

OFFICE OF THE PRIME MINISTER

# NAMIBIA 2023/24 VULNERABILITY ASSESSMENT & ANALYSIS (VAA) MAIN REPORT

By  
Namibia Vulnerability Assessment Committee (NAMVAC)

VULNERABILITY ASSESSMENT & ANALYSIS (VAA)



REPUBLIC OF NAMIBIA

© 2023, Office of the Prime Minister  
Erf 231 Nickel Street, Prosperita - Windhoek Namibia  
Private Bag 13338, Windhoek Namibia  
Tel: 061 435 1000 / Fax: 061 226 867  
Email: [drm@gov.com.na](mailto:drm@gov.com.na)  
[www.opm.gov.na](http://www.opm.gov.na)



## Development Partners:





**Republic of Namibia**  
Office of the Prime Minister

**NAMIBIA 2023/24 VULNERABILITY ASSESSMENT  
AND ANALYSIS (VAA) MAIN REPORT**



# FOREWORD



**PRIME MINISTER**

**Rt. Honorable Dr. Saara Kuugongelwa-Amadhila, MP**

The Namibia Vulnerability Assessment and Analysis (VAA) 2023/24 assessment is an annual assessment coordinated by the Office of the Prime Minister under the auspices of Namibia Vulnerability Assessment Committee (NAMVAC). NAMVAC is established in line with Section 13 of the ORM Act No 10 of 2012. NAMVAC is entrusted with the collection and analysis of livelihood and food security data to inform policy decision making on annual basis.

The assessment is conducted by staff members from different Offices, Ministries and Organisations (OMAs), Regional Councils, civic society organizations (Namibia Red Cross Society), University of Namibia and the United Nations (FAO, UNDP, WHO, WFP & UNICEF).

The 2023/24 VAA was conducted be-

tween June-July 2023 in all 14 regions of Namibia and collected data at National, Urban, Rural and Regional level. A total of 213 PSUs were chosen for the sampling design out of the 14 regions. The sampling frame used was the area frame obtained from the Namibia Statistics Agency (NSA) based on the 2019/20 National Population and Housing Census Mapping.

The main objective of the assessment of the assessment is to inform policy planning and decision making on livelihood and food insecurity.

The primary data collection is supplemented by secondary data from the crop and livestock assessment conducted by the Ministry of Agriculture, Water and Land Reform (MAWLR), economic statistics from Namibia Statistics Agency (NSA) and Bank of Namibia (BON), fuel prices from Ministry

of Mines and Energy MoME), Rainfall performance from Ministry of Works and Transport and Health related statistics from Ministry of Health and Social Services (MoHSS).

I therefore would like to express our sincere gratitude and appreciation for all the support that was received from various stakeholders who contributed to the successful implementation of this survey. Particularly, our gratitude goes to the users and producers who provided inputs to survey data collection instruments.

Furthermore, our appreciation goes to the household members who participated in the survey and provided the required information. We would also like to thank all Regional, Local, Political and Traditional leaders and the general public for their support and cooperation to ensure that the importance of the survey was explained to their respective communities.

Also, I would like to express my sincere

thanks to the development partners such as the United Nation Organizations, University of Namibia, Namibia Statistics Agency, Namibia Red Cross Society and the SADC Secretariat for their technical and financial support which led to the completion of this survey.

Finally, I would like to thank the Government of the Republic of Namibia for its continued funding of this survey. I hope that the users will find this report informative and use it to support evidence-based planning for the development of the country at all levels.



SAARA KUUGONGELWA

AMADHILA, MP

PRIME MINISTER



## EXECUTIVE SUMMARY

This report presents findings of the Vulnerability Analysis and Assessment undertaken between June – July 2023 by the Namibia Vulnerability Assessment Committee (NAMVAC). The main objective of the assessment and analysis is to provide accurate and timely information about the prevailing food and nutrition security situation in Namibia for evidence-based planning and decision making.

### **The key findings of the assessments are summarized hereunder:**

a. Current IPC Acute Food Insecurity Situation: Acute Food The assessment findings indicate that in the current period, July – September 2023, 579,000 people in Namibia (22% of the population) face high levels of acute food insecurity (IPC Phase 3 and above) and required urgent action to reduce food gaps and protect livelihoods. Only two regions, Erongo and Khomas were classified in Stressed (IPC Phase 2), and are in need of action for livelihood protection, while all the other 12 regions were classified in crisis (IPC Phase 3 and above). Namibia's deteriorating food security

is mainly driven by the drought/dry spell/erratic rainfall, prices shocks, economic decline and unemployment.

b. Projection 1 IPC Acute Food Insecurity Situation: In the projected period 1 (October 2023 – March 2024) 695, 000 people (26% of the population) are expected to be in IPC Phase 3 and above. Erongo and Hardap region are expected to be in stressed (IPC phase 2) and all other regions expected to be in crisis (IPC Phase 3 and above). Erongo region is anticipated to remain in stressed (IPC phase 2) due to government interventions and possible employment opportunities from the mining sector; while Khomas region is expected to fall in crisis (IPC Phase 3 and above). An improvement for Hardap region from Crisis to Stressed will be due to the government planned intervention of drought relief in terms of food support to the region. The food insecure population is expected to worsen with 4% since this duration is the first half of Namibia's lean season. Prices start to rise, and most households would have used up their own production's stocks. Moreover, some households have not harvested during

the previous harvest seasons especially the northeastern crop growing regions, which puts them even more at risk of food insecurity.

c. **Projection 2 IPC Acute Food Insecurity Situation:** During the projected period 2 (April – June 2024), it is projected that the food security situation will improve as households start consuming food from their own production, which marks the beginning of the 2023–2024 consumption period. During this period, it is estimated that 491,000 people (or 19% of the population) will experience high food insecurity (IPC Phase 3 and above). The acute food security is expected to recover in Eight (8) out of fourteen (14) regions. Kharas, Erongo, Hardap, Kavango West, Omusati, Oshana, Oshikoto and Zambezi region are expected to be in stressed (IPC phase 2) and other six (6) regions expected to remain in Crisis (IPC Phase 3 and above).

d. **Water:** About 77.2 percent of the households interviewed walk a distance of less than 2.5 km to water points. Moreover, 17.8 percent indicated to walk between 2.5 km to 5 km, while 5.0 percent indicated to walk more than

5 km to water points. At regional level, Kavango West (13.7%), Zambezi (12.4%), Ohangwena (8.8%) and Oshikoto (6.4%) regions have the highest percentage of households who walk more than 5 km to water points. Additionally, 84.9 percent of the interviewed households have access to safe drinking tap water. About 15.1 percent of the interviewed households, mainly from Ohangwena, Oshikoto, Kavango West, Kunene, Omaheke, Omusati, Otjozondjupa and Zambezi regions, obtain water from other sources such as boreholes, rivers, open wells, etc.

e. **Sanitation:** Only 34.2 percent of the interviewed households had access to a flushing/water closet toilet. A significant (45.3%) percent of the households did not have toilets while 18.1 percent used pit latrines. Zambezi (82.3%), Kavango West (75.0%) and Kunene (64.3%) regions reported to have the highest percentage of households who had no toilet facility at the time of the survey.

f. **Rainfall performance:** According to the Namibia Meteorological Services 2022/2023 seasonal report, Namibia experienced

below normal and sporadic rainfalls which culminated in a combination of flash floods and dry spells in some parts of the country. This has subjected communities to prospects of lower crop yields, impacts on livestock, and ultimately reduced household food stocks compromising food security at household levels.

g. Food Security status: According to the Ministry of Agriculture, Water and Land Reform (MAWLR, 2023) Crop Prospects, Food Security and Drought Situation Report for July 2023, the 2022/23 estimates shows that the nation has harvested 153,000 MT, which is 9% less than the harvest of 168,200 MT from previous season (2021/22) but 23% above the 10 years' average production of 124,200 MT. About 81% of the harvest was attributed from the increased maize and wheat production from the commercial sector, when comparing to last season and average production. On the other hand, both pearl millet and sorghum production from the crop growing regions recorded a significant decrease in the production, compared to last season and average production.

h. Grazing conditions: Further-

more MAWLR (2023), shows that the grazing conditions were generally poor in most regions. //Kharas, Hardap, Otjozondjupa, Oshikoto, Oshana, Omusati, Ohangwena, Kavango West had poor grazing conditions while Kunene region's grazing conditions ranged from fair to poor; Omaheke, Zambezi & Kavango East regions had poor to fair and Erongo & Khomas regions had fair grazing conditions.

i. Food and non-food item prices: The food and non-food item prices increased which is triggered by the global price increments in fuel products has reduced people's purchasing power.

j. Livestock body conditions: Livestock body condition was generally poor in most parts of the country except for Zambezi, Kavango East and Kavango West regions, which ranged from good to fair (MAWLR, 2023).

k. Health and Nutrition status: Overall malnutrition cases recorded countrywide between December 2022 to May 2023 stood at 3 734 cases. These occurrences are predominantly among the marginalized communities and in urban informal settlements. Khomas region re-

corded the highest malnutrition cases with 586 followed by Kavango East with 544 and Otjozondjupa with 458 cases. One in every three children were reported to have experienced illness during the 2 weeks prior to the survey, with cough being the most common illness reported by caregivers. Over 95% of caregivers took their children for treatment at a health facility. Of the few (less than 5%) caregivers who did not take their children for treatment, the most common reason was the cost of transport or the cost of treatment (not enough money to access the services).

- I. Vitamin A supplementation and deworming: Only 76% of caregivers reported that their children had received at least two doses (adequate vitamin A supplementation) over the past 12 months, which is below the UNICEF recommended coverage of over 80%. Only 65% of children were reported as having received deworming in the past 6 months, which is also below the WHO recommended coverage of 75%. Only Zambezi region had a reported coverage above the recommended thresholds for both vitamin A supplementation and deworm-

ing. Out of all the children under five in the sampled households, 2% (proxy SAM) were identified to have severe wasting and requiring referral for further assessment at the nearest health facility.

- m. Breast feeding and complementary feeding practices: Of the children in the households sampled, more than 9 out of every 10 children are reported to have received breastmilk before the age of 2 years. One in every five children under the age of 6 months were reported to have received mixed milk feeds (other animal milks alongside breastmilk). At least 40% of children under 2 years are reported to have received foods from at least four food groups the previous day, and almost 30% ate the minimum number of recommended meals the previous day. Only half of the children in the sampled households who were not breastfed, under the age of 2 were reported to have received the minimum number of milk feeds the previous day. More than half of children under the age of 2 were reported to have consumed unhealthy foods the previous day, with less than half having consumed a fruit or vegetable the previous day.

# TABLE OF CONTENTS

<b>FOREWORD</b> .....	<b>i</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>iii</b>
<b>TABLE OF CONTENTS</b> .....	<b>vii</b>
<b>LIST OF FIGURES</b> .....	<b>x</b>
<b>LIST OF TABLES</b> .....	<b>xii</b>
<b>LIST OF ABBREVIATIONS AND ACRONYMS</b> .....	<b>xiv</b>
<b>1. INTRODUCTION</b>	<b>1</b>
1.1. Background .....	1
<b>2. METHODOLOGY</b>	<b>3</b>
2.1. Objectives .....	3
2.2. Target Population .....	3
2.3. Sampling Frame .....	4
2.4. Sample Design .....	4
2.5. The Sample Size .....	4
2.6. Survey Response Rate .....	5
2.7. Data Collection Instrument .....	6
2.8. Indicators covered .....	7
2.9. Secondary data information sources .....	8
2.10. Strengths and Limitations of VAA 2023/24 .....	8
<b>3. OVERVIEW OF THE NATIONAL CONTEXT</b>	<b>11</b>
3.1. Seasonal rainfall performance .....	11

3.2. The Namibia 2023/24 Economic performance .....	12
<b>4. KEY FINDINGS</b> .....	<b>20</b>
4.1. Household Demographic Characteristics of the Sample .....	20
4.2. Casual Factors .....	25
4.3. Dimensions of Food Security .....	28
4.4. Food Security outcomes .....	44
4.5. Health and Nutrition Status of Children under five years .....	51
4.6. Health seeking behaviour by caregivers whose children experi- enced illness .....	52
4.7. Vitamin A supplementation coverage - children under 5 years .....	56
4.8. Deworming coverage – children under five years .....	57
4.9. Breastfeeding Practices – children under 2 years .....	59
4.10. Complementary feeding practices – children under 2 years .....	62
4.11. Consumption of healthy and unhealthy foods .....	65
4.12. Factors Affecting Food Security Situation .....	72
<b>5. NAMIBIA POPULATION AT RISK TO FOOD INSECURITY</b> .....	<b>73</b>
5.1. Current food insecure population overview (July – September 2023) .....	73
5.2. Projection 1 food insecure population overview (October 2023 – March 2024) .....	74
5.3. Projection 2 food insecure population overview (April – June 2023) .....	75
5.4. Key assumptions for the assessment findings .....	76
<b>6. CONCLUSIONS AND DISCUSSIONS</b> .....	<b>77</b>
<b>7. RECOMMENDATIONS</b> .....	<b>78</b>
7.1. On Going Social Safety Nets and Other Programmes .....	78
7.2. Proposed Response Priorities .....	80

<b>8. REFERENCES</b> .....	<b>84</b>
<b>9. APPENDICES</b> .....	<b>86</b>
Appendix I: Map and table indicating Current projection of Food Insecurity: July - September 2023 .....	86
Appendix II: Map and table indicating Projection 1 Food Insecurity: October 2023 – March 2024 .....	87
Appendix III: Map and table indicating 2nd Projection of Food Insecurity: April – June 2024 .....	88
Appendix IV: Names of participants in the VAA assessment .....	89
Appendix V: The IPC Food Security Analytical Framework .....	91
Appendix VI: Definition of Significant Terms/ Glossaries .....	92
Appendix VII: Namibia 2023/24 Integrated Food Security Phase Classification (IPC) Acute Food Insecurity Analysis Report .....	96

# LIST OF FIGURES

Figure 3. 1: October 2022 to April 2023 rainfall in millimeters .....	11
Figure 3. 2: Rainfall Performance Chart: October 2022 to April 2023 relative to Normal in various areas of the country .....	12
Figure 3. 3: Namibia CPI from July 2022 to July 2023 (Year on Year Changes) .....	13
Figure 3. 4: GDP growth rates (%) .....	15
Figure 3. 5: Repo Rates, June 2022 to July 2023 (%) .....	17
Figure 4. 1: Child orphan hood status by region .....	23
Figure 4. 2: Orphans not benefiting from any grant by region .....	24
Figure 4. 3: Disability status by region .....	24
Figure 4. 4: Flood situation in the northern regions .....	26
Figure 4. 5: Fire occurrence in the last 12 months by region .....	27
Figure 4. 6: Human wildlife occurrence in the last 12 months by region .....	28
Figure 4. 7: Household cultivate any crop by region .....	32
Figure 4. 8: Number of months own production sustain household by Region .....	32
Figure 4. 9: Experienced difficulty in purchasing food .....	35
Figure 4. 10: Availability of market for own production by region .....	36
Figure 4. 11: Household Dietary Diversity Score categories by area .....	45
Figure 4. 12: Food expenditure shares categories by region .....	46
Figure 4. 13: Livelihood Coping Strategies categories by area .....	47
Figure 4. 14: Reduced Coping Strategy Index categories and area .....	49
Figure 4. 15: Malnutrition cases from December 2022 to May 2023 by region .....	51
Figure 4. 16: Caregiver reported health seeking behaviour of children under 5 years .....	53
Figure 4. 17: Patterns of health seeking behaviour for the four different	

illnesses experienced during the two weeks preceding the assessment as reported by caregivers in 2023 .....	54
Figure 4. 18: Reasons given by caregivers of children under five who were ill with diarrhoea for not receiving treatment from a health facility or community health worker .....	56
Figure 4. 19: Proportion of under-fives whose caregivers reported that they had received at least 2 doses (adequate) Vitamin A supplementation in the past 12 months preceding the survey of 2023 .....	57
Figure 4. 20: Caregiver reported deworming coverage in children under the age of five in all regions in 2023 .....	58
Figure 4. 21: Percentage of children who consumed other milk in addition to breast milk the previous day .....	61
Figure 4. 22: Breast feeding in children under 2 years as reported by caregivers comparing 2022 and 2023 .....	62
Figure 4. 23: Percentage of children 6-23 months who consumed eggs or flesh foods .....	66
Figure 4. 24: Children 6-23 months who consumed sweet beverages ..	67
Figure 4. 25: Children 6-23 months who consumed healthy foods .....	67
Figure 4. 26: Children under 6-23 months who consumed fruit and/or vegetables .....	69
Figure 4. 27: Children under 0 to 23 months who drank from a bottle with a nipple .....	69
Figure 4. 28: Knowledge about the reasons for exclusive breastfeeding .....	71
Figure 4. 29: Popular ways of encouraging young children to eat .....	71
Figure 4. 30: Common beliefs about how child malnutrition is prevented .....	72
Figure 9. 1: Map indicating Current projection of Food Insecurity .....	86
Figure 9. 2: Map indicating 1st projection of food insecurity .....	87
Figure 9. 3: Map indicating 2nd projection of food insecurity .....	88
Figure 9. 4: The IPC Food Security Analytical Framework .....	91

# LIST OF TABLES

Table 2. 1: Sample size distribution by region .....	5
Table 2. 2: Response Rate by Region .....	6
Table 3. 1: Namibia CPI from July 2022 to July 2023 (Year on Year Changes) by main groups .....	14
Table 3. 2: Namibian Exchange rate, NAD per USD \$ and £, June 2022 to July 2023 .....	16
Table 3. 3: Fuel prices from June 2022 to August 2023 .....	18
Table 3. 4: Multidimensional Poverty Index (MPI) & unemployment rate by region .....	19
Table 4. 1: Sex composition by region .....	20
Table 4. 2: Average household size by region .....	21
Table 4. 3: Relationship to Head of Household (HH) by sex .....	22
Table 4. 4: Age categories by marital status .....	22
Table 4. 5: Most vulnerable population groups by region (%) .....	25
Table 4. 6: National cereal production statistics trend (in '000 Metric Tons) and 2022/2023 production compared to a 10 – year average and 2021/2022 production .....	30
Table 4. 7: Household main income source by region .....	33
Table 4. 8: Income source change past 12 months (Aug 2022 –July 2023) by region .....	34
Table 4. 9: Reason for difficulty in purchasing food by region .....	35
Table 4. 10: National availability of market for own production .....	36
Table 4. 11: Average common food prices in N\$ per KG by region .....	37
Table 4. 12: Average meat prices in N\$ per kg by region .....	38
Table 4. 13: Inflation effect on food prices by region .....	39
Table 4. 14: Main source of the Cereals and Grain by region .....	40
Table 4. 15: Main source of the Roots and tubers: cassava, potatoes, sweet potatoes by region .....	41

Table 4. 16: Source of water by region .....	42
Table 4. 17: Distance to nearest water points by region .....	43
Table 4. 18: Type of toilet facility by area .....	44
Table 4. 19: Most common distress livelihood coping strategy for the majority of households in communities by region (%) .....	48
Table 4. 20: Household Hunger Scale Categories by area .....	50
Table 4. 21: Prevalence of malnutrition in children under the age of 5 using Mid-Upper Arm Circumference and Oedema .....	52
Table 4. 22: Percentage of children under 2 years who consumed the minimum acceptable diet .....	63
Table 4. 23: Percentage of children under 2 years who consumed the minimum dietary diversity .....	64
Table 4. 24: Percentage of children under 2 years who consumed the minimum meal frequency .....	65
Table 4. 25: Percentage of children under 2 years who are not breast fed who consumed the minimal milk feeding frequency .....	65
Table 9. 1: Population table indicating Current projection of Food Insecurity .....	86
Table 9. 2: Population table indicating 1st projection food insecurity .....	87
Table 9. 3: Population table indicating 2nd projection of food insecurity .....	88

# LIST OF ABBREVIATIONS AND ACRONYMS

CBPP	Contagious Bovine Pleuroneumonia
DDRM	Directorate Disaster Risk Management
EAs	Enumeration Areas
ECD	Early Childhood Development Centers
FAO	Food and Agriculture Organization
FIES	Food Insecurity Experience Scale
GDP	Gross Domestic Products
GSU	Global Support Unit
HDDS	Household dietary diversity Score
IBR	Infectious Bovine Rhinotracheitis
IMF	International Monetary Funds
IPC	Acute Food Insecurity Phase classification
JRC	Joint Research Centre
LCS	Livelihood coping strategy
MAWLR	Ministry of Agriculture, Water and Land Reform
MHSS	Ministry of Health and Social Security
MPI	Multidimensional Poverty Index
MUAC	Mid Upper Arm Circumference
MURD	Ministry of Urban and Rural Development
NAMVAC	Namibia Vulnerability Assessment and Analysis Committee
NDVI	Normalised Diference Vegetation Index
NGOs	Non-Governmental Organization
NSA	Namibia Statistics Agency
ODK	Open Data Kit
OPM	Office of the Prime Minister
PPS	Probability Proportional to Size
PSUs	Primary Sampling Units
RC	Regional Council

rCSI	reduced Coping Strategy Index
UN	United Nations
UNAM	University of Namibia
UNDP	United Nation Development Program
UNICEF	United Nations International Children's Emergency Fund
VAA	Vulnerability Assessment Analysis
WFP	World Food Programme
WHO	World Health Organization



# 1. INTRODUCTION

## 1.1. Background

Namibia is recognised as one of the most arid countries on the continent with a disaster-prone climate pattern. Climate change patterns constitute various disasters such as floods, drought, diseases outbreak amongst other hazards which can instigate negative impacts on the socio-economic development of a country, infrastructures, environmental effects and other threats.

The 2022/23 rainfall performance was below normal and sporadic rainfalls which culminated in a combination of flash floods and dry spells in some parts of the country. The complexity of the heavy flash floods experienced in the Ohangwena, Oshana and Omusati regions has affected the communities undesirably which has resulted in the closure of some schools and limited access to health facilities, loss of livestock, damage to road infrastructure, inundated crop fields and flooding of public and private infrastructure particularly homesteads, which has led to several communities being displaced. This has subjected communities to prospects of lower crop yields, impacts on livestock, and ultimately reduced household food stocks compromising food security at household levels.

To continuously monitor the vulnerability, food and nutrition security situation in the country, Namibia has enacted a law that has resulted in the establishment of the Namibia Vulnerability Assessment and Analysis Committee (NamVAC). The NamVAC was established in line with section 13 of the DRM Act no 10 of 2012 and is mandated to regularly assess the country's vulnerability, food, and nutrition security situation. The Office of the Prime Minister (OPM), namely the Directorate of Disaster Risk Management, chairs NamVAC, which is made up of government ministries, UN agencies, non-governmental organisations (NGOs), academic institutions, and the corporate sector. The mandate of NamVAC is to carry out biannual analyses of livelihood vulnerability in all regions, with an empha-

sis on both urban and rural areas.

Usually conducted in April or May, the initial assessment determines the crop's susceptibility to shocks such as floods and severe drought.

The second assessment is often carried out in the months of October and November to revise the April and May findings and evaluate the presumptions made at that time. However, due to budget constraint, only one assessment was carried out in 2023 from May to July 2023.

The NamVAC members received training on household listing, map reading, open data kit (ODK) application for data collection, data collection, assessment of nutrition status, health and nutrition indicators, and Integrated Food Security Phase Classification and analysis(IPC).

The fundamental goal of these assessments and analyses is to deliver timely findings to the stakeholders and decision-makers in government. The assessments and analysis focus on how shocks and hazards affect people's livelihoods, access to food and nutritional security. The assessment makes suggestions based on assessment results that range from immediate interventions to long-term development programmes.

## 2. METHODOLOGY

### 2.1. Objectives

The main goal of the assessment and analysis is to deliver timely, reliable information regarding Namibia's current state of food and nutrition security in order to support evidence-based planning and decision-making.

The following are some of the specific goals of the vulnerability assessment and analysis:

- Evaluate the nation's status in terms of food and nutrition security, currently and in the future.
- Examine how hazards may affect people's access to, use of, and stability of food, non-food items, and services in the present and the future.
- Assess factors affecting health and nutrition status of women of childbearing age and children under five years old.
- Evaluate the micronutrient fortification status of mealie-meal, flour, cooking oil, and salt.
- Monitor food security and livelihood patterns as part of early warning.
- Increase the technical expertise of NamVAC (Namibia Vulnerability Assessment Committee) members.
- Identify the needs for interventions and policy-related actions.
- Offer recommendations to stakeholders and policymakers.

### 2.2. Target Population

The target population for the VAA 2023/24 is all non-institutional populations residing in private households in the country. Therefore, people who are residing in hospitals, hostels, old age homes, orphanage homes, police barracks, military barracks and prisons etc. were ineligible for the assessment. However, private households within institutional settings such as teachers' houses, hospital matrons in schools and health centres' premises were covered. Specifically for nutrition, all children under the age of five years in the sampled households were included in the assessment.

### **2.3. Sampling Frame**

The sampling frame used was obtained from the Namibia Statistics Agency, which is the 2019/2020 Population and Housing Mapping Census Enumeration Areas (EAs) / Primary Sampling Units (PSUs). The area frame was stratified explicitly by region, urban and rural.

The measure of size in the frame is the number of households within a particular PSU of which the size ranges between 40 and 120 households.

### **2.4. Sample Design**

The sample design for the assessment is a stratified two-stage cluster sample design with Probability Proportional to Size (PPS) sampling of Primary Sampling Units (PSUs) at the first stage, and sampling of households within the sampled PSUs at the second stage. Sample sizes were determined to give reliable estimates of the population characteristics at the regional level (i.e., lowest domain of estimation). A total of 3,195 households constituted the sample for all 14 regions from 213 PSUs, selecting 15 households by equal probability systematic sampling from the listed households.

### **2.5. The Sample Size**

The survey sample size was 213 PSUs and 3,195 households countrywide (table1). A total of 1,329 children under the age of five years belonging to the sampled households were included in the survey for assessment of nutrition indicators. Khomas region had the highest number of PSUs (25) compared to all regions. This was followed by Omusati with 19 sampled PSUs and Ohangwena and Erongo both at 18 PSUs respectively. Kavango West had the least PSUs with 9 PSUs.

Table 2. 1: Sample size distribution by region

Region	PSUs			Households		
	Rural	Urban	Total	Rural	Urban	Total
!Karas	6	7	13	90	105	195
Erongo	3	15	18	45	225	270
Hardap	5	7	12	75	105	180
Kavango East	5	8	13	75	120	195
Kavango West	8	1	9	120	15	135
Khomas	1	24	25	15	360	375
Kunene	7	5	12	105	75	180
Ohangwena	14	4	18	210	60	270
Omaheke	7	5	12	105	75	180
Omusati	16	3	19	240	45	285
Oshana	8	8	16	120	120	240
Oshikoto	13	4	17	195	60	255
Otjozondjupa	6	10	16	90	150	240
Zambezi	9	4	13	135	60	195
<b>Total</b>	<b>108</b>	<b>105</b>	<b>213</b>	<b>1 620</b>	<b>1 575</b>	<b>3 195</b>

## 2.6. Survey Response Rate

The response rate is defined as the proportion (expressed in percentage) of the households which have responded to the survey questionnaires out of the total expected households in the survey. When the household sample was implemented, it was not possible to interview some of the households due to refusals or non-contacts etc., therefore, such households were not substituted or replaced. The response rate (RR) is given by;

$$\text{Response Rate} = \frac{\text{Responding Households}}{\text{Sampled Households}} * 100$$

Following data processing, 2,796 of 3,195 sampled households were successfully interviewed, resulting in 87.5 percent response rate. Zambezi region recorded the highest response rate (99.0%) followed by Oshikoto region with 98.4%. The lowest response rate was observed in Khomas region (57.9%). Since no GPS location was utilized, certain sampled PSUs for the Kavango East and Khomas regions were not covered because they could not be identified on the ground, (Table 2.2).

Table 2. 2: Response Rate by Region

	<b>Responding HHS =</b> (Expected HHS- Non_Contacts Refusals)	<b>Responding PSUS</b>	<b>Sampled PSUS</b>	<b>Expected HHS</b>	<b>Non_Contacts Refusals</b>	<b>Response Rate =</b> (Responding HHS / Sampled HHS) *100
<b>Zambezi</b>	193	13	13	195	2	<b>99.0%</b>
<b>Oshikoto</b>	251	17	17	255	4	<b>98.4%</b>
<b>Hardap</b>	176	12	12	180	4	<b>97.8%</b>
<b>Otjozondjupa</b>	234	16	16	240	6	<b>97.5%</b>
<b>Ohangwena</b>	251	18	18	270	19	<b>93.0%</b>
<b>//Kharas</b>	181	13	13	195	14	<b>92.8%</b>
<b>Kavango West</b>	124	9	9	135	11	<b>91.9%</b>
<b>Omusati</b>	260	19	19	285	25	<b>91.2%</b>
<b>Omaheke</b>	163	12	12	180	17	<b>90.6%</b>
<b>Oshana</b>	216	16	16	240	24	<b>90.0%</b>
<b>Kavango East</b>	168	12	13	195	27	<b>86.2%</b>
<b>Kunene</b>	154	12	12	180	26	<b>85.6%</b>
<b>Erongo</b>	208	18	18	270	62	<b>77.0%</b>
<b>Khomas</b>	217	22	25	375	158	<b>57.9%</b>
<b>Total</b>	<b>2 796</b>	<b>209</b>	<b>213</b>	<b>3 195</b>	<b>399</b>	<b>87.5%</b>

## 2.7. Data Collection Instrument

Primary data for the assessment was gathered through individual household sample survey and focus group discussions with key informants providing a process through which data at household and associated analysis outcomes are linked to underlying livelihood system and strategies employed by different wealth groups. The questions asked about household demographic figures, food consumption, nutrition, health, water, sanitation, crop, livestock productivity, food sources and costs. The MoHSS, UNICEF and the University of Namibia (UNAM) made a few improvements to the questionnaire to determine updated indicators and influencers of nutrition security. For children under the age of 5, In addition to taking direct measurements of their mid-upper arm circumference and testing for bilateral pitting oedema, caregivers were also asked about specific illnesses experienced by their children two weeks prior to the survey, health

care seeking behavior, feeding practices, and knowledge about feeding practices. Furthermore, questions were removed from the 2022/23 micro-nutrient section to exclude collection of samples at household level and have more cost-effective batch collection of samples by brand names at retail outlets.

## **2.8. Indicators covered**

- Food availability (crop and livestock production, markets access, wild foods and food reserves).
- Food access (physical, financial and social).
- Food utilization (food storage and access to water sanitation).
- Food stability at all times
- Vulnerabilities (exposure and resilience to specific hazards or ongoing conditions)
- Hazards (acute events or ongoing conditions e.g., natural, socio-economic, conflict, disease and others)
- Food Consumption (quantity and nutritional quality)
- Food security indicators
- Livelihood changes (assets and strategies)
- Malnutrition (under nutrition in children under five years)
- Childhood illness (fever, cough, pneumonia, and diarrhoea)
- Health seeking behavior (by caregivers whose children experienced illness)
- Vitamin A supplementation coverage
- Deworming coverage
- Breastfeeding (Exclusive breastfeeding, mixed milk feeding, continued breast feeding at one year)
- Complementary feeding (minimum dietary diversity, minimum meal frequency, minimum milk feeding frequency, minimum acceptable diet)
- Consumption of healthy and unhealthy foods (Egg and/or flesh food consumption, consumption of sweetened beverages, unhealthy food consumption, zero vegetable or fruit consumption, bottle feeding)

- Knowledge and beliefs around feeding practices.
- Micronutrient fortification coverage [vitamin A, iodine, iron]

## **2.9. Secondary data information sources**

The main source of data for the VAA 2023/24, was primary data collection, which provided outcome as well as contributing factor evidence. This was supplemented from secondary data gathered both at the regional and national levels, and other sources of data included but not limited to;

- Ministry of Agriculture, Water and Land Reform (MAWLR) (July 2023 Crop Prospects, Food Security and Drought Situation) on crops and livestock productions;
- Ministry of Health and Social Services on malnutrition cases [Health Information System data];
- Ministry of Works and Transport (Meteorological Services) on climate outlook;
- Regional Councils and Local Authorities on local reports;
- Bank of Namibia on macroeconomic information, repo rates and exchange rates;
- Namibia Statistics Agency on population figures, price statistics, poverty figures;
- World Food Programme on Seasonal: Rainfall & Vegetation data and Normalized Difference Vegetation Index (NDVI) data;
- European Commission for the African Seasonal forecast.

## **2.10. Strengths and Limitations of VAA 2023/24**

### **2.10.1. Strengths**

- The strength of the VAA 2023/24 is that it is one of the largest household surveys in terms of assessing the current state of food and nutrition security in order to support evidence-based planning and decision-making in Namibia. As a result, it provides reliable statistics necessary to

estimate vulnerability conditions for regional estimates in Namibia.

