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1. Document Profile detail



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LINCS Value Framework

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	Learning The project stresses the value of experiential learning and that multiple ways of knowing are welcomed, deemed of equal value, and can be connected to enhance understanding. "NEA ONNIM NO SUA A, OHU" - "He who does not know can know from learning"	Inclusivity and deliberate engagement and empowerment of communities will enhance their agency and participation in decision- making for a people-centred and informed research, policy and practice. "FUNTUNFUNEFU- DENKYEMFUNEFU" - "Unity in diversity"	Novelty represents the embracing of the new or unexpected, which necessarily requires diverse expertise, skills and perspectives. It includes the dismantling of inappropriate systems in favour of traditional or indigenous practices. "UAC NKANEA". "UAC lights" symbolises technological advancement.	Collaboration To successfully ensure transdisciplinary work, societal actors must be continuously engaged to co- define the research objectives and questions, and to continuously contribute to meaning- making with the researcher as the research progresses. "BOA ME NA ME MMOA WO" - "HELP ME AND LET ME HELP YOU".	Sustainability is articulated both as the overarching global imperative to ensure economic, environmental and social wellbeing, and as the ethos that every project intervention must aim to become self-sustaining. "SANKOFA". The backwards turning bird symbolises returning while looking forward
How does this deliverable contribute to each of the values?	This has involved a deep learning process connecting food systems understanding to urbna systems understandings	The report entailed less engagement and a surface review but consultations with diverse stakeholders will now take place	This is one of the first reviews to connect urbna systems and food systems knowledge and to assess the food system of a city as embedded in both the urban, the policy and the infrastructural contexts	This work involved convening different food systems knowledge specialists. More collaborative work will commence with this report service as the site of conversation	This report serves a key sustainability position. The wealth (per a broad definition) of society is embedded how society functions and that is embedded in context and the environment. The intersections between these sphere also needs mediation and governance. This report seeks to understand this process as a primary entry point to ongoing food system engagement.
How did you practice this value in this deliverable?	Through the initial brief and active engagement through the development of the report.	This process built the foundation for more inclusive conversations with diverse actors who impact the food system across the city	This report is novel and pushed researchers to engage diverse systems at the urban scale – food, urban, governance, health, policy, politics, etc.	This report was collaborative in terms of how it brought researchers together. However, it is a key tool upon which collaborative processes are now built	This report sought to offer greater understanding about the intersections of the three spheres and how these are mediated through the sphere, who governs these processes and how these enable or constrain outcomes.

2. Introduction and Background

2.1. Introduction

"Malnutrition is a multi-causal national challenge that must be addressed by many sectors using a food systems approach"

(Republic of Namibia, 2021)

Rapid urbanization in Africa has been accompanied by a major transformation in national and local food systems. Food systems changes however, differ across contexts. None more so than in African cities. Different cities reflect different stages of urban and food systems transformation. Further, seldom do policy actors, or urban food systems researchers, actively seek to understand urban food systems transformation at the same time as considering urban transformations. This report actively locates Windhoek's urban food systems change as this intersects with the multiple changes taking place across the city. Not only is Windhoek experiencing significant in-migration and high levels of urbanisation, the city's food system reflects the significant inequities of such urban transitions. The food system of Windhoek offers a unique lens to both the urban challenges faced in Windhoek, but also, the associated nutrition, health and development challenges experienced in the City.

Windhoek's food system and wider urbna challenges cannot be engaged without actively engaging the history of the City and that of Namibia, a country subjected to violent occupations and resultant policy directives. These were dispensed through Windhoek, as the governing city in the region.

This report starts by reflecting on the history of the City, detailing the growth of the City and the relationship between that growth and the food system of the City, region and wider context. The different historical phases associated with the growth of Windhoek are described. These are then followed by discussions on current day challenges in the City, specifically inequities and food systems challenges. The report then provides information on the economy of the region, specifically the nature of the economy, the formal economy and the informal economy.

The report then engages the challenges associated with food security, offering detail drawn from recent food and nutrition security, the food economy and the wider food systems studies. These studies provide context for later engagement, in greater depth, in the dynamics of food insecurity, the nutrition transition and associated health related challenges in the city. These in depth engagements are further contextualised through a detailed account of the food and nutrition policy environment. Policy discussions are contextualised through a discussion on the nature and form of urban and food systems governance and how these aspects are embedded with wider food system of Namibia.

The report draws on this information to delve into different aspects of the Windhoek in greater detail, offering important detail on the functioning and challenges of the City's food system.

2.2. Methodology

This report is a State of Knowledge review. As such, the report drew only on documentary evidence and policy documents. The report drew significantly on more recent food security and food system studies. Authors of this report were active members of the teams drafting these earlier reports. Further, the report drew on a right legacy of historical information, information that needed to be considered alongside current urbna food systems information. Given the documentary review process, no interviews or engagement with human research informants took place.



Image: Informal vendors selling in shade of supermarket billboard (Source: J. Crush - not for re-use)

3. The City of Windhoek

Windhoek is the capital city of Namibia, and the geographical, economic, services, manufacturing, and political centre of the country. Since political independence in 1990, the population of Windhoek has been growing at a dizzying rate of 5% per annum. At independence, the population of the city was 140,000 and, with rapid urbanization in the years since, now exceeds 500,000 people. Although relatively small by African capital city standards, Windhoek dominates the urban system of the country with one-third of all urban residents. The next largest urban centre in the country, Rundu, has a population of only 58,000. Since independence from South African colonial rule in 1990, rapid urbanization, in-migration, and economic growth have transformed the demographic composition, economy, infrastructure, and landscape of the city. The urban food system has also undergone significant transformation although, like much else in the city, it is strongly influenced by the burden of the past. Windhoek is located in the central highlands of Namibia in the Khomas Region. In this report, Khomas is viewed as the Windhoek city-region. Khomas region covers an area of 37,000 sq kms and comprises 10 constituencies.

3.1. History of the City

3.1.1. Precolonial and Colonial Windhoek

The history of Namibia's capital unfolded over four main phases: (a) in the pre-colonial period,, as the centre of the Oorlam territory (1840s-1860s); (b) as the administrative capital of colonial German South-West Africa (1890-1915); (c) as the capital of the UN-mandated territory of South-West Africa controlled by South Africa, and finally (d) as the capital of post-colonial Namibia. Before the arrival of the Oorlam, the Windhoek area was occupied and farmed by indigenous Herero people. They were displaced by the Oorlam in the 1840s, a mixed-race group who migrated from the British Cape Colony and established a small settlement which they named 'Windhoek'. The settlement grew into a market town of 2-5,000 people linking pre-colonial trade routes from the Cape and the Namibian coast (Figure 1). In the 1860s, the Oorlam and their Nama allies were defeated by the Herero and left the area. Windhoek was ransacked and eventually abandoned.

Germany annexed Namibia in 1884 and the beginnings of modern Windhoek date from 1890, when occupying troops made it their military headquarters (Wallace, 2014). By 1894, the new town had 500 German troops, 300-400 black workers (mostly Damara). German colonialism was relatively brief but included a genocidal policy of extermination following the 1904-1907 War of Resistance when the Nama and Herero forces united against the Germans. For the small but growing German capital of Windhoek, the colonial episode 'generated the city's spatial and legal conditions for segregation by encoding different spatial and material parameters for Black and White residential neighbourhoods' (Roland et al., 2024: 132). In 1912, a Main (or Old) Location was established and Black residents of the town were forcibly moved into this area. Following the defeat of German troops in 1915, the government of the Union of South Africa (established in 1910) took over administrative control of the German colony.

For the next seven decades, white South Africa exercised colonial control over Namibians (Wallace, 2014). Prior to 1948, and the advent of the apartheid regime in South Africa, the colonial administration 'proceeded to systematise the discrimination started by the Germans along racial and ethnic lines' (Frayne, 2001: 115). Influx controls and a passbook system were introduced, since the black population was treated as temporary urban residents (Hayes et al, 1998). Modelled on South Africa's notorious migrant labour system, a compound was built for male Owambo contract labour migrants from the north. In the 1960s, the

Old Location was abolished, and the residents were forced to relocate to a new township to the north of the city, named Katatura (Pendleton, 1993). As in South Africa, Katatura was divided into different sections for different ethnic groups. As Frayne (2001: 124) notes, 'urban development during the preindependence era was therefore guided by the same ideology of colonial apartheid, dominated almost entirely by the white population, and served the interests of the urban elite.'



Figure 1: Pre-Colonial Trade Routes Centred on Windhoek

Source: Roland et al. (2024)

During the colonial period, and despite apartheid-like restrictions on urbanization, the population of Windhoek increased from 15,000 in 1946 to 62,000 in 1970 to 140,000 in 1990. The white population of the city was augmented by white settlers from South Africa and the black population by migrant workers. In 1970, 31,000 of the 140,000 residents were black and half of these were contract workers. Like the apartheid cities of South Africa, the residential geography of Windhoek in the late colonial period was racially stratified, and consisted of high-density Katatura for black Namibians, Khomasdahl for mixed-race Namibians, and low-density white residential areas including Windhoek West and Klein Windhoek.

Year	Population
1936	10,000
1946	15,000
1960	36,000
1970	62,000
1975	74,500
1986	120,000
1990	140,000

Table 1: Growth of Windhoek in the Colonial Era

Source: Frayne (2001: 124)

3.1.2. Post-Colonial Windhoek

After a decade-long war of liberation, Namibia achieved its independence from South African colonialism in March 1990. With the end of South African apartheid in the country, Windhoek began to experience rapid change. The urban population grew rapidly after independence primarily through in-migration (Figure 3). People began to move in ever-greater numbers from impoverished rural reserves to Windhoek, overwhelming the ability of the city government to plan for the influx. During the period 1991-1994, the municipality established three "reception areas" around Katatura to temporarily accommodate the new influx of migrants until they could be resettled. Migrants were allowed to settle in shacks of corrugated metal sheeting of not less than six square metres on plots of 300 square metres and water and communal toilet facilities were provided.

Despite these efforts to contain and direct new settlement, the number of informal households within and outside the reception areas continued to grow rapidly. The City found it very difficult to keep people out of the designated reception areas and major land invasions occurred prior to site layout and rudimentary construction. Such was the demand, that the City was unable to confine growth to the planned boundaries. Although the reception areas were originally seen as a temporary fix, they have become permanent features of the urban landscape. The financial improvement which would enable people to purchase land elsewhere did not occur and most people were unemployed and too poor to purchase fully-serviced land. People started to allow others to settle on their little plots and overcrowding intensified.

Figure 2: Colonial Windhoek



Source: Roland et al. (2024)



Figure 3: Population of Windhoek, 1960-2001

Source: Pendleton et al. (2014)

Despite the rapid increase in the population of the city, many urban residents have maintained close material and cultural connections with rural homes, especially in the north of the country.

The Namibian Migration Survey in the late 1990s mapped the major types of internal migration in Namibia and showed the dominance of Windhoek as the destination for rural-urban migrants (Figure 4). The uncontrolled and unplanned occupation of urban land by rural-urban migrants continues to the present in expanding informal settlements on the northern fringes of the city. Windhoek's informal settlements are located around Katutura and Khomasdal North. In Katutura they are in the north-western constituencies of Tobias Hainyeko (Oshitenda, Okahandja Park, Kilimanjaro and Babylon), Moses // Garoëb (Hakahana and Havana Extension No.2, No.5) and Samora Machel (Greenwell Matongo, Gorengab and Havana Extension No.7).

Figure 4: Migration Patterns in Namibia



Source: Frayne and Pendleton (2001)

Figure 5: Post-Colonial Windhoek



Source: Roland et al. (2024)

The spatial legacy of Windhoek's colonial past is deeply inscribed in the urban landscape. While racial discrimination and segregation have been consigned to the dustbin of history, the spatial consequences of South African colonialism have not. Windhoek is no longer a city officially divided into white, mixed-race, and black residential areas. There was initial optimism about the possibilities for post-colonial urban transformation (Mitlin & Muller, 2004; Müeller-Friedman, 2006). However, the transition to independence has not meant the end of segregation or inequality but rather changed its statutory basis from one based on racial criteria to one based on property rights and economic class (Figure 5) (Kohima et al., 2023; Metsola,

2022). As a result, 'Windhoek's present-day spatial structure, layout, and urban-planning legislation are neither neutral nor rational, having evolved from colonial and apartheid ambitions of segregation and dominance, which continue to serve commercial interests and landowners, at the expense of the poorest residents. By disregarding the former townships' urban morphological and material preconditions and administering them as suburbs, the city authorities have entrenched Windhoek's asymmetrical and unequal development' (Roland et al., 2024).

As Figure 5 shows the contemporary city has a distinctive geography of inequality when viewed through the lens of household income. The low and no formal income areas are all to the north of Windhoek and encompass a large swathe of informal settlement in the constituencies of Moses // Garoeb, Tobias Hainyeko, and Samora Machel. Table 2 shows that these are the poorest areas of the Windhoek city-region with Moses // Garoeb having the highest levels of income poverty (79% poor/severely poor), followed by Tobias Hainyeko (36%), Windhoek Rural (28%), and Samora Machel (26%).

	Severely Poor %	Poor %
	%	%
Moses Garoeb	43.0	34.8
Tobias Hainyeko	16.5	19.6
Windhoek Rural	13.9	14.3
Samora Machel	12.7	13.4
Khomasdal	7.6	7.1
Katutura Central	3.8	4.5
John Pandeni	2.5	1.8
Windhoek East	0.0	0.0
Katutura East	0.0	4.5
Windhoek West	0.0	0.0
Total	100.0	100.0

Table 2: Income Poverty Levels by Khomas Constituency

Source: Pendleton, W., & Nickanor, N. (2016)

As with income poverty, there were striking differences in Lived Poverty Index scores within Windhoek, with households in Windhoek East, Windhoek West and John Pandeni constituencies having close to 100% of households lacking no basic household needs (LPI of 1.00 or below). Comparatively, in Tobias Hainyeko, Katutura East, Moses Garoeb, and Samora Machel constituencies, only about 30%-50% of the households had an LPI of 1.00 or less.

Figure 6: Lived Poverty Index by Constituency



Source: Pendleton, W., & Nickanor, N. (2016)

3.1.3. Food History of the City-Region

As in many Southern African cities, the food history of Windhoek and its city-region (the district of Khomas) is largely undocumented. In the pre-colonial period, the Oorlam provisioned the settlement of Windhoek by raiding the cattle of the local pastoralist Herero and Nama and exchanging the livestock in the Cape Colony for firearms, wagons, horses, and consumer goods (Botha, 2005). During the early colonial period, Windhoek was relatively small, and the German troops could feed themselves and the small white population through raiding and importation of food from the coast and the Cape Colony. Dobler (2014) shows that itinerant traders began to establish trading stores in the north of the country from the 1920s onwards and it is reasonable to assume that they also set up stores in Windhoek much earlier on. Some traders probably came from the Cape where there was a well-established trading network, but German entrepreneurs also espied an opportunity in the new colony. In October 1894, a company known as the "Damara & Namaqua Handelsgesellschaft" was established in Hamburg to carry on trade in the colony. In 1909, the company was renamed "Woermann, Brock & Co." after the first partners Adolph and Eduard Woermann and Max Brock and by WW1 it had 32 branches in the colony. Supplies from Germany were transported by the Africa Shipping Company, maintained by the mother company C. Woermann in Hamburg. After the War, only two branches were left, one of which was in Windhoek. The company continued to operate and expand its

operations throughout the colonial period and in 1966 built Windhoek's first self-service supermarket in the CBD, patronized primarily by white residents.

Until it was closed in 1987, contract migrants living in the compound received food rations as part of their monthly wage, while the residents of Old Location and Katatura made do by purchasing food with their own meagre wages. Pendleton's (1993: 25) description of the food environment in Katatura in the 1960s revealed a pattern of food purchasing that in some respects continues to the present:

Besides accommodation, Katatuta provided various other facilities. About ten shops were located in a central business area. Other shops were distributed throughout the location in the different ethnic sections, often operated by a resident of the ethnic situation in which it was situated. Most people sent their children to these small shops to buy food everyday as the need arose and money was available. However, many people went to Windhoek on Friday afternoons and Saturday mornings, when they had received their pay checks, to buy at the large supermarkets and white-owned clothing stores.

As many as 40 businesses owned and operated by black Namibians were located in Katatura including 20 general dealers, 9 cafes, and 2 butcheries. As in apartheid South Africa, informal food selling was completely prohibited which explains the proliferation of small shops selling food.

At independence, several surveys were conducted in Windhoek focused on food, nutrition, and health. Pendleton (1993) conducted a household survey of Katatura's 91,000 residents and found that although 43% of household income on average was spent on food in 1967, this had declined to 27% by 1991. Table 3 shows that the daily diet of households relied heavily on maize meal, brown bread, and to a lesser extent dairy. Around half of all households consumed rice, potatoes, beef, chicken and fresh vegetables once per week. A food security measure such as the HDDS would likely have shown low levels of dietary diversity since it relies on a 24-hour recall.

	% of Households	Daily	Weekly	Monthly
Staples				
Maize meal	100	62	28	9
Rice	92	14	56	22
Potatoes	92	19	52	21
Brown bread	97	67	25	6
White bread	72	8	39	25
Dairy Products				
Dairy	97	39	38	20
Meat Products				
Tripe	78	17	37	24
Beef	88	10	47	31
Mutton	87	11	39	37
Chicken	97	14	50	33
Fish	73	9	25	39
Canned meat	59	5	20	33
Vegetables				
Fresh vegetables	82	12	44	25
Canned vegetables	62	4	27	32
Fresh salads	77	6	38	34
Fresh fruit	79	14	35	30
Canned fruit	62	4	24	35

Table 3: Household Food Consumption in Katatura, 1988

Source: Pendleton (1993: 142)

Frayne (2001) surveyed 305 households in Katatura and one informal settlement in 1999 and found that rural-urban food transfers played a significant role in the diet of low-income households. Frayne (2001) also found that urban agriculture was only practiced by 5% of households and that the informal sector was relatively small with only 7% of households receiving informal sector income. The next major survey of food security in Windhoek was conducted by AFSUN in 2008 (Pendleton et al., 2012). This survey of 448 households in four low-income areas of the city provided new insights into the rapid transformation of Windhoek's food system. First, the significance of migration to Windhoek's explosive growth was affirmed with 61% of the city population having been born outside Windhoek (Pendleton et al., 2014). Second, the continued growth of the informal sector was confirmed with 13% of households receiving income from this source. Third, urban agriculture was even less important with less than 2% of households participating. Fourth, the survey uncovered very high levels of food insecurity in the city. Only 18% of households were food secure on the HFIAP scale, while as many as 63% were severely food insecure. There was a marked difference between households in formal and informal housing areas with the latter significantly more food insecure (76% versus 59% severe food insecurity). A gender analysis of the AFSUN data showed that femalecentred households had the worst food security outcomes in Windhoek (Nickanor, 2014). Another study documented increasing levels of child stunting with rapid urbanization in Windhoek's informal settlements (Nickanor and Kazembe, 2016).

	No.	Househo Insecuri Scale (Hi	old Food ty Access FIAS)	Household (HFIAP)	d Food Insecu	rity Access Pro	evalence
		Mean	Median	Food Secure	Mild Food Insecurity	Moderate Food Insecurity	Severe Food Insecurity
Windhoek, Namibia	442	9.3	9.0	18.0	5.0	14.0	63.0
Formal Areas*	213	5.9	5.0	29.0	7.0	14.0	50.0
Informal Areas*	223	12.4	11.0	8.0	4.0	13.0	76.0
Female-Centred**	69	14.1	15.0	4.5	3.0	7.5	85.1

Table 4: Levels of Food Insecurity in Windhoek, 2008

Source: Pendleton, W., & Nickanor, N. (2016)

With rapid in-migration and urbanization, the food system of Namibia began a process of swift transformation. The transformation has had two defining features: first, the informal food sector has grown dramatically in the last 20 years. Second, Windhoek has experienced a supermarket revolution driven by the major South African supermarket chains and local company Woermann Brock (Emongor, 2009; Emongor and Kirsten, 2009) (see Section 2).

3.2. Economy of the Windhoek City-Region

3.2.1. Formal and Informal Business

Windhoek is Namibia's industrial, administrative, legislative, judicial, and financial capital. The country's national parliament and line ministries are all located in the city. The civil service is thus a major employer of educated Namibians. Windhoek is also the 'nerve centre' for economic activity in Namibia and hosts most of the country's light industries and manufacturing. Most companies and corporates in Namibia have their head offices in Windhoek, including the major financial institutions, supermarket chains, and manufacturing companies. Industries that add value to agricultural produce include dairy, milling, brewing,

abattoir and meat processing, hide processing, and leather manufacture. Other manufacturing facilities include bottling and canning, plastics, paints, refrigeration, aluminum products, beverages, carpets, charcoal, chemicals, clothing, baking, furniture, and solar power. Additional private sector employers include supermarkets, malls, tourism companies, hotels and restaurants, security companies, telecommunications, real estate, construction, and transportation.

	No.	%	No. of Employees	%	No. in Sole Ownership	Sole Ownership (%)
Wholesale and retail trade	3,008	32.6	20,643	19.0	1,756	58.4
Accommodation, food services	2,867	31.0	8,944	8.3	2,223	77.5
Manufacturing	523	5.7	7,886	7.3	131	25.0
Education	461	5.0	9,794	9.0	113	24.5
Professional, scientific, technical	307	3.3	4,828	4.5	18	5.9
Human health, social work	296	3.2	5,695	5.3	40	13.5
Administrative, support services	218	2.4	10,027	9.3	18	8.3
Financial and insurance	167	1.8	5,058	4.7	5	3.0
Transportation, storage	135	1.5	4,997	4.6	3	2.2
Construction	123	1.3	3,230	3.0	5	4.1
Public administration, defence	119	1.3	14,128	13.0	0	0.0
Arts, entertainment, recreation	97	1.1	726	0.7	18	18.6
Information, communication	87	0.9	2,957	2.7	5	5.7
Agriculture	41	0.4	1,089	1.0	0	0.0
Real estate	34	0.4	312	0.3	2	5.9
Electricity supply	27	0.3	731	0.7	6	22.2
Water supply	15	0.2	2,847	2.6	3	20.0
Mining and quarrying	13	0.1	424	0.4	0	0
Extraterritorial organisations	7	0.1	224	0.2	0	0
Other services	689	7.5	3,826	3.5	300	43.5
	9,234		108,366	100. 0	4,656	

Source: Calculated from NSA (2022)

Table 6 shows the distribution of businesses by constituency within the city-region. Every constituency has over 300 enterprises, indicating that economic activity occurs in all areas of the city. Windhoek East (including the CBD) (18%), Samora Machel (15%), Windhoek West (15%), Moses // Garoeb (14%), and Tobias Hainyeko (13%) had the largest number of business enterprises. However, in Windhoek East and Windhoek West, less than 10% of businesses are sole owners, compared with 87% in Moses // Garoeb. 80% in Samora Machel, and 76% in Tobias Hainyeko. Most medium and large enterprises are in the CBD and high-income areas of Windhoek West and Windhoek East. Micro-enterprises cluster in lower-income areas of the city. Therefore, informal economic activities such as accommodation and food services (78% of total enterprises), wholesale and retail trade (58%), and other services (44%) are predominantly found in these areas as well (Table 5).

|--|

	No.	%	Sole Owners	% of Total
Windhoek East	1,645	18.1	157	9.5
Samora Machel	1,394	15.3	1,120	80.3
Windhoek West	1,321	14.5	131	9.9
Moses // Garoeb	1,254	13.8	1,085	86.5

Tobias Hainyeko	1,134	12.5	862	76.0
Khomasdal	644	7.1	437	67.9
Katutura Central	493	5.4	291	59.0
Katutura East	427	4.7	185	43.3
Windhoek Rural	394	4.3	126	32.0
John Pandeni	377	4.2	262	69.5
Total	9,083	100.0	4,656	51.3

Source: NSA (2022)

A 2016 informal sector survey by the Ministry of Labour, Industrial Relations and Employment Creation collected data on over 6,000 informal enterprises, including 1,221 in Khomas Region (MLIREC, 2017). The survey showed that nearly 60% of the employed population of Namibia and 42% of those in urban areas were informally employed. Over half (54%) of the informal enterprises were in wholesale and retail trade and another 16% in manufacturing. In Khomas, 92% of enterprises were sole ownerships and only 21% were registered with the city. Unfortunately, the survey report did not provide a more detailed profile of Khomas enterprises.

