



SWAZILAND MINISTRY OF AGRICULTURE



SWAZILAND MARKET ASSESSMENT REPORT

DECEMBER 2016



Shiselweni Region Food Security and Resilience

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Acronyms

AGOA	African Growth and Opportunity Act
CBT	Cash Based Transfer
CPI	Consumer Price Index
CSI	Coping Strategy Index
CSO	Central Statistics Office
C&V	Cash and Vouchers
FAO	United Nations Food and Agriculture Organization
FCS	Food Consumption Score
HDDS	Household Diet Diversity Score
IPC	Integrated Food Security Phase Classification
KCal	Kilocalorie
KG	Kilograms
Km	Kilometers
Lt	Litres
M	Metres
MMAC	Maize Marketing Advisory Committee
MoA	Ministry of Agriculture
MT	Metric Tonnes
MoT	Ministry of Trade
NAMBORD	National Agriculture Marketing Board
NDMA	National Disaster Management Authority
NMC	National Maize Corporation
RBJ	Regional Bureau Johannesburg
RCS	Red Cross Swaziland
RDA	Regional Development Area
SACU	South African Customs Union
SAGIS	South African Grain Information Service
SME	Small and Medium Enterprises
SOMI	Swaziland Oil Milling Industry
Swazi VAC	Swaziland Vulnerability Assessment Committee
SZL	Swaziland Lilangeni/Emalangeni
TWG	Technical Working Group
USD	United States Dollars
VAC	Swaziland Vulnerability Assessment household Report
VAT	Value Added Tax
WB	World Bank
WFP	United Nations World Food Programme
WVI	World Vision International
ZAR	South African Rand

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Executive summary

- Southern Africa experienced an unprecedented El Niño phenomenon affecting the region with two consecutive years of drought and erratic rains. The year 2015 was the hottest and driest year on record (in over a century) for South Africa and 2016 is set to top this record. With numerous member countries affected by drought¹, SADC announced a regional state of emergency, requesting US \$2.4 billion to address the effects of the crisis.
- The unfavourable climatic conditions have triggered a second year of heightened food insecurity levels in the region. Southern Africa's 2014-15 harvest had a 7.9 million tonnes cereal deficit while the 2015-16 cereal deficit was estimated at 6.4 million tonnes, forcing the region to import food to meet national food requirements.
- Multiple countries in the region depend on South Africa for their food security. Grain SA (an association of South African grain farmers) estimates that the Southern African Customs Union (Botswana, Lesotho, Namibia and Swaziland) will have to depend more than ever on South Africa for their food security. Grain SA estimated that South Africa was to export 810,000MT to SACU nations to support their food security needs for the 2016-17 marketing season.
- A Swazi VAC Assessment conducted in May 2016 found the estimated total number of food insecure people in Swaziland to have increased to 638,251 people from 320,973 in July 2015 (an increase of 99 per cent).
- Swaziland has averaged an annual cereal production of 92,000 tonnes since 2011. Even in exceptionally good harvest years, Swaziland only produces enough to meet roughly 45 per cent (110,250 tonnes) of its annual total cereal requirements (approximately 245,000 tonnes).
- Swaziland produced 34,000 tonnes of cereal for the 2016-17 marketing season, down from 94,000 tonnes in 2015-16 (-64 per cent) and down from the five-year average (2011-2015) of 92,000 tonnes (-63 per cent)². In terms of national requirements, Swaziland has produced only 20 per cent of its national cereal requirement for the 2016-17 marketing season. The remaining 80 per cent (197,000 tonnes) will need to be imported from South Africa, up from a five-year average of 62 per cent.
- Food prices, especially maize, have been falling in Southern Africa for most of 2016. The price of maize meal in Swaziland, however, has not seen a similar reduction in 2016. Maize meal was on average 53 per cent more expensive in Swaziland in August/September 2016 compared to the southern African average. Making it the country with the second highest price of maize meal per kg in the region, second only to Namibia which is a non-maize producer. Swaziland's National Maize Corporation (NMC) is not anticipating reducing its maize grain prices till March 2017. The high price of maize has already forced many households to opt for cheaper alternatives such as rice and sour porridge.
- As a result of falling commodity prices, southern Africa is also experiencing serious national currency devaluations. This is having an impact on consumer purchasing power especially affecting the value

¹ Lesotho, Malawi, Swaziland and Zimbabwe declared a state of drought emergency in 2016 while Mozambique has issued a state of red alert related to the drought and eight out of nine Provinces in South Africa reported a drought emergency

² Using official RVAC figures

of remittances from Swazis living abroad. Between February 2015 and December 2016 Zambia's Kwacha fell by 25 per cent; Mozambique's Metical fell by 109 per cent; Angola's Kwanza fell by 60 per cent; and South Africa's Rand fell by 21 per cent, against the US Dollar.

- The main objective of the MoA Swaziland 2016 Market Assessment was to determine market capacity and functionality in the most food insecure Tinkhundla of Swaziland during the 2016-17 consumption year. The market assessment data was also used to guide a cash based transfer (CBT) modality selection process where Tinkhundla were recommended the most appropriate CBT intervention modality (cash, vouchers and/or in-kind) based on a set of monitored indicators. More information can be found on the 2016 Swaziland CBT Response Options Report.
- The assessment employed primary and secondary data sources to gather data. Structured trader and key informant questionnaires were used to collect the primary data while key stakeholder discussions were undertaken to obtain information from market actors.
- A total of 35 markets in 29 Tinkhundla across the country's four regions were assessed. In total, 12 wholesalers, 64 medium vendors, and 43 small traders/retailers were interviewed using a structured questionnaire for a total of 119 traders.
- Interviewed traders identified low consumer demand (24.4 per cent of interviewed traders) and limited trader capital (10.7 per cent of interviewed traders) as key constraints to trade. These are typically constraints that can be addressed through the use of CBT interventions. Other key constraints to trade mentioned by the traders were: shortage of supply (19 per cent), insecurity (19 per cent), transport limitations (15.5 per cent), competition (9.5 per cent) and food assistance (1.8 per cent).

Section 1: Introduction

The Kingdom of Swaziland is a small landlocked nation surrounded by Mozambique and South Africa. Swaziland is one of the smallest nations in Africa with a total area of around 17,364 square kilometres of which 0.9 per cent is covered by water. Even though small in size the country has four distinct climatic regions; Highveld, Middleveld, Lowveld, and the Lubombo Plateau. Just over 10 per cent of its land is arable (AFDB, 2016a).

There are approximately 1.25 million people living in the country, out of which 78 per cent live in rural areas. Around 63 per cent of Swazis live below the national poverty line (AFDB, 2016b). In rural areas, this increases to 73 per cent (IFAD, 2016).

Unemployment is high in Swaziland, estimated at 28.1 per cent (AFDB, 2016b). A majority of people in rural areas (70 per cent) rely on the agriculture sector for employment, which is prone to natural hazards, mainly drought, flash floods and pests (WFP, 2016).

With an estimated 26 per cent of those aged 15-49 years old and 42 per cent of pregnant women, living with HIV/AIDS, Swaziland has the highest HIV/AIDS prevalence rate in the world. The country also has a very low average life expectancy rate at birth of 48.9 years and high chronic malnutrition levels with one in four children suffering from stunted growth as a result of malnutrition.

This difficult socio-economic situation has been further exacerbated by the worst drought to hit southern Africa in the last 35 years. The drought in 2015-16 resulted in poor performance of the agriculture sector with well below average production levels and death of 67,120 cattle, representing 11 per cent of the national herd.

Swaziland Fact File

Population:	1.25 million (2013, WB), 78% live in rural areas
Climate:	Continental climate. Rainy season October – April (spring and summer), winter (June – August) is largely dry and cold. Temperatures range between 40° C in the summer in the Lowveld to 13° C in the winter in the Highveld.
Political administration:	The country is divided into 55 Tinkundla which are found within 4 regions: Hhohho, Manzini, Shiselweni and Lubombo.
Currency:	Lilangeni (pegged to the SA Rand)
GDP Total:	US \$4,357 billion (WB, 2016)
GDP Per Capita:	US \$9,782 (WB, 2014)– Lower Middle Income Country
HDI:	0.531 – 150 (low, HDR 2014)
Gini Index:	0.495 (high, WB 2015)
Poverty Headcount:	63% (living below poverty line, AFDB)



1.1 The Economy

Swaziland's economy relies on agriculture, manufacturing and services as well as remittances from the South African Customs Union (SACU). Government services (mainly revenues from The South African Customs Union – SACU) contribute the most to GDP (46 per cent) with manufacturing such as textiles and sugar-related processing at 37 per cent and agriculture, forestry and mining accounting for about 13 per cent of GDP. Agriculture represents around 11.5 per cent of GDP and remittances from abroad (mainly South Africa) to be around 4 per cent of GDP).

Economic growth has slowed from 2.5 per cent in 2014 to 1.7 per cent in 2015 and is projected at 1.3 per cent for 2016 (WB, 2016). The fall in GDP growth is in large part due to the drought which reduced agricultural production in Swaziland and in South Africa, which in turn reduced revenues for Swaziland from SACU. Other elements affecting Swaziland's reduced economic growth are a weaker mining sector as result of the fall in commodity prices and loss of AGOA (African Growth and Opportunity Act) eligibility status. **Table 1** below gives a breakdown of GDP contributions by sector of the economy in 2015.

Table 1: GDP by sector (percentage of GDP at current prices)

Sector of the Economy	2015
Agriculture, forestry and mining	13
...of which Agriculture	11.5
Manufacturing (textiles and sugar-related processing)	37
Remittances (Mainly from South Africa)	4
Services	46

Source: AfDB, 2016

Swaziland depends heavily on South Africa from which it imports 90 per cent of commodities and sends 70 per cent of its exports to. The country recently experienced the termination of its AGOA eligibility status which gave it preferential access to the US market for the sale of textiles and food commodities. It currently still has trade ties with the EU to which it exports sugar. Swaziland has therefore been struggling to be competitive in light of the trade agreement changes and reduced revenues from dampened agricultural production.

Swaziland pegged its currency (The Lilangeni) to the South African Rand due to its close trade agreements with South Africa. This has effectively transferred the country's monetary policy to South Africa and allows for purchasing imports at par with the South African Rand. Over the past two years, the US \$ has been appreciating against the Rand which in turn also meant it appreciated against the Lilangeni, negatively impacting the country's trade by making overseas imports more expensive and reducing revenue from trade. Between 2013 and mid-2016 the Rand had depreciated by 58 per cent from an average of RZA 9.7/US \$ in 2013 to RZA 15.3/US \$ in June 2016. However, since then the Rand has strengthened to 13.8/US \$ in December 2016 (see **Figure 1**).

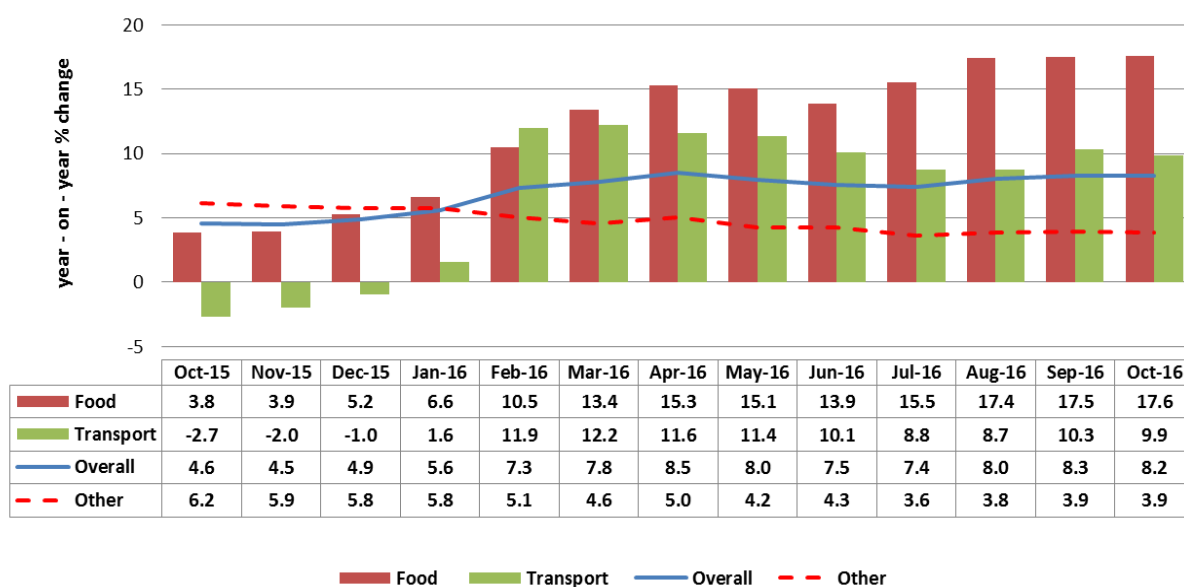
Figure 1: Exchange Rate over Time: South African Rand per 1 US \$



Source: <http://www.xe.com/currencycharts/?from=USD&to=ZAR&view=5Y>

Swaziland’s headline inflation nearly doubled from 4.9 per cent in July 2015 to 7.4 per cent in July 2016. The greatest influence was registered from food price inflation which rose from 3.4 per cent to 15.5 per cent over the same period. Transport costs also increased considerably from 0.5 per cent to 8.8 per cent over the same period (Table 2).

Table 2: Inflation Trends; July 2015 to July 2016



Source: CSO through Central Bank of Swaziland, 2016

1.2 Food Availability

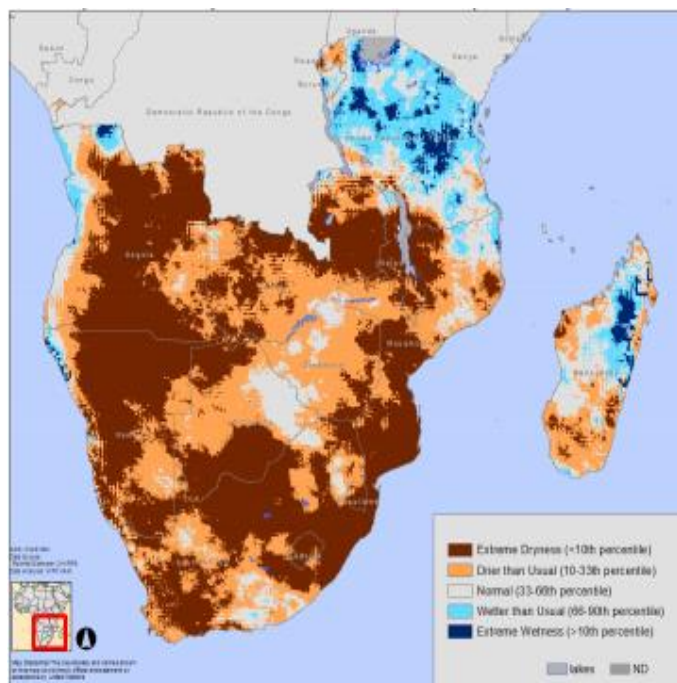
Swaziland is a predominantly rural society, with most of the population dependent on subsistence agriculture for their livelihoods. The country has a dual land tenure system consisting of 1) Swazi Nation Land (SNL), constituting around 60 per cent of total land area and is held in trust by the King who allocates it to households through traditional chiefs on his behalf, and 2) Title Deed Land (TDL) which is freehold land and mainly owned by companies (mainly sugarcane, forestry, citrus and pineapple plantation companies) as well as by some individuals.

Production on TDL is market-oriented and uses modern technology and irrigation systems, while production on SNL is largely subsistence-oriented and rain-dependent. Agriculture's contribution to Gross Domestic Product (GDP) is currently estimated at around 11 per cent. TDL contributes about 80 per cent to the agricultural sector while around 10 per cent comes from SNL, with the remaining contribution from livestock and forestry.

Swaziland's 10.4 per cent of available arable land produces on average (2010 – 2015) 55 per cent of the country's maize requirements annually. The remaining 45 per cent is imported.

In view of the magnitude of the impact of the two consecutive years of drought (2014 – 15 and 2015 – 16) on the population, the Swazi government declared a State of National Emergency on 18 February 2016.

Map 1: Southern Africa Two Year (June 2014 – May 2016 Rainfall extremes within 1984-2016 Percentiles)



Swaziland, like the rest of southern Africa, experienced an extremely pronounced El Niño weather system which brought sporadic rains and extensive droughts. This was the worst El Niño to affect Southern Africa in 35 years and has meant that the region, Swaziland included, has been affected by two consecutive years of droughts (2014-15 and 2015-16). **Map 1** below shows how extreme the drought was when expressed compared to the historical records (1981-present). Extreme dryness or wetness was defined as amounts falling in the driest or wettest 10 per cent of the record – corresponding to the 3rd driest/wettest or worse. The map also shows less extreme drier and wetter than average regions.

Source: WFP VAM

The two consecutive drought years have led to significant regional cereal deficits. For the 2016-17 marketing season, the regional cereal deficit is of 6.4million MT (**Table 3**). Swaziland produced only 34,000 MT for the 2016-17 marketing season down from 94,000 MT in 2015-16 (-64 per cent) and down from the five-year average (2011-2015) of 92,000 MT (-63 per cent). In terms of national requirements, Swaziland has only produced 20 per cent of its national cereal requirement for the 2016-17 marketing season. The remaining 80 per cent (197,000 MT) respectively will need to be imported. Up from a five-year average for cereal imports of 62 per cent.

Table 3: SADC 2016-17 cereal availability update – (RVAC, August 2016)

Preliminary Cereal Balance Sheet by Country ('000 MT)												
Country	Ang	Bot	Les	Mal	Moz	Nam	RSA	Swa	Tan	Zam	Zim	SADC
A. Domestic Availability	2497	19	65	2207	2675	112	13157	49	9695	3607	854	34,938
A.1 Opening Stocks	123	13	34	15	379	32	3861	15	238	811	216	5,737
Formal/SGR	89	13	28	15	248	32	3390	9	51	811	163	4,850
On Farm	34	-	6	-	131	-	430	1	-	-	53	650
Other	-	-	-	-	-	-	41	4	187	-	-	29,201
A.2 Gross Harvest	2374	6	31	2192	2296	80	9297	34	9457	2797	638	29,201
A. Gross Domestic Requirement	4011	476	358	3391	3587	327	14438	245	8356	3051	2969	41,210
A. Desired SGR Carryover Stocks	-	-	-	-	-	-	-	-	150	-	-	150
A. Domestic Shortfall/ Surplus	-1514	-457	-293	-1184	-912	-215	-1281	-197	1189	556	-2115	-6,422
A. Percent availability vs. requirement	62%	4%	18%	67%	75%	34%	91%	20%	116%	118%	29%	85%

Source: RVAC

*Not including figures from DRC, Madagascar, Mauritius and Seychelles

SADC's regional maize deficit for the 2016-17 marketing season is 2.9million tonnes. Swaziland produced 33,000 tonnes of maize for the 2016-17 marketing season, down from 81,623 tonnes in 2015-16 (-60 per cent) and down from the five-year average (2011-2015) of 88,506 tonnes (-63 per cent). In terms of national requirements, Swaziland has only produced 27 per cent of its national maize requirement for the 2016-17 marketing season. The remaining 73 per cent (114,000 tonnes) respectively will need to be

imported. Up from five-year average maize imports of 29 per cent. **Tables 4a** and **4b** below show SADC's and Swaziland's maize balance sheets.

