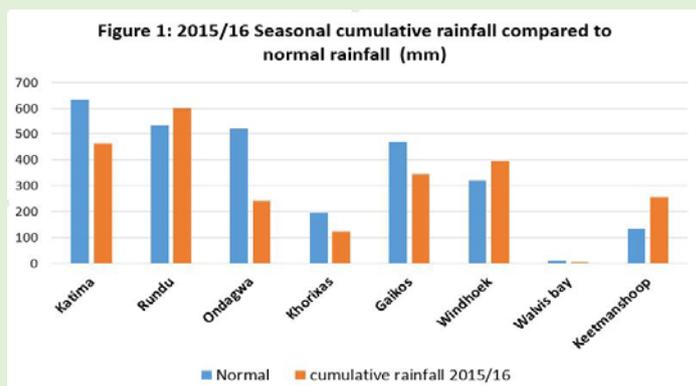




# FINDINGS

## 1. 2015/16 SEASONAL RAINFALL PERFORMANCE

The 2015/16 rainfall season was characterized by poor and erratic rainfall and prolonged dry spells spanning from mid January to end February 2016. The onset of the rains was delayed with little to no rainfall being received in October and November 2015, leading to delayed sowing. Most places in the far south, north central and western parts as well as Zambezi received below normal rains, unfavourable to agricultural production. Cumulative rainfall shows that Rundu, Keetmanshoop and Windhoek received above normal rainfall (Figure 1).



## 2. HOUSEHOLD DEMOGRAPHICS

Of 966 households surveyed in 12 regions (excluding Khomas and Kavango East), 55% and 45% were male and female headed households respectively.

Table 1 presents regional breakdown of household-head by gender.

	//Karas	Omaheke	Erongo	Otjozondjupa	Omusati	Ohangwena	Oshana	Oshikoto	Kavango West	Zambezi	Hardap	Kunene
Male (%)	73	57	38	68	36	56	50	64	55	29	65	49
Female (%)	27	43	62	32	64	44	50	36	45	71	35	51
Interviewed Households	73	80	26	87	91	118	30	132	120	75	91	43

Twenty-eight percent of the households were elderly headed while no child-headed households were observed. With regards to school enrolment 90% of children of school going age were enrolled in schools, the remaining 10% percent were either never enrolled or dropped out from school.

A total of 152 cases of chronic illness (more than 3 months) were recorded among the sampled households out of 4523 people – a 3.4 percent. In Oshikoto of 51 cases were observed representing 33% of the total people assessed in the region. Meanwhile in Kavango West, 31 cases were observed among 143 people assessed – a 22 percent.

## 3. FOOD AVAILABILITY

The main staple foods (maize meal and mahangu) were confirmed to be available in most local markets, although at higher prices than those observed at the same time last year (percentage).

For example 40% of households in the Zambezi region indicated limited availability of cereals in local markets especially in remote areas. Maize meal prices in the region have also gone up by 29% compared with the same time last year, which is indicative of a looming food shortage. Elsewhere prices have also gone up (Table 2). Maize meal prices per Kg increased by 20% compared to same time last year. With the impacts of the El Niño induced drought worsening on international, regional and national markets, commodity prices are expected to escalate further.

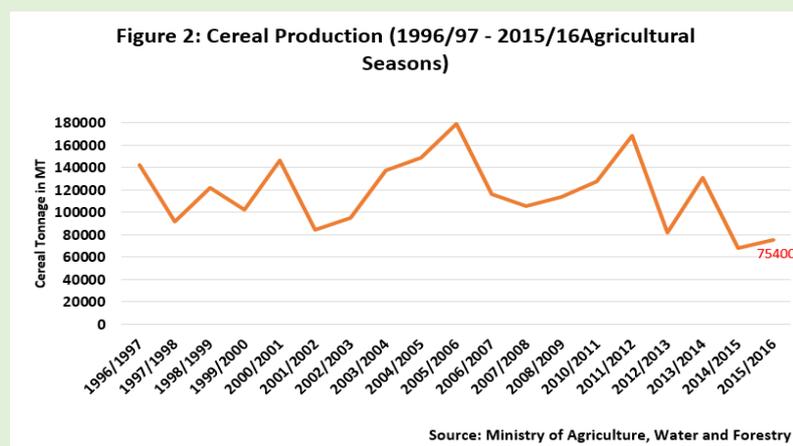
	Maize meal average price			Meat average price			Cooking oil average price		
	Mar15	Mar16	% change	Mar15	Mar16	% change	Mar15	Mar16	% change
//Karas	12	16	36	58	54	-7	20	20	4
Kunene	15	14	-7	33	41	25	21	20	-5
Omaheke	11	12	12	24	40	65	22	19	-14
Omusati	8	13	59	33	27	-18	17	21	19
Ohangwena	9	9	0	25	23	-8	18	19	5
Zambezi	9	12	29	17	46	176	20	24	23

Market purchases remain the main source of food (39%) consistent with previous assessments, followed by own production (33%) and food assistance (26%). Market purchases were dominant in the Omaheke region (100%), while own production was dominant in Oshikoto (90%), Omusati (71%) and Ohangwena (67%). Elsewhere, a combination of food sources was noted, including food assistance, purchases, casual labour and gifts.

## 4. 2015/16 CROP PRODUCTION ESTIMATES

The severe El Niño induced drought impacted negatively on the 2015/16 crop production. Provisional crop estimates indicate a poor crop harvest, projected at 75,300 metric tonnes which is below the 5- year average (Figure 2). The majority of farmers attribute the poor harvest to sporadic, erratic and insufficient rainfall and frequent dry spells. This poor harvest will translate into an increase in commercial imports, which need to be sourced out from international markets as all SADC countries have been severely impacted by the drought and very little is available for trade on regional markets except for Zambia, RSA and Tanzania.

Figure 2 shows Namibia Cereal Production Trend from 1996/97 to 2015/16 Agricultural Seasons. Cereal Production levels have been on the decline since 2011/12 Seasons.