3.2.2. Employment and Unemployment

The 2018 Namibia Labour Force Survey (NSA, 2019) reported that there were 725,000 wage employees in Namibia of whom 416,000 (57%) were urban-based (Figure 7). Of urban workers, 51% were male and 49% female suggesting that the labour market is not heavily gendered. Table 7 shows the sectoral employment distribution for sectors represented in the Windhoek economy (i.e. excluding agriculture and mining). Here there is a clear gender division with women predominant in accommodation and food services (77%), domestic work (72%), education (69%), health and social work (72%), finance and insurance (66%), arts and entertainment (74%), and real estate (62%). Men dominate in sectors such as construction (93%), manufacturing (63%), public administration and defence (62%), transportation (89%), services and trades such as electricity (80%), and water and sewerage (71%). Only wholesale and retail trade, and the professions, have a relative balance of men and women employees.



Figure 7: Urban and Rural Employment in Namibia by Sex

Source: NSA (2019)

Table 7: Employment in Namibia by Economic Sector and Sex

Sector	Total	% Male	% Female
Accommodation, food services	83,056	23.1	76.9
Wholesale trade, retail trade	80,852	51.8	48.2
Households (domestic workers)	72,185	28.3	71.7
Education	46,923	30.5	69.5
Construction	45,057	92.7	7.3
Manufacturing	45,057	62.6	37.4
Public administration, defence,	34,174	62.1	37.9
Administrative, support services	29,951	56.7	43.3
Transportation, storage	24,710	88.9	11.1
Other services	20,865	37.8	62.2
Human health, social work	19,527	28.1	71.9
Financial, insurance	13,861	33.8	66.2
Professional, scientific, technical	8.648	48.5	51.5
Information, communication	7,141	78.2	21.8
Arts, entertainment, recreation	4,910	25.7	74.3
Water, sewerage, waste management	4,095	70.8	29.2
Electricity, gas, steam, AC	3,278	79.8	20.2
Real estate	1,050	38.4	61.6
Extraterritorial organizations	1,035	59.6	40.4

Source: NSA (2019)

The Labour Force Survey also reported that nationally 42% were in formal employment and 58% were employed informally (NSA, 2019). In the Khomas Region, around 165,000 were employed in the formal sector (61%) and 64,000 (39%) in the informal sector (Table 8). Women were more likely to be informally employed than men (53% versus 47%), and more men than women were employed in the formal sector (52% versus 48%).

Table 8: Formal and Informal Employment in Khomas Region by Sex

	No.	%
Formal Employment	165,385	61.1
Men	85,913	51.9
Women	79,471	48.1
Informal Employment	64,266	38.9
Men	30,195	47.0
Women	34,071	53.0
	•	•

Source: NSA (2019)

Unemployment levels are high in Windhoek, but worse for women than men (Table 9). Over 75,000 individuals are unemployed which translates into an overall unemployment rate of 32% (30% for men and 33% for women). Youth unemployment is even more severe at 43% of adults aged 18 to 34 (40% for men and 46% for women).

Table 9: Unemployment in Khomas Region by Sex

	No. Unemployed	Unemployment Rate
Unemployment	75,936	31.5
Men	37,349	30.3
Women	38,588	32.7
Youth Unemployment (18-34)	57,524	43.0
Men	26,435	40.0
Women	31,089	46.0

Source: NSA (2019)

3.3. Food and Nutrition Security

3.3.1. Levels of Food (In)security

A representative survey of 863 Windhoek households by AFSUN-HCP found high levels of food insecurity and food security inequality across the city-region (Crush et al., 2017). The survey revealed exceptionally high rates of food insecurity among households living in informal settlements (Crush et al., 2019). On the HFIAS scale, the mean household HFIAS score was 15.4 with two-thirds of the households having an HFIAS of 15 or greater, and a quarter with an HFIAS of 20 or greater (Figure 8).





Source: Crush et al. (2019)

As many as 63% of households are severely food insecure with only 18% of households classified as completely food secure (Table 10). There is a significant difference between households in formal versus informal housing. Three-quarters of households in informal settlements are severely food insecure and only 8% are completely food secure. The survey also showed that female-centred households in informal settlements were also the most food insecure (at 85% and only 4% food secure).

Table 10: Levels of Food Insecurity in Windhoek

	Windhook	Formal	Formal Informal		es of household i	n informal settle	ements
	% of households	housing % of households	housing % of households	% of female- centred households	% of male- centred households	% of nuclear households	% of extended households
Food secure	18	29	8	4	10	9	8
Mildly food insecure	5	7	4	3	3	9	2
Moderately food insecure	14	14	13	7	15	12	18
Severely food insecure	63	50	76	85	72	71	71

Source: Crush et al. (2019)

Food (in)security also varied considerably across the ten constituencies of the Khomas Region. Food insecurity was highest among rural households in the city-region, followed by informal settlements in Katatura Central, Moses // Garoeb, Tobias Hainyeko, Khomasdal, and Samora Machel. In these low-income areas of the city, over 80% of households experience a degree of food insecurity. Only high-income Windhoek East had more food secure than food-insecure households. Half of the households in Windhoek West were also food secure. In all other constituencies, over 75% of households experience food insecurity.

Table 11: Food Insecurity Prevalence in Windhoek City-Region

	Food Secure %	Mild, Moderate and Severely Food Insecure %
Constituency		
Windhoek Rural	8.1	91.9
Katutura Central	9.6	90.4
Moses // Garoeb	10.8	89.2
Tobias Hainyeko	11.1	88.9
Khomasdal	14.0	86.0
Samora Machel	16.1	83.9
John Pandeni	16.9	83.1
Katutura East	21.3	78.7
Windhoek West	47.7	52.3
Windhoek East	72.7	27.3

Source: Crush et al. (2019)

3.3.2. Nutrition Transition

The nutrition transition is advancing at a rapid rate in urban Namibia. Figure 9 shows the prevalence of various under and over-nutrition indicators in Namibia by income quintiles. stunting (a measure of undernutrition) decreases with increasing income. However, overweight and obesity (measures of

overnutrition) increase with increasing income for both men and women. The NCP and WFP (2021) conclude that 'few households in Namibia actually consume a healthy, nutritious diet and the current food system is largely providing for diets that are unhealthy and not adequately nutritious.'



Figure 9: Nutrition Indicators by Income Groups

Source: NCP and WFP (2021)

The Household Dietary Diversity Score (HDDS) is a common measure of the nutritional quality of the household diet, where an increasing score on a scale from 0 to 12 indicates a more balanced and diverse diet. The mean HDDS across all households in Windhoek was an extremely low 3.21 (Crush et al., 2017). In effect, most households in the city had consumed food from four or fewer food groups in the preceding 24 hours. Food security and dietary diversity were positively correlated; food secure households had a mean HDDS of 4.47 compared with a mean HDDS of 2.95 for food insecure households. Households in formal housing had an HDDS of 3.88 compared with 2.66 for households in informal housing. In the informal settlements, nearly two-thirds of households had an HDDS of 2 or less (Crush et al., 2019). Figure 9 shows a strong negative association between poverty and dietary diversity. As the LPI score increases, dietary diversity decreases. Households with an LPI over 2.0 had a mean HDDS of less than 2, while those with a lower LPI had a higher HDDS.

Figure 9: Household Dietary Diversity and Lived Poverty



Source: Pendleton, W., & Nickanor, N. (2016)

A lack of diversity in the diet is closely related to the level of household food security (as measured by the HFIAP). Food insecure households had a mean HDDS of 2.95 while food secure households had a mean HDDS of 4.47. Additional insights are gained by cross-tabulating the HDDS and HFIAP by type of housing (Table 11). Households in formal housing had a more diverse diet than those in informal housing (3.88 versus 2.66). Households in formal areas had higher HDDS scores than those in informal areas in both food secure (4.72 versus 3.78) and food insecure (3.56 versus 2.56) households. Further, food secure households in formal areas had a higher HDDS than food insecure households in formal areas (3.78 versus 3.56).

Food Insecurity Prevalence	Housing type	Mean	Ν
Food secure	Formal housing	4.72	103
	Informal housing	3.78	37
	Total	4.47	140
Food insecure	Formal housing	3.56	268
	Informal housing	2.56	433
	Total	2.95	701
Total	Formal housing	3.88	371
	Informal housing	2.66	470
	Total	3.20	841

Table 1: Dietary Diversity by Food Insecurity and Type of Housing

Source: Pendleton, W., & Nickanor, N. (2016)

In neighbouring South Africa, the emergence and character of a Westernized dietary pattern is welldocumented. In Windhoek, three major dietary patterns were identified in the AFSUN-HCP data using principal component analysis: starch-oils-sugar, fruit-vegetables, and meat-fish-dairy (Kazembe et al., 2022).

There was increased uptake in the starch-oils-sugar diet with increased income. Sex-differences were marginally significant, with increased uptake among females compared to males. There were slight differences by age, low dietary diversity (HDDS<=5) was associated with low uptake of this diet. The same pattern was observed with the lived poverty index. In terms of the association between dietary pattern and NCDs, diabetes, and cardiovascular disease (CVD) prevalence were relatively more common in the upper than the lower income terciles.

An earlier survey of hypertension and CVD risk factors among Windhoek residents found a high ageadjusted prevalence of 38%, increasing from 8% for those aged 18-24 to 34% (ages 35-44) to 66% (ages 55 and over) (Hendriks et al 2012). A survey of 11,000 employees in 13 industries (including nearly 60% in foodrelated industries) found that 26% had elevated blood pressure, and 8% had an elevated random blood glucose measurement (Guariguarta et al 2015). Another survey of the health and wellness of the Windhoek workforce employed by 53 companies found self-reported rates of diabetes increased consistently with age from 1.5% of those aged 35-44 to 12% of those aged 55 and over. Similarly, high blood pressure in these two age groups of employees increased from 5% to 25%. Overall, women were more likely to report high blood pressure than men (German et al 2016: 24). Twelve percent of employees had unhealthy blood sugar levels, with 33% of those aged 45 and older having this condition. Eighteen percent had unhealthy levels of cholesterol, rising to 29% of those aged 45-54. Some 19% of employees had an unhealthy systolic blood pressure value and 17% had an unhealthy diastolic blood pressure (47% and 29% for those 55 and over). In terms of BMI, 38% of employees were overweight or obese. Another recent study of risk factors in Windhoek found that hypertension was independently associated with persons who are older in age (>40 years old), female, and married or cohabitating (Kaputjaza, 2017). It was also associated with lower levels of education and average monthly household income less than or equal to N\$5,000. Hypertension was also independently associated with sedentary behaviour, overweight, and obesity.



Image: Informal Settlement in Windhoek (Credit: M. Salamone - not for re-use)

4. Windhoek Baseline Information

4.1. Food System Stakeholders

The Food and Nutrition Security Policy (FNSP) allocates responsibilities to the following national government entities:

Office of the Prime Minister Ministry of Health and Social Services Ministry of Agriculture, Water, and Land Reform Ministry of Education Arts and Culture Ministry of Higher Education, Technology, and Innovation Ministry of Industrialisation and Trade Ministry of Gender Equality, Poverty Eradication and Social Welfare Ministry of Defence and Veteran Affairs Ministry of Labour, Industrial Relations & Employment Creation Ministry of Sport, Youth and National Service Ministry of Fisheries and Marine Resources Ministry of Information and Communication Technologies Ministry of Environment, Forestry and Tourism Ministry of Justice Ministry of Urban and Rural Development Ministry of Finance Ministry of Works and Transport

In 2010, the Namibian Cabinet established the National Alliance for Improved Nutrition (NAFIN), a multisectoral and multi-stakeholder platform aimed at enhancing the nutrition status of Namibians. NAFIN's goal was to coordinate the activities of government, private sector, NGOs, UN agencies and academia in the field of nutrition and was headed by Prime Minister with an American NGO as the Secretariat. NAFIN released a report on malnutrition in Namibia and joined the global Scaling Up Nutrition (SUN) movement in 2011. By 2017, NAFIN was largely dormant. In 2019, it was reconstituted as NAFSIN (Nutrition and Food Security Alliance of Namibia) established in late 2019. <u>NAFSAN is meant to be</u> a national platform that brings together civil society, academia, private sector and others to promote food and nutrition security, to support the implementation of the national Food and Nutrition Policy and to represent non-governmental, private sector, and civil society stakeholders. <u>NAFSAN's vision statement is that "all persons in Namibia have the</u> **resources**, knowledge and motivation to ensure food security and optimal nutritional status for themselves, and all children in Namibia are sufficiently well-nourished" (NAFSAN 2020). NAFSAN's <u>Constitution</u> was finalized in March 2020. To date, NAFSAN has launched an urban agriculture project in Windhoek's informal settlements and published a Training Manual with GIZ-funding titled Nutrition for Health: Embracing Our Namibian Food System.

4.2. Policy and Regulatory Environment

In reviewing the policy and regulatory environment affecting the Windhoek food system, it is important to examine both national and local policy initiatives, since food system interventions occur at both levels simultaneously and the scope for policy development at the municipal level is framed by national policy and legislation. Food security and health are the policy and legislative domain of national and not local government in Namibia. The 1992 Local Authorities Act (as Amended) defines the spheres of responsibility of city government and makes no mention of governing or regulating the urban food system, which is therefore also absent from the organizational structure of local government.

4.2.1. National Policy Development

Widespread poverty and food insecurity were a major legacy of decades of South African colonialism. Namibia's first post-independence government prioritised plans to address this inheritance (lyambo 1992). In 1992, President Nujoma declared a 'Namibian Food and Nutrition Decade' (1993-2002) and constituted a multi-stakeholder National Food and Nutrition Council. Culminating in the 1995 Food and Nutrition Policy for Namibia (Republic of Namibia 1995). The Policy was notable for two reasons: first, it saw food and nutrition security as a multi-sectoral policy challenge involving several government departments, a vision that persists to the present. Second, although the emphasis was very much on reducing hunger and malnutrition, the Policy pledged within a decade to ensure that all Namibians had "reliable access to a healthy diet" and to reduce substantially diet-related communicable and non-communicable diseases even though, as the Policy noted, "nutrition activities are constrained by the sparsity of information on food habits, child feeding practices, food consumption levels and the precise links between food intake and the incidence of disease in different areas of the country."

In 2013, the Namibian Food and Nutrition Security Monitoring System (NFNMS) was established as part of the SADC Regional Vulnerability Assessment and Analysis Programme. The Namibia Vulnerability Assessment Committee (NamVAC) sits in the Directorate of Disaster Risk Management (DDSM) in the Prime Minister's Office with representation from the Ministries of Health and Social Services; Regional and Local Government, and Housing and Rural Development; Gender Equality and Child Welfare; Agriculture, Water and Forestry; Defence; and Environment and Tourism, as well as the National Planning Commission; the University of Namibia; UNDP, WFP, FAO, UNICEF and the Namibia Red Cross Society. The NamVAC releases statistical bulletins with regularly updated information on: (a) food availability (including agricultural production, market supplies, and changing staple food prices); (b) food access (including market commodity and livestock prices, food and income sources, food consumption patterns and coping strategies) and (c) food utilization (including malnutrition cases, disease outbreaks, and water and sanitation). The bulletins provide data on sources of cereals (whether purchased or produced), food consumption scores (using the Food Consumption Score or FCS), coping strategies (using the Coping Strategy Index or CSI), nutrition (child nutrition and breastfeeding), sources of income, assets, patterns, and an overall measure of district-level food insecurity severity using the WFP's CARI methodology and classification. NamVAC bulletins included household-level data from a regular survey of around 300 households, all in rural districts throughout the country.

4.2.2. Current National Policies

Namibia's 5th National Development Plan (NDP5) (2017/18-2021/22) frames food insecurity as a predominantly rural and agricultural production issue, proposing various strategies to increase the output of cereals, horticulture and livestock; developing agro-processing industries by utilizing local produce and regional value chains; increasing communal smallholder farmers' productivity; enhancing animal health and production; and promoting drought-resistant crops (Republic of Namibia 2017). The NDP5 section on

Health and Nutrition proposes strategies including "developing a multi-sectoral approach for control and prevention of NCDs" and "scaling up high impact nutrition-specific and sensitive interventions (and) strengthening the enabling environment for effective action, coordination, integration and implementation of food and nutrition programmes." Thus, NDP5 treats food security in a conventional rural-oriented manner, while nutrition and non-communicable diseases are viewed as a cross-cutting sectoral issue to be addressed by a separate multi-sectoral initiative.

A related central government initiative designed to give effect to components of NDP5 is the *Harambee Prosperity Plan (HPP)* from the Office of the President following extensive Town Hall consultations in all of Namibia's 14 districts (Republic of Namibia 2016a). The Harambee Plan focuses on strategies for effective governance, economic advancement, social progression, infrastructure development, and international relations and cooperation. One of the proposed action areas under the social progression pillar is what the HPP calls "hunger poverty" and promises that "over the Harambee period and beyond there should be zero deaths in Namibia due to a lack of food. As a so-called upper middle-income country no one in Namibia should die because of lack of food." The focus on eliminating hunger means that other aspects of food insecurity – including overnutrition – are not addressed in the HPP. Similarly, HPP health targets are focused on reducing poverty-related maternal and infant mortality rather than NCDs which are not mentioned. However, the HPP proposes a national Food Bank strategy as one component of the elimination of hunger. In 2016, government launched the National Food Bank Programme aimed at alleviating hunger and addressing the nutritional needs of the poorest urban families (see below).

In 2016-2017, the Prime Minister's Office conducted a Zero Hunger Strategic Review modeled on the goal and targets of SDG 2 (Republic of Namibia 2017). The Review was designed to "provide an insight in the food and nutrition security landscape and outline priority areas for action by all stakeholders including government, development partners, the private sector and civil society." Citing work by AFSUN, the Review recognizes that urban food insecurity is a serious challenge. The Review called for a new comprehensive Food and Nutrition Security Policy. For example, the Review states that "the establishment of an effective food security and nutrition governance system requires a systematic approach to the collection and assessment of data to understand how the food system is changing and affecting the lives of the residents of Namibia, particularly the poor." Further, "effectively tackling the breadth of food security and nutrition challenges that exist at local and national levels requires that Namibia adopt whole food value chain approach to food security. Such an approach, from "seed to fork", includes sustainable production in the fields, linking smallholders with markets and retail centres, consumption, and building the overall resilience of the food system - with emphasis on improving inclusiveness, efficiency, sustainability, nutrition, and food safety. Finally, "a genuine, coordinated attempt to align policy to effectively address food security and nutrition demands deliberate and methodical action across different domains of policy. Such action would involve systematically addressing the immediate and underlying determinants of food security and nutrition, the health environment, care practices, diet, and health status." In response to the Zero Hunger Review, the national government established a Food and Nutrition Security Council (FNSC) in the Office of the Prime Minister. In 2021, the FNSC released a Revised National Food & Nutrition Security Policy (FNSP) (Republic of Namibia, 2021), as a follow-up to the first national policy in 1995. Key details of the FNSP are included in the Appendix, including a listing of pertinent legislation and a list of the vision, mission, goal, three policy objectives, 29 strategies, and 129 actions. The Plan makes three key statements that are of relevance to this report:

Malnutrition is a multi-casual national challenge that must be addressed by many sectors using a food systems approach. This will ensure balanced investment of resources throughout the value-chain from input supply, farm production, aggregation, processing, marketing to consumption.

Food and nutrition security are multi-sectoral and best addressed through a well-coordinated multi-sectoral approach. Hence an institutional framework will be initiated to support stakeholders at all levels to successfully operationalize the FNSP.

In support of the multi-sectoral approach, the government will establish a four-level Food and Nutrition Security Coordination mechanism from the national to the community level: (a) National: the FNSC chaired

by the Prime Minister; and the Food and Nutrition Security Inter-Agency Steering Committee (FNSIAC) provides coordination, management, and implementation of the FNSP; (b) Regional: regional development committees to supervise implementation of the FNSP in each region with a Secretariat hosted by the Directorate of Planning at the Regional Council in each region; (c) Constituency: matters regarding food and nutrition to be relayed through different Development Committees e.g. Local Authority Development Committees, Village Development Committees, Settlement Development Committees, and Locality Development Committees; and (d) Community: constituency development communities to be reported to by community-based organisations, community leaders, community health workers, community members, faith-based organisations.

4.2.3. National Agriculture Policy

The idea that food insecurity is primarily a rural and production challenge in Namibia is reinforced by the 2015 Namibia Agriculture Policy from the Ministry of Agriculture, Water and Land Reform which promises a new nutrition-sensitive approach, citing the FAO's standard definition of food security and having as one of its stated aims "to improve national and household food security and nutrition" (Republic of Namibia 2015). The Policy commits government to several nutrition-related activities including (1) promoting public understanding of good nutrition to improve the health and well-being of Namibians, and reduce the preventable burden of diet-related illness, disability and death; (2) promoting dietary guidance that links scientific research to the nutrition needs of Namibian consumers; (3) monitoring the food and nutrition situation in the Republic of Namibia and (4) facilitating the cooperation and coordination amongst all agencies responsible for food nutrition in Namibia, to guarantee that all food produced, processed and distributed in Namibia is "of good nutrition."



Figure 10: Draft Food and Nutrition Security Governance Structure

4.2.4. Social Protection Blueprint

An ILO (2014) review of Namibia's social protection policies argued that compared to the rest of Sub-Saharan Africa, Namibia "has a comprehensive social protection system (both in terms of risks covered and types of schemes) that plays a critical role in its economy and society." Schade et al (2019) traces the evolution of social protection provisions and expenditures in Namibia and note that by 2015/16, spending on various social protection programmes had reached 13% of GDP. At the same time, "social protection is currently not making sufficient progress in eliminating persistent and deep-rooted poverty (especially among children), inequality and unemployment" (Schade et al 2019: 5).

National social protection policy is guided by the Harambee Prosperity Plan and the Ministry of Poverty Eradication and Social Welfare (MPESW)'s Blueprint on Wealth Redistribution and Poverty Eradication (2016-2025) (Republic of Namibia, 2016). The objectives of the Blueprint include: (a) protecting and helping the poor, vulnerable people, deprived communities and the unemployed by investing in programmes, sectors, and communities where opportunity and equitable inclusion is a reality for all; (b) improving and sustaining the food and nutrition status of children and the poor and vulnerable; (c) enhancing the provision of social safety nets; (d) enhancing access to basic social services; (e) achieving sustainable employment creation through skills development and appropriate employment creation strategies; (f) supporting gender equality and women's empowerment; and (g) laying the foundation for a stronger, more sustainable economy that distributes benefits more fairly and equitably to all Namibians.

