6: Food Governance) will seek to form partnerships with relevant municipalities, the private sector and organisations to identify opportunities in LED to improve household access to healthy, nutritious food.

The WCG aims to support food security in the informal economy by assisting local municipalities through Local Economic Development initiatives (LED) to identify, support and service commercial zones relating to the food system within commuter transportation nodes to increase opportunities for informal traders. The WCG will investigate opportunities or partnerships to support infrastructure and the investment in storage, access to storage, cold chain management, water and public ablution facilities that will shorten value chains and give access to fresh food to local communities.

Programme 3: Investigate the Impact of Emerging Farmers on the Food System and Ways to Support Their Contribution to Food Security

Directing resources towards increasing economic opportunities within the food system, especially for small-scale producers, will contribute towards the diversification of the food value chain. In the 2015/16 financial year, 1 572 emerging farmers were given the tools they need to grow their enterprises. Over the next three years, the WCG will support 4 195 new farmers to take their businesses to the next level. Activities will include:

- The ongoing identification of opportunities for land reform processes and the provision of support to black smallholder farmers;
- Where land transfers have already taken place, the prioritisation of post-settlement support to smallholder farmers;
- The identification and active promotion of the effective elements of farm worker equity schemes; and
- The investigation and promotion of models for training in farming methods, mentoring by experienced farmers, and training in marketing and produce development for emerging farmers.

Furthermore, the Western Cape Government will continue the promotion of food gardens, food production on government land, commonage land and research farms. This will take account of the Green Economy Strategic Framework in order to promote a diversified, climate-resilient agricultural sector and a secure ecosystem infrastructure. In both cases, emerging farmers tend to be more efficient than large commercial farmers in terms of their consumption of energy and water. The WCG will also seek to actively encourage commonages and the strengthening of cooperatives and working relationships that seek to empower smallholders.

It is widely recognised that agri-processing has the potential to support smallholder farmers to survive for the following reasons⁸⁷:

- Agri-processing is labour absorbing, and is not reliant on seasons like farming;
- Agri-processing provides further market access to farmers to sell diverse products; and
- Processing can extend the lifetime of a product and reduce food losses for smallholder farmers.

The WCG will investigate opportunities to link smallholder farmers to household and community-

⁸⁷ <http://www.idc.co.za/home/media-room/articles/251-agro-processing-key-for-small-scale-farmers.html>; <http://agriculturenigeria.com/agro-processing>; <http://practicalaction.org/t4sl/agroprocessingapproaches>

level agri-processing activities or existing commercial agro-processors. The Industrial Development Corporation's R100-million Agro-Processing Linkage Scheme (APL) provides one example of attempts to incentivise agri-processors to source raw material directly from resource-poor farmers. It seeks to create direct linkages between agri-processors and resource-poor farmers through mechanisms such as contract farming.

Furthermore, the WCG will establish links between smallholders and the five proposed agri-parks in the Western Cape municipal districts. The agri-parks are envisaged to facilitate networks between smallholder farmers, large-scale producers, processors and markets, but also provide infrastructure required to transform industries. It is anticipated that through this approach, subsistence and smallholder farmers will be supported with infrastructure and market access.

Programme 4: Support for Skills Development in the Food Economy

The Department of Agriculture of the Western Cape is making a concerted effort to build on and improve food production skills of individuals involved in the agricultural sector.

In particular, the Department provides structured formal training (NQF level 5 to 7) to prospective farmers, farm managers, extension officers/advisors and agriculturalists, with the emphasis focused on technical training for production. This is full-time training (BAgric, Higher Certificate, Diploma) targeted at post-matric students.