Table 4a: SADC 2016-17 Maize availability update – (RVAC, August 2016)

Preliminary Maize Balance Sheet by Country ('000 MT)												
Country	Ang	Bot	Les	Mal	Moz	Nam	RSA	Swa	Tan	Zam	Zim	SADC
B. Domestic Availability	2282	5	47	2078	1988	75	1044 4	42	6215	3397	725	27,298
A.1 Opening Stocks	44	1	22	15	194	28	2901	9	66	668	213	3,525
Formal/SGR	14	1	16	15	97	28	2471	4	51	668	163	3,337
On Farm	30	-	5	-	97	-	430	1	-	-	50	183
Other	-	-	-	-	-	-	-	4	15	-	-	4
A.2 Gross Harvest	2238	4	25	2063	1794	46	7543	33	6149	2729	512	17,174
B. Gross Domestic Requirements	2812	221	253	3251	2102	173	1101 1	157	5202	2562	2274	30,018
B. Desired SGR Carryover Stocks	-	-	-	-	-	-	-	-	150	-	-	150
B. Domestic Shortfall/Surplus	-530	-216	-206	-1172	-114	-98	-567	-114	863	835	-1549	-2,869
B. Percent availability vs. requirement	81%	2%	19%	64%	95%	43%	95%	27%	119%	133%	32%	91%

Source: RVAC

*Not including figures from DRC, Madagascar, Mauritius and Seychelles

Table 4b: Swaziland - AEZ Maize Production 2009/10–2014/15 (tonnes) with 2015/16 Production Forecast

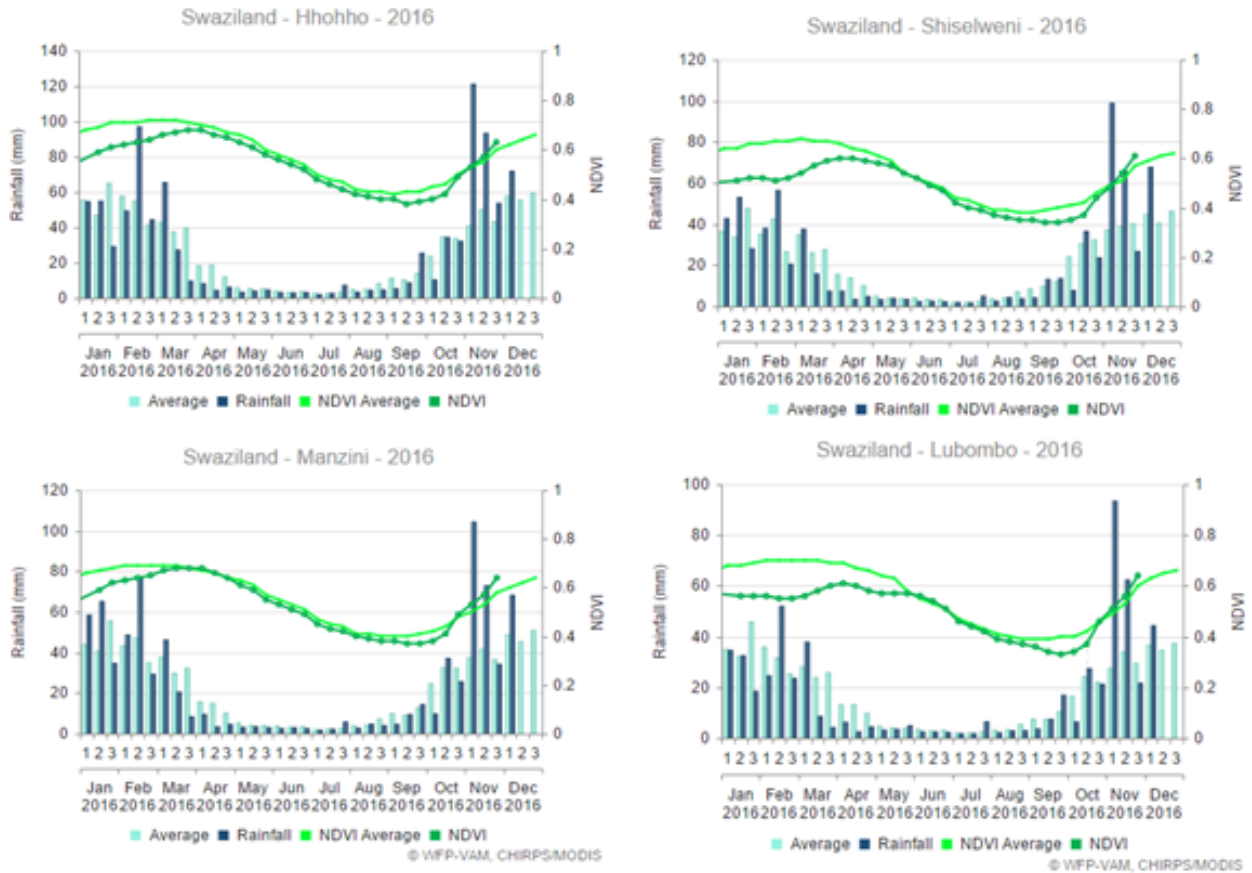
	2010/11	2011/12	2012/13	2013/14	2014/15	5-year average	2015/16*	2015/16 as % of 5 year average
Highveld	36 437	31 315	31 440	38 821	32 887	32 814	17 208	52.4
Middleveld	33 127	32 056	32 738	48 097	39 548	35 733	13 602	38.1
Lowveld	12 532	9 273	12 994	19 081	6 646	13 176	1 741	13.2
Lubombo	2 589	2 774	4 762	12 872	2 542	5 472	908	16.6
National	84 685	75 418	81 934	118 871	81 623	87 195	33 460	38.4

Source: MoA

*AEZ maize production forecast

Swaziland received below average cumulative rainfall throughout the 2015/2016 rainfall season. Between September 2015 and September 2016 654.9mm of rain fell in Swaziland compared to the average of 815.2 for the same range of months, representing a fall of 19.7 per cent (**Figure 2**). The low levels of precipitation coupled with high temperatures have contributed to acute water scarcity in the country. This has had a significant impact on agricultural production levels especially maize production (as explained above) and on overall vegetation levels. As a result livestock, a key source of livelihoods for many Swazi communities has been heavily affected. At least 67,120 cattle, representing 11 per cent of the national herd, had died by May 2016 due to the drought (2015 – 2016).

Figure 2: Rainfall and NDVI across four regions in Swaziland

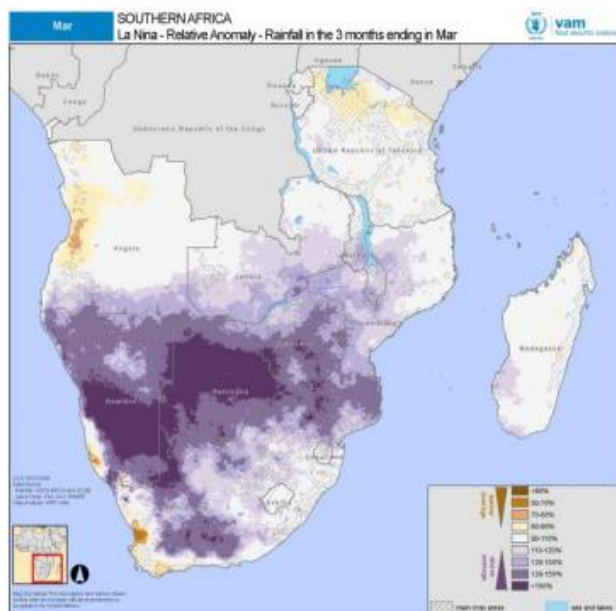


Source: WFP http://dataviz.vam.wfp.org/Agroclimatic_Charts (WFP, 2016a)

However, the forecast for the 2016-17 season is positive. A ‘neutral’ La Niña is expected to positively influence rainfall patterns in southern Africa for the coming planting and cropping season. It is widely anticipated that rainfall between October 2016 and March 2017 will be above average. Already rainfall across Swaziland in October and November 2016 was 40.4 per cent above average for the time of year (273mm compared to 195mm) pushing-up NDVI levels to above average for the time of year. The expectation is that January to March 2017 will see a continuation of this trend (**Map 2**). In-line with the above average levels of rainfall experienced in the region in the fourth quarter of 2016, the International

Grains Council of South Africa has set its South African 2016-17 maize production estimate at 12.9million tonnes, which is 72 per cent higher than the 2015-16 crop production level for the country (Agbiz, 2016).

Map 2: Southern Africa Predicted Rainfall January – March 2017



Average January-March rainfall for La Niña seasons 1981-2013 compared to Neutral seasons. Browns: La Niña drier than neutral seasons; Purples: La Niña wetter than neutral seasons. Southern Africa in 2017 is expected to generally receive above average rainfall.

Source: WFP

1.3 Food Security and Nutrition – Swazi VAC 2016

A total of 259,623 people (30 per cent of the rural population) were classified in Integrated Food Security Phase Classification (IPC) Phases 3 and 4 for the period April – June 2016 (current situation). Two projections were calculated for the likely evolution of the number of vulnerable people. For the period July to September 2016 (first projection) a total number of 314,612 were estimated to require support Phases 3 and 4. The second projection scenario for the period October 2016 – February 2017 presented a further worsening of the situation with an increase in the number of rural people facing livelihood related as well as food deficits across all regions of Swaziland to be estimated at 350,069. The worse-off regions with significant livelihood related as well as food shortages were found to be Lubombo and Shiselweni. The total population that will require livelihood support over the consumption period (October 2016 – February 2017) is estimated at 638, 251. This represents the rural population in IPC Phases 2, 3 and 4 in the second projection (**Table 5**).

Table 5: Vulnerable Population by Regions – 2nd IPC Projection (October 2016 – February 2017)

Region	Rural Population	Phase 1	Phase 2	Phase 3	Phase 4
Hhohho	248 791	87 077 (35%)	99 516 (40%)	62 197 (25%)	
Lubombo	197 201	39 440 (20%)	49 300 (25%)	78 880 (40%)	29 580 (15%)
Manzini	264 321	105 728 (40%)	79 296 (30%)	66 080 (25%)	13 216 (5%)
Shiselweni	200 230	40 046 (20%)	60 068 (30%)	70 080 (35%)	30 034 (15%)
Average		272 291 (29%)	288 182 (31%)	277 239 (31%)	72 831 (9%)

Source: Swazi VAC Report

In general, there has been an overall deterioration in food security outcomes across all regions in Swaziland in 2016. Of the rural population, 73 per cent of households have acceptable food consumption, 22 per cent borderline and 5 per cent poor food consumption. The Manzini and Lubombo regions have a higher percentage of households with borderline and poor food consumption. The Household Dietary Diversity Score (HDDS) presents low levels of dietary diversity among households. Of the households, 31 per cent have low dietary diversity consisting mainly of cereals and pulses, while 54 per cent with medium dietary diversity. The Manzini, Shiselweni and Lubombo regions have more than 30 per cent of households with low dietary diversity. Overall 21 per cent of households spend more than 75 per cent of their income on food with Manzini and Shiselweni regions representing a higher proportion of households in this category. Rapid inflationary changes influencing prices will have a greater impact on households' purchasing power, reducing expenditure on non-food items and savings, predisposing households to further food security shock hereby increasing their vulnerability.

The Lubombo region has the highest levels of negative coping strategies. A Coping Strategy Index (CSI) of 17.7 indicates that households in the regions are employing more negative coping strategies as a result of shocks affecting their households. The region faced more pronounced and longer lasting shocks in 2016 than usual with prolonged drought spells and poor rains leading to crop failure. Female-headed households have a higher CSI (CSI of 15) compared to male headed households (CSI of 14), indicating that the shocks are affecting households differently depending on household composition and initial vulnerability levels. The Lubombo region also reported the highest percentage (39 per cent) of households employing emergency coping strategies. Using the Integrated Food Security Phase Classification (IPC) thresholds, 5 per cent of the country's households are using high levels of coping while 35 per cent are employing medium levels of coping while 60 per cent employ either very low coping strategies or none at all.

Water, sanitation and hygiene remain a challenge in Swaziland. In particular low access to clean drinking water, precarious household health environment, and poor feeding practices are widespread across the country. Overall, 63 per cent of Swazi households uses improved water sources for domestic purposes.

The levels in Manzini and Shiselweni regions are considerably lower than the other regions as only 58 and 56 per cent respectively of rural households retrieve water for domestic use from improved water sources. Hhohho region has the highest (71 per cent) per cent of households with access to improved water sources. Distance to water sources is still a challenge across the country as more than 7.5 per cent of the population travels more than 0.5km to access their water source. The Lubombo region has the highest proportion of households with poor access to water. Poor households have limited access to water with only 11.7 per cent having access to water within their homes in comparison to the 66.5 per cent of households in the richest wealth quintile.

Household food insecurity in Swaziland negatively impacts health and the development of children and adults leading to increased hospitalisation, poor health, iron deficiencies, developmental risks and behaviour problems. In terms of household morbidity, households hosting a chronically ill person was higher in female-headed households (25.7 per cent) compared to male headed households (23.3 per cent). Severe Acute Malnutrition (SAM) is high in the Manzini region and low in the Shiselweni region. Higher morbidity was reported in Lubombo region in comparison to the other regions.

High food prices are undermining the purchasing power of poor households across the region. The national VAC food security assessments conducted in May-July 2016 highlighted that the number of food-insecure people has increased in the SADC region by 10.9 million people in 2016 from 30.5 million people in 2015 to 41.4 million people in 2016. This represents an increase of 35 per cent (**Table 6**). Swaziland is one of the countries which has experienced the highest increase in the number of food insecure compared to the national population. The country has seen an increase of 317,278 people from 320,973 people in 2015 to 638,251 people in 2016, representing an increase of 99 per cent.

Table 6: Changes in the number of food insecure people in southern Africa 2010/11 – 2016/17

Country	Marketing Year							% change
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	
Angola			367 190	665 000	755 678	1 253 048	1 253 048	0%
Botswana				28 936	29 306	30 318	57 411	89%
DRC	5 860 872	5 445 000	6 395 448	7 318 639	6 591 535	4 456 106	7 500 000	68%
Lesotho	200 000	514 000	725 519	223 055	447 760	463 936	709 394	53%
Madagascar						1 800 000	1 140 000	
Malawi	508 089	272 502	1 972 993	1 855 163	1 312 376	2 833 212	7 609 040	169%
Mozambique	350 000	245 000	270 000	212 000	150 000	375 905	1 980 000	427%
Namibia	42 100	243 474	74 711	778 504	117 662	578 480	729 134	26%
South Africa	14 547 022	12 871 320	13 625 930	13 798 024	14 060 928	14 349 445	14 349 445	0%
Swaziland	160 989	88 511	115 713	289 920	223 249	320 973	638 251	99%
Tanzania	1 141 214	1 618 795	1 472 127	828 063	424 136	358 505	358 505	0%
Zambia	53 629	74 804	62 842	209 498	351 267	798 948	975 738	22%
Zimbabwe	1 287 937	1 390 000	1 668 000	2 206 924	564 599	2 829 159	4 071 233	44%
SADC	24 151 852	22 763 406	26 750 473	28 413 726	25 028 496	30 448 035	41 371 199	36%

Source: RVAC Dissemination meeting 9-10 June 2016

*Not including figures from DRC, Madagascar, Mauritius, Seychelles and Tanzania

More in-depth information on the country's food security and nutrition situation can be found in the CBT Modality Selection Report (WFP, 2016b) and in the 2016 Swazi VAC Report (Swazi VAC, 2016).

Section 2: Objectives, methodology and limitations

2.1 Objectives

MoA requested the market assessment to determine the functionality of food market systems (for maize, rice, pulses and cooking oil) in Swaziland. The market assessment was also undertaken to inform the design and implementation of humanitarian assistance programmes in 2016-17. The market assessment covered the country's 4 regions, all of which had been identified by a prior Swazi VAC food security assessment to be highly food insecure for the 2016/17 consumption season. This market assessment identified whether local markets have the ability to effectively respond to increased consumer demand by verifying adequate food supply sources/levels and that the likelihood that food prices will remain stable in the short and long term. Specific objectives of the assessment include the following:

Market structure	Identify the key actors and institutions as well as assessing the supply chain for cereals (maize grain, maize meal and rice), pulses (sugar beans) and vegetable oil
Availability of food items	Analyse current and projected availability of cereals, pulses and cooking oil in local markets across Swaziland
Market integration	Establish how well the source and supply markets are linked
Market patterns	Analyse volumes stored and traded, price levels and trends, price setting behaviour, competition and seasonality
Capacity to meet consumer demand	Analyse the market's potential to respond to current and transfer-induced increases in consumer demand, e.g. through storage facilities, stocking levels, stock replenishment lead-time, etc.
Use of markets	<p>Analyse physical and economic access of the food insecure populations in the country to local markets, how they (the markets) respond to price variations of food and non-food commodities, the distance of vulnerable populations from markets and their road access to their key markets, etc.</p> <p>Analyse the market's potential or capacity to respond to current and transfer-induced increases in consumer demand, e.g. through assessing the number of traders by operational capacity, storage facilities, stocking levels, stock replenishment lead-time;</p>
Overall market environment	Analyse the role and implication of government policies and regulations, road and transport infrastructure and the socio-political situation on trade patterns and volumes
Provide recommendations on:	<ul style="list-style-type: none"> ▪ The most appropriate assistance modality for the assessed Inkhundla ▪ How to address the identified bottlenecks for traders to meet increased demand and strengthen respective supply chains.

2.2 Methodology

The market assessment employed both secondary and primary data sources to meet the assessment's objectives (see **section 3.1**) and to identify suitable markets for market-based response options. Primary data was collected using structured trader and market key informant questionnaires.

The key informant questionnaire was undertaken at region level with the government's Regional Development Agency (RDA) acting as key food security informants. The key informant interviews were essential in identifying the key markets that the food insecure households in the affected Tinkhundla were using, and would use, to buy their daily food commodities in 2016-17. The criteria used to identify the key markets were that: 1) at least 25 per cent of the customers using the market for their daily/weekly food requirements were from the most food insecure population in the Inkhundla and 2) that the selected markets were operational all year round hereby enabling use of these markets for food security interventions.

Once the key markets were identified, the assessment team ventured to the individual markets to conduct the trader questionnaire. The trader questionnaire targeted traders who sold one or more of the following

commodities: maize grain (few traders sold maize grain), maize meal, rice, sugar beans, and vegetable cooking oil. The trader questionnaire made up the bulk of the market assessment data.

On average eight key markets were identified per Region (one market per Inkhundla) and two markets were visited by a data collection team every day. While the aim was to cover at least three traders per commodity by trader operation level (wholesaler, medium trader and retailer), in reality, traders were not so plentiful, especially in rural more isolated markets. Wholesalers were seldom found in markets across the country apart from the main region markets serving the entire region and often other regions too. Medium traders and retailers were more abundant in rural market where however on most occasions they did not surpass more than two in number per market.

Prior to the assessment, a three-day training workshop was conducted on: linking markets to food security; food markets and response option; market assessment tools and analysis. A guideline that explains the tools was prepared and was used to explain concepts and definitions during the training. The guideline was also distributed for quick referencing. On the third training day, the tools were pre-tested at nearby markets surrounding Manzini and adjustments were made based on feedback from the enumerators.

Data collection took place over 6 days (14th – 19nd November 2016). Four key informant interviews were delivered. Moreover, 35 markets from 29 Tinkhundla (four regions) were assessed (see **map 3**). From these markets, 12 wholesalers, 64 medium traders and 43 retailers were interviewed using structured questionnaires for a total of 119 traders interviewed. The primary data collected at each market was analysed using Excel and SPSS software.

The assessment was conducted by 12 enumerators from six different organisations: Ministry of Agriculture (5), Central Statistics Office (2), National Disaster Management Authority (1), Red Cross (2), World Vision International (1), and UN World Food Programme (1) as well as an assessment coordinator (WFP). The enumerators were divided into 4 teams, one per region. Each team was made-up of a mix of 3 enumerators from different agencies: A team leader representing one of the six organisations collaborating in the assessment, and two enumerators representing different agencies. A fifth vehicle was used by the assessment coordinator as a satellite vehicle visiting the teams individually during data collection overseeing the assessment and providing insight/support where necessary (**table 7**).