- VAA surveys are conducted by NAMVAC, a committee made up of the multi-sectoral cooperation from different institutions such as government offices, ministries and agencies; UN agencies; non-governmental organisations (NGOs); academic institutions and the corporate sector. The assessment is carried out by officers with different sectoral expertise.
- VAA 2023/24 data collection was collected through Computer Assisted Personal Interview which made it possible to check for data inconsistencies interactively during the interview process as edit rules were included in the data entry application.
- Namibia successfully included, for the first time, questions to determine the quality of feeding of children under 2 years: (i) minimum dietary diversity; (ii) minimum meal frequency; (iii) minimal milk feeding frequency; and (iv) minimal acceptable diet.

### **2.10.2. Limitations**

- High number of refusals and noncontacts, which affected the overall survey's response rate and regional response rate especially Khomas (57.9%) and Kunene (77.0%) regions (Table 2.2).
- Data collected from Khomas region was mostly from informal settlement and rural areas. The majority of the sampled households were not assessed due to refusals and noncontacts, consequently, the results do not accurately represent the high- and middle-income urban areas in Khomas region as data quality for Khomas was compromised by the low response rate. The Khomas results collected from the primary data collection gives a better picture for those households in informal urban and rural areas not necessarily the whole region as compared to other regions.

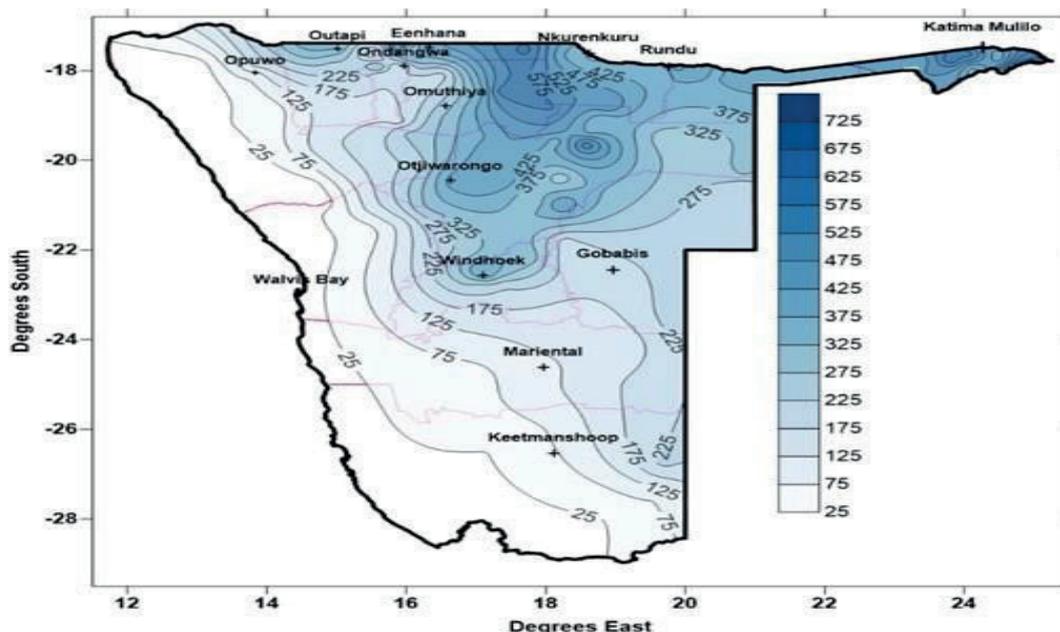
- Insufficient capacity of certified IPC technical staff in the country.
- Inadequate time for the refresher training and analysis.
- Inadequate secondary data at the time of the analysis on some outcome indicators mainly on mortality and malnutrition.
- The VAA coverage was limited to persons in private households excluding those in institutions at the time of the survey, such as school hostels, army/ police barracks, hospitals wards, etc. Household members residing in these institutions are only included if they live in their own private accommodation.
- No sample weights or estimations were calculated, survey results should not be inferred to the whole population (national or regional level).
- There's a limitation regarding the assessment of health-seeking behaviour for the remaining three illnesses. This limitation arose from a programming error in the questionnaire, causing the caregivers' responses to be linked solely to diarrhoea and not encompassing all four illnesses as intended.

### 3. OVERVIEW OF THE NATIONAL CONTEXT

#### 3.1. Seasonal rainfall performance

- “Since the start of the 2022/2023 rainfall season, the country received below normal rainfall performance, with a considerable delay in the onset. Most parts of the country only received productive rainfall in January 2023. In addition to sporadic and insufficient rainfall patterns that have dominated the season, the country noted a severe and prolonged dry spell in December, February, March and April, which led to poor agricultural production and pasture establishment. According to Namibia Meteorological Service, most of the above-average rainfall received in January lacked follow up rains and as a result, the bulk of the northern Regions ended the season with average rainfall. Moreover, the bulk of //Kharas, Hardap, Erongo, western of Omaheke, Kunene, Omusati, Oshana and western part of Os-hikoto Regions ended the rainfall season with below average rainfall (see figure 3.1). There are some areas in Kunene and Erongo Region which did not receive any single drop of rainfall this season” (MAWLR, 2023, p.1).

Figure 3. 1: October 2022 to April 2023 rainfall in millimeters

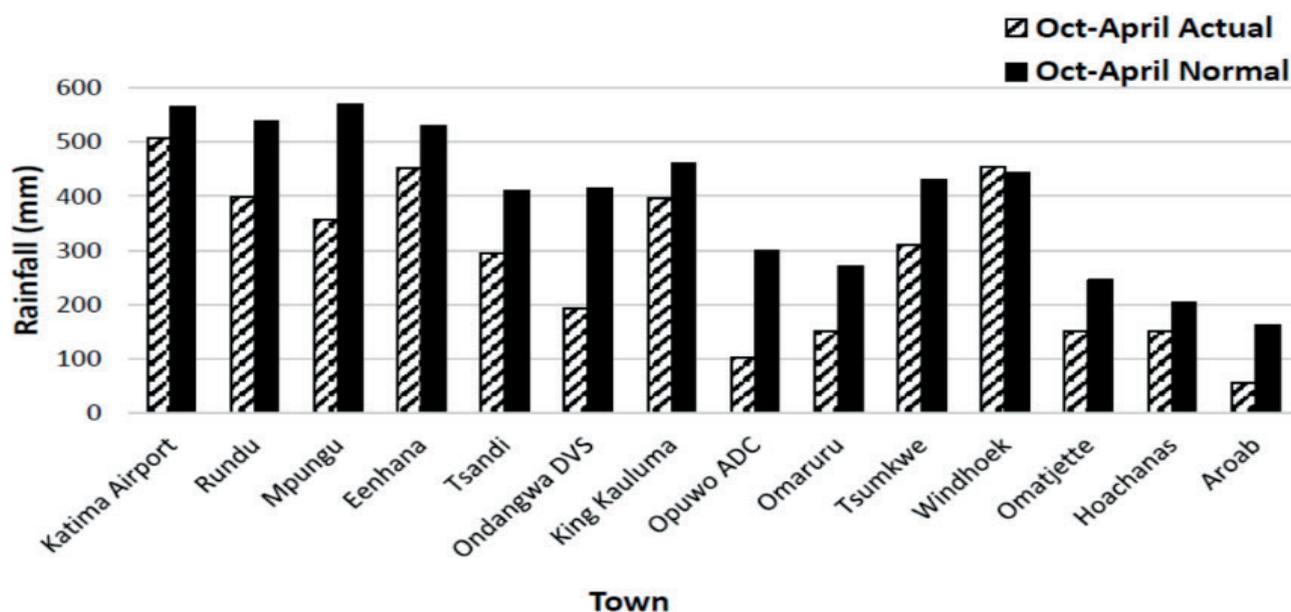


Source: Ministry of Agriculture, Water and Land Reform, 2023

“The Zambezi, Kavango East, and Kavango West regions were not exempted from the erratic rainfall patterns, as they too experienced severe dry spells. As a result, crop production in these regions was significantly impacted. In addition to the regions that have been grappling with drought episodes in previous seasons (such as Kunene, parts of Erongo, and Omusati), the entire country has been affected by the drought of the 2022/2023 season. Figure 3.2 below shows the rainfall performance from October 2022 to April 2023 in different parts of the country” (MAWLR, 2023, p.2).

During the October 2022 to April 2023 rainfall season, majority of locations across the country experienced below-normal rainfall, with the exception of Windhoek, which received slightly above-normal rainfall.

Figure 3. 2: Rainfall Performance Chart: October 2022 to April 2023 relative to Normal in various areas of the country



Source: Ministry of Agriculture, Water and Land Reform, 2023

## 3.2. The Namibia 2023/24 Economic performance

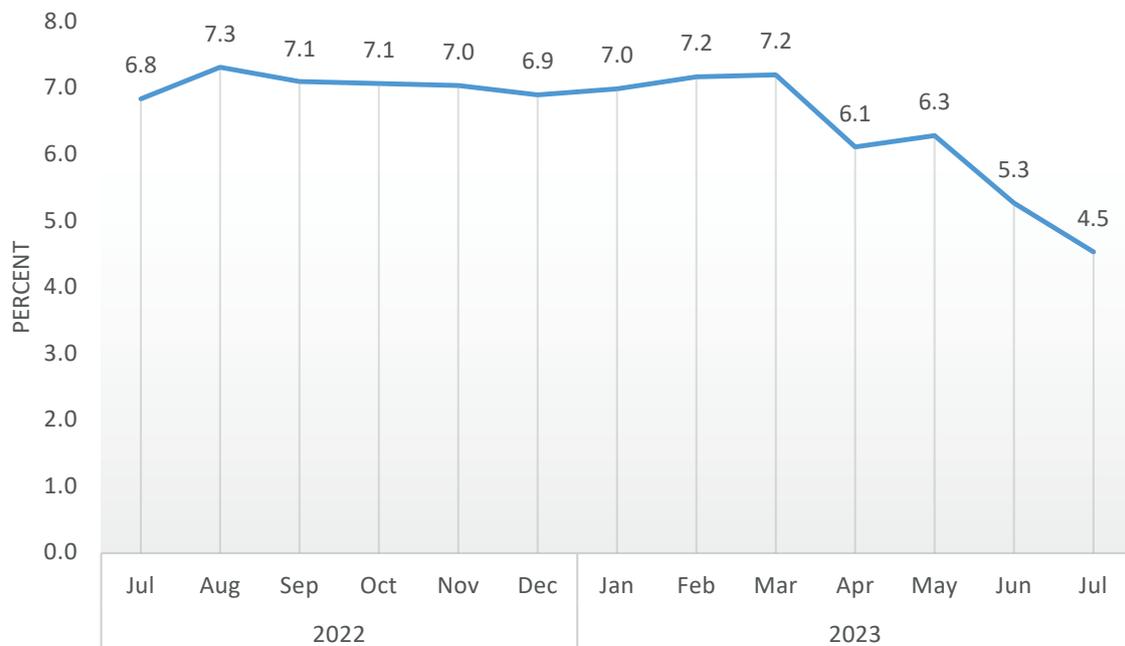
### 3.2.1. Namibia Consumer Price Index (NCPI)/Inflation

The annual inflation rate for July 2023 stood at 4.5 percent, which shows

a fluctuating trend from July 2022 to July 2023. Moreover, from May 2023 it could be observed that the NCPI has been declining from 6.3% to 4.5% respectively (Figure 3.3).

The major contributors to the annual inflation rate since July 2023 were food and non-alcoholic beverages; alcoholic beverages and tobacco; and housing, water, electricity, gas, and other fuels (Table 3.1). Overall, Food and non-alcoholic beverages has been the major contributing factor to the NCPI during the reporting period.

Figure 3. 3: Namibia CPI from July 2022 to July 2023 (Year on Year Changes)



Source: Namibia Statistics Agency

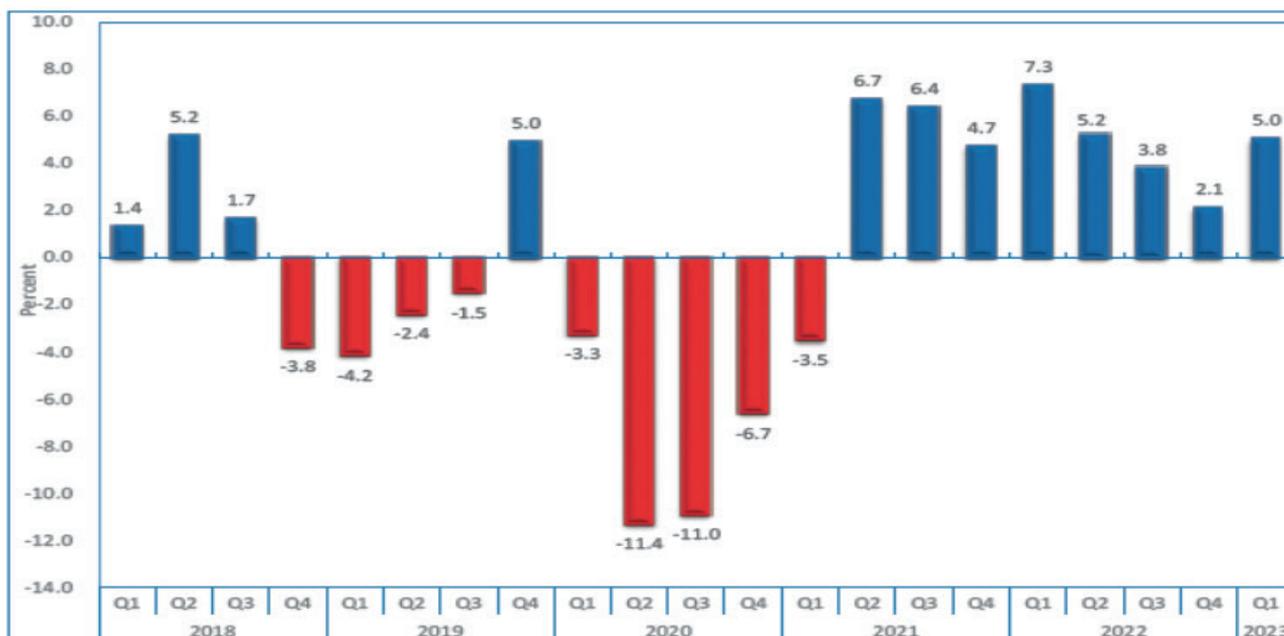
Table 3. 1: Namibia CPI from July 2022 to July 2023 (Year on Year Changes) by main groups

	Period												
	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23	Jul 23
<b>All Items / NCPI</b>	6.8	7.3	7.1	7.1	7.0	6.9	7.0	7.2	7.2	6.1	6.3	5.3	4.5
<b>Food and Non-Alcoholic Beverages</b>	8.4	8.8	9.3	9.1	9.4	11.8	14.0	14.0	14.6	13.5	12.5	11.7	10.5
<b>Alcoholic Beverages and Tobacco</b>	5.4	5.2	5.6	6.7	4.8	4.2	5.8	7.1	6.9	6.7	7.5	6.2	6.9
<b>Clothing and Footwear</b>	0.3	1.1	0.9	0.8	1.3	1.8	2.3	2.5	2.5	2.4	2.6	2.1	1.8
<b>Housing, Water, Electricity, Gas and Other Fuels</b>	1.8	2.0	2.1	2.3	2.4	2.1	2.7	2.9	3.0	2.6	2.7	2.8	2.7
<b>Furnishings, Household Equipment and Routine Maintenance of the House</b>	7.9	8.6	9.4	9.6	10.5	10.6	6.0	7.6	7.4	7.6	7.1	7.2	7.0
<b>Health</b>	1.7	1.7	2.0	3.3	2.2	2.0	3.7	4.5	4.0	3.9	3.7	3.8	4.1
<b>Transport</b>	20.9	23.2	19.5	17.8	18.3	14.8	11.1	9.9	9.2	3.8	4.5	-0.1	-2.5
<b>Communications</b>	-0.7	-1.1	-0.3	0.1	0.1	0.1	0.2	0.6	0.6	0.4	0.3	0.4	0.6
<b>Recreation and Culture</b>	5.1	5.1	5.5	5.2	5.0	5.6	4.7	5.2	6.0	8.2	9.9	10.1	9.9
<b>Education</b>	3.1	3.1	3.1	3.1	3.1	3.1	3.8	3.8	3.8	3.8	3.8	3.8	3.8
<b>Hotels, Cafes and Restaurants</b>	9.8	9.3	11.0	10.6	11.3	11.7	5.2	5.4	6.0	5.3	6.7	6.7	5.3
<b>Miscellaneous Goods and Services</b>	3.0	3.4	3.8	3.8	4.1	4.5	7.2	7.0	7.3	7.5	7.7	8.1	5.6

### 3.2.2. Gross Domestic Product

The NSA Q1 GDP report (April –June 2023) showed that, the economy grew by 5.0 percent compared to 7.3 percent recorded in the corresponding quarter of 2022, (Figure 3.4). The slow performance is largely attributable to the contractions observed in the sectors of financial services activities, Manufacturing activities, and ‘Public administration and defense’. Additionally, the ‘Agriculture and forestry’ and Health sectors experienced notable slowdowns. However, sectors such as ‘Mining and quarrying’ and ‘Electricity and water’ witnessed an increase in economic activities during the period under review. Furthermore, activities picked up in the sectors of ‘Administrative and support services’, ‘Transport and storage’, ‘Wholesale and retail trade’, and ‘Hotels and restaurants’”.

Figure 3. 4: GDP growth rates (%)



Source: Namibia Statistics Agency

### 3.2.3. Exchange rate

During the period under review, the exchange rate between the Namibian dollar and Pound has been fluctuated and has not followed a constant

trend. It could be observed that the NAD has appreciated against both the US Dollar and UK Pound since May 2023. As of July 2023, the exchange rate is N\$18.31 per USD and N\$23.42 per UK Pound (Table 3.2). July 2023 standing at N\$18.31 per USD and N\$23.42 per UK Pound (Table 3.2).

Table 3. 2: Namibian Exchange rate, NAD per USD \$ and £, June 2022 to July 2023

Year	Month	US Dollar	UK Pound
2022	June	15.77	19.47
	July	16.84	20.20
	August	16.68	20.00
	September	17.55	19.90
	October	18.12	20.45
	November	17.48	20.52
	December	17.28	21.05
2023	January	17.09	20.89
	February	17.89	21.63
	March	18.27	22.17
	April	18.18	22.62
	May	19.05	23.77
	June	18.76	23.66
	July	18.31	23.42

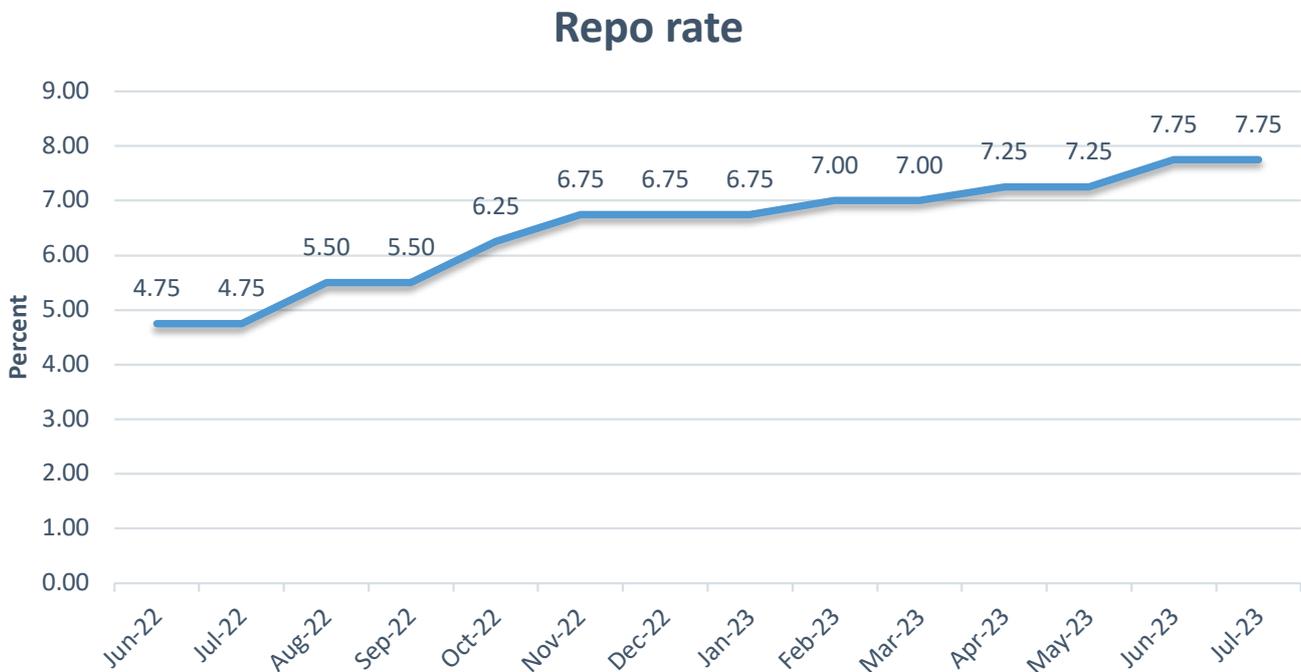
Source: Bank of Namibia

### 3.2.4. Repo Rates

Repurchase rate (Repo rate) this is the rate at which the private (sector) banks borrow Namibian dollars from the Bank of Namibia. The repo rate influences the prime interest rate, which in reverse affects the interest rate for personal loan. An increase in the repo rate will mean that the interest payable on personal loans such as (houses, vehicle payments, debt, etc.) will increase while interest earned on savings and investment products will also increase. From Figure 3.5, the repo rate has been increasing

from 4.75% in June 2022 to 7.75% in July 2023, which means the monthly repayments for debt/personal loan increased.

Figure 3. 5: Repo Rates, June 2022 to July 2023 (%)



Source: Bank of Namibia

### 3.2.5. Fuel prices

The price of both petrol and diesel has been fluctuating during the period under review, with exception of some months where the prices remained constant, especially from March 2023, the price of petrol remained unchanged at N\$ 19.78 until August 2023 (table 3.3). It is also notable that the price of diesel has been decreasing from December 2022 and stable for the last three (3) reporting periods, June to August at N\$ 19.05.

Table 3. 3: Fuel prices from June 2022 to August 2023

Year	Month	PETROL (N\$)	DIESEL (N\$)
2022	June	20.4	21.43
	July	22.28	22.77
	August	22.28	22.77
	September	21.08	22.12
	October	20.08	22.12
	November	20.08	24.1
	December	20.08	24.1
2023	January	18.28	20.65
	February	18.28	20.65
	March	19.78	20.65
	April	19.78	20.65
	May	19.78	19.85
	June	19.78	19.05
	July	19.78	19.05
	August	19.78	19.05

Source: Ministry of Mines and Energy

### 3.2.6. Regional Multidimensional Poverty Index (MPI) & Unemployment rate

Table 3.4., shows the composition of poverty and unemployment rate across the fourteen (14) regions of Namibia. The incidence of multidimensional poverty Index (MPI) is highest in Kavango West (79.6%), Kavango East (70.0%) and Kunene (64.1%).

Furthermore, the unemployment rate showed that the rate was highest in Kavango East (48.2%), Kunene (41.6%) and Omaheke (38.7%). While Omusati (24.0%) and Erongo (29.7%) regions recorded the lowest unemployment rate respectively.

Table 3. 4: Multidimensional Poverty Index (MPI) & unemployment rate by region

Region	MPI (%)	Unemployment rate (%)
//Kharas	19.6	35.1
Erongo	16.6	31.2
Hardap	26.9	39.2
Kavango East	70.0	48.7
Kavango West	79.6	33.8
Khomas	25.2	32.7
Kunene	64.1	45.0
Ohangwena	56.6	33.1
Omaheke	51.4	50.2
Omusati	50.7	21.5
Oshana	33.1	30.2
Oshikoto	50.0	35.3
Otjozondjupa	40.5	41.5
Zambezi	60.7	39.99
<b>Average</b>	<b>43.3</b>	<b>34.3</b>

Source: Namibia Statistics Agency, Multidimensional Poverty Index (MPI) Report 2021 and Labour Force Survey 2018

## 4. KEY FINDINGS

### 4.1. Household Demographic Characteristics of the Sample

This chapter provide information on demographic characteristics of the interviewed households such as age, sex, household size, etc. These variables were used to describe the demographic profile of the analyzed population.

#### 4.1.1. Sex composition

Table 4.1 shows that of the interviewed households (n=2 796), there were more female (52.1%) compared to male (48.0%). At regional level, many regions had more females covered by the survey compared to males, apart from Omaheke (54.0%), Kunene (50.1%), Zambezi (50.4%) regions who had more males compared to female. Hardap region had the same number of female and male covered by the survey (50.0%) respectively.

Table 4. 1: Sex composition by region

Region	Sex (%)	
	Male	Female
//Kharas	49.2	50.8
Erongo	48.0	52.0
Hardap	50.0	50.0
Kavango East	47.2	52.8
Kavango West	46.0	54.0
Khomas	49.7	50.3
Kunene	50.1	49.9
Ohangwena	47.3	52.7
Omaheke	54.0	46.0
Omusati	41.8	58.2
Oshana	48.0	52.0
Oshikoto	48.1	51.9
Otjozondjupa	47.8	52.2
Zambezi	50.4	49.6
<b>Average</b>	<b>48.0</b>	<b>52.1</b>

### 4.1.2. Average Household Size

Table 4.2 shows that the typical household size varied from 3 to 6 members per household. The largest average household size was found in Ohangwena (6), Kavango East (5) and Kavango West (5). Kunene Region had the smallest average household size, with 3 members per household.

Table 4. 2: Average household size by region

Regions	Average Household size
//Kharas	3
Erongo	3
Hardap	3
Kavango East	5
Kavango West	5
Khomas	4
Kunene	3
Ohangwena	6
Omaheke	3
Omusati	4
Oshana	4
Oshikoto	4
Otjozondjupa	3
Zambezi	5
<b>Average</b>	<b>4</b>

### 4.1.3. Relationship to head of household

The survey also collected information on the linkages in terms of relationships of other members of the household to the head (Table 4.3). The head of household refer to a person, of either sex who is looked upon by other members of the household as their leader or main decision-maker.

There were more other relatives or family members (35.7%) to head of households in the interviewed households followed by the head of household's biological or stepchildren (33.3%) compared to other relations to heads. Moreover, only about 20 percent (19.9%) of the interviewed

household's members were head of households. The majority (21.8%) of households were headed by males.

Table 4. 3: Relationship to Head of Household (HH) by sex

Relationship to head of HH	Sex of HH member (%)		
	Male	Female	Total
Head	21.8	18.1	19.9
Spouse	2.7	11.7	7.4
Child	34.2	32.4	33.3
Employee	1.6	1.2	1.4
Family	37.3	34.3	35.7
Tenant	0.5	0.3	0.4
In-laws	0.5	0.7	0.6
No relation	1.4	1.4	1.4
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

#### 4.1.4. Marital status

All persons were asked to state their marital status at the time of the survey in one of the following categories; married (married with certificate/ married traditionally/separated), divorced, single (never married) and widow / widower. Table 4.4 indicates that majority of the interviewed household members were Single (Never married) (74.2%) followed by those who were Divorced (21.0%).

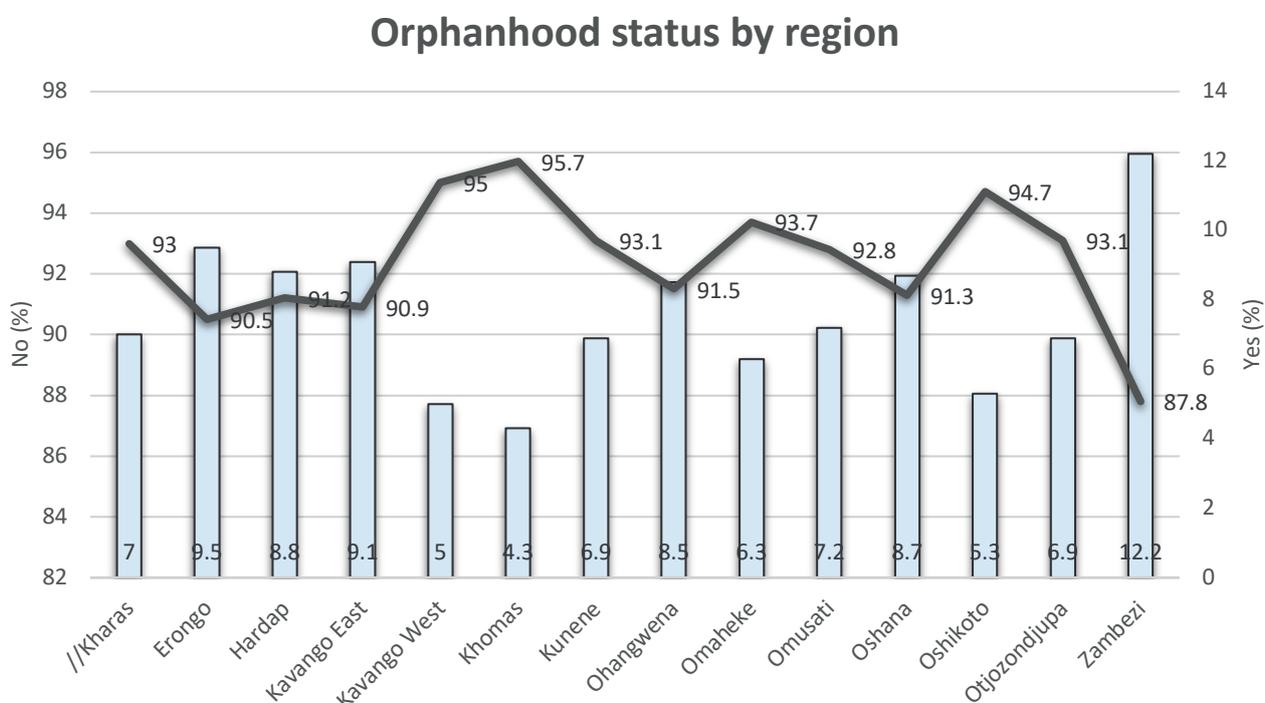
Table 4. 4: Age categories by marital status

Age categories (years)	Marital status (%)				Total
	Married	Divorced	Single	Widow / Widower	
15-21	0.3	0.1	99.6	0.1	100.0
22-49	17.5	0.6	81.3	0.7	100.0
50-120	47.4	2.9	35.0	14.7	100.0
<b>Average</b>	<b>21.0</b>	<b>1.0</b>	<b>74.2</b>	<b>3.9</b>	<b>100.0</b>

#### 4.1.5. Orphan hood status

All household members less than 18 at the time of survey were asked whether they were orphans or not, with either one or more parent no longer alive during the time of the survey. About eight (8) percent responded to not having either one (1) or both parents no longer alive. Zambezi region (12.2%) had the highest percentage of orphans, followed by Erongo region (9.1%) and Kavango East region (9.1%). The region with the most percent of nonorphans was Khomas (95.7%).

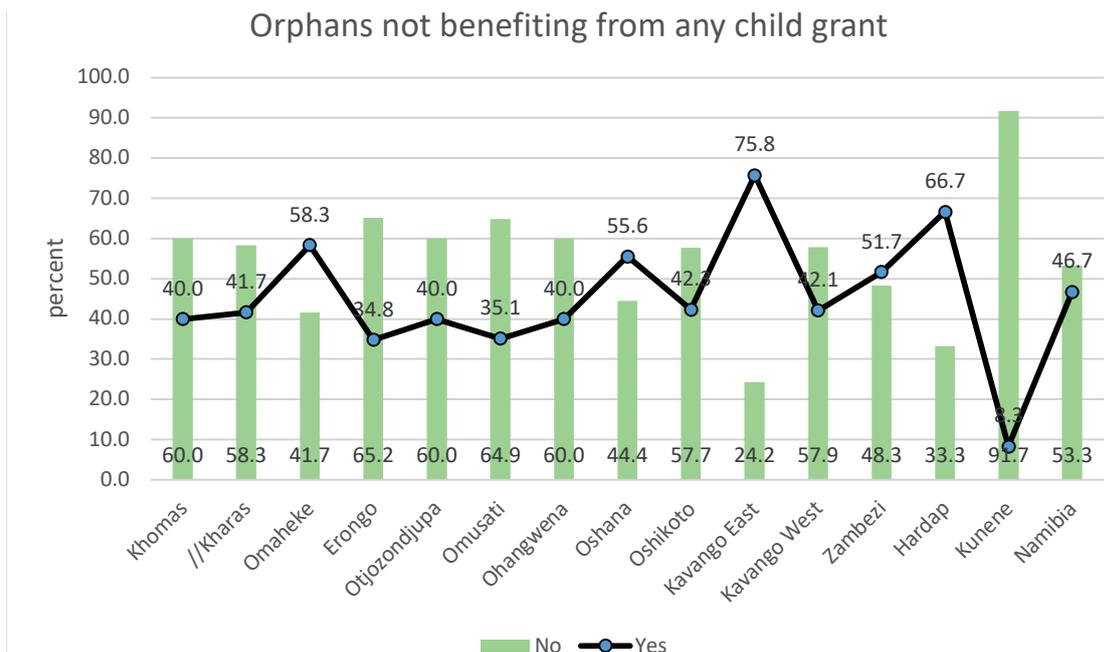
Figure 4. 1: Child orphan hood status by region



#### 4.1.6. Orphans not benefiting from any child grant

Out of the orphaned child who indicated not to receive any child beneficially grant or disability grant if the child is disable (n = 204), about 46.7 percent were not receiving any child grant while 53.3 percent of them were receiving social grant at the time of survey (Figure 4.2). Kunene region had a highest percent of orphaned children who indicated not to receive any child beneficially grant or disability grant if the child is disable, about 91.7 percent.