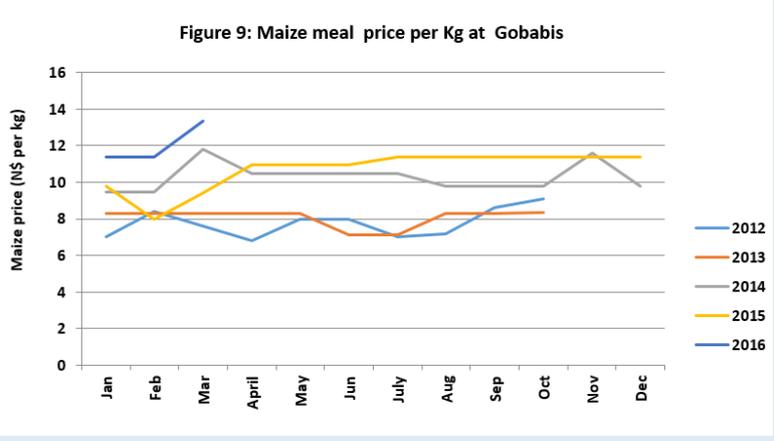
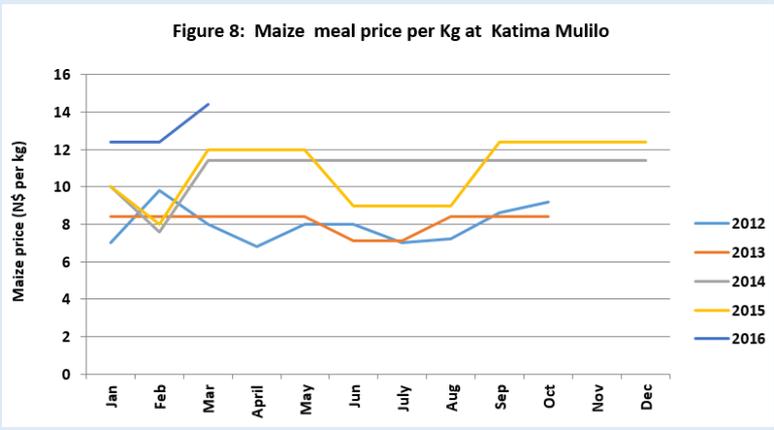
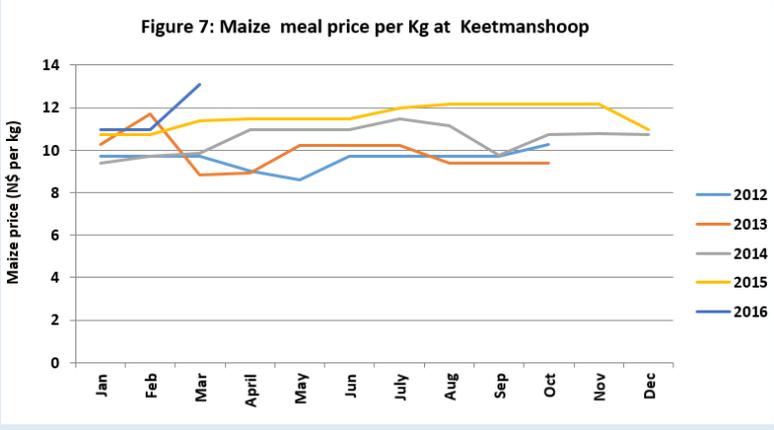
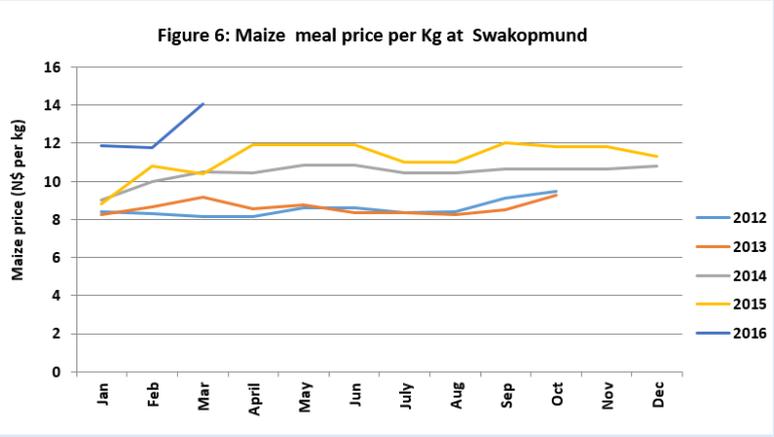
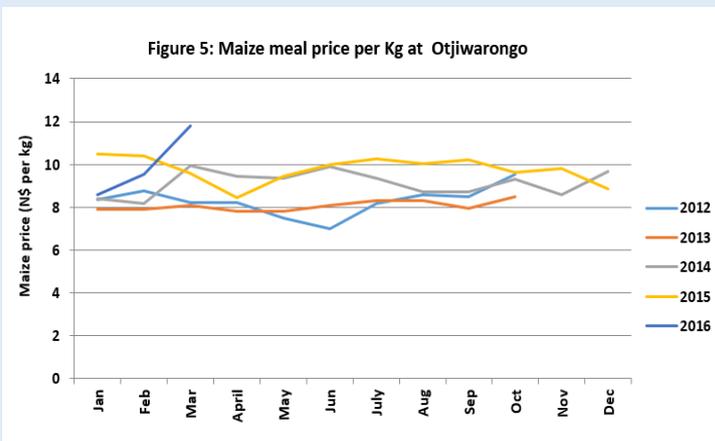
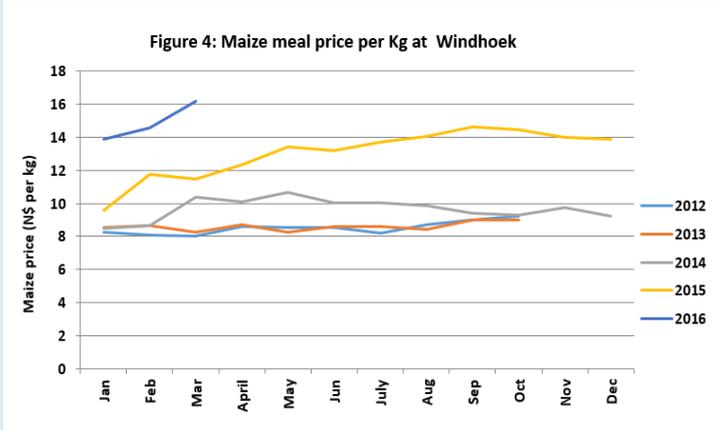
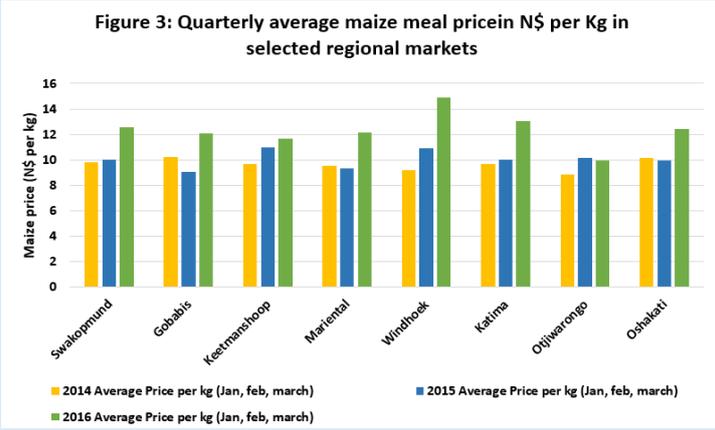
Source: Ministry of Agriculture, Water and Forestry



## 5. MARKET ANALYSIS

A three-month average price analysis (January to March) for 2014, 2015 and 2016 portrays an upward trend in maize meal prices in all 8 regional markets (Figure 3). In all markets the 2016 average maize meal prices are well above those observed in the previous years. This increase could be attributed to the decrease in staple food production locally, high food prices on the international and regional markets and the increased demand on local market purchases.

Figures (4 - 9) show the increasing monthly price trends of maize meal prices in Windhoek, Otjiwarongo, Swakopmund, Mariental, Keetmanshoop, Katima Mulilo and Gobabis from 2012 to date.

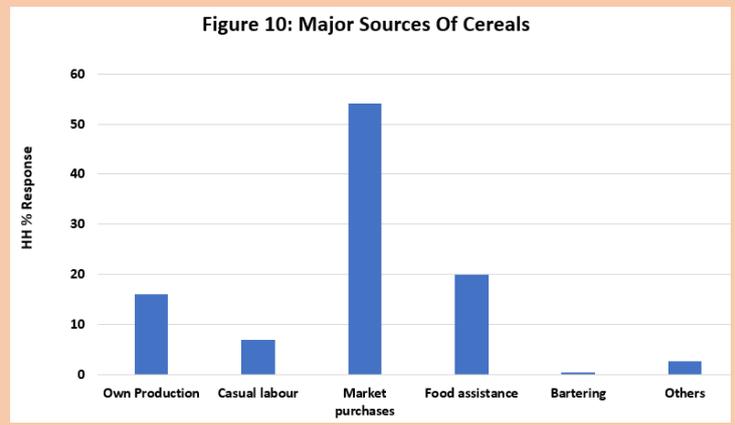




## 6. FOOD ACCESS

### Food Stocks and Sources

Market purchases is the main source of cereal, followed by food assistance and food production (Figure 10). The percentage respondents citing own production as a source of food is low due to current drought. The dominance of market purchases and the increase in food prices will have an impact on access to food by poor vulnerable households.



Regionally, market purchases were cited as the major source of cereals, with the exception of Oshana, Omusati and Oshikoto where own production stands at 50%, 44% and 42% respectively as shown in Figure 10. Food assistance is the main source of cereals in Zambezi (59%), Kunene (51%), Otjozondjupa (33%) and //Karas (37%). Meanwhile, casual labour was the major cereal source in Kavango West.

In addition, 79% confirmed little or no stocks at household level (Figure 12). Most sampled households had no stocks except in Oshikoto, Oshana and Omusati where availability of stocks for two months or more was observed. Figure 12 compares assessment findings of March 2015 and March 2016 in the six pilot regions (//Karas, Kunene, Omaheke, Omusati, Ohangwena and Zambezi).