Secondary data and reports were obtained from various sources (MoA, NDMA, CSO, Red Cross, and WFP). These provided background context analysis as well as strengthening primary data analysis. In parallel with the market assessment data collection exercise, key stakeholder interviews were also conducted. These were interviews with national level market actors such as with representatives from the Ministry of Trade and Commerce – Department of Medium and Small Enterprises, National Milling Corporation

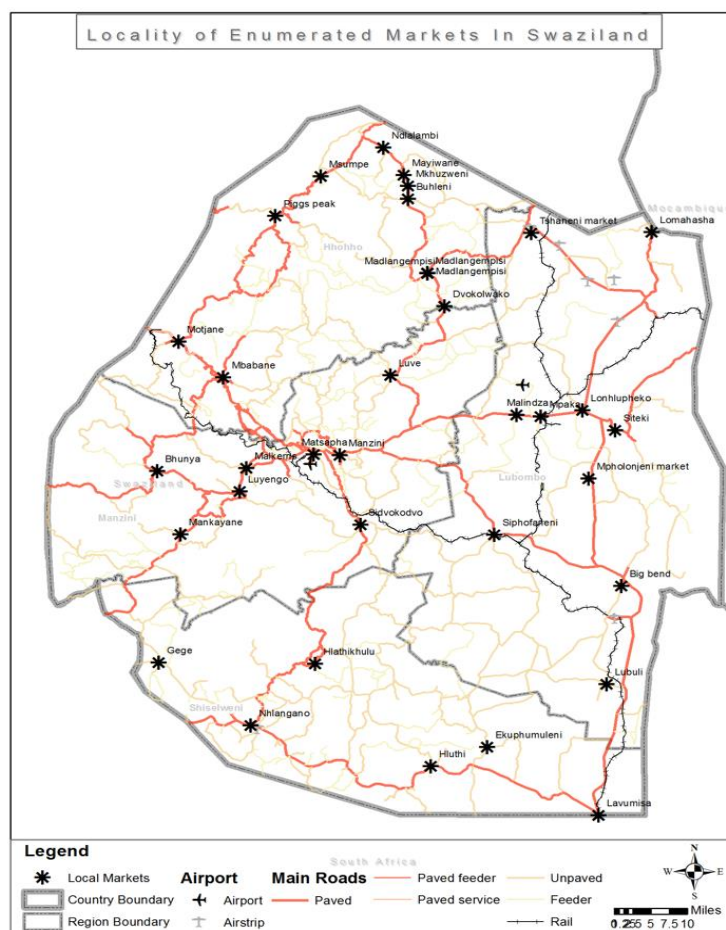
(NMC), National Agricultural Marketing Board (NAMBOARD), and millers/processors such as Premier Foods, Swazi Milling, and Swaziland Oil Milling Industry (SOMI). These were conducted to provide a more holistic understanding of food market dynamics in Swaziland.

Table 7: Districts covered by the 10 teams in the market assessment

Region	Hhohho	Manzini	Shiselweni	Lubombo	Satellite Vehicle
Team Leader	NDMA	CSO	Red Cross	MoA	WFP
Enumerator	MoA	MoA	MoA	Red Cross	
Enumerator	CSO	WFP	WVI	MoA	

Source: Swaziland Market Assessment 2016

Map 3: Geo-locations of markets assessed



Source: Swaziland Market Assessment 2016

2.3 Limitations

The assessment has limitations that readers should take note of. The main ones being:

- Markets are dynamic and constantly evolving. They depend on interactions between supply and demand, which can change from one day to the next. The market assessment took place in mid-November, at the start of the lean season in Swaziland and the region as a whole. By this time a majority of rural households had shifted to consuming market purchased foods. It is expected that as the lean season further takes hold, markets in Swaziland will increase in volumes sold.
- Coverage of the market assessment was limited to the size of the assessment team and time constraints affecting the assessment. Training of the enumerators and data collection was conducted in a reduced space of 9 days.
- Many of the traders interviewed were foreign nationals and had difficulty in communicating in SiSwati and/or English, possibly leading to inaccurate data having been collected.
- Some traders owned different shops in the same town/village causing possible duplication of storage and volume figures.
- Mentioning a cash and vouchers intervention raised some traders' interest, possibly causing inflationary estimates on volumes traded.
- It is estimated that up to 10 per cent of Swaziland's annual maize production is sold informally between neighbouring households. This type of trade by-passes most of the assessed markets and therefore has not been captured by the market assessment. Maize grain and sugar beans are some of the prime food commodities traded informally between households.
- Even though key informants were used in identifying the markets used by beneficiaries, there still remains a possible margin of error in the selection of the key markets. Future identification of key markets used by food insecure populations should come from the vulnerable populations themselves during household food security assessments such as during an annual VAC assessment. This would enable greater precision in asserting those markets which are used by the food insecure to purchase their food needs.

Section 3: Swaziland Food Market Structure and Conduct

The three main crops grown in Swaziland are maize, sugar and cotton. Maize dominates local cereal cultivation with over 90 per cent of total cereal production. The bulk of home-grown maize is cultivated in the Highveld and Middleveld of Swaziland whereas the Lowveld produces most of the country's sugar. The Lubombo plateau produces the majority of the country's cotton, sunflower and cow peas. Manzini, Hhohho and Shiselweni are the three leading regions in maize production and jointly they provide 93 per cent of the country's maize production. For more information on Swaziland's crop production breakdown, land tenure system, agro-ecological zones and rural livelihood zones please refer to the 2015 Crop and Food Security Assessment Mission Report (CFSAM, 2015) and the 2016 Swazi VAC Report (Swazi VAC, 2016).

Smallholders constitute 70 per cent of the population and occupy 75 per cent of the crop land but their productivity is low, accounting for only 11 per cent of total agricultural outputs with cereal yields at a low average rate of 1.1 tonne/hectare. Furthermore, Swaziland's agricultural sector was affected by the two-year long (2014-15 and 2015-16) droughts in the region. In particular, the agriculture casual labour sector (household production to industrial level) had been especially hard hit by the prolonged drought. A number of households were as a result not able to engage in agricultural production while others experienced livestock losses due to feed and water shortages. Casual labour opportunities from other sub-sectors that utilise water (such as car wash, smallholder irrigation, domestic laundry services etc.) also suffered significantly due to the prolonged drought. The threat of reduced income and employment opportunities affecting household income levels lingers on as the region starts to receive rains for its 2016-17 season through limited purchasing power of quality planting inputs.

The 2016 Swazi VAC Assessment uncovered that between 2015 and 2016, 21 per cent of Swazi households spent more than 75 per cent of their incomes on food, with the Manzini (26 per cent) and Shiselweni (25 per cent) regions having a higher percentage of households in this category. The Hhohho region had the highest proportion of households spending less than 50 per cent of their income on food (64 per cent), indicating that food sources for households in Hhohho are mainly from own production.

High food, transport and overall inflation, at 17.6 per cent, 9.9 per cent and 8 per cent respectively for October 2016, will have a significant impact on households' purchasing power, reducing expenditure on food and non-food items and savings, predisposing households to further food security shocks, hereby increasing their vulnerability.

Swaziland's overall cereal requirement (maize, wheat and rice) is of 245,430 tonnes while total 2016 domestic availability (2015-16 harvest and carry-over stocks) came to 48,52 tonnes, translating to a domestic shortfall of 196,910 tonnes. The shortfall is expected to be met through imports of 291,000 tonnes. According to the 2016 Swazi VAC Report, commercial imports for the 2016-17 marketing period

stand at 191,000 tonnes and food aid (planned government and humanitarian relief organisations) is estimated at 100,000 tonnes for the same period. Compared to the five-year average, Swaziland will have to import 44 per cent more maize and in general 35 per cent more cereals for the 2016-17 marketing season than it did on average for the past five years.

Swaziland is a highly regulated market where government intervention on food trade is high. The Swazi Government frequently intervenes in the economy especially in the maize trade market through import trade bans and price setting as well through taxes on imports for other food goods.

Maize: Swaziland has a very protectionist approach vis-à-vis the importation of food goods, especially white maize. Swaziland is a GMO-free country and until recently individuals were not allowed to bring in more than 25kgs of maize or maize meal at a time. Any more would be categorised as goods for sale and people bringing in maize would have to apply for an import permit. The limit of 25kgs of maize per person has recently been increased to 50kgs and is set to last at least until March 2017. The increase was due to the two consecutive years of drought which have depleted national stocks and has, as a result, increased the demand for maize in the country. Post-March 2017, the 50kg tax-free importation limit will likely return to 25kgs per person.

Swaziland controls its white maize flow through the National Maize Corporation (NMC). NMC is a parastatal which has a monopoly over maize importations and plays a key role in ensuring Swaziland's food security. The primary mandate of NMC is to guarantee a competitive market for farmers, effectively operating as a buyer of last resort, and providing sufficient maize supplies to satisfy national demand. NMC is also the only institution authorised to import white maize, which is mostly sold to the country's two large-scale millers (Premier Foods and Swaziland Milling). Maize imports are prohibited as are maize meal imports above 50kg per person or company regardless. Traders are allowed to only purchase domestically stored maize for sale to customers. NMC manages Swaziland's national reserves of white maize, with five silos and nine distribution centres spotted across the country. Furthermore, all formal food importations are reviewed by the National Agriculture Marketing Board (NAMBORD), a Swazi parastatal which emits food import permits. NAMBORD provides import permits solely to the NMC (and sometimes also to humanitarian relief organisations and maize import volumes need to be vetted by the Maize Marketing Advisory Committee (MMAC), which guided by NMC and NAMBORD, sets the price and volume for the year's maize imports.

Swaziland's market structure (food supply chain and value chain) is well-established country-wide. Road networks are good, especially between key cities across regions and storage capacity as well as trader networks are well-developed.

Maize meal reaches markets and final consumers (households) through a number of supply routes (**figure 3**, see page 27). One route is through large millers (Premier Foods and Swaziland Milling) who buy the

maize grain from NMC and proceed to mill the maize. Once milled, 20-25 per cent is removed as bran and is used as animal feed while the remaining 75-80 per cent is used to produce a variety of maize meal products which are sold to wholesalers, supermarkets and retailers across the country.

A second supply route is via households and traders who venture across the border to purchase South African maize meal and import it VAT-free into Swaziland. As mentioned above there exists an import limit of 50kg of maize meal per person. Traders and households alike, especially those living close to the country's border, prefer buying their maize meal from South Africa as maize meal is less than half the price than in Swaziland. Individuals are allowed to bring in 50kg of maize meal per person every time they enter Swaziland. This maize either gets consumed directly at household level or finds its way to small retailer stores for informal, local sale to consumers.

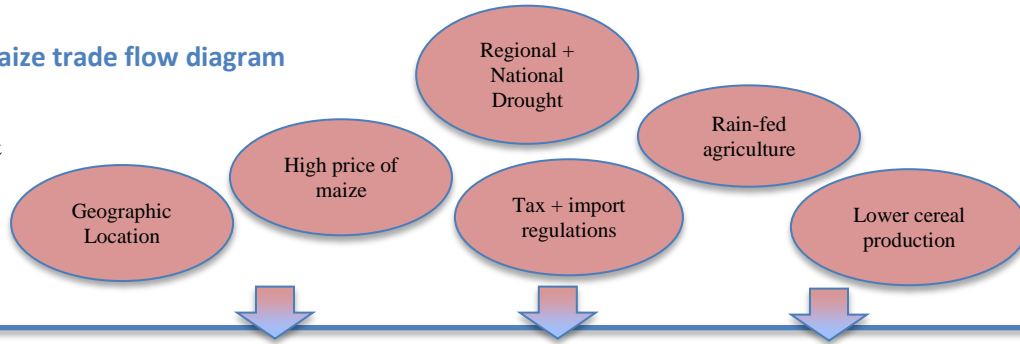
A third supply route is through local small-holder production which due to the low average maize yields (1 tonne/hectare) is, however, by-and-large not enough to meet household's annual maize requirements. The informal house-to-house trade of maize grain does occur especially from maize production surplus zones in the Highveld and Middleveld to the maize deficit zones in the Middleveld, Lowveld and Lubombo Plateau, and accounts for not more than 10 per cent of total maize sold on the market. Other maize sources can be maize stocks brought forward from the previous marketing season, food aid imports through WFP, Government social protection systems (NDMA) and other channels such as religious-based organisations and occasionally, government-to-government bilateral arrangements.

Here is a more in-depth description of the maize meal market actors in Swaziland

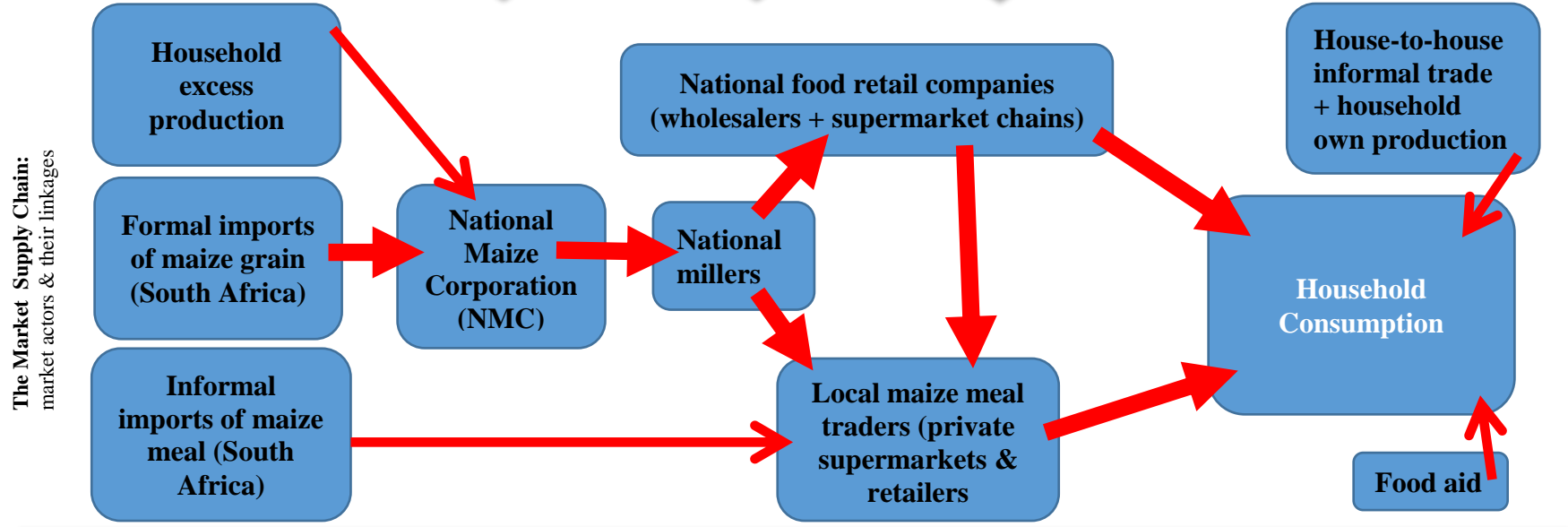
Small-scale traders	Purchase from producers, traders and processors in their same region or from Manzini. These actors sell directly to the final consumers using primarily small sized maize meal bags (5kg, 7.5kg and 12.5kg, 50kg, and 80kg). This group never sells to processors or institutions. Their capital and trade capacity is low; they merely meet their minimum requirements to satisfy their short-term livelihood needs.
Local producers	Produce, purchase, stock and trade maize grain locally (Inkhundla level). Smallholder farmers tend to harvest maize grain by the end of May. Any excess maize will be traded from June – Sept. to traders, households and NMC. Generally, these farmers produce just enough to be self-sufficient during the year and what little excess they have they sell informally to households in the Middleveld, Lowveld and Lubombo Plateau.
Informal trade	An important supply chain for maize meal trade. At border points, small scale informal traders frequently import small volumes of maize meal (max. 50kg per person). These traders store and trade the informally imported maize meal locally (within the Inkhundla). Informal trade below 50kg has no import tax and takes place year-round.
Wholesalers	They purchase stock from millers in Swaziland and transport the maize meal to their depot where they store it ahead of selling it to customers in urban centres or to traders across Swaziland during the lean season. The financial capacity of this group of traders is strong compared with the medium traders and retailers. The number of large vendors at region level markets is low, usually no higher than two with the exception of Manzini and Matsapha which is Swaziland’s maize and food trading hub.
National millers	Procure maize grain from NMC and proceed to mill and trade the maize nationally in differentiated milling grades and bag sizes for human consumption. Approximately 20% of milled grain is sold as animal feed. Due to government regulations, millers are not allowed to buy maize internationally and have to accept the selling price set by NMC.
Medium sized traders (supermarkets)	Purchase maize meal from processors and other traders (wholesale or other traders) and in most cases sell to small scale traders (retailers) and/or consumers, using both retail and wholesale units. These traders sell maize meal in different sized bags (5kg, 7.5kg, 12.5kg, 50kg, and 80kg). They have considerable capital behind them and are different to wholesalers since they focus primarily on retail sale and have less storage space. Medium sized traders are known to collude with other medium sized traders to buy in bulk and reduce their purchasing costs. It is not uncommon to find these traders owning multiple shops in the same town or across the same Inkhundla/region. This is the most common type of maize trader in Swaziland.
Food Aid	These Organisations (typically WFP, Red Cross, religious based organisations and NDMA) are known to buy maize grain internationally for distribution to the most vulnerable and food insecure populations in the country. Beneficiaries proceed to have the maize milled for personal consumption.
NMC	The national Maize Corporation is a parastatal company which is tasked to protect and support Swaziland’s maize production and the country’s food security. It does this by buying at the highest possible price from farmers and selling at the lowest possible price to millers. NMC is the sole formal maize importer for Swaziland. It is fair to say that NMC controls the majority of the maize trade in Swaziland and has an important role in setting the price of maize. NMC, however, has to apply to NAMBORD (National Agriculture Marketing Board also a parastatal) for maize import permits.

Figure 3: Swaziland maize trade flow diagram

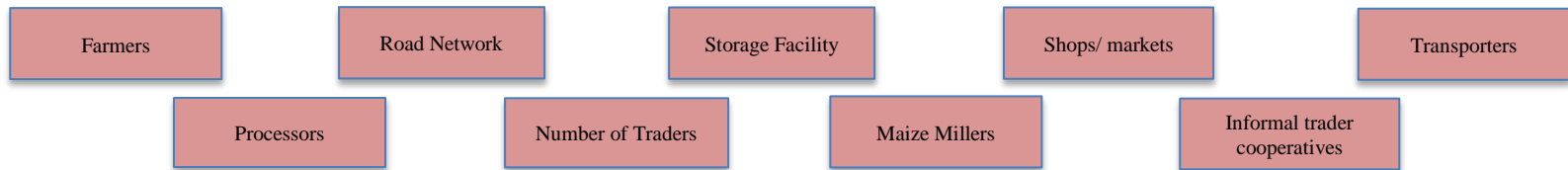
Market environment:
institutions, rules, norms & trends



Key:
Direction and volume of maize (grain + meal) trade in Swaziland →
Highest volumes of maize (grain + meal) trade in Swaziland →



Key Infrastructure:
Inputs and market-support services



Source: Swaziland Market Assessment 2016

Rice and sugar beans follow similar supply chains and trade routes in Swaziland. Even though Swaziland does produce sugar beans this is not enough to meet the national requirement. Swaziland, therefore, imports all of its rice and most of its sugar beans directly from South Africa.

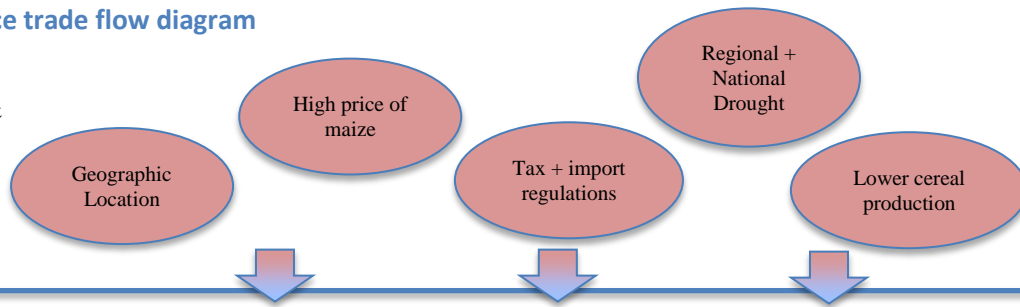
Rice: Rice sold in Swaziland originates mostly from India, Thailand and Pakistan and finds its way to Swaziland passing through Durban, South Africa. In Durban, wholesalers will store the rice ready for sale to Swaziland's key rice wholesalers. Swaziland's wholesalers apply for import permits from NAMBORD and have to pay a tax of 3.5 per cent on rice imports. Swaziland Milling, Swaziland's main rice importer controls about 60 per cent of all rice imported into Swaziland. Swazi-Milling will import unpacked rice from Durban millers/wholesalers and will proceed to the mill, process and bag the rice for sale in Swaziland (**Figure 4** below). The company also owns its own transportation system through which it distributes rice to wholesalers and retailers across Swaziland. Swazi-Milling ensures the rice it sells in Swaziland is at par with the price of rice in South Africa.