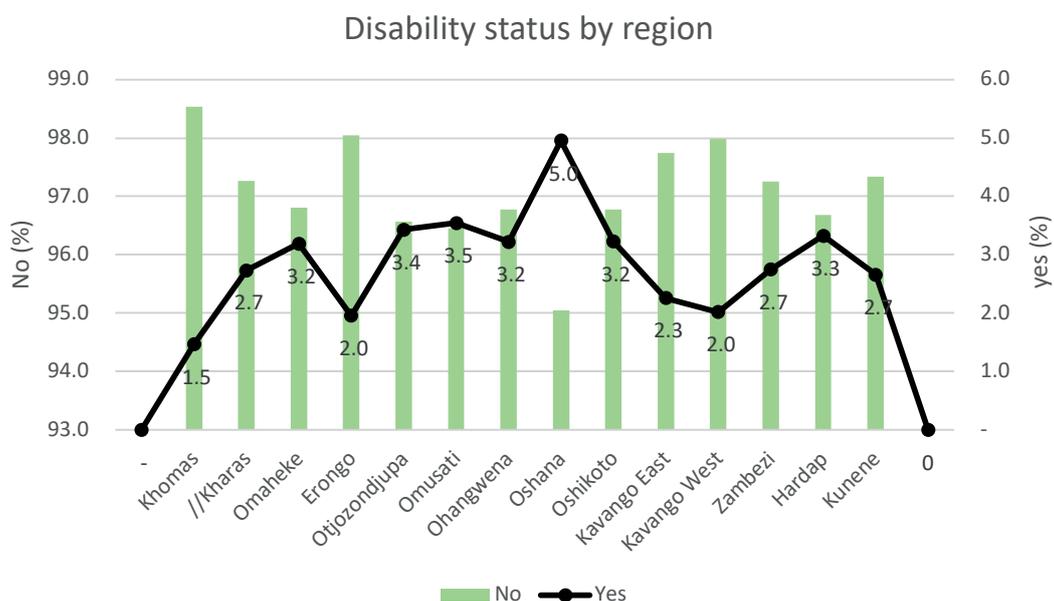
Figure 4. 2: Orphans not benefiting from any grant by region



#### 4.1.7. Disability

About 3.0 percent of the interviewed household members countrywide were disabled. Oshana (5.0%), Omusati (3.5%), Otjozondjupa (3.4%) and Hardap (3.3%) regions had a highest percent of disabled household members (Figure 4.3).

Figure 4. 3: Disability status by region



## 4.1.8. Most vulnerable population groups

The communities; focal groups; community leaders, etc. were asked to identify the most vulnerable population groups in majority of households in their respective communities. The unemployed youth (40.4%) were found to be the highest population group vulnerable to food and livelihood changes, followed by elderly people (19.6%) and marginalized communities (18.7%) (Table 4.5).

Table 4. 5: Most vulnerable population groups by region (%)

Region	Most vulnerable population groups by region (%)							
	Children under 5 yrs.	Elderly	Marginalized community	Others	OVC	People with Disability	Pregnant Women	Unemployed Youth
//Kharas	12.5	0.0	25.0	0.0	0.0	0.0	0.0	62.5
Erongo	33.3	26.7	0.0	6.7	6.7	6.7	6.7	13.3
Hardap	8.3	25.0	0.0	0.0	25.0	8.3	8.3	25.0
Kavango East	0.0	36.4	9.1	0.0	0.0	0.0	18.2	36.4
Kavango West	11.1	44.4	11.1	0.0	0.0	0.0	0.0	33.3
Khomas	13.0	21.7	13.0	13.0	8.7	0.0	0.0	30.4
Kunene	0.0	25.0	8.3	0.0	0.0	0.0	0.0	66.7
Ohangwena	33.3	22.2	5.6	0.0	0.0	5.6	0.0	33.3
Omaheke	9.1	18.2	45.5	0.0	0.0	0.0	0.0	27.3
Omusati	0.0	16.7	5.6	0.0	0.0	0.0	0.0	77.8
Oshana	0.0	23.1	7.7	0.0	7.7	0.0	7.7	53.8
Oshikoto	0.0	33.3	27.8	0.0	0.0	0.0	5.6	33.3
Otjozondjupa	2.6	5.1	46.2	2.6	0.0	0.0	10.3	33.3
Zambezi	11.1	5.6	16.7	0.0	0.0	11.1	0.0	55.6
<b>Average</b>	<b>9.3</b>	<b>19.6</b>	<b>18.7</b>	<b>2.2</b>	<b>3.1</b>	<b>2.2</b>	<b>4.4</b>	<b>40.4</b>

## 4.2. Casual Factors

### 4.2.1. Vulnerability and Hazards

#### 4.2.1.1. Livestock diseases

“There were no significant outbreaks of major livestock diseases. However, the regions have widely reported the following diseases and conditions: Dermatophilosis, Sweating Sickness in calves, Dystocia, Malignant

Catarrhal Fever in cattle, Lamina Internal Prolapse, Anaplasmosis, Uterine and Vaginal Prolapse, Foot Rot, Atresia Ani in both cattle and goats, Umbilical Hernia, Tick Infestation, Internal Parasites, Orf, Bloating, and Mange and Abortion in small stock, Botulism, Pulpy Kidney, Cutaneous Papillomatosis, and Pasteurella. Additionally, isolated cases of Infectious Bovine Rhinotracheitis (IBR), commonly known as Pink Eye, and Lumpy Skin Disease were reported mainly in the Oshana region. Ohangwena region reported suspected cases of Contagious Bovine Pleuropneumonia (CBPP) disease in cattle that are in Angola for grazing purposes, whereby 20 cattle have been reported dead due to this suspected disease” (MAWLF, 2023, p.9).

#### **4.2.1.2. Flood in the northern growing regions**

The Northern regions of Ohangwena, Oshana and Omusati suffered from flash flood early this year as a result of heavy rainfalls in Cuvelai Catchment areas. Similarly, Zambezi region, farmers were also affected by the rising of Zambezi River which resulted in submerged crop fields. School, health facilities and roads were severely affected.

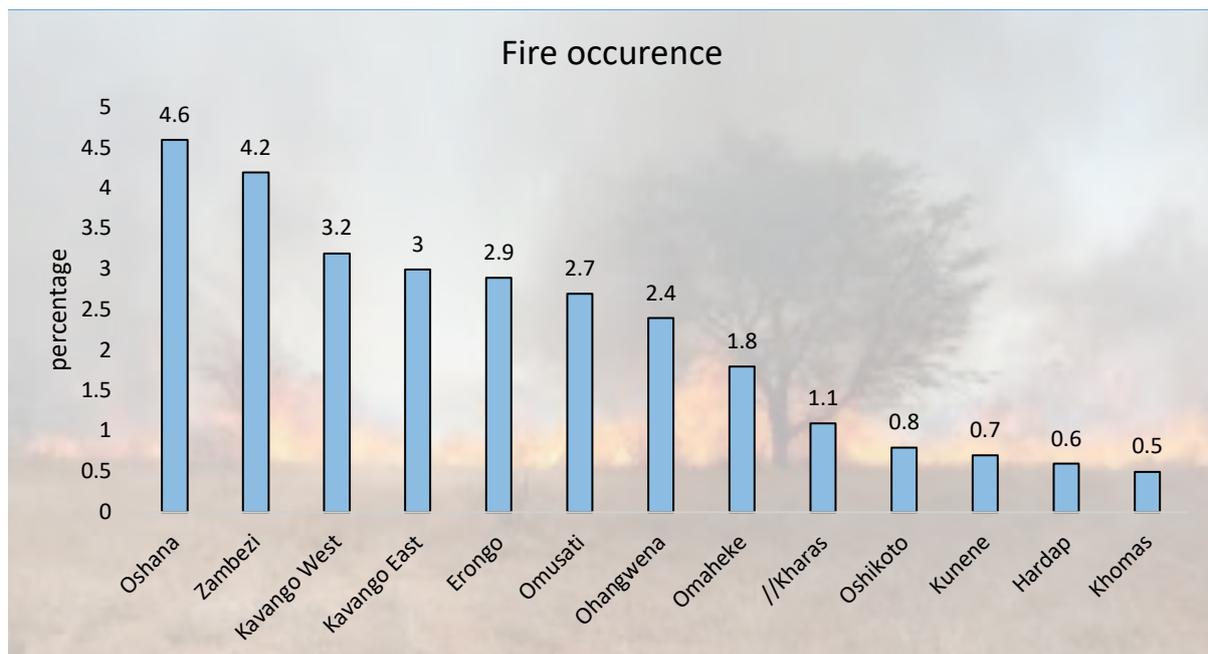
Figure 4. 4: Flood situation in the northern regions



### 4.2.1.3. Fire occurrence

Households were asked to indicate whether they experienced any fire during the last 12 months (August 2022 to July 2023). From Figure 4.5 below, fire occurrences were highest in Oshana (4.6%), Zambezi (4.2%), Kavango West (3.2%) and Kavango East (3.0%) regions.

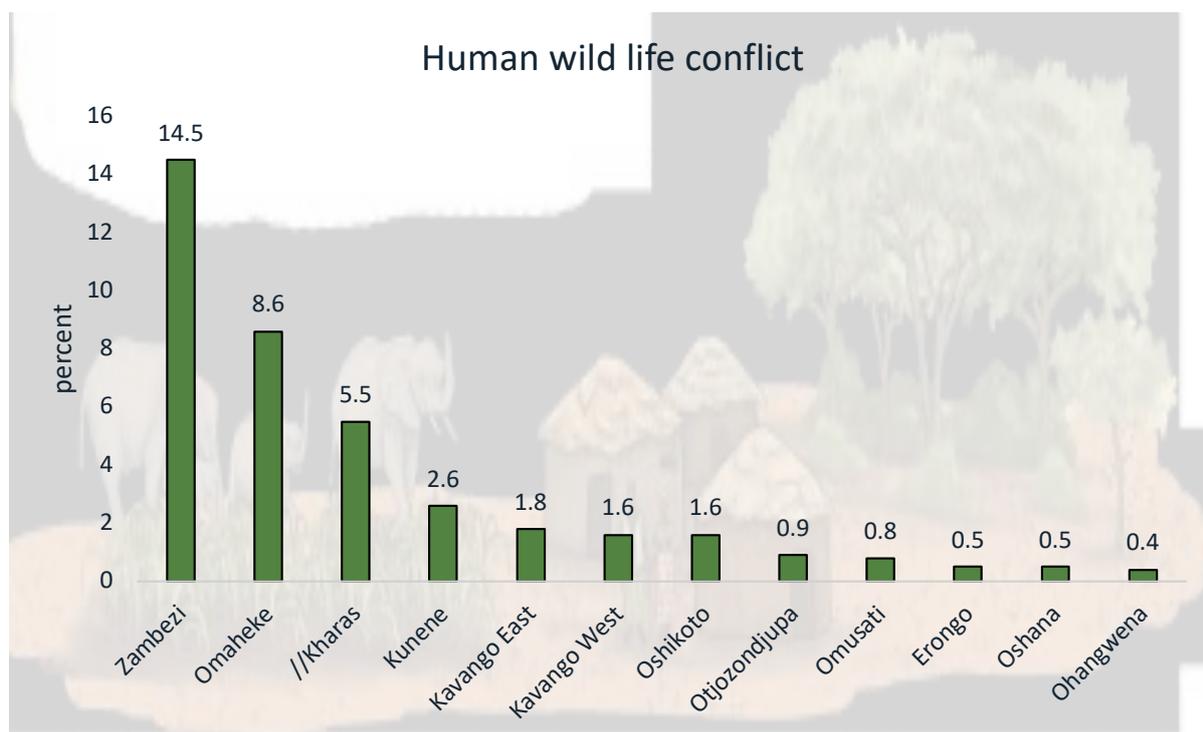
Figure 4. 5: Fire occurrence in the last 12 months by region



### 4.2.1.4. Human-wildlife Conflicts (HWC)

Households were asked to indicate whether they experienced any human wildlife conflicts during the last 12 months (August 2022 to July 2023). From Figure 4.6 below, human wildlife conflicts cases were highest in Zambezi (14.5%), Omaheke (8.6%) and //Kharas (5.5%) regions.

Figure 4. 6: Human wildlife occurrence in the last 12 months by region



### 4.3. Dimensions of Food Security

#### 4.3.1. Food availability (crop and livestock production, markets access and food reserves).

##### 4.3.1.1. Crop Production Performance for 2022/23 Season

“All the crop producing regions in the communal area have recorded a significant decline in the crop harvest this season, following the unfavorable crop growing conditions experienced during the 2022/2023 cropping season. The aggregate cereal estimates showed that, the country has recorded 153,000 Metric Tons (MT), which is 9% lower than the last season’s harvest of 168,200MT but 23% above the 10 years’ average production of 124,200MT” (MAWLF, 2023).

Much of the cereal production came from the commercial area, including the Green Schemes with a contribution of 80% while the communal area

only contributed 20% to the national cereal production for the 2022/2023 season.

Table 4.6., below indicates the aggregate cereal production from 2012/2013 to 2021/2022 cropping seasons. The table also indicates the harvest (highlighted in red) for the 2022/2023 cropping season, 10-year average, 2022/2023 production as percentage of the average and as percentage of 2021/2022-cropping season.

“As indicated below, maize production in the communal area (Zambezi, Kavango East and Kavango West regions) recorded 6,800MT which is 15% below last season’s production of 8,000MT, but 29% more than the 10-year average production of 5,300MT. Furthermore, pearl millet recorded 20,500MT this season, which is 54% lower than last season’s production of 44,700MT and 54% below the 10-year average production of 44,500MT. Sorghum production on the other hand, recorded a 2,200MT, a significant reduction of 64% below last season’s production of 6,100MT and also 41% lower than the 10-year average production of 3,800MT. This decrease in production is highly attributed to the drought conditions and the prolonged dry spells experienced during the course of the 2022/2023 season” (MAWLF, 2023, p.3).

Table 4. 6: National cereal production statistics trend (in ‘000 Metric Tons) and 2022/2023 production compared to a 10 – year average and 2021/2022 production

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	10-year average	2022/23 as % of 10-years average	2022/23 as % of 2021/22 production
Maize (Communal)	2.5	5.2	1.4	1.2	6.3	6.9	1.3	8.5	11.5	8.0	6.8	5.3	29	-15
Maize (Commercial)	72.4	71.3	38.9	43.9	76.7	58.0	28.8	51.6	66.6	90.9	98.8	59.9	65	9
Pearl Millet	24.7	44.1	15.3	19.4	57.6	83.5	9.3	90.8	55.2	44.7	20.5	44.5	-54	-54
Sorghum	2.2	4.1	1.7	1.5	2.8	4.0	0.4	7.1	8.2	6.1	2.2	3.8	-41	-64
Wheat	14.8	11.3	11.6	11.4	9.8	6.9	7.5	4.5	11.5	18.5	24.7	10.8	130	34
Aggregate	116.6	136.1	68.9	77.5	153.2	159.3	47.3	162.5	153.0	168.2	153.0	124.2	23	-9

#### 4.3.1.2. Overview on Livestock Production - Grazing conditions

According to MAWLR (2023), the grazing condition in most parts of the country has significantly become limited which is largely to poor rainfall conditions and dry spells which have dominated the 2022/2023 rainfall season. The grazing condition in most parts of the country has deteriorated, ranges between poor and fair and has not made any significant recovery due to the below average rainfall received this season. The overall grazing conditions is expected to worsen throughout the country during the dry season and many farmers will need Government intervention to better the situation and avoid high livestock mortalities as a result of drought.

#### 4.3.1.3. Overview of Livestock production - Livestock conditions

Livestock conditions vary across different regions, which ranges between poor to fair body condition in large stock and good to poor in small stock. As the dry season progresses and the grazing conditions deteriorate in various parts of the country, it is anticipated that the body condition

of livestock will decline, which could further lead to livestock mortalities (MAWLR, 2023).

### **4.3.2. Food reserves**

#### **4.3.2.1. National food reserve**

According to Agro Marketing and Trade Agency (AMTA) (2023), the National Strategic Food Reserve (NSFR) had a stock of 3,560.07 MT of grains which is only 16% of the silos' total holding capacity of 22,900 MT as of July 2023. The NSFR stock consisted of 1,442.50 MT of white maize in Katima Mulilo silo, 948.79 MT of white maize in Rundu silo, 420.51 MT of white maize in Tsandi silo and 748.27 MT of pearl millet in Okongo silo. Omuhiya silos were completely empty.

#### **4.3.2.2. Household own production reserve**

Households were asked whether they cultivated any crop or not during the past 12 months prior to data collection (August 2022 to July 2023) (Figure 4.7) and if yes, how long (in months) do they anticipate the harvest to sustain the household (Figure 4.8). Figure 4.7 shows that only 39.0 percent of households in Namibia cultivated any crop. This could be either in commercial, communal areas or backyard gardens in urban areas. Figure 4.8., shows that overall, majority of households in the countries harvests only sustain the household for about one (1) to three (3) months. All households who harvested from their own production in //Karas and Zambezi regions will have their food stock completed in less than three months. Only about ten (10) percent households in the northern crop growing regions' harvest indicated to have a production lasting for a longer period, 7 to 12 months, respectively, with the exception of Kavango East and Zambezi; whose harvest will be consumed within the first three to six months of harvest.

Figure 4. 7: Household cultivate any crop by region

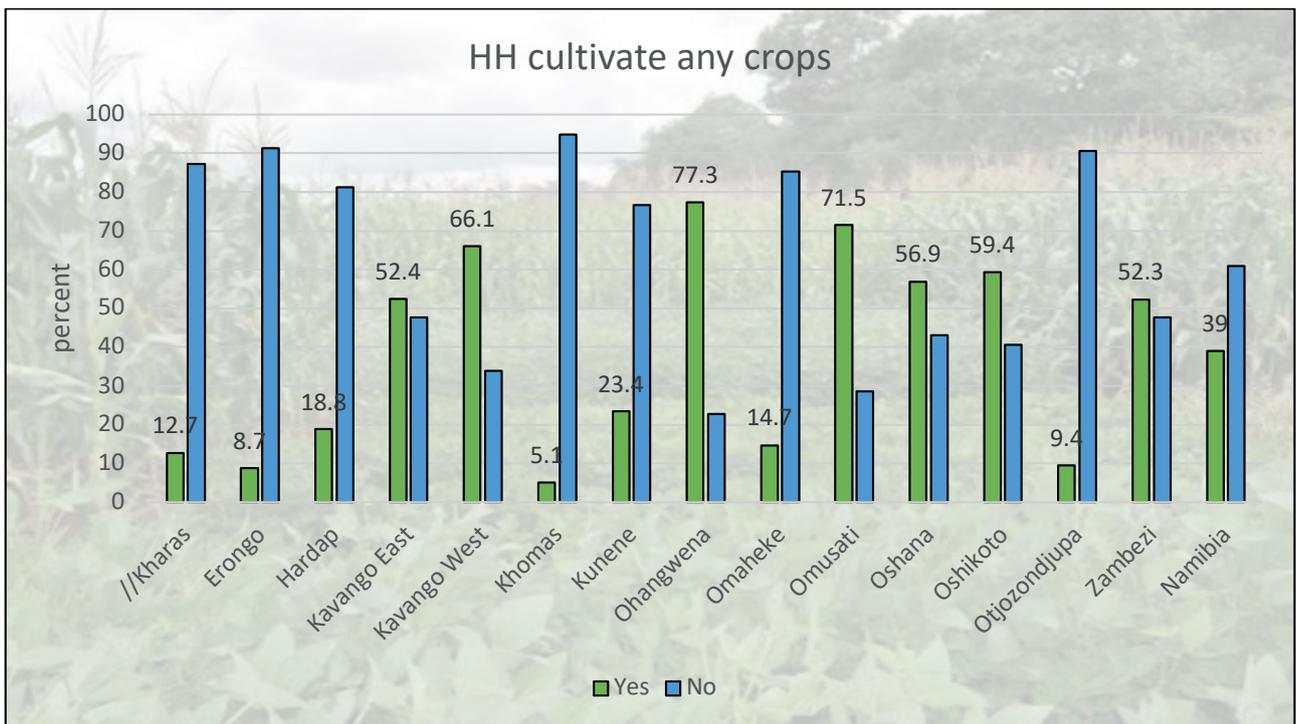
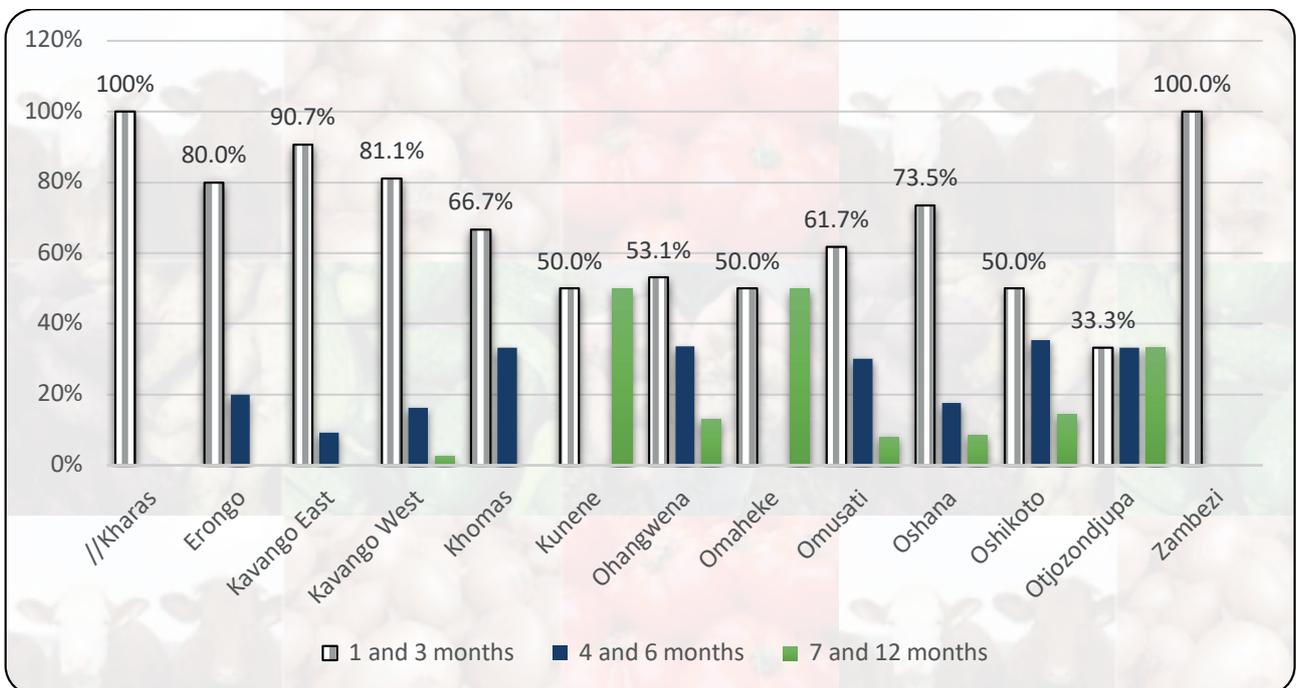


Figure 4. 8: Number of months own production sustain household by Region



### 4.3.3. Food access

#### 4.3.3.1. Household main source of income

Interviewed households were asked to state their main source of income. Majority of the households (30.8%) indicated to depend on social grants, followed by those dependent on salary and wages (30.4%). Furthermore, about 12.8 percent of interviewed household's indicated to not have any source of income, with the highest recorded in Kunene (26.0%), Khomas (25.4%) and Kavango West (24.2%) regions. Moreover, Ohangwena (46.2%), Hardap (37.5%), Oshana (37.0%) and Omusati (36.9%) have the highest number of households who indicated to depend on social grants as their main source of income compared to other regions (Table 4.7).

Table 4. 7: Household main income source by region

Region	Household Main Income Source (%)					Total
	Salary and Wages	Social Grants	Remittance	Income Generating Activities	No Income	
//Kharas	51.4	23.2	0.0	15.5	9.9	100
Erongo	52.4	16.8	4.3	13.9	12.5	100
Hardap	37.5	37.5	3.4	10.2	11.4	100
Kavango East	20.2	36.3	7.1	22.6	13.7	100
Kavango West	16.9	34.7	6.5	17.7	24.2	100
Khomas	35.5	12.9	3.2	23.0	25.4	100
Kunene	33.1	24.7	3.9	12.3	26.0	100
Ohangwena	16.3	46.2	1.6	19.5	16.3	100
Omaheke	36.2	36.8	9.8	13.5	3.7	100
Omusati	19.2	36.9	15.4	23.5	5.0	100
Oshana	23.6	37.0	8.3	25.0	6.0	100
Oshikoto	27.9	31.5	4.4	29.9	6.4	100
Otjozondjupa	44.0	24.4	6.4	9.4	15.8	100
Zambezi	13.5	31.1	5.7	39.9	9.8	100
<b>Average</b>	<b>30.4</b>	<b>30.8</b>	<b>5.8</b>	<b>20.2</b>	<b>12.8</b>	<b>100</b>

## Income source change in the past 12 months (August 2022 – July 2023)

Table 4.8, below shows that of those households who indicated to have any source of income in table 4.6 above, about 62.1 percent of households specified that their household income has not changed since August 2022, while 32.1 percent indicated to have a decreased income and slightly 5.8 percent of households income increased. A significant decrease in household income was reported in Ohangwena (55.4%) and Zambezi (50.8%) regions.

Table 4. 8: Income source change past 12 months (Aug 2022 –July 2023) by region

Region	Household income change the past 12 months (%)			Total
	Increased	No Change	Decreased	
//Kharas	10.5	80.7	8.8	100
Erongo	12.0	60.1	27.9	100
Hardap	10.8	67.6	21.6	100
Kavango East	3.0	64.9	32.1	100
Kavango West	3.2	80.7	16.1	100
Khomas	6.5	69.1	24.4	100
Kunene	7.8	70.8	21.4	100
Ohangwena	1.2	43.4	55.4	100
Omaheke	3.1	62.6	34.4	100
Omusati	4.6	64.6	30.8	100
Oshana	3.7	52.8	43.5	100
Oshikoto	4.4	61.8	33.9	100
Otjozondjupa	6.0	62.4	31.6	100
Zambezi	5.7	43.5	50.8	100
<b>Average</b>	<b>5.8</b>	<b>62.1</b>	<b>32.1</b>	<b>100</b>

### 4.3.3.2. Food purchase

On average, about 72.4 percent of the interviewed households reported experiencing difficulty in purchasing food, with the two Kavango regions having the highest percentage, 94.4 and 90.3 percent respectively, followed by Zambezi region (85.5%) (Figure 4.9). Out of those who experienced difficulty in purchasing food, 29.9 percent indicated that it was due to no income; 56.7 percent indicated that income was not enough; 8.7 percent was due to price increase in food prices and 4.6 percent were caused by other reasons, e.g., transport issues etc., (Table 4.9).

The regions with a highest household who indicated having difficulty in purchasing food due to income not enough were //Kharas (73.6%), Kavango East (70.3%) and Omusati (67.4%) regions.

Figure 4. 9: Experienced difficulty in purchasing food

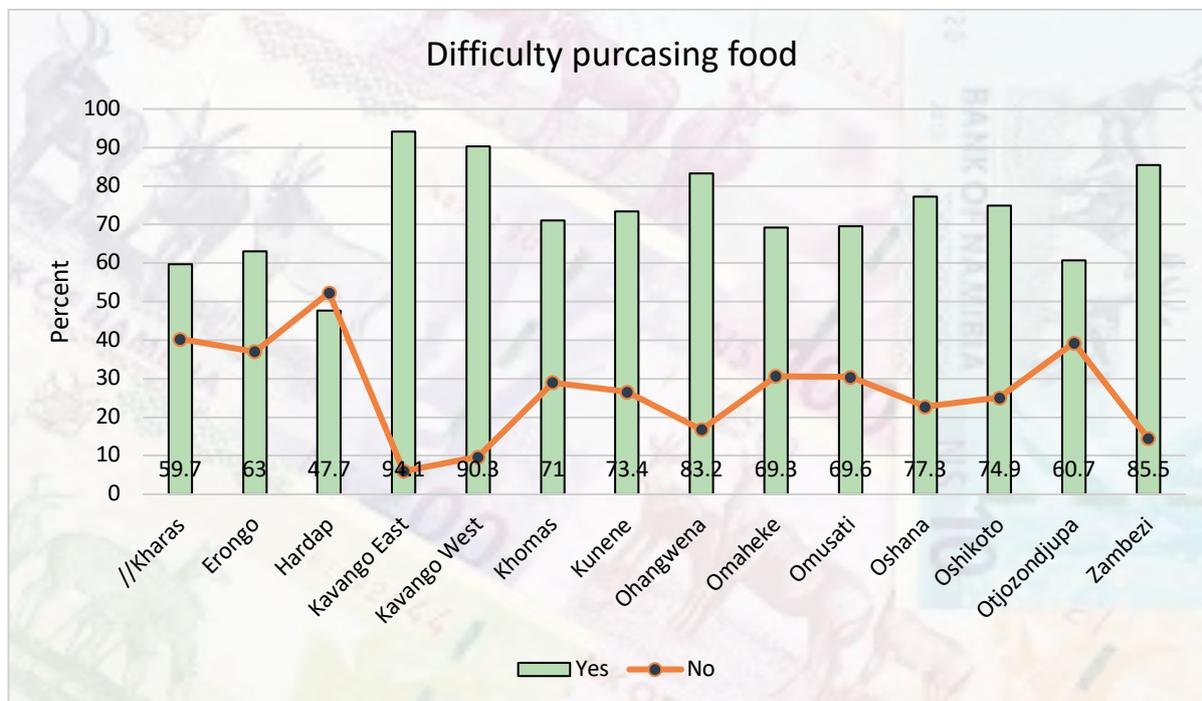


Table 4. 9: Reason for difficulty in purchasing food by region

Region	Reasons why difficulty in purchasing food (%)			
	No Income	Income not enough	Price Increase	Others
//Kharas	20.8	73.6	1.9	3.8
Erongo	28.1	63.3	4.7	3.9
Hardap	31.0	53.6	7.1	8.3
Kavango East	14.6	70.3	7.6	7.6
Kavango West	42.9	46.4	8.0	2.7
Khomas	46.7	48.7	2.6	2.0
Kunene	42.5	41.6	4.4	11.5
Ohangwena	36.1	50.5	10.6	2.9
Omaheke	23.9	59.3	8.0	8.9
Omusati	18.8	67.4	10.5	3.3
Oshana	24.0	58.1	13.8	4.2
Oshikoto	23.4	56.9	16.5	3.2
Otjozondjupa	35.9	57.0	6.3	0.7
Zambezi	34.6	48.5	10.9	6.1
<b>Average</b>	<b>29.9</b>	<b>56.9</b>	<b>8.7</b>	<b>4.6</b>

### 4.3.3.3. Access to markets

Households were asked whether there was market available for their own production. Out of all the interviewed households countrywide, about 86.6 percent indicated to have market available for their own production (Table 4.10). However, Ohangwena (36.3%), Kavango West (33.1%) and Oshana (24.5%) regions had the highest percentage of households who reported to not having market available for their own production at the time of survey (Figure 4.10).

Figure 4. 10: Availability of market for own production by region

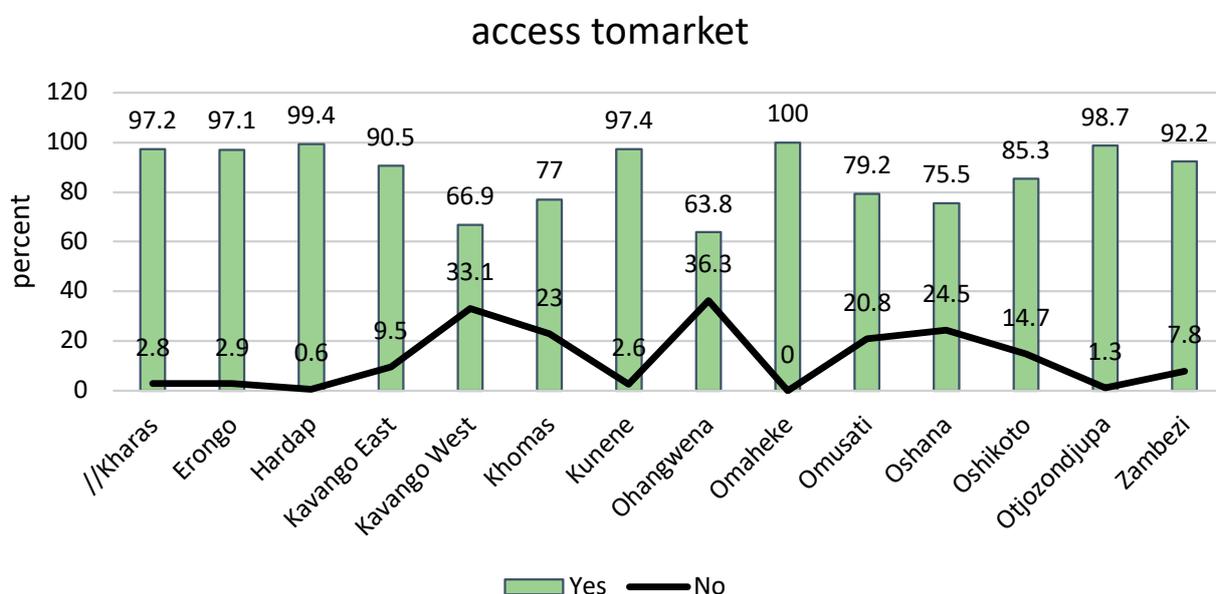


Table 4. 10: National availability of market for own production

	Access to markets (%)		
	Yes	No	Total
<b>Namibia</b>	<b>86.6</b>	<b>13.5</b>	<b>100</b>

### 4.3.3.4. Average Food prices

#### 4.3.3.4.1. Average common food prices

Focal group discussions held with community members, and community leaders, were asked to give the most common/average food commodity prices in N\$ per KG in both urban and rural areas in that specific community or town. After the data cleaning for the food price variable at community level, the average price per kg for Maize grains for //Kharas and Zambezi regions; average millet price per kg for Khomas and average rice price for Khomas and Zambezi region were not reported or analyzed due to too many inconsistencies in the data (Table 4.11).