### Household Food Consumption Patterns

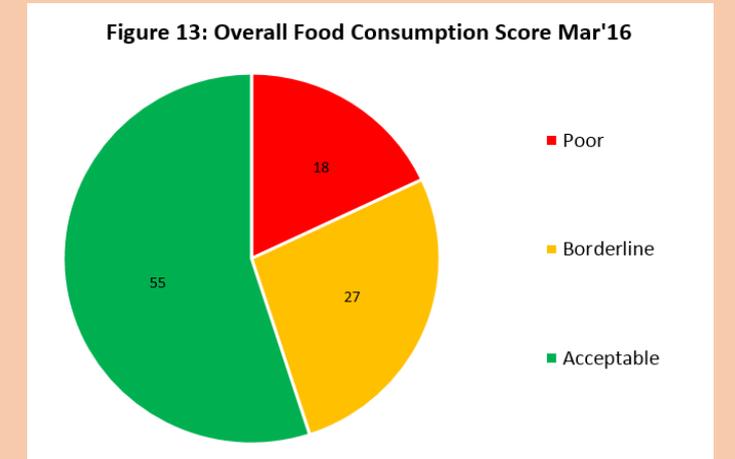
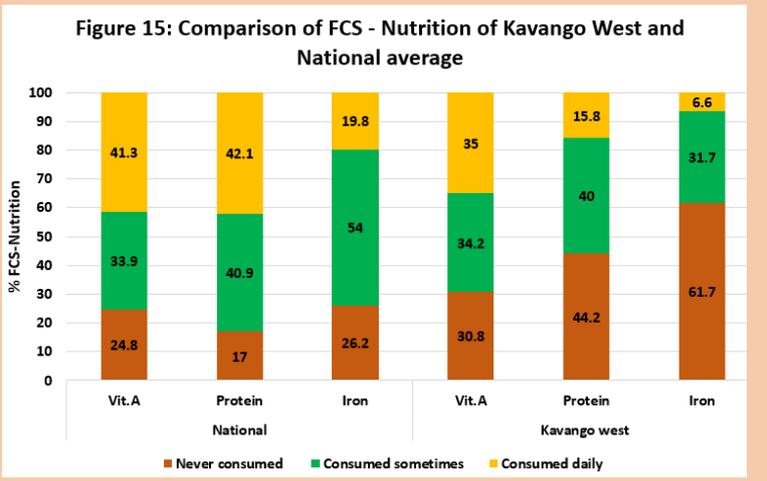


Figure 13 shows the overall Food Consumption Score (FCS), depicting a high percentage of households in the acceptable FCS category. Meanwhile the poor category remains low consistent with previous assessments. In addition, comparison in Food Consumption Score of the 6 pilot regions with the same time last year, show a slight improvement in the acceptable category across

the monitored regions with the exception of Ohangwena (Figure 14).

Kavango West has the highest level of households with poor food consumption patterns at 51%. This indicates low access to nutrient-rich foods contributing to low dietary diversity and high risk of food insecurity. The analysis of the FCS-Nutrition below underpins the evidence mentioned above and shows that the consumption of Kavango West's households of nutrient-rich foods is below national average. The results show that 62%, 44% and 31% of the sampled households in Kavango West have not consumed Vitamin A, Protein and Iron rich foods respectively during the week preceding the assessment.



### Household Coping Strategies

Coping strategies are analyzed using the Coping Strategy Index (CSI) – a technique which measures the frequency and severity of a number of common household coping strategies for addressing food supply shortfalls. It combines the information into a single CSI score. With the CSI, a lower score implies reduced stress on the household's ability to meet its food needs and thus indicates relatively better food security for the households.

**Livelihood Coping Strategies:**  
 Stress strategies, such as borrowing money or spending savings, are those which indicate a reduced ability to deal with future shocks due to a current reduction in resources or increase in debts.  
 Crisis strategies, such as selling productive assets, directly reduce future productivity, including human capital formation.  
 Emergency strategies, such as selling one's land, affect future productivity, but are more difficult to reverse or more dramatic in nature

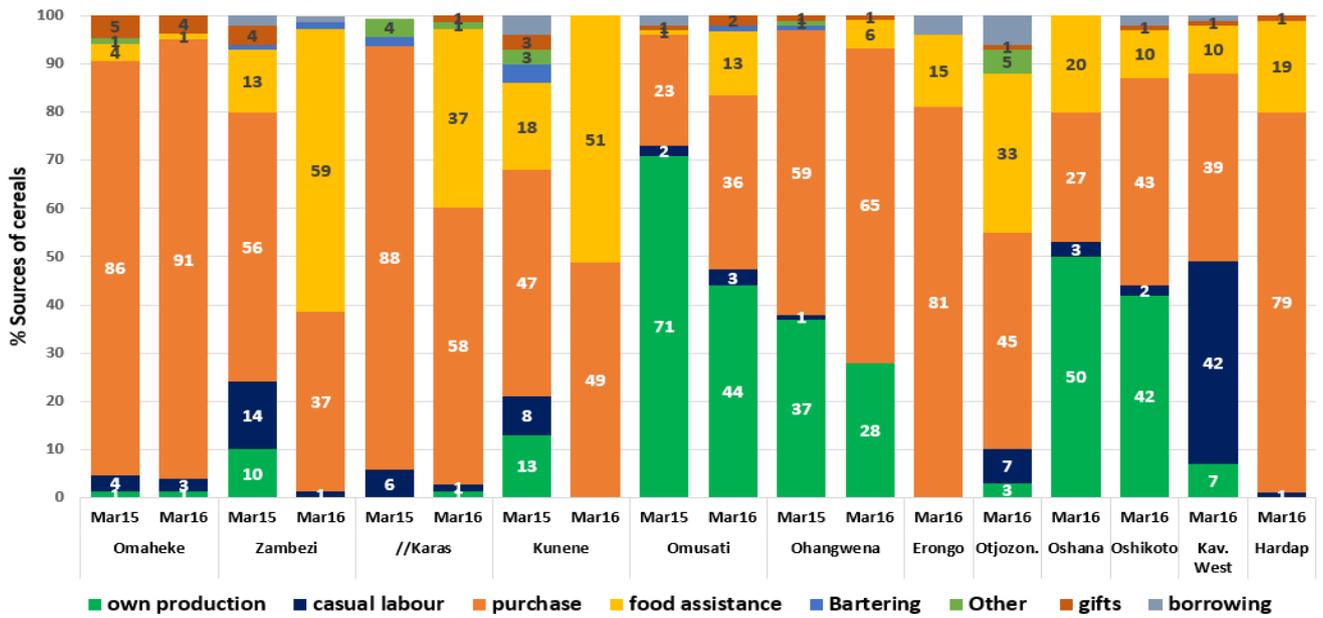
In comparison with the same period last year, the CSI scores have decreased in most of the six pilot regions. Although this is perceived as a general improvement, Zambezi region is still showing a high CSI score due to households engaging at least one day a week in stress and emergency coping strategies including: reduction of adult consumption so that children can eat (47%), skipping entire day without eating (38%) and gathering wild foods (16%). Kavango West has the highest CSI score standing at 50, which is 21.5 points above the national average (28.5). A gender analysis shows no major difference between female and male headed households with 28.29 and 28.67 respectively.

Regarding livelihood coping strategies, 33% of households engaged in stress coping strategies, 10% in emergency coping strategies and 9% in crisis coping strategies.

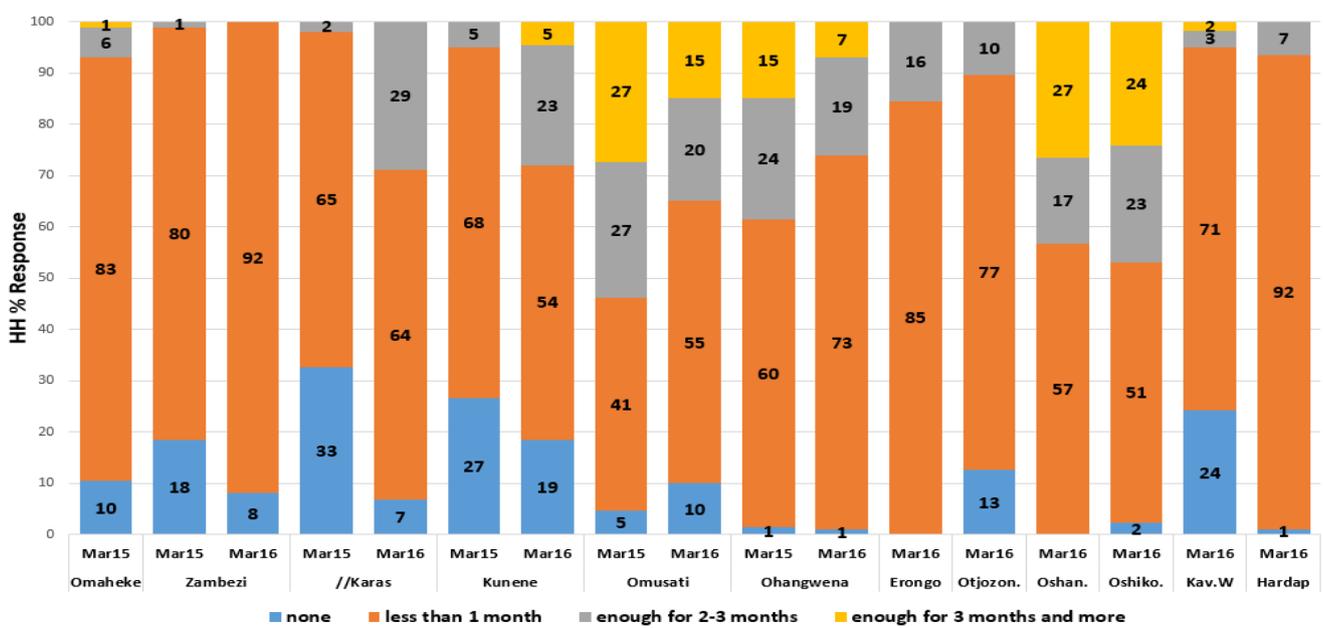
A breakdown analysis of the livelihood coping strategies shows that households are mostly engaging in stress coping strategies across the 12 regions. Between 40% - 50% of households in Erongo,