Beans: NAMBORD controls 40 per cent of Swaziland's vegetable market. Of this 40 per cent, 70 – 80 per cent originates from South Africa. This accounts for most vegetables and pulses including sugar beans. NAMBORD directly imports goods from South Africa and stores them at its warehouse hub in Matsapha where it distributes the food across the country and where wholesalers and retailers can also come to directly purchase the goods. NAMBORD also buys directly at farm-gate from farmers and farmer cooperatives to try and incentivize local farmers to produce more vegetables by providing access to the country-wide market.

Sunflower Oil: Only around 8 per cent of sunflower oil in Swaziland is produced locally, the rest is imported from South Africa. The Swaziland Oil Mill Industries (SOMI) which has enough storage capacity to meet five times the size of Swaziland's oil requirement, controls the majority (80-90 per cent) of Swaziland's cooking oil market. Bottled imports from South Africa are taxed at 24 per cent in an attempt to protect SOMI as it is a newly born Swazi industry (started in 2007). The 24 per cent import tax levy will be removed in 2018, making bottled imports cheaper. In the meantime, SOMI continues to bottle South African imported cooking oil at its bottling plant based in Matsapha and to distribute the bottles to traders (wholesalers and retailers) across Swaziland.

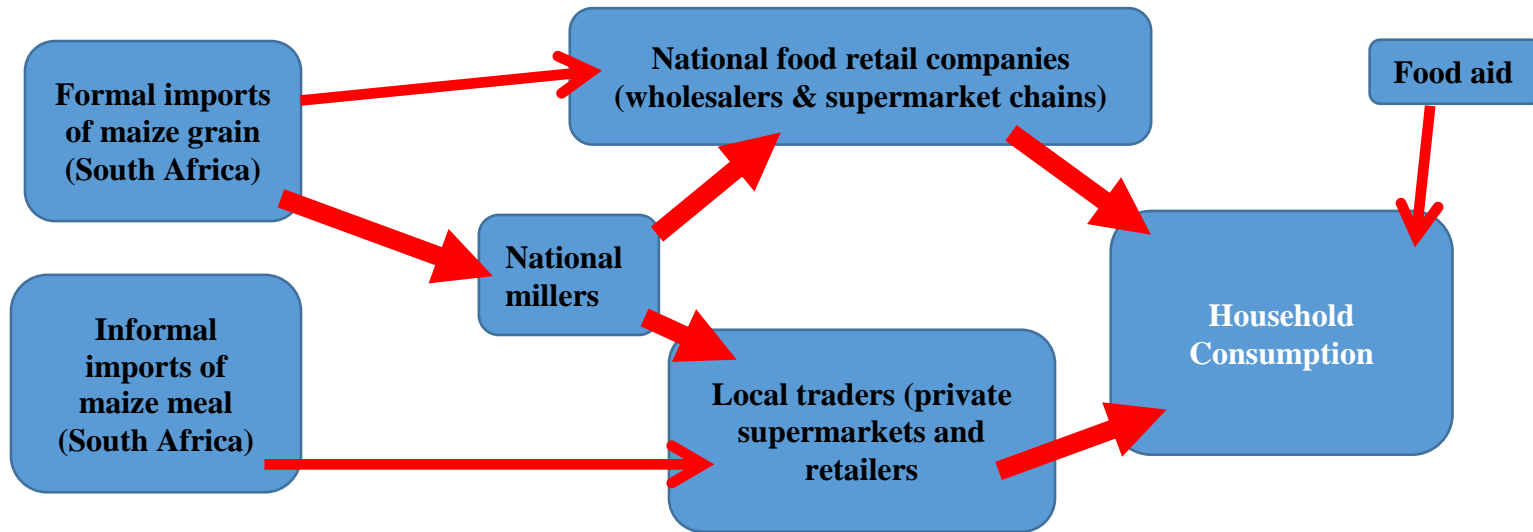
Figure 4: Swaziland rice trade flow diagram

Market environment:
institutions, rules, norms & trends

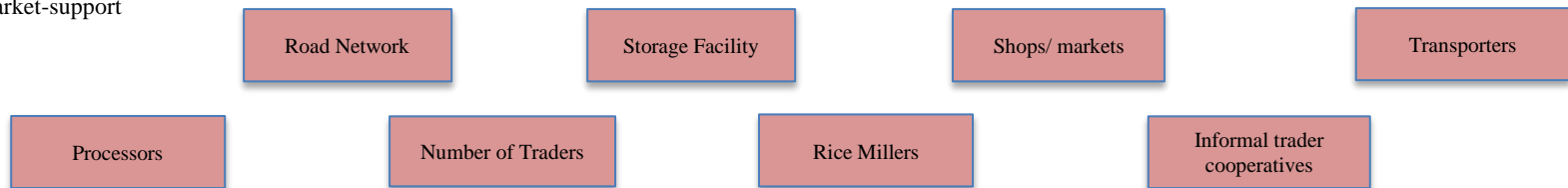


Key:
Direction and volume of rice trade in Swaziland →
Highest volumes of rice trade in Swaziland →

The Market Supply Chain:
market actors & their linkages

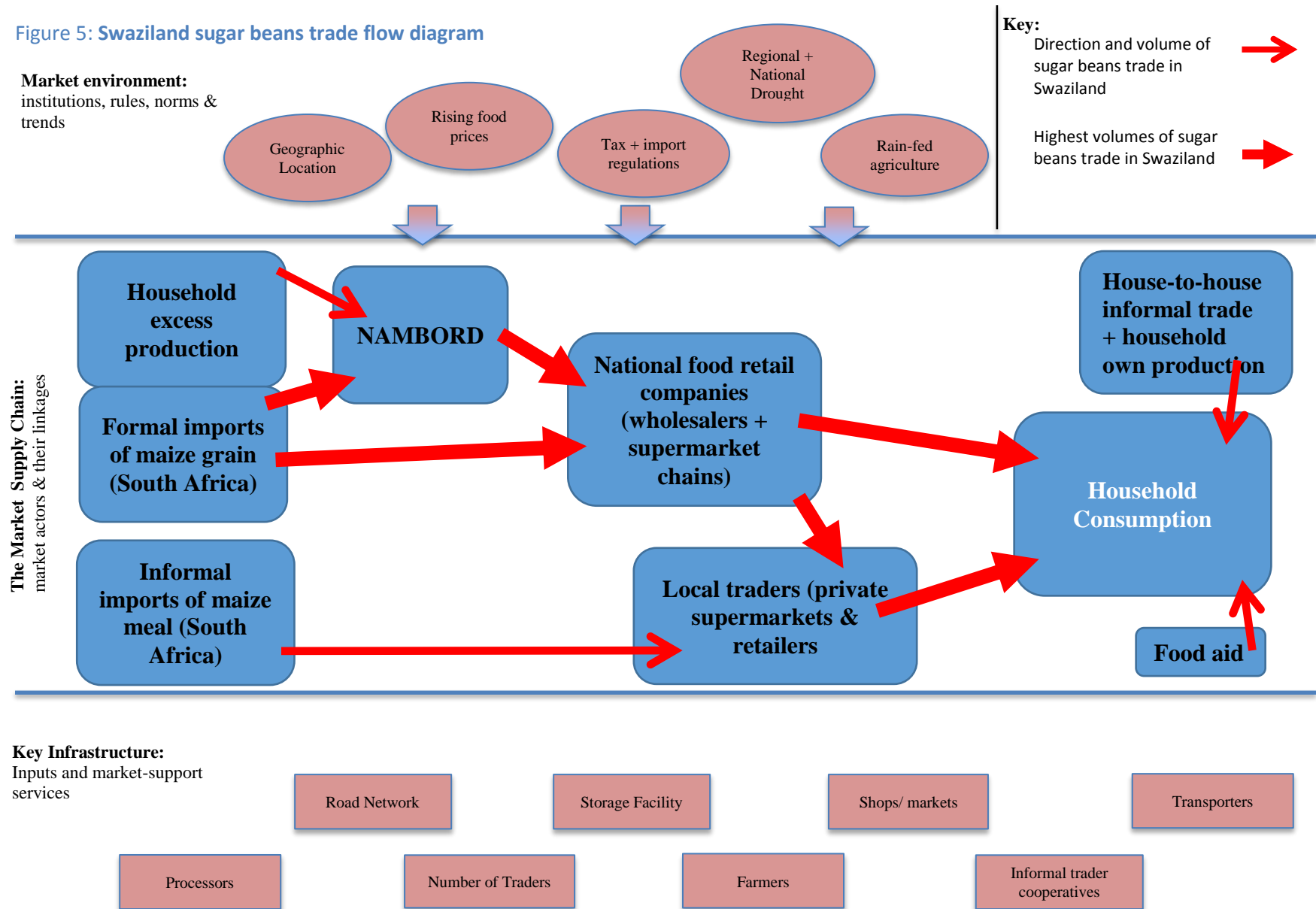


Key Infrastructure:
Inputs and market-support services



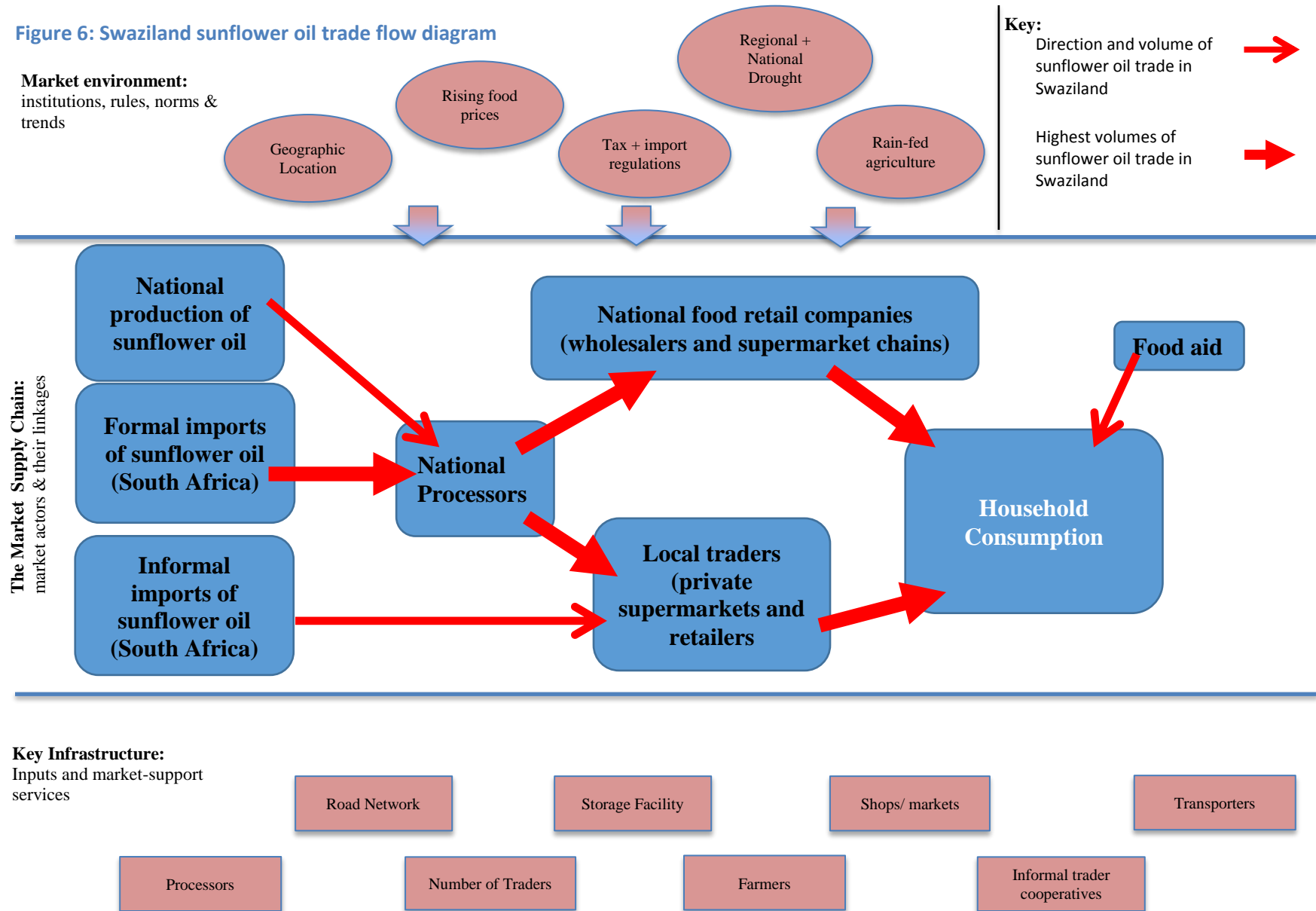
Source: Swaziland Market Assessment 2016

Figure 5: Swaziland sugar beans trade flow diagram



Source: Swaziland Market Assessment 2016

Figure 6: Swaziland sunflower oil trade flow diagram



Source: Swaziland Market Assessment 2016

Swaziland follows a three-level market network system: where primary, secondary and tertiary markets exist. This system ensures that food such as maize meal is moved from food excess to deficit areas or where demand for the commodity is greatest. This system is further explained below:

<p>Tertiary (local) market</p>	<p>A local shop where rural and isolated communities buy their food from. These shops tend to be located in a main town/village used by the food insecure population who scattered up to max 10kms away from the village. These primary shops are generally built of brick/stone and sell a variety of commodities; from food to clothes to building materials. They act as a general amenity store operated by retailers. Examples of primary markets are Buhleni in Hhohho, Sidvokodvo in Manzini, Gege in Shiselweni and Siteki in Lubombo. Road infrastructure tends to be not maintained gravel roads and financial infrastructure is basic or non-existent. Traders depend heavily from milled maize in shops as local production is minimal. It is common for retailers in these areas to use local buses/Kombies which depart and return daily to the main town in the Inkhundla while medium-sized traders tend to have their own trucks to use for procuring food from the main market in the Inkhundla. Food prices in these markets tend to be higher than in other markets in the country due to the greater distance the food has to travel to reach it and the longer supply chain.</p>
<p>Secondary (Inkhundla) market</p>	<p>A market that supplies the primary market with food commodities, usually located in the main town of the Inkhundla or very close to the country's border with South Africa and Mozambique. Traders in secondary markets have greater access to finances and infrastructure such as good mobile coverage and supply routes. These markets have a wider sphere of influence than tertiary markets and their traders' trade in greater volumes than those in tertiary markets. Retail companies (supermarkets) are often found in Swaziland's secondary markets as well as smaller retailers, medium sized traders and wholesalers. These agents use this market to store and sell maize meal to the entire Inkhundla' population. Examples of secondary markets are Pigg's Peak and Mbabane in Hhohho; Nhlanganano and Lavumisa in Shiselweni; and Siphofaneni and Lomahasha in Lubombo.</p>
<p>Primary (regional and national) market</p>	<p>A market that supplies secondary markets with food commodities. These are key hub markets dealing with large volumes of trade at one time and have regional and national reach. These markets source their food supplies from millers for maize and rice, processors for cooking oil and directly from South Africa for beans and other goods and supply food to deficit markets where demand outstrips supply. They tend to have medium sized traders/ assemblers and wholesalers/ large assemblers/ national millers. Examples of tertiary markets are Manzini and Matsapha. The prices of goods in these markets are the cheapest in the country as transport costs are lowest and the supply chain for the goods, the shortest. The strong financial capital of traders in these markets means that actors can trade in wholesale quantities, reducing costs through economies of scale.</p>

In Swaziland goods steadily flow from tertiary to secondary to primary markets throughout the year without major bottlenecks/constraints apart from the regulatory limitation on the importation of maize into the country. A well-constructed network of traders exists at each trade level within the country enabling food to be traded and delivered in a matter of hours/days. Swaziland has an important number of shops which are foreign owned. Foreign traders in Swaziland were found to be part of a tight-knit trader network enabling these traders to access large volumes of goods in a short time frame and at competitive prices. Shops in isolated markets/ villages in a district tend to be poorly stocked due to low household

income which reduces demand. Conversely, the key market in an Inkhundla tends to be well stocked both in volume and diversity of goods sold.

Maize meal is milled and distributed nationally by national milling companies such as Premier Foods and Swaziland Milling as well as to a small degree traded informally from South Africa by local traders. Apart from large volumes of maize grain being imported by NMC and some house-to-house informal trade, maize grain trade in Swaziland is negligible in volume compared to the trade in maize meal.

Section 4: Price Analysis

Swaziland is a highly regulated economy where government intervention on food trade is significant. A restrictive maize import policy providing monopolistic control of the maize market to NMC limits competition by imposing high barriers of entry to trade. Government regulation also interferes with setting maize grain purchasing and selling prices, this it does through the MMAC, a marketing advisory committee which NMC, NAMBORD and MoA are part of. What results is an over-regulated and inefficient maize grain market sector coupled with artificially high maize prices compared to the region's average.

In more detail, through its five silos and nine distribution centres spotted across the country, NMC manages Swaziland's national white maize reserves. The parastatal uses the silos and distribution centres to purchase local maize grain (currently buying at SZL 238/50kg and SZL 4,750/tonne) and to sell maize grain (currently selling at SZL 280/50kg and SZL 5,000/tonne). In comparison maize grain for the same period sold at ZAR 3,546/tonne in South Africa (Lilangeni is pegged to the Rand at 1:1), Swaziland's main source of maize imports.

By government regulation, millers in Swaziland are obliged to buy maize grain directly from NMC at NMC's selling price. Once milled, maize meal sells for between SZL 8,000 /tonnes for bags of 25-50 kg and SZL 9,000 – SZL 10,000 /tonnes for bags of 10 kg. Premier Foods, a Swazi milling company which controls approximately 70 per cent of the maize meal market in Swaziland, reported that it is running at 40 per cent of its total capacity due to the effect of the prolonged drought on the price of maize which has pushed households to opt for cheaper alternatives. Even though the price of maize grain has been steadily decreasing in South Africa over the past six months (**Figure 8**), Premier Foods cannot alter its prices as their buying price is fixed by NMC. NMC is currently importing around 4,000 tonnes of maize grain per month directly from South Africa and has set its maize grain selling price at SZL 5,000/ tonnes till end March 2017, when a revision on the buying and selling prices will be undertaken.

Swaziland has the second highest maize meal price per kg in southern Africa, second only to Namibia which is not a maize producer. The price of maize meal in August-September 2016 was on average 53 per cent more expensive than South Africa, its source market (**Table 8**).

Table 8: Maize Meal Retail Prices Across Southern Africa (August – September 2016)

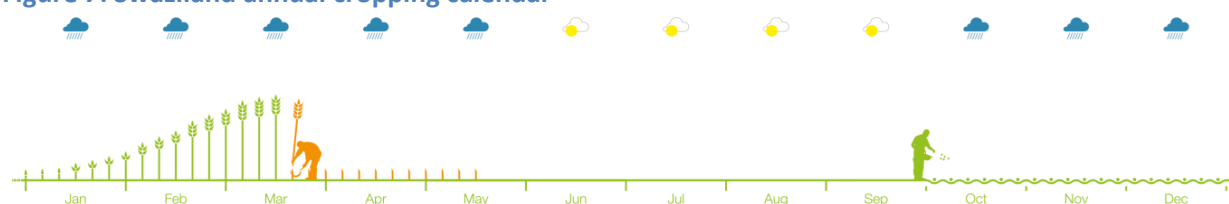
Country	Maize meal price US \$/kg	Price compared to southern Africa national average (%)
Botswana	0.53	-8
Lesotho	0.49	-14.3
Malawi	0.64	1.6
Mozambique	0.60	-4.6
Namibia	1.06	68.6
South Africa	0.46	-26.8
Swaziland	0.96	52.7
Tanzania	0.50	-20.6
Zambia	0.35	-44.3
Zimbabwe	0.58	-7.8
Average	0.63	NA

Source: Swaziland Market Assessment

4.1 Price Trends and Seasonality

Swaziland imports a large part (on average 45 per cent) of its cereals from South Africa and furthermore sets its national maize grain selling prices, making it by-and-large, a stable market especially when compared to seasonal price trends. The country does produce around half its cereal need requirements. As mentioned in **Section 1.3** agriculture in Swaziland is predominantly traditional, characterised by rain-fed cereal production and extensive animal grazing, the sole exception being irrigated cultivation for sugar plantations and citrus fruit farming.