On average, maize flour (N\$23.70 per kg) was reported to be the most expensive food commodity national wide followed by the price of rice (N\$21.89 per kg) and sorghum grains (N\$20.55 per kg).

Table 4. 11: Average common food prices in N\$ per KG by region

Regions	Average common food price per Kg (N\$/KG)						
	Maize grains	Maize flour	Millet grains	Millet flour	Sorghum grains	Sorghum flour	Rice
//Kharas	-	23.83	0.00	-	0.00	-	24.50
Erongo	0.00	23.38	19.00	22.00	58.00	40.00	23.50
Hardap	32.25	23.83	15.20	0.00	0.00	0.00	23.83
Kavango East	18.89	21.36	22.50	15.50	11.20	9.00	13.88
Kavango West	23.75	21.25	24.00	22.50	21.00	25.00	24.14
Khomas	37.71	32.40	-	16.31	19.79	12.23	-
Kunene	19.14	28.67	0.00	0.00	0.00	0.00	24.00
Ohangwena	2.00	13.29	8.86	18.93	24.64	6.67	19.59
Omaheke	14.00	16.82	5.33	5.00	0.00	6.67	24.55
Omusati	7.63	26.88	11.90	18.75	11.79	18.00	19.69
Oshana	20.00	23.92	15.22	9.50	38.22	27.70	20.69
Oshikoto	7.33	11.06	10.56	8.00	9.25	14.00	15.00
Otjozondjupa	23.52	24.89	6.47	7.43	6.82	11.04	29.26
Zambezi	-	33.78	2.38	21.25	4.75	26.50	-
<b>Average</b>	<b>18.75</b>	<b>23.70</b>	<b>12.86</b>	<b>15.02</b>	<b>20.55</b>	<b>17.89</b>	<b>21.89</b>

#### 4.3.3.4.2. Average meat prices

The community members and leaders were also asked to provide the most common/average meat prices in N\$ per kg in both urban and rural areas in their specific communities or towns. After the data cleaning, the cost of meat per kg in Zambezi region was not analyzed due to too many inconsistencies in the data (Table 4.12).

On average, for the reporting 13 regions, a kg of goat meat which costed N\$78.63 and a kg of beef costing N\$78.52 were reported to be the most expensive meat compared to other meat products (pork and sheep).

Table 4. 12: Average meat prices in N\$ per kg by region

Region	Average meat price per Kg (N\$/kg)			
	Beef	Mutton	Goat	Pork
//Kharas	133.50	123.88	90.00	96.17
Erongo	109.40	145.44	144.67	126.50
Hardap	67.70	82.91	85.22	41.13
Kavango East	45.45	41.25	41.36	54.50
Kavango West	75.00	10.00	58.33	69.17
Khomas	82.50	101.53	71.06	57.75
Kunene	54.33	50.00	51.50	35.00
Ohangwena	96.61	0.00	120.83	142.22
Omaheke	68.00	69.55	71.36	55.00
Omusati	76.06	68.33	73.89	73.89
Oshana	105.00	95.00	123.75	112.00
Oshikoto	95.47	48.33	108.93	90.40
Otjozondjupa	57.35	47.28	52.08	24.25
<b>Average</b>	<b>78.52</b>	<b>70.00</b>	<b>78.63</b>	<b>75.86</b>

#### 4.3.4.3. Inflation effect on food

Majority (70.5%) of the interviewed households believed that inflation deteriorated food prices (food became expensive), while 26.6 percent reported that inflation had no effect in food prices and 2.9 percent stated

that inflation improved the food prices (Table 4.13).

Table 4. 13: Inflation effect on food prices by region

Region	Inflation effect on food prices (%)			
	Improved	No change	Deteriorate	Total
//Kharas	2.2	50.3	47.5	100
Erongo	4.4	29.5	66.2	100
Hardap	17.7	24.6	57.7	100
Kavango East	0.0	22.6	77.4	100
Kavango West	0.8	33.9	65.3	100
Khomas	3.2	58.1	38.7	100
Kunene	2.6	57.1	40.3	100
Ohangwena	2.4	11.6	86.1	100
Omaheke	0.0	8.6	91.4	100
Omusati	0.0	18.9	81.2	100
Oshana	0.5	2.3	97.2	100
Oshikoto	6.4	24.5	69.1	100
Otjozondjupa	0.4	30.8	68.8	100
Zambezi	0.0	12.4	87.6	100
<b>Average</b>	<b>2.9</b>	<b>26.6</b>	<b>70.5</b>	<b>100</b>

#### 4.3.3.5. Main sources of food

##### Main source of cereals and grains

Households were asked to state their main source of Cereals and Grains: (Maize/ porridge, rice, sorghum, mahangu, wheat). A significant percent of (67.3%) of the interviewed households stated cash purchases as their main source, while 21.3 percent reported to have gotten cereal and grain from their own harvest and 5.6 percent stated to have gotten cereal and grains as gifts and 5.8 percent stated their main source of cereal and grain was from other sources, e.g. Food aid, borrowing, credit purchases, garbage etc., (Table 4.14). Furthermore, majority of households in all regions were relying on cash purchases as their main source of cereals and grains, which is worrisome in terms of food security; as most of the households indicated to have no source of income or income was not enough to purchase food in Table 4.9 above.

Table 4. 14: Main source of the Cereals and Grain by region

Main source of the Cereals and Grain: Maize/ porridge, rice, sorghum, mahangu, wheat, bread, etc. (%)				
Region	Own Harvest	Cash Purchases	Gift (food from families, relatives, etc.)	Others
//Kharas	1.1	88.4	7.7	2.3
Erongo	2.4	91.8	1.4	3.8
Hardap	0.0	88.6	8.0	2.9
Kavango East	25.7	59.9	8.4	5.4
Kavango West	30.6	56.2	5.8	6.6
Khomas	1.4	89.2	4.7	4.8
Kunene	1.3	82.9	4.6	11.2
Ohangwena	39	56.2	2.0	2.8
Omaheke	1.2	75.2	5.0	18.6
Omusati	51.2	40.8	6.2	1.6
Oshana	47.4	47.4	3.7	1
Oshikoto	43.8	49.8	5.2	0.8
Otjozondjupa	1.3	82.3	5.2	11.3
Zambezi	26.2	49.2	12.6	11
<b>Average</b>	<b>21.3</b>	<b>67.3</b>	<b>5.6</b>	<b>5.8</b>

### Main source of the roots and tubers

Households were also asked to state their main source of roots and tubers: cassava, potatoes, and sweet potatoes consumed in the last 7 days prior to the survey. A significant percent (90.9%) of the interviewed households indicated that cash purchases was their main source of roots and tubers, while 3.6 percent reported they got the roots and tuber as gifts and 2.9 percent indicated to have gotten roots and tubers from their own harvest (Table 4.15).

Table 4. 15: Main source of the Roots and tubers: cassava, potatoes, sweet potatoes by region

Region	Main source of the Roots and tubers: cassava, potatoes, sweet potatoes (%)			
	Cash Purchases	Gift (food from families, relatives, etc.)	Own Harvest	others
//Kharas	92.4	3.8	1.0	2.9
Erongo	95.6	1.8	0.0	2.7
Hardap	83.3	5.6	8.3	2.8
Kavango East	90.0	0.0	10.0	0.0
Kavango West	100.0	0.0	0.0	0.0
Khomas	94.6	2.2	1.1	2.2
Kunene	90.7	4.7	4.7	0.0
Ohangwena	81.6	5.3	7.9	5.2
Omaheke	85.7	6.1	0.0	8.1
Omusati	92.0	0.0	4.0	4.0
Oshana	90.2	3.9	5.9	0.0
Oshikoto	88.3	0.0	6.7	5.0
Otjozondjupa	95.3	4.7	0.0	0.0
Zambezi	85.2	11.1	0.0	3.7
<b>Average</b>	<b>90.9</b>	<b>3.6</b>	<b>2.9</b>	<b>2.7</b>

#### 4.3.4. Utilization

##### 4.3.4.1. Water, Sanitation, and Hygiene (WASH)

###### 4.3.4.1.1. Access to water

###### Sources of water

About 85.1 percent of the population gets their water from private and public taps and 7.3 percent from boreholes. Ohangwena (19.1%), Omusati (11.2%10.2%) and Oshana () regions have the highest percent of households who gets water from other sources such as open well, rivers, dams, etc., (Table 4.16).

Table 4. 16: Source of water by region

Region	Source of water (%)				Total
	Private tap	Public taps	Borehole	Others	
//Kharas	69.6	16.0	6.1	8.3	100.0
Erongo	67.8	21.2	2.9	8.2	100.0
Hardap	65.9	20.5	9.7	4.0	100.0
Kavango East	58.3	35.7	3.6	2.4	100.0
Kavango West	27.4	43.5	21.8	7.3	100.0
Khomas	35.9	58.1	0.5	5.5	100.0
Kunene	53.2	23.4	15.6	7.8	100.0
Ohangwena	63.7	9.2	8.0	19.1	100.0
Omaheke	65.0	12.9	19.6	2.5	100.0
Omusati	70.4	18.1	0.4	11.2	100.0
Oshana	73.6	15.7	0.5	10.2	100.0
Oshikoto	72.9	11.6	6.0	9.6	100.0
Otjozondjupa	63.7	23.5	10.3	2.6	100.0
Zambezi	37.3	48.2	9.3	5.2	100.0
<b>Average</b>	<b>60.3</b>	<b>24.6</b>	<b>7.3</b>	<b>7.8</b>	<b>100.0</b>

### Distance to nearest water points

Khomas region was not analyzed due to data inconsistency in the distance to water point variable. Out of the 77.2 percent of the interviewed households from the 13 reporting regions walk less than 2.5 km to water points, 17.8 percent walks between 2.5 km to 5 km and 5.0 percent walks more than 5 km to water points. At regional level, Kavango West (13.7%), Zambezi (12.4%), Ohangwena (8.8%) and Oshikoto (6.4%) regions have the highest percentage of households who walk more than 5 km to water points (Table 4.17).

Table 4. 17: Distance to nearest water points by region

Distance to water point (%)				
Region	Less than 2.5 km	2.5 km to 5.0 km	More than 5.0 km	Total
//Kharas	90.6	9.4	-	100.0
Erongo	84.6	12.5	2.9	100.0
Hardap	84.5	13.2	2.3	100.0
Kavango East	79.8	19.6	0.6	100.0
Kavango West	63.7	22.6	13.7	100.0
Kunene	72.1	24.0	3.9	100.0
Ohangwena	68.9	22.3	8.8	100.0
Omaheke	86.4	7.4	6.2	100.0
Omusati	71.9	25.0	3.1	100.0
Oshana	86.5	9.8	3.7	100.0
Oshikoto	75.3	18.3	6.4	100.0
Otjozondjupa	83.3	14.1	2.6	100.0
Zambezi	55.4	32.1	12.4	100.0
<b>Average</b>	<b>77.2</b>	<b>17.8</b>	<b>5.0</b>	<b>100.0</b>

#### 4.3.4.1.2. Access to sanitation

##### Types of toilet facilities

Only 34.2 percent of the interviewed households had access to a flushing/water closet toilet. A significant (45.3%) percent of the households did not have toilets while 18.1 percent used pit latrines. Zambezi (82.3%), Kavango West (75.0%) and Kunene (64.3%) regions reported to have the highest percentage of households who had no toilet facility at the time of the survey (Table 4.18).

Table 4. 18: Type of toilet facility by area

Region	Access to type of toilet facility (%)					Total
	Pit latrine	Flushing toilet / water closet	Bucket System	Ventilated Improved Pit (VIP)	No toilet	
//Kharas	12.2	67.4	2.2	0.6	17.7	100
Erongo	11.5	69.7	1.4	0.0	17.3	100
Hardap	10.8	56.8	6.3	0.0	26.1	100
Kavango East	17.3	26.2	0.0	3.0	53.6	100
Kavango West	11.3	12.9	0.0	0.8	75.0	100
Khomas	9.7	40.1	8.8	0.5	41.0	100
Kunene	10.4	22.1	1.3	2.0	64.3	100
Ohangwena	25.9	10.8	0.0	1.6	61.8	100
Omaheke	8.0	46.6	0.6	0.0	44.8	100
Omusati	27.7	13.9	0.0	0.0	58.5	100
Oshana	43.1	23.2	1.4	0.0	32.4	100
Oshikoto	24.7	26.3	0.4	1.6	47.0	100
Otjozondjupa	18.8	56.4	1.3	0.4	23.1	100
Zambezi	5.7	10.4	0.0	1.0	82.9	100
<b>Average</b>	<b>18.1</b>	<b>34.2</b>	<b>1.7</b>	<b>0.8</b>	<b>45.3</b>	<b>100</b>

#### 4.4. Food Security outcomes

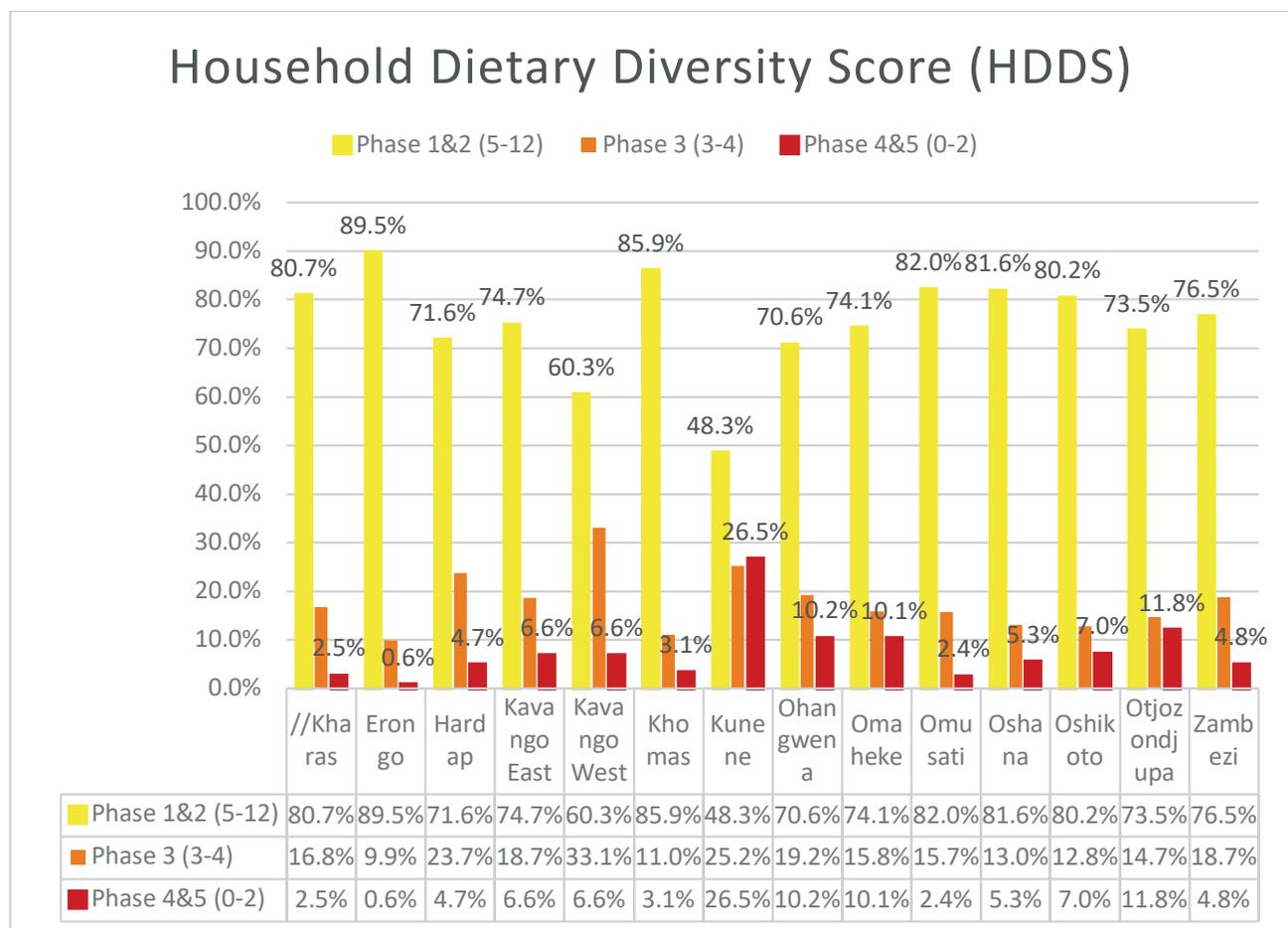
This section discusses household level food security indicators from the household level primary data collected from all the 14 regions. The indicators discussed include Household Dietary Diversity Score (HDDS), Food Expenditure Shares, Livelihood coping strategy (LCS), and Reduced Coping Strategy Index (rCSI).

##### 4.4.1. Household Dietary Diversity Score (HDDS)

Household dietary diversity Score (HDDS) is a qualitative measure of food consumption that reflects household access to a variety of foods. Dietary diversity scores aim to reflect nutrient adequacy. HDDS consists of a simple count of food groups that a household has consumed over the preceding 24 hours. HDDS reflects the economic ability of a household to access a variety of foods. An increase in dietary diversity is associat-

ed with socio-economic status and household food security. HDDS measures diet quality and micronutrient adequacy in the 12 food groups. The analysis indicates that, on average most households in Namibia (about 60% HHs) were consuming about 5 to 12 different food groups indicative of IPC phase 1 &2. Majority of these households were from Erongo (89.5%) and Khomas (85.9%). However, Kunene, Kavango West, Ohangwena, Omaheke and Otjozondjupa regions performed poorly on the food groups consumed by households 24 hours prior to the assessment. In this case, the food groups ranged from 0 to 4 groups (Figure 4.11).

Figure 4. 11: Household Dietary Diversity Score categories by area

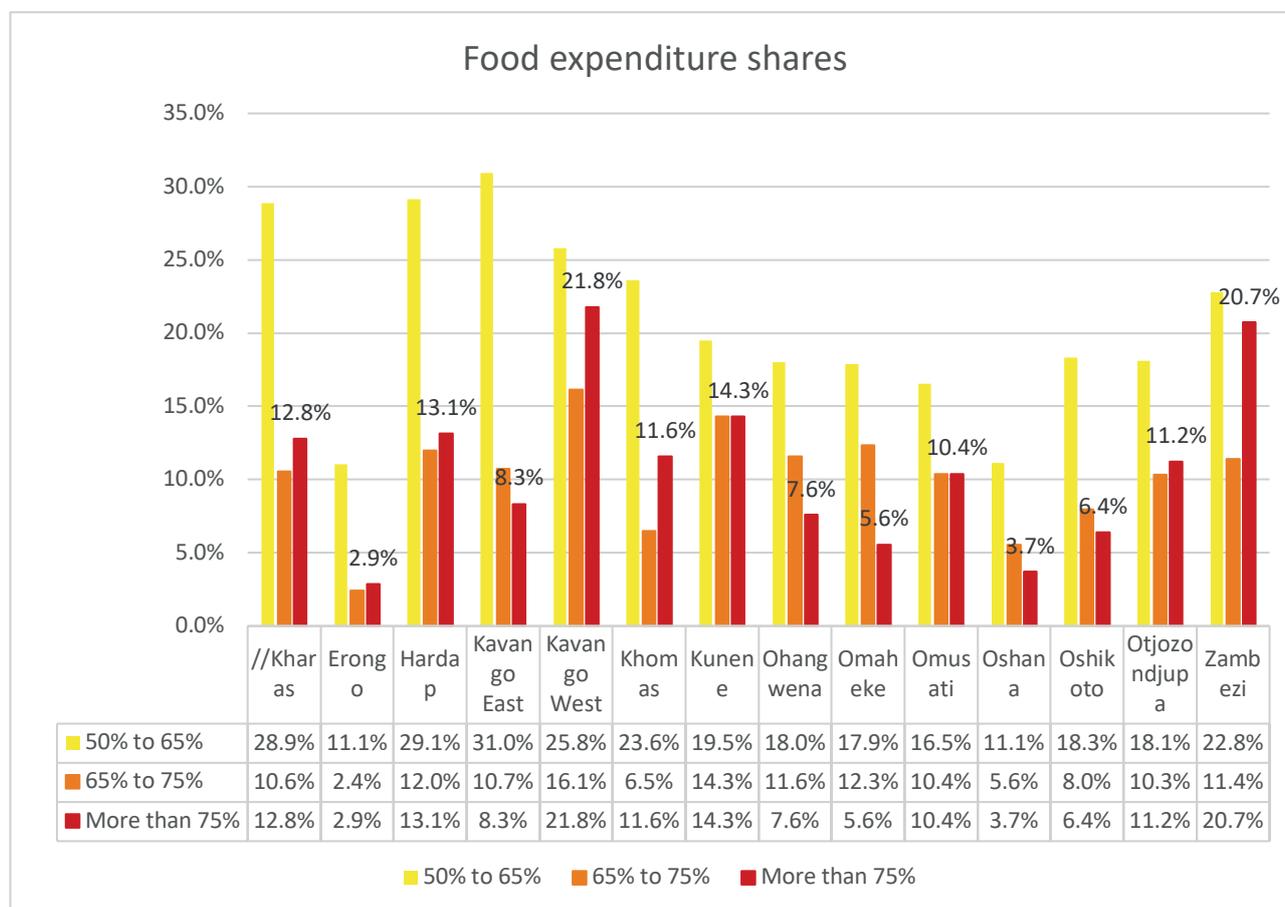


## 4.4.2. Food Expenditure Shares

The share of total household expenditure (as a proxy of income) spent on food is an indicator of household food security because it is widely documented that the poorer and more vulnerable a household, the larger the share of household income spent on food, compared to other non-food items such as education, health, etc.

About 20.0% of Namibians spend 65% or more of their income on food, with Kavango West having the greatest percentage of households doing so at 37.9% and Zambezi coming in second at 32.1%. In comparison to last year, the assessment revealed a much higher percentage of households using much of their income to buy food, indicating a decrease in income spent on other nonfood items as more households rely more on food purchases compared to own harvest (Figure 4.12).

**Figure 4. 12: Food expenditure shares categories by region**





#### 4.4.3.1. The most common distress livelihood coping strategy for the majority of households in communities by region

At community level, majority of households reported to be reducing the numbers of meals they eat per day (53.3%) as a most common distress livelihood coping strategy method. This is followed by those households who are engaging in a combination of other coping strategies (19.1%) such as selling of assets and livestock, theft, consumption of cheap un-preferred food etc., as a response to lack of food or money to purchase food to meet their food consumption gaps. Omaheke (90.9%), Kavango West (88.9%) and Zambezi (83.3%) regions had a highest significant percent of households reducing the number of meals eaten per day as a livelihood coping strategy (Table 4.19).

Table 4. 19: Most common distress livelihood coping strategy for the majority of households in communities by region (%)

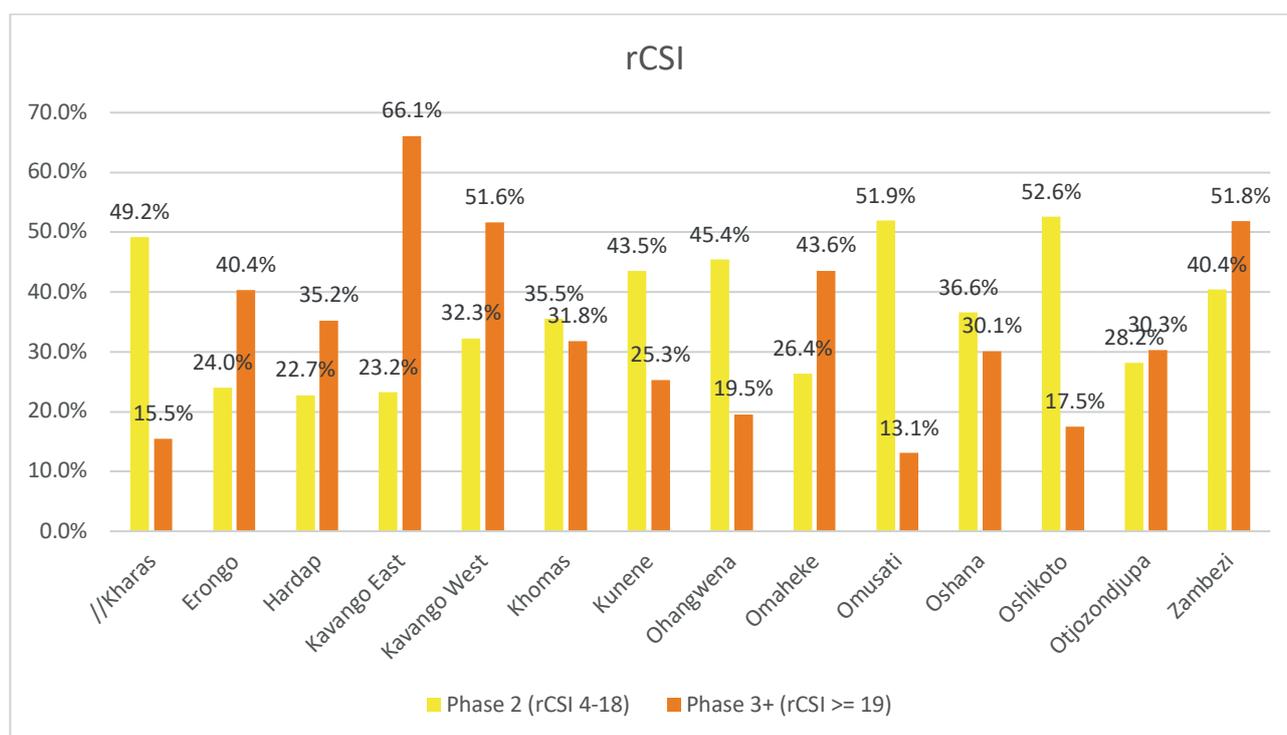
Most common distress livelihood coping strategy for the majority of households in communities by region (%)						
Region	Reduction of number of meals eaten per day	Sharing of food among households	Reduction of portion sizes consumed	Skipping entire days without eating	Others	Total
//Kharas	37.5	12.5	12.5	0.0	37.5	100
Erongo	26.7	13.3	13.3	6.7	40.0	100
Hardap	50.0	16.7	8.3	0.0	25.0	100
Kavango East	72.7	0.0	9.1	18.2	0.0	100
Kavango West	88.9	0.0	11.1	0.0	0.0	100
Khomas	52.2	8.7	13.0	8.7	17.4	100
Kunene	33.3	33.3	8.3	16.7	8.3	100
Ohangwena	61.1	16.7	16.7	0.0	5.6	100
Omaheke	90.9	0.0	9.1	0.0	0.0	100
Omusati	33.3	11.1	11.1	11.1	33.3	100
Oshana	38.5	15.4	30.8	0.0	15.4	100
Oshikoto	72.2	0.0	5.6	0.0	22.2	100
Otjozondjupa	38.5	23.1	7.7	0.0	30.8	100
Zambezi	83.3	0.0	0.0	11.1	5.6	100
<b>Average</b>	<b>53.3</b>	<b>12.0</b>	<b>10.7</b>	<b>4.9</b>	<b>19.1</b>	<b>100</b>

#### 4.4.4. Reduced Coping Strategy Index (rCSI)

The rCSI is an experience-based indicator measuring the behaviour of households over the past 7 days when they did not have enough food or money to purchase food. The rCSI is used for monitoring and identifying changes in household behaviour especially in early stages of a crisis. It is used as a proxy for food quantity availability. The rCSI is categorized into three phases; no stress, crisis or emergency strategies and are allocated to Phase 1 when no stress is experienced, households using stress strategies are allocated to Phase 2, households using crisis strategies are allocated to Phase 3.

Households in IPC Phase 1 (minimal/none) were filtered out to give a clear wider illustration of the other phases on the figure. Figure 4.14, shows that, Kavango East (66.1%), Zambezi (51.8%), and Kavango West (51.6%) had the highest proportion of households using food-based coping strategies used by households to ensure food is on the table, indicative of IPC Phase 3 and higher.

Figure 4. 14: Reduced Coping Strategy Index categories and area



#### 4.4.3.1. The most common distress livelihood coping strategy for the majority of households in communities by region

At community level, majority of households reported to be reducing the numbers of meals they eat per day (53.3%) as a most common distress livelihood coping strategy method. This is followed by those households who are engaging in a combination of other coping strategies (19.1%) such as selling of assets and livestock, theft, consumption of cheap un-preferred food etc., as a response to lack of food or money to purchase food to meet their food consumption gaps. Omaheke (90.9%), Kavango West (88.9%) and Zambezi (83.3%) regions had a highest significant percent of households reducing the number of meals eaten per day as a livelihood coping strategy (Table 4.19).

Table 4. 20: Most common distress livelihood coping strategy for the majority of households in communities by region (%)

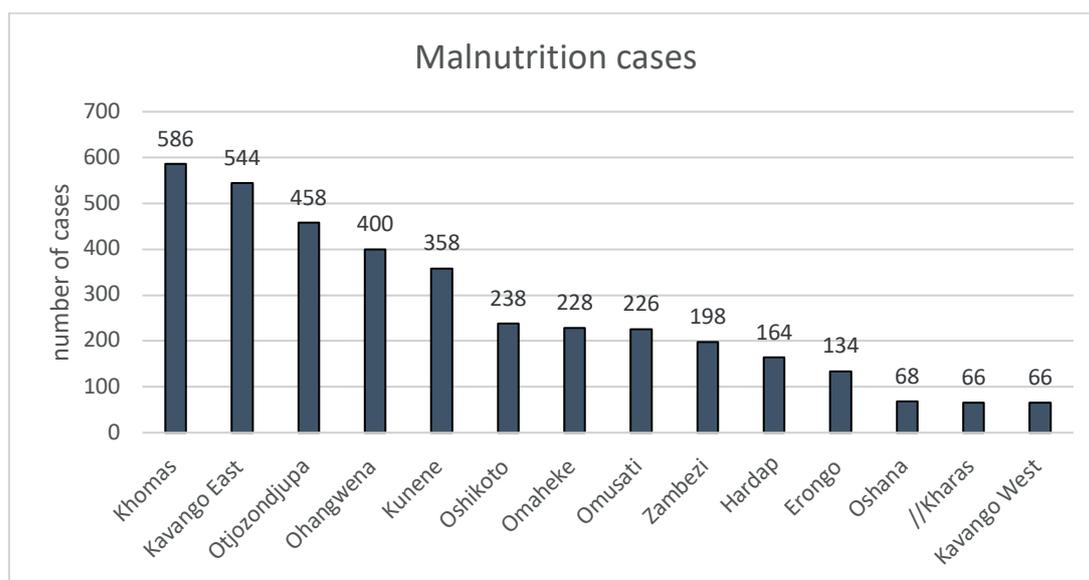
Region	Household Hunger Scale Categories (%)					Total
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	
//Kharas	23.2	5.0	67.4	3.3	1.1	100.0
Erongo	19.2	3.8	73.6	1.9	1.4	100.0
Hardap	31.8	5.7	50.0	4.0	8.5	100.0
Kavango East	2.4	1.2	89.3	3.6	3.6	100.0
Kavango West	4.8	6.5	79.8	4.8	4.0	100.0
Khomas	4.6	0.0	86.2	3.7	5.5	100.0
Kunene	21.4	11.0	59.1	3.9	4.5	100.0
Ohangwena	26.3	13.9	49.8	2.0	8.0	100.0
Omaheke	18.4	3.7	65.6	5.5	6.7	100.0
Omusati	53.8	11.2	33.1	1.2	0.8	100.0
Oshana	28.7	6.0	64.4	0.9	0.0	100.0
Oshikoto	25.9	7.2	64.1	1.2	1.6	100.0
Otjozondjupa	20.5	0.9	67.1	3.0	8.5	100.0
Zambezi	1.0	0.5	87.6	2.1	8.8	100.0
<b>Average</b>	<b>21.6</b>	<b>5.7</b>	<b>65.6</b>	<b>2.7</b>	<b>4.4</b>	<b>100.0</b>

## 4.5. Health and Nutrition Status of Children under five years

### 4.5.1. Malnutrition admissions in the 14 regions

Overall malnutrition cases recorded countrywide between December 2022 to May 2023 stood at 3,734 cases (Figure 4.15). These occurrences are predominantly among the marginalized communities and in urban informal settlements. Khomas region recorded the highest malnutrition cases with 586 followed by Kavango East with 544 and Otjozondjupa with 458 cases.