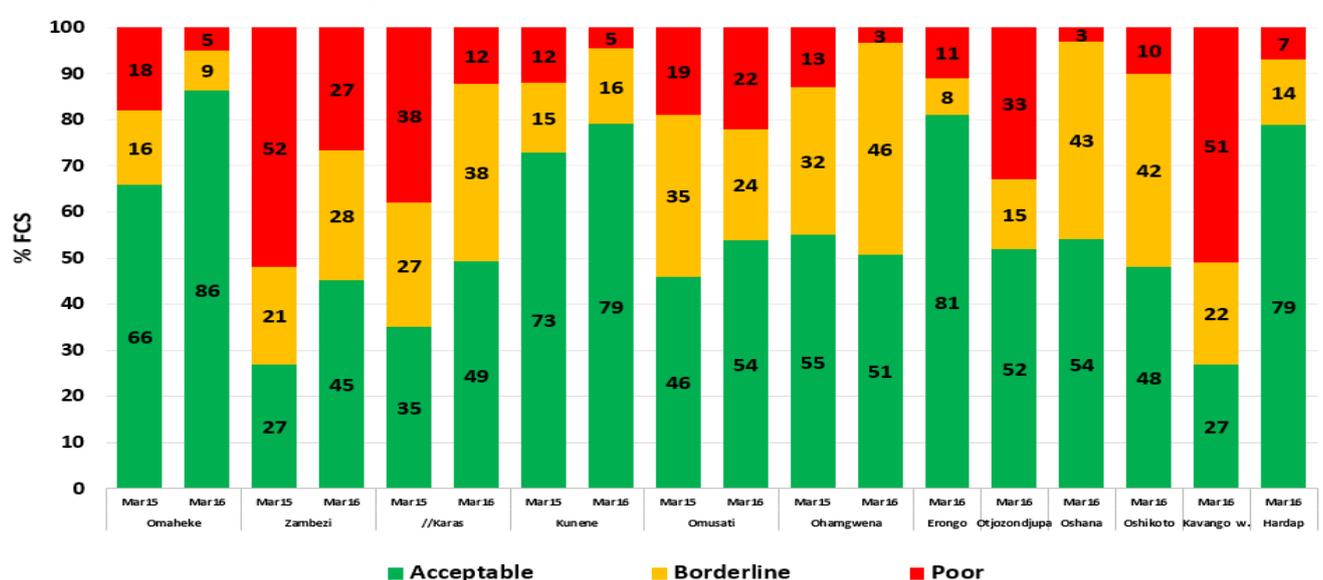
**Figure 11: Major sources of cereals by region**



**Figure 12: Duration of existing stocks by region**



**Figure 14: Food Consumption Scores**





Otjozondjupa, Ohangwena, Oshana and Oshikoto regions indicated engagement in stress coping strategies. Only few households engaged in crisis and emergency strategies during the reporting period of March 2016.

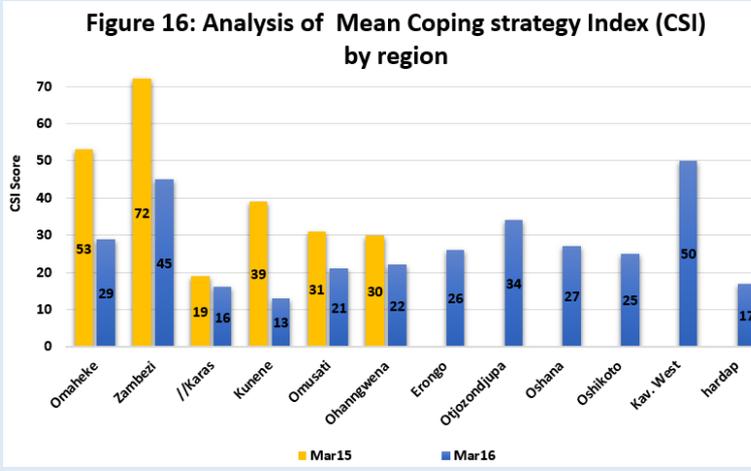


Table 3 presents a summary of the most common coping strategies.

Coping strategies	Mar15	Mar16
Reduce Number of meals	✓	✓
Reduce adult eating	✓	
Borrow food/rely on friends	✓	
Gathering of Wild foods	✓	
Limit portion size	✓	✓
Sharing of food among Households		✓

**Household Purchasing Power**

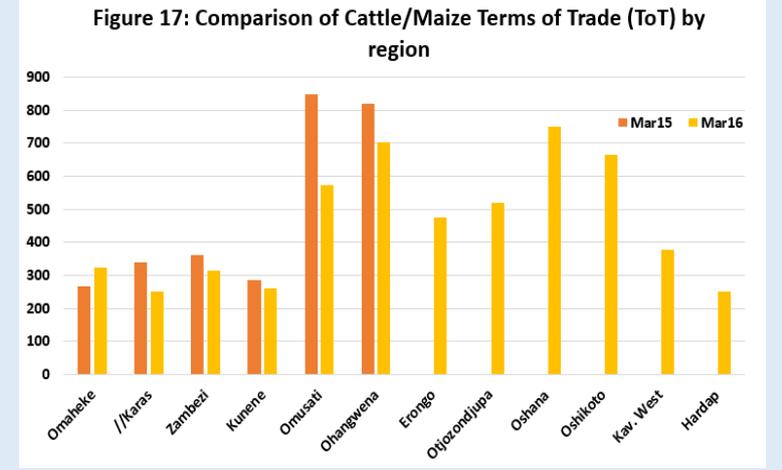
The purchasing power of sampled households in this analysis was measured using average maize and livestock prices in order to assess terms of trade (ToT). Using the commodity prices recorded at sentinel sites, an average price for each commodity and livestock type was calculated for each monitored region. Income from livestock sales was then used to determine the quantity (in kg) of maize meal that could be bought at prevailing market prices

Regional variations in livestock-maize meal terms of trade (ToT) are presented in Table 4. Livestock/Maize meal terms of trade are much more favourable in Oshana, Ohangwena and Oshikoto and less favourable in //Karas and Hardap.

Compared to same time last year, the pilot regions depict a declining trend in Terms of Trade (ToT). This will impact negatively on the food security situation of the livestock dependent farmers.

	Omaheke		//Karas		Zambezi		Kunene		Omusati		Ohangwena		Erongo	Otjozon.	Oshana	Oshikoto	Kav. West	Hardap
	Mar15	Mar16	Mar15	Mar16	Mar15	Mar16	Mar15	Mar16	Mar15	Mar16	Mar15	Mar16	Mar16	Mar16	Mar16	Mar16	Mar16	Mar16
Cattle ToT	268	325	331	250	361	313	285	261	848	573	819	703	474	518	750	664	378	250
Goat ToT	65	56	58	54	46	51	42	41	129	44	75	106	44	87	60	76	58	46
Sheep ToT	48	42	55	39		0	33	36	220	107	110	96	37	43	98	134	74	35
Pig ToT	0	0	207	0		33	78	34	158	68	72	68	48	78	63	94	71	21
Chicken T	6	5	4	3	12	4	4	4	11	7	7	8	4	8	9	6	6	4

Unfavourable Cattle/Maize meal ToT were observed across the regions due to poor animal body conditions and increasing maize meal prices as a result of the effects of the current drought (Figure 17).



**Sources of Income**

Figure 18 shows the March 2016 overall analysis of income sources. Households confirmed diversified sources of income. Pension grants, formal salary, casual labour, crop sales, and other income sources were the dominant sources of income.