The Blueprint makes the case that the Namibian food security challenge is not primarily one of food availability, and more a question of access and utilization. It notes that although Namibia has a comprehensive social safety net system, it does not have a national social protection policy and implementation framework, leading to a lack of coherence and high level of fragmentation in policy and programme implementation. Table 13 shows that responsibility for social protection programmes is currently spread across several different ministries. The Blueprint advocated the development of a Social Protection Policy with an implementation plan and monitoring and evaluation framework.

Ministry	Programme
Poverty Eradication and Social Welfare	Old Age Grant, Disability Grant, Funeral Benefit,
	Food Bank
Gender Equality and Child Welfare	Foster Care Grant, Maintenance Grant, Special
	Maintenance Grant, Vulnerable Child Grant,
	Allowance for War Orphans
Veteran Affairs	Veterans' Subvention Grant, Veterans Once-Off
	Gratuity, Veterans Projects, War Veterans Houses,
	War Veterans Farms
Education, Arts and Culture	School Feeding
Urban and Rural Development	Social Housing Projects
Prime Minister's Office	Drought Relief
Social Security Commission	Occupational Injuries, Employees Compensation
	Fund, Sick Leave Benefit, Maternity Leave Benefit,
	Death Benefit
Finance	Public Service Employee Medial Aid
Government Institution Pension Fund	Public Pension Fund

Table 13: Social Protection Programmes in Namibia

The EU Social Protection Systems (EU-SPS) Initiative, UNICEF and GIZ have assisted the MPESW in drafting a Whole-of-Government Social Protection Policy for Namibia which has 10 priority objectives including:

a) universal maternity grant and health coverage;

- b) universal child and disability grant;
- c) employment creation and empowering women and youth;
- d) sustainable old age and disability income security;
- e) improved food and nutrition security;
- f) inclusion of marginalized people;
- g) affordable housing; and
- h) enhanced coordination of social protection.

The Draft Policy was published in 2019. The Draft Policy proposes a universal non-means-tested child grant and a targeted basic income grant for unemployed people between the ages of 39-54. The Draft Policy also references the need for enhanced and expanded food banking and school feeding programming.

4.2.5. School Feeding Programme

The Namibian School Feeding Programme (NSFP) was first introduced in 1991 and had 366,000 beneficiaries by 2017/18. The programme provides lunch to over 1,400 pre-primary and primary schools in high-poverty areas in the form of a fortified maize blend comprising 63% maize meal, 25% protein (soya) blend, 10.8% sugar and 1.2% salt. In 2019, the Ministry of Education, Arts and Culture released a new Namibian School Feeding Policy and Implementation Action Plan (2019-2024) which aimed to have 80% of schools with a school garden at the end of the period and to incorporate fresh produce into the diet (to be supplied by smallholder farmers) (Republic of Namibia 2019). In 2012, the NSFP operated in 66 Khomas Region schools (86% of the total).

4.2.6. Food Bank Programme

As part of the Harambee Prosperity Plan, the Ministry of Poverty Eradication and Social Welfare embarked on a Food Bank Programme which targeted needy and vulnerable communities through the distribution of food rations (Schade et al 2019). The programme was launched in June 2016 and food parcels distribution was piloted in 7 constituencies in Windhoek. The initiative targeted people earning less than NAD400 (US\$24) per month in 7 constituencies, reaching 94,000 people in 22,000 households (Ndamanomhata, 2019). Monthly food parcels are distributed consisting of 10 kg of maize meal; 1,600g of tinned fish; 1,200g of corned meat; 750ml of vegetable oil; 100g of pulses; yeast; 2.5kg of bread flour; and 2kg of brown sugar plus laundry soap. The food bank programme also provides income opportunities for unemployed youths who serve on Street Committees. The youth participate in the identification and registration of beneficiaries and organise the distribution of food. By the end of 2019, the programme had expanded to all 14 regions of the country.

The Draft Social Protection Policy envisages further consolidation and expansion of food banking and the quality of meals given to schoolchildren:

"Food Bank needs to be expanded to more urban and peri-urban areas as population in these areas is growing rapidly and unemployment remains high...young people at risk of hunger will have opportunities to work and get food while improving their skills in food-for-work schemes implemented as part of the Food Bank. School feeding, disaster relief and Food Bank assistance will use Namibian produce to the extent possible to add value, improve nutrition and increase incomes of local producers. Namibian produce should be given priority in food assistance procurement. Smallholder producers should be supported to improve the quality of their produce, reduce postharvest losses, and invest in technology and productivity enhancement. The school feeding menu will include more fruits, vegetables, and proteins to make it more attractive and nutritious for children."

4.2.7. National Health Policy

Food consumption-related health impacts were initially seen as the sole domain and responsibility of the Health Ministry. The first post-independence National Health Policy Framework (1998) and the second National Health Policy Framework (2010-2020) both address the issue of non-communicable disease. The latter has a major focus on communicable disease but also observes that "overweight and obesity among children and adults alike is of increasing concern: "lifestyle factors are strongly associated with these problems. Type 2 diabetes is associated with obesity, and in cardio-vascular diseases, nutrition plays an important role. It is also increasingly documented that some cancers are associated with nutritional factors."

Proposed strategic response directions include: (a) promotion of research for monitoring of micronutrient deficiencies; research into the nutrition situation of the adult population and their diet and staging adequate action together with other sectors to promote a balanced diet; (b) advocacy for fortification of food; (c) promotion of use of local foods and the necessary health education support; (d) special attention to the nutritional situation of women in antenatal clinics; (e) promotion of breastfeeding; (f) paying attention to the nutritional needs of PLWHA; (g) advocacy for and promotion of the introduction of school feeding programmes; (j) participation in health promotion action against overweight and obesity; (k) strengthening action against important lifestyle and NCDs; (l) institution of smoking in public places, non-sale of alcohol to minors, and alcohol taxation; (n) developing and implementing with other sectors and stakeholders the awareness creation instruments and strengthening health promotion through behavioural change communication, including community dialogue; (o) advocate for healthy lifestyle at an early age; and (p) institutionalization of NCD screening and promotion of good quality health services for lifestyle related ailments and other NCDs.

The other relevant MoHSS policy framework is the MoHSS *Strategic Plan for Nutrition (2011-2015)* (Republic of Namibia, 2011) The *Plan* noted that a proposed Non-communicable Diet-Related Diseases Programme had not been implemented "because of lack of capacity at national level." However, "the prevalence of overweight, obesity and associated non-communicable diseases (NCD) are of public health concern as these are emerging as important causes of morbidity and mortality in Namibia. Namibia is using standardised surveillance methods and rapid assessment tools such as the WHO STEPwise approach to the surveillance of risk factors for non-communicable diseases in order to assess the current situation, trends, impact of interventions and measure changes in the distribution of risk such as patterns in diet, nutrition and physical activity." Diet-related diseases and lifestyles were identified as one of four priority areas with the aim to reduce the prevalence of obesity from 12% to 8% and overweight from 16% to 10% in women of prevalence and causes of obesity and associated NCCD in the general population; (b) monitoring and promotion of healthy diets and physical activity; and (c) dietary management of diet-related non-communicable diseases; and (d) regulation of food safety, food standards and food labelling.

4.2.8. National Multisectoral NCD Strategic Plan

In August 2018, the Office of the Prime Minister launched a comprehensive multi-sectoral National Multisectoral Strategic Plan for Prevention and Control of Non-Communicable Diseases (NCDs) in Namibia, 2017/18-2021/22 (Republic of Namibia 2017). The Minister's introduction notes that "most of the determinants of NCDs and their risk factors lie well outside the purview of the Ministry of Health and Social Services" which therefore demands a multi-sectoral approach including line ministries, academia, the private sector, NGOs, CSOs, FBOs, CBOs and "the community at large." The Strategic Plan is explicit about government's commitment to addressing NCDs: "Acknowledging the huge burden of NCDs in terms of morbidity, mortality and disability in Namibia and the urgency to act now, the government of the Republic of Namibia has prioritized the prevention and control of NCDs, through a whole of government and multisectoral approach, firmly believing that investment in the prevention and control of NCDs is a priority for social- and economic development."

The Plan affirms that "the risk factors for CVD in Namibia include smoking, lack of physical exercise, harmful use of alcohol, unhealthy diets and obesity" and that a large percentage of NCDs are preventable through the reduction of four main behavioural risk factors: use of tobacco products, physical inactivity, harmful use of alcohol products and unhealthy diet. Under the latter, the Plan notes that fruit and vegetable consumption is higher among higher income and educational groups but is generally "below the recommended standard." In addition: "socio-economic developments and rapid urbanization led to changing lifestyles resulting in a shift in dietary patterns. People are now consuming more foods high in energy, fats, free sugars or salt/sodium, and many do not eat enough fruit, vegetables and dietary fiber such as whole grains."

The Plan has seven Strategic Objectives (SOs), 47 Expected Outputs, and 129 Activities. The SOs include:

- Raising the priority accorded to the prevention and control of NCDs on the political agendas and at all levels through advocacy;
- Strengthening national capacity, leadership, governance, multisectoral collaboration and partnerships to accelerate country response for the prevention and control of NCDs;
- Reducing modifiable risk factors for NCDs and underlying social determinants through the creation of health-promoting environments;
- Strengthening and orienting health systems to address the prevention and control of NCDs and the underlying social determinants through people-centred primary health care and universal health coverage;
- Promoting and implementing evidence-based strategies and interventions for prevention and control of violence and injuries particularly road traffic accidents;
- Promoting and supporting national capacity for high-quality research and development of research agenda for prevention and control of NCDs;
- Monitoring trends and determinants of NCDs and evaluating progress in its prevention and control.

The Plan notes that NCD control and prevention is a multi-scalar challenge requiring action at the national, regional, district and community level and that a Multisectoral Coordination Mechanism lodged in the Office of the Prime Minister (OPM) is central to the Plan's success. Two levels of coordination mechanism are suggested: (a) national (responsible for developing policies, coordinating different sectors, mobilizing and allocating resources, reviewing progress, addressing obstacles and reporting); and (b) regional (coordinated by Regional Governors and responsible for implementation of activities, enforcement of relevant laws and reporting on activities). Notably, no specific coordination mechanisms are proposed at the municipal level.

At the national level, the Plan proposes a Multisectoral Coordination Committee with a Secretariat in the Ministry of Health and Social Services, comprising representatives from 13 government ministries, the Association of Local Authorities, the Association of Regional Councils, the Roads Authority and Motor Vehicle Accident Fund, the Namibian Police Force, the University of Namibia and University of Science and Technology, the Windhoek Central Hospital Cancer Centre, the Cancer association, 'private sector representatives' (unspecified), civil society (unspecified), Health Professional and Patients Associations, and 'partners' (namely WHO, UNDP, UNFPA, UNICEF, UNAIDS, FAO, CDC, I-TEC).

4.2.9. Food Safety Policy

The 2015 Namibian Food Safety Policy defines food safety as an essential component of food security. It also takes a 'farm to fork approach' to food safety and proposed policies and interventions throughout the food system and at all points in the food supply chain. The Policy obliges the following to abide by its standards and regulations: (a) food producers; (b) transporting, and storage; (b) primary handling, slaughter, processing, or packaging; (d) food trade such as retailing, wholesaling, and import and export of food; and (e)food service including catering, restaurants, hotels, street foods, and ceremonial or social food services.

Food safety is therefore a cross-cutting issue that is coordinated across several government departments including the Ministry of Health; the Ministry of Industrialization, Trade and SME Development; the Ministry of Fisheries; the Ministry of Urban and Rural Development; and the Ministry of Agriculture, Water and Land Reform. The challenges in implementing the policy have been identified as an irrational allocation of environmental health practitioners, inspection services at workplaces not in place, inadequate resources for inspections at ports of entry, insufficient funds, high staff turnover, poor coordination among stakeholders, absence of standard inspection procedures, and no regulations for enforcement of the 2015 Public and Environmental Health Act (NSA, 2022).

4.2.10. Food Retail Charter

In 2016, Namibia adopted a Food Retail Charter, the only one of its kind in Southern Africa (das Nair and Landani 2019) which includes:

- Support to local sourcing and the promotion and marketing of Namibian-produced goods;
- Support for domestic value chain and supplier development;
- Support for regional value chain development;
- Promotion of transparency and fairness in procurement procedures, particularly in terms of the credit, payment and rebate provisions so local producers receive no worse treatment than existing suppliers;
- Promotion of local ownership and control including the empowerment of formerly disadvantaged Namibians;
- Promotion of gender equity, human resource development, employee health and safety;
- Ensuring consumer protection regarding the safety and standards of products, the supply chains of these products, and their environmental and social impacts;

Development of a system of monitoring and reporting against the goals and targets of the charter and encouraging public participation and consumer involvement in such processes (NTF, 2016).

The main aims of the Charter include "transform(ing) the retail sector from one that relies predominantly on foreign imports, to one that gives preference to local manufactures, by promoting the sourcing of locally produced products by retailers" and "promot(ing) consumer protection by safeguarding the safety and standards of products, the supply chains of the products, and minimising their adverse environmental impacts." The latter includes facilitating consumer education; preventing dishonest or misleading advertising or labelling; addressing consumer complaints and providing redress; ensuring that products that are sold and services that are supplied are safe and suitable for consumption; ensuring that labels on products are accurate; and complying with national and international standards. Because participation in the Charter is voluntary and there are no legal enforcement mechanisms, full compliance by the major and highly competitive South African retailers is likely to be highly conditional. In 2019, a new directive with a longer list of products was in development but the voluntary nature of the Charter remains a challenge for local producers and processors. In an interview with the authors, the Deputy Executive Director at the Ministry of Industrialization, Trade and SME Development observed that there were no effective restriction on SA retailers "who import what they want."
4.3. Municipal Governance

The City of Windhoek has departments of electricity, information and communication technology, finance and customer services, police, human capital and corporate services, infrastructure, water and technical services, urban and transport planning, housing, property and human settlements, and economic development and community services (with a health services division) but no department responsible for food security and the food system. The only reference to food in Windhoek's Transformational Strategy Plan's (2017-2022) is Council's commitment to roll out urban agriculture (City of Windhoek, 2017). However, the City has engaged internationally with various initiatives and programmes.

4.3.1. Learning from Belo Horizonte

In 2009, the German NGO, World Future Council (WFC), partnered with Ryerson University in Canada to launch an initiative to internationalize the Brazilian Belo Horizonte food governance model and market it as a solution to urban food insecurity in Africa. The two organizations initially attempted to sell the model to the City of Cape Town, but their efforts gained no traction. The WFC then turned its attention to other African countries including Namibia, following a GIZ feasibility study on transferability. In 2013, the WFC funded a visit to Belo Horizonte by government delegates from four African cities including Windhoek. During the trip, the Windhoek Deputy Mayor signaled the City's intention to put food security on the governance agenda: "By sharing best practices with our counterparts in Belo Horizonte, Mayor Agnes Kafula and I intend to solve this problem by promoting urban food security projects and turn Windhoek into a role model for other African cities to learn from" (WFC 2013). In July 2014, the City of Windhoek convened a three-day workshop with the WFC, the FAO, and the City of Belo Horizonte on Food and Nutrition Security, opened by the Namibian Deputy Prime Minister. The workshop was attended by over 30 Namibian mayors and deputy mayors, 11 representatives of village councils, 11 City of Windhoek officials and Council members, and representatives from the private sector, civil society organizations, and international agencies. The Belo Horizonte model was presented and discussed as part of the proceedings. The primary outcome of the workshop was the Windhoek Declaration on Food and Nutrition Security (Box One) and several "next step" recommendations including:

- Mayoral Forums and ALAN (Association of Local Authorities in Namibia) could support the development of a National Framework with local and contextualized implementation
- A multi-stakeholder task force to be established at local authority level, with the mandate of taking the lead in the implementation process, enabling thus the technical will through formulating a concrete roadmap, addressing and engaging the respective relevant stakeholders and monitoring and documenting the implementation process.
- Put in place a committee to develop white paper to be ready by the end of 2014
- Mapping of land to identify land parcels which can be used for UPA
- Developing a UPA and Food and Nutrition Security policy in a participatory manner
- Reviewing existing Namibian by-laws in a participatory manner
- Integrating UPA into the school feeding regulation
- Mainstreaming UPA in schools and soup kitchens, hospitals, etc.

There is no evidence to hand that any of these recommendations have been actioned. In 2015, the City of Windhoek signed an MOU with Belo Horizonte and the WFC to work together and there was a further study tour of Belo Horizonte by Windhoek and Walvis Bay mayors who expressed particular interest in the implementation of urban agriculture and municipal food banks in the Brazilian city. There appears to have been little follow-up with Belo Horizonte since.

Windhoek Declaration

Workshop on Food and Nutrition Security

21 - 23 July 2014, Windhoek, Namibia NamPower Convention Centre

Concluding Recommendations

After thorough deliberation at the Workshop on Food and Nutrition Security which was enabled by the City of Windhoek, the City of Belo Horizonte (Brazil), the World Future Council and the Food and Agricultural Organization of the United Nations (FAO).

We, the Mayors of Namibian Cities, policymakers, technicians, experts, and representatives of civil society organizations have compiled this document with the following recommendations which we strongly feel ought to be implemented by all stakeholders in order to ensure the right to food for all people.

We

Recognize the urgent need to act now at local and national levels to address the challenges in food and nutrition security our country is facing today and ensure food and nutrition security for future generations.

Commit to engage in a multi-stakeholder dialogue on food and nutrition security governance and interventions at different levels: from local to national, from public to private, including but not limited to civil society and international organisations, and media.

Acknowledge the fact that we need to develop and implement solutions that are fitting for our specific situations, including reviewing the policy and legal framework on national level, developing solutions for financing efforts on local level, and connecting political with technical will.

Commit to harmonize our efforts to tackling food and nutrition security in Namibia and build networks for multi-level stakeholder dialogue, partnerships, capacity building and implementation of follow-up actions.

Engage to realize the concrete recommendations, action plans and time frames that have been developed at the Workshop, especially in regards to the establishment of Food Banks in Namibia and the promotion of urban and peri-urban agriculture and city-region linkages.

Recommend that ALAN facilitates the establishment of an inter-municipal technical task force whose mandate is to engage further relevant stakeholders with the view to implementing concrete recommendations and action plans that have been developed at the workshop.

Windhoek, 23 July 2014

4.3.2. Joining the Milan Urban Food Policy Pact

In 2015, Windhoek was one of the original African signatories to the Milan Urban Food Policy Pact (which now has over 200 participating cities worldwide). The Pact contains 37 recommended food system actions for voluntary implementation. However, there is no evidence that the City of Windhoek has been able to implement any of these Pact recommendations. City officials have no mandate to address many Pact recommendations and lack the resources to act on those that do fall within their ambit. Crucially, the City has yet to develop the baseline urban food policy or plan recommended for creating an effective governance environment. As the City's Section Head of Social Welfare commented to us: "The challenge is that we don't have a food policy as required by Milan. We do not even know where the food is coming from. We have not done any food mapping of the entire food system and need assistance from researchers to do this. We need assistance but we do not have the resources. We also need assistance to develop a policy."

4.4. Production Environment

Almost all the food consumed each day in Windhoek is imported into the Khomas city-region. This section first focuses on why local urban and peri-urban agriculture is of minimal significance in Windhoek. It then examines the various national, regional, and international supply chains that feed food into the urban food system of Windhoek.

4.4.1. Urban Agriculture

In some African cities, poor households can mitigate food insecurity through non-market mechanisms such as urban agriculture and livestock rearing. In theory, urban agriculture has the potential to mitigate food insecurity and diversify diets. However, in many Southern African cities, including Windhoek, rates of participation in urban agriculture by the urban poor are extremely low. In informal settlements, where land

is at a premium, urban agriculture is even less feasible. Conventional explanations for the ongoing insignificance of urban agriculture in Windhoek include land shortage, an inclement arid climate, and a lack of farming inputs. AFSUN-HCP has sought to understand the issue from the perspective of the residents of informal settlements themselves. As Table 14 shows, the threat of theft of produce proved to be the biggest disincentive (with 69% in agreement). More conventional deterrents were also cited by most respondents including land shortage (68%), a lack of inputs (64%), and poor soil quality (51%). Half of the respondents said they lacked the skills to grow food and a similar proportion said it was easier to buy food than grow it themselves. There was also uncertainty about whether municipal regulations allowed them to practice urban agriculture. A significant minority (45%) had no interest in growing food or did not have the time or labour (39%).

Reasons	Agree	Disagree
People would steal whatever we grow	68.9	19.4
We have no land on which to grow food	67.9	23.7
We do not have access to inputs	63.9	24.6
The soil is poor quality/rocky	51.2	36.6
We lack the skills to grow food	50.9	41.7
It is easier to buy our food than grow it	50.7	42.9
Municipal regulations do not allow us to grow food	49.4	37.5
We have no interest in growing food	45.5	46.5
We do not have the time or labour	39.0	49.0
Farming is for rural people only	35.2	49.3
The water is poor quality/brackish	32.7	53.0

Table 14: Reasons for Not Engaging in Urban Agriculture

Source: Crush et al. (2019)

Nevertheless, the Ministry of Agriculture, Water and Land Reform, Directorate of Extension and Engineering Services has launched a project entitled "Integrated Initiative in Support of Urban and Peri-Urban Horticulture Development" in Namibia Funded by the Ministry of Agriculture, Water and Land Reform & Forestry with the following objectives: (1) secure access to natural resources (land, water); (2) secure high quality and safe of horticulture produce; (3) secure the institutional context for sustainable development of Urban and Peri-Urban Horticulture in Namibia; and (4) secure the impact of the Urban and Peri-Urban initiative.

4.4.2. Rural-Urban Food Transfers

There is growing evidence that urban households in many African cities rely to varying degrees on an informal, non-market supply of food from rural areas to survive in precarious urban environments. An AFSUN survey of such rural-urban food transfers in 11 African cities showed that this practice was most common in Windhoek (Table 15). Almost half of low-income households surveyed received food remittances and nearly three-quarters received food from rural areas with another 16% receiving food remittances from rural and other urban areas such as Oshakati in the north.

	% of all households receiving food remittances	% of recipient households receiving remittances from rural areas	% of recipient households receiving remittances from urban areas only	% of recipient households receiving remittances from both rural and urban areas
Windhoek, Namibia	47	72	12	16
Lusaka, Zambia	44	39	44	17
Harare, Zimbabwe	42	37	43	20
Maseru, Lesotho	37	49	44	7
Blantyre, Malawi	36	38	51	11
Manzini, Swaziland	35	53	40	7
Msunduzi, South Africa	24	15	82	3
Maputo, Mozambique	23	23	62	15
Gaborone, Botswana	22	70	16	14
Cape Town, S Africa	18	14	83	3
Johannesburg, S Africa	14	24	67	9

Table 15: Food Remittances to Urban Households in SADC

Source: Calculated from Frayne et al, (2011)

Nearly 80% of recipient households received cereals (primarily *mahangu* or pearl millet, a common grain grown by small farmers in the north), 27% received meat and/or poultry, and 19% received milk and milk products (Table 16). The frequency of remitting varied with the type of food involved. For example, more than half of the households received cereals three to six times per year, which suggests that remitting not only occurs after the harvest, but also at other times of the year, probably from household stores (Table 17). More research is needed into how food is transferred and at what cost.