In addition, the DoA also delivers short technical skills courses at GETC and FET levels regarding farming to between 2 500 and 3 000 beneficiaries per annum. Beneficiary groups are small and emerging farmers (subsistence and commercial), farm workers (agri-workers) and individuals from disadvantaged communities. Nevertheless, wider national resources and programmes should be leveraged where opportunities are available. The WCG will improve coordination with the DTI, the IDC and professional associations to support the growth of livestock, fruit and horticulture processing in terms of opportunities for emerging farmers, employment and new products without sacrificing efficiency. In addition to offering learning opportunities, the WCG will also promote relevant learnerships, apprenticeships and learning opportunities offered by SETAs, industries and institutions. The WCG also recognises the value that established farmers can add to this process through mentoring, and will investigate incentives and support to connect established and emerging farmers to encourage knowledge transfer.

In addition, by partnering with organisations and institutions offering training for informal traders in the Western Cape, the WCG aims to support the roll-out of programmes dealing with food management and safety, as well as business development and legislative compliance.

4.6 Pillar 6: Food governance

Objective: Evidence-based integration of food security implementation and planning

4.6.1 Rationale

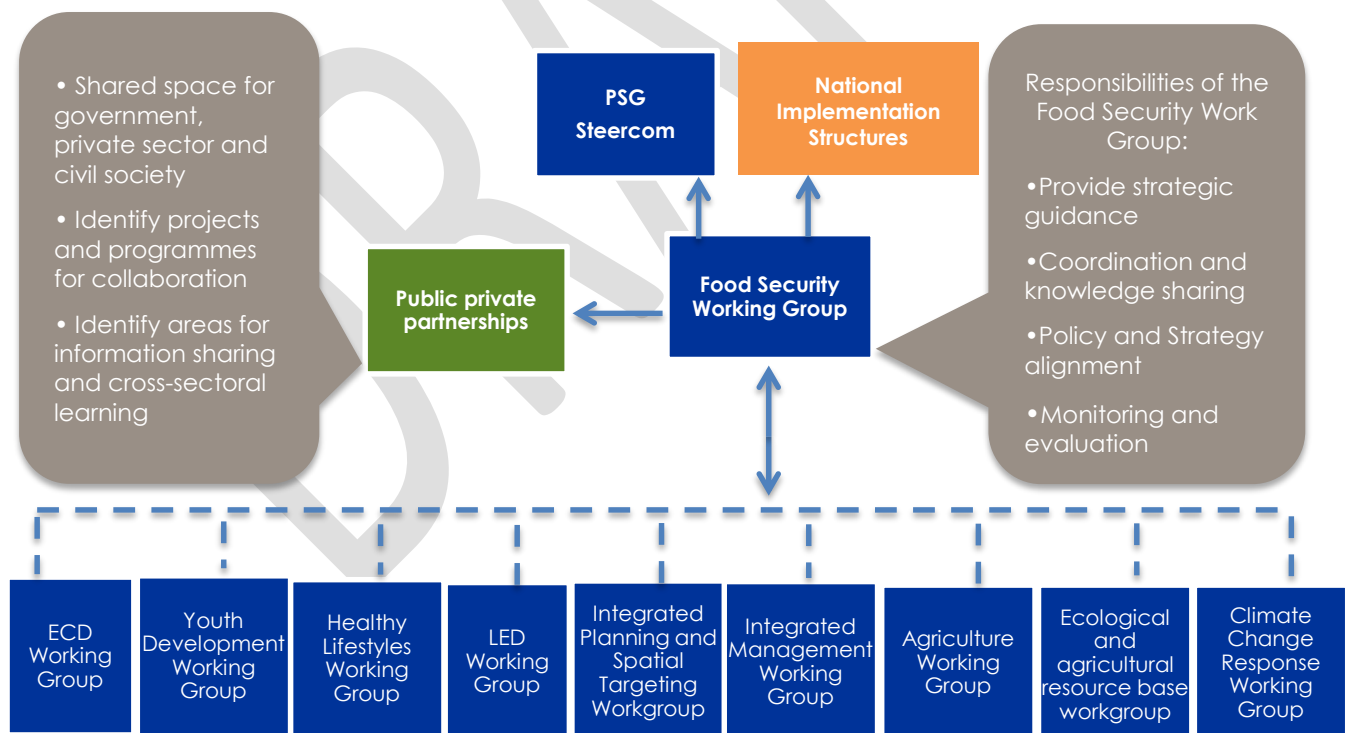
The complexity of the food system means that there is a wide range of influential stakeholders in determining aspects of access, availability, utilisation and stability of food supply in the Western Cape. This Strategic Framework seeks to balance the direct interventions required of the government to ensure that all the residents of the WCG have access to food and more indirect interventions that seek to influence the food system to ensure that it is more inclusive. However, it is important to acknowledge that the government, and particularly the provincial sphere, has a limited set of levers to influence these dynamics. Improving the food security of the province, therefore, can only be successfully pursued through the building of robust partnerships between the different spheres of the government, the private sector and civil society. Such an approach embraces the WCG's whole-of-society philosophy, namely to pursue policy and programmes that seek to address complex problems by involving a wide range of stakeholders working together. This approach aligns well with the national policy framework and international trends towards the formation of food governance structures, to coordinate the different aspects of a