Figure 7 below shows Swaziland's seasonal calendar. Maize, pulses and sorghum are usually planted in the main planting period November – January and are harvested between April – July.

Figure 7: Swaziland annual cropping calendar


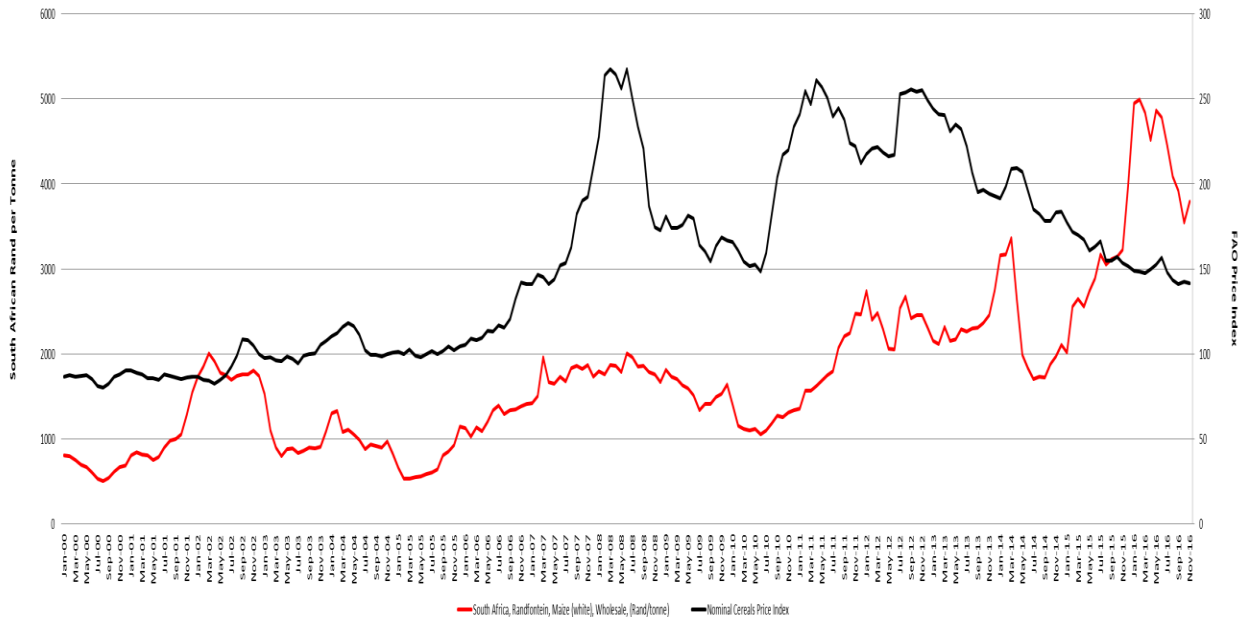
Source: Swaziland CFSAM 2015

4.2 Price Volatility

The report's price analyses used 2010-2016 nominal retail prices of maize meal provided by CSO as well as retail prices for maize meal, rice, sugar beans, and vegetable cooking oil provided by WFP (2015-2016). Compared to world cereal prices, the price of white maize in the region, specifically in South Africa, saw out-of-the-ordinary price increases and decreases between November 2015 and November 2016. The

price trend over this period is contrary to the international cereal price trend. **Figure 8** below clearly shows this different trend, where FAO’s Cereal Price Index shows that over the past four years cereal prices have been falling to 7 year low levels while the price of white maize in South Africa has instead sharply increased since September 2014 and more recently seen an equally sharp decrease in price. An important reason behind the sudden increase in South Africa’s white maize price is led by the ratio of white to yellow maize produced in the world. Only around 5 per cent of annual world maize production is white, the remaining 95 per cent being yellow. Moreover, southern African culinary habits affected the price increase as white maize is the most preferred staple for human consumption in the region; yellow maize being largely used for animal feed. This meant that the two consecutive drought years experienced in the region 2014-15 and 2015-16, exacerbated by the worst El Niño weather event in 35 years for the region and 2015 being recorded as the hottest year on record for South Africa, have all had a part in significantly reducing cereal stocks and crop production levels in the region, where an important part of the world’s white maize grain is grown. Global stock of white maize grain reduced as a result of these droughts hereby pushing-up white maize prices across the region.

Figure 8: Wholesale price of white maize in South Africa compared to FAO Food Price Index over time



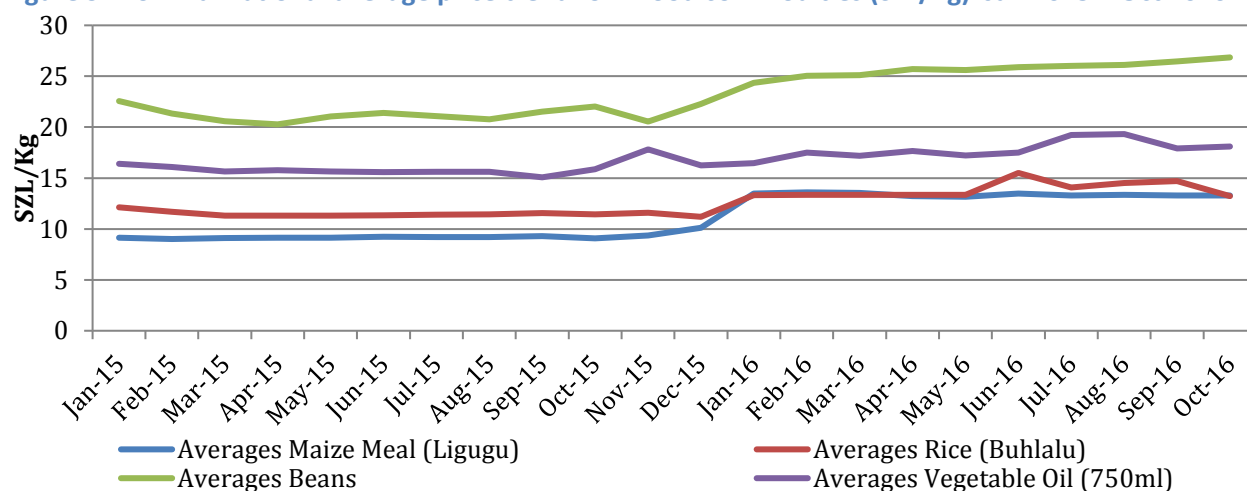
Source: FAO GIEWS

However, since May 2016 prices started to steadily fall again (27 per cent) as South Africa confirmed its 2016-17 import stocks instilling confidence into the market that there would be enough white maize in the SACU region. The prospect of a neutral La Niña in 2016-17 bringing good planting and cultivation rains across the region also helped reduce white maize prices. The recent upturn in prices is likely due to the arrival of the lean season bringing increased demand for maize on markets. Future overall trends though are anticipated to continue going downwards in the long-term.

The serious national currency devaluations experienced across the region in 2015 and continuing into 2016 (between February 2015 and February 2016 Zambia’s Kwacha fell by as much as 61 per cent recovering to currently (December 2016) 25 per cent below its February 2015 level compared to USD; Mozambique’s Metical has depreciated against the USD by 109 per cent compared to February 2015; Angola’s Kwanza has depreciated against the USD by 60 per cent since February 2015; and South Africa’s Rand fell against the USD by as much as 47 per cent but recovering to around 21 per cent compared to February 2015 levels) which were led by falling worldwide commodity prices due to falling demand worldwide, especially China, have made imports more expensive reducing supply and driving up prices in the region. Transportation costs are also contributing to the increasing price of imported foods especially for land-locked maize deficit countries as petrol prices start increasing again (OPEC petrol prices have increased by 64 per cent in 2016). The 2016-17 lean season exacerbated by the two consecutive years of drought is also having an effect on driving up food prices as more people depend on markets to buy their food.

As mentioned earlier, Swaziland depends heavily on South Africa for its imports (especially maize) and furthermore employs price setting policies. Food prices, therefore, tend to loosely follow South African food price trends but especially tend to remain fixed for a long period of time (about one year until the next review). As shown in **figure 9** prices in Swaziland have been generally increasing over the past two years. The country saw a particularly sharp increase in the price of maize meal of around 30 per cent in December 2015 but has since remained relatively stable (**figure 9**). The other goods tend to follow a less regulated price system resembling South African price trends.

Figure 9: Nominal national average price trend for 4 food commodities (SZL/Kg): Jan 2015 – Oct 2016

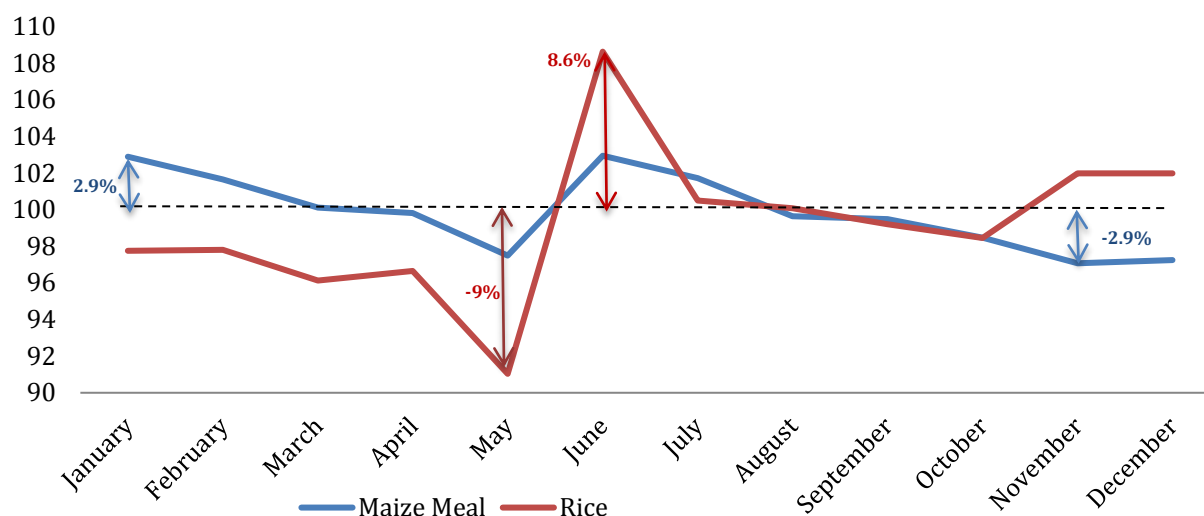


Source: Swaziland Market Assessment 2016

Nominal prices have the disadvantage that they do not factor out inflation from the price thereby making it difficult to understand how much of the change in price is led by inflation over time and how much instead is a direct effect of supply and demand trends. The Grand Seasonal National Index (GSNI) is an

average of seasonal indices and shows the average price trend in one season (12 month period). From **figure 10** it is clear that Swaziland has usually very stable prices especially for maize meal which only varies marginally (by under 5.8 per cent) throughout the year from the annual average price at 100. In other words, in a typical year, seasonality does not affect Swaziland’s maize meal price much. Which makes sense as the maize meal market is heavily regulated. The GSNI for the price of rice in Swaziland is very different. The product is not locally grown therefore the country is a price taker, not a price setter. This we can see by the much larger variance between May and June where the price on average drops by 9 per cent below the annual mean to then increase by 8.6 per cent on average above the annual mean the following month, to then reduce again and stabilize below four per cent variance from the mean (**figure 10**). Highlighting that the price is likely artificially set by the source market as well as by local wholesale traders/millers.

Figure 10: Maize meal and Rice grand seasonal national price index 2010-16



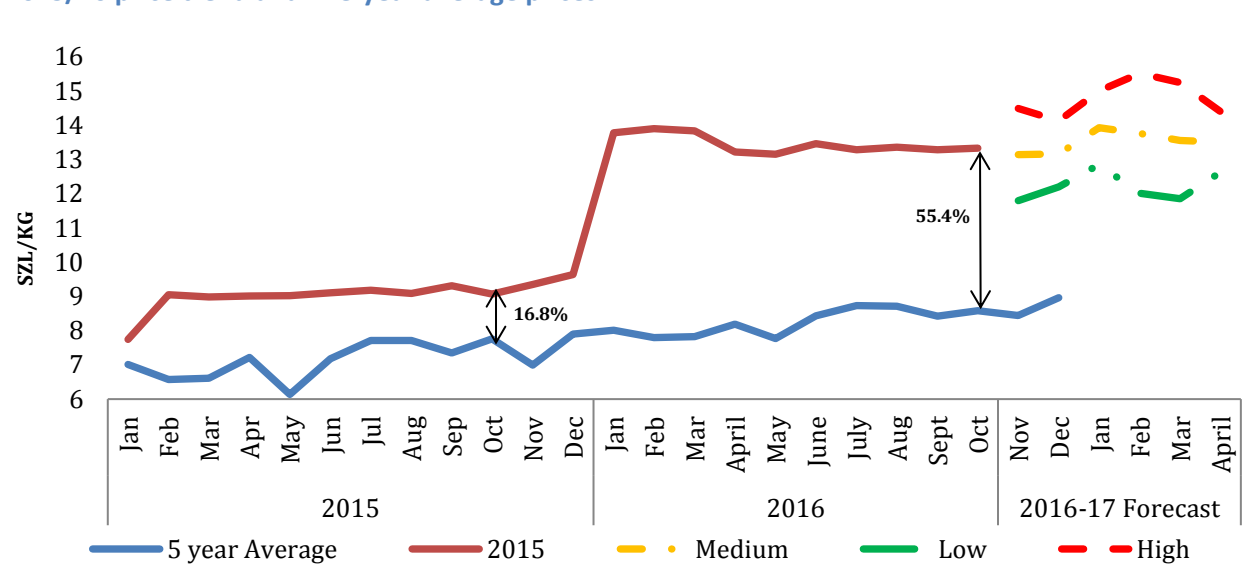
Source: Swaziland Market Assessment 2016

Figures 11 and 12 use the current price trend in addition to applying the GSNI data and a 5-year average monthly variance of prices to project a 6-month forecast on how future national average retail prices for maize meal and rice are likely to develop in Swaziland. The graphs depict three scenarios, for maize meal it shows: a possible low trend price level where the price of 1kg of maize meal will initially decrease from the current 13.3 SZL/kg down to 11.8 SZL/kg after which prices will increase to 12.8 SZL/kg and then decrease again. The medium price scenario for maize meal projects the price of 1kg of maize meal to increase to 13.9 SZL by January 2017 after which to remain constant. The high price scenario anticipates the price of maize meal to increase to 15.5 SZL/kg by February 2016 after which the price will decrease to 14.4SZL/kg (**figure 11**).

Figure 11 also clearly illustrates the increasing maize meal price trend in Swaziland. Already at the start of 2015 maize meal prices were on average 30 per cent above their 5-year average level for the time of year.

As the year unfolded this gap decreased to 16.8 per cent. However, since the start of 2016, the price of maize meal drastically increased. By October 2016 the national average retail price for 1kg of maize meal was 55.4 per cent above the 5-year average level for the time of year. This increase is a direct result of Swaziland purchasing its white maize from South Africa while prices were still high.

Figure 11: Swaziland national average maize meal 2016-17 forecast retail price (SZL/kg) compared to 2015/16 price trend and five-year average prices

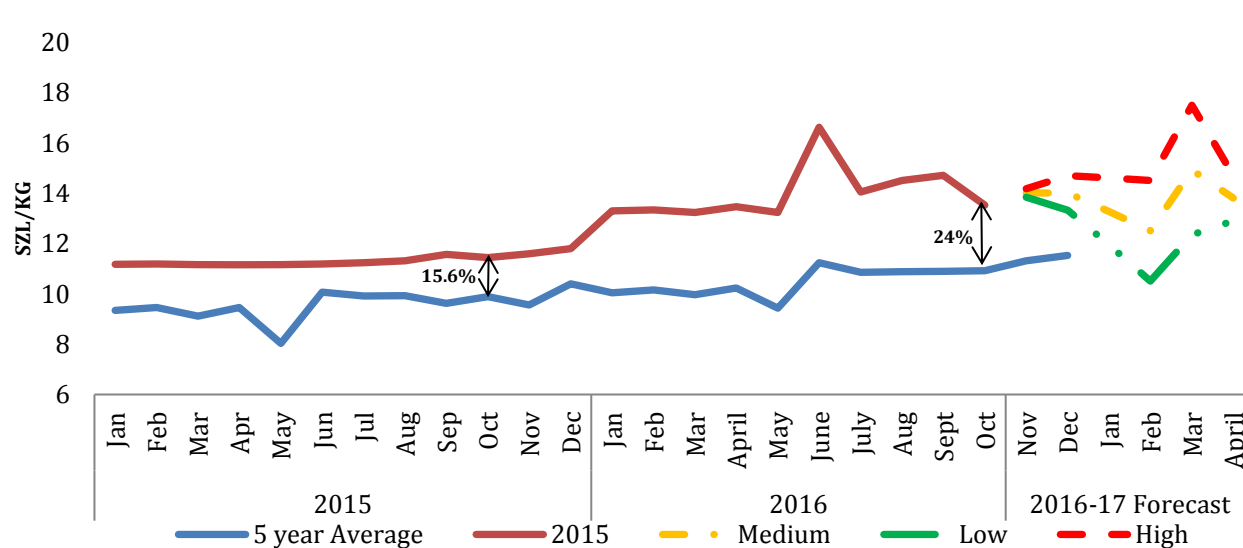


Source: Swaziland Market Assessment 2016

The forecast scenario for 1kg of rice is different. **Figure 12** shows a possible low trend price level where the price of 1kg of rice initially decreases from the current 13.5 SZL/kg down to 10.5 SZL/kg in February 2017 to then increase again. The medium price scenario decreases to 12.5 SZL/kg by February 2017 after which increasing to 14.9 SZL/KG. The high price scenario anticipates the price of 1kg of rice to remain constant until February 2017 after which a temporary increase to 17.5 SZL/KG can be expected before returning to 14.7 SZL/kg by April 2017 (**figure 12**).

Similar to **figure 11**, **figure 12** also illustrates the increasing price trend of rice in Swaziland. Already at the start of 2015 rice prices were on average 26 per cent above their 5-year average level for the time of year. As the year unfolded this gap decreased to 15.6 per cent. However, since the start of 2016, the price of rice has gradually but constantly increased. By October 2016 the national average retail price for 1kg of rice was 24 per cent above the 5-year average level for the time of year. This increase is believed to be an indirect result of the prolonged drought which pushed maize prices higher and forced Swazi consumers to opt for cheaper alternatives. Therefore with increased demand for rice, rice prices started increasing as well.

Figure 12: Swaziland national average rice 2016-17 forecast retail price (SZL/kg) compared to 2015/16 price trend and five-year average prices



Source: Swaziland Market Assessment 2016

Understanding a market’s price structure is important since high price variability creates an atmosphere of uncertainty among market actors. High price variability can be caused by a number of issues, some of which are: poor local and regional harvests, poor road infrastructure, few traders leading to an oligopoly/monopoly trading system, limited trader storage capacity, limited selection of alternative foods on the market and resistance by consumers to alter the type of foods they eat. These factors make it difficult to understand the functionality of the market as they can lead to a multitude of responses/mitigating factors by market actors.

In Swaziland’s case three mitigating measures were popular among traders and customers: 1) groups of traders grouped together to restock in order to receive a more competitive restocking price as well as to share the transport cost burden, thereby further reducing overhead costs; 2) due to the higher prices in Swaziland compared to South Africa and Mozambique, especially for maize meal, customers and traders alike were crossing the border to buy their maize meal; 3) customers were opting for cheaper alternative goods preferring rice and sour porridge to maize meal, their usual staple.