*Diversification of sources of income helps to spread the risk during a negative shock, as not all sources are susceptible to one single shock.*

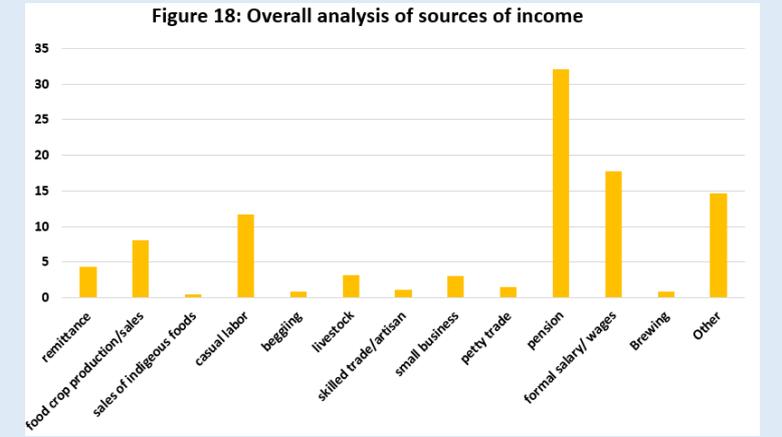
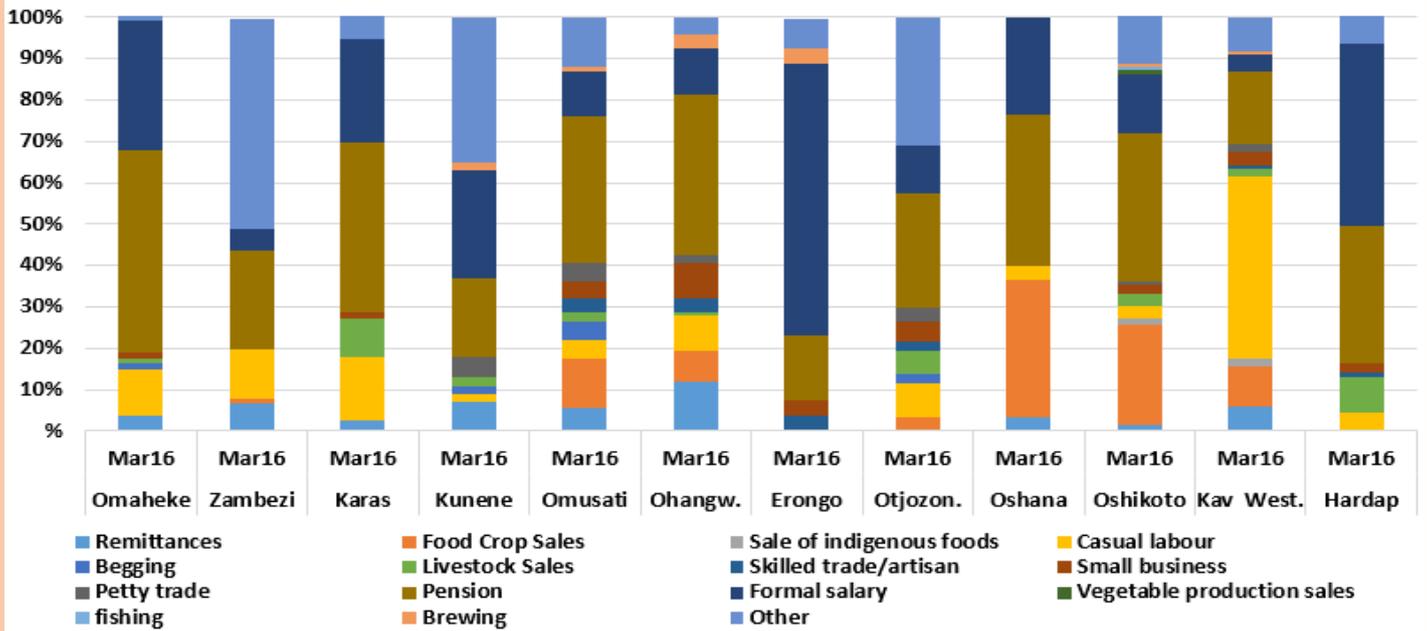


Figure 19 shows the variations of sources of income across the regions. Although pension is reflected as the main source of income across most of the regions, formal salary is the major source of income in Erongo (66%) and Hardap (44%). Casual labour is the dominant source of income in Kavango West (44%). Oshana and Oshikoto are the only regions that have reported crop sales as an additional source of income at 33% and 24% respectively. Zambezi, Kunene and Otjozondjupa reported significant income from other sources (51%, 35% and 31% respectively), which needs further investigation.

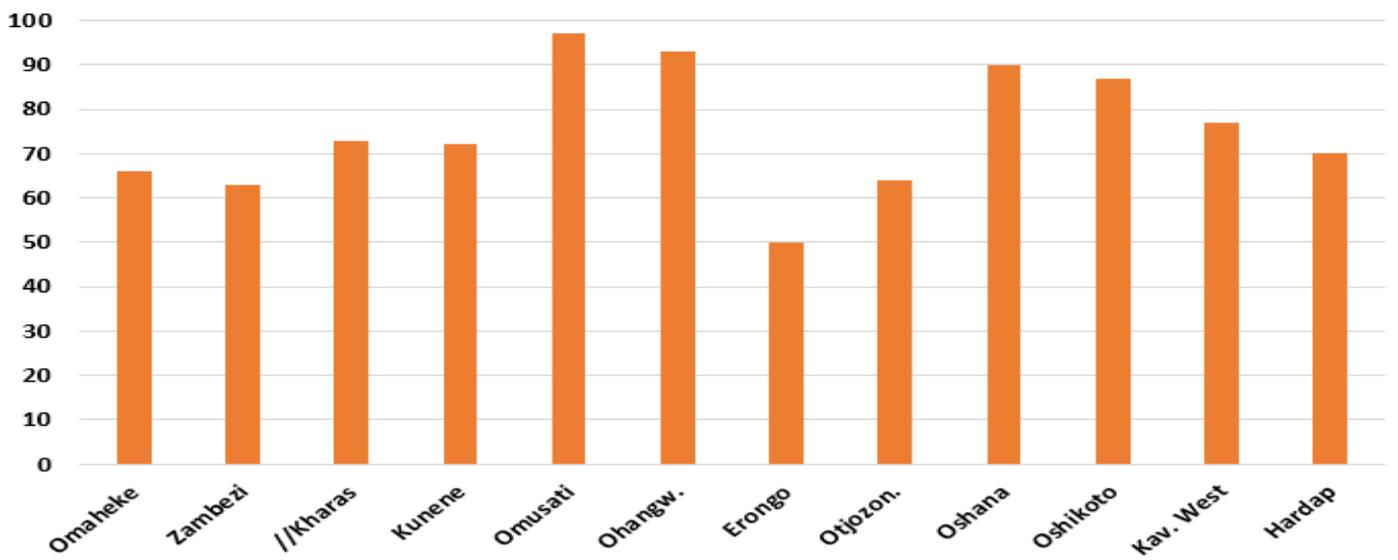


**Figure 19: Analysis of sources of income by region**



**Livestock Ownership**

**Figure 20: Percentage livestock ownership by region - March 2016**



Livestock ownership (Figure 20) is high in Omusati, Ohangwena, Oshana and Oshikoto where more than 80% of the households confirmed ownership. In contrast, Erongo registered the lowest percentage of livestock ownership at 50%. A decline in livestock ownership is a strong indicator of deteriorating food access and general food security of the pastoral communities.

A gender-based analysis showed that 81% of the male headed households and 71% of female headed households owned livestock.

**Asset Ownership**

Data on asset ownership were collected from each household on a total of 21 different assets classified as productive (plough, hoe, tractor, oxcart, etc.) and non-productive (TV, bed, bicycle, radio, etc.) and livestock. The data were analysed considering the number of assets owned by households. Households were then classified as asset poor: having 0-4 different asset types, asset medium: 5-9 assets or asset rich: with 10 or more assets.

Oshikoto, Ohangwena and Omusati registered the highest number of households categorized as asset rich at 75%, 63% and 58% respectively (Figure 21). Of concern are Kunene and Otjozondjupa with the highest number of households falling in the asset poor categories at 42% and 39% respectively. An in-depth study is required to understand assets ownership dynamics in these two regions especially in Kunene where



Figure 21: Overall analysis of asset groups



By gender, male headed households dominated the asset rich category at 43% compared to female headed households at 38%.

## 7. FOOD AND NUTRITION SECURITY ANALYSIS – CARI APPROACH

**CARI** stands for Consolidated Approach for Reporting Indicators of Food Security - a standardized approach for assessing and reporting on household food insecurity. It culminates in a food security console which supports the reporting and combining of food security indicators in a systematic and transparent way. Central to the approach is an explicit classification of households into four descriptive groups: food secure, marginally food secure, moderately food insecure, and severely food insecure. The classification provides an estimate of food insecurity within the target population whether it is calculated at the national or sub-national level. The food security console is the final output of the CARI. It combines a suite of food security indicators into a summary indicator called the Food Security Index (FSI) – expressed as a percentage – which represents the population’s overall food security status. The CARI analysis is based on Food Consumption Scores, Food Expenditure Shares and Livelihood Coping Strategies. A composite food security index for the sampled regions was derived.