response to food insecurity. Such a multi-stakeholder approach will become ever more necessary as the effects of climate change begin to transform aspects of the food system.

This Framework identifies a wide range of roles for government departments across the three different spheres that need to work together and coordinate more effectively towards the overall goal of improving food security in the WCG. This applies not only to provincial government departments, but also to key national departments and municipalities. It is recognised that a great deal of the pressure to deal with food insecurity is likely to fall on national and local government in the future. As such, it is imperative that an effective institutional structure, a Food Security Work Group, is empowered to ensure that the programmes of individual departments align with the strategic intent outlined in this Strategic Framework, and improve the levels of coordination and collaboration between departments within the province and with the other spheres of government. The identification of collaborative opportunities and formation of partnerships also requires a systematic space to bring together the private sector and civil society.

Finally, the poor state of data represents a major impediment to the effective response of all stakeholders to food insecurity. The establishment of an effective food security governance system, therefore, requires a systematic approach to the collection and assessment of data to understand the way in which the food system is changing and affecting the lives of the residents of the Western Cape, particularly the poor. The province needs to build strategic partnerships with key stakeholders to ensure that the data that is already being collected is readily accessible to policy and decision makers and, where gaps exist, identify them and possible partners that have a mutual interest in addressing them (e.g. academic institutions and private sector partners).

Figure 7: Western Cape Food Governance Structure



4.6.2 Programmes

Programme 1: Strengthen Food Security Governmental Work Group

The WCG has an existing work group that is currently responsible for the development of a strategic response to food security in the province – and it is under its direction that this Strategic Framework has been developed – as well as information sharing and coordination between provincial departments that are working on aspects of food security. The Strategic Framework represents an ideal opportunity to assess and revise the terms of reference, ensuring that they are aligned with this document, and to determine whether the relevant representatives from national, provincial and local government are members. The work group has four aspects with regard to its mandate:

- 1) Provide strategic guidance to individual departments, work groups and the province as a whole to ensure that the intent of the Strategic Framework is effectively pursued, and provide coordination across departments to ensure the alignment of Strategic Framework, planning, and programmatic responses of food security.
- 2) Align policies, strategies and programmes across departments regarding food and nutrition to the Strategic Framework.
- 3) Coordinate and share knowledge between departments, strategic partners from other sectors and the other spheres of government to maximise the impact of the programmes identified in the Strategic Framework.
- 4) Ensure that a monitoring and evaluation system is established which can provide operational detail to assist in assessing implementation, as well as outcome and impact assessments to track the overall effectiveness of the Framework.