The problem with high price variability for humanitarian interventions is that the transfer value given to targeted food insecure populations will constantly have to be corrected to meet the value required for households to purchase their required food needs. Therefore, markets with lower price variability will tend to be seen as ‘healthier’ and more ‘functioning’ markets which are more ideal to support cash and voucher interventions.

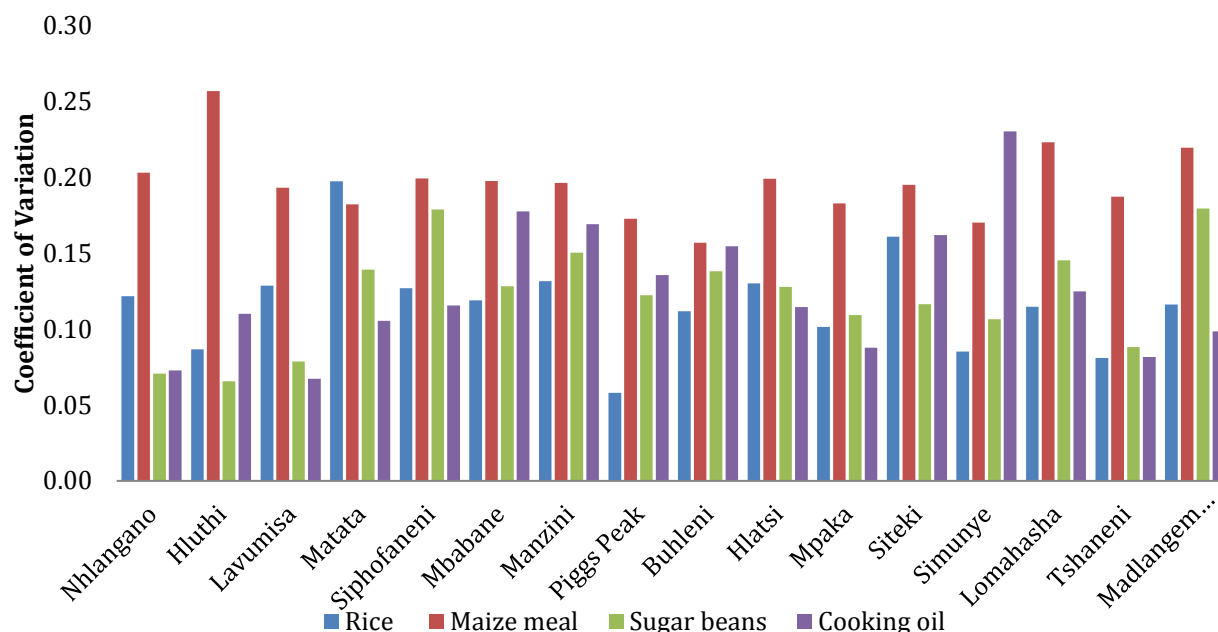
Price volatility is measured by taking the current price of a good and measuring its gap (numerical difference) to the average price for the period analysed. This analysis is computed through the coefficient of variation³ which indicates the level of dispersion prices have from their mean. The coefficient of variation provides a useful understanding of how prices have changed in the past and use this information as a useful indication as to the likelihood of changes in price levels in the future. With little variation in price over time we can be sure that prices will tend to remain relatively stable while with a high reported price variation the opposite is likely to occur. This is a useful indicator which helps reduce uncertainty for decision makers and provides evidence to support market-based response options.

For this analysis, we took WFP's collected retail prices across different markets in Swaziland over a two-year period 2015-16 (**figure 13**). The result is quite surprising as for the products whose price is controlled by demand and supply, the coefficient of variance (i.e. spread of prices over time) is relative low (10 per cent and below) highlighting stable and possibly well-integrated markets. However for maize meal whose price is heavily regulated and therefore variation from the mean price should be low, the coefficient of variation shows that this is actually wider than for the other products. The reason is likely down to the government's hike in the price of maize meal due to the drought and the increasing prices in South Africa in late 2015 early 2016.

Another interesting observation from **figure 13** is that variation differs significantly from market to market. Highlighting that traders set their prices independently from other markets in the country, hereby indicating that there are multiple factors (not only source prices) affecting the price of goods in markets.

³ Coefficients of variation is calculated as the ratio of the number of standard deviation a particular figure has from the mean/average figure for the sample.

Figure 13: Analysing the coefficient of variation for selected markets in Swaziland: 2015-16



Source: Swaziland Market Assessment 2016

4.3 Market Price Integration

Market integration analysis forms an important component in understanding market functionality and is also a key factor used by programme officers in deciding whether market-based interventions are an appropriate food assistance transfer mechanism. Markets are said to be integrated when price changes of a food commodity move in tandem and by the same extent between different markets and when goods flow freely between markets.

Prices do not have to be identical for markets to be integrated. In fact, food prices for the same product across different markets are rarely the same due variables cost such as transport costs and a number of actors in a good’s supply chain (e.g. more isolated and further away markets from the source market would have more actors in the supply chains each demanding a small profit). These variables would increase a commodity’s costs ahead of the final trader placing a sale price on the commodity. To be perfectly integrated, prices for the same commodity in different markets will have to change by exactly the same amount (per cent ratio of the final selling price) across different markets. Calculating the correlation coefficient (comparing prices changes over time for two separate markets) will aid us in calculating market integration.

It is important to note though that it is not possible to use correlation coefficients alone as a proxy for market integration as unobservable factors may also be driving price trends. More contextual information such as, and not limited to: number of traders, storage capacity, the source of food, type of road, seasonality, food availability and other trade constraints need also to be analysed. These will help in

consolidating the significance of the correlation coefficient data towards identifying two markets' level of integration and will provide a more holistic understanding of the capacity of a market and why price changes have occurred as observed.

Nevertheless, correlation coefficients are an added useful indication of market functionality⁴. Price correlation coefficients of 0.8 upwards suggest markets are strongly integrated, with a correlation coefficient of 1.0 representing two fully integrated markets. Instead, a correlation coefficient of 0.69 and below represents weak or non-integrated markets.

Tables 9 correlates the average price of 1kg of maize meal across key Inkhundla markets in Swaziland between January 2015 and October 2016. **Table 10** correlates the average price of 1kg of rice and **Table 11** correlates the average price of 1kg of beans. The tables show markets where strong (dark green colour in the table) maize meal, rice and beans price correlation coefficient is found between two markets, suggesting that these markets may likely be well integrated through trade. The table also shows where weaker (light green) price correlation exists between markets. Market integration is important since strong market integration highlights that food will likely be traded between markets thereby ensuring food surplus areas support food deficit areas and food gets traded in a short timeframe (within a week) between markets.

Table 9: Maize meal price correlation coefficients for key markets across Swaziland

	Nhlangano	Hluthi	Lavumisa	Siphofaneni	Mbabane	Manzini	Pigg's Peak	Buhleni	Lomahasha
Nhlangano	1								
Hluthi	0.98	1							
Lavumisa	0.96	0.94	1						
Siphofaneni	0.997	0.98	0.96	1					
Mbabane	0.89	0.89	0.87	0.89	1				
Manzini	0.99	0.98	0.92	0.98	0.87	1			
Pigg's Peak	0.90	0.92	0.87	0.90	0.98	0.88	1		
Buhleni	0.48	0.59	0.47	0.49	0.38	0.51	0.51	1	
Lomahasha	0.91	0.92	0.91	0.93	0.84	0.91	0.87	0.58	1

Source: Swaziland Market Assessment 2016

Table 9 illustrates that maize meal prices are highly correlated across key Inkhundla markets. This comes as no surprise as maize is highly regulated in Swaziland. Buhleni, a small market in Swaziland's Hhohho region, does not seem to follow similar maize meal prices as other markets across Swaziland. This is likely related to traders in this market setting their own maize meal price independent of other markets.

⁴ WFP Market Analysis Framework, December 2011

Table 10: Rice price correlation coefficients for key markets across Swaziland

	Nhlangano	Hluthi	Lavumisa	Siphofaneni	Mbabane	Manzini	Piggs Peak	Buhleni	Lomahasha
<u>Nhlangano</u>	1								
<u>Hluthi</u>	0.76	1							
<u>Lavumisa</u>	0.78	0.64	1						
<u>Siphofaneni</u>	0.93	0.78	0.85	1					
<u>Mbabane</u>	0.88	0.74	0.86	0.97	1				
<u>Manzini</u>	0.80	0.87	0.85	0.91	0.92	1			
<u>Piggs Peak</u>	0.68	0.61	0.65	0.68	0.64	0.70	1		
<u>Buhleni</u>	0.90	0.75	0.84	0.97	0.95	0.93	0.68	1	
<u>Lomahasha</u>	0.55	0.42	0.40	0.59	0.60	0.51	0.37	0.59	1

Source: Swaziland Market Assessment 2016

Table 11: Sugar beans price correlation coefficients for key markets across Swaziland

	Nhlangano	Hluthi	Lavumisa	Siphofaneni	Mbabane	Manzini	Piggs Peak	Buhleni	Lomahasha
<u>Nhlangano</u>	1								
<u>Hluthi</u>	0.43	1							
<u>Lavumisa</u>	0.47	0.60	1						
<u>Siphofaneni</u>	0.52	0.65	0.81	1					
<u>Mbabane</u>	0.63	0.64	0.72	0.66	1				
<u>Manzini</u>	0.67	0.64	0.74	0.77	0.82	1			
<u>Piggs Peak</u>	0.56	0.68	0.72	0.71	0.82	0.81	1		
<u>Buhleni</u>	0.43	0.47	0.86	0.61	0.69	0.63	0.54	1	
<u>Lomahasha</u>	0.47	0.71	0.90	0.88	0.72	0.74	0.76	0.77	1

Source: Swaziland Market Assessment 2016

Tables 10 and 11 show that even though prices across some of Swaziland’s key Inkhundla markets have lower correlation coefficients for rice and sugar beans than maize meals prices, they nevertheless remain relatively well correlated, especially for rice. The strong correlation coefficients for Manzini and Mbabane with all other markets highlights how these are key markets for Swaziland in its rice and sugar beans trade.

Section 5: Assessment of Traders and Markets

The following section of the report forms the bulk of the market assessment. Data for this section was drawn from the primary data collected through the Swaziland Market Assessment field traders' survey questionnaire. Considering the number of markets assessed (35), analysis and results are divided into broader categories such as by national averages and by traders' typology (retailer, medium vendor, and wholesaler). Where possible the data is broken down further to highlight possible regional and Inkhundla disparities.

Swazi traders trading in maize meal, rice, sugar beans and cooking oil can be classified into three broad groups: large-scale traders (wholesalers), medium sized traders (medium vendors - supermarkets) and small scale traders (retailers). A description is provided below expanding on these three broad categories:

a. Wholesalers: purchase in bulk from producers/millers/processors primarily based in South Africa or from an aggregation site in Swaziland NMC/NAMBORD/millers/processors. They mostly sell to retailers and customers using both wholesale and retail units. Wholesalers in Swaziland can either be national millers who mill maize grain and sell maize meal or large traders who buy pre-packaged maize-meal bags from millers and transport the bags to their warehouses (Manzini and Matsapha) where they store it ahead of selling it further. Unlike typical wholesalers in other countries in the region wholesalers in Swaziland sell to medium vendors, retailers and customers alike in wholesale and retail units. The financial capacity of this group of traders is strong compared to the other two categories of traders indicated below. The number of big vendors in the country is low with most being based in Manzini and Matsapha from where they supply traders across the country. An example of such wholesalers is Ruchi, Moon and Sun Sun.

b. Medium Vendors: are enterprises such as supermarkets. They typically purchase from wholesalers in Swaziland and South Africa, buying directly from the large traders' store/mills/processing plants and farmers' cooperatives and in most cases sell to consumers as well as small traders, using both retail and wholesale units. Medium vendors are often part of a retail chain store such as Pick'n'Pay, Shoprite, Checkers, etc. and source their goods from the main hub in South Africa. The distinction from big vendors is that this group sells primarily to consumers. These traders have considerable capital behind them and often own multiple shops/branches in the same town or across the same region. The number of medium vendors is much higher than big vendors in a given market location and also higher than retailers.

c. Retailers: purchase their goods primarily from medium vendors and wholesalers in the same market or in a closeby market. They sell directly to the final consumer in loose or small retail units. This group never sells to processors or institutions. Their capital and trade capacity is low meeting only their minimum requirements to satisfy their short-term livelihood needs.

5.1 Traders' Characteristics

Table 12: Trader breakdown by type of trader

Trader Type	% of Total	Total number
Retailers	35.3%	42
Medium vendors	54.6%	65
Wholesalers	10.1%	12

The breakdown of the traders interviewed by operation size⁵ is as follows: 10.1 per cent (12) big vendors, 54.6 per cent (65) medium vendors and 35.3 per cent (42) retailers (**table 12**). Unlike other countries in southern Africa, Swaziland seems to have a higher medium trader base than retail traders and wholesalers. This is especially true for rural areas where the medium vendor (supermarket) acts as the main amenity store for the local population providing

Source: Swaziland Market Assessment 2016

an array of goods. The per cent of big traders in the assessed markets is low due to their large volume of trade and the small dimensions of the country. This allows wholesalers to have regional and national reach and increases the level of competition between traders.

All of the traders interviewed were selling their food commodities from an established shop. The typical small scale and medium trader sells a multitude of food and non-food items at any one time and will in general (99 per cent of the traders) operate on a daily basis. Maize meal, rice, sugar beans and vegetable oil are reported to be available throughout the year across the country.

Figure 14: National average of trader gender (Swaziland 2016 Market Assessment)

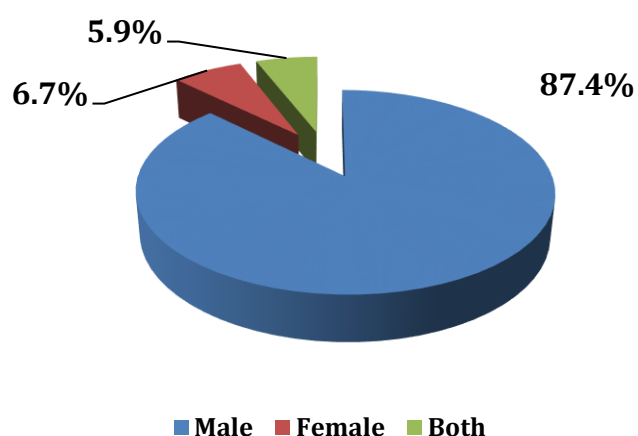


Figure 14 breaks down the business ownership by gender. As is visible from the pie chart, trade in food commodities is largely male dominated with over three-quarters of the interviewed traders mentioning sole ownership being male and only 6.7 per cent of ownership being solely female. Dual ownership was reported at 5.9

per cent. Furthermore, as shown in **table 13**, men are by far the most frequent traders throughout all trade size categories. Women tend to be present more at the retailer and medium vendor levels even

⁵ Random selection of traders was undertaken in each market, however many markets especially rural markets only had medium vendors with occasionally some retailers hereby meaning that medium vendors were selected more frequently

though still a minority (6.7 per cent). Men dominate outright the big vendor category 100 per cent of ownership being male. The high majority of men in trading compared to women could be outlining possible constraints for women to join and work in this sector.

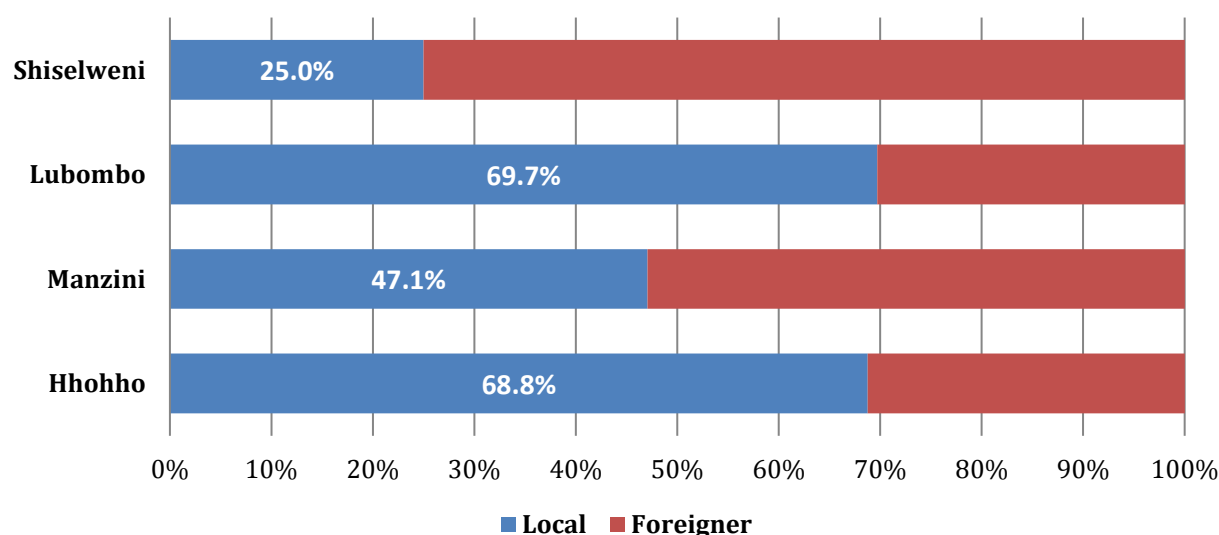
Table 13: Business ownership by trader gender

	Retailer	Medium Vendor	Big Vendor	Total
Male	83.3%	87.7%	100%	87.4%
Female	11.9%	4.6%	0%	6.7%
Both	4.8%	7.7%	0%	5.9%

Source: Swaziland Market Assessment 2016

Trader nationality was noted by local Swazi traders and key informants to be an important element to investigate due to the high levels of competition from foreign traders local traders were being subjected to thereby creating high barriers of entry and continued operation in the sector. The assessment found that in general 55.5 per cent of interviewed traders were foreigners and 44.5 per cent were Swazi nationals. **Figure 15** outlines the regions by trader nationality. The graph illustrates that Shiselweni is by far the region with most foreign traders (75 per cent) while the average for the other regions is 38 per cent.

Figure 15: National average of trader gender (Swaziland 2016 Market Assessment)



Source: Swaziland Market Assessment 2016

Trader nationality may be a contentious area where CBT interventions support foreign run business due to their greater financial and network base providing them greater ease at restocking important

commodity volumes per restocking trip. This may be an important aspect to look at in Shiselweni where foreign food traders heavily outnumber Swazi food traders (**figure 15**).

Table 14 looks at trader nationality data in more detail and found that foreigners dominated the medium vendor businesses while Swazis dominated the retail trade. Wholesaler owner operation was even split.

Table 14: Trader operation nationality in Swaziland (Swaziland 2016 Market Assessment)

	Retailers	Medium Vendors	Wholesalers	Total
Swazis	67%	29%	50%	44.5%
Foreigner	33%	71%	50%	55.5%

Source: Swaziland Market Assessment 2016

The length of time during which traders have run a shop for has an implication on the performance and trade capacity of the business as well as the market in general which the trader operates in. The more years of experience a trader has the greater the likelihood that the trader will know when and from where to purchase and trade goods from. Moreover, with increased years of experience traders will have more developed trade networks and will tend to run a more efficient business structure.

The results from the trader survey (**table 15**) show that nearly two-thirds of the interviewed traders have more than 5 years of work experience in their current trade and when expanded to one year or higher this figure goes up to 95 per cent of traders. Medium vendors and wholesalers tend to have more years of experience at running their business (66 per cent and 92 per cent respectively at 5 years or higher) than retailers (52 per cent). Retailers are more likely than the other trader types to have started their business during the past year (14.3 per cent of retailers compared to 0 per cent for wholesalers and medium vendors).