Figure 4. 15: Malnutrition cases from December 2022 to May 2023 by region



### 4.5.2. Nutrition status of children under the age of 5

Among 1,329 children under five years old surveyed in households, 2% were identified with severe wasting (proxy SAM), and 2.1% with moderate wasting (proxy GAM) (refer to Table 4.21). The notable prevalence of severe acute malnutrition (SAM) warrants verification during the upcoming national Demographic and Health Survey (DHS) scheduled for 2024. The current proxy SAM level aligns with the global threshold of 2% for severe acute malnutrition, necessitating an urgent nutrition response. The forth-

coming comprehensive survey will allow for a larger sample size of under-five children, enabling a regional breakdown of data. This breakdown will pinpoint regions and communities with higher malnutrition prevalence, facilitating targeted emergency nutrition interventions. An alternative approach could involve ensuring a sufficiently large sample size, in subsequent VAA assessments.

Table 4. 21: Prevalence of malnutrition in children under the age of 5 using Mid-Upper Arm Circumference and Oedema

	Frequency	Percent
Severe Acute Malnutrition	26	2.0
Moderate Acute Malnutrition	28	2.1
Healthy - Not Malnourished	1,275	95.9
Total	1,329	100

#### 4.5.3. Childhood illness – fever, cough, diarrhoea, signs pointing to possible pneumonia

Out of all caregivers of children under the age of five years who were interviewed, 31.4% reported that their children had experienced at least one illness, either a cough, fever, diarrhoea, or rapid short breaths, accompanied by faster than normal breathing, (which was taken as a proxy for possible pneumonia) during the two weeks prior to the assessment. The caregiver reported prevalence of illness for 2023 of 31.4% was lower compared to the previous year, 2022, where 43.5% of children under five years were reported to have experienced at least one form of illness two weeks prior to the survey. Like 2022, the most common illness experienced in children under the age of 5 in households, was cough (37.3%), followed by fever (31.4%), and lastly diarrhoea (13.9%). Out of all children who were reported to have a cough, 38.2% were reported to also have signs of pneumonia (breathing faster than usual with short rapid breaths).

#### 4.6. Health seeking behaviour by caregivers whose children experienced illness

A higher percentage of caregivers (80.5% in 2023 compared to 61.4% in 2022) reported that they had taken their children to a clinic or health

centre after the child developed any of the four illnesses, suggesting a significant improvement in health care seeking behaviour (see Figures 4.16 and 4.17). Further to this, 15.8% of caregivers of children under five years in 2023 compared to 7.8% in 2022 reported taking their children to hospital after developing any one of the four illnesses. Only 2.5% and 1.5% of care givers reported taking their children to a traditional healer or community health worker respectively in 2023 compared to 7.0% and 5.4% during the same period in 2022, suggesting that more caregivers are taking their children to formal health institutions for care.

Figure 4. 16: Caregiver reported health seeking behaviour of children under 5 years

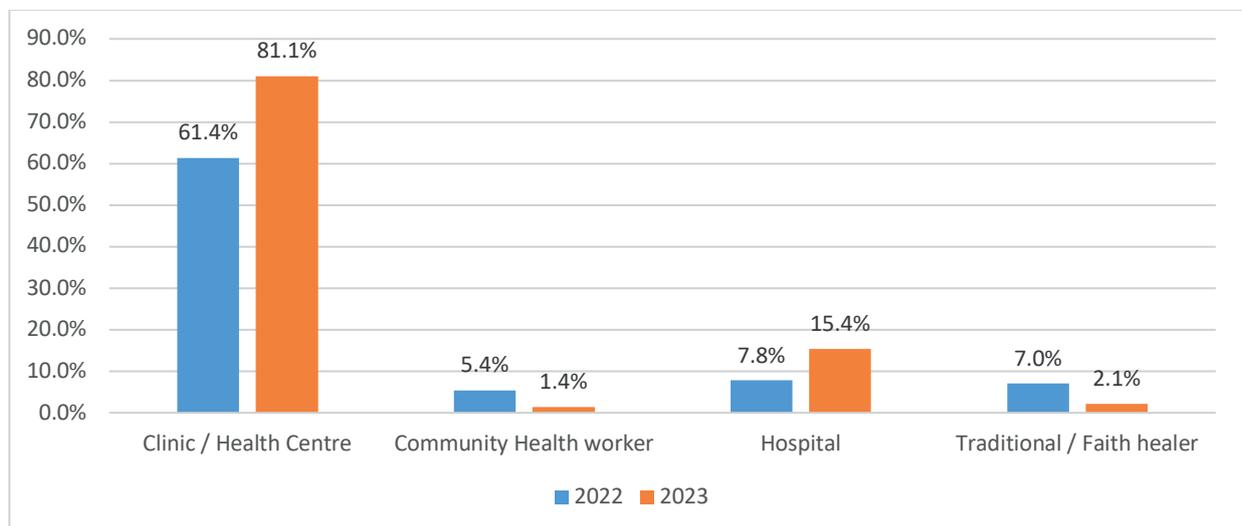
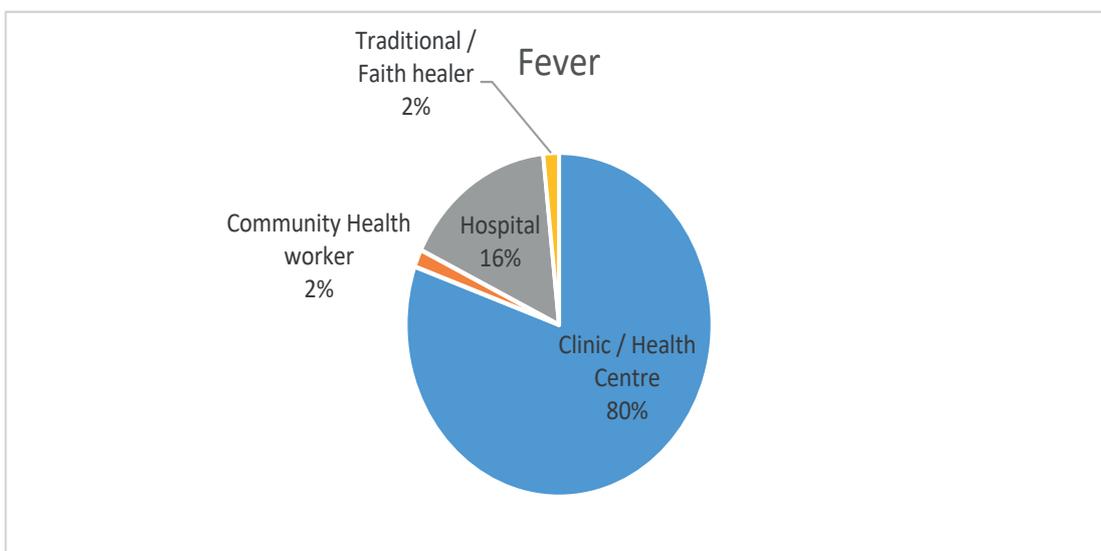
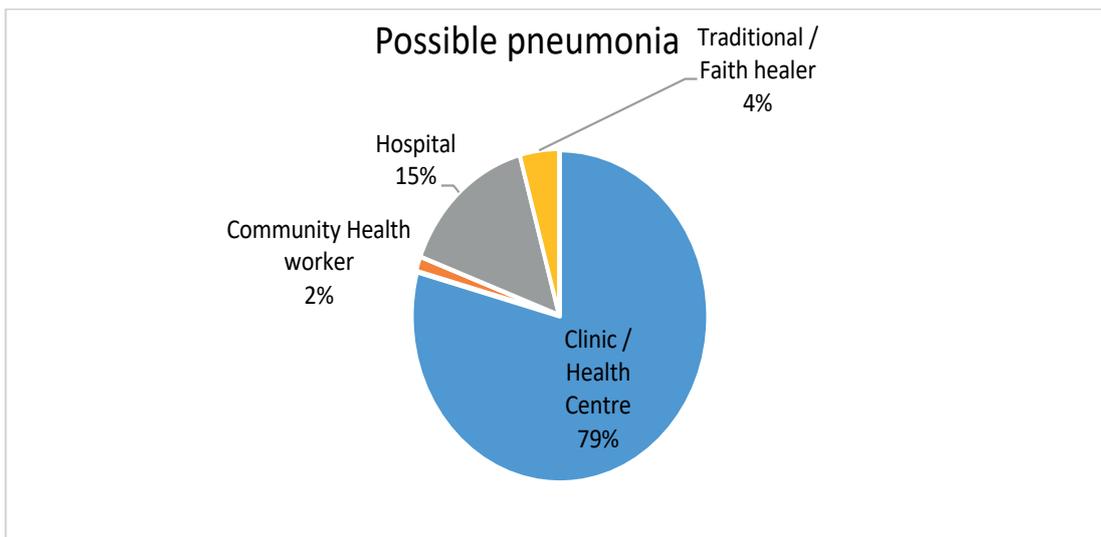
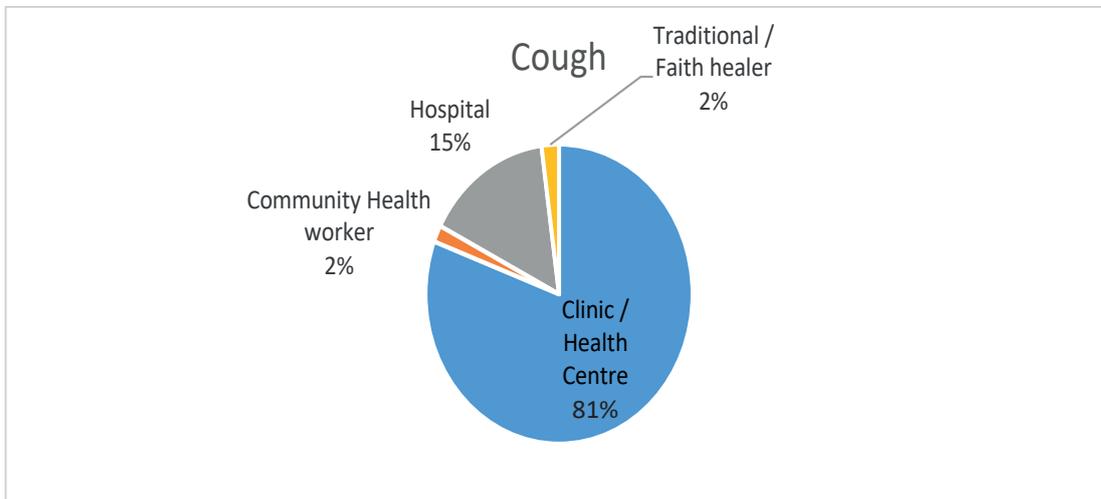
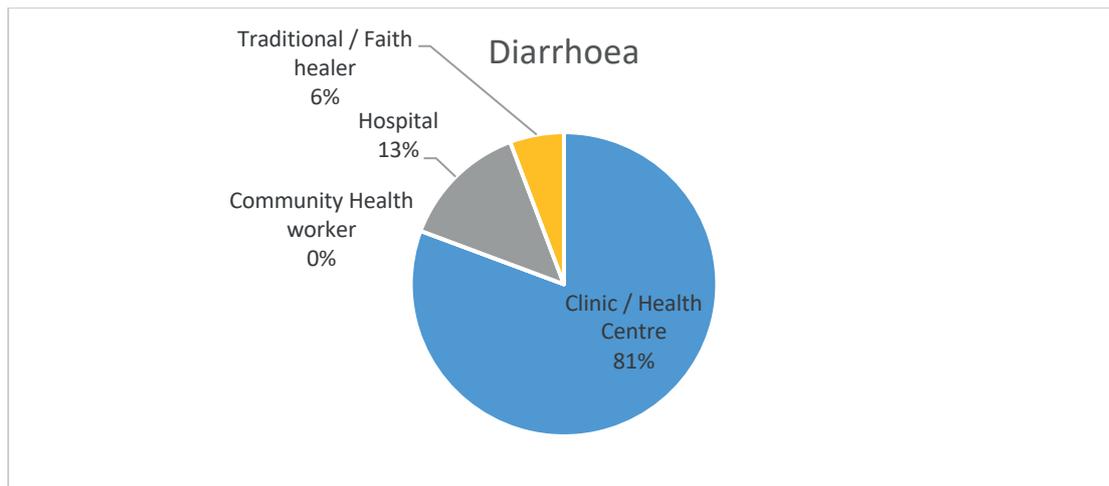


Figure 4.17: below, details the patterns of health seeking behaviour for each separate illness: fever; cough; diarrhoea; and signs of possible pneumonia for children under the age of five as reported by caregivers during the two weeks prior to the assessment.

Figure 4. 17: Patterns of health seeking behaviour for the four different illnesses experienced during the two weeks preceding the assessment as reported by caregivers in 2023.

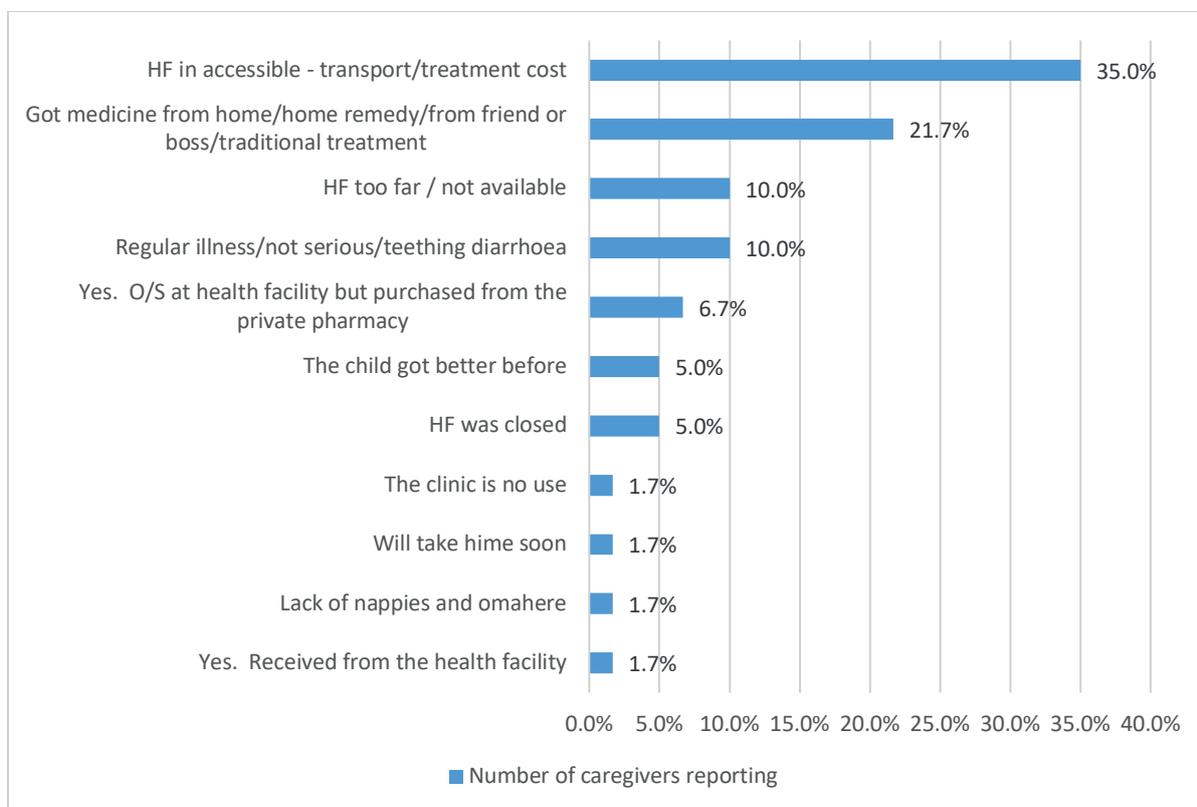




#### 4.6.1. Reasons given by caregivers for children not receiving treatment for diarrhoea

The most common reason (see Figure 4.18.) reported by caregivers (35%) for their children not receiving treatment for diarrhoea was that either the cost of transport or treatment was too high for them. The second most common reason reported by 22.7% of caregivers was that they used home treatment, with medications from friends or traditional herbs. Other reasons given were that the health facility was either too far or not available (10% of caregivers), or that the illness was not serious/teething diarrhoea (10% of caregivers).

Figure 4. 18: Reasons given by caregivers of children under five who were ill with diarrhoea for not receiving treatment from a health facility or community health worker



#### 4.7. Vitamin A supplementation coverage - children under 5 years

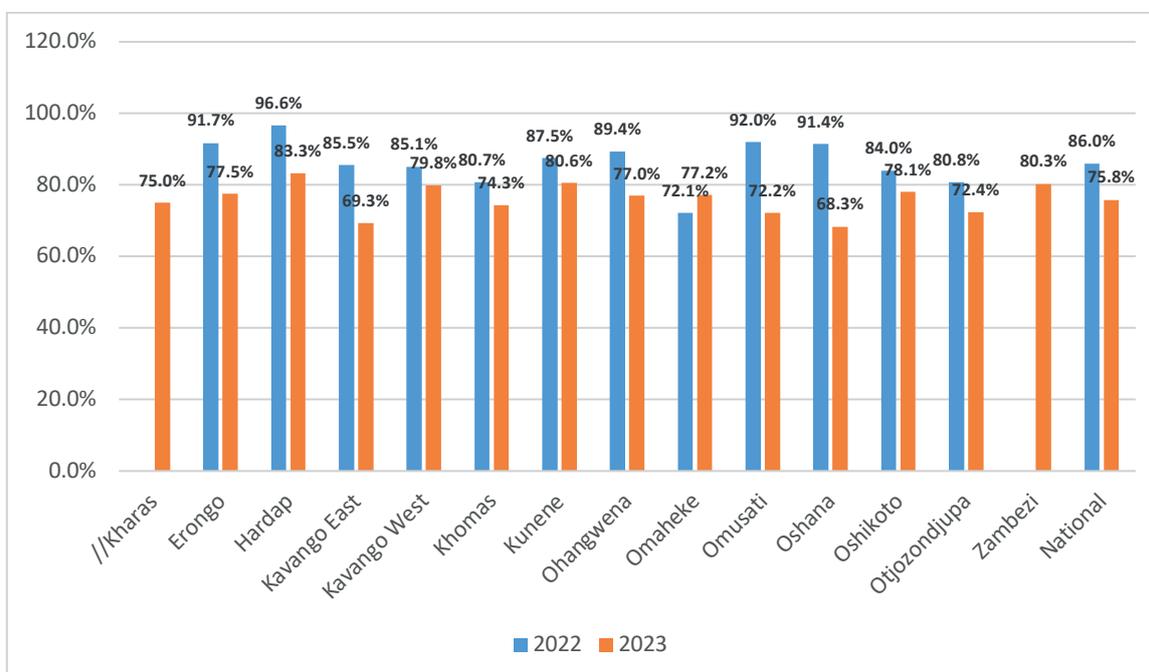
According to the 2023 VAA, 76.4% (compared to 88.4% in 2022) of caregivers reported that their child had received one dose of vitamin A supplementation over the past 6 months. Again, 75.8% (compared to 86.0% in 2022) reported that their child had received two doses of vitamin A supplementation over the past 12 months. Overall, the caregiver reported coverage of vitamin A supplementation for 2023 was lower than the coverage for 2022. Further to this, the caregiver reported coverage of vitamin A supplementation for 2023 was below the UNICEF recommended threshold of 80% for all regions except Hardap, Zambezi, Kunene and Kavango West. Caregiver reported coverage in 2022 was much higher where 12 out of 14 had reported coverage over global recommended thresholds of 80%. UNICEF recommends a population coverage for two annual doses of Vitamin A among children aged 6 months to 5 years of

at least 80%. In Namibia, due to lack of a recent micronutrient survey, the prevalence of vitamin A deficiency is currently unknown.

The decrease in 2023 may be reflective of the absence of an integrated national campaign during unlike in 2022. Note that during 2022, only 12 out of 14 regions had adequate data to calculate regional vitamin A supplementation coverage at regional level. (See figure 4.19).

During early childhood from 6 months to 5 years, the prevention of vitamin A deficiency through provision of two high doses every year is an important strategy to reduce under five deaths. Globally, supplementation with vitamin A twice a year, at least every four to six months has the potential to reduce mortality by up to 24%, especially in vitamin A deficient communities. Vitamin A deficiency can result in hearing loss, loss of sight, and higher risk of mortality from common childhood illnesses like measles and diarrhoea (UNICEF, 2018).

Figure 4. 19: Proportion of under-fives whose caregivers reported that they had received at least 2 doses (adequate) Vitamin A supplementation in the past 12 months preceding the survey of 2023.

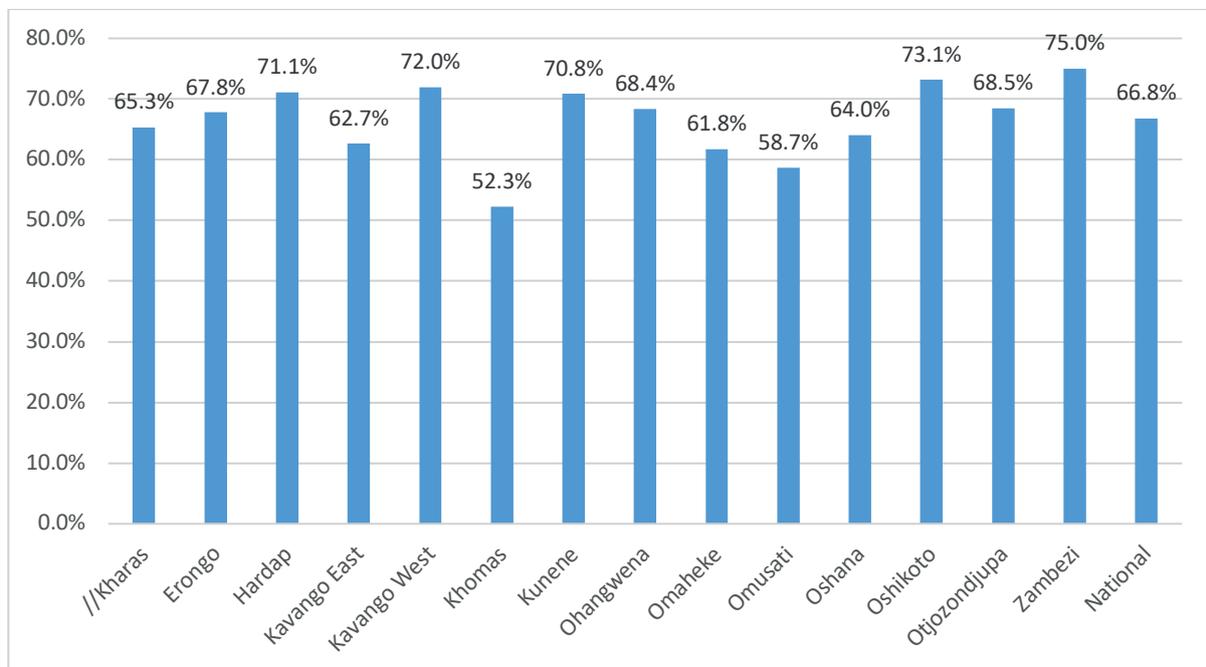


#### 4.8. Deworming coverage – children under five years

During the 2023 VAA, more than 65% of caregivers in all regions of Namibia reported that their children aged between one and five years had

received deworming tablets during the past 6 months before the survey. Zambezi, Oshikoto, Kavango East, and Kunene region had coverage of over 70%, with Khomas Region having the lowest coverage of 52%. Only Zambezi region had a coverage above the recommended WHO threshold of 75%. Most regions in Namibia are not far from reaching the minimum recommended coverage. A concerted national effort is required to improve the coverage of deworming in all regions in Namibia. (see figure 4.20)

Figure 4. 20: Caregiver reported deworming coverage in children under the age of five in all regions in 2023



The MoHSS has identified several neglected tropical diseases (NTDs) in Namibia, including soil-transmitted helminths (STH). These diseases have notably affected nine out of the fourteen regions in the country, predominantly impacting the poorest and most marginalized communities. A prevalence mapping study conducted among school children revealed that 12.2% of the surveyed population had STH, with some regions reporting particularly high intensity infections. For instance, the Kavango region showed a concerning 28% prevalence of hookworm, with one school reaching as high as 82% infection rate among its students. Ohangwena followed with a 16% prevalence, and Oshikoto with 5.4%. This data em-

phasizes the varying but substantial prevalence of STH across different regions in Namibia. (MoHSS, 2023)

Globally, soil transmitted helminthiasis is the most prevalent neglected tropical disease. The consequences of infection with soil transmitted helminths (current or previous) include chronic abdominal pain, anaemia (and other micronutrient deficiencies), and stunting (Lo NC, 2019). In Namibia, the extent of micronutrient deficiencies in the population is either unknown or outdated with the latest data on anaemia prevalence available from the national 2013 DHS.

WHO recommends deworming as the key global public health strategy against soil-transmitted helminthiasis. WHO also recommends that a minimum national coverage of at least 75% of the target population at risk should receive routine deworming. One of the ways in which deworming can be achieved is through mass drug administration. For soil-transmitted helminthiasis, deworming programmes around the world usually focus on school-age (ages 5–14 years) and preschool age (ages 1–4 years) children. In Namibia, deworming is recommended for children from the age of 1 – 5 years at least twice a year, (every six months).

#### **4.9. Breastfeeding Practices – children under 2 years**

##### **4.9.1. Children ever breastfed – 0 to 23 months**

From the reports given by caregivers of during the assessment, most mothers in Namibia breast fed their babies at some point in time before they reached 2 years of age. At least 90% (497 out of 549 valid responses) of children born in the past 24 months received breastmilk in one way or the other. (See figure 4.21)

Breast feeding is recommended for all infants worldwide except, in very few cases, for those with specific medical conditions (UNICEF-WHO, 2009). This indicator is useful for assessing the overall acceptance of breastfeeding and for advocacy efforts.

##### **4.9.2. Exclusive breast feeding – 0 to 5 months**

Based on the analysis of maternal responses regarding feeding and drinking habits, the recorded percentage of mothers practicing exclusive

breastfeeding appeared to be 0%. However, there's ongoing verification of the statistical analysis due to discrepancies in caregivers' narrative responses. Some of these responses suggest that numerous children might not have consumed solid, semi-solid, or other liquids in the 24 hours before the assessment, potentially qualifying them under the criteria for exclusive breastfeeding.

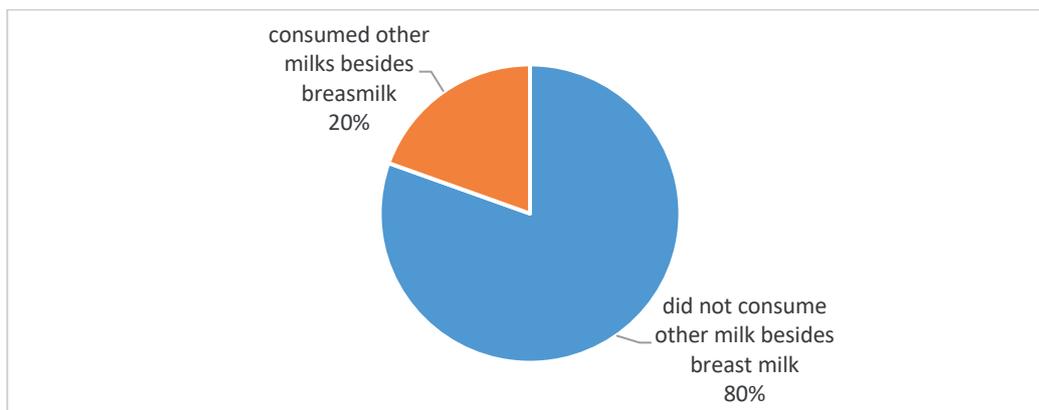
WHO Global Strategy for Infant and Young Child Feeding recommends that infants be exclusively breastfed until they turn six months of age (WHO, 2003). Exclusive breastfeeding stands out as the most secure and healthiest choice for children worldwide, ensuring infants receive a nourishment uniquely tailored to their requirements. It not only provides a safe, clean, and easily accessible food source but also aligns perfectly with their developmental needs.

Research consistently shows that infants in low- and middle-income nations exposed to mixed feeding (introduction of foods and liquids alongside breast milk) before six months faced a mortality risk nearly three times higher than those exclusively breastfed. This underlines the critical importance of exclusive breastfeeding in safeguarding the health and well-being of infants, especially in vulnerable communities (Sankar MJ, 2015). Exclusive breastfeeding protects against diarrhoea, lower respiratory infections, acute otitis media and childhood overweight and obesity (Victora CG, 2016).

#### **4.9.3. Mixed Milk Feeding – 0 to 5 months**

From reports given by caregivers during the assessment (see figure 4.21), almost one out of every 5 infants (19.5%) of infants under the age of 6 months in Namibia received mixed milk feeds (i.e. were fed formula and/or animal milk in addition to breast milk during the previous day).

Figure 4. 21: Percentage of children who consumed other milk in addition to breast milk the previous day



UNICEF and WHO recommended the inclusion of this indicator to capture the practice of feeding formula and/or animal milk in addition to breast milk among infants less than six months of age. Mixed milk feeding is not a recommended practice as non-human milks are likely to displace breast milk. Combining breast milk with a breast milk substitute is linked to higher chances of stopping breastfeeding early and decreased production of breast milk (Walker, 2015) and altered gut microflora (Favier CF, 2002). Infants in areas with poor sanitation who are fed a mix of breast milk and other substances face a higher likelihood of experiencing diarrhea compared to those exclusively breastfed (Aidake, 2000). This indicator is valuable for advocacy efforts as it helps capture how extensively non-human milks are replacing breastfeeding.

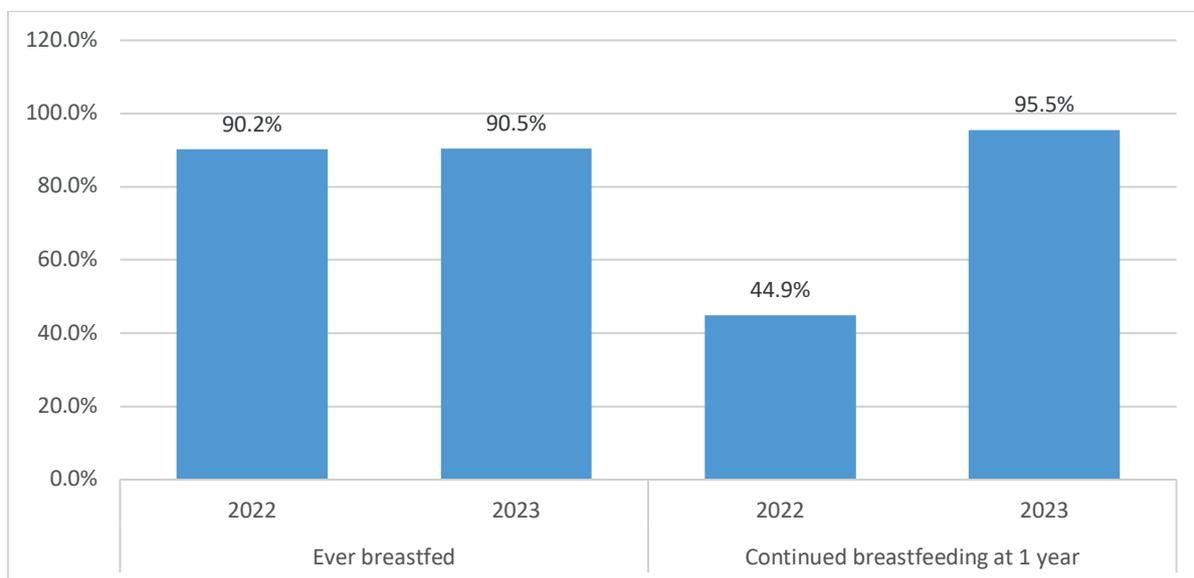
#### 4.9.4. Continued breastfeeding - 12 to 23 months

The majority of children aged one to two years were still receiving breast milk, with 95.5% (see figure 4.22) of children aged 12-23 months having been fed breast milk on the previous day. (Note: There's an ongoing revision to verify and confirm the significant difference between the 2022 and 2023 data.)

The WHO Global Strategy for Infant and Young Child Feeding strongly recommends continuing breastfeeding for two years or more. Breast milk remains a significant part of a child's energy intake after the first year, providing essential nutrients even during illness when solid foods might

be less appetizing. Sustained breastfeeding significantly reduces the risk of deaths from infectious diseases between six and 23 months old. Moreover, it consistently correlates with better performance in intelligence tests among children and adolescents, especially for those breastfed beyond 12 months. Extended breastfeeding may also lower the risk of childhood overweight or obesity. Notably, continued breastfeeding benefits mothers too, potentially reducing the risk of breast cancer, ovarian cancer, and type 2 diabetes.