The Work Group will be convened and formalised under PSG 1 and, because of its transversal nature, will be convened and chaired by the Department of the Premier. The membership of the group should reflect the need to give strategic guidance to the changing state of food security in the province, as well as those staff that are actively engaged in the programmes outlined within the Strategic Framework. Given that the notion of food security intersects with much of the work of government, representatives on the Food Security Work Group will be selected based on their active involvement within other relevant working groups. The identified working groups of interest include the following: ECD Nutrition, PSDF, LED, Healthy Lifestyles, Youth Development, Agriculture, Ecological and Agricultural Resource Management, Climate Change Response. By proactively identifying individuals from these workgroups, the Strategic Framework aims to introduce food sensitivity into the work of the WCG, and also ensure that the implementation of the Strategic Framework is sensitive to the programmatic context and requirements. Where necessary, the wider work group can investigate setting up sub-work groups to work on specific issues and report back to the wider group.

The monitoring of and reporting on indicators identified in the Framework should be the responsibility of the work group, including the following tasks:

- Develop a baseline of relevant dimensions of food and nutrition security in the Western Cape, including availability, access, stability and utilisation.
- Develop a Monitoring and Evaluation Plan to monitor immediate outcomes, intermediate outcomes and impacts of Food Security interventions by the WCG and partners.
- Develop a plan to measure return on investment regarding projects. Considering limited public resources, and the scale of Household Food Insecurity in the Western Cape, the Food Security Work Group must begin to report on return on investment regarding projects. Where evidence shows low return on investment, the Work Group should review projects for recommendation to be submitted to the lead implementing department.

Programme 2: Establish a multi-stakeholder process to create public-private partnerships

A Food Security lab, similar to the process followed by Project Khulisa, will be convened, including stakeholders from government, private sector and civil society that share interests and expertise regarding food security in the Western Cape. It will be an opportunity for areas and programmes for collaboration to be identified and for the creation of appropriate public-private partnerships.

Particular emphasis will be placed on ensuring that all stakeholders make specific commitments by the end of the process. A typical example of this would be the strengthening of ties between retail outlets and food banks to identify opportunities to address food waste in more proactive ways. They may also include longer-term collaborations, for example, eliciting a commitment from retailers to source a percentage of their produce from smallholder farmers and to play a leading role in sensitising consumers with regard to the merits of locally grown produce and supporting smallholder agriculture. The lab process should determine the nature of the institutional mechanism for the ongoing tracking of the implementation of the commitments made, and identification of further areas of collaboration by different stakeholders.

The process should also actively work to maximise the positive impacts of the Strategic Framework programming, limit duplication of efforts, ensure that there are no gaps in coverage, identify aspects of the food system that require further research and find innovative ways of mitigating the root causes of the challenges. Furthermore, it should actively identify opportunities to share data for knowledge building or mutual benefit.

This consultative process may also seek to develop a Western Cape Food Security Charter, which outlines a commonly held vision of food security in the province. The intent of this document would be to outline areas for joint strategic effort. It would need to specify how joint resources and data can be mobilised to achieve this vision.

Programme 3: Develop or Leverage Existing Monitoring and Evaluation Systems and Research Opportunities

The poor state of data represents a major impediment to the effective response of all stakeholders with regard to food insecurity. The establishment of an effective food security governance system, therefore, requires a systematic approach to the collection and assessment of data. A particular emphasis must be placed on collecting and representing geo-located data so that analysis can be conducted to identify areas of high need and an overlay existing of provincial responses to ensure that resources are being used optimally. The WCG needs to build partnerships with stakeholders to ensure that where data is already being collected, it is readily accessible to policy and decision makers.

Furthermore, in order to assess the extent to which the Strategic Framework goals have been attained, data on the output and outcome indicators will be managed by the Work Group. The Work Group is tasked with designing the food and nutrition baseline and implementation indicators. Members of the Food Security Work Group are also positioned within various other relevant work groups, and will be responsible for gathering data either through various work groups or line function departments. This data will be used to report on the implementation of the Western Cape Food Framework. Work Group members should work with Strategic Management Information (SMI) to develop data systems to assist with the collection and reporting of data, thereby lessening the burden of reporting in the medium term. It should also leverage monitoring and evaluation schemes developed by intersecting programmes or strategies such as the Provincial Strategic Framework, the SmartAgri Plan, the Western Cape Game Changers and the First 1000 Days Campaign.