Table 15: Distribution of trader by years of experience:

	Wholesaler	Medium Vendor	Retailer	Total
Less than 1 year	0%	0%	14.3%	5%
Between 1-5 years	8.3%	33.9%	33.3%	31.1%
More than 5 years	91.7%	66.1%	52.4%	63.9%

Source: Swaziland Market Assessment 2016

5.2 Flow and Volume of Traded Commodities

The direction of flow and volumes of traded maize meal, rice, beans and vegetable oil does not vary much during the post-harvest and lean season in Swaziland. With Swaziland depending on South Africa for 45 per cent of its annual maize requirements food trade is primarily one-way, inward. Furthermore, 90 per

cent of Swaziland's imports come from South Africa and the Kingdom sends 70 per cent of its exports to South Africa. Swaziland is understandably highly dependent on South Africa. **Table 16** further clarifies Swaziland's stable volumes of trade with South Africa.

In 2016 – 2017 wholesalers on average have traded and expect to trade in 18.7 tonnes of maize meal per week. This figure alternates between seasons and is respectively 16.8 tonnes on average per week in the post-harvest period (May – August 2016) and is expected to increase to 20.5 tonnes per week in the lean season (October 2016 – March 2017). This is likely linked to household's depletion of self-produced food stocks having to depend on markets for food in the lean season.

Medium vendors trade on average 2.4 tonnes of maize meal per week during the year. This figure oscillates between 2.2 tonnes per week in post-harvest to 2.7 tonnes per week in the lean season. This figure is not expected to change much between seasons. Retailers trade on average 0.38 tonnes of maize meal per week in a year. This figure is also not forecasted to change much throughout the year. Trade in rice, sugar beans and cooking oil follows similar patterns and is also not expected to change much between 2015 and 2016 (see **table 16**). It is interesting to note that Swaziland seems to trade in greater volumes of rice than maize meal. This is true for all trade categories and may be linked to many Swazi households growing their own maize as well as being linked to the rising maize prices.

Table 16: Average Trade per Week in Commodity by Trader Size

	Maize Meal (MT)		Rice (MT)		Sugar Beans (MT)		Cooking Oil ('000s litres)	
	May '16 – Aug '16	Oct '16 – March '17	May '16 – Aug '16	Oct '16 – March '17	May '16 – Aug '16	Oct '16 – March '17	May '16 – Aug '16	Oct '16 – March '17
Wholesaler	16.8	20.5	21.3	27.8	7.8	10.6	8.9	11.6
Medium trader	2.2	2.7	3.2	3.9	0.7	1	1.6	2.3
Retailer	0.3	0.4	0.4	0.5	0.1	0.2	0.4	0.5

Source: Swaziland Market Assessment 2016

Table 17 somewhat strengthens the correlation trend shown earlier in **tables 9, 10, and 11**. The sourcing markets shown in **table 17** were provided by the interviewed maize meal traders. The table highlights that the country's maize meal originates from Manzini and Matsapha, which is normal as the country's main maize wholesalers, millers, processors are all located there. The maize then passes through the key Region market to get to the rural markets. This is an important finding as it highlights key trade routes of the maize value chain and also identifies possible bottlenecks for Swaziland's food security.

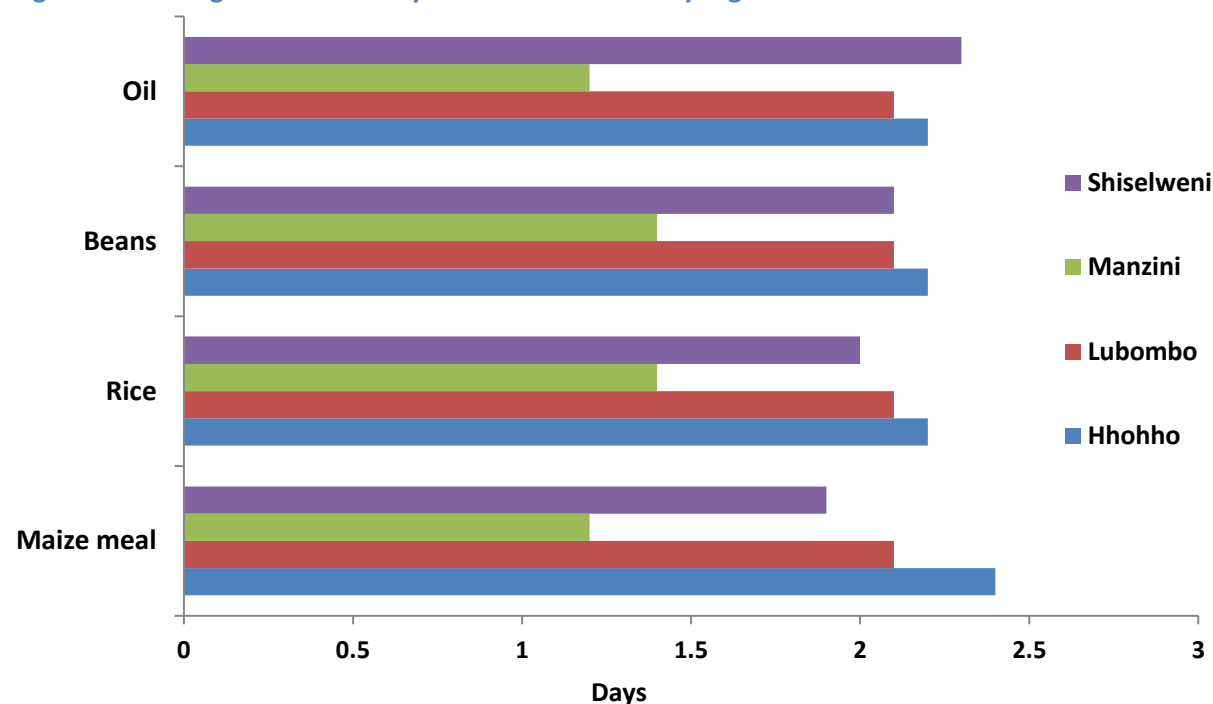
Table 17: Traders’ maize meal source reference market

Region	Main maize meal trading market in Region	Maize meal source market
Hhohho	Buhleni	Manzini, Matsapha
Manzini	Manzini, Matsapha	Manzini, Matsapha
Shiselweni	Nhlangano	Manzini, Matsapha
Lubombo	Siteki, Siphofaneni, Lomahasha	Manzini, Matsapha

Source: Swaziland Market Assessment 2016

Even though maintenance of roads is a pending issue in the country, Swaziland can still vouch for a strong road infrastructure. **Figure 16** supports this claim and further shows that the trade network in the country is strong as traders are restocked quickly. On average it takes a trader 1 to 3 days to restock. This trend does not change by season, however, as can be seen by the graph there are some regions where restocking can take longer, such as 2 to 3 days in Hhohho, Lubombo and Shiselweni, with an average of 1-2 days in Manzini. The bar graph also highlights that restocking does not vary much by commodity; the main difference in the number of days to restock seems to be location.

Figure 16: Average number of days it takes to restock by region



Source: Swaziland Market Assessment 2016

Restocking frequency does not change much (see **table 18**) between seasons highlighting that trade and demand do not vary much between seasons which is normal for a country that heavily depends on food

imports. This is true for all commodities highlighting a constant inflow and supply of these goods from South Africa year round.

Table 18: Average national restocking frequency per month by trader type

	Maize Meal		Rice		Sugar Beans		Cooking Oil	
	May-Aug	Oct-March	May-Aug	Oct-March	May-Aug	Oct-March	May-Aug	Oct-March
Wholesaler	3.9	3.9	3.9	4	3.3	4.2	3.5	4.4
Medium trader	3.4	3.6	3.4	3.7	2.7	3.6	3.3	3.5
Retailer	3.1	3.5	3.1	3.4	3.1	3.6	3.1	3.4

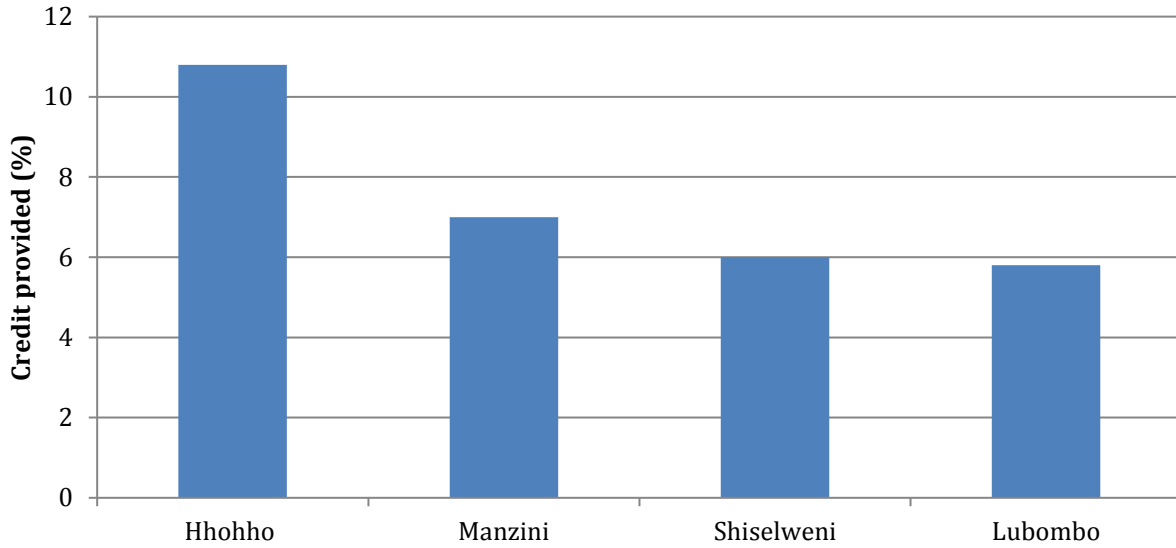
Source: Swaziland Market Assessment 2016

5.3 Credit and Stock Strategy

In the last two years, a majority (74 per cent) of the traders interviewed had not been requesting credit. Per category this broke down to 67 per cent of big traders; 69 per cent of medium traders and 83 per cent of small traders did not request credit. This implies that a large proportion of traders are dependent on their own capital for trade. Of the 88 traders who mentioned they did not benefit from credit, 74 per cent mentioned that they did not need credit while 3 per cent mentioned that they needed credit but that they could not get it and a further 10 per cent said that they could get credit but decided against it due to high interest rates and high collateral requirements. These figures put emphasis on the lack of access to liquidity affecting 26 per cent of traders; an issue the report will look deeper into in the section on trader constraints.

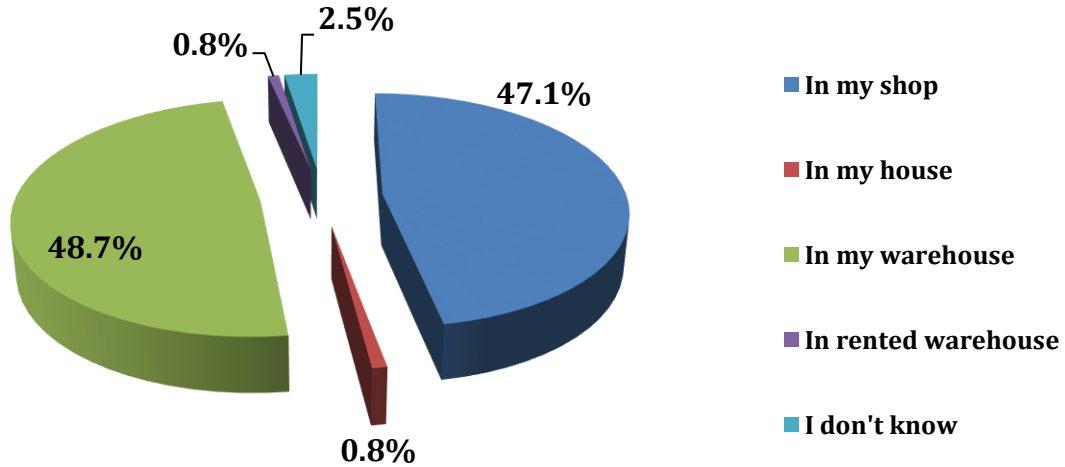
With regard to providing credit, 38 per cent of traders mentioned that there had been an increase in customers' credit request compared to previous years. Moreover, 45 per cent of traders mentioned credit request to be largely in the norm for the time of year, compared to 10.6 percent that mentioned credit request to have decreased. Traders across the four regions reported having provided on average 18.7 per cent of their October sales on credit. This is further looked into in **figure 17** which outlines average trader credit provided by region. Provision of credit is low in Swaziland with Hhohho (10.8 per cent) topping the list of average amount traders by region provide sales on credit and Lubombo lowest (5.8 per cent).

Figure 17: Trader average credit provided to customers by region in October 2016 as a per cent of their total sales in October 2016



Source: Swaziland Market Assessment 2016

Figure 18: Trader Storage Structure



Source: Swaziland Market Assessment 2016

Traders were asked where they kept their food stock irrespective of the storage condition (quality). The survey found that the vast majority (97.5 per cent) were storing their goods in appropriately covered storage facilities in their shops, warehouses, rented warehouses or at home. No trader reported storing food out in the open and no interviewed traders mentioned not stocking any food. This shows that a vast majority of traders have storage capacity (**figure 18**).

However, when looking at how much of the total storage is actually used on a weekly basis, an interesting picture emerges. Across all types of traders total storage used is at very low levels: 23.4 per cent for wholesalers, 37.2 per cent for medium vendors and 28.5 per cent for retailers (**table 19**). This highlights that lack of storage capacity is not an issue for most traders as they are operating well below their full storage capacity level. However, it does raise a question as to why they are storing at such low levels especially during the lean season which should be a peak trading season. **Section 5.4** identifies low demand (mainly led by consumer limited liquidity) as a key trader constraint, an issue the section will address in more depth. Low trader storage capacity use does though indicate that the CBT intervention could effectively build on local traders’ capacity to supply food to the food insecure. Moreover, big millers and processors also reported operating at below total capacity (Premier Foods operating at 40 per cent and SOMI operating at 20 per cent of total capacity). Millers and wholesalers mentioned that this was led by high prices (especially for maize meal) and low consumer demand and liquidity.

Table 19: Average total storage capacity used by trader type

Trader Type	Average current storage capacity used
Wholesalers	23.4%
Medium Vendor	37.2%
Retailers	28.5%

Source: Swaziland Market Assessment 2016

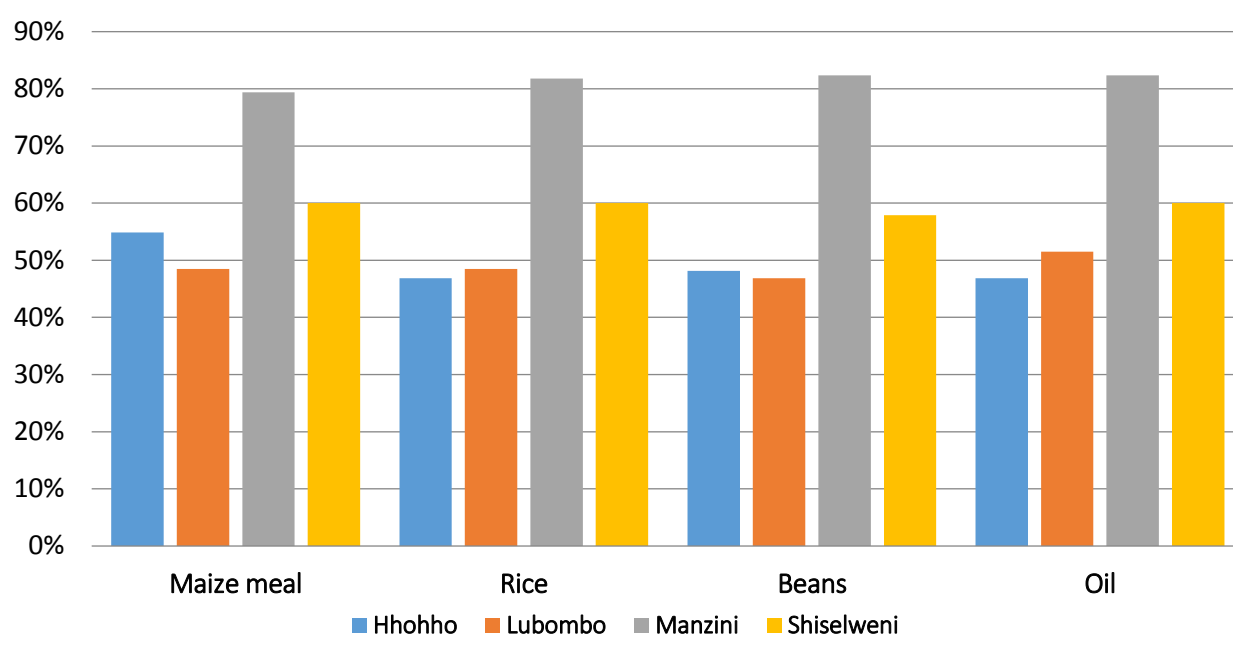
5.4 Response Capacity and Constraints

In terms of response capacity to consumer demand, on average 95 per cent of traders (all types) across Swaziland claimed that they would be able to meet at least a 50 per cent increase in demand for their trade in maize meal within less than a month. When questioned further on meeting a 100 per cent increase (i.e. doubling their trade) this figure only reduced to 58 per cent of traders (mainly due to wholesalers who already trade at very high volumes which are difficult to double), showcasing that a majority of traders have ample access to maize meal in Swaziland. For rice this figure was 98 per cent for meeting a 50 per cent increase and 60 per cent for meeting a 100 per cent increase. When looking at sugar beans this figure was 98 per cent of traders able to meet a 50 per cent increase in demand and 60 per cent of traders meeting a 100 per cent increase in demand. Regarding cooking oil, 98 per cent of traders mentioned being able to meet a 50 per cent increase in demand while 61 per cent of traders reported being able to meet a 100 per cent increase in demand.

Figure 19 below breaks down average trader capacity by region to respond to an increase in 100 per cent of demand for maize meal, rice, sugar beans and vegetable oil. The graph clearly shows that Manzini has the highest percentage (approx. 80 per cent) of traders reporting the ability to upscale and even double

their current trade volumes, followed Shiselweni (approx. 60 per cent), Lubombo (approx. 50 per cent) and Hhohho (approx. 48 per cent).

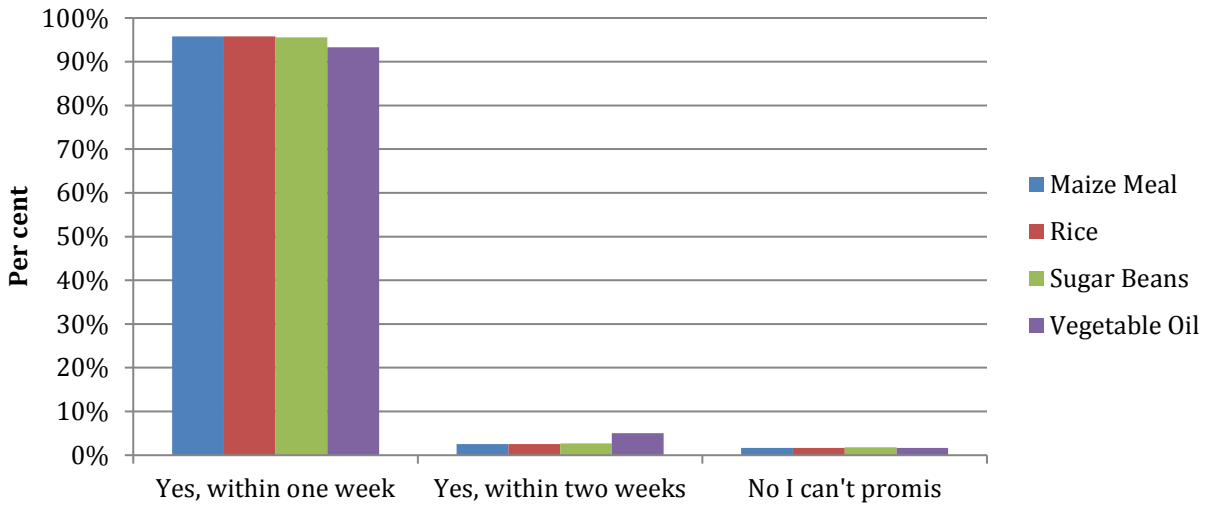
Figure 19: Per cent of traders by region reporting that they can meet demand increases of 100% for maize meal, pulses and cooking oil



Source: Swaziland Market Assessment 2016

Traders reported having well-developed supply network systems which allowed them to restock within a matter of days (**figure 16**, p49). This allowed the traders to confirm short timeframes to meet an increase in demand of 50 per cent. **Figure 20** shows that 95.8 per cent of traders mentioned being able to meet an increase in demand of maize meal by 50 per cent of their current trade in less than a week. This figure was the same for rice and sugar beans and slightly less (93.3 per cent) for cooking oil.