Table 5: CARI Console for March 2016

Domain		Indicator	Food Secure (1)	Marginally Food Secure (2)	Moderately Food Insecure (3)	Severely Food Insecure (4)
Current Status	Food Consumption	Food consumption group	55		27	18
	Coping Capacity	Economic Vulnerability	Food expenditure share	49	20	11
Asset Depletion		Livelihood coping strategy categories	60*	24	6	10
<b>Food Security Index</b>			<b>32</b>	<b>34</b>	<b>30</b>	<b>4</b>

**Food expenditure share** was computed to measure households’ economic vulnerability (ratio of total food expenditure and total household expenditure). The food expenditure share is an indicator which classifies households with different food-acquisition patterns. The greater the importance of food within a household’s overall budget, the more economically vulnerable the household is.

**Livelihood Coping Strategies:**

**Stress strategies**, such as borrowing money or spending savings, are those which indicate a reduced ability to deal with future shocks due to a current reduction in resources or increase in debts.

**Crisis strategies**, such as selling productive assets, directly reduce future productivity, including human capital formation.

**Emergency strategies**, such as selling one’s land, affect future productivity, but are more difficult to reverse or more dramatic in nature.



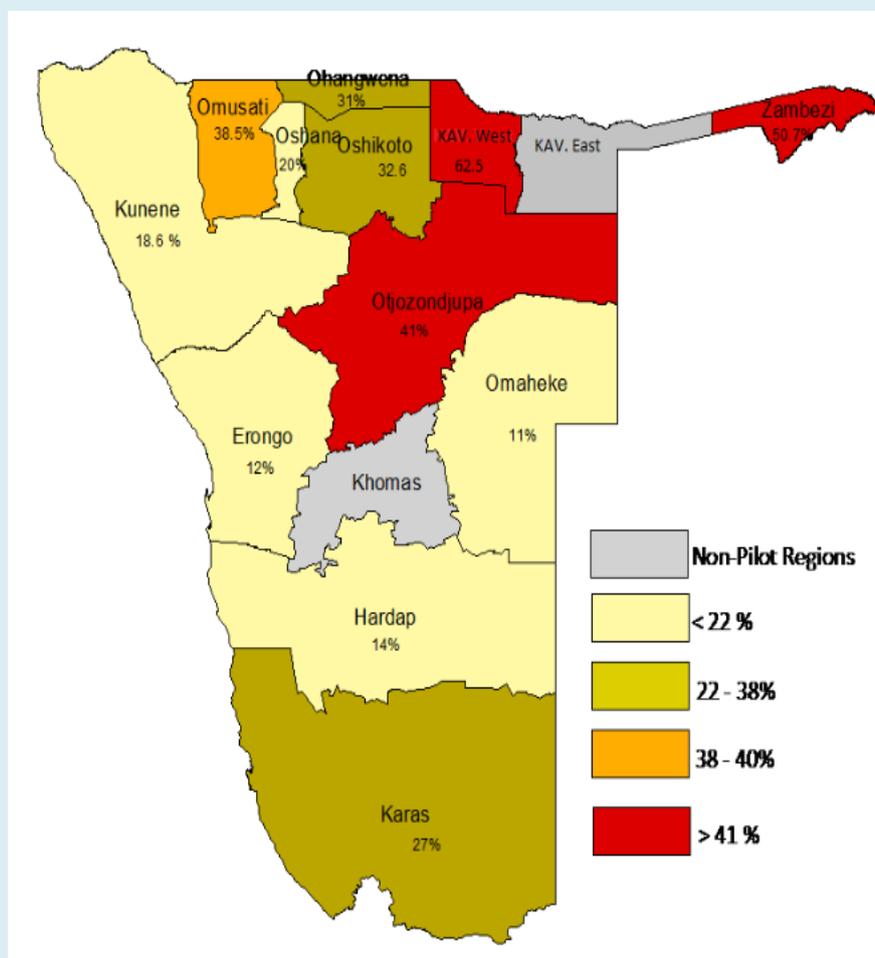
The CARI analysis presented in **Table 5** shows the percentage of food insecure rural households as at March 2016. Thirty-two percent of the sampled households were assessed as "food secure"; 34% as "marginally food secure"; 30% as "moderately food insecure"; and 4% as "severely food insecure". Thirty-four percent of the assessed households were found to be food insecure across the country. This figure is likely to go up as food commodity prices continue to rise if no measures are put into place to boost poor households' purchasing power.

**Table 6: Food and Nutrition Security Index by Region March 2016 (%)**

Food Security Index	Food Secure	Marginally Food Secure	Moderately Food Secure	Severely Food Insecure	March 2016 Food Insecure pop.
//Karas	42.5	30.1	27.4	0	27.4
Omaheke	53.8	35	11.3	0	11.3
Omusati	30.8	30.8	33	5	38
Ohanwena	33.1	35.6	28.8	2.5	31.3
Zambezi	12	37.3	46.7	4	50.7
Kunene	30.2	51.2	18.6	0	18.6
Erongo	76.9	11.5	7.7	3.3	11
Otjzondjupa	27.6	31	35.6	5.7	41.3
Oshana	30	50	16.7	3.3	20
Oshikoto	27.3	40.2	31.1	1.5	32.6
Kavango west	15.8	21.7	52.5	10	62.5
Hardap	46.2	39.6	13.2	1.1	14.3

The regional CARI analysis shows high levels of food insecurity in Kavango West (63%), Zambezi (51%), Otjzondjupa (41%), Omusati (38%) and Oshikoto and Ohangwena at around 33% and 31% respectively (**Table 6**). These high levels of food insecurity are a cause for concern given the recurrent droughts that has eroded the coping capacity of many rural households. **Figure 22** maps the severity of food insecurity per region using the CARI console.

**Figure 22: Percentage Population Food Insecure**





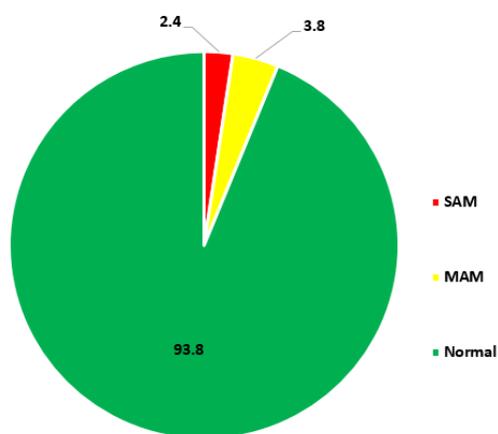
Omaheke, Erongo and Hardap show the lowest levels of food insecurity with 11%, 12% and 14% respectively. The same regions (Omaheke, Erongo and Hardap) recorded high levels of acceptable food consumption patterns and showed low engagement in stressful coping strategies, indicative of improved food security conditions.

The food security status by gender indicates 35% and 29% of male and female headed households being food secure respectively. Meanwhile 34% of female headed households and 33% of male headed households were found to be food insecure.

### 8. FOOD UTILIZATION: NUTRITION SECURITY INDICATORS

#### Mid Upper Arm Circumference (MUAC) measurement:

Figure 23: Nutrition status of children under five - March 2016



Based on the data collected in the 12 regions for the MUAC indicator, a total of 2.4% of children aged 6-59m were identified as being severely acutely malnourished (SAM) and 3.8% as moderately malnourished (MAM), see Figure 23.

//Karas, Otjozondjupa, Omusati, Ohangwena and Hardap regions were the only regions out of the 12 to record cases of severe acute malnutrition out of 561 children screened (Table 7).

Otjozondjupa region recorded the largest percentage of children with severe acute malnutrition (9.5%) from the total cases observed in the region, followed by Omusati (7.5%), Hardap (5.6%), //Karas (2.4%) and Ohangwena (1.7%). Since this was the first time data was collected on this indicator from all 12 regions, these results will act as a baseline for future comparisons.

A comparison of the data collected from the 6 pilot regions for MUAC indicates a slight increase in the levels of acute malnutrition among children 6-59 months, between March 2015 and March 2016. The total percentage of children with SAM in March 2015 was 1% and has slightly increased to 2% in March 2016. The total percentage of children with MAM in March 2015 was 4% and remained the same in March 2016.