The Food Security Strategic Framework recognises that Food Security is a complex and dynamic challenge. As such, ongoing research and analysis is a critical input to ensure that the Strategic Framework remains relevant to the province. The Work Group is expected to leverage partnerships with research institutions to review and incorporate pressures on the food system such as population growth and migration, food prices, climate change and resource scarcity into the Food Security Strategic Framework. Partnerships should also be used to examine the longer-term impact of the Framework. Identified existing research institutions, units and partnerships that could be leveraged to support the Strategic Framework include:

- Statistics South Africa (StatsSA)
- Cape Higher Education Consortium (CHEC)
- Human Sciences Research Council (HSRC)
- Centre of Excellence on Food Security, University of the Western Cape (CoE, UWC)
- Agricultural Economics Services, DoA, Elsenburg

Programme 4: Performance Management

The Strategic Framework will be implemented within the Provincial Transversal Management System (PTMS) to ensure that strategic policy objectives are effectively and efficiently executed. The PTMS enables the WCG to strategically align its provincial service delivery imperatives and electoral mandate, as well as the mandate and obligations of local government. The PTMS provides a platform for policy and strategic consideration and enables political, tactical and operational governance of integrated service delivery. This is an ideal structure for the implementation, coordination, management and monitoring of the Food Security Framework. The outputs in the form of milestones will be tracked via multi-year transversal ICT projects such as BizProjects and BizPerformance.

At the level of individual performance within the WCG, the mandated functions of Senior Management Staff (SMS) and Middle Management Staff (MMS) members, as required by the PSGs, are captured in their individual performance agreements and tracked on the Performance Management Information System (PERMIS) via the quarterly reviews.

The performance of municipalities is monitored as part of the annual review of the municipal performance against each municipality's Integrated Development Plan (IDP) and Service Delivery and Budget Implementation Plan (SDBIP) as part of the annual IDP and LGMTEC engagements.

Programme 5: Leverage, Showcase and Expand the Use of Technology and Innovation in Food Security Solutions

Many of the challenges outlined in the Food Security Strategic Framework are either systemic or structural. Particularly in areas of food production and environmental resource management, issues such as climate change, soil quality and water scarcity compound the formidable challenge of ensuring more households have stable access to nutritious food. The WCG has recognised the potential of technology and innovation in addressing some of these issues – for example the Fruitlook project leverages and the online, open-access platform to share information with farmers to encourage more efficient farming. In cases where the WCG has developed innovative or technology-driven solutions, they will be showcased within and outside of provincial government to demonstrate the value of these solutions. By showcasing examples of innovation, the WCG aims to expand the notion that innovation and technology can hold creative and practical answers to critical and mounting challenges.

Furthermore, the WCG will investigate opportunities to catalyse or support the use of technology and innovation in food security for public and private partnerships, partnering with NGOs and investing in research.

4.7 Summary of key programmes

Food and Nutrition Insecurity touches many lives in the Western Cape. This framework builds on the programming strengths of provincial government and has identified new key programmes to be designed and implemented in order to fill strategic gaps in delivering a coherent response. A strong food security working group and a passionate multi-stakeholder process will ensure equity and effectiveness in the Food Security Strategic Framework programming throughout the province. The table below provides a summary of the key existing programmes that will be integrated with new programmes.