Table 16: Types of Rural-Urban Food Remittance

	% of recipient households
Cereals	79
Meat/poultry	27
Milk and milk products	19
Legumes	13
Vegetables	12
Oils/fats/butter	4
Fruits	3
Eggs	1
Roots/tubers	0.5

Source: AFSUN data

Table 17: Frequency of Rural–Urban Food Remitting

	Cereals % of recipient households	Meat/poultry % of recipient households	Milk products % of recipient households	Fish % of recipient households	Vegetables % of recipient households
At least once per week	1	2	0	0	0
At least every two months	24	56	42	17	17
3–6 times per year	56	29	30	38	26
At least once per year	19	13	12	45	57

Source: AFSUN data

4.4.3. Commercial Agriculture in Namibia¹

Meat Production and Marketing

Namibia's commercial farming sector is dominated by cattle raising and slaughter for the domestic market and for export. The commercial cattle farming area covers 14.5 million hectares in the northern half of the country. Cattle farming is practiced by an estimated 2,250 farmers, with a combined average annual herd of 840,000. The total cattle herd is closer to 3 million as cattle are also raised by small farmers. However, barriers face small-scale cattle farmers from accessing formal markets (Kalundu and Meyer 2017). Around 300,000 cattle are marketed on average each year, roughly half as live cattle and half as beef. Sheep, goat, pig, and poultry farming is also practiced. Game farming is also practiced on a significant scale. The animal and meat industries constitute over 50% of the total gross production value of agriculture in the country (Figure 11). They make up over two-thirds of commercial produce destined for market. The production of beef and processed meat increased in the 1990s and then stabilized and has recently gone into decline as a result primarily of recurrent drought (Figure 12). Namibia is also a major beef exporter, exporting 10.2 million kg of beef in 2022. The EU accounted for 46% of the exports, while South Africa, Norway and China are other significant export markets. Figure 13 shows the mix of exports and local abattoir sales from 1990 to 2020. Over time, exports have outpaced local sales, reversing from a 40:60 split in 1990 to a 60:40 split in 2020.

The sheep sector marketed 459,542 sheep in 2022. Most of the sheep were exported to abattoirs in the Northern Cape, South Africa, where higher prices for A-grade lamb were paid than at Namibian abattoirs. The goat sector recorded 25% growth in 2022 as a result of the increased demand for live goats in South Africa. The Mariental Abattoir (200km south of Windhoek) aims to market 70,000 in 2024 and 280,000 in 2025.

The domestic meat value-chain involves the road shipment of live animals for slaughter at the MeatCo abattoirs across the country including in Windhoek. MeatCo, officially known as the Meat Corporation of Namibia, is a major player in the meat processing industry in Namibia and is headquartered in Windhoek. Established initially as Swameat Corporation in 1986 and later renamed in 2001. The company has recently faced challenges, including financial losses and operational difficulties, and received a lifeline of N\$66.7 million (US\$3,663,000) in the 2023/24 national budget. MeatCo also faces competition from Savanna Beef

¹ This section draws on a recent diagnostic on commercial agriculture in Namibia; see Fortunato and Enciso (2023).

Processors, initiated by the Beef Value Chain Forum (BVCF) and in November 2020 with 659 producer shareholders. The company has purchased 25 ha of land north of Windhoek for a beef-processing facility and aims to slaughter 22,000 to 24,000 cattle a month when fully operational.





Source: Fortunato and Enciso (2023)

Figure 12: Production of Beef and Processed Meat, 2002-2020



Source: Fortunato and Enciso (2023)



Figure 13: Exports and Abattoir Sales

Source: Fortunato and Enciso (2023)

Poultry

The poultry sector comprises eggs, day-old chicks and broiler production. Namib Poultry Industries (NPI) is the leading producer of chicken meat in Namibia and produces two-thirds of local demand. NPI brands include RealGood and NAM Chicken. NPI operations are located 30 kms outside Windhoek, and the company has a significant distribution network to Windhoek and across Namibia to meet the growing demand for chicken meat. Imported chicken feed accounts for two-thirds of production costs. Price increases and imports of cheap poultry meat are hampering broiler production. Despite the imposition of an import quota of 1,200 tonnes per month in 2020, NPI continues to face competition from cheaper imports and illegal dumping (Fortunato and Enciso, 2023). Egg production is also affected by the influx of cheaper imported eggs from Zambia where chicken feed is cheaper. Most imported eggs are sold in informal markets., resulting in a reduction of sales in retail stores.

Dairy

Milk production by medium-size commercial farms primarily focuses on fresh milk, with some dairy products produced as well. Namibia Dairies, a subsidiary of the Namibian Ohlthaver & List (O & L) Group, is one of the major players in the Namibian dairy industry. They produce a range of dairy products under the brand name "Rietfontein" including fresh milk, long-life milk, flavoured milk, yogurt, butter, cheese, and cream. One of their two processing facilities is in Windhoek. Local production does not meet demand and processed dairy products from South Africa are imported to make up the shortfall. The Namibian government provides subsidies to dairy farmers to support the production of local milk and dairy products. These subsidies help offset some of the high costs associated with feed and water.

Crops

Namibia's average annual cereal production is lower than domestic demand and the country continues to be a net importer of white maize and wheat. The white maize harvest comprised around 50% of the demand in 2023. Some large-scale farmers in Namibia who produce horticultural products such as onions and tomatoes under rainfed conditions or limited irrigation prefer to transport their produce to the Johannesburg or Cape Town Fresh Produce Markets in South Africa over 1,000 km away. These farmers prefer these markets because the markets are easily accessible and farmers can sell larger amounts of produce, reducing transaction and transportation costs. Supermarkets are required to source a certain percentage of their fresh produce from local farmers. Pick n Pay's FreshCo makes up this quota by sourcing from a single large-scale farm. FreshMark does obtain some produce locally but mainly from large-scale farmers including

watermelons from a farm at Etunda and tomatoes from two farms at Tsumeb. Fruit & Veg City procures cabbage, watermelons, pumpkins and tomatoes from two large farms in North Ruaka. Lettuce, cabbage, green peppers are also sourced from irrigated farms in Hardap and Okahandja. About 30% of vegetables are sourced locally, the rest coming from Fresh Produce Markets in Cape Town and Johannesburg. The challenge of meeting quotas from local producers has led to charges that supermarkets are mislabelling products. In 2014, for example, the Namibian Standards Institution launched an inquiry into mislabelling produced.

4.4.4. Food Imports

Namibia is a major importer of fresh and processed food from over 50 countries worldwide with a value of USD676,329,000. However, Sub-Saharan Africa accounts for 92% of imports by value (Table 18). The top 10 source countries are listed in Table 19. South Africa is easily the most important source of food products with a 78% share of all imports by value.

Table 18: Value of Food Imports, 2021

Region	USD (thousands)
Sub-Saharan Africa	620,329
Europe & Central Asia	33,290
East Asia & Pacific	11,275
South Asia	3,730
Latin America & Caribbean	2,182
North America	2,132
Middle East & North Africa	822
Total	676,392

Source:

https://wits.worldbank.org/CountryProfile/en/Country/NAM/Year/2021/TradeFlow/Import/Partner/b y-region/Product/16-24 FoodProd

Table 19: Main Sources of Food Imports

Country	USD (thousands)
South Africa	530,018
Zambia	10,845
UK	8,818
Thailand	7,959
Germany	6,539
Eswatini	6,267
Switzerland	4,409
Tanzania	3,786
India	3,619
Zimbabwe	3,534

Source:

https://wits.worldbank.org/CountryProfile/en/Country/NAM/Year/2021/TradeFlow/Import/Partner/b y-country/Product/16-24 FoodProd

Over 80% of fresh fruit and vegetables come from South Africa. The imports come from South Africa via supply chains organized by subsidiaries such as Freshmark Namibia, Shoprite's fruit and vegetable procurement and distribution arm, and FreshCo (the Pick n Pay equivalent).

Some 80% of all processed foods sold in Namibia are imported from South Africa. Namibia's food processing sector is relatively small and although its products are found in Windhoek supermarkets, local production is

insufficient to meet demand. Protectionist regulations mean that supermarkets procure most of their fresh milk from Namibia Diaries and their milled flour and pasta products from Namib Mills. Other dairy products such as cheese and yoghurt are imported from South Africa. There is a ban on the import of flour to Namibia so Namib Mills has a monopoly on the importation and processing of wheat and maize to flour. Namib Mills also processes and packages rice imported from Thailand, but Thai rice is also imported in packaged form from South Africa.

4.4.5. Food Diversity and Staple Foods

Data from the AFSUN-HCP survey shows that almost all households in Windhoek (95%) had consumed staple cereals in the 24 hours prior to the survey (Table 20). Cereals include maize, wheat, rice, millet and processed products such as pasta, breakfast cereal, and bread. Meats (in the form of beef, offal, pork, mutton, lamb, goat, and poultry) were consumed by almost 50% of Windhoek households. Cereals and meats are therefore the primary staple foods in the city. Sugars, processed foods made with oil, fat or butter, and coffee/tea were consumed by approximately one third of households. Vegetables, fruit, and dairy products were only consumed by a small minority of households. However, there was a marked difference between food secure and food insecure households. Both rely on cereals as their staple food but thereafter, more food secure households consume every other type of food (except for fish), confirming that food insecure households have much lower dietary diversity.

Types of Food	% of Households	% of Food Secure Households	% of Food Insecure Households
Cereals and cereal products	95.0	94.9	97.3
Meats	48.5	78.8	48.6
Sugar, honey	34.3	55.5	30.8
Foods made with oil, fat, butter	29.7	54.0	25.5
Condiments, coffee, tea	26.7	49.6	23.4
Fresh, dried fish	21.1	13.1	23.3
Vegetables	20.2	27.0	20.1
Milk & dairy products	14.2	26.3	12.8
Tubers	11.7	25.5	8.9
Legumes	5.9	8.8	5.6
Fruit	5.6	14.6	4.2
Eggs	5.2	12.4	4.0

Table 20: Level of Household Consumption from Each Food Group

Source: Crush et al. (2019)

4.4.6. Food Expenditures by Income Categories

Table 21 shows that there is a consistent relationship between household income and the proportion of household income spent on food. The reverse is true for most other expenditure categories.

	Income Quintile				
	l	II	III	IV	V
Food and groceries	32.2	27.0	24.5	20.4	15.0
Public utilities (water, electricity, sanitation)	17.2	18.4	16.2	11.7	11.2
Fuel	15.3	10.6	7.5	6.9	2.3
Transportation	9.8	9.6	11.4	13.2	12.6
Telecommunications	5.5	6.4	7.7	7.4	9.5
Informal utilities (water, electricity, sanitation)	4.1	3.2	2.9	2.8	1.1
Medical care	3.0	3.4	2.9	3.0	4.6
Education	2.5	4.4	3.6	3.7	5.0
Housing	2.5	5.4	7.3	7.0	7.3
Clothing	1.9	1.4	2.2	4.4	5.7
Cash remittances to rural areas	1.6	2.8	4.4	6.4	5.5
Donations, Gifts	1.4	2.0	2.7	1.8	2.7
Savings	1.1	1.4	2.2	6.0	5.3
Household Furniture, Tools and Appliances	0.8	1.8	2.7	2.7	3.8
Insurance	0.5	0.4	0.5	0.5	3.4
Debt Repayments	0.5	0.8	1.5	0.8	1.8
Entertainment	0.0	1.0	0.0	1.2	3.1
Other Expenses	0.5	0.0	0.0	0.3	0.6



Source: Crush et al. (2019)



Image: USave Supermarket, Windhoek, Namibia (Source: M. Salamone - not for re-use)

5. Food Environment

5.1. Typology of Food Sources

Figure 14 provides insights into the food environment of Windhoek through the lens of the food sourcing behavior of a representative sample of Windhoek households. The domination of supermarkets is apparent with over 90 of households regularly shopping for food at these outlets. Other formal sector outlets such as small shops, take aways and restaurants are patronised by a much smaller proportion of households. The primary informal food sources are open markets, spazas/tuck shops, and street sellers/traders/hawkers. While there is no significant difference between supermarket patronage by food secure and food insecure households, it is clear that informal outlets are patronized in greater numbers by the food insecure. A similar purchasing pattern is evident in Figure 15 which compares the sourcing behaviour of households in formal and informal housing. Again, there is no significant difference in supermarket patronage between the two, while households in informal settlement are much more likely to patronize informal vendors and open markets. The next section revisits the apparent similarities in supermarket patronage by food secure and insecure households and households in informal and formal areas of the city.



Figure 14: Food Sources by Level of Household Food Security

Source: Crush et al. (2019)

Figure 15: Food Sources by Housing Type

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Source: Crush et al. (2019)

5.2. Formal Foodscape

The formal food sector of Windhoek is dominated by the major South African supermarket chains, all of which now have a significant presence in the city and other urban centres in Nambia. We enumerated nearly 160 supermarkets in Namibia as a whole, of which 55 are owned by Shoprite, 35 by Pick n Pay, and 29 by SPAR. Other chains with supermarkets in Namibia include South African Woolworths and Fruit & Veg City, and Choppies from Botswana. In Windhoek itself, we enumerated 12 Shoprite outlets, seven SPAR, three Woolworths, and three Food Lovers Market, for a total of 25 South African supermarkets. Pick n Pay is another major supermarket chain in South Africa. However, in Namibia, Pick n Pay supermarkets are now owned by local corporate entity O & L who trade under the name PnP Namibia. Locally-owned Woermann Brock (WB) operates a further six supermarkets in Windhoek, in competition with the South African chains. A number of the newer supermarkets are lead tenants in new up-market mall developments such as Grove Mall. In addition to the large supermarket chains, there are a number of single, family-owned small supermarkets, corner stores, butcheries, and bakeries in the city's retail landscape.

Table 22: Number of Supermarkets in Windhoek

	No.	%
Foreign		
Shoprite-Checkers-USave	12	30.8
SPAR	7	17.9
Woolworths	3	7.7
Food Lovers Market	3	7.7
Sub-Total	25	64.1
Local		
Woermann Brock (WB)	8	20.5
PnP Namibia	4	10.3
FutureFresh	2	5.1
Sub-Total	14	35.9
Total	39	100.0

Source: Various company reports and websites

The spatial distribution of supermarkets in Windhoek has several distinctive features (Figure 16). First, the number of supermarkets varies considerably across the city with the highest concentration in the highincome areas of Windhoek East and Windhoek West. As many as three-quarters of the city's supermarkets are in these two constituencies. Second, the number of supermarkets in lower-income areas of the city is much lower but increasing in number with bargain brands such as Shoprite's USave opening in or close to these areas. Around 17% shop at Usave (the Shoprite subsidiary that targets lower-income areas of cities) Some Shoprite supermarkets such as the Montecristo and Katutura stores, are also relatively accessible to lower-income consumers. Third, there are as yet no supermarkets in the informal settlements to the north of the city although supermarkets are edging closer to these areas.

Nearly two-thirds of Windhoek supermarkets are South African-owned with the Shoprite Group of supermarkets dominant (31%) followed by SPAR (18%). However, the second most important chain in terms of number of outlets is the long-established Namibian firm Woermann Brock (at 21%) (Figure 17). Over half of the respondents (57%) said that they patronize South African supermarkets, while the remainder (43%) patronize Namibian supermarkets (with 32% patronizing Woermann Brock). There was a significant difference in patronage patterns by residents of formal and informal areas of the city with the latter more likely to patronize South African supermarkets and the latter Namibian-owned supermarkets. The reasons for this probably relate to proximity and lower prices for bulk staples at USave.



Image: Cereals sold in bulk, Shoprite, Katatura (Source: J. Crush - not for re-use)

Figure 16: Distribution of Chain Supermarkets in Windhoek



Source: Crush et al, (2019)

Figure 17: Consumer Preferences for South African and Namibian Supermarkets



Source: Crush et al, (2019)

Emongor's (2009) census of the source of products on supermarket shelves showed the overwhelming domination of South Africa as a source of fresh food and vegetable products (Table 23). With regard to processed foods, South Africa was again dominant although all of the wheat and maize flour, pasta products, and processed fresh milk brands were Namibian. However, with the exception of dairy, the processing ingredients were mainly imported and processed by Namib Mills.

Products	Source	% of Brands on Shelves
Processed		
Frozen vegetables	South Africa	100
Fruit juices	South Africa	100
Canned vegetables	South Africa	100
Canned fruit	South Africa	100
Processed milk (UHT)	South Africa	100
Tomato sauces	South Africa/International	90/10
Wheat and maize flour	Namibia	100
Pasta products	Namibia	100
Processed fresh milk	Namibia	100
Fresh vegetables		
Carrots	South Africa	100
Irish potatoes	South Africa	100
Cabbages	South Africa	100
Onions	South Africa	100
Leafy vegetables	South Africa/Namibia	90/10
Tomatoes	South Africa/Namibia	90/10
Fresh fruit		
Apples	South Africa	100
Oranges	South Africa	100
Bananas	South Africa	100
Mangoes	South Africa	100

Table 23: Source of Supermarket Products, 2009

Source: Emongor (2009)

Our own census of food products in two Shoprite supermarkets in Windhoek found that two-thirds of all products on the shelves were manufactured in South Africa and imported (Table 24). There were only three product categories – cereals and cereal products, dairy products, and processed meat – where there are more local than imported products. In all other categories, there were more imported than local products. Shoprite's supply chains for processed foods are dominated by imports from South Africa. As many as two-thirds of the processed products come from South Africa and that country has a monopoly on canned food, sauces, spreads, desserts, and frozen foods. The high number of cereal products is related to its domination of the supply of breakfast cereals. It also has a commanding presence in the soft drinks (including fruit juices and pop), condiments (including tea and coffee), and snacks categories. Shoprite appears to do little sourcing from other African countries (with canned pineapples from Swaziland and orange juice concentrate from Zimbabwe the only recorded products). Equally, Europe and Asia are only sources for certain specialised foods. Thailand is the main source of rice. Thai rice is imported directly into the country by Namib Mills and via South African manufacturers. Packaged rice from both sources can be found on the same supermarket shelves. Many of the European and Asian products may also be imported via South Africa. The only US product of the 642 sold is tabasco sauce.

Product Category	Total No. of Products	Namibia	South Africa	Other SADC	Europe	Asia	Other
Cereals	136	68	51	0	6	11	1
Soft Drinks	112	19	92	1	0	0	0
Snacks	108	30	71	0	3	3	1
Canned food	79	3	54	1	15	4	2
Sauces	43	0	39	0	0	4	0
Condiments	41	6	33	0	0	2	0
Spreads	31	0	23	0	4	2	2
Dairy	29	22	7	0	0	0	0
Desserts	24	0	24	0	0	0	0
Frozen foods	23	0	23	0	0	0	0
Meats	16	13	3	0	0	0	0
Total	642	161	419	2	28	26	6
%	100.0	25.1	65.3	0.3	4.4	4.0	0.9

 Table 24:
 Source of Processed Foods in South African Supermarkets, Windhoek

Source: Crush et al, (2019)

As Table 25 demonstrates, supermarkets are the main source of many common food products. In the case of half of the products on the list, supermarkets command over 90% of the market share. The three main staples – maize meal, rice, and pasta – are bought almost exclusively at supermarkets. In sum, supermarkets completely dominate the food retail system of the city, irrespective of the location, wealth, and level of poverty and food insecurity of households. The only staple in which supermarkets face competition is bread although they still command over half of the custom. Supermarkets are also the major source of fresh and frozen produce. Over three-quarters of the households that purchase milk, eggs, fruit, fresh chicken, and vegetables do so from supermarkets. Meat is also bought from small shops (mainly butcheries). Supermarkets command over 50% of the cooked food market, although fast-food outlets do compete for cooked chicken and meat. At least one of these outlets, Hungry Lion, is owned by the supermarket chain, Shoprite.

	% of households purchasing item	% purchasing at supermarkets	% purchasing from small shops
Staples			
Maize meal	83	95.7	2.0
Bread	48	43.6	17.0
Rice	42	99.0	0.0
Pasta	39	99.6	0.2
Fresh produce			
Meat	38	59.8	20.1
Vegetables	20	60.9	5.3
Fish	39	25.8	4.8
Milk	14	91.7	3.8
Eggs	12	21.6	8.4
Offal	13	8.3	8.3
Frozen produce			
Chicken	16	88.0	2.7
Processed food			
Cooking oil	77	91.1	2.3
Sugar	56	91.4	1.9

Table 25: Main Source of Food Items Purchased in Previous Month

Source: Crush et al, (2019)

Table 26 shows the frequency of patronage of four types of formal food outlet. Supermarkets tend to be patronized monthly by two-thirds of households whereas small shops are patronized more frequently for products such as bread and meat. Most of the monthly supermarket patrons are households in the informal settlements and other low-income areas who shop once a month and purchase their cereal staples in bulk. Around 75% of households said they patronize supermarkets because of bulk purchase opportunities.

Table 26: Frequency of Sourcing Food from Formal Outlets

		Frequency of purchase from the source (%)				
	% of HH	Daily	Weekly	Monthly	Bi-Annually	Annually
Supermarkets	96.5	4.5	16.5	65.7	12.4	0.8
Small shops	18.6	11.9	60.0	22.5	5.6	0.0
Fast food/Take away	15.5	5.1	39.4	48.5	4.8	2.3
Restaurant	5.8	8.2	49.0	36.7	4.1	2.0

Source: Pendleton and Nickanor, (2016)



Image: Namib Mills, Windhoek (Source: M. Salamone - not for re-use)



Image: MeatCo Abattoir, Windhoek (Source M. Salamone - not for re-use)

5.3. Informal Foodscape

Our comprehensive mapping of the informal food sector in Windhoek in 2019 produced a typology of different types of informal food outlet in the city (Table 27). Street vendors were the most common type of outlet, making up 27% of the total, followed by informal market vendors (15%), open market vendors (14%), and vendors outside supermarkets (13%). The frequency distribution of other types is shown in the table. As Figure 18 shows, informal food vendors cluster in the northern, lower-income areas of the city.

Table 27: Typology of Informal Food Vendors in Windhoek

Туре	No surveyed	% of sample
Street vendors	128	27.2
Informal market vendors	70	14.9
Open market vendors	67	14.3
Vendors outside supermarkets	59	12.6
Tuckshops/spazas	39	8.3
Vendors at taxi rank/bus stop	35	7.4
Mobile vendors	26	5.5
Homeshops	21	4.5
Vendors outside open markets	16	3.4
Other	9	1.9
Total	470	100.0

Source: Pendleton and Nickanor, (2016)

Figure 18: Spatial Distribution of Informal Food Vendors



Source: Nickanor et al, (2019)

In keeping with broader trends in the informal sector in Africa and globally, two-thirds of the Windhoek food vendors were women. Three-quarters of the vendors were single and of the 25% who were married, most were women. The male vendors were on average younger (31 years old) than women (39 years old). The age range also varied with nearly 50% of male vendors qualifying as "youth" (under the age of 35) compared to

only 29% of female vendors (Figure 19). Only 18% of men were over the age of 40 compared to nearly 40% of women. In summary, women of all ages tend to be involved in informal food vending while male vendors are generally a younger cohort (Figure 19).





Source: Nickanor et al, (2019)

Nearly three-quarters (73%) of the informal food vendors surveyed were migrants born in the rural areas of Namibia. About 7% were from other urban centres in the country and 9% were born outside the country. Only 11% of the sample were born in Windhoek. These findings confirm studies showing the importance of rural-urban migration in Namibia's rapid urbanization process and that the informal sector is dominated by migrants who cannot find formal employment. As Figure 20 shows, most informal food vendors in Windhoek are recent entrants to the trade. This is consistent both with the structural context of rapid urbanization, reduced opportunity to access jobs in the formal sector, and rapid expansion of the sector.

Figure 20: Start-Up Year of Informal Food Vending Enterprises



Source: Nickanor et al, (2019)

Over 80% of the vendors surveyed cited abundant passing traffic and proximity to public transport as the main factors in their choice of operating location (Figure 21). Approximately 70% indicated that their location delivered the greatest number of customers. A similar proportion said that their current location was where they had always conducted business which suggests that once established in a location, most vendors tend not to move. Around half of the vendors said other reasons influenced their choice of location including safety, free or cheap land, proximity to home, and a location where the authorities would not confiscate their goods.