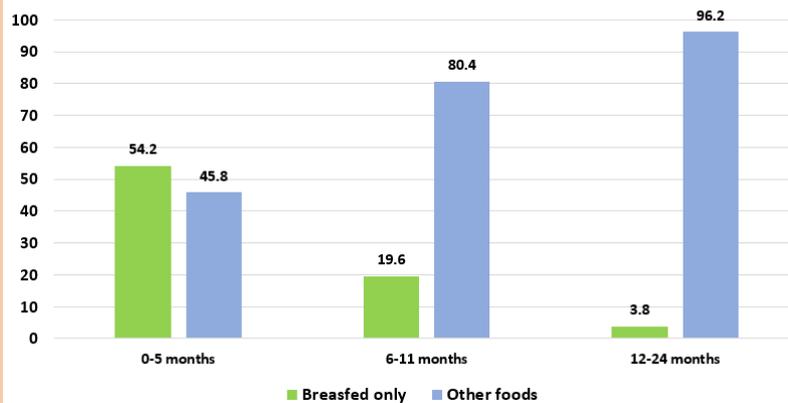
Malnutrition trends in the 6 pilot regions indicate acute malnutrition rates of 5% (20 out of 400 screened), 3.5% (12 out of 348 screened) and 6% (18 out of 300) in March 2015, October 2015 and March 2016 assessments respectively – indicative of worsening situation this year.

Ohangwena region recorded a decrease in the percentage of children with acute malnutrition (MAM) from 10% in March 2015 to 4% in March 2016. Whereas Omusati region recorded the greatest increase in observed cases of acute malnutrition from 2 in March 2015 to 6 observed cases in March 2016.

#### Infant and Young Child Feeding Practices:

With regard to the exclusive breastfeeding indicator, 54% of infants aged 0-6 months are being exclusively breastfed. The remaining 46% of infants are receiving breastmilk and other foods and fluids, which does not comply with global recommendations for breastfeeding exclusively from birth to 6 months of age (Figure 24).

Figure 24: Exclusive breastfeeding and introduction of other foods and fluids per age group - March 2016



In terms of health seeking behavior 51% of the children have visited a health centre during the past three months due to cough/ common cold (43%), diarrhoea (30%), malnutrition and malaria (3%) and other illnesses (23%).

Table 6: Number of cases observed with acute malnutrition (SAM and MAM) for the 6-59 months by gender and by region (MUAC measurement)

	Gender		Regions												
	Male	Female	//Karas	Kunene	Ohangw.	Omaheke	Omusati	Zambezi	Erongo	Otjozon.	Oshana	Oshikoto	Kavango W.	Hardap	Total
Total screened	287	344	41	29	119	42	40	29	7	74	10	90	114	36	561
Cases observed	22	17	2	5	5	0	6	0	0	11	0	1	0	9	39

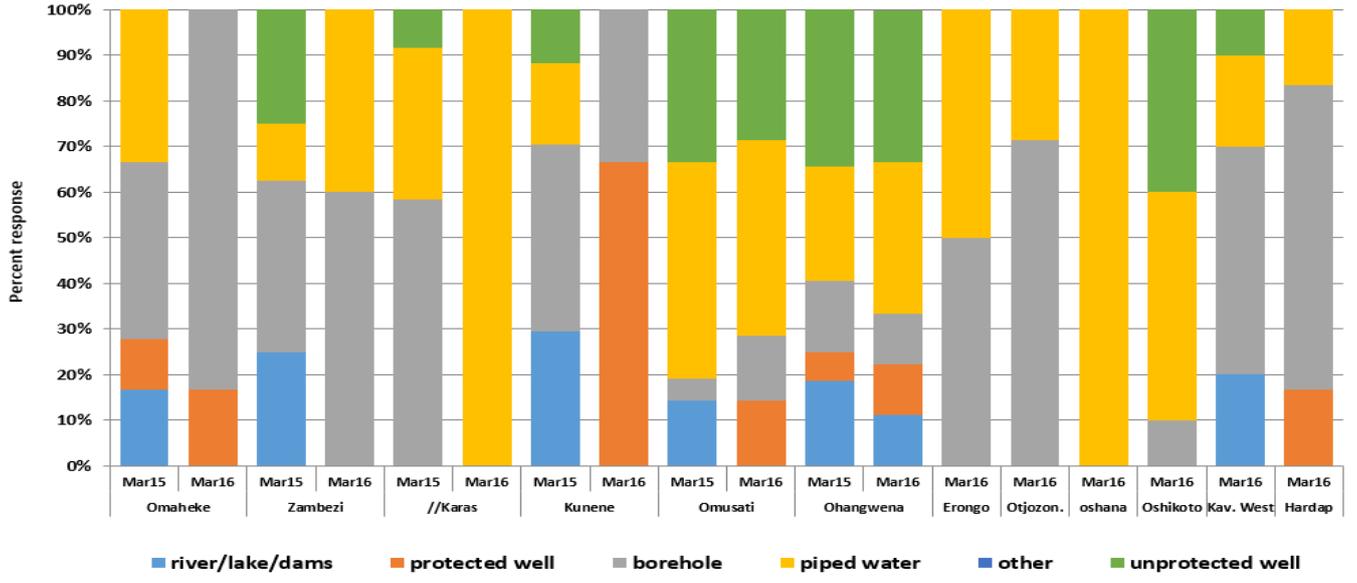


**Water and Sanitation:**

**Drinking water sources**

Borehole and piped water are the main sources of drinking water across all the 12 regions. //Karas and Oshana rely on piped water only. The main source of drinking water in Omaheke, Otjozondjupa, Hardap and Kavango West is boreholes. Elsewhere, water is sourced from a combination of sources including boreholes, piped water, protected and unprotected wells. Of concern is Oshikoto, Ohangwena and Omusati where a number of households (40%, 33%, and 29% respectively) are sourcing drinking water from unprotected wells (Figure 25). Access to clean water is crucial to achieve food security as it ensures prevention of diarrhoeal diseases and other water borne infections.

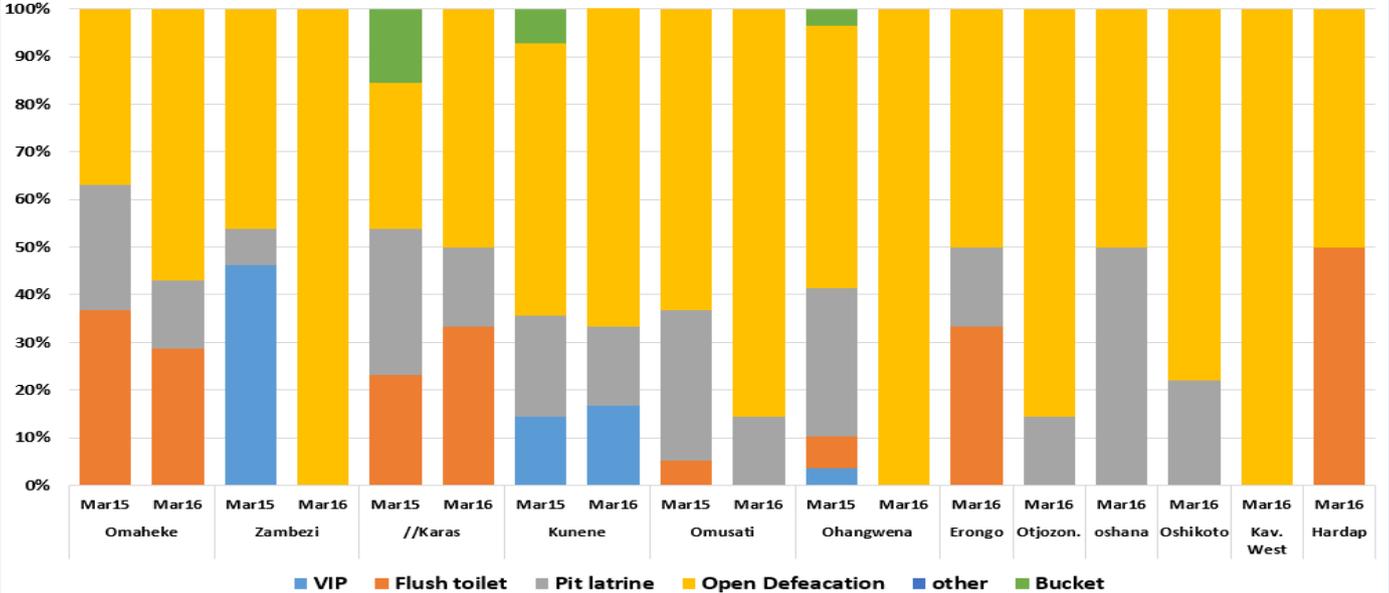
**Figure 25: Common Drinking Water Sources by region**



**Sanitation facilities**

The widespread use of the bush/river for sanitary purposes remains high across all regions (Figure 26). These findings are in agreement with the national rate of 86% of the rural population not having access to improved sanitation facilities ([www.unicef.org/namibia/health\\_nutrition/](http://www.unicef.org/namibia/health_nutrition/)). There is a need to raise community awareness on and promoting knowledge of best practices of basic hygiene and proper sanitation.