Figure 4. 22: Breast feeding in children under 2 years as reported by caregivers comparing 2022 and 2023



#### 4.10. Complementary feeding practices – children under 2 years

##### 4.10.1. Minimum acceptable diet – 6 to 23 months

The minimum acceptable diet is a combination of two indicators: (i) minimum dietary diversity; and (ii) minimum meal frequency, excluding breast-milk consumption. Minimum acceptable diet reflects the quality of diets accessible to children under 2 years old. According to the DHS of 2013, only 12.5% of children aged 6 to 23 months in Namibia are consuming a minimal acceptable diet. The possible causes of this include:

- Poor knowledge of care givers with regards to optimal feeding;
- Food insecurity;
- Poor caring practices of the mother and child;

Preliminary cross-tabulations from the 2023 VAA indicate that, based on caregiver reports, none of the children are meeting the minimum recommended acceptable diet criteria (see table 4.22). Surprisingly, it seems there's no overlap between the 30% (table 4.24) of children receiving minimal dietary diversity and the 40% (table 4.23) of children receiving a minimal number of meals per day, which is atypical. The data for this indicator is currently under review for verification, necessitating a double-check to ensure accuracy and reliability.

Table 4. 22: Percentage of children under 2 years who consumed the minimum acceptable diet

	Percent
Children not consuming the minimal acceptable diet	100.0
Children consuming the minimal acceptable diet	0
Total	100

In Namibia, there are wide gaps between the rich and poor, rural, and urban populations. There are also recurrent floods and droughts which render some communities more food insecure than others. Barriers to accessing health services and HIV among young adults, especially women of childbearing age, is another key challenge increasing the nutrition vulnerability of the population.

For the first time in 2023, Namibia was able to include questions to determine the quality of feeding of children under 2 years: (i) minimum dietary diversity; (ii) minimum meal frequency; (iii) minimal milk feeding frequency; and (iv) minimal acceptable diet.

#### 4.10.2. Minimum dietary diversity – 6 to 23 months

For this assessment, the caregiver reported prevalence of children 6-23 months of age consuming at least five of the recommended food groups (minimum dietary diversity), was 23.5% (see table 4.23). Minimum dietary diversity is one of the indicators contributing to minimum acceptable diet as described in 4.10.1 above.

Table 4. 23: Percentage of children under 2 years who consumed the minimum dietary diversity

	Percent
Four food groups and below	76.5
Five food groups and above	23.5
Total	100.0

Minimum dietary diversity looks at children aged between 6 and 24 months who consumed from five or more of the following eight food groups during the previous day:

- breast milk;
- grains, white/pale starchy roots, tubers, and plantains;
- beans, peas, lentils, nuts, and seeds;
- dairy products (milk, infant formula, yogurt, cheese);
- eggs;
- vitamin A rich fruits and vegetables;
- flesh foods (meat, fish, poultry, organ meats); and
- other fruits and vegetables.

(WHO, 2003)

#### 4.10.3. Minimum meal frequency – 6 to 23 months

The caregiver reported prevalence of children under the age of 2 years eating the minimum recommended number of meals for their age was 29.5% (see figure 4.24). Children aged between 6 and 8 months consuming at least three meals a day and children aged 9 months and above consuming at least four meals a day are considered to have minimal meal frequency (Yiska, 2020). Minimum meal frequency is also one of the indicators contributing to minimum acceptable diet as described in 4.10.1 above.

Table 4. 24: Percentage of children under 2 years who consumed the minimum meal frequency

	Percent
Children not eating minimum number of meals for their age	70.5
Children eating the minimum number of meals for their age	29.5
Total	100.0

#### 4.10.4. Minimum milk feeding frequency – 6 to 23 months

The caregiver reported minimum milk feeding frequency for infants under 2 years was at 50% (see figure 4.25). Only half of the children in under the age of 2 years who are not breastfed, were receiving the minimum recommended number of milk feeds. Minimum milk feeding frequency is an additional recommended indicator, that factors in children who are not breastfed. It looks at non-breastfed children 6-23 months of age who consumed at least two milk feeds during the previous day.

Table 4. 25: Percentage of children under 2 years who are not breast fed who consumed the minimal milk feeding frequency

	Percent
Received less than 2 milk feeds	50.0
Received at least 2 milk feeds	50.0
Total	100.0

#### 4.11. Consumption of healthy and unhealthy foods

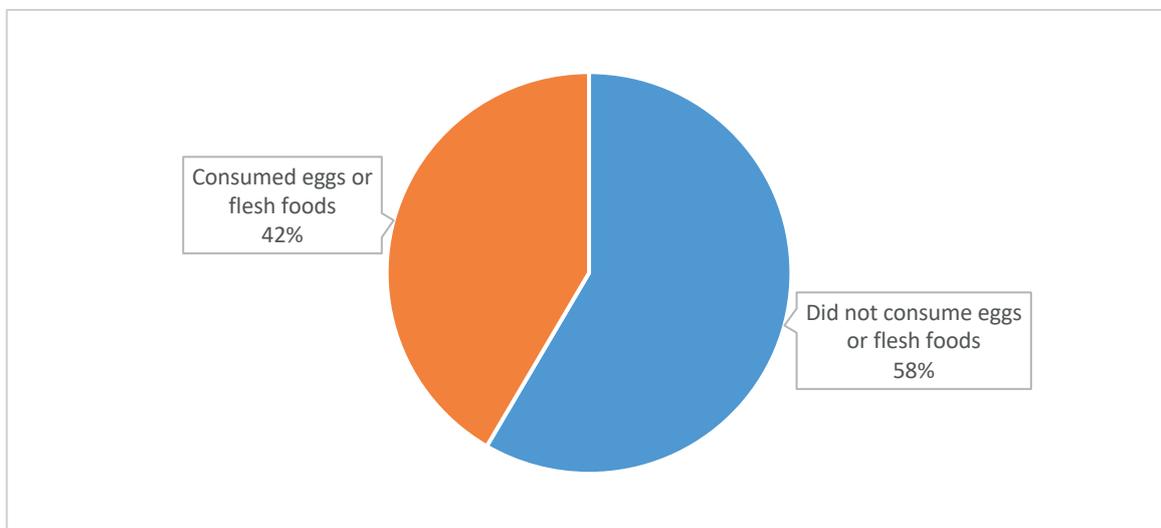
##### 4.11.1. Egg and/or flesh food consumption – 6 to 23 months

WHO guiding principles for feeding breastfed and non-breastfed children state that “meat, poultry, fish or eggs should be eaten daily, or as often as possible” (WHO, 2003), (WHO, 2005). According to caregiver’s reports during the 2023 VAA, only 41.6% of children under 2 years had consumed eggs or flesh foods the previous day before the interview (Figure 4.22).

Research shows that children who include eggs and flesh foods in their diet tend to have increased intake of crucial nutrients essential for optimal

linear growth, a critical factor in reducing high levels of stunting among children in Namibia. The consumption of eggs correlates with elevated intake of energy, protein, essential fatty acids, vitamin B12, vitamin D, phosphorus, selenium, and is also linked with greater recumbent length (Papanikolaou & Fulgoni, 2018). Introducing meat early as a complementary food for breastfed infants showed a correlation with enhanced intake of protein and zinc. (Krebs N. e., 2014), (Krebs N. , 2014).

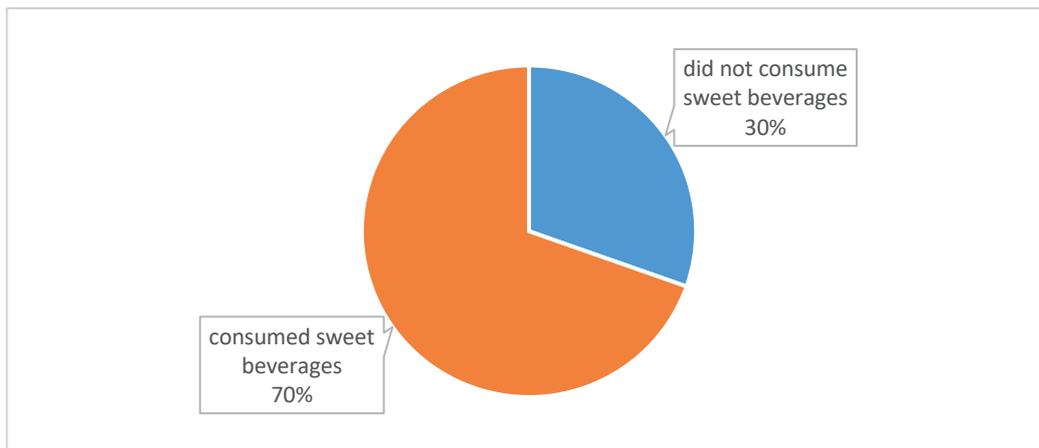
Figure 4. 23: Percentage of children 6-23 months who consumed eggs or flesh foods



#### 4.11.2. Consumption of sweetened beverages – 6 to 23 months

According to caregiver's reports during the 2023 VAA, 69.6% of children under 2 years had consumed sweet beverages (Figure 4.23). The WHO guiding principles on complementary feeding discourage the provision of sweet drinks like soft drinks since they offer minimal nutrients beyond energy and might replace more nourishing food options (WHO, 2003) (WHO, 2005). Increased consumption of sugar-sweetened beverages (SSBs) has been linked to a higher risk of obesity in children across all age groups. Introducing SSBs at an early age (before 12 months) is correlated with obesity by the age of six (Pan L, 2014). The intake of free sugars, encompassing 100% juice and SSBs, is connected to a heightened risk of dental cavities (WHO, 2017).

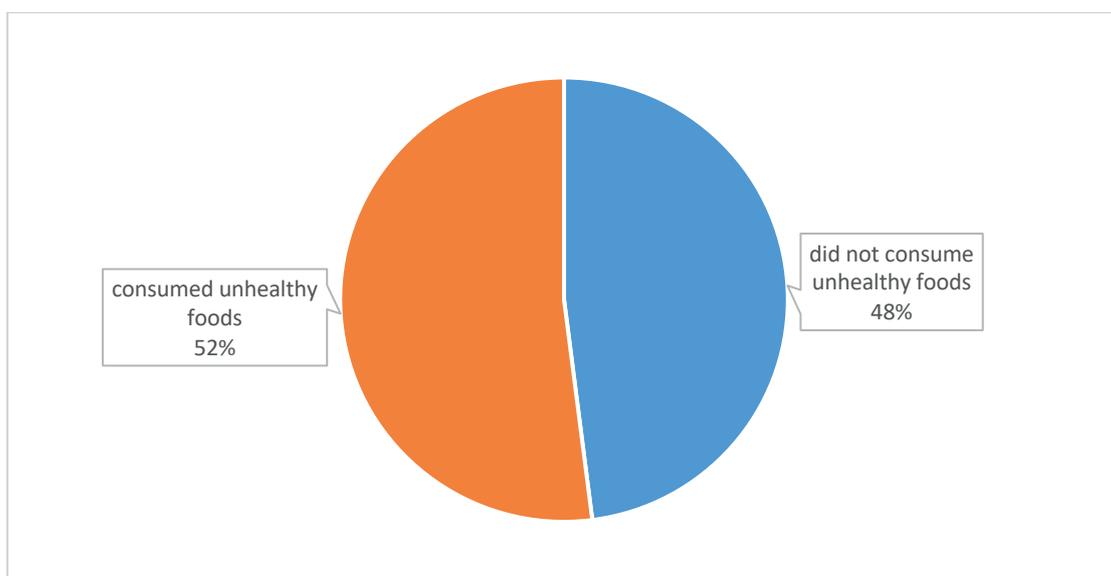
Figure 4. 24: Children 6-23 months who consumed sweet beverages



#### 4.11.3. Unhealthy food consumption – 6 to 23 months

According to caregiver’s reports during the 2023 VAA (Figure 4.25), more than one in every two (52.0%) children under 2 years had consumed unhealthy foods. In numerous middle-income countries like Namibia, dietary trends are moving towards increased consumption of added sugars, unhealthy fats, salt, and refined carbohydrates. It is important to monitor the salt, sugar and fat content of commercially processed food items and reformulate for reduction of salt, sugar and fat content as they tend to be higher than the recommended daily allowance (Khadijeh K, 2021).

Figure 4. 25: Children 6-23 months who consumed healthy foods

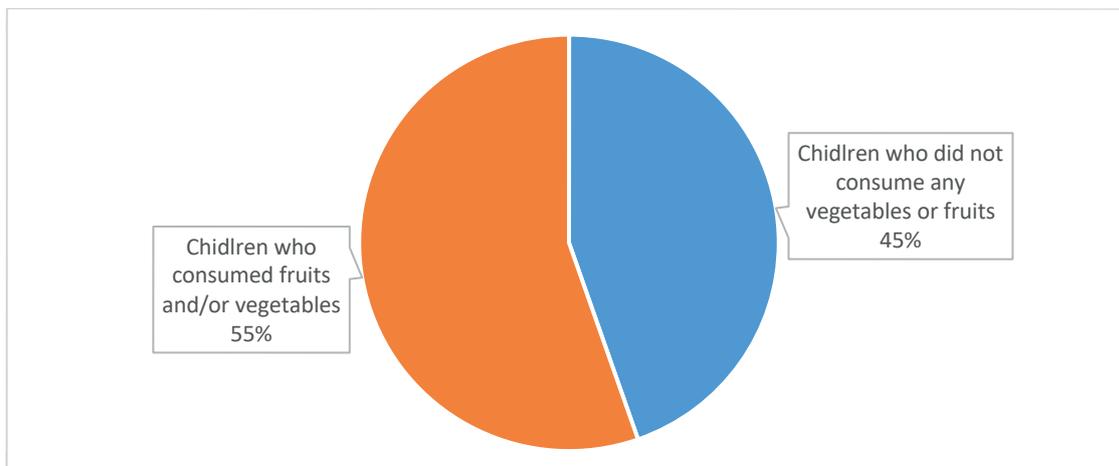


The European Society for Paediatric Gastroenterology, Hepatology and Nutrition advises restricting free sugar intake to less than 5% of the total calorie intake for children below two years old (Fidler Mis N, 2017). For instance, eating a single cream-filled cookie surpasses this threshold. Introducing foods like candies, chocolate, chips, French fries, cakes, and cookies to children under 2 might replace more nutritious options and restrict the intake of vital vitamins and minerals. Early food preferences often persist into later stages of childhood and adolescence. Regular exposure to sugary foods and drinks during childhood might strengthen the natural liking for sweetness, potentially leading to increased consumption of sweet-tasting items in the future. This pattern, if sustained through adolescence and into adulthood, could heighten the risk of overweight or obesity and related chronic illnesses later in life (Ventura AK, 2011), (Nicklaus S, 2004).

#### **4.11.4. Zero vegetable or fruit consumption – 6 to 23 months**

According to caregiver's reports during the 2023 VAA (Figure 4.26), more than half of children under 2 years (55.3%) had not consumed any fruit or vegetables. WHO indicates that low vegetable and fruit consumption is associated with increased risk of noncommunicable diseases (NCDs). Evidence suggests that inadequate consumption of fruits and vegetables during early childhood is connected to continued low intake in later stages of life (te Velde SJ, 2007). Consuming at least one vegetable serving a day is a healthy practice. While there is no universal recommendation for the optimal number of servings of vegetables and fruits per day for infants and young children, consumption of zero vegetables or fruits on the previous day represents an unhealthy practice.

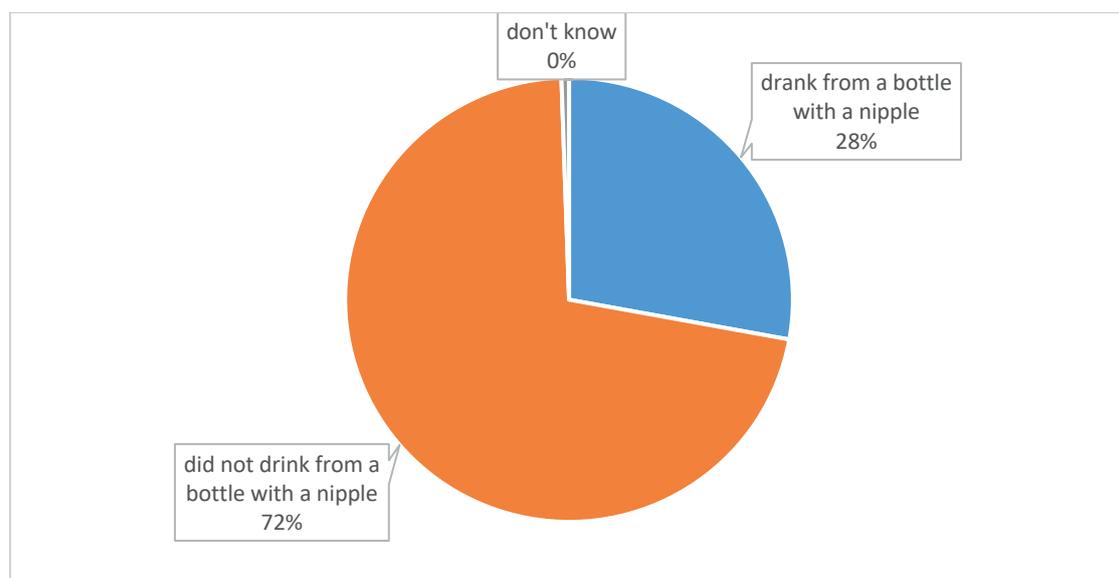
Figure 4. 26: Children under 6-23 months who consumed fruit and/or vegetables



#### 4.11.5. Bottle feeding – 0 to 23 months

According to caregiver’s reports during the 2023 VAA, almost one third of children under 2 years (27.9%) drank liquids from a bottle with a nipple (refer to figure 4.27). The WHO advises against using feeding bottles due to challenges in maintaining cleanliness and their significant role in transmitting pathogens. Bottle feeding can potentially disrupt optimal suckling behaviour. Instead, WHO recommends cup feeding and discourages the use of feeding bottles, (WHO, 2005).

Figure 4. 27: Children under 0 to 23 months who drank from a bottle with a nipple

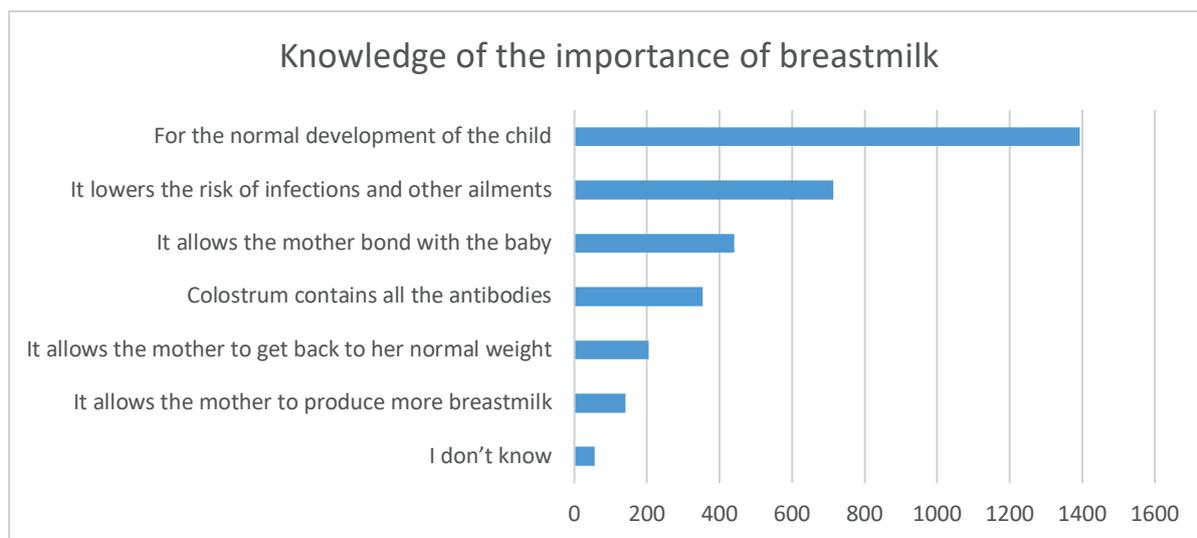


#### **4.11.6. Knowledge and beliefs around optimal feeding practices**

In Namibia, knowledge and beliefs around optimal feeding practices are deeply rooted in cultural traditions and evolving health perspectives. Breastfeeding is widely regarded as the cornerstone of infant nutrition, valued for its numerous health benefits and its role in fostering a strong bond between mother and child. Traditionally, exclusive breastfeeding for the first six months is highly encouraged, seen as crucial for a child's growth and immunity. However, there's a growing recognition of the need to balance cultural practices with contemporary health recommendations. Efforts are underway to promote exclusive breastfeeding and educate communities about the importance of nutritionally diverse diets for infants and young children. While traditional beliefs continue to influence feeding practices, there's a gradual shift towards incorporating modern nutritional knowledge to ensure the optimal health and development of Namibia's children.

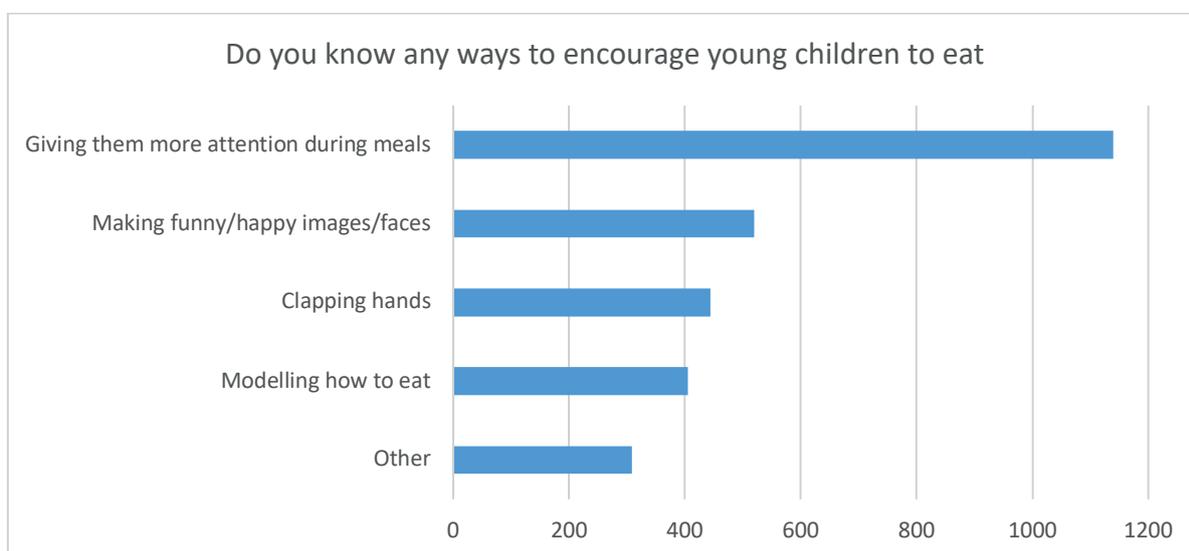
The three most popular reasons mentioned by most caregivers for breast-milk being the only food recommended for infants up to 6 months old were: (i) “for the normal development of the child”; (ii) “it lowers the risks of infections and other ailments”; and (iii) “it allows the mother to bond with the baby” (see figure 4.28). Although the many benefits of exclusive breastfeeding are commonly recognized, the reported rate of mothers practicing exclusive breastfeeding might not precisely mirror the reality. This could be due to potential issues with the questionnaire used for data collection, possibly stemming from the training methodology of enumerators. Alternatively, it might highlight the existence of additional barriers that impede exclusive breastfeeding practices, warranting further investigation and exploration.

Figure 4. 28: Knowledge about the reasons for exclusive breastfeeding



The most popular method mentioned by caregivers regarding ways to encourage young children to eat was “giving them more attention during meals” to encourage young children to eat. More sensitisation needs to be given on the less known methods of encouraging a child to eat (see figure 4.29).

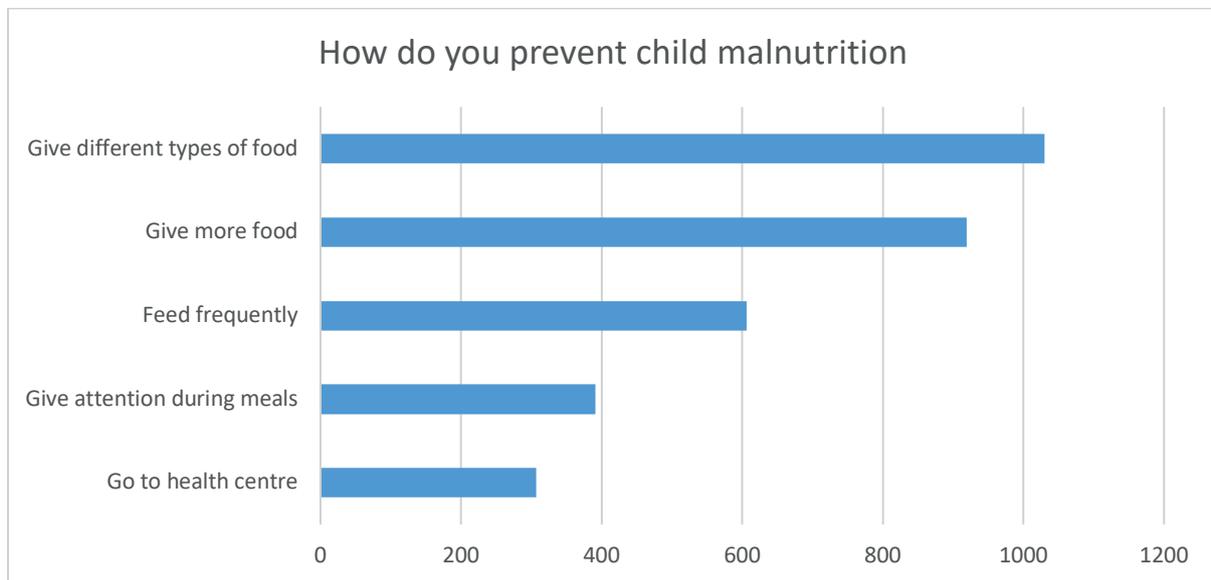
Figure 4. 29: Popular ways of encouraging young children to eat



Most caregivers mentioned that child malnutrition is prevented by giving different types of food, followed by giving more food, and feeding frequently (4.30). “Go to health centre” was the least mentioned reason, suggesting that more sensitisation needs to be given around other ways of preventing malnutrition, such as immunisation, and early detection and

treatment of illnesses, in addition to improving young child feeding practices.

Figure 4. 30: Common beliefs about how child malnutrition is prevented



#### 4.12. Factors Affecting Food Security Situation

The key factors to monitor include:

- Prices for staple commodities
- Inflation and its impact on the Namibian Dollar
- Seasonal Rainfall performance (Drought, dry spells or erratic rainfall)
- African Migratory Locusts infestations across the country
- Employment, income or labor opportunities
- Occurrence of the anticipated El Niño

## 5. NAMIBIA POPULATION AT RISK TO FOOD INSECURITY

### 5.1. Current food insecure population overview (July – September 2023)

Between the months of July to September 2023, approximately 579,000 people in Namibia (22% of the population) are estimated to be facing high levels of acute food insecurity (IPC Phase 3 and above) and requiring urgent humanitarian assistance. Of this population, 566,000 people experiencing Crisis food insecurity (IPC Phase 3) and 13,000 face emergency food insecurity (IPC Phase 4), an additional 970,000 (37 %) are Stressed (IPC Phase 2) and 1, 094, 000 (41% %) are classified under None /minimal (IPC Phase 1).

Most of the regions are classified under IPC phase 3 except for Erongo and Khomas regions which are classified in stressed (IPC Phase 2). The most affected regions are Kavango East and Kavango West region with 5% of the population estimated to be facing emergency food insecurity (IPC Phase 4), respectively.

At regional level, the food insecure population range from 15% both in Erongo and Khomas regions correspondingly to 30% and 40% percent in Kavango West and Kavango East regions, respectively.

During the current period most households do not have any food stocks most having indicated stocks lasting less than one month and those who had stocks lasting between 1-3 months have already depleted their food stock., As a result, households have already experienced difficulties in purchasing food due to lack of income and high unemployment rates. Of those households who indicated to have some source of income, majority indicated social grants as their major source of income which may be affected negatively by the household sizes.

Moreover, erratic and limited rainfall distribution since the start of the agricultural season in November has resulted in abnormal dry conditions

affecting the northern part of the country and resulted in poor crop performance. Additionally, poor rainfall over the northwestern and southern parts of the country during the 2022/2023 agricultural season has negatively impacted pasture biomass conditions, particularly in the crop growing regions as most of the areas crop fields did not mature but rather withered before it reached the mature age and lowering cereal production expectations. Some households in Ohangwena, Oshana and Omusati regions experienced flood during the ploughing season which resulted in the affected households not being able to cultivate during this agricultural season. Furthermore, occurrences of livestock diseases and pests also hampered the livestock production especially in Kavango West and East.

## **5.2. Projection 1 food insecure population overview (October 2023 – March 2024)**

During the first projection period (October 2023 – March 2024), the number of people expected to experience food insecurity is expected to increase by an estimated 4% from the current number of 579,000 to 695,000 people.

Out of this population 65,000 (2%) will face emergency food insecurity (IPC Phase 4); 630,000 (24 %) in crisis (IPC Phase 3); 943,000 (36%) are anticipated to be in Stressed (IPC Phase 2) and 1, 004, 000 (38 %) in minimal (IPC Phase 1).

Kavango West, Kavango East, Omaheke, Ohangwena, Hardap, Kharas, Zambezi, Otjozondjupa, Oshana, Omusati, Oshikoto and Kunene regions are classified under IPC phase 3 while Erongo and Khomas regions are classified in IPC Phase 2. The most affected regions are Kavango East and Kavango West region with 5% of the population estimated to be facing emergency food insecurity (IPC Phase 4), respectively.

Erongo region is anticipated to remain in stressed (IPC phase 2) and Khomas region expected to fall in crisis (IPC Phase 3 and above). All other regions that were in crisis (IPC Phase 3 and above) except Hardap region

are anticipated to remain in Phase 3 and above. Food security situation in Hardap region is expected to improve from IPC Phase 3 to IPC Phase 2, due to the drought relief food assistance planned for the region from the government. At regional level, the food insecure situation will deteriorate significantly especially in Kavango West, Kavango East, Omaheke, Ohangwena with at least 35% of their populations, respectively being in IPC Phase 3 and above.

The main factors that are likely to affect the food security during the projected period will be the impact of the prolonged dry spell and erratic rainfall which has been below normal for the past years which impacted negatively on affected households as well as crop and livestock production. Due to poor harvest during the current agricultural season, households have limited food stock which will have been depleted by the start of the lean season and most households will resort to stress and emergency coping strategies, such as selling of assets to meet food consumption gaps. Furthermore, the global increase of commodity prices and higher rate of unemployment will have an impact on the food systems especially for those with no stable income.

The Seasonal Rainfall forecast has predicted an El Niño phenomenon with a high probability which will cause drier conditions. These conditions which are likely to result into below normal rainfall for the 2023/24 rainfall season will affect both crop and livestock production consequently negatively affecting the consumption period from April to June 2023.

### **5.3. Projection 2 food insecure population overview (April – June 2023)**

The number of people expected to experience food insecurity is expected to decrease by an estimated 7 percent from the projected period 1 of 695,000 to 491,000 people.

Out of this population in 4,000(0.2%) are anticipated to face emergency food insecurity (IPC Phase 4); 487,000 (18 %) in crisis (IPC Phase 3); 1,011,000 (38%) in Stressed (IPC Phase 2) and 1, 142, 000 (43 %) in minimal (IPC Phase 1).

The acute Food security is expected to improve in Eight (8) out of fourteen (14) regions as households start consuming food from their own production. //Kharas, Erongo, Hardap, Kavango West, Omusati, Zambezi and Oshikoto region are expected to be in stressed (IPC phase 2) and other six (6) regions expected to remain in crisis (IPC Phase 3 and above).

At regional level, the food insecurity situation for the estimated population anticipated to be in IPC Phase 3 and above ranges from 35% to 10% with Omaheke having the highest population, followed by Kavango East with 30% and Erongo being the lowest with 10% of its population being in IPC Phase 3 and above.

However, it is important to note that, with the anticipated El Niño, which is likely to affect Africa, Central America and Far East Asia during the 2023/24 agricultural season, the food security situation in the country will be negatively affected due to drier and more limited rainfall, which could put food security in the country at risk. Therefore, the projected population 491,000 anticipated to be in phase 3 and above during April to June 2024 is likely to increase.

#### **5.4. Key assumptions for the assessment findings**

- Food Availability: Food availability for commodities including staples is expected to deteriorate and deficits will be experienced during the projected period.
- Food prices: Commodity prices are expected to trend at levels above five-year average prices throughout the projected period being a result of the escalating fuel prices.
- Inflation: cost of fuel will likely affect the exchange rate and impact negatively on the economy. Growth is expected to slow down. Households will therefore bear the brunt of a strained economy.
- Dry spells and erratic rainfall: Seasonal forecast from the European Commission latest forecast of the period until December 2023 shows a drier than normal rainfall forecast for Namibia until December 2023

which will affect food security in the country. This may result in Namibia experiencing drought/dry spell which will affect the food condition in the projected period.