Figure 21: Reasons for Choice of Location



Source: Nickanor et al, (2019)

Table 28 shows the food products sold by informal vendors in Windhoek. Overall, fresh produce in the form of vegetables (sold by 50% of vendors) and fruits (25% of vendors) was the most common. Of the cereal staples, the highest proportion were selling maize meal (11% of all vendors), with a few (5%) selling *mahangu*

(millet). As regards cooked food, pies/samosas/vetkoek (21%) and meat (19%) were most commonly on offer. Of processed food, sweet/chocolates (15%) and snacks/crisps/nik-naks (13%) were mostly sold.

Food type	No.	% of vendors
Cereal staples		
Maize meal	52	11.1
Bread	33	7.0
Mahangu	24	5.1
Pasta	19	4.0
Rice	11	2.3
Fresh produce		
Vegetables	237	50.4
Fruits	119	25.3
Potatoes	81	17.2
Red meat	79	16.8
Freshfish	47	10.0
Eggs	34	7.2
Chicken	28	6.0
Kidney, livers, tripe, offal	10	2.1
Milk	6	1.3
Cooked food		
Pies/samosas/vetkoek	99	21.1
Meat	89	18.9
Chips	74	15.7
Vegetables	29	6.2
Chicken	7	1.5
Eggs	6	1.3
Frozen food	·	·
Meat	15	3.2
Fish	2	0.4
Processed food	·	
Sweet/chocolates	71	15.1
Snacks/crisps/nik-naks	62	13.2
Cool drink	36	7.7
Sugar	10	2.1
Canned meat/wors	7	1.5
Powdered milk/omaere/sour milk	7	1.5
Canned fruit	5	1.1
Tea/coffee	5	1.1
Cooking oil	4	0.9

Table 28: Food Products Sold by Informal Vendors

Note: Multiple-response question (Source: Nickanor et al, 2019)

The vendors obtain stock from a variety of sources (Table 29). Almost 60% purchase their stock from other vendors in open markets for sale in other locations. Additionally, half of all vendors buy stock from

wholesalers and 41% buy from supermarkets. Also important are informal markets (37%) and small shops/retailers (25%). Home-made meals are also common (36%). Far fewer (only 16%) obtain their produce directly from farms. Figure 22 shows the most common business strategies of informal food vendors. These include price-shopping, offering credit to consumers, keeping records, extending hours of operation, and purchasing in bulk.

	No.	%
Formal markets	280	59.6
Wholesaler	224	47.7
Supermarket	193	41.1
Informal market	173	36.8
Made at home	167	35.5
Small shops/retailers	119	25.3
Direct from farmers	76	16.2
Others	3	0.6

Table 29: Sources of Stock

Note: Multiple-response question (Source: Nickanor et al, 2019)

A central issue associated with informal trading is the relationship between operational challenges and entrepreneurial activity, as this impacts on the conditions that determine survival. Most vendors indicated that their primary business challenges were economic in nature, including not having enough customers (63%), insufficient sales (46%), and supplies being too expensive (43%). While 60% of the vendors offer credit to their customers, 40% said that customers not paying their debts was a significant business challenge. Thus, offering food on credit may boost custom but it puts the vendors in a vulnerable position when customers do not or cannot pay later (Table 30). Storage and refrigeration problems were cited as challenges by just under 30% of the vendors, but only 11% felt that they lacked sufficient training to operate a business.



Image: Street Food Vendors on road edge (Source: M. Salamone - not for re-use)

Figure 22: Business Strategies



Note: Multiple-response question (Source: Nickanor et al, 2019)

Table 30: Business Challenges

	No.	%
Economic challenges		
Too few customers	294	62.6
Insufficient sales	215	45.7
Suppliers are charging too much	204	43.4
Customers not paying their debts	183	38.9
Too many competitors around here	168	35.7
Competition from supermarkets/large stores	30	6.4
Operational challenges		
Storage problems	130	27.7
Refrigeration problems/do not have a refrigerator	129	27.4
Restricted by lack of relevant training	53	11.3
Social challenges		
Verbal insults against your business	92	19.6
Crime/theft of goods/stock	34	7.2
Crime/theft of money/income	22	4.7
Conflict with Namibian vendors	18	3.8
Prejudice because of nationality or ethnicity	11	2.3
Conflict with vendors from other countries	8	1.7
Experienced physical attacks/assaults	7	1.5
Experienced arrest/detention of yourself/employees	3	0.6
Experienced prejudice because of your gender	3	0.6

Note: Multiple-response question (Source: Nickanor et al, 2019)



Image: Cooked meat Vendors – note constructed food cooking facilities in the background behind fencing (Source: N. Nickanor – not for re-use)



Image: Vegetables vendors selling largely imported produce (Source: N. Nickanor - not for re-use)

6. Conclusion

Like many cities in Southern Africa, Windhoek has been growing rapidly, primarily as a result of in-migration, especially from the more heavily populated rural north of Namibia. Urban planning has been unable to keep pace with the influx, leading to the expansion of informal settlements to the north of the city. The population of Windhoek has grown from 147,000 at independence in 1990 to 326,000 in 2011 to its current estimated population of 430,000. In 2008, AFSUN conducted a household food security baseline survey in lower-income neighbourhoods of the city (Tobias Hainyeko, Moses Garoeb, Samora Machel and Khomasdal North) (Pendleton et al., 2012). The survey covered around 180,000 people in these four areas, or more than half of the city, and found that 77% of households were food insecure and 23% were food secure. In the informal settlements, 89% were food insecure and 11% were food secure. Dietary diversity was also low at 5.95 (on the HDDS scale) for the sample as a whole and 4.78 for households in informal settlements. The survey also revealed a very high level of supermarket patronage in these lower-income areas of the city, with 83% of households obtaining at least some of their food through supermarket purchase, more than through the informal food sector (at 66%). Urban agriculture was negligible, with less than 5% of households growing any of their own food within the city. Much more important were informal food transfers from rural areas, received by 72% of households.

On the AFSUN HFIAS, the regional SAA average is 10.3; for those in informal housing it is 12.4 (the fourth highest for the region). For the HFIAP, the regional average is 77% food insecure; for Windhoek, those in informal housing are 89% food insecure (the third highest food insecure for the region). On the LPI, the regional average is 1.2; for those in informal housing in Windhoek the average is 1.4 (the fourth highest). The overall picture is that those who are better off and more food secure are living in formal houses and those who are poorer and more food insecure are only able to live in informal housing. In an effort to mitigate their insecure food situation, food insecure households make use of various strategies including receiving food transfers, obtaining food from informal markets, and other informal methods such as borrowing food with neighbours.

Why are Windhoek's urban poor in informal housing poorer and more food insecure than those in formal housing, and among the poorest of the 11 cities surveyed? Looking at the housing situation in the other 10 cities surveyed, most urban poor live in houses with the exception of Khayelitsha and Philippi (Cape Town 40%), Msunduzi (Durban 19%) and Manzini (Swaziland 19%). The poorest households in these cities (Windhoek, Cape Town, Durban and Swaziland) are unable to afford or access formal housing. In the case of Windhoek, the relatively recent history of urban migration and the inability of the municipality to provide formal housing for poor people is a partial explanation; the same is probably true for the other cities mentioned above. For the other cities in the survey, urban migration has been going on for a longer period of time and people have had a chance to improve or adapt to their urban accommodation.

Windhoek represents a typical policy challenge facing any city undergoing particularly rapid growth through in-migration. In that respect, Windhoek is a prototype for many other cities in SADC and beyond. However, while myriad challenges facing such cities (e.g. employment, housing, service provision and transport infrastructure) are well-recognised, food insecurity is not. The international, continental and national food security agenda (including in Namibia) has a decidedly rural bias with little attention given to the specific challenges of feeding the residents of African cities. Food availability is not an issue in a city like Windhoek and is likely to become even less so over time as more supermarkets open and the city becomes more firmly integrated into modern global and regional food supply chains. What is more important is the whole issue of food access and that, in turn, depends on incomes and food pricing. Unlike in other cities, it also depends on whether rural-urban food transfers are sustainable and can be made more organised and efficient. What is certainly required is a systematic national and city strategy for reducing the high levels of food insecurity amongst the urban poor in general and in informal settlements in particular.

The surprisingly high rate of supermarket patronage in low-income areas of the city was at odds with conventional wisdom at the time that supermarkets in African cities are primarily patronized by middle and high-income residents and therefore target their neighbourhoods. However, Windhoek was not alone in this respect. Rates of supermarket patronage by low-income urban residents were similarly high in the three

South African cities surveyed (Cape Town, Johannesburg and Msunduzi) and in other countries neighbouring South Africa, including Botswana, Lesotho and Swaziland. In other Southern African countries, such as Zimbabwe, Zambia, Malawi and Mozambique, rates of patronage were lower and, simultaneously, informal food sector purchasing was much higher. This raised the obvious question of what was happening in Namibia and other countries that made supermarkets so much more accessible to the urban poor, as well as other questions about what they were buying at supermarkets and how frequently they shopped there. Further, what was the relationship, if any, between supermarkets and informal food vendors? Was there some kind of symbiotic relationship (as there appears to be in many Asian cities, for example) or were supermarkets driving the informal sector out of business? In South Africa, the government's Competition Commission began investigating this, following numerous complaints about supermarket incursion by owners of small informal food businesses.

What is evident from the combination of details from the food system studies and wider historical and governance studies used in the report is that while the City acknowledges the challenge, and national government have sought to engage and respond, through high level centralised coordinating bodies, the respective ministerial engagements in the food system and food security remain locked in dated, agrarian and production oriented responses, in the case of the Department of Agriculture. In the case of the health departments, nutrition education and awareness are prioritised. Both responses fail on two levels, first these are siloed policy actions and fail to acknowledge or even engage in the integration aspirations of the centralised coordination process. More importantly both policies fail to acknowledge and effectively understand the food and nutrition security and wider food system challenges associated with living in informality and engaging in a city in a largely informal manner. This informality means that key infrastructural and related interventions necessary to engage in and resolve food system issues, are overlooked, or disregarded in the policy engagements.

7. References

Abrahams, C. (2009). "Transforming the Region: Supermarkets and the Local Food Economy" African Affairs 109: 115-134.

Abrahams, C. (2011). "Supermarkets and Urban Value Chains: Rethinking the Developmental Mandate" Food Chain 1: 206-222.

Amwele, H. (2013). "An Empirical Investigation into the Factors Affecting the Performance of SMEs in the Retail Sector in Windhoek, Namibia" MIB Thesis, Polytechnic of Namibia, Windhoek.

Andersson, C., Chege, C., Rao, E and Qaim, M. (2015). "Following Up on Smallholder Farmers and Supermarkets in Kenya" American Journal of Agricultural Economics 97: 1247–1266.

Andjamba, H. (2017). "Econometric Estimation of the Demand for Meat in Namibia" Magister Scientiae Agriculturae Thesis, University of the Free State, Bloemfontein.

Asfaw, A. (2008). "Does Supermarket Purchase Affect the Dietary Practic- es of Households? Some Empirical Evidence from Guatemala" Development Policy Review 26: 227–243.

Battersby, J. (2017). "Food System Transformation in the Absence of Food System Planning: The Case of Supermarket and Shopping Mall Retail Expansion in Cape Town, South Africa" Built Environment 43: 417-430.

Battersby, J. and Peyton, S. (2014). "The Geography of Supermarkets in Cape Town: Supermarket Expansion and Food Access" Urban Forum 25: 153-164.

Battersby, J., Marshak, M. and Mngqibisa, N. (2017). Mapping the Invisible: The Informal Food Economy of Cape Town, South Africa. AFSUN Report No. 24, Cape Town.

Berkowitz, B., Ramkolowan, Y., Stern, M., Venter, F. and Webb, M. (2012). The Role of South African Business in Africa: South African Outward Investment. Report for Nedlac, Pretoria.

Biénabe, E., Berdegué, J., Peppelenbos, L. and Belt, J. (eds.) (2011) Recon- necting Markets Innovative Global Practices in Connecting Small-Scale Producers with Dynamic Food Markets (Farnham: Gower).

Blandon, J., Henson, S. and Cranfield, J. (2009). "Small-Scale Farmer Participation in New Agri-Food Supply Chains: Case of the Supermarket Supply Chain for Fruit and Vegetables in Honduras" Journal of International Development 21: 971–984.

Botha, C. (2005). People and the environment in colonial Namibia. South African Historical Journal, 52(1), 170-190.

Brown, A. (2015). "Sustaining African Cities: Urban Hunger and Sustain- able Development in East Africa" International Journal of Environmental, Cul- tural, Economic & Social Sustainability 11: 1-12.

Budlender, D. (2011). Informal Employment in Namibia in 2008 (Geneva: ILO).

Cheadle, H. (2017). "Grocery Retail Market Enquiry Public Hearings: Remarks by the Chairperson" At: http://www.compcom.co.za/wp-con-tent/uploads/2015/06/Cape-Town-Public-Hearings-introduction-by- Prof-Halton-Cheadle.pdf

Chidozie, F., Olanrewaju, I. and Akande, O. (2014). "Foreign Megastores and the Nigerian Economy: A Study of Shoprite" Mediterranean Journal of Social Sciences 5: 425-437.

City of Windhoek (1999), *Development and Upgrading Strategy*, Division of sustainable Development, Department of planning, Urbanization and Environment, windhoek.

Ciuri, S. (2013). "Nakumatt Set to Take Over Shoprite Stores in Tanzania" Business DailyAfrica 17 December.

Ciuri, S. and Kisembo, D. (2015). "Uganda: Nakumatt to Buy Shoprite" All Africa 23 July.

Coates, J. (2013). "Build it Back Better: Deconstructing Food Security for Improved Measurement and Action" Global Food Security 2: 188-194.

Competition Commission of South Africa (2016). "Enforcement of Competition Policy in the Retail Sector: Contribution by South Africa" Prepared for 2016 UNCTAD Round Table, Geneva.

Competition Commission of South Africa (2017). Retail Market Enquiry. At: http://www.compcom.co.za/retail-market-inquiry/

Crush, J. and Caesar, M. (2016). "Food Access and Insecurity in a Supermarket City" In J. Crush and J. Battersby (eds.), Rapid Urbanisation, Urban Food Deserts and Food Security in Africa (New York: Springer), pp. 47-58.

Crush, J. and Frayne, B. (2011a). "Urban Food Insecurity and the New International Food Security Agenda" Development Southern Africa 28: 527-544.

Crush, J. and Frayne, B. (2011b). "Supermarket Expansion and the Informal Food Economy in Southern African Cities: Implications for Urban Food Security" Journal of Southern African Studies 37: 781-807.

Crush, J. and McCordic, C. (2017). "The Hungry Cities Food Purchases Matrix: Household Food Sourcing and Food System Interaction" Urban Forum 28: 421-433.

Crush, J. and Riley, L. (2017). "Urban Food Security and Rural Bias" HCP Discussion Paper No. 11, Waterloo and Cape Town.

Crush, J., Frayne, B. and McLachlan, M. (2011). Rapid Urbanization and the Nutrition Transition in Southern Africa. AFSUN Report No. 7, Cape Town.

Crush, J., Frayne, B. and Pendleton, W. (2012). "The Crisis of Food Insecurity in African Cities" Journal of Hunger and Environmental Nutrition, 7: 271-292.

Crush, J., Hovorka. A. and Tevera, D. (2011). "Food Security in South- ern African Cities: The Place of Urban Agriculture" Progress in Development Studies 11: 285-305.

Crush, J, Nickanor, N. and Kazembe L. (2019), "Informal food deserts and household food insecurity in Windhoek, Namibia", *Sustainability* Vol 11, no 1, article 37.

Dakora, E. (2012). "Exploring the Fourth Wave of Supermarket Evolution: Concepts of Value and Complexity in Africa" International Journal of Managing Value and Supply Chains 3: 25-37.

Dakora, E. (2016). "Expansion of South African Retailers' Activities into Africa" Cape Peninsula University of Technology, Cape Town.

Dakora, E. and Bytheway, A. (2014). "Entry Mode Issues in the Interna- tionalisation of South African Retailing" Mediterranean Journal of Social Sci- ences 5: 194-205.

Dakora, E., Bytheway, A. and Slabbert, A. (2010). "The Africanisation of South African Retailing: A Review" African Journal of Business Management, 4: 748-754.

das Nair, R. (2015). "The Implications of the Growth of Supermarket Chains in Southern Africa on Competitive Rivalry" Competition Com- mission and Competition Tribunal's 9th Annual Conference on Competi- tion Law, Economics and Policy, Johannesburg.

das Nair, R. (nd). "The Internationalisation of Supermarkets and the Nature of Competitive Rivalry in Retailing in Southern Africa" Centre for Competition, Regulation and Economic Development, University of Johannesburg.

das Nair, R. and Chisoro, S. (2016). "The Expansion of Regional Super-market Chains and Implications for Local Suppliers: Capabilities in South Africa, Botswana, Zambia and Zimbabwe" UNU WIDER Working Paper 2016/114, Helsinki.

das Nair, R. and Chisoro, S. (2017). "The Expansion of Regional Super-market Chains: Implications on Suppliers in Botswana and South Africa" UNU WIDER Working Paper 2017/26, Helsinki.

das Nair, R. and Dube, C. (2015). "Competition, Barriers to Entry and Inclusive Growth: Case Study on Fruit and Veg City" Working Paper 9/2015, Centre for Competition, Regulation and Economic Development (CCRED), University of Johannesburg.

das Nair, R. and Dube, S. (2017). "Growth and Strategies of Large, Lead Firms – Supermarkets" Working Paper 8/2017, CCRED, University of Johannesburg.

Dawson, N., Martin, A. and Sikor, T. (2016). "Green Revolution in Sub-Saharan Africa: Implications of Imposed Innovation for the Wellbeing of Rural Smallholders" World Development, 78: 204-218.

Deloitte (2015). African Powers of Retailing: New Horizons for Growth. Johan- nesburg.

Dobler, G. (2014). Traders and Trade in Colonial Ovamboland, 1925-1990: Elite Formation and the Politics of Consumption Under Indirect Rule and. African Books Collective.

Dralle, T. (2017). "The South African Walmart/Massmart Case: SME- Friendly Domestic Competition Laws in the Light of International Eco- nomic Law" In T. Rensmann (ed.), Small and Medium Enterprises in Interna- tional Economic Law (Oxford: OUP), pp. 123-64.

Economist (2013). "The Grocers' Great Trek: A Sluggish Home Market is Pushing South Africa's Big Retail Chains" The Economist 19 September.

Emongor, R. (2009). "The Impact of South African Supermarkets on Agricultural and Industrial Development in the Southern African Development Community" PhD Thesis, University of Pretoria, Pretoria.

Emongor, R. and Kirsten, J. (2009). "The Impact of South African Super-markets on Agricultural Development in the SADC: A Case Study in Zambia, Namibia, and Botswana" Agrekon 48: 6-84.

Farina, E., Nunes, R. and Monteiro, G. (2005). "Supermarkets and Their Impacts on the Agrifood System of Brazil: The Competition Among Retailers" Agribusiness 21: 133-147.

Frayne, B. (2004). "Migration and Urban Survival Strategies in Windhoek, Namibia" Geoforum 35: 489-505.

Frayne, B. (2007). Migration and the changing social economy of Windhoek, Namibia. *Development Southern Africa*, 24(1), 91-108.

Frayne, B., & Pendleton, W. (2001). Migration in Namibia: Combining Macro and Micro Approaches to Research Design and Analysis 1. *International Migration Review*, *35*(4), 1054-1085.

Gengenbach, H., Schurman, R., Bassett, T., Munro, W. and Moseley, W. (2017) "Limits of the New Green Revolution for Africa: Reconceptualising Gendered Agricultural Value Chains" Geographical Journal DOI: 10.1111/geoj.12233

Gorton, M., Sauer, J. and Supatpongkul, P. (2011). "Wet Markets, Super-markets and the "Big Middle" for Food Retailing in Developing Countries: Evidence from Thailand" World Development 39: 1624-1637.

Government of Namibia (1999), *General Notice No 252: Municipality of Windhoek: Street Trading Regulations*, accessed 15 January 2019 at http://www.lac.org.na/ laws/1999/2179.pdf.

Government of Namibia (2017). *Namibia Informal Economy: Case Study Report 2016*; Ministry of Labour, Industrial Relations and Employment Creation and Social Security Commission: Windhoek, Namibia, 2017.

Greenberg, S. (2017). "Corporate Power in the Agro-Food System and the Consumer Food Environment in South Africa" Journal of Peasant Studies 44: 467-496.

Hawkes, C. (2008). "Dietary Implications of Supermarket Development: A Global Perspective" Development Policy Review 26: 657-692.

Haysom, G. (2015). "Food and the City: Urban Scale Food System Gover-nance" Urban Forum 26: 263-281.

Huang, C., Tsai, K. and Chen, Y. (2015). "How Do Wet Markets Still Survive in Taiwan?" British Food Journal 117: 234-256.

Humphrey, J. (2007), "The Supermarket Revolution in Developing Coun-tries: Tidal Wave or Tough Competitive Struggle?" Journal of Economic Geography 7: 433-450.

Igumbor, E., Sanders, D., Puoane, T., Tsolekile, L., Schwarz, C., Purdy, C., Swart, R., Durão, S. and Hawkes, C. (2012). "Big Food," the Con- sumer Food Environment, Health, and the Policy Response in South Afri- ca" PLoS Medicine 9(7): e1001253.

Ijuma, C., Snyder, J., Tshirley, D. and Reardon, T. (2015). "Stages of Trans- formation in Food Processing and Marketing: Results of an Initial Inven- tory of Processed Food Products in Dar es Salaam, Arusha, and Mwanza" Tanzania Policy Research Brief No. 3, Michigan State University, Ann Arbor.

Jauch, H. (2018). Namibia's Labour Movement: An Overview. History, Challenges and Achievements, Windhoek, Friedrich-Ebert-Stiftung.

Kaira, C. and Haidula, T. (2014). "Checkers and Shoprite Probed Over Mislabelling" The Namibian 11 September.

Kalundu, K. and Meyer, F. (2017). "The Dynamics of Price Adjustment and Relationships in the Formal and Informal Beef Markets in Namibia" Agrekon 56: 53-66.

Kambwale, J., Chisoro, C. and Karodia, J. (2015). "Investigation into the Causes of Small and Medium Enterprise Failures in Windhoek, Namibia" Arabian Journal of Business and Management Review 4: 80-109.

Kapitako, A. (2017a). "Union Mounts National Campaign to Boycott Shoprite" New Era 19 September.

Kapitako, A. (2017b). "Shoprite Workers to Vote on Strike" The Namibian 21 February.

Karaan, M. and Kirsten, J. (2008). "A Programme to Mainstream Black Farmers into Supply Chains: An Emphasis on Fresh Produce" Southern Africa Policy Brief 6, Regoverning Markets Project, IIED, London.

Katjangu, N. (2017). "Shoprite Exploitive, says Nghimtina" The Namibian 21 July.

Kazembe, L. and Nickanor, N. (2017). "Spatial Modelling of the Relation- ship Between Socio-Economic Disadvantage and Child Health in Namib- ia" Spatial Demography 5: 1-24.

Kelly, M., Seubsman, S., Banwell, C. and Dixon, J. (2014). "Thailand's Food Retail Transition: Supermarket and Fresh Market Effects on Diet Quality and Health" British Food Journal 116: 1180-1193.

Kennedy, G., Nantel, G. and Shetty, P. (2004). "Globalization of Food Systems in Developing Countries: A Synthesis of Country Case Studies" FAO Food and Nutrition Paper 83, Rome.