**Figure 26: Sanitary facilities commonly used by region**





## 9. FOOD SECURITY OUTLOOK

Due to the El Niño induced drought, food access is likely to be a major challenge for the food insecure households particularly in Otjozondjupa, Kavango West and Zambezi regions, where the highest number of food insecure households has been observed. The situation is expected to worsen during the lean season around December and onwards if no interventions are put in place. Key determinants of food security this year remain rising food prices, low crop production levels, high dependency on markets purchases, poor cattle-maize meal terms of trade, low income levels, and poor dietary diversification among others.

According a World Meteorological Organization report released in May 2016, the previously strong El Niño is now weakening rapidly. The report predicts an increasing likelihood of La Niña development during the third quarter, and little likelihood of a resurgence of El Niño.

## 10. RECOMMENDATIONS

- Given the severe impact of the El Niño on agricultural production, the rising food prices and the high dependency on market purchases, scaling up of safety nets is highly recommended to improve the food security status of vulnerable households.
- Considering the high number of food insecure people in Otjozondjupa, Kavango West and Zambezi, scaling up of food assistance interventions and promotion of food security resilience through provision of agricultural inputs for drought affected farmers would be crucial to ensure a quick recovery.
- The very poor consumption of micronutrients rich foods in Kavango West suggest an extremely poor dietary quality and high risk of micronutrient deficiencies. There is need to promote dietary diversification to ensure balanced diets in Kavango West and elsewhere.
- Open defaecation remains a challenge countrywide. Therefore, there is a need for a community-led total sanitation awareness campaigns to eliminate open defaecation and improve hygiene practises.
- Among 561 children screened using MUAC, a total of 32 children were found to be severely or moderately acutely malnourished. This is indicative of the existence of malnutrition among the under-fives and calls for a countrywide in-depth assessment to determine the magnitude and extent of the problem to develop appropriate nutrition intervention programmes. In addition exclusive breastfeeding awareness campaigns should be promoted for children 0-6 months to reduce introduction of other foods at early ages.
- Common colds and Diarrhoea were found to be main illnesses among the under-fives. There is need to strengthen disease surveillance among this age group across all regions.



## Background information on the Namibia Food & Nutrition Monitoring System (NFNMS)

Food and Nutrition Security monitoring is a tool that is used to detect and track changes in people's food security and nutrition situations over time and space. It can also be used for early warning in order to alert the government and its partners when a situation deteriorates in order to ensure that assistance can be provided in a timely and appropriate manner. Food and nutrition security monitoring information, in many instances, trigger early responses averting disastrous outcomes while at the same time fulfilling the needs of programmes that aim at building resilience of the affected communities.

The food & nutrition security monitoring system is being established under the auspices of Namibia Vulnerability Assessment Committee (NAMVAC) in DDRM in the Office of the Prime Minister and is in line with its (NamVAC's) long term strategic plan to strengthen its food security monitoring component (NAMVAC Strategic Plan 2012 – 2017, National Disaster ACT). This is further supported by the 2013 Cabinet Decision No # 7th /07.05.13/001 which was established following the Emergency Food Security Assessment (EFSA) recommendation in 2013.

This information has been collected in 12 regions across the country except for Kavango East and Khomas.

Data is collected using the sampling framework designed by the National Statistics Agency in order to align the findings to those of other national surveys and NamVAC annual assessments. A stratified two stage cluster sample design was used based on the 2011 Census enumeration areas. A total of 100 Primary Sampling Units (PSUs)/sentinel sites were randomly selected from 71 rural constituencies

A total of 15 households' and one community questionnaires were administered per each site across the monitored regions.

Only data relevant to the food and nutrition security indicators listed below were collected:

- Food Availability (agricultural production, market supplies, food prices, etc.)
- Access (market commodity and livestock prices; food and income sources, Food consumption patterns, coping strategies, etc.)
- Food Utilization: (malnutrition cases, diseases outbreaks, water and sanitation etc.).

The Namibia Food & Nutrition Security Monitoring System is an integral part of the Namibia Vulnerability Assessment Committee (NamVAC), which is housed in the Directorate of Disaster Risk Management (DDRM), in the Office of the Prime Minister. NamVAC is a multi-stakeholder platform that coordinates annual food security and vulnerability assessments- providing a holistic and an integrated analysis on food availability, food access and food utilization within the country.

A multi-sectoral task team was composed in 2013 to spear head and oversee the implementation of the food security monitoring activities. The task team comprises of the following institutions:

- DDRM in the Office of the Prime Minister
- Ministry of Agriculture, Water and Forestry
- Ministry of Health and Social Services
- Namibia Agronomic Board
- Namibia Statistics Agency
- World Food Programme

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- Constituencies
- Ministry of Urban and Rural Development
- City of Windhoek
- United Nations Children's Fund (UNICEF)

And last but not least the Food and Nutrition Security Monitoring enumerators.



# FOOD SECURITY TERMS AND DEFINITIONS

## FOOD AVAILABILITY:

Food availability can be described as the extent to which food is within the reach of households (i.e. in local shops and markets), both in terms of sufficient quantity and quality. It is also strongly related to the overall availability of food, which is determined by domestic food production, commercial food imports, food aid, road and market infrastructure, the degree of market integration, and local market institutions.

## MARKET PRICE INFORMATION:

Market price information provides an indication of household affordability given its income levels. Any food price increases can actually limit households' food access thereby compromising its food security.

## FOOD ACCESS:

Food access is to a large extent determined by food prices and household resources. Important drivers of food access are household resources, food prices, food preferences and socio-political factors such as discrimination and gender inequality.

## HOUSEHOLD FOOD CONSUMPTION SCORE:

Household food consumption was measured using the Food Consumption Score (FCS) technique, which is a composite of dietary diversity and food frequency measures. Dietary diversity refers to the number of different foods or food groups consumed, and food frequency refers to the food consumed over a 7-day period preceding the assessment.

During the assessment, enumerators ask the respondent how many days in the past week (7 days) the respondent's household has eaten foods from the following 7 food groups:

Starches, pulses, vegetables, fruits, proteins, fats, sugars, condiments (next slide)

## HOUSEHOLD COPING STRATEGIES:

The coping strategies are proxy indicators for food-access related food security. They can provide insight into how households cope with income and food shortfalls. HOUSEHOLD

## PURCHASING POWER:

In food security terms, the household purchasing power is a measure of the quantity and quality of food products that a particular household can afford to buy with the available income. Purchasing power is analyzed by calculating the terms of trade (ToT) using for example wage rates, food retail prices, livestock prices, etc. ToTs are said to be favorable if the income obtained from the sale of one animal (say cattle) enables the household to buy a sizeable quantity of food, in this case maize meal.

## MAIN INCOME SOURCES:

Income sources constitute a food-access indicator that identifies the reliability and sustainability of household income sources and levels of household earnings. Sources of income are thus directly related to the economic activities of household members. Hence, field data on income sources is collected from the sentinel sites to ensure that the basis for sustaining households is accurately reported.

## FOOD UTILIZATION:

Food utilization refers to an individual's ability to absorb and metabolize nutrients. Monitoring the impact of disease, care, quality, sanitation and the quality and composition of diet on nutritional outcomes is essential for a full understanding of food security.

Water and sanitation are also food utilization indicators. If not properly managed, improper water and sanitation practices can impact an individual's ability to utilize the nutrients appropriately, leading to malnutrition and consequently food insecurity.

## MID UPPER ARM CIRCUMFERENCE:

MUAC can be measured easily, quickly and allows health workers to quickly determine if a patient is acutely malnourished. Values below the cut-offs of 12, 5 mm and 11, 5 mm are used to define moderate and severe acute malnutrition respectively. It measures the circumference of a patient's arm at the midpoint between his or her shoulder and elbow.

## BREASTFEEDING PRACTICES

All children from 0-6 months should be exclusively breastfed. Breastfeeding should also be extended till 24 months, with additional complementary foods.

## CLASSIFICATION OF FOOD CONSUMPTION SCORES

"Poor" food consumption is generally regarded as a sign of extreme household food insecurity. It refers to a diet composed mainly of cereals on a daily basis and vegetables for a maximum of 4 days per week. (FCS: 0.5 to 21.0: Poor)

"Borderline" food consumption is classified as a diet made up of cereals and vegetables on a daily basis plus oils/fats for 5 days and sugar/sugar products for 3 days per week (FCS: 21.0 – 34.5: Medium)

"Acceptable" food consumption is classified as daily intake of cereals, vegetables, oil and sugar, and at least one day consumption of foods rich in protein (FCS: 35 and above: Acceptable)



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