- El Nino: El Niño, which is likely to affect Africa, Central America and Far East Asia during the 2023/24 agricultural season, the food security situation in the country will be negatively affected due to drier and more limited rainfall, which could put food security in the country at risk.
- Humanitarian Assistance: Humanitarian Food Assistance (HFA) Office of the Prime Minister will likely continue through the projection period.
- Therapeutic feeds for treatment of acute malnutrition: As donor funding continues to shrink, the Ministry of Health and Social Services will take on more responsibility from year to year for purchasing ready-to-use therapeutic feeds for children identified with severe and moderate wasting.

## 6. CONCLUSIONS AND DISCUSSIONS

The commencement of the rainfall season for 2022/2023 experienced a notable delay across most regions within the country, thereby causing adverse effects on crop yields, pasture development, and surface water availability. In addition to sporadic and insufficient rainfall patterns that have dominated the season, the country noted severe and prolonged dry spells in December, February, March and April, and the above-average rainfall was mostly received in January. This however, lacked follow up rains and as a result, the bulk of the northern regions ended the season with average rainfall. Nonetheless, the central region of the country, specifically Khomas, partially Erongo and partially Otjozondjupa, exhibited substantial rainfall performance, leading to enhancements in agricultural output and the establishment of pastures.

The crop and livestock production estimates shows that poor pastures and water deficit has negatively impacted livestock production and poor grazing. This led to poor livestock body conditions in most regions, with Zambezi, Kavango East and Kavango West regions livestock's body condition ranging from good to fair, resulting in low livestock prices in the affected regions.

A total of 579 000(22% of Namibian population) will experience high levels of acute food insecurity between July to September 2023. This number is projected to increase to 695,000 people (26% of the population) projected to face high level of food insecurity during Projected period 1 of October 2023 to March 2023 and expected to reduce to 491 000(19% of the population) during projection 2 period, April to June 2024.

The main key drivers of food insecurity identified are drought/dry spell/erratic rainfall, flash floods, prices shocks, economic decline, and unemployment.

The deworming and vitamin A coverage is lower for older children having completed the immunization schedule. Khomas region, generally has low coverage for immunization and for vitamin A and deworming, especially

among the middle- and upper-income wealth classes who are more likely not to encounter primary health services were vitamin A supplementation and deworming more likely to be offered.

Not all community members are able to access nearby health centers, either due to distance, lack of transport, or no money for transport. Coverage of vitamin A and deworming supplementation may be lower in the absence of national integrated campaigns because only 6 out of 14 regions have community health workers that are trained to give vitamin A supplementation. Even in the regions where community health workers (CHWs) are trained, there are still challenges with clarifying permissions for CHWs to give vitamin A supplementation. CHWs, are also few, with high turnover also affecting number and availability CHWs as they resign and go to better opportunities, with no system in place to replace them as they are not part of the official organizational structure of the MoHSS.

While there is a lack of updated data on the prevalence of micronutrient deficiencies in the population, the national vulnerability assessment provides useful data on the level of fortification with key micronutrients of staple foods consumed at household level.

## 7. RECOMMENDATIONS

### 7.1. On Going Social Safety Nets and Other Programmes

In order to address the identified vulnerabilities, the O/M/A's responsible for implementation of social safety nets and other programmes need to continue with the following programmes:

- The Office of the Prime Minister - Directorate Disaster Risk Management to implement a comprehensive nation-wide drought humanitarian relief assistance food program to all the 14 regions, from October 2023 to June 2024. The humanitarian relief assistance food basket consisting of; Maize meal/ Mahangu; relish (beans/fish/meat/soya mince); and cooking oil.
- The Office of the Prime Minister and the Ministry of Agriculture, Water and Land Reform to provide livestock support to drought affected farmers from Oct 2023 to March 2024.
- The Ministry of Agriculture, Water and Land Reform to continue with provision of rural water supply programme, to address water shortages, and to accelerate the provision of sanitation facilities in all communities;
- The Ministry of Gender Equality, Poverty Eradication and Social Welfare to strengthen the provision of welfare grants to qualified beneficiaries, provision of food assistance to marginalized communities and cash transfer (previously food bank) to qualifying beneficiaries in urban areas.
- The Ministry of Health and Social Services to continue with nutrition programme for assessing acute malnourished persons, and to refer diagnosed cases to existing feeding programmes;
- The Ministry of Health and Social Services in collaboration with the Ministry of Education to introduce regular routine deworming in ECD centres, primary schools, and early childhood development centres (including in middle- and upper-income neighborhoods) along with vitamin A. As with Vitamin A supplementation, integrate deworming into national campaigns consistently.
- The Ministry of Health and Social Services in collaboration with the Min-

istry of Information to target low coverage regions for vitamin A supplementation and deworming, such as Khomas, with a context specific communication and social behaviour change strategy starting with a baseline survey to determine bottlenecks to increasing coverage affecting both the enabling environment and health seeking behavior.

- The Ministry of Health and Social Services, with support from key partners (UNICEF, WHO, WFP, and FAO) a distinct system dedicated to monitoring and collecting data specifically focused on nutrition interventions carried out via community-based platforms, which includes overseeing the implementation of vitamin A supplementation initiatives.

## **7.2. Proposed Response Priorities**

The following response priorities are proposed:

### **7.2.1. Short Term Measures**

- The Office of the Prime Minister and the Ministry of Agriculture, Water and Land Reform to implement drought relief programme including food distribution and livestock support to all the 14 regions without delay, effective 01 October to 31 June 2024 for food distribution and 01 October 2023 to 01 March 2024 for livestock support;
- Cabinet to approve the transfer of funds for livestock support and logistics to Regional Councils to fast track the process of payment;
- Ministry of Finance and Public Enterprises to consider availing funding gaps to implementing Ministries of the proposed drought relief interventions;
- Ministry of Defense and Veteran Affairs & Ministry of Works and Transport to continue providing logistic support towards implementation of drought relief interventions;
- Ministry of Agriculture, Water and Land Reform to avail adequate agricultural implements such as tractors to rural subsistence farmers;
- Ministry of Agriculture, Water and Land Reform to provide financial support to non-operational green scheme to produce food and employment opportunities to communities;

- Ministry of Finance and State-Owned Enterprises to provide up to date budget to institutions mandated to conduct national surveys and censuses such as the Namibia Statistics Agency, Ministry of Health and Social Services and other institutions responsible for carrying out national surveys, that can reliably inform food security indicators for the VAA;
- Ministry of Health and Social Services to urgently carry out a national nutrition survey to document malnutrition related mortality and nutrition indicators such as the Mid-upper arm circumference (MUAC);
- Ministry of Health and Social Services and Office of the Prime Minister to consider including the community health workers as part of the enumerators to measure MUAC, weight and heights and expand the sample size for children under the age of five to achieve the minimal sample size to determine the prevalence of malnutrition on an annual basis.
- In case key assumptions in section 6 holds (the occurrence of the anticipated El Niño and seasonal rainfall performance), it is recommended that NAMVAC update the acute food insecurity projection figures especially the projection period 2 of April-June 2024 figures.
- While routine health services are still being strengthened in terms of accessibility and affordability for service providers, it is necessary to boost preventative health and nutrition services using as many means as possible:
  - Have at least 2 per year integrated national campaigns which include vitamin A supplementation and deworming of children under the age of five.
  - Capacitate ECD centers to identify children under five due for vitamin A supplementation to increase the reach of preventative services to community centers linking them up with CHWs for catch up immunization/nutrition services including growth monitoring for early identification and referral to health centers where necessary.
  - Update the data on the prevalence of vitamin A (and other micronutrient deficiencies in Namibia) by, incorporation of micronutrient analysis into the next Demographic and Health Survey with the assistance of academia. This will be much more cost effective than carrying out a separate, stand-alone micronutrient survey the same blood samples being analyzed for anaemia can be used to analyze for other micronutrients.

## 7.2.2. Long Term Measures

- Ministry of Agriculture, Water and Land Reform to invest in long term development of water infrastructures to harvest and store water especially during rain seasons;
- Ministry of Agriculture, Water and Land Reform to develop the underground water resources such as Ohangwena aquifer II;
- Ministry of Agriculture, Water and Land Reform to promote resilience/ climate smart agricultural production technologies.
- Ministry of Home Affairs Immigration Safety and Security to intensify issuance of national documents to qualifying non-Namibians to start benefiting from government social grants.

## 8. REFERENCES

- Ministry Of Agriculture, Water and Land Reform (MAWLR) (2023). Crop Prospects, Food Security and Drought Report - July 2023. Windhoek, Namibia
- Namibia Statistics Agency (2021), Multidimensional Poverty Index (MPI) Report 2021. Windhoek, Namibia. Retrieved from <https://nsa.nsa.org.na/publications/>
- Namibia Statistics Agency (2018). Labour Force Survey 2018 report. Retrieved from <https://nsa.nsa.org.na/publications/>
- Namibia Statistics Agency (2021). Namibia Population and Household Census Mapping 2019-2021 Basic Report. Retrieved from <https://nsa.nsa.org.na/publications/>
- Aidake, C. (2000). Breast-feeding, diarrhoea and sanitation as components of infant and child health: a study of large-scale survey data from Ghana and Nigeria. *J Biosoc Sci.*, 32(1):47–61.
- Favier CF, V. E. (2002). Molecular monitoring of succession of bacterial communities in human neonates. *Appl Environ Microbiol.*, 68:219–26.
- Fidler Mis N, B. C. (2017). ESPGHAN Committee on Nutrition. Sugar in Infants, Children and Adolescents: A Position Paper of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition Committee on Nutrition. *J Pediatr Gastroenterol Nutr.* , 65(6):681–96.
- Khadijeh K, P. K. (2021). Comparative study of salt, total fat and sugar contents of mayonnaise and salad dressings from the Iranian market in 2017 and 2019. WHO, Eastern Mediterranean Health Journal.
- Krebs, N. (2014). High protein intake from meat as complementary food increases growth but not adiposity in breastfed infants: a randomized trial. *Am J Clin Nutr*, 100(5):1322–28.
- Krebs, N. e. (2014). High protein intake from meat as complementary food increases growth but not adiposity in breastfed infants: a randomized trial. *Am J Clin Nutr*, 100(5):1322–28.
- Lo NC, H.-N. S. (2019). State of deworming coverage and equity in low-income and middle-income countries using household health surveys: a spatiotemporal cross-sectional study. *Lancet*.
- MoHSS. (2023). Neglected tropical diseases master plan 2023-2027. Windhoek: MoHSS.
- Nicklaus S, B. V. (2004). A prospective study of food preferences in child-

- hood. *Food Qual Pref.*, 15(7):805-18.
- Pan L, L. R. (2014). A longitudinal analysis of sugar-sweetened beverage intake in infancy and obesity at 6 years. *Paediatrics*, 134(1):S29-S35.
- Papanikolaou, Y., & Fulgoni, V. L. (2018). Egg Consumption in Infants is Associated with Longer Recumbent Length and Greater Intake of Several Nutrients Essential in Growth and Development. *Nutrients*, p. 10(6):e719.
- Sankar MJ, S. B. (2015). Optimal breastfeeding practices and infant and child mortality: a systematic review and meta-analysis. *Acta Paediatr.*, 104 (467):3-13.
- te Velde SJ, T. J. (2007). Tracking of fruit and vegetable consumption from adolescence into adulthood and its longitudinal association with overweight. *Br J Nutr.*, 98(2):431–38.
- UNICEF. (2018). Coverage at a crossroads. New directions for vitamin A supplementation programmes. New York: UNICEF.
- UNICEF-WHO. (2009). Acceptable medical reasons for use of breast-milk substitutes. Geneva.
- Ventura AK, M. J. (2011). Innate and learned preferences for sweet taste during childhood. . *Curr Opin Clin Nutr Metab Care.*, 14(4):379–84. .
- Victoria CG, B. R. (2016). Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *Lancet*, 387(10017):475-90.
- Walker, M. (2015). Formula Supplementation of Breastfed Infants: Helpful or Hazardous? *Infant, Child, & Adolescent Nutrition (ICAN)*, 7(4):198–207.
- WHO. (2003). *Global Strategy for Infant and Young Child Feeding*. Geneva.
- WHO. (2003). Guiding principles for complementary feeding of the breastfed child. Retrieved August 2020, from Pan American Health Organization-World Health Organization: [https://www.who.int/nutrition/publications/guiding\\_principles\\_compfeeding\\_breastfed.pdf](https://www.who.int/nutrition/publications/guiding_principles_compfeeding_breastfed.pdf)
- WHO. (2005). Guiding principles for feeding non-breastfed children 6–24 months of age. . Geneva.
- WHO. (2017). Sugars and dental caries. Technical Information Note: WHO/NMH/NHD/17.12. Retrieved August 2020, from (<https://apps.who.int/iris/bitstream/handle/10665/259413/WHO-NMH-NHD-17.12-eng.pdf;sequence=1>
- Yiska, A. e. (2020). *Journal of Public Health Nutrition*.

## 9. APPENDICES

### Appendix I: Map and table indicating Current projection of Food Insecurity: July - September 2023

Figure 9. 1: Map indicating Current projection of Food Insecurity

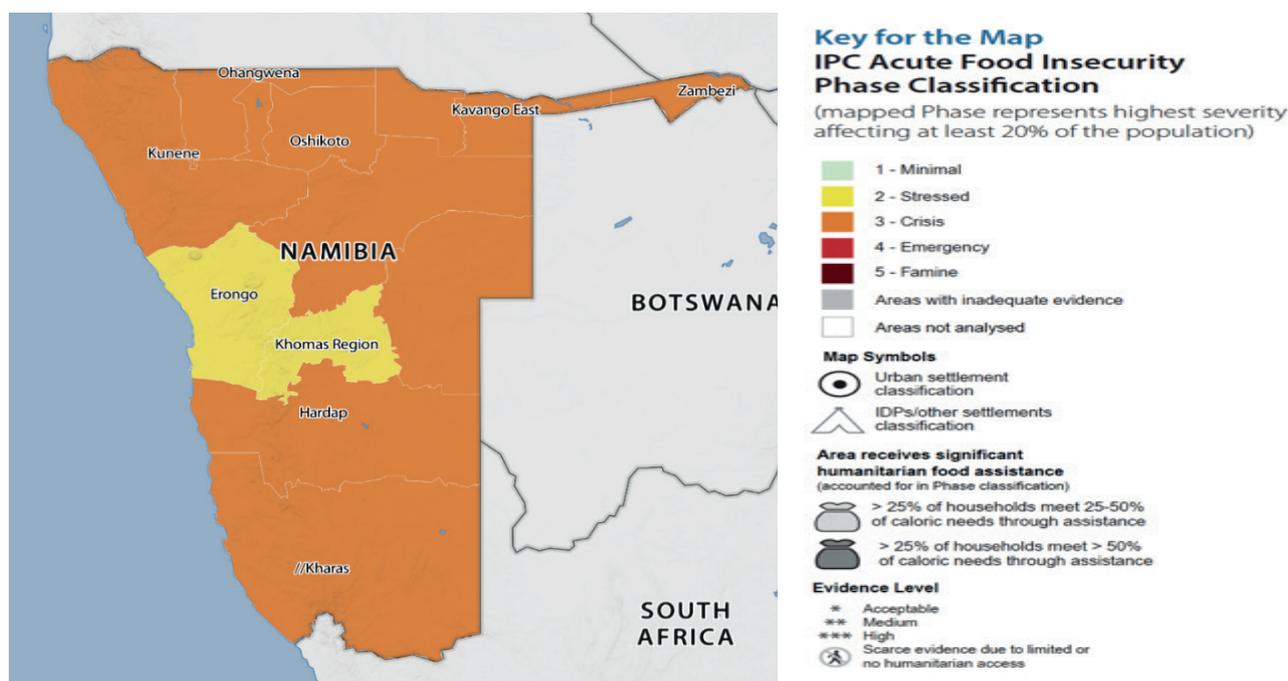


Table 9. 1: Population table indicating Current projection of Food Insecurity

Level 2 Name	Area Phase	Total # (pp)	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5		Phase 3 or above	
			#	%	#	%	#	%	#	%	#	%	#	%
Erongo	2	229,000	45,800	20	148,850	65	34,350	15	0	0	0	0	34,350	15
Hardap	3	98,000	49,000	50	29,400	30	19,600	20	0	0	0	0	19,600	20
Kavango East	3	166,000	49,800	30	58,100	35	49,800	30	8,300	5	0	0	58,100	35
Kavango West	3	93,000	32,550	35	23,250	25	32,550	35	4,650	5	0	0	37,200	40
//Kharas	3	98,000	39,200	40	34,300	35	24,500	25	0	0	0	0	24,500	25
Khomas Region	2	530,000	238,500	45	212,000	40	79,500	15	0	0	0	0	79,500	15
Kunene	3	115,000	40,250	35	40,250	35	34,500	30	0	0	0	0	34,500	30
Ohangwena	3	273,000	122,850	45	81,900	30	68,250	25	0	0	0	0	68,250	25
Omaheke	3	78,000	27,300	35	27,300	35	23,400	30	0	0	0	0	23,400	30
Omusati	3	261,000	117,450	45	91,350	35	52,200	20	0	0	0	0	52,200	20
Oshana	3	208,000	104,000	50	62,400	30	41,600	20	0	0	0	0	41,600	20
Oshikoto	3	215,000	107,500	50	64,500	30	43,000	20	0	0	0	0	43,000	20
Otjozondjupa	3	167,000	75,150	45	58,450	35	33,400	20	0	0	0	0	33,400	20
Zambezi	3	111,000	44,400	40	38,850	35	27,750	25	0	0	0	0	27,750	25
Grand Total		2,642,000	1,094,000	41	969,000	37	566,000	21	13,000	1	0	0	579,000	22

Note: A population in Phase 3+ does not necessarily reflect the full population in need of urgent action. This is because some households may be in Phase 2 or even 1 but only because of receipt of assistance, and thus, they may be in need of continued action. Marginal inconsistencies that may arise in the overall percentages of totals and grand totals are attributable to rounding.

## Appendix II: Map and table indicating Projection 1 Food Insecurity: October 2023 – March 2024

Figure 9. 2: Map indicating 1st projection of food insecurity

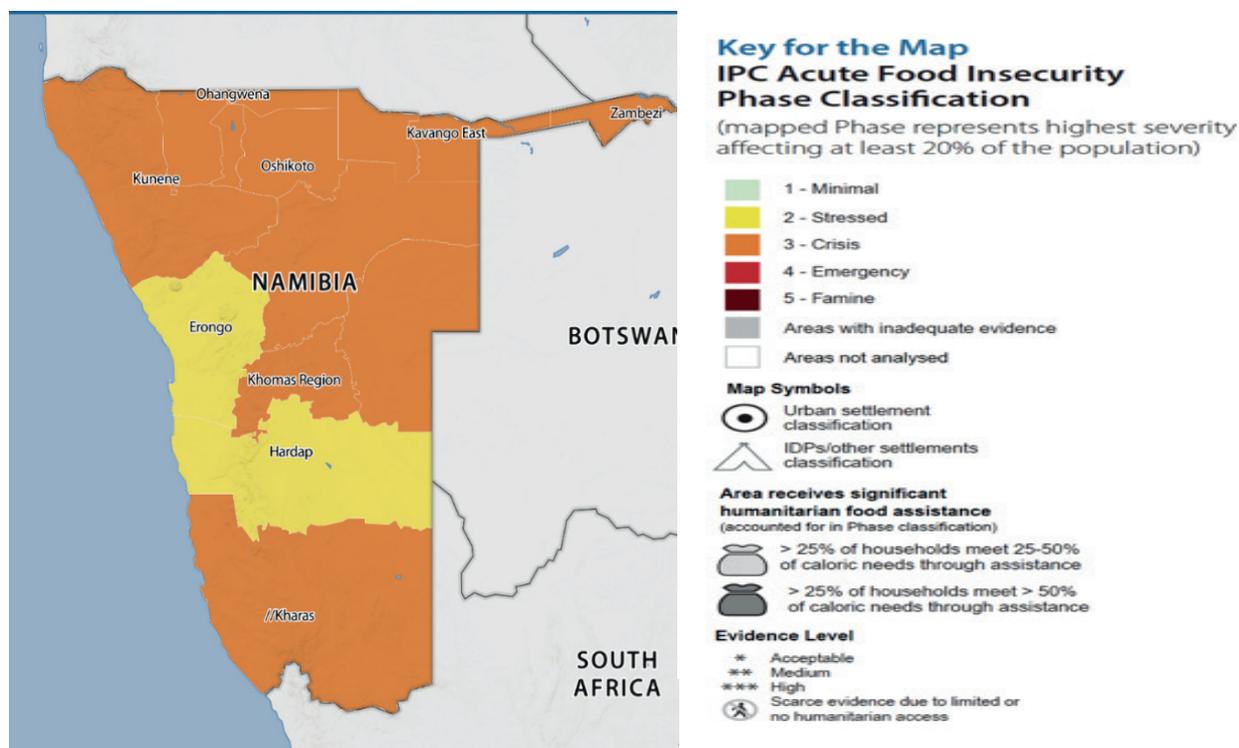


Table 9. 2: Population table indicating 1st projection food insecurity

Level 2 Name	Area Phase	Total # (pp)	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5		Phase 3 or above	
			#	%	#	%	#	%	#	%	#	%	#	%
Erongo	2	229,000	68,700	30	137,400	60	22,900	10	0	0	0	0	22,900	10
Hardap	2	98,000	49,000	50	34,300	35	14,700	15	0	0	0	0	14,700	15
Kavango East	3	166,000	41,500	25	49,800	30	58,100	35	16,600	10	0	0	74,700	45
Kavango West	3	93,000	32,550	35	18,600	20	32,550	35	9,300	10	0	0	41,850	45
//Kharas	3	98,000	49,000	50	29,400	30	19,600	20	0	0	0	0	19,600	20
Khomas Region	3	530,000	212,000	40	212,000	40	106,000	20	0	0	0	0	106,000	20
Kunene	3	115,000	34,500	30	40,250	35	40,250	35	0	0	0	0	40,250	35
Ohangwena	3	273,000	109,200	40	68,250	25	81,900	30	13,650	5	0	0	95,550	35
Omaheke	3	78,000	23,400	30	23,400	30	27,300	35	3,900	5	0	0	31,200	40
Omusati	3	261,000	91,350	35	104,400	40	65,250	25	0	0	0	0	65,250	25
Oshana	3	208,000	93,600	45	62,400	30	41,600	20	10,400	5	0	0	52,000	25
Oshikoto	3	215,000	96,750	45	64,500	30	43,000	20	10,750	5	0	0	53,750	25
Otjozondjupa	3	167,000	58,450	35	66,800	40	41,750	25	0	0	0	0	41,750	25
Zambezi	3	111,000	44,400	40	33,300	30	33,300	30	0	0	0	0	33,300	30
Grand Total		2,642,000	1,004,000	38	943,000	36	630,000	24	65,000	2	0	0	695,000	26

## Appendix III: Map and table indicating 2nd Projection of Food Insecurity: April – June 2024

Figure 9. 3: Map indicating 2nd projection of food insecurity

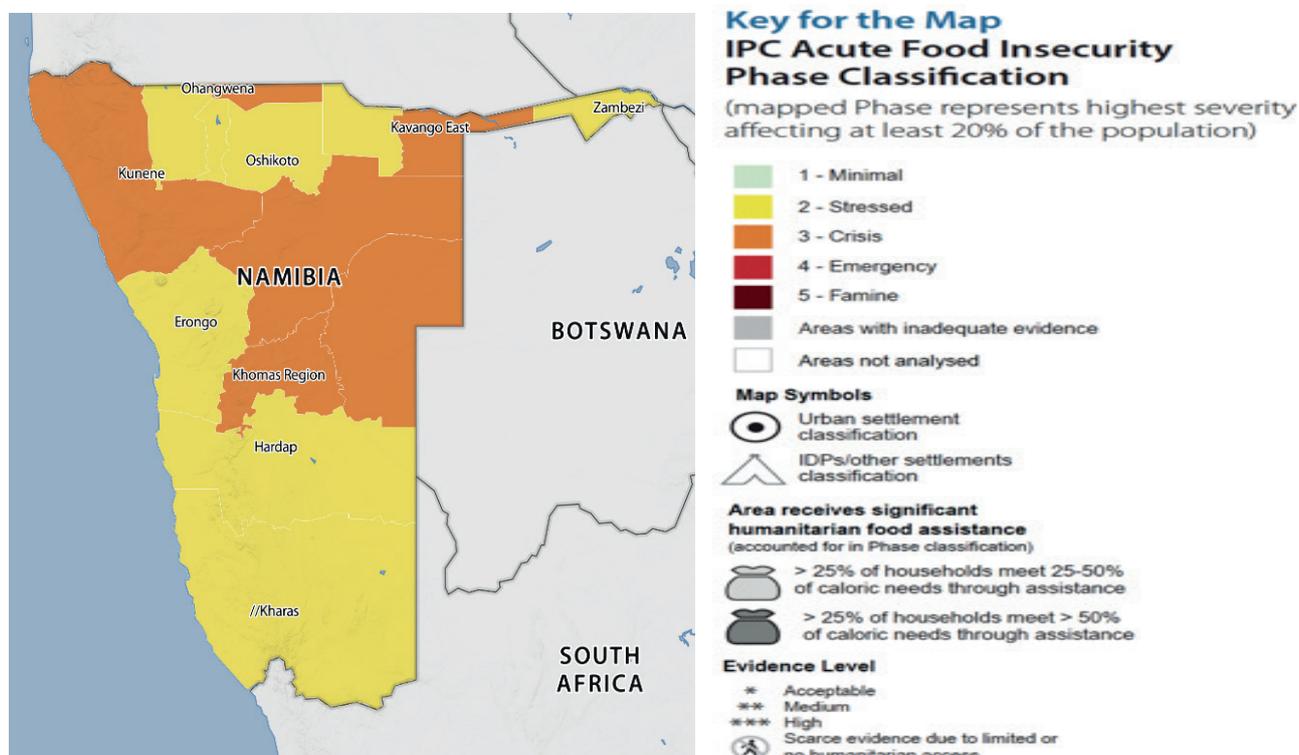


Table 9. 3: Population table indicating 2nd projection of food insecurity

Level 2 Name	Area Phase	Total # (pp)	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5		Phase 3 or above	
			#	%	#	%	#	%	#	%	#	%	#	%
Erongo	2	229,000	91,600	40	114,500	50	22,900	10	0	0	0	0	22,900	10
Hardap	2	98,000	49,000	50	34,300	35	14,700	15	0	0	0	0	14,700	15
Kavango East	3	166,000	49,800	30	66,400	40	49,800	30	0	0	0	0	49,800	30
Kavango West	2	93,000	46,500	50	32,550	35	13,950	15	0	0	0	0	13,950	15
//Kharas	2	98,000	49,000	50	34,300	35	14,700	15	0	0	0	0	14,700	15
Khomas Region	3	530,000	212,000	40	212,000	40	106,000	20	0	0	0	0	106,000	20
Kunene	3	115,000	34,500	30	46,000	40	34,500	30	0	0	0	0	34,500	30
Ohangwena	3	273,000	136,500	50	81,900	30	54,600	20	0	0	0	0	54,600	20
Omaheke	3	78,000	19,500	25	31,200	40	23,400	30	3,900	5	0	0	27,300	35
Omusati	2	261,000	117,450	45	104,400	40	39,150	15	0	0	0	0	39,150	15
Oshana	2	208,000	104,000	50	72,800	35	31,200	15	0	0	0	0	31,200	15
Oshikoto	2	215,000	107,500	50	75,250	35	32,250	15	0	0	0	0	32,250	15
Otjozondjupa	3	167,000	66,800	40	66,800	40	33,400	20	0	0	0	0	33,400	20
Zambezi	2	111,000	55,500	50	38,850	35	16,650	15	0	0	0	0	16,650	15
<b>Grand Total</b>		<b>2,642,000</b>	<b>1,139,000</b>	<b>43</b>	<b>1,012,000</b>	<b>38</b>	<b>487,000</b>	<b>19</b>	<b>4,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>491,000</b>	<b>19</b>

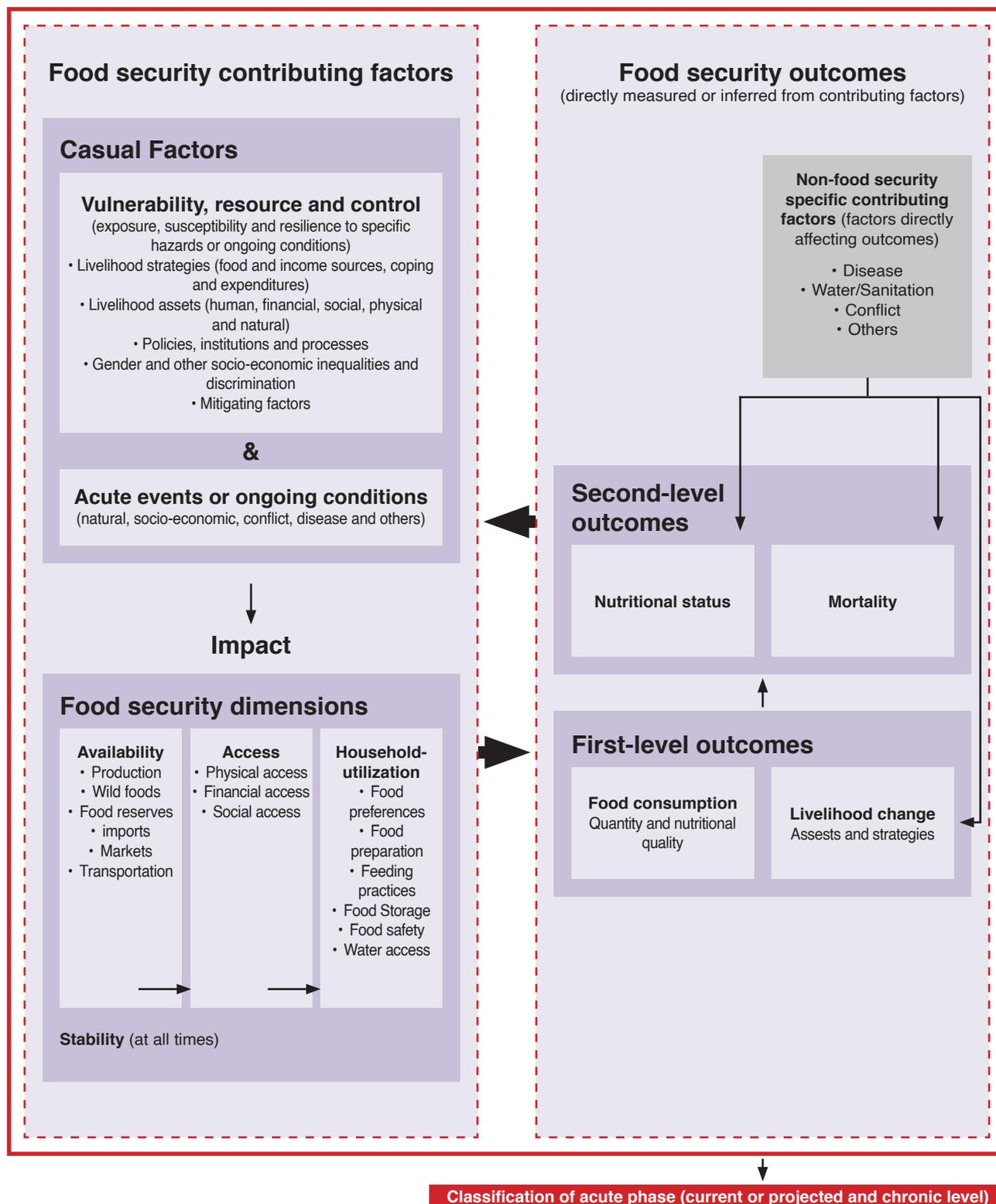
## Appendix IV: Names of participants in the VAA assessment

	Name	Institution
1	Albert Orwa	IPC GSU, FAO
2	Amalia Muhongo	Oshikoto RC
3	Anna Amwaama	Omusati RC
4	Anna Dumeni	OPM-DDRM
5	Chief Inspector Nikola Kganetso Kalikuma	Ministry of Home Affairs, Immigrations, Safety and Security
6	Col. Malakia Namwaapo	Ministry of Defense and Veteran Affairs
7	Beatus Monchwe	Omaheke RC
8	Bernadus Hoeb	Kunene RC
9	Dep. Com. David Sheehamandje	Ministry of Home Affairs, Immigrations, Safety and Security
10	Dust Kachaka	Zambezi RC
11	Edwin Etienne Swartz	Hardap RC
12	Efraim Kaushiningwa	Ohangwena RC
13	Eleotheria Mashako Mukoya	Kavango West RC
14	Gabriel Geigub	Otjozondjupa RC
15	Gabriel Namagumbo	Khomas RC
16	George Seister	Karas RC
17	Gideon Mulenga	Oshikoto RC
18	Gideon Muteka	OPM-DDRM
19	Gift Kamupingene	FAO
20	Hellen Likando	OPM-DDRM
21	Hilkka Magano Nailenge	Oshana RC
22	Ileni M. Simon	OPM-DDRM
23	Israel Tjizake	UNICEF
24	Jacob Ulanda	Kavango East RC
25	Jane Misihairabgwi	UNAM
26	Jason Amukwa	Erongo RC
27	Johanna Mushelenga	OPM-DDRM
28	Johanna Namene	UNAM
29	Johanna Nekaro	Kavango East RC
30	Johanna Shapwa	MAWLR
31	Josephine Tjizu	Otjozondjupa RC
32	Karlous Shinohamba	MURD
33	Keneth Kabiri	IPC GSU, FAO
34	Klaudia Nangobe	Ohangwena RC
35	Kornelius Ekandjo	Oshana RC
36	Kosmas Petrus	WHO
37	Kudzayi Kariri	IPC GSU, FAO
38	Kunandjambi Mupurua	UNDP
39	Linus Negumbo	Kavango West RC
40	Manuel Veiga Lopez	European Commission's JRC
41	Marjorie Van Wyk	MOHSS
42	Mbapeua Karutjaiva	FAO

43	Mclean N. Liyali	Zambezi RC
44	Meke Shikwambi	MOHSS
45	Mercy Mahoto	OPM-DDRM
46	Monalisa Tsuses	Erongo RC
47	Naomi Tjिताura	Hardap RC
48	Ndamonanghenda Jermias	OPM
49	Ndapunikwa Hamunyela	OPM-DDRM
50	Nicoletta Mokhatu	Omaheke RC
51	Nosizo Mthupa	FAO
52	Nozizwe Chigonga	UNICEF
53	Obert Mutabani	WFP
54	Paulus Ashili	OPM-DDRM
55	Percias Masule	Namibia Red Cross Society
56	Sakaria Namwandi	Omusati RC
57	Sandile Thwala	WFP
58	Sannia Iiyambo	Omusati RC
59	Sara Jacobs	//Kharas RC
60	Senovia Leukes	//Kharas RC
61	Scott Drimie	IPC GSU, FAO
62	Shivute Nangula	OPM-DDRM
63	Simon Muhindi	IPC GSU, FAO
64	Sofie Tjombonde	Ministry of Works and Transport
65	Thomas Baar	IPC GSU, FAO
66	Titus Kayawala	MAWLR
67	Tuyakula Kaudinge	Kunene RC
68	Usiel Mbinge	Khomas RC

# Appendix V: The IPC Food Security Analytical Framework

Figure 9. 4: The IPC Food Security Analytical Framework



## Appendix VI: Definition of Significant Terms/ Glossaries

- 1. PSU** - A Primary Sampling Unit (PSU) is a geographical area, which was formed on the basis of the population in Enumeration Areas (EAs) as a result of the Namibia 2019/20 Population and Housing Census Mapping.
- 2. Household/private household** - this is defined as one or more persons, related or unrelated, who live together in one (or part of one) or more than one dwelling unit and have common catering arrangements and answerable to the same head of household. A person who lives alone and caters for himself/herself forms a one-person household.
- 3. Vulnerability** is defined as the household's exposure, susceptibility, and resilience to specific hazards. According to the IPC, vulnerability analysis is mainly driven by an understanding of: the livelihood strategies of households (e.g. how they obtain food and income, their common coping strategies, expenditure patterns); the livelihood assets that the household can rely on (financial, physical, human, social, and natural assets); and how policies, institutions and processes, gender, and mitigating factors positively or negatively affect or could affect their ability to successfully respond to shocks and ongoing conditions(IPC.
- 4. Hazards** are phenomena that have occurred or may occur in the future. They include acute events or ongoing conditions that can be natural or human-made, including droughts, floods, earthquakes, tsunamis, sharp price increases, energy or food shortages, war, civil unrest, HIV/AIDS, cholera, malaria and other events that can impact on acute food insecurity
- 5. The Integrated Food Security Phase Classification (IPC)** - is a common global scale for classifying the severity and magnitude of food insecurity and malnutrition. Areas are classified in phases based on severity using the 20 percent rule for area classification.