Kenny, B. (2014). Walmart in South Africa: Precarious Labor and Retail Expansion" International Labor and Working Class History 86: 173-177.

Kimenju, S., Rischke, R., Klasen, S. and Qaim, M. (2015). "Do Super- markets Contribute to the Obesity Pandemic in Developing Countries?" Public Health Nutrition 18: 3224-3233.

Kohima, J. M., Chigbu, U. E., Mazambani, M. L., & Mabakeng, M. R. (2023). (Neo-) segregation, (neo-) racism, and one-city two-system planning in Windhoek, Namibia: What can a new national urban policy do?. *Land Use Policy*, 125, 106480.

Louw, A., Chikazunga, D., Jordaan, D. and Biénabe, E. (2007). "Restruc- turing Food Markets in South Africa: Dynamics Within the Context of the Tomato Subsector" Agrifood Sector Studies, Regoverning Markets Proj- ect, University of Pretoria.

Mbongo, L. 2017 "Food Insecurity and Quality Of Life in Informal Settlements of Katutura, Windhoek, Namibia". Master's Thesis, University of Namibia, Windhoek, Namibia, 2017.

Metsola, L. (2022). Affordability and relationality: The reproduction and transformation of the segregated city in Windhoek. *Focaal*, 2022(94), 38-56.

Meyer, D. and Keyser, E. (2016). "Validation and Testing of the Lived Pov- erty Index Scale (LPI) in a Poor South African Community" Social Indicators Research 129: 147-159.

Michelson, H., Reardon, T., Perez, F. (2012). "Small Farmers and Big Retail: Trade-offs of Supplying Supermarkets in Nicaragua" World Develop- ment 40: 342–354.

Miller, D., Saunders, R. and Oloyede, O. (2008). "South African Corpo- rations and Post-Apartheid Expansion in Africa: Creating a New Regional Space" African Sociological Review 12: 1-19.

Ministry of Labour, Industrial Relations and Employment Creation (MLIREC) (2017) Strategic Plan 2017 – 2020. https://mol.gov.na/documents/53329/0/Strategic+Plan+Print.+%281%29.pdf/1c1bde81-fe61-91b3-3aa8-357281025bdc

Minten, B., Reardon, T. and Sutradhar, R. (2010). "Food Prices and Mod- ern Retail: The Case of Delhi" World Development 38: 1775-1787.

Mitlin, D., & Muller, A. (2004). Windhoek, Namibia: towards progressive urban land policies in southern Africa. *International Development Planning Review*, 26(2).

Monteiro C., Levy, R., Claro, R., de Castro. I and Cannon G. (2011). "Increasing Consumption of Ultra-Processed Foods and Likely Impact on Human Health: Evidence from Brazil" Public Health Nutrition 14: 5-13.

Monteiro, C., Moubarac, J.-C., Cannon, G., Ng, S. and Popkin, B. (2013). "Ultra-Processed Products are Becoming Dominant in the Global Food System" Obesity Reviews 14(S2): 21-28.

Moustier, P., Tam, P., Anh, D., Binh, V. and Loc, N. (2010). "The Role of Farmer Organizations in Supplying Supermarkets with Quality Food in Vietnam" Food Policy 35: 69-78.

Muchopa, C. (2013). "Agricultural Value Chains and Smallholder Pro- ducer Relations in the Context of Supermarket Proliferation in Southern Africa" International Journal of Managing Value and Supply Chains 4: 33-44.

Müeller-Friedman, F. (2006). Beyond the post-apartheid city: de/segregation and suburbanization in Windhoek, Namibia. *African Geographical Review*, 25(1), 33-61.

Nakashole, N. (2017). "Nafau wants all Shoprite Workers to Join one Union" The Namibian 18 May.

New Era (2017). "Union Challenges Nghimtina over Shoprite Workers" New Era 17 August.

Nickanor, N. (2014). "Food Deserts and Household Food Insecurity in the Informal Settlements of Windhoek, Namibia" PhD Thesis, University of Cape Town, Cape Town.

Nickanor, N., & Kazembe, L. N. (2016). Increasing Levels of Urban Malnutrition with Rapid Urbanization in Informal Settlements of Katutura, Windhoek: Neighbourhood Differentials and the Effect of Socio-Economic Disadvantage. *World Health & Population*, 16(3), 5-21.

Nickanor, N., Kazembe, L., Crush, J. and Wagner J. (2017), "The supermarket revolution and food security in Namibia", Urban Food security series no 26, AFSUN, Cape Town.

Nickanor, N., Kazembe, L., Crush, J., & Wagner, J. (2018). Urban food system of Windhoek, Namibia: Africa's supermarket revolution and urban food security in Namibia.

Nickanor, N., Crush, J., & Kazembe, L. (2019). The informal food sector and cohabitation with supermarkets in Windhoek, Namibia. *Urban Forum* 30, 425-442.

Nortons Inc (2016). "Grocery Retail Sector Market Inquiry: Pick n Pay Submission" Johannesburg.

NPC (nd). Namibia Poverty Mapping (Windhoek: National Planning Commission).

Namibia Statistics Agency (NSA) (2017). The Namibia labour force survey 2016 report, Windhoek: Namibia Statistics Agency.

Ogbokor, C. and Ngeendepi, E. (2012). "Investigating the Challenges Faced by SMEs in Namibia" Department of Economics, Polytechnic of Namibia, Windhoek.

Olbrich, R., Quass, M. and Baumgärtner, M. (2014). "Characterizing Commercial Cattle Farms in Namibia: Risk, Management and Sustain- ability" Working Paper No. 248, University of Lüneburg.

Parker, H. and Luiz, J. (2015). "Designing Supply Chains Into Africa: A South African Retailer's Experience" In W. Piotrowicz and R. Cuthbert- son (eds.), Supply Chain Design and Management for Emerging Markets (Lon- don: Springer), pp. 65-85.

Pendleton, W. (2002). Chapter two Katutura and Namibia: The people, the place, and the fieldwork. Chronicling Cultures: Long-Term Field Research in Anthropology, 34.

Pendleton, W. C. (1993). Katutura: a place where we stay: life in a post-apartheid township in Namibia. (No Title).

Pendleton, W., & Nickanor, N. (2016). The State of Food Insecurity in Windhoek, Namibia (No. 14). Southern African Migration Programme.

Pendleton, W., Crush, J. and Nickanor, N. (2014). "Migrant Windhoek: Rural-Urban Migration and Food Security in Namibia" Urban Forum 25: 191-205.

Pendleton, W., Nickanor, N. and Pomuti, A. (2012). The State of Food Insecurity in Windhoek, Namibia. AFSUN Urban Food Security Series No. 14, Cape Town.

Petersen, L. (2016). "Submission to Grocery Retail Sector Inquiry" Sus- tainable Livelihoods Foundation and DST-NRG Centre of Excellence in Food Security, Cape Town.

Peyton, S., Moseley, W. and Battersby, J. (2015). "Implications of Super-market Expansion on Urban Food Security in Cape Town, South Africa" African Geographical Review 34: 36-54.

Pick n Pay (2016). Pick n Pay Integrated Annual Report 2016. At: www.pick-npayinvestor.co.za/downloads/2016/PnP_IAR_2016.pdf

Popkin B., Adair, L. and Ng, S. (2012). "Global Nutrition Transition and the Pandemic of Obesity in Developing Countries" Nutrition Reviews 70: 3-21.

Popkin, B. and Slining, M. (2013). "New Dynamics in Global Obesity Fac- ing Low- and Middle-Income Countries" Obesity Reviews 14(S2): 11-20.

Reardon T., Henson S. and Berdegué, J. (2007) "'Proactive Fast-Tracking' Diffusion of Supermarkets in Developing Countries: Implications for Mar- ket Institutions and Trade" Journal of Economic Geography 7: 399-431.

Reardon, T. (2011). "The Global Rise and Impact of Supermarkets: An International Perspective" Paper for Conference on The Supermarket Revolution in Food, Canberra, Australia. At: https://ideas.repec.org/p/ags/ cfcp11/125312.html

Reardon, T. (2015). "The Hidden Middle: The Quiet Revolution in the Midstream of Agrifood Value Chains in Developing Countries" Oxford Review of Economic Policy 31: 45-63.

Reardon, T. and Hopkins, R. (2006). "The Supermarket Revolution in Developing Countries: Policies to Address Emerging Tensions Among Supermarkets, Suppliers and Traditional Retailers" European Journal of Development Research 18: 522-545.

Reardon, T. and Minten, B. (2011) "Surprised by Supermarkets: Diffusion of Modern Food Retail in India" Journal of Agribusiness in Developing and Emerging Economies 1: 134-161.

Reardon, T., & Berdegué, J. (2002). The rapid rise of supermarkets in Latin America: challenges and opportunities for development. Development Policy Review, 20, 371–388.

Reardon, T., Barrett, P., Berdegué, J. and Swinnen, J. (2009). "Agrifood Industry Transformation and Small Farmers in Developing Countries" World Development 37: 1717-1727.

Reardon, T., Timmer, C., Barrett, C. and Berdegué, J. (2003). "The Rise of Supermarkets in Africa, Asia, and Latin America" American Journal of Agricultural Economics 85: 1140-1146.

Roland, S., Stevens, Q., & Simon, K. (2024,). The Uncanny Capital: Mapping the Historical Spatial Evolution of Windhoek. In *Urban Forum* 35(1), 121-145.

Ruel, M., Garrett, J., Yosef, S. and Olivier, M. (2017). "Urbanization, Food Security and Nutrition" In S. de Pee, D. Taren and M. Bloem (eds.), Nutrition and Health in a Developing World (New York: Humana Press), pp. 705-735.

Schipmann, C. and Qaim, M. (2011). "Modern Food Retailers and Tradi- tional Markets in Developing Countries: Comparing Quality, Prices, and Competition Strategies in Thailand" Applied Economic Perspectives and Policy 33: 345-362.

Shoprite (2016). Shoprite Holdings Ltd. Annual Financial Statements, 2016. At: https://www.shopriteholdings.co.za/search-results/shoprite-holdings- documents/financial-statements.html

Si, Z., Scott, S. and McCordic, C. (2016). "Supermarkets, Wet Markets and Food Patronage in Nanjing, China" HCP Discussion Paper No. 4, Waterloo.

Skinner, C. (2016). "Informal Food Retail in Africa: A Review of Evi- dence" Consuming Urban Poverty Project Working Paper No. 2, African Centre for Cities, University of Cape Town.

Skinner, C. and Haysom, G. (2017). "The Informal Sector's Role in Food Security: A Missing Link in Policy Debates" HCP Discussion Paper No. 6, Waterloo and Cape Town.

Smit, W. (2016). "Urban Governance and Urban Food Systems in Africa: Examining the Linkages" Cities 58: 80-86.

Spar Group (2016). The Spar Group Ltd. Integrated Report 2016. At: https://www.spar.co.za/About-SPAR/SPAR-Financial/Annual-Reports-(1)

Suryadarma, D., Poesoro, A., Budiyati, S. and Rosfadhila, M. (2010). "Traditional Food Traders in Developing Countries and Competition from Supermarkets: Evidence from Indonesia" Food Policy 35: 79-86.

Thomas, B., Togarepi, C. and Simasiku, A. (2014). "Analysis of the Deter- minants of the Sustainability of Cattle Marketing Systems in Zambezi Region of North-Eastern Communal Area of Namibia" International Journal of Livestock Production 5: 129-136.

Timmer, C. (2009). "Do Supermarkets Change the Food Policy Agen- da?" World Development 37: 1812-1819.

Timmer, C. (2017). "The Impact of Supermarkets on Nutrition and Nutri- tional Knowledge: A Food Policy Perspective" In S. de Pee, D. Taren and M. Bloem (eds.), Nutrition and Health in a Developing World (New York: Humana Press), pp. 737-752.

Toiba, H., Umberger, W. and Minot, J. (2015). "Diet Transition and Supermarket Shopping Behaviour: Is There a Link?" Bulletin of Indonesian Economic Studies 51: 389-403.

Trebbin, A. (2014). "Linking Small Farmers to Modern Retail Through Producer Organizations: Experiences with Producer Companies in India" Food Policy 45: 35-44.

Tschirley, D., Reardon, T., Dolislanger, M. and Snyder, J. (2015). "The Rise of a Middle Class in East and Southern Africa: Implications for Food System Transformation" Journal of International Development 27: 628-646.

Umberger, W., He, X., Minot, N. and Toiba, H. (2015). "Examining the Relationship between the Use of Supermarkets and Over-nutrition in Indonesia" American Journal of Agricultural Economics 97: 510-525.

van der Heijden and Vink, N. (2013). "Good for Whom? Supermarkets and Small Farmers in South Africa: A Critical Review of Current Approaches to Increasing Access to Modern Markets" Agrekon 52: 68-86.

Vink, N. (2013). "Commercialising Agriculture in Africa: Economic, Social, and Environmental Impacts" African Journal of Agricultural and Resources Economics 9: 1-17.

Vorley, B., Fearne, A., and Ray, D. (2008). Regoverning Markets: A Place for Small Scale Producers in Modern Agrifood Chains? (London: Routledge).

Wallace, M. E. (2014). Health and society in Windhoek 1915-1945 1997 (Doctoral dissertation).

Weatherspoon, D. and Reardon, T. (2003). "The Rise of Supermarkets in Africa: Implications for Agrifood Systems and the Rural Poor" Development Policy Review 21: 333-355.

Woolworths (2016). Woolworths Holdings Ltd. 2016 Annual Financial State- ments. At: http://www.woolworthsholdings.co.za/investor/financial_results.asp

World Future Council (nd). Growing Food in Windhoek. At: https://www.worldfuturecouncil.org/file/2017/03/Food-Handbook-final-web.pdf

Zhang, Q. and Pan, Z. (2013). "The Transformation of Urban Vegetable Retail in China: Wet Markets, Supermarkets and Informal Markets in Shanghai" Journal of Contemporary Asia 43: 497-518.

Appendix



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approach. This ensures balanced investment of resources throughout the value-chain from input supply, farm production, aggregation, storage, processing, marketing to consumption in order to sustainably improve food and nutrition security.

It is also accepted globally that food systems are complex adaptive systems composed of many diverse parts/actors whose interactions with each other drive the functioning of the system. A dysfunction in one sector or by one actor, has significant knock impacts to the rest of the actors. Namibia's FNSP therefore looks at innovative, coherent game-changing actions and investments that must be prioritised and undertaken from seed and planting stages to harvesting, processing, marketing and consumption, for both crop and livestock, so as to transform Namibia's food system in a manner that improves food quality, availability, affordability and diversity, on the one hand, and food consumption and dietary diversity on the other, in order to address all forms of malnutrition at every stage of the life-cycle.

The revised policy therefore bridges the policy gap on food and nutrition security in the country and provides an overarching and coordinated framework for the Government and its development partners to tackle and overcome all the causes of malnutrition. It articulates the roles and responsibilities of various stakeholders and has clear coordination mechanisms. The policy acknowledges that other development sectors, such as agriculture, education, gender, social protection, urban and rural development as well as, international cooperation partners, NGOs, private sector, and civil society have critical roles to play in implementing nutrition-specific and sensitive interventions that address the immediate and underlying causes of malnutrition.

2.3 Legal Alignment

The Food and Nutrition Security Policy (FNSP) is well aligned to national sectoral policies, strategies, and the constitution, and contributes to aspirations of the Harambee Prosperity Plan and the Zero Hunger Road Map. It resonates well with international conventions and declarations on food and nutrition, which the Government has ratified for the promotion of food and nutrition security. Table 1 presents the legislative framework and policy alignment of food and nutrition strategies.

Legislative framework	Policy Alignment/FNSP strategies
The Constitution of the Republic of Namibia	Article 95, paragraph (j) which stipulates "consistent planning to raise and maintain an acceptable level of nutrition and standard of living for the Namibian people and to improve public health".
Namibia Vision 2030 [43]	Attainment of objective 5 of the Namibia Vision 2030. Which aims at ensuring a healthy, food secured and breastfeeding nation, in which all preventable, infectious, and parasitic diseases are under secure control, and in which people enjoy a high standard of living, with access to quality education, health and other vital services, in an atmosphere of sustainable population growth and development.

Table 1 Policy alignment for Food and Nutrition Security Policy

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Legislative framework	Policy Alignment/FNSP strategies
	Addresses sectoral strategies of food and nutrition challenges at national, regional and constituency plans through the integration of food and nutrition interventions.
National Development Plan 5 [34]	The NDP5 health pillar aims at achieving a healthy population as core for economic growth and development. It recognises the inter-linkages between nutrition, health, and poverty. It also acknowledges that poor nutrition is a barrier to achieving the health and poverty outcomes in Namibia.
	The FNSP contains strategies aimed at ensuring healthy and productive Namibian population and consequently is aligned to achieving the outcomes of the health and poverty pillars.
Namibia Zero Hunger Road Map (2016 – 2020):[35]	FNSP will provide the framework for the implementation of the Zero Hunger Road Map that outlines strategic actions for ensuring a Namibia without hunger. In addition, FNSP will define the coordination mechanisms to ensure actions and the relevant Government institutions and partners implement targets set within the Road Map.
Namibia Agriculture Policy of 2015 [44]	FNSP supports the Namibia Agriculture Policy to increase and diversify food production in all areas of the country, specifically drought tolerance varieties and crop diversification. It also provides the framework to support farmers to increase the production of nutritious cereal, vegetable and fruit crops for household consumption and as a source of income.
National Gender Policy 2010[45]	The FNSP contributes to the National Gender Policy to create an enabling environment for the empowerment of women ensuring their full participation in socio-economic and decision-making processes in all sectors and at all levels. The FNSP contains nutrition strategies to reduce gender inequalities and improve access to productive resources enabling poor women and girls to overcome poverty.
Namibia Food Safety Policy 2014 [38]	The Objective of the Namibia Food safety policy is to protect consumer health while facilitating trade in food. This is done by ensuring control standards are established and adhered to in regard of food production safety, food product hygiene, animal health and welfare, plant health and preventing the risk of contamination from external substances. It also lays down conditions for regulations on appropriate labelling for foodstuffs and food products.

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Legislative framework	Policy Alignment/FNSP strategies
National Health Policy Framework 2010 – 2020 [46]	The National Health Policy Framework confirms that health and social well-being are fundamental human rights and addresses nutrition as one of the general public health and social services priorities.
National Policy on Sexual, Reproductive and Child Health 2013 [47]	The FNSP is in line with the overall goal of the National Policy on Sexual, Reproductive and Child health that is to enhance the attainment of the highest possible standard of sexual, reproductive health, child health and nutrition for the Namibian population through the provision of equitable, accessible and affordable health and nutrition information and services.
National Rural Development Policy 2012 [48]	The FNSP supports the overall objective of the National Rural Development Policy to achieve a sustainable economic and social advancement in rural areas. Optimal nutritional status of the Namibian population will contribute to the improvement of rural people's standards of living and empowerment to take charge of their own development.
National Policy for School Health 2008 [49]	The FNSP complements the school health policy that aims to promote health education in schools to influence learner's understanding, attitudes and behaviour concerning health and nutrition practices. The FNSP strategies aim at ensuring improvement and maintenance of nutrition status and prevention of diseases.
Namibia School Feeding Policy [50]	The FNSP is in line with the four pillars of the school feeding policy that form the school feeding policy framework. The pillars are aimed at provision of safe, quality, adequate and balanced meals to learners. It also emphasizes the importance of strengthening coordination and sectoral linkages in achieving its objectives. The FNSP considers well- nourished learners as key contributor to the future socio-economic development of Namibia.
Namibia Climate Change Policy 2011	The FNSP support the vision of the National Policy on Climate Change (NPCC), which outlines a coherent, transparent, and inclusive framework on climate risk management in accordance with Namibia's national development agenda, legal framework, and in recognition of environmental constraints and vulnerability. The goal of the NPCC is to contribute to the attainment of sustainable development in line with Namibia's Vision 2030 through strengthening of national capacities to reduce climate change risk and build resilience for any climate change shocks

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Legislative framework	Policy Alignment/FNSP strategies
Global and Regional Conventions	The FNSP resonates well with major elements of the global and regional conventions and guidelines that deal with direct and underlying principles related to food and nutrition security. These include the 1990 World Summit for Children, the World Health Assembly (1991), International Conference for Nutrition (1992 and 2014) and the World Nutrition Summit (1996), which influenced nutrition to become an integral part of the Sustainable Development Goals (2015). The FNSP draws from the global movement on Scaling Up of Nutrition (SUN) movement initiated in 2010 to promote and guide national efforts to improve nutrition and mobilize national and international resources. The FNSP also recognizes Namibia ratification of the Convention on the Rights of the Child and Convention for the Eradication of all forms of Discrimination against Women that include important principles on food production, household food and nutrition security. The Second International Conference on Nutrition (2014), the Zero Hunger Challenge and Malabo Declaration, World Health Assembly (2012), the Scaling Up Nutrition Movement (2010) and more recently the established 1000 days movement with a focus to reducing malnutrition from conception through to the second birthday of a child. At regional level, the FNSP accepts key resolutions related to nutrition and household food security from of the Comprehensive Africa Agriculture Development Programme (CAADP), the African Union New Partnership for Africa's Development (NEPAD) and the Agriculture and Rural Development Strategy for the East African Community.

2.4 Guiding Principles

Namibia as member of the regional and international community is signatory to several instruments such as ICN 2 recommendations, the SUN movement, the SDGs, the 1,000 days' movement, and the African Regional Nutrition Strategy. These instruments are formulated based on updated research and Namibia has the obligation of contributing to their objectives. Further, Namibia has developed several national road maps such as the Vision 2030, Harambee Prosperity Plan, the Zero Hunger road maps and National Development Plan 5. This Food and Nutrition Security Policy is well aligned to the principles of all these instruments. Therefore, implementation and governance of this Policy is founded on the following guiding principles:

 Namibia's commitment to the Universal Human Rights as evidenced by the Namibian Constitution that guarantees the rights of all Namibian to adequate, safe and nutritious foods,



- Commitment to implement the recommendations of regional and global initiatives including the Sustainable Development Goals (SDGs), Maputo Declaration, the Scaling-Up Nutrition Movement, the Zero Hunger Challenge, the second International Conference on Nutrition,
- Equity in access to and implementation of nutrition interventions more specifically, eliminating gender and other inequalities to help address some of the underlying causes of vulnerability to malnutrition,
- Effective coordination within and across sectors including alignment, partnership, and integration for inclusive and effective multi-sectoral collaboration,
- Community empowerment and effective involvement with incentives to engender community acceptance and ownership for implementation including the delivery of evidenced-based actions, good practices, nutritional knowledge, skills, and resources,
- Decentralisation of adequate tools and resources and governance system for better implementation at operational level in accordance with Namibia's commitment to decentralisation,
- Scaling-up of evidence-based interventions that include proven strategies and best practices,
- Life course approach, with a particular focus on the key 'window of opportunity', which is the first 1,000 days. This is a period from pregnancy and the first two years of life to address infant, maternal and adolescent girl nutrition, and
- Accountability and participation at all levels including within and across sectors and at national, regional, district and community levels.

3. POLICY DIRECTION

3.1 Vision

Optimal food and nutrition security for a healthy and productive nation.

3.2 Mission

To provide integrated, affordable, accessible, and equitable, quality food and nutrition security services that are responsive to the needs of the population.

3.2 Goal

To ensure that the population has access to adequate, safe, quality food and water throughout their life cycle that always meets their nutrient requirements for optimal healthy and productive lives.