Table 4: Key programmes

Pillar	Key existing programmes	Key new programmes
1: Food Assistance	<ul style="list-style-type: none"> • Provincial indigent and vulnerable populations intervention • Promotion of self-provisioning • Nutritional support for individuals at risk of malnutrition • Promoting, supporting and protecting breastfeeding and improved complimentary feeding • Using schools and ECDs as sites of opportunity 	<ul style="list-style-type: none"> • Breastfeeding Policy to be adopted by whole of WCG
2: Food Awareness and Safety	<ul style="list-style-type: none"> • Expanding the Western Cape Working on Wellness Programme • Promoting the Western Cape Healthy Eating Guide • Expanding events programmes that capitalise on global food and nutrition programmes • Support for WASH programmes 	
3: Food-sensitive Planning		<ul style="list-style-type: none"> • Integrate food sensitivity into Provincial Spatial Development Framework in order to influence Municipal SDFs • Include and adapt the principles of food-sensitive planning and design into the model zoning scheme bylaw • Food-sensitive planning and design guidelines for land use management in the province • Include food sensitivity principles into existing municipal assessment criteria

4: Food Resource Management for the Future	<ul style="list-style-type: none"> • Promote a climate-resilient, low-carbon agricultural sector that is productive, competitive, equitable and ecologically sustainable across the value chain • Embed greater water security practices in in food production • Strengthen effective climate disaster risk reduction and management for agriculture • Build farmer capacity for sustainable farming 	<ul style="list-style-type: none"> • Improve food waste reduction and management • Include food sensitivity principles into existing municipal assessment criteria
5: Inclusive Food Economy	<ul style="list-style-type: none"> • Support skills development in the food economy 	<ul style="list-style-type: none"> • Introduce a model bylaw for small-scale and informal food trading in municipalities • Investigate opportunities to support major local level food markets commercial zones in the Western Cape • Investigate the impact of emerging farmers on the food system and their potential contribution to food security
6: Food Governance	<ul style="list-style-type: none"> • Strengthen Food Security Work Group 	<ul style="list-style-type: none"> • Establish a multi-stakeholder process to create public-private partnerships • Develop or leverage existing knowledge and data for the food framework • Monitor and evaluate interventions • Leverage, showcase and expand the use of technology and innovation in household food security solutions

4.8 Sequencing of key programmes for implementation

Considering the significant number of programmes advocated by the draft Food Security Framework, it is recognised that programmes must be staggered over the MTEF and beyond.

Timeline	Programme
Current	<ul style="list-style-type: none"> • Provincial indigent and vulnerable populations intervention • Promotion of self-provisioning • Nutritional support for individuals at risk of malnutrition • Promoting breastfeeding and improved complimentary feeding • Using schools and ECDs as sites of opportunity • WOW programme • Healthy Eating Guide • Events

	<ul style="list-style-type: none"> • WASH programme • Support skills development in the food economy • Strengthen Food Security Governmental Work Group
Short term	<ul style="list-style-type: none"> • Include and adapt the principles of food-sensitive planning and design into the model zoning scheme bylaw • Including food-sensitivity principles into existing municipal assessment criteria • Promote a climate-resilient, low-carbon agricultural sector that is productive, competitive, equitable and ecologically sustainable across the value chain • Promote the sustainable use of water, soil and energy • Strengthen effective climate disaster risk reduction and management for agriculture • Build farmer capacity for sustainable farming • Including food-sensitivity principles into existing municipal assessment criteria • Multi-stakeholder process to engage the private sector and civil society • Research and Development with academic partners • Leverage, showcase and expand the use of technology and innovation in household food security solutions
Medium term	<ul style="list-style-type: none"> • Integrate food sensitivity into Provincial Spatial Development Framework in order to influence Municipal SDFs • Food-sensitive planning and design guidelines for land use management in the province • Improve food waste reduction and management • Introduce model bylaw for municipalities for informal food trading • Introduce model bylaw for municipalities for informal food trading as well as guidelines for implementation • Investigate opportunities to support local-level fresh food markets in the Western Cape • Investigate the impact of emerging farmers on the food system and ways to support their contribution to food security • Improvements in food security data management and food security monitoring and evaluation

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