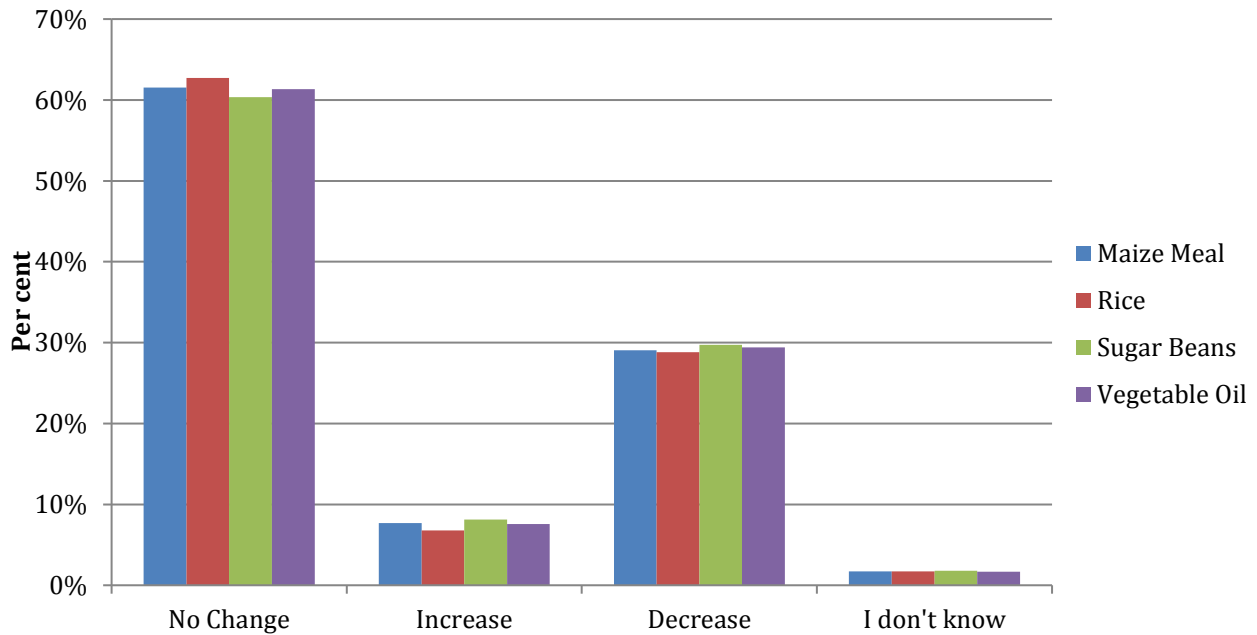
Figure 20: Timeframe to meet an increase in demand of 50% with adequate volume per commodity



Source: Swaziland Market Assessment 2016

Regarding price inflation as a result of meeting the increase in demand, 61.5 per cent of interviewed traders mentioned that they would not alter their prices as a result of meeting a 25 per cent increase in demand for maize meal. This figure was 62.7 per cent for rice, 60.4 per cent for sugar beans and 61.3 per cent for cooking oil, hereby highlighting stable prices (figure 21). Interestingly nearly 30 per cent of traders mentioned that they would reduce prices with a 25 per cent increase in demand possibly highlighting low stock turnaround.

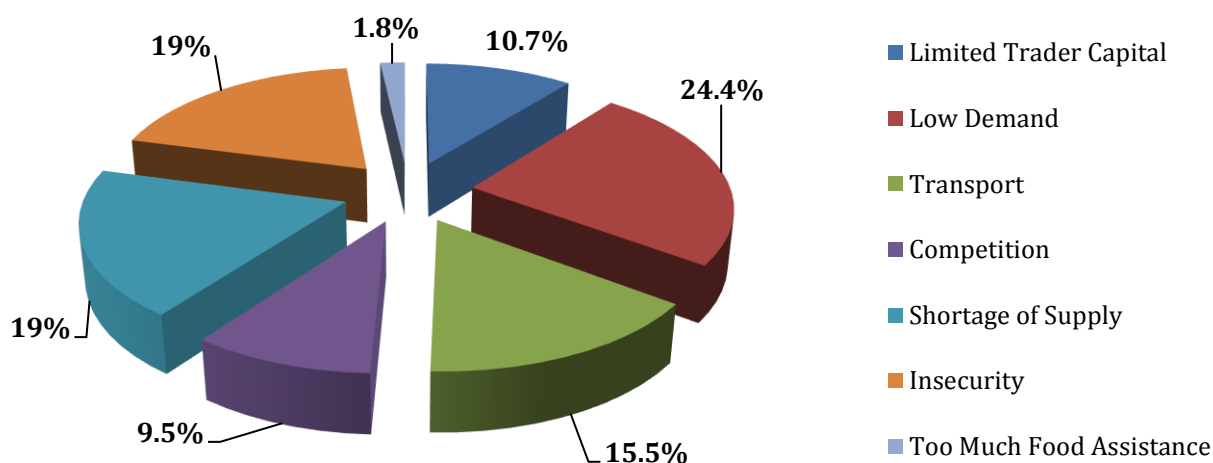
Figure 21: Price trend related to a 25% increase in demand



Source: Swaziland Market Assessment 2016

The main barriers preventing traders from increasing trade are: low demand (mentioned by 24.4 per cent of traders), shortage of supply (19 per cent of traders mentioned that shortage of supply and storage were important constraints), insecurity (19 per cent of traders mentioned that theft and insecurity were important constraints), transport limitations (15.5 per cent mentioned bad roads, lack of transport and high transport costs as important constraints), see **figure 22**. These four main barriers affected over two-thirds (77.9 per cent) of traders, with the remaining 22.1 per cent being limited trader capital (10.7 per cent of traders mentioned that lack of credit, lack of own capital, high collateral and high tax were important constraints for them); competition (9.5 per cent of traders); and 1.8 per cent of traders mentioned too much food assistance. Limited trader capital and low demand (35.1 per cent of constraints mentioned by traders) are by-and-large issues that could be addressed through a CBT intervention.

Figure 22: Main reported trader constraints



Source: Swaziland Market Assessment 2016

Section 6: Conclusions and Recommendations

6.1 Conclusions

The market assessment analysed numerous market components and uncovered a plethora of information. Specifically, the assessment looked at food price trends over time including providing forecasts. It covered macroeconomic and food security analyses. It has looked at trade patterns over time, trader food sources, market interconnectedness, as well as traders' ability to expand production to meet demand. It has covered road type and mobile phone network coverage and has also looked at trader storage capacity and constraints to trade.

The assessment found that food markets in Swaziland are functioning. Even though in need of maintenance, Swaziland has decent infrastructure (roads, mobile networks, storage facilities) which facilitates and catalyses trade across regions and national borders. The ability of most, if not all, traders across the country, to procure food within two to three days throughout the year demonstrates good market functionality and food supply chains in the country. The single most important trader constraint mentioned was low consumer demand which outlines the potential for CBT interventions.

Continued further in-depth data collection and analyses such as monitoring food prices, monitoring cross-border trade flows and monitoring market functionality and volumes traded throughout the year, should be undertaken so as to better understand the evolution of Swaziland's food markets over time and to be able to project likely future trends.

The key question to answer remains availability of food at affordable prices on local markets for the upcoming lean season. With high food prices especially of maize, households are switching to cheaper substitutes such as rice and sour porridge. Swaziland depends heavily on South Africa for its food security. In fact, Swaziland's imports from South Africa account for 90 per cent of the country's total imports. For the 2016-17 marketing season, cereal imports are expected to increase to around 80 per cent (197,000 tonnes out of 245,000 tonnes) of Swaziland's national cereal requirement, up from the five-year average of 45 per cent. Equating to an increase of around 86,000 tonnes compared to the five-year average. Swaziland's National Maize Corporation has already ensured imports of maize of 4,000 tonnes per month till March 2017, thereby ensuring a stable and plentiful supply of maize on the market.

Nevertheless, the prohibitive cost of maize at SZL 5,000 per tonne at which NMC is selling maize to millers and consumers alike in Swaziland, is affecting household expenditures. Twenty-one per cent of Swaziland's population already spends more than 75 per cent of their household's income on food. NMC's high prices are above regional average prices; white maize in South Africa was priced at ZAR 3,789 per tonne in November 2016, 24 per cent cheaper than in Swaziland. Millers in the country add SZL 2,000 – SZL 3,000 per tonne to the final cost of maize meal found in the shop/outlets, thereby making Swaziland

the second most expensive country (after Namibia) in southern Africa for maize meal, approximately 53 per cent more expensive than the region's average.

In order to support local traders and ensure cheaper food for households, Swaziland's Government should try to ease its highly regulated food market, especially regarding maize. Maize prices should be reviewed more frequently to more closely reflect regional price trends and import tariffs/bans should be reduced to spur competition and reduce food prices paid by consumers.

Initial forecasts for the 2016-17 harvest look promising with above average rains in the planting period and an outlook of more rain to come in the first quarter of 2017. However, before the 2017 harvest, Swaziland will have to face the 2016-17 lean season where prices will likely remain prohibitively high for the most vulnerable and food insecure Swazi households. In most cases, a CBT intervention will be the best solution providing access to food for the most vulnerable and food insecure populations in society while at the same time supporting the Swazi economy through allowing beneficiaries to buy directly from traders. An issue which the 'Market Assessment Cash Based Transfer Modality Options: Swaziland' report looks into further.

6.2 Recommendations

The assessment team has proposed a set of recommendations to be followed up on by the Swaziland inter-agency cash and voucher working group. These recommendations aim to: support CBT interventions during 2016-17, improve market monitoring approaches and better prepare Swazi VAC for future market assessments it plans to undertake:

- Review Swaziland's national food price monitoring system to align it with CBT requirements (units of measure, standards of data collection, market selection and reporting format/s).
- Monitoring of food volumes, cash distributions and food prices on the markets is a must before, during and after the cash/vouchers intervention modality has taken place.
- WFP to start-up mVAM as a way to monitor food prices in remote markets.
- Include a question in Swaziland's annual VAC Assessment identifying which markets vulnerable households' get their food requirements from. Emphasising on location rather than shop name.
- Ensure a CBT intervention balances out support between shops owned by nationals and those by foreigners. This will ensure possible tension and conflict between different communities with regard to the received assistance is limited.
- Verify with local traders on their preferred intervention modality. A number of traders mentioned that competition between traders is very strong in Swaziland. Often they mentioned preferring vouchers to cash distributions as this would guarantee consumers would purchase food from them rather than a competitor, thereby limiting the trader's exposure to risk.
- Monitor security concerns across the country to see if any recordings occur as a result of the interventions.
- Due to high levels of chronic malnutrition in the country review feasibility of selecting vouchers over cash coordinating with nutrition units/organizations, as vouchers are typically the favoured market-based modality to improve nutrient intake and increase diet diversity.
- A nutrition survey is recommended to enable a more in-depth understanding of the malnutrition situation in Swaziland.

Section 7: References

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Section 8: Annexes

Annex 1: Terms of Reference

Swaziland Market Analysis for Peak of Lean Season November 2016 – March 2017

Terms of Reference

Background

Since early 2015 Swaziland has been severely affected by the El Niño climatic event. The country's cumulative rainfall during 2015/2016 was well below the cumulative rainfall of the previous rainy season, significantly drying up national water resources and leading to a situation of sustained water scarcity. Agricultural production, in particular, production of maize which represents the main staple for the majority of households, has been severely impacted. The 2015/16 production is estimated at 33,460 MT compared to the 81,623 MT of the previous year. The livestock sector, another critical source of livelihoods, reports a loss of 67,120 cattle and counting due to the drought, corresponding to 11 percent of the national herd population.

A national state of emergency was declared in February 2016, followed by the launch of the National Emergency Response Mitigation and Adaptation Plan (NERMAP) coordinated by the National Disaster Management Agency (NDMA). An estimated 300,000 people (approximately one-third of the population) were estimated to have fallen into food insecurity by March 2016, with a potential deterioration of the food security situation towards the peak of the lean season (Feb 2017). The Government of Swaziland committed important resources to drought mitigation but requested additional technical and financial support to the international community in the development and implementation of an emergency response plan.

The Vulnerability Assessment Committee (VAC) Report published in July 2016 under coordination of NDMA and with participation of the main international organization addressing issues of Food Security, confirmed the start of the year projections, estimating an increase of the food insecure population to 320,000 towards the end of 2016, and a likely further deterioration during the peak of the lean season between November 2016 and March 2017. Around 350,000 people, especially in rural areas, are expected to be severely affected by food insecurity (Integrated Food Security Phase Classification -IPC phase 3 and 4), while up to 640,000 (49.3 per cent of the country's population) are anticipated to be in need of some degree of food assistance and livelihood support. The worst affected regions are the rural areas of Lubombo and Shiselweni.

Swaziland is traditionally a net importer of staple foods and typically Swazis' source around 40 per cent of their staples from the market. Given the decrease in production, affected populations are even more dependent on markets to sustain their basic food needs, yet their purchasing power is compromised by reduced income sources as a consequence of the drought. The government controls maize prices on the market, maintaining cost to households of the main staple food relatively stable for the time being.

Upon government request, WFP initiated an Emergency Operation in June 2016 to cover the gap left by governmental and other humanitarian partners, thus addressing the initial food needs of approximately 77,000 beneficiaries. The number of beneficiaries assisted through WFP resources is projected to progressively be scaled up to 150,000 as the peak of the lean season approaches. Part of

the targeted caseload will be reached through cash-based transfers (CBT), starting with 30,000 beneficiaries in September 2016, and potentially scaling up to 50,000 as needs are confirmed and market stability permits.

Objective

The main objective of the Market Analysis is: i) to establish whether from a food supply perspective local markets have the capability to absorb additional demand without negatively affecting markets' food supply and price levels throughout the remainder of the lean season; ii) identify an agile approach/monitoring system to follow key market indicators in real time, so as to inform programme modalities, including the selection of transfer modality combinations for future caseload increases and adjustments of transfer values to beneficiary food security needs.

General objectives of the assessment are as follows:

- Identify and map the local **market structure** (key actors & institutions) and assess the **supply chain** for main cereals (maize, maize meal, rice and wheat flour), pulses (general beans) and vegetable oil;
- Analyse **current and projected availability** of cereals, pulses, and cooking oil on local markets taking into consideration both formal and informal market patterns;
- Establish the **level of market integration** between source and supply area/s;
- Analyse **market patterns** such as volumes stored and traded, price levels and trends, price setting behaviour, competition and seasonality, taking into consideration formal and informal market trends;
- Analyse **market patterns** such as price levels and trends, price setting behaviour, competition and seasonality for both formal and informal markets;
- Analyse the market's **potential or capacity to respond to current and transfer-induced increases in consumer demand**, e.g. storage facilities, stocking levels, stock replenishment lead-time;
- Analyse **demand conditions** such as the vulnerable population's **physical and economic access** to local markets (including inflation patterns of food and non-food commodities, distance from markets and road access to markets, commodity preferences, commodity utilisation, etc.);
- Establish a market monitoring methodology that can allow for easy and agile tracking of key market indicators subject to volatility during the period of programme implementation. Specifically, these indicators should include:
 - Price trends of key staple and fresh food items typically consumed by beneficiaries at national level and in current and planned project areas
 - Import flows and volumes of key staple food items (and dairy products?)
 - Government import-export and price subsidy policy

- Provide **recommendations**, including i) scale up the capacity of CBT programming ii) **transfer value** per area of intervention and iv) how to **address identified bottlenecks** for traders to meet increased demand and strengthen respective supply chains.

Methodology

The WFP Market Analyst will provide technical support for the market assessment. WFP will lead in the facilitation and finalisation of the market assessment with support from Swazi-VAC, MoA, CSO, FAO, Swaziland Red Cross, World Vision International, including other partners and Government Ministries. The activities will involve reviewing the assessment methodology, tools and facilitation processes. The assessment will be financed by the WFP, while other agencies including UN Agencies, NGOs and Government Ministries will provide logistical support, including the provision of enumerators and tablets for the assessment and possibly also vehicles and drivers.

The market assessment methodology and tools will have to be agreed upon by the partners before commencing field data collection. Training on the use of the methodology (to be facilitated by all partners) will be done for the research team before proceeding to the field for data collection. The training will also include piloting of the proposed tools. A data and response analysis workshop will be undertaken at the end of the field data collection to inform the final market assessment and response analysis report with clear recommendations to the humanitarian response community on the appropriate response modality to be undertaken by the district.

WFP's mVAM data collection methodology will be explored as the tool for the proposed monitoring system. Associated costs should also be looked at, in comparison to a more traditional data collection mechanism. If it is agreed that this is indeed the most cost-efficient and agile way to collect market data on a regular basis, the RB Market Analyst will:

- Support the CO in drafting the appropriate questionnaires/data collection tools required to putting the mVAM system into practice.
- Provide the CO with advice on how to practically set up the mVAM system, including required equipment and involving key CO units as applicable (VAM, M&E, IT, etc.).
- Support the CO in developing a monthly budget to cover mVAM related costs.

A first test round of mVAM data collection should be conducted during the mission, so as to allow for any adjustments that may be required.

Main Deliverables

- Tools and methodology for the initial market assessment to be developed.
- Training of research team on market assessment tools.
- Coordinate the collection of field level market data.

- Facilitate a data analysis session with CO VAM colleagues to identify key informants profiles, monitoring sample and methodology, frequency of mVAM data collection and indicators to be tracked throughout programme implementation.
- Produce a short market analysis report summarising the main findings from the secondary and primary data analyses, highlighting clear recommendations on the most appropriate market monitoring modalities.
- Produce a set of graphs, maps and tables which can be used to present preliminary results to key stakeholders by mid-November.
- Support the CO in making a cost analysis/monthly budget for the implementation of the mVAM monitoring system
- Design a '*structured quantitative questionnaire*' for mVAM live calls with traders.
- Explore feasibility of an in-house call centre for remote mVAM market monitoring, including training of the operators and fine-tuning of a data collection tool.
- Identify a list of key indicators (from mVAM data collection and from secondary data analysis) to be used for a tentative '*cash suitability index*' which can be piloted in other countries across the region
- Produce a market assessment report in English, summarising the main findings from the secondary and primary data analyses, highlighting the supply chain for specific food commodities and clear recommendations on the most appropriate market monitoring system, as well as on appropriateness of transfer value and the possibility of potential CBT scale-up.

Timeframe

The assignment in the country is planned for a maximum of 19 days (from discussions on the methodology to the presentation of the results. This will cover the period from 6th to 25th November 2016. The write-up of the report will happen remotely after the 25th November and the zero draft of the report will be submitted by 15th December 2016. An indicative schedule of activities is outlined in the table below. Further reviewing may be considered to accommodate the proposed planning with the effective data collection and cleaning timing.

Table 1: Tentative Timeframe of the implementation of the Market Assessment

<i>Key Activities</i>	Sept-Oct	9-11 Nov	14-18 Nov	21-23 Nov	24 Nov	25 Nov	28 Nov – 9 Dec	9-15 Dec	16 Dec
1. Background literature review (continuous)									
2. Agreeing on methodology and Tools									
3. Training data collection team									
4. Data collection									
5. Analysis of preliminary data									
6. Agreeing on recommended intervention modality by Inkhundla/ region									
7. Preliminary findings									
8. mVAM cost forecast									
9. Development of mVAM questionnaires/ tools									
10. Writing of draft report + Preliminary findings presentation									
11. Review comments on draft report									
12. Market Assessment Report final release									