3.4 Policy Objectives

Objective 1 By 2030, reduce the prevalence of undernourishment from 30.9% to 15% and maintain overweight and obesity among children under five years below 5%, by facilitating the provision of adequate food and nutrition for mothers and children and ensuring optimal health and productivity of the people of Namibia throughout their lifecycle;



- Objective 2 By 2030, increase domestic food production of local consumption from 30% to 60% and enhance processing, marketing, and consumption of food to improve access to nutritious and safe food for the populace of Namibia at all times.
- **Objective 3** By 2030, reduce prevalence of stunting from 24% to 12% through nutritionsensitive interventions and by ensuring access to health care services, sanitation, hygiene, education, and social protection programmes for all people in Namibia.
- **Objective 4** By 2030, increase investment in food and nutrition security by at least 10% of the national budget annually and ensure an enabling environment for effective coordination and implementation.

3.5 Government Policy Objectives, Rationale and Strategies

 Policy Objective 1:
 By 2030, reduce the prevalence of undernourishment from 30.9% to 15% and maintain overweight and obesity among children under five years below 5%, by facilitating the provision of adequate food and nutrition for mothers and children and ensuring optimal health and productivity of the people of Namibia throughout their lifecycle.

Rationale

Inadequate nutrition is a contributor to malnutrition, reduced immunity, and increased susceptibility to disease, impaired physical and mental development, and reduced productivity. Malnutrition can present itself as acute (wasting and underweight), chronic (stunting) or micronutrient deficiencies. Both severe and moderate acute malnutrition are perilous for child survival and major determinants of stunting, which has long-lasting consequences and linkages with slowing development. Namibia has made minimal progress in reducing stunting as compared to wasting and underweight yet if reducing stunting is prioritised, more lives will be saved and all related consequences of child undernutrition will be eliminated. Conversely, Namibia has made progress in lowering acute malnutrition. However, assistance in changing nutrition practices need to be strengthened in both health facility and community settings.

Addressing deficiencies of micronutrients is considered a major component of the stunting reduction strategy. In Namibia, micronutrients of greatest concern include vitamin A, iron, iodine, folic acid and zinc whose deficiencies have devastating consequences ranging from reduction of mental and physical development to impaired growth and related pregnancy complications. Specific strategies for reducing micronutrient deficiencies include promotion of micronutrient-rich diets, fortification of staple foods, point-of-use fortification of complementary foods, and micronutrient supplementations.

Diet-related non-communicable diseases require high-level attention in Namibia because of the increasing prevalence of overweight and obesity in the urban population. Underlying factors contributing to overweight and obesity need to be determined and related strategies for effective prevention developed accordingly.

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Adequate nutritional care and support are recognised as an essential component of the Namibian guidelines for Antiretroviral Therapy (ART) because it contributes to enhancing quality of life, prolong the survival rates of those infected and improve productivity. Therefore, integration of nutrition and HIV interventions should be strengthened.

Namibia is prone to natural disasters including droughts and floods that lead to farming failure, food losses and high livestock mortality. Together with internal population displacements, disasters increase food insecurity and malnutrition. Therefore, there is a need to strengthen food and nutrition security activities in the disaster preparedness and response plan.

Hence, the Government of Namibia commits itself to strengthening actions aimed at preventing and managing all forms of malnutrition through the following strategic measures that are designed to address the underlying and immediate causes of malnutrition that have direct impact on nutritional outcomes.

Strategy 1.1 Increase coverage of evidence-based high impact nutrition-specific interventions aimed at preventing all forms of malnutrition

- 1.1.1 Promote, protect, and support exclusive breastfeeding by enforcing the legislation and monitoring of the implementation of the Code of Marketing of Breast-milk Substitutes
- 1.1.2 Facilitate a supportive family, workplace, and social environment that enable caregivers to provide optimal feeding of their infants and young children
- 1.1.3 Ensure equitable access to optimal feeding and hygiene practices for infants and young children
- 1.1.4 Promote increased intake of micronutrients by infants and young children through consumption of diversified diets, food fortification, home fortification, and micronutrient supplementation
- 1.1.5 Promote and create access to available, affordable, and nutritionally adequate complementary foods for children aged 6–24 months
- 1.1.6 Foster partnerships to expand the scope of actors and implement Multi-Sectoral Nutrition approach towards improving child feeding practices
- 1.1.7 Create a national campaign on "1,000 Days" that promotes awareness messages on the multiple causes of stunting, its negative consequences, services, and practices for its prevention
- Strategy 1.2 Increase coverage of interventions for the management and treatment of acute malnutrition by documenting and sharing best practices at national, regional and global levels.
 - 1.2.1 Scale up high quality health and nutrition services to detect, treat and prevent the occurrence of acute malnutrition among children under the age of five years.
 - 1.2.2 Promote and support community-based approaches for active identification and effective management of acute malnutrition
 - 1.2.3 Enhance the institutional and operational capacity to manage moderate and severe acute malnutrition within health facilities and communities



- 1.2.4 Strengthen and scale up the prevention and treatment of acute malnutrition and the nutritional management of men, women, and children in hospital setting
- 1.2.5 Ensure that operational tools for the policy implementation include guidelines and key messages, norms, and standards for essential strategies such as Management of Acute Malnutrition

Strategy 1.3 Implement Growth Monitoring and Promotion programmes

- 1.3.1 Strengthen capacity of health workers at health facilities and outreach services to monitor infant and child growth of children under the age of five years.
- 1.3.2 Sensitise mothers and women of reproduction age on pre-conditions and enablers for optimal growth
- 1.3.3 Scale up growth monitoring and promotion services via Community Health Workers at community and household level
- 1.3.4 Reinforce information on the use and interpretation of anthropometric indices, cutoff points, and summary statistics used to establish progress on optimal growth
- 1.3.5 Undertake periodic comparisons in levels, trends, and geographical distributions of under- and over-nutrition in pre-school and primary school children in Namibia

Strategy 1.4 Prevention and control of micronutrient disorders

- 1.4.1 Strengthen monitoring of the universal salt iodisation programme to ensure that all salt is adequately iodised
- 1.4.2 Strengthen the quality and coverage of vitamin A supplementation for children under the age of five years and post-partum women
- 1.4.3 Develop national guidelines for the prevention and treatment of micronutrient deficiency disorders (this includes all manner of micronutrient deficiency management)
- 1.4.4 Increase production and use of fortified and bio-fortified foods including point-ofuse fortification

Strategy 1.5 Promotion of optimal maternal nutrition

- 1.5.1 Strengthen pre-conceptual nutrition services and counselling for women of reproductive age and encourage pregnancy spacing
- 1.5.2 Strengthen iron and folic acid supplementation during pregnancy
- 1.5.3 Strengthen community mobilisation to increase access to and use of antenatal care services by women
- 1.5.4 Promote healthy weight gain and adequate nutrition during pregnancy through Antenatal services
- 1.5.5 Introduce measures to prevent adolescent pregnancy and nutrition services and counselling for pregnant adolescents
- 1.5.6 Strengthen interventions to ensure that pregnant and lactating adolescent mothers are adequately nourished
- 1.5.7 Promote nutrition-sensitive services (including family planning, safe motherhood, and prevention or management of infections) in collaboration with relevant sectors



1.5.8 Improve the system of social safety nets to ensure all vulnerable women of reproductive age and their family members have adequate nutrition

Strategy 1.6 Prevention and management of over-nutrition and related noncommunicable diseases

- 1.6.1 Promote practices that encourage diversified diets, food safety, healthy food choices, and healthy lifestyles, and weight management through communication, counselling, and dietary guidelines
- 1.6.2 Strengthen the capacity to screen, manage and provide adequate care for people affected with NCDs
- 1.6.3 Develop tailored dietary guidelines for over nutrition prevention and related NCDs
- 1.6.4 Regularly monitor the prevalence and diet related risk factors for NCDs
- 1.6.5 Further explore lifestyle changes contributing to obesity and overweight and strategies to encourage physical activity
- 1.6.6 Regulate the marketing of processed food and beverages to children and other vulnerable groups
- 1.6.7 Promote and support inclusion and sustainability of physical education in schools
- 1.6.8 Advocate for formulation of guidelines and strategies that will regulate intake of sugar and salt in processed foods

Strategy 1.7 Promotion of optimal nutritional care for people living with HIV, TB, and other infectious diseases

- 1.7.1 Increase access to appropriate nutritional assessment, care and support for people living with HIV & AIDS and TB
- 1.7.2 Provide counselling on diet and exercise to prevent and control diet-related chronic diseases among people living with HIV
- 1.7.3 Strengthen the community HIV programmes nutrition support capacity
- 1.7.4 Promote and strengthen provider-initiated testing and counselling (PITC) at nutritional recuperation units
- 1.7.5 Coordinate and implement services in health facilities and activities in workplaces, communities, and homes to protect, promote and support breastfeeding among women living with HIV with full ART cover

Strategy 1.8 Promotion of universal access and utilisation of quality primary health care services to all people

- 1.8.1 Promote and support health and nutrition education to increase the level of awareness of good nutrition
- 1.8.2 Promote integration of nutrition services in all routine and outreach health services and programmes targeting children and mothers
- 1.8.3 Promote and support breastfeeding policies, programmes, and initiatives
- 1.8.4 Promote and support appropriate complementary feeding practices

- 1.8.5 Promote utilisation of antenatal and postnatal care services among all pregnant and lactating women to monitor child growth, and the health and nutrition status of both the mother and the child
- 1.8.6 Advocate for, and support scale-up of new or existing programmes with low coverage
- 1.8.7 Prevent, control, and manage communicable diseases such as malaria, diarrhoea and HIV.

Strategy 1.9 Develop nutrition preparedness and response plans for emergency situations interventions

- 1.9.1 Ensure that policies, strategies and practices in emergencies and humanitarian crises promote, protect, and support breast-feeding and cater for non-breastfeeding mothers
- 1.9.2 Ensure implementation as per national guidelines for infant feeding in emergencies
- 1.9.3 Strengthen workforce capacity for managing nutrition in emergency situations
- 1.9.4 Improve supplementary feeding programmes for infants and young children in emergency situations
- 1.9.5 Ensure screening mechanisms are in place for targeting of nutrition and its related services to underserved communities and vulnerable groups in humanitarian situations
- 1.9.6 Improve supply chain management and logistics in emergency situations to treat and refer cases of severe acute malnutrition
- 1.9.7 Carry out sensitisation programmes for communities to raise their awareness of prevention, mitigation and response to risks of malnutrition during emergencies
- 1.9.8 Strengthen early warning systems on food and nutrition information from community to national levels

Policy Objective 2: By 2030, increase domestic food production of local consumption from 30% to 60% and enhance processing, marketing, and consumption of food to improve access to nutritious and safe food for the populace of Namibia at all times.

Rationale

The UNICEF conceptual framework (1990) which has been in use for programming for the past 28 years by the nutrition community identifies inadequate dietary intake and disease as the two immediate causes of malnutrition, disability and death. Dietary intake is underpinned by household food security. Therefore, improving household food security has a high potential to prevent and control undernutrition, particularly wasting, stunting and micronutrient deficiencies through food-based approaches. Intervention packages and practices that combine improved food security with nutrition education have been shown to be more successful in improving nutritional status than stand-alone agricultural interventions.



The revised Namibia Agricultural Policy provides direction for increasing crop and livestock production, increasing household income through agro-business development, and promoting marketing and trade of Namibian safe, raw and processed agricultural products.

Strategy 2.1 Strengthening local production of safe and nutritious foods especially by smallholders' farmers and facilitate markets.

- 2.1.1 Enhance the use of sustainable agricultural technologies to increase production, processing, storage and handling of bio-fortified staple and nutrient-rich foods
- 2.1.2 Promote the production and consumption of locally grown indigenous nutrient-rich foods through increased awareness of their benefits and facilitate market access through formal marketing channels such as the Agro Marketing and Trade Agency and others.
- 2.1.3 Promote climate-smart agriculture and conservation
- 2.1.4 Strengthen agricultural inputs to enhance growth and food diversification for smallholder farmers that can still not afford agriculture inputs
- 2.1.5 Promote irrigation development and integrated water resources management
- 2.1.6 Promote sustainable and resilient agriculture through supporting livelihood approaches and new technologies that are climate resilience.
- 2.1.7 Strengthen research on new technologies and methodologies to enhance climatesmart agriculture
- 2.1.8 Promote fisheries, especially aquaculture, through access to finance, training, equipment, and market linkages

Strategy 2.2 Improve both physical and economic access to safe and nutritious foods at household levels

- 2.2.1 Facilitate marketing of local surplus produce, and access to adequate, diverse, safe, and affordable food at household level
- 2.2.2 Promote and support income generating activities of food insecure households through agro-processing and small-scale agricultural technologies
- 2.2.3 Promote production, marketing, and consumption of diversified nutritious foods at household and community levels
- 2.2.4 Advocate for and support integration of nutrition in agricultural programmes at national and local government levels
- 2.2.5 Promote and support local food processing and value addition at household and community level
- 2.2.6 Promote production and consumption of indigenous foods across seasons to enhance diet diversification
- 2.2.7 Scale-up urban and peri-urban horticulture program, incorporating backyard gardening projects
- Strategy 2.3 Improve processing, storage and preservation of nutritious foods and reduce food waste and loss



- 2.3.1 Promote preparation at and dissemination of nutritious local recipes to household and community level
- 2.3.2 Promote national and local systems for food processing, preservation and smallscale storage technologies that preserve nutrients and increase the supply of nutritious foods
- 2.3.3 Promote food practices that reduces food waste and losses at household level
- 2.3.4 Develop a national framework to enhance postharvest handling of food and reduce food loss and waste
- 2.3.5 Support the standardisation of food handling and management during processing, storage, and transportation
- 2.3.6 Support the establishment of food banks to minimise food losses
- 2.3.7 Support the establishment of a coordination body to direct a comprehensive food management system
- 2.3.8 Promote fish canning, marketing, and distribution
- Strategy 2.4 Strengthening capacity for implementation of nutrition-sensitive intervention within the agriculture sector
 - 2.4.1 Strengthen nutrition promotion and education in agricultural extension training
 - 2.4.2 Promote extension service system as a platform to deliver food and nutritioninformation to farming households
 - 2.4.3 Strengthen the capacity of farmers' unions in service delivery to farmers, especially with focus on digital extension, facilitation of farmer organisation for input acquisition, knowledge sharing and market linkage promotion

Strategy 2.5 Strengthening the resilience capacity of households to various shocks

- 2.5.1 Scale up the implementation of nutrition-sensitive safety nets and social protection programmes to address chronic vulnerability linked to strengthening livelihoods to build resilience among vulnerable groups
- 2.5.2 Provide technical and financial assistance to small-scale farmers in the Green Scheme farming, rural communities, and horticulture programmes
- 2.5.3 Establish an integrated risk management and reporting system for monitoring and assessing livelihood and vulnerability
- Strategy 2.6 Promotion of agricultural approaches that mitigate the negative impact on nutrition
 - 2.6.1 Ensure that nutrition is enhanced across all stages of the food system, from production through consumption
 - 2.6.2 Identify agricultural interventions and practices that are harmful to human nutrition and enhance mitigation strategies

Strategy 2.7 Create a conducive, healthy, and safe food industry

2.7.1 Encourage consumer demand for healthy foods and meals through sensitisation of communities on their benefits



- 2.7.2 Strengthen partnership with the food industry to foster implementation of nutrition related legislation such as food fortification, labelling, food safety, public and environmental health
- 2.7.3 Facilitate the establishment and accreditation of a national network of food testing laboratories to international / regional food safety institutions.
- 2.7.4 Strengthen policies and regulations that encourage gradual reduction of saturated fat, sugars, salt/sodium, and trans-fat in foods
- 2.7.5 Promote healthy diet-friendly public facilities such as hospitals, childcare facilities, workplaces, schools, food and catering services

Strategy 2.8 Promote irrigation development and integrated water resources management

- 2.8.1. Facilitate investment in rainwater harvesting and water management
- 2.8.2. Encourage use of rivers and underground water resources for irrigation to diversify crop farming
- Strategy 2.9 Promote environmental systems and land management for sustainable agriculture development
 - 2.9.1. Support the development of strategies for climate change adaptation
 - 2.9.2. Encourage productive utilisation of arable land in communal areas

Policy Objective 3: By 2030, reduce prevalence of stunting from 24% to 12% through nutrition-sensitive interventions and by ensuring access to health care services, sanitation, hygiene, education, and social protection programmes for all people in Namibia

Rationale

Malnutrition is not just due to diseases or lack of food, but also because of poor access to health care services, sanitation and hygiene, and education. In addition, lack of access to resources and lack of women empowerment indirectly contribute towards malnutrition. Scientific evidence suggests that implementation of the ten proven high-impact nutrition-specific interventions to scale, with a 90% coverage, can reduce prevalence of stunting and severe wasting by 20% and 60% respectively (Lancet 2013). Nevertheless, implementation of nutrition-sensitive interventions designed to address the underlying causes of malnutrition yield more benefits in reducing malnutrition.

Empowerment of women through increased income, access and control over resources and reduction in female work overload are linked to improved child nutrition. Evidence has shown that an increase in USD10 in woman's income achieves the same improvements in children's nutrition and health to an increase of a man's income by USD110 (Farming First and FAO 2015: the female face of farming). This is because women are more likely to spend additional income on food and healthcare when compared to men. In addition, reduction of time constraints on women positively affects caring capacity and practices for children, self-care, and care for the family. To address these underlying determinants of malnutrition, the following strategic actions will be undertaken.

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Strategy 3.1 Enhance and sustain equitable access to safe water, hygiene, and sanitation interventions

- 3.1.1 Promote measures that ensure equitable access to safe water
- 3.1.2 Promote scaling up of community approaches to total sanitation
- 3.1.3 Promote interventions on awareness of infectious disease prevention and management strategies at community and household levels
- 3.1.4 Encourage treatment of recycled water in agriculture
- 3.1.5 Promote and support interventions on hand washing with soap (and where possible with liquid soap)
- 3.1.6 Enhance communication and advocacy for improved sanitation and hygiene practices.

Strategy 3.2 Improve school nutrition and nutrition awareness

- 3.2.1 Integrate and strengthen nutrition education on infant feeding, maternal nutrition, and healthy eating into curricula for Early Childhood Development, formal and informal education. and parenting communities
- 3.2.2 Enhance nutritional sensitivity of the national school feeding programme through appropriate emphasis on hygiene and sanitation practices, deworming, gardening, and small animal husbandry in all participating schools
- 3.2.3 Promote physical education and exercise in schools at all levels
- 3.2.4 Ensure that the foods offered in institutional settings provide meals that meet optimal dietary requirements for targeted age groups and disease conditions
- 3.2.5 Promote water, sanitation and hygiene promotion education and practices in institutional settings
- 3.2.6 Build capacity of institutional staff on food handling, safety, and hygiene practices
- 3.2.7 Promote school gardens especially in schools in areas with rivers and springs to aid learning on agriculture and to supplement school feeding programme

Strategy 3.3 Promote social protection interventions for improved nutrition

- 3.3.1 Provide social transfers to the most vulnerable households and communities
- 3.3.2 Strengthen the quality-of-service provision and expand coverage of social protection measures, including conditional and non-conditional cash transfers to target nutritionally vulnerable groups
- 3.3.3 Promote nutrition education activities in social protection interventions to increase household awareness of optimal nutrition practices
- 3.3.4 Promote nutrition-sensitive interventions such as school feeding programs as vehicles for nutrition education, micronutrient supplementation, deworming, school gardening for vulnerable groups
- 3.3.5 Promote off-farm employment opportunities through economic empowerment programmes and other income generating activities

- Strategy 3.4 Enhance women and youth's (including persons with disability) empowerment for improved nutrition status of household members and communities.
 - 3.4.1 Promote gender-sensitive approaches in agriculture, primary health care, water and sanitation, social protection, and education.
 - 3.4.2 Ensure meaningful participation of designated groups in all decision-making processes related to the food and nutrition security issues
 - 3.4.3 Promote labour and time-saving technologies to reduce women's workload
 - 3.4.4 Support women's access to productive resources and income-generating opportunities
 - 3.4.5 Encourage the retention of learners, especially girls, at school
 - 3.4.6 Ensure that women and youth empowerment programmes have nutrition goals and outcomes.

Strategy 3.5 Improve the livelihood and nutritional status of Marginalized Communities

- 3.1.1 Strengthen coordination among stakeholders to ensure full implementation of targeted initiatives towards marginalised communities
- 3.1.2 Advocate and promote the related human rights for marginalised communities
- 3.1.3 Ensure that learners and students from marginalised communities have equitable access to primary, secondary and tertiary education
- 3.1.4 Strengthen existing collaboration with key stakeholders to expedite the provision of water, land, housing and sanitation
- 3.1.5 Increase, improve and mobilize Marginalised Communities towards socioeconomic empowerment programmes
- 3.1.6 Strengthen the registration and coverage of marginalised communities to benefit from social protection interventions
- 3.1.7 Intensify the registration of undocumented marginalised community members within Namibia
- 3.1.8 Ensure that food items under the Marginalised Community Feeding Programme have sufficient nutritional value for all beneficiaries

Policy Objective 4: By 2030, increase investment in food and nutrition security by at least 10% of the national budget annually and ensure an enabling environment for effective coordination and implementation

Rationale

The achievement of the nutrition goal relies not only on capacities of individuals and organisations to design and implement cost effective interventions, but also on a set of supportive programmes and activities required to ensure that the core set of nutrition interventions are competently delivered to the target population. This requires financial resources and well-educated and adequately skilled staff. To monitor the implementation of

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nutritional interventions and assess progress in outcomes as well as to inform decisionmaking, a comprehensive monitoring and evaluation system at all levels will be implemented.

Key to enhancing implementation outcomes, is the ability to learn and share information on gaps and corrective measures and adjust programme implementation accordingly in real-time by navigating between the original log frame and the realities on the ground that arise during implementation (referred as adaptive management).

Accurate data and information are important not only for evidence-based planning and implementation but tracking the changes in welfare and living conditions of the Namibian population. The food and nutrition information management system needs to be strengthened and implemented through national surveys, monitoring and evaluation and other assessments and reviews as well as a problem-based operations research. Food and nutrition information from various sources need to be strategically disseminated to promote effective use among stakeholders.

Achieving the objectives of the policy to reduce the burden of malnutrition will also require stakeholders to accurately track progress and performance, evaluate impact, and ensure accountability at all operational levels. Therefore, a comprehensive M&E and accountability system for food and nutrition aligned with NDP-5 will be developed based on existing mechanisms for collecting routine data.

To increase investment and raise the profile of food and nutrition, policy makers and other key players will need to be sensitised on social and economic consequences of poor nutrition for Namibia's development through advocacy activities. A communication strategy is required to support advocacy, resource mobilisation, alliance building and to effectively promote social mobilisation and behavioural change.

In addition to good governance and accountability, the policy recommends the following strategies to strengthening the supportive programmes, activities and services.

There is a global consensus that sustainable improvement in nutrition requires nutritionspecific and nutrition-sensitive interventions, underpinned by an enabling environment for securing and sustaining political momentum and resources, and converting momentum into actions on the ground.

In Namibia, nutrition is currently given high priority in development objectives as evidenced by its positioning in Vision 2030 and NDP 5. However, persistent, and causal complexity of remaining and emerging food and nutrition security challenges requires strategic advocacy to sustain and increase political leadership and further build political commitment to sustain momentum and resources.

A major challenge in reducing food and nutrition insecurity in Namibia and other Sub-Saharan African countries is the tendency to focus on individual interventions often undertaken by single sectors rather than on collaborative, coordinated and mutually reinforcing strategies. Therefore, it is essential to create a conductive environment for a multi-sectoral approach through mainstreaming food and nutrition security into development policies and programmes, comprehensive scope and coverage of interventions, effective coordination and

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accountability across sectors and among development partners at all levels. In this Policy, the enabling environment for food and nutrition will be reinforced through four major strategies as follows:

Strategy 4.1 Enhanced capacity for food and nutrition security policy implementation

- 4.1.1 Implement a comprehensive human resource plan for nutrition in Namibia in collaboration with the national human resource plan
- 4.1.2 Increase the capacity of relevant sectors and stakeholders at the national and subnational levels to implement nutrition-specific and nutrition-sensitive interventions relevant to their mandate
- 4.1.3 Strengthen the institutional, technical, and infrastructure capacity of relevant institutions to develop and carry out problem-based nutrition operational research
- 4.1.4 Analyse the social and economic impacts of child undernutrition through the Cost of Hunger in Africa Study and provide evidence supporting investments in human capital for sustainable development in Namibia

Strategy 4.2 Strengthening Integrated Food and Nutrition Information management system for improved decision-making and programming at all levels

- 4.2.1 Maintain and continuously improve the existing comprehensive and integrated health information system for the country
- 4.2.2 Strengthen the existing nutrition surveillance system at all levels of operation
- 4.2.3 Strengthen the quality of food and nutrition data systems, specifically in collection, collation, analysis, interpretation, and dissemination
- 4.2.4 Analyse the nutrition situation in Namibia through the Fill the Nutrient Gap Study to identify barriers in accessing and consuming healthy and nutritious food for improved decision-making and programming
- 4.2.5 Harmonise the food and nutrition security implementation plan with other strategic frameworks such as Sustainable Development Goals, the SUN movement, Zero Hunger Road Map, ICN 2 framework for actions and the National Climate Change Strategic and Action Plan
- Strategy 4.3 Enhance a national interest in and commitment to improving nutrition programmes through functional communication plan
 - 4.3.1 Ensure full dissemination of the policy in forms ranging from the full document to summaries and electronic versions
 - 4.3.2 Develop and implement tailored communication and advocacy strategy to inform and influence decisions that affect food and nutrition security outcomes on all levels in Namibia
 - 4.3.3 Strengthen and sustain capacity for advocacy, resource mobilisation and social mobilisation
 - 4.3.4 Create effective platforms for information sharing on Food and Nutrition Security and networking for decision and policy formulation
 - 4.3.5 Establish Champions to advocate for Food and Nutrition messages at all levels



Strategy 4.4 Enhance sustained commitment, governance, and resources

- 4.4.1 Advocate for and stimulate domestic investments in food and nutrition interventions
- 4.4.2 Encourage ethically public-private partnerships in addressing hunger and malnutrition issues
- 4.4.3 Strengthen budget tracking for food and nutrition interventions

Strategy 4.5 Mainstream food and nutrition security into national, sectoral, regional, and local plans and promote common result-based frameworks

- 4.5.1 Foster alignment of policies, projects, programmes, objectives, and indicators that impact food and nutrition security across different ministries and agencies
- 4.5.2 Strengthen alignment of development partner programmes and funding mechanisms within their respective mandates
- 4.5.3 Encourage identification and mitigation of potential harmful actions for Food and Nutrition Security
- 4.5.4 Ensure that all NDPs have budget lines for food and nutrition security
- 4.5.5 Strengthen coordination institutions to enhance the implementation of the Namibian Zero Hunger road map

Strategy 4.6 Develop appropriate food and nutrition security legislations, regulatory instruments, and guidelines

- 4.6.1 Review, analyse and modify existing sectorial policies and programmes on food and nutrition to ensure their suitability to emerging changes
- Strategy 4.7 Strengthen policy and legal frameworks for coordination, planning, monitoring and evaluation for food and nutrition security activities
 - 4.7.1 Establish and implement a functional governance structure that ensures effective implementation of food and nutrition security interventions
 - 4.7.2 Establish and operationalise a strong and authoritative government-owned and -led coordination body on all levels
 - 4.7.3 Advocate for the establishment of Food and Nutrition Security academic programmes at various levels of academic institutions to enhance human resource capacity
 - 4.7.4 Facilitate the development of a monitoring and evaluation system for the implementation of food and nutrition security policy

4. INSTITUTIONAL ARRANGEMENTS AND COORDINATION

The current policy intends to achieve optimal nutrition for everyone in Namibia, by means of specific and targeted strategies, focusing on strengthening the enabling environment for effective actions in ending hunger, preventing, and managing all forms of malnutrition, ensuring equitable food security for all households in Namibia. It also aims at promoting and

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ensuring wide coverage of nutrition-sensitive interventions to address underlying causes of malnutrition, strengthening supporting programmes and services needed for effective policy implementation, and establishing and enforcing a strong governance system. Each strategy needs to be implemented through a set of measures which are under the responsibility of several sectors, notably Health and Social Services, Agriculture, Water and Land Reform, Education Arts and Culture, Higher Education, Technology and Innovation, Fisheries and Marine Resources, Urban and Rural Development, Gender Equality, Poverty Eradication and Social Welfare, Industrialisation and Trade, etc. In addition to these government ministries and agencies, effective implementation of the policy requires engagement and contribution from development partners, civil society organisations, academia, and the private sector.

Therefore, the responsibility for the implementation of the policy framework lies with all stakeholders, and a multi-sectoral governance system will be strengthened to ensure effective coordination and accountability.

4.1 Governance and Coordination

Food and nutrition security concerns are multi-sectoral and best addressed through a well-coordinated multi-sectoral approach. Hence, an institutional framework will be initiated with the aim of supporting stakeholders at all levels to successfully operationalise the FNSP. The FNSP will galvanise the achievements realised so far and strengthen the existing coordination, planning and management mechanisms to guide policy and harmonise programming.

The Government will provide overall leadership of the policy implementation with assistance from development partners, civil society organisations, and research and academic institutions.

Effective coordination, planning and management for food and nutrition interventions has always been a priority for the Government of the Republic of Namibia. In support of the multisectoral approach, the Government will establish a four level Food and Nutrition Security Coordination mechanism for Namibia from the national to the subnational level.

National level: refers to the first and top tier ranking for decision-making for all Food and Nutrition Security Policy implementation directives and emerging concerns. The national structure comprises of two bodies. 1) The Food and Nutrition Security Council, which is the over-arching body for all stakeholders, involved in food and nutrition security activities in the country. The Right Honourable Prime Minister will chair the Council. 2) The Food and Nutrition Security Inter-Agency Steering Committee (FNSIASC) is the body that provides coordination, management and implementation of Food and Nutrition Security Policy, chaired by Secretary to Cabinet as outlined in the Coordination Structure document. The FNSIASC addresses all technical issues regarding food and nutrition security in the country. The technical experts will work in specialised units or working groups to address specific components of food and nutrition security issues in line with government departments, development partners, and civil society's alliances. Still at the national level, the National Secretariat will offer all the administrative support to the two institutions, link and coordinate the stakeholders. The National secretariat will be hosted in the MAWLR and work closely with other stakeholders.

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Regional level: refers to the second tier ranking of operation level for decision making for Food and Nutrition Security programming. The regional development committee is the overarching supervisory body for the food and nutrition security stakeholders in the region. It comprises of a food and nutrition security technical team with similar composition of that of the national level that advice the regional development team on Food and Nutrition Security matters. The Sub-National Secretariat will be hosted under the Directorate of Planning at the Regional Council supervised by the Chief Regional Officer. The role of sub-national secretariat is the same as that of the national level secretariat.

Constituency level: refers to the third tier ranking of operational level for decision-making navigated by Regional Council through the constituency development. Due to lack of adequate technical capacity at the constituency levels, matters regarding food and nutrition security will be relayed through the different Development Committees like the Local Authority Development Committee, Village Development Committee, Settlement Development Committee, and Locality Development Committee. The community resource persons and agriculture extension workers will sit in the various development committees to discuss Food and Nutrition Security Matters.

Community level: refers to the fourth tier ranking of operational levels for decision making at the community level steered through community-based organisations, community leaders, community health workers, the community members, faith-based organisations and other existing and relevant structures in the community. The community leaders and representatives of the community organisations will report to the constituency development committee.

4.2 Stakeholder Roles and Responsibilities

The policy also recognizes the critical needs for creating a supportive environment that seeks to promote complementary and harmonized efforts and to maximize synergies for existing resources, capacity, and programs across all relevant government sectors, development partners, private sector and civil society organisations.

Given the multi-sectoral and multi-stakeholder nature of this policy, the proposed actions will be implemented through a coherent and coordinated approach, which will foster collaboration between line ministries, regional and local authorities, development partners, CSOs, training and research institutions and private sector. Therefore, responsibility for implementation will be shared among stakeholders and there will be both individual and collective accountability for results.

4.2.1. Office of the President: National Planning Commission (NPC)

National Planning Commission will:

- Support resource mobilisation for the implementation of food and nutrition security activities in all relevant sectors,
- Ensure that priority research topics and data needs for computation of indicators on food and nutrition security are included in national surveys, and
- Support the development, revision and reviewing of related regulated framework on Food and Nutrition Security



4.2.2. Office of the Prime Minister (OPM)

The Office of the Prime Minister will oversee the Food and Nutrition Security Coordination structure and its implementation up to the subnational level through the various government sectors. Further, the Directorate of Disaster Risk Management (DDRM) in the Office of the Prime Minister will ensure that Food and Nutrition Security issues in emergency preparedness and responses are integrated into the sectoral preparedness and response plans. The OPM as a public service coordinating body will:

- Strengthen nutrition and agricultural linkages.
- Ensure that policies are implemented and oversee human resource development and management for the various ministries,
- Provide timely and reliable data on emergency for programming purposes (planning, provision of nutrition services and monitoring),
- Coordinate resource mobilisation in cases of emergency, and
- Chair the Food and Nutrition Security Council.

4.2.3. Ministry of Health and Social Services

MoHSS will play a key role in the achievements of the FNSP especially under nutrition-specific interventions. In addition, the Ministry will:

- Strengthen public health care system and human capacity to respond to nutrition needs at all levels of the system,
- Take responsibility to provide technical support and guidance to all sectors as well as
 to disseminate the nutrition policy and associated action plans to other stakeholders
 and the community at large;
- Enhance accountability on FNSP implementation,
- Take necessary steps to strengthen the integrated health information systems with a wide spectrum of key nutrition indicators,
- · Promote healthy lifestyles in families,
- Seek to build the capacity of its personnel at all levels in nutrition information management to enhance data collection, reporting and utilisation, and
- Ensure that all elderly and disabled are entitled to quality health and nutrition care information and services.

4.2.4. Ministry of Agriculture, Water and Land Reform (MAWLR)

The MAWLR is responsible for promotion of food production security for all Namibians and specifically mandated to promote sustainable production, productivity, and diversification of the agricultural sector towards food security and the sustainable management and utilisation of land and water resources. To achieve this MAWLR will:

- Under the Department of Land Reform, ensure that Namibia's land resource is equitably allocated, efficiently managed, administered, and sustainably used for the benefit of all Namibians,
- Strengthen land and property rights to realise Namibia's development objectives related to poverty alleviation, food security, environmental sustainability and advancing women's empowerment,



- Collaborate with Ministry of Industrialisation & Trade and research institutions on the production of micronutrient rich-foods, and production of drought resistant food crops,
- Ensure adequate sanitation and equitable access to adequate safe water for all Namibian households, particularly in underserved areas, and
- Ensure national, community and household food security, and
- Host the National Secretariat for the implementation and coordination of National Food and Nutrition Security Policy, Implementation Action Plan as well as the Coordination Structure.

4.2.5. Ministry of Education, Arts and Culture (MEAC)

The MEAC will:

- Strengthen school-based nutrition programmes including nutrition education through classroom curricula, nutrition-sensitive school feeding programme, school gardening and school health activities including deworming, micronutrient supplementation, sexual and reproductive health, and water, sanitation, and hygiene promotion,
- Ensure that Physical Education will be an examinable subject to promote physical activity and healthy lifestyle throughout the life cycle, and

4.2.6. Ministry of Higher Education, Technology, and Innovation (MHETI)

The MHETI will:

- Ensure an environment conducive for human resource development, including pre-service and in-service opportunities to meet the requirements for a well-trained and skilled workforce for food and nutrition security,
- Support skills development through the Technical and Vocational Education and Training system, inclusive of skills development needed in the attainment of food security and nutrition,
- Support efforts to start food and nutrition security degree programmes, including certificate and diploma courses in food and nutrition security,
- Support efforts in the undertaking of food and nutrition security research in institutions of higher learning aimed at enabling technologies and product development,
- Support the development and implementation of appropriate innovative strategies/interventions towards food and nutrition security,
- Collaborate with the National Commission on Research, Science and Technology (NCRST) to promote the establishment of research and analytical laboratories and facilities that can address food and nutrition security problems.

4.2.7. Ministry of Industrialisation and Trade (MIT)

Part of the Ministry's mandate is to develop and maintain economic regulatory framework, create conducive environment for business and promote value addition. In line with this, MIT will:

 Collaborate with the relevant OMAs and the private sector to regulate imported and locally processed food products,



- Strengthen its existing policies and strategies to promote value addition to locally
 produced goods, especially agro-processed food and ensure that it is done in a manner
 that does not compromise nutritional content of the product, and
- Promote fair pricing and trade and ensure that food and beverages on the Namibian market meet the country's nutritional standards and protect consumer health.

4.2.8. Ministry of Gender Equality, Poverty Eradication and Social Welfare (MGEPESW)

The MGEPESW will:

- Provide leadership in advocacy for equitable and gender sensitive nutrition programming including food supply to needy families and the implementation of growth monitoring and promotion,
- Take leadership in advocacy for adequate maternity leave as it relates to breastfeeding promotion and protection, and national campaign for 1,000 days' movement,
- Promote male involvement in maternal, infant, and young child nutrition care; train
 and educate women, girls, men, and boys on how gender impacts on nutritional status
 and food and nutrition security and educate the public on and reinforce existing
 policies, guidelines, acts and regulations related to maternity protection, maternal
 health, infant feeding, and child welfare grants,
- Provide support to poor rural, urban, and peri-urban populations to enhance food
 production and income-generating activities through the Implementation Plan for the
 Blueprint on Wealth Redistribution and Poverty Eradication and the Zero Hunger
 Road Map,
- Ensure quality of service provision and make sure that the safety net programme targets nutritionally vulnerable groups.

4.2.9. Ministry of Defence and Veteran Affairs (MDVA)

The MDVA will:

- Ensure that all maternal and child health and nutrition services are provided to the Namibia Defence Force members and their families,
- Create awareness among the Defence Forces and their families by developing information, education and communication materials on food and nutrition security,
- Collaborate with the Ministry of Health and Social Services to ensure that the MDVA health care providers are oriented towards the provision of quality nutrition care services, and
- Provide logistical support in emergency nutrition preparedness and response, and when possible be responsible for exceptional, large-scale programmes.

4.2.10. Ministry of Labour, Industrial Relations & Employment Creation (MLIREC)

The MLIREC together with all relevant stakeholders will:

- Ensure children are protected from child labour and traditional practices harmful to optimal nutrition,
- Support the ratification and implementation of the ILO Maternity Protection Convention No. 183 of 2000 and its recommendations, and



 Work towards ensuring fully paid maternity leave for all employees including those in the private sector.

4.2.11. Ministry of Sport, Youth and National Service (MSYNS)

The MSYNS will:

- Support Behaviour Change Communications and healthy lifestyles including nutrition
 and physical activity, and
- Incorporate nutrition, food security, food safety and health issues into existing youth development programmes

4.2.12. Ministry of Fisheries and Marine Resources (MFMR)

The MFMR will:

- Promote freshwater aquaculture to enhance food security, generate income and improve rural livelihoods through a pro-poor policy with production targeted primarily to ensure food security in local communities,
- Promote marine aquaculture (known as mariculture) targeting farming of high value export species,
- · Promote fish canning and related value-addition,
- Strengthen conservation, sustainable use and mainstreaming of biodiversity in coastal and marine ecosystems in Namibia, and
- Ensure the production and availability of fish products in the local market to contribute to enhancing micronutrient intakes while providing income to the people.

4.2.13. Ministry of Information and Communication Technologies (MICT)

The MICT will collaborate with the relevant sectors to:

- Inform and educate the population on nutrition issues,
- Assist with the social mobilisation for nutrition including advocacy, community involvement and behaviour change communication,
- Through a variety of appropriate channels such as broadcasts (TV and radio), and print and electronic media, it will ensure that Namibians receive accurate and timely information related to nutrition policies, regulations, and laws as well as best practices and norms.

4.2.14. Ministry of Environment, Forestry and Tourism (MEFT)

The MEFT will:

- Mainstream food and nutrition security into mitigation and adaptation strategies for managing the threat of desertification, drought, climate change and other disasters,
- Specific to climate change, will take up the designated role as the government agency
 responsible for the coordination and implementation of climate change policies and
 measures including sustainable land management and biodiversity conservation to
 protect the present and future development gains for the country.

4.2.15. Ministry of Justice (MoJ)

The MOJ will

- ensure that laws and regulations related to food and nutrition security such as food safety, food standards and the Environmental and Public Health Act related to International Code for marketing of Breastmilk Substitutes are enforced,
- Play a critical role in revision of the Labour Act to put into effect changes to maternity
 protection provisions,
- Assist with the review and updating of food and nutrition related legislation, and
- Ensure justice for citizens on health, nutrition, and food security issues.

4.2.16. Ministry of Urban and Rural Development (MURD)

The MURD will:

- Mainstream WASH, food and nutrition security into regional and district development programmes and projects and enforce by-laws,
- Establish and strengthen sub-national coordination platforms for multi-sectoral planning,
- Assist with food distribution and WASH in emergency situations requiring food distribution,
- Accelerate a broad-based rural industrialisation and economic growth through enhanced rural infrastructure development, research and appropriate technology development, income generation and employment creation,
- Use constituency development funds to support community, family and child health and food and nutrition initiatives in their various constituencies,
- Local government shall ensure nutrition is included in local development plans. They
 shall mobilize resources for the implementation of interventions and the
 operationalization of sub-national multi-sectoral platforms.

4.2.17. Ministry of Finance (MoF)

The MoF will:

- Coordinate resource mobilisation for food and nutrition security and make concomitant provisions for food and nutrition security in the national budget, and
- Ensure adequate budget allocation and track expenditures for food and nutrition security in all sectors.

4.2.18. Ministry of Works and Transport (MWT)

The MWT will:

- Facilitate and support the construction and maintenance of food and nutrition building and transportation infrastructure,
- Facilitate the movement of goods (food and nutrition products), and
- Provide early warning services in terms of natural disasters which may impact food
 production and security such as floods, droughts etc.



4.2.19. Namibia Statistic Agency (NSA)

NSA in collaboration with the stakeholders will:

- Develop a nutrition information management system to strengthen the evidence base for food and nutrition security programming, and
- Ensure findings are disseminated in a timely manner to enable effective planning and M&E.

4.2.20. Namibia Standards Institution (NSI)

The NSI will:

- Develop and disseminate quality national standards of food products including imported and locally produced foods and micronutrient fortified products, and
- Reinforce the food quality control system and assist sectors in enforcing the Public Health Act relevant to their activities.

4.3 Legal and Regulatory Arrangements

The National Food and Nutrition Security Policy derives from the Constitution of the Republic of Namibia, Article 95, paragraph (j) which stipulates that "consistent planning to raise and maintain an acceptable level of nutrition and standard of living of the Namibian people and to improve public health". It conforms to the international conventions and declarations on food and nutrition, which the Government has adopted or ratified for the promotion of nutrition.

This policy aligns with the country's national development priorities. The Namibian Vision 2030 provides the foundation for principles of nutrition security. The fifth Objective of the Vision is to "ensure a healthy, food secured and breastfeeding nation, in which all preventable, infectious and parasitic diseases are under secure control, and in which people enjoy a high standard of living, with access to quality education, health and other vital services, in an atmosphere of sustainable population growth and development".

The Fifth National Development Plan (NDP-5) which is the main instrument for implementing policies and programmes aimed at achieving Vision 2030 acknowledges the nexus between nutrition, health and poverty. For example, NDP-5 considers nutrition as barrier to achieving health outcomes but also as a determinant and an outcome of poverty in Namibia.

The revised policy also aligns with objectives of several sector policies, strategies and programmes as well as regulatory frameworks that impact food and nutrition security. These strategic documents listed in Annex 1 are from health and social services, agriculture and forestry, gender and child welfare, fisheries and marine resource, poverty eradication, education, industry, and trade just to name a few.

4.4 Resource Mobilisation

Government will create a budget line for food and nutrition and secure resources for each cycle of the implementation plan. The Implementation Action Plan will include both nutrition-specific and sensitive interventions carried out by several line ministries and development partners. All stakeholders will be expected to budget for and secure own financial, human and

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material resources to ensure effective implementation of activities they are responsible for. In case of insufficient funding, stakeholders will mobilise resources and technical assistance. Government will explore ways in which the private sector can participate in reaching the policy goals, in line with Government policies and priorities. At Regional and District levels, food and nutrition security interventions will be included in development plans and budgeted accordingly.

4.5 Monitoring and Evaluation framework

Monitoring of this Policy will entail a range of activities that will describe and analyse the development and implementation of policy objectives. Through the monitoring process, lead implementers and co-partners will be charged with the responsibility of identifying potential gaps in implementation, outline areas of improvement and account for their activities and resource utilisation. The monitoring reports will gauge the level and quality of stakeholder engagement and track progress of achieving the intended policy outcomes.

The Policy Implementation Action Plan (Section 5) contains key components essential for monitoring progress of policy implementation. The monitoring and reporting tool (Supplementary document 2) enables each lead implementer to report on the objectives, strategic outcomes, activities, outputs, output indicators, status of actual interventions and related results. Lead implementers will at least annually submit their monitoring reports to the Food and Nutrition Security Steering Committee (FNSSC) and the FNSC Secretariat or as often as mandated by the FNSC- steering committee.

Monitoring and evaluation of these sectorial related activities will be completed concurrently with mandatory assessments of the progress made in the implementation of the sector plans. The information obtained should contribute towards continuous policy review (section 4.7). Thus, the continuous review should report on physical and financial implementation rates, progress and achievements, effectiveness of strategies and activities, gaps and challenges, lessons learned and recommendations for revising the policy.

4.6 Advocacy and Dissemination

Proper communication and dissemination are important elements in raising awareness on the policy, creating ownership, and enhancing commitment. The launch of the endorsed policy will be publicised through television, radio, and print media in all of Namibia's most spoken languages in order to raise awareness of the existence of the document. Following the adoption of the policy, all relevant stakeholders involved in the implementation will be availed with copies. Copies will be provided to academic institutions and libraries and made available for online access on the website of relevant institutions.

Plain language summary of the policy will be developed and other formats of the documents for advocacy purposes will be developed for the high-level decision makers and traditional leaders. Finally, a communication and social mobilisation plan for food and nutrition security will be developed to support and enhance implementation of the action plan.

4.7 Policy Revision

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Food and Nutrition Security agenda is dynamic, and priorities may change quickly. Therefore, the current policy shall not be considered as a static document. Rather, it should be revised as national priorities change and new evidence becomes available. Each revision should be undertaken only after an in-depth evaluation of the implementation of the policy and related action plans. The following eight steps may be followed during the revision of the policy; 1) Policy review 2) research and analysis, 3) stakeholder consultations, 4) draft policy, 5) review and revision, 6) implementation, 7) evaluation and 8) revised policy. Prior to each revision of the policy, FNSC in collaboration with the National Planning Commission will conduct a thorough evaluation of the policy implementation.

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