**6. The twenty percent rule for area classification** - An area is classified according to a specific IPC phase when at least 20 percent of the population in the area are experiencing the conditions related to that phase or more severe phases. Ideally, the distribution of affected populations across Phases 1 to 5 should be provided, as each phase is linked to different severity and calls for different action.

### **7. Acute food insecurity**

Short-term objectives to prevent or decrease severe food insecurity that threatens lives or livelihoods. The specific area of interest is food insecurity found at a specific point in time and of a severity that threatens lives or livelihoods, or both, regardless of the causes, context or duration.

### **8. Acute food insecurity severity phases:**

#### **Phase 1: Minimal / None**

Households are able to meet essential food and non-food needs without engaging in a typical and unsustainable strategies to access food and income.

#### **Phase 2: Stressed**

Households have minimally adequate food consumption but are unable to afford some essential non-food expenditures without engaging in stress coping strategies.

#### **Phase 3: Crisis**

Households either;

- Have food consumption gaps that are reflected by high or above-usual acute malnutrition, or
- Households are marginally able to meet minimum food needs but only by depleting essential livelihood assets or through crisis-coping strategies.

## **Phase 4: Emergency**

Households either;

- Have large food consumption gaps which are reflected in very high acute malnutrition and excess mortality, or
- Are able to mitigate large food consumption gaps but only by employing emergency livelihood strategies and asset liquidation.

## **Phase 5: Catastrophe/Famine**

Household have an extreme lack of food and/or other basic needs even after full employment of coping strategies. Starvation, death, destitution and extremely critical acute malnutrition levels are evident.

9. Food availability addresses whether food is actually or potentially physically present for purchase or acquisition for consumption, including aspects of production, food reserves, imports, markets and transportation, and wild foods.

10. Adequate dietary energy intake - relates to the condition of regularly consuming, over a relevant period of time, an amount of food that provides the dietary energy needed to cover the requirements for an active and healthy life. Dietary energy intake is used as a convention and convenience to assess the average energy requirements for a population group

11. The Household Dietary Diversity Score (HDDS) - It aims to reflect the economic ability of a household to access a variety of foods and is based on households' self-reporting of the number of food groups consumed in the previous 24 hours.

12. Household Hunger Scale (HHS) - It assesses whether households have experienced problems of food access in the preceding 30 days, as reported by the households themselves, to classify the severity of food insecurity for that period.

13. The reduced Coping Strategies Index (rCSI) - developed by CARE is an experience-based indicator collecting information on household use and frequency of five different food-based coping strategies over the past 7 days.
  
14. Household Economy Analysis (HEA) - is a livelihoods-based framework founded on the analysis of people in different social and economic circumstances. In particular, the HEA examines the self-reporting of information on:
  - how people access the food and cash they need;
  - their assets, the opportunities available to them, and the constraints they face; and
  - the options open to them in times of crisis.
  
15. Livelihood Coping Strategies (LCS) - is an indicator developed by WFP and is derived from a series of questions regarding the household's experience with livelihood stress and asset depletion due to lack of food or lack of money to buy food during the 30 days prior to the survey.

# NAMIBIA

Climatic shocks, economic decline, and rising prices are driving acute food insecurity in Namibia

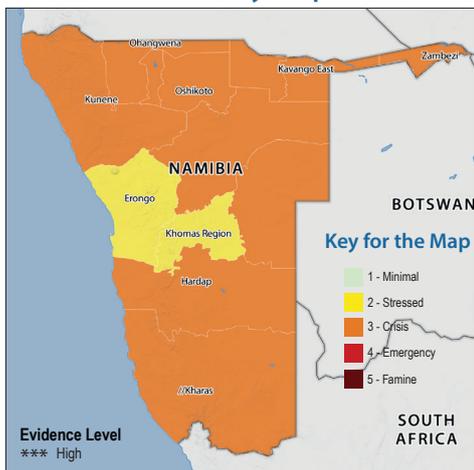
## IPC ACUTE FOOD INSECURITY ANALYSIS

JULY 2023 – JUNE 2024

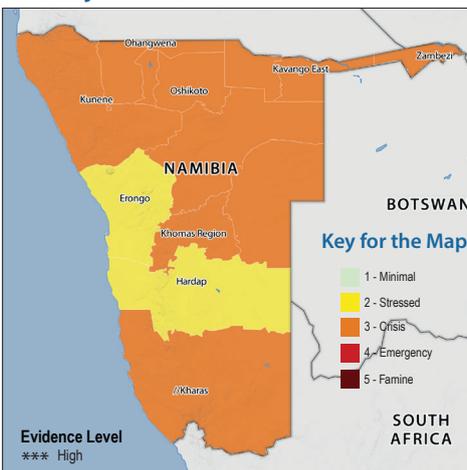
Published on September 6, 2023

CURRENT SITUATION: JULY - SEPTEMBER 2023		1st PROJECTION: OCTOBER 2023 - MARCH 2024		2nd PROJECTION: APRIL - JUNE 2024	
<b>579,000</b>  22% of the population analysed  People facing high levels of acute food insecurity (IPC Phase 3 or above)  IN NEED OF URGENT ACTION	Phase 5	0 People in Catastrophe	<b>695,000</b>  26% of the population analysed  People facing high levels of acute food insecurity (IPC Phase 3 or above)  IN NEED OF URGENT ACTION	Phase 5	0 People in Catastrophe
	Phase 4	13,000 People in Emergency		Phase 4	65,000 People in Emergency
	Phase 3	566,000 People in Crisis		Phase 3	630,000 People in Crisis
	Phase 2	969,000 People in Stressed		Phase 2	943,000 People in Stressed
	Phase 1	1,094,000 People in food security		Phase 1	1,004,000 People in food security
<b>491,000</b>  19% of the population analysed  People facing high levels of acute food insecurity (IPC Phase 3 or above)  IN NEED OF URGENT ACTION	Phase 5	0 People in Catastrophe	<b>491,000</b>  19% of the population analysed  People facing high levels of acute food insecurity (IPC Phase 3 or above)  IN NEED OF URGENT ACTION	Phase 5	0 People in Catastrophe
	Phase 4	4,000 People in Emergency		Phase 4	4,000 People in Emergency
	Phase 3	487,000 People in Crisis		Phase 3	487,000 People in Crisis
	Phase 2	1,012,000 People in Stressed		Phase 2	1,012,000 People in Stressed
	Phase 1	1,139,000 People in food security		Phase 1	1,139,000 People in food security

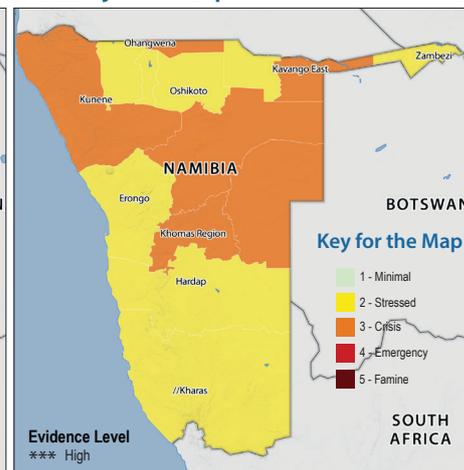
### Current Situation (July - Sept 2023)



### 1st Projection (Oct 2023 - Mar 2024)



### 2nd Projection (Apr - Jun 2024)



Note: According to IPC Acute Food Insecurity classification protocols, an area is classified in a specific IPC Phase when at least 20% of the population in the area are experiencing the conditions related to that Phase or above.

### Overview

Food insecurity exists when people have limited capacity physically and economically to access adequate food at household level. In the current period, from July to September 2023, 579,000 people in Namibia (22 percent of the population) face high levels of acute food insecurity (IPC Phase 3 or above) and require urgent action to reduce food gaps and protect livelihoods. Only two regions, Erongo and Khomas are classified in IPC Phase 2, Stressed, and need action for livelihood protection, while the remaining 12 regions are classified in IPC Phase 3, Crisis. Namibia's deteriorating food security is mainly driven by climatic shocks like drought/dry spells/erratic rainfall, prices shocks, economic decline, and unemployment.

In the first projected period, from October 2023 to March 2024, 695,000 people (26 percent of the population) are expected to be in IPC Phase 3 or above. Erongo and Hardap regions are expected to be in IPC Phase 2, Stressed and the remaining regions are expected to be in IPC Phase 3, Crisis. Erongo region is anticipated to remain in IPC Phase 2, Stressed due to government interventions and possible employment opportunities from the mining sector; while Khomas region is expected to fall in IPC Phase 3, Crisis. An improvement for Hardap region from IPC Phase 3, Crisis to IPC Phase 2, Stressed will be due to the government planned intervention of drought relief in terms of food support to the region. The food security situation is expected to worsen with 4 percent since this period represent the first half of Namibia's lean

### Key Drivers

- Dry spells**  
 Namibia faced adverse effects of dry spells and erratic rainfall, impacting crop and livestock production. Livestock mortality rates rose due to insufficient grazing land and water, while crop harvests also dwindled in affected regions.
- Price shocks**  
 Rising global prices of fuel products have prompted an escalation in both food and non-food costs, consequently diminishing the purchasing power of individuals.
- Unemployment**  
 The COVID-19 pandemic caused economic decline and job losses, leaving many households reliant on markets for food.



season, prices start to rise, and most households would have used up their own production's stocks and some households have not harvested during the previous harvest seasons especially the northeastern crop growing regions.

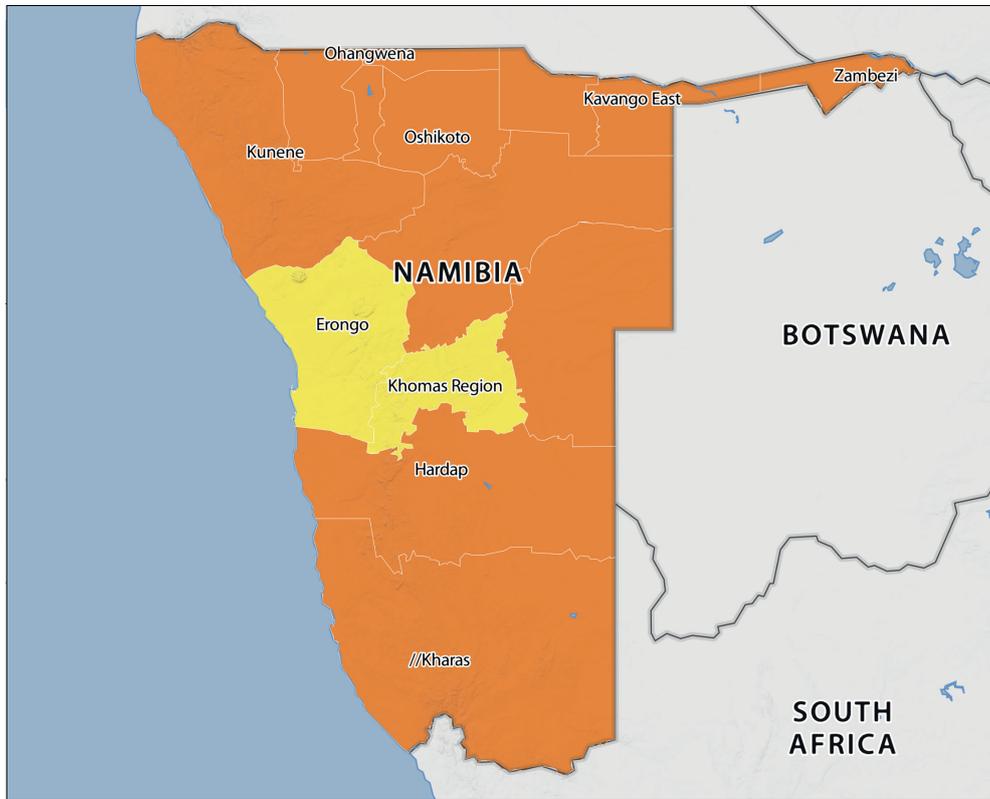
On the other hand, during the projected period 2, from April to June 2024, it is projected that the situation will relatively improve as households start consuming food from their own production, which marks the beginning of the 2023–2024 consumption period. During this period, it is estimated that 491,000 people or 19 percent of the population will experience high food insecurity, IPC Phase 3 or above (Crisis or worse). The situation is expected to recover in seven out of thirteen regions in the second projection compared to the current and/or first projection periods. Karas, Erongo, Hardap, Kavango West, Omusati, Oshana, Oshikoto and Zambezi region are expected to be in IPC Phase 2, Stressed and other six regions expected to remain in IPC Phase 3, Crisis. Food and non-food item prices increase which is triggered by the global price increments in fuel products, resulting in reduced people's purchasing power.

The 2022/23 agricultural season rainfall performance was generally poor for most of the regions, with below average rainfall recorded, which resulted in poor crop harvest especially for the northern crop growing regions. Moreover, poor rainfall over the northwestern and southern parts of the country has negatively impacted pasture biomass conditions, particularly in the northern regions of Kunene, Omusati, Oshana, Ohangwena Oshikoto, and the southern regions of Hardap and Karas.

Preliminary findings on crop and livestock production estimates shows that poor pastures and water deficit has negatively impacted livestock production and poor grazing which led to poor livestock conditions in most regions, with Zambezi, Kavango East, Kavango West livestock's condition ranging from good to fair, resulting in low livestock prices in the affected regions.



## ACUTE FOOD INSECURITY CURRENT SITUATION MAP AND POPULATION TABLE (JULY - SEPTEMBER 2023)



### Key for the Map

#### IPC Acute Food Insecurity Phase Classification

(mapped Phase represents highest severity affecting at least 20% of the population)

- 1 - Minimal
- 2 - Stressed
- 3 - Crisis
- 4 - Emergency
- 5 - Famine

Evidence Level  
\*\*\* High

### Population table for the current period: July – September 2023

Region	Population analysed	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5		Area Phase	Phase 3+	
		#people	%	#people	%	#people	%	#people	%	#people	%		#people	%
Erongo	215,700	46,000	20	149,000	35	34,000	15	0	0	0	0	2	34,000	15
Hardap	95,049	49,000	50	29,000	35	20,000	20	0	0	0	0	3	20,000	20
Kavango East	160,670	50,000	30	58,000	35	50,000	30	8,000	5	0	0	3	58,000	35
Kavango west	92,239	33,000	35	22,000	30	33,000	35	5,000	5	0	0	3	38,000	40
Kharas	94,294	39,000	40	34,000	35	25,000	25	0	0	0	0	3	25,000	25
Khomas Region	496,546	239,000	45	212,000	40	79,000	15	0	0	0	0	2	79,000	15
Kunene	109,672	40,000	35	40,000	30	35,000	30	0	0	0	0	3	35,000	30
Ohangwena	267,835	123,000	45	82,000	30	68,000	25	0	0	0	0	3	68,000	25
Omaheke	77,212	27,000	35	27,000	25	24,000	30	0	0	0	0	3	24,000	30
Omusati	257,874	118,000	45	91,000	30	52,000	20	0	0	0	0	3	52,000	20
Oshana	202,656	104,000	50	62,000	50	42,000	20	0	0	0	0	3	42,000	20
Oshikoto	209,270	107,000	50	65,000	30	43,000	20	0	0	0	0	3	43,000	20
Otjozondjupa	163,776	75,000	45	59,000	40	33,000	20	0	0	0	0	3	33,000	20
Zambezi	107,433	44,000	40	39,000	30	28,000	25	0	0	0	0	3	28,000	25
<b>Grand Total</b>	<b>2,642,000</b>	<b>1,094,000</b>	<b>41</b>	<b>969,000</b>	<b>37</b>	<b>556,000</b>	<b>21</b>	<b>13,000</b>	<b>1</b>	<b>0</b>	<b>0</b>		<b>579,000</b>	<b>22</b>

Note: A population in Phase 3+ does not necessarily reflect the full population in need of urgent action. This is because some households may be in Phase 2 or even 1 but only because of receipt of assistance, and thus, they may be in need of continued action. Marginal inconsistencies that may arise in the overall percentages of totals and grand totals are attributable to rounding.



## ACUTE FOOD INSECURITY CURRENT SITUATION OVERVIEW (JULY - SEPTEMBER 2023)

Between the months of July to September 2023, approximately 579,000 people in Namibia (22 percent of the population) are estimated to be facing high levels of acute food insecurity (IPC Phase 3 or above) and requiring urgent humanitarian assistance. Of this population, 566,000 people experiencing IPC Phase 3, Crisis and 13,000 face IPC Phase 4, Emergency, an additional 969,000 (37 percent) are IPC Phase 2, Stressed and 1,094,000 (41 percent) are classified under IPC Phase 1, Minimal.

Most of the regions are classified under IPC Phase 3, Crisis except for Erongo and Khomas regions which are classified in IPC Phase 2, Stressed. The most affected regions are Kavango East and Kavango West region with 5 percent of the population estimated to be facing IPC Phase 4, Emergency, respectively.

At regional level, the food insecure population range from 15 percent both in Erongo and Khomas regions correspondingly to 30 percent and 40 percent in Kavango West and Kavango East regions, respectively.

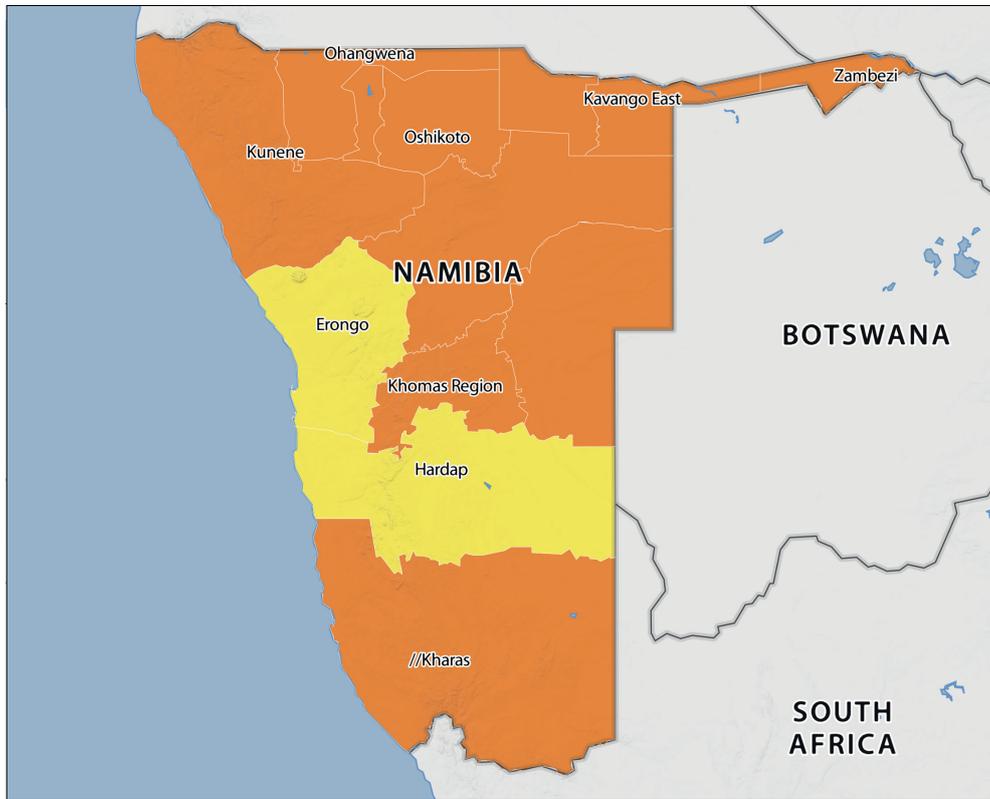
During the current period most households do not have any food stocks most having indicated stocks lasting less than one month and those who had stocks lasting between one to three months have already depleted their food stock. As a result, households have already experienced difficulties in purchasing food due to lack of income and high unemployment rates. Of those households who indicated to have some source of income, majority indicated social grants as their major source of income which may be affected negatively by the household sizes. Moreover, erratic and limited rainfall distribution since the start of the agricultural season in November has resulted in abnormal dry conditions affecting the northern part of the country and resulted in poor crop performance. Additionally, poor rainfall over the northwestern and southern parts of the country during the 2022/2023 agricultural season has negatively impacted pasture biomass conditions, particularly in the crop growing regions as most of the areas crop fields did not mature but rather withered before it reached the mature age and lowering cereal production expectations. Some households in Ohangwena, Oshana and Omusati regions experienced flood during the ploughing season which resulted in the affected households not being able to cultivate during this agricultural season. Furthermore, occurrences of livestock diseases and pests also hampered the livestock production especially in Kavango West and East.

About 85 percent of the population gets their water from private and public taps and 7 percent from boreholes. About 20 percent of the population in Kavango West, Omaheke and Kunene region, respectively get most of their water from boreholes.

Moreover, about 76.4 percent of the population walks less than 2.5 km to water points, 18.1 percent between 2.5 km to 5 km and 5.6 percent walks more than 5 km to water points. Respectively, more than 10 percent of Kavango West, Oshikoto, Ohangwena and Zambezi walks more than 5km to water points.

With little rainfall received this year and flash floods experienced in Ohangwena, Oshana and Omusati, all crop growing regions (Omusati, Oshana, Ohangwena, Oshikoto, Kavango East, Kavango West and Zambezi) experienced a poor harvest. The Namibia Total Cereal Production trend preliminary findings for the 2022/23 was 153 000 MT compared to 168 200 MT harvested in 2021/22 season, of which 81 percent of the total production was from the commercial sector and only 19 percent produced from the crop production regions, which is 9 percent lower than the 2021/22 harvest.

## ACUTE FOOD INSECURITY FIRST PROJECTION SITUATION MAP AND POPULATION TABLE (OCTOBER 2023 - MARCH 2024)



**Key for the Map**  
**IPC Acute Food Insecurity Phase Classification**  
 (mapped Phase represents highest severity affecting at least 20% of the population)

- 1 - Minimal
- 2 - Stressed
- 3 - Crisis
- 4 - Emergency
- 5 - Famine

**Evidence Level**  
 \*\*\* High

### Population table for the first projected period: October 2023 – March 2024

Region	Population analysed	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5		Area Phase	Phase 3+	
		#people	%	#people	%	#people	%	#people	%	#people	%		#people	%
Erongo	215,700	69,000	30	137,000	60	23,000	10	0	0	0	0	2	23,000	10
Hardap	95,049	49,000	50	34,000	35	15,000	15	0	0	0	0	2	15,000	15
Kavango East	160,670	41,000	25	50,000	30	58,000	35	17,000	10	0	0	3	75,000	45
Kavango west	92,239	32,000	35	19,000	20	33,000	35	9,000	10	0	0	3	42,000	45
Kharas	94,294	49,000	50	29,000	30	20,000	20	0	0	0	0	3	20,000	20
Khomas Region	496,546	212,000	40	212,000	40	106,000	20	0	0	0	0	3	106,000	20
Kunene	109,672	35,000	30	40,000	35	40,000	35	0	0	0	0	3	40,000	35
Ohangwena	267,835	109,000	40	68,000	25	82,000	30	14,000	5	0	0	3	96,000	35
Omaheke	77,212	23,000	30	23,000	30	28,000	35	4,000	5	0	0	3	32,000	40
Omusati	257,874	91,000	35	105,000	40	65,000	25	0	0	0	0	3	65,000	25
Oshana	202,656	94,000	45	62,000	30	42,000	20	10,000	5	0	0	3	52,000	25
Oshikoto	209,270	97,000	45	64,000	30	43,000	20	11,000	5	0	0	3	54,000	25
Otjozondjupa	163,776	58,000	35	67,000	40	42,000	25	0	0	0	0	3	42,000	25
Zambezi	107,433	45,000	40	33,000	30	33,000	30	0	0	0	0	3	33,000	30
<b>Grand Total</b>	<b>2,642,000</b>	<b>1,004,000</b>	<b>38</b>	<b>943,000</b>	<b>36</b>	<b>630,000</b>	<b>24</b>	<b>65,000</b>	<b>2</b>	<b>0</b>	<b>0</b>		<b>695,000</b>	<b>26</b>

Note: A population in Phase 3+ does not necessarily reflect the full population in need of urgent action. This is because some households may be in Phase 2 or even 1 but only because of receipt of assistance, and thus, they may be in need of continued action. Marginal inconsistencies that may arise in the overall percentages of totals and grand totals are attributable to rounding.



## ACUTE FOOD INSECURITY FIRST PROJECTION OVERVIEW (OCTOBER 2023 - MARCH 2024)

During the first projection period (October 2023 – March 2024), the number of people expected to experience food insecurity is likely to increase by an estimated 4 percent from the current number of 579,000 to 695,000 people.

Out of this population 65,000 (2 percent) will face emergency food insecurity (IPC Phase 4), 630,000 (24 percent) in IPC Phase 3, Crisis, 943,000 (36 percent) are anticipated to be in IPC Phase 2, Stressed and 1,004,000 (38 percent) in IPC Phase 1, Minimal.

Kavango West, Kavango East, Omaheke, Ohangwena, Hardap, Kharas, Zambezi, Otjozondjupa, Oshana, Omusati, Oshikoto and Kunene regions are classified under IPC Phase 3, Crisis while Erongo and Khomas regions are classified in IPC Phase 2. The most affected regions are Kavango East and Kavango West region with 5 percent of the population estimated to be facing IPC Phase 4, Emergency, respectively.

Erongo region is anticipated to remain in IPC Phase 2, Stressed and Khomas region expected to fall in IPC Phase 3 or above (Crisis or worse). All other regions that were in IPC Phase 3, Crisis except Hardap region are anticipated to remain in IPC Phase 3. The Hardap region is expected to improve from IPC Phase 3 to IPC Phase 2.

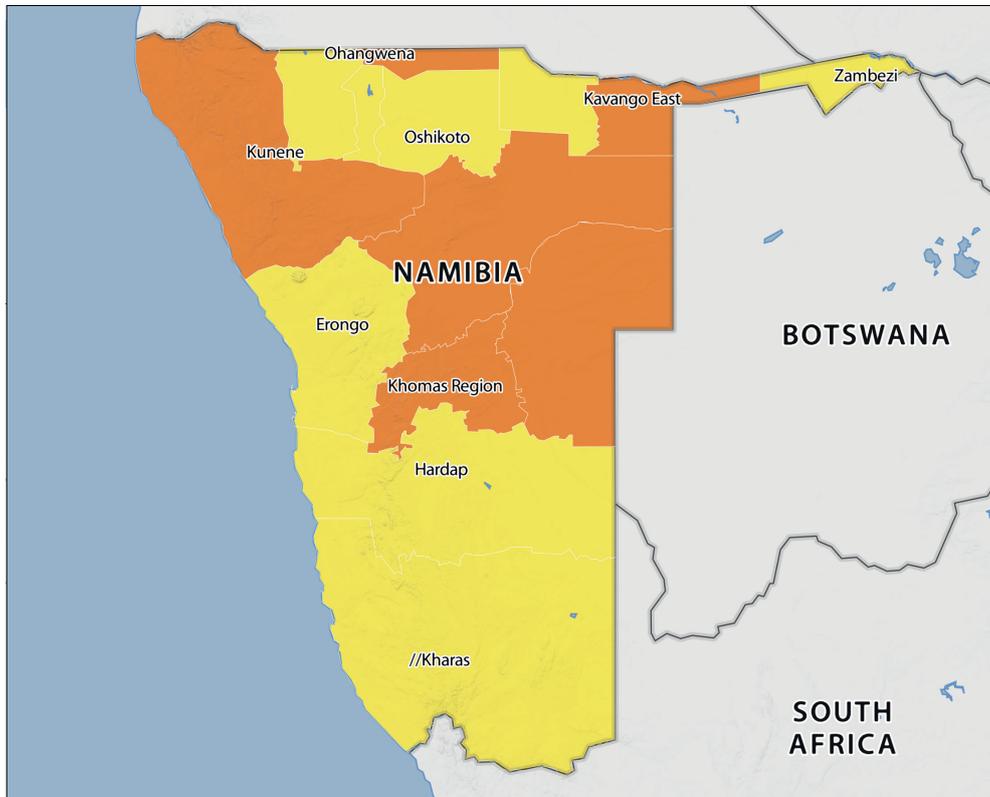
At regional level, the situation will deteriorate significantly especially in Kavango West, Kavango East, Omaheke, Ohangwena with at least 35 percent of their populations, respectively being in IPC Phase 3 or above.

The main factors that are likely to affect the food security during the first projected period will prolong dry spells and erratic rainfall which has been below normal for the past years, negatively impacting livelihoods and crop and livestock production. Due to poor harvest during the current agricultural season, households have limited food stock which will have been depleted by the start of the lean season and most households will resort to stress and emergency coping strategies, such as selling of assets to meet food consumption gaps. Furthermore, the global increase of commodity prices and higher rate of unemployment will have an impact on the food systems especially for those with no stable income.

The Seasonal Rainfall forecast has predicted an El Nino phenomenon with a high probability which will cause drier conditions. These conditions which are likely to result into below normal rainfall for the 2023/24 rainfall season will affect both crop and livestock production consequently negatively affecting the consumption period from April to June 2023.



## ACUTE FOOD INSECURITY SECOND PROJECTION SITUATION MAP AND POPULATION TABLE (APRIL - JUNE 2024)



**Key for the Map**  
**IPC Acute Food Insecurity Phase Classification**  
 (mapped Phase represents highest severity affecting at least 20% of the population)

- 1 - Minimal
- 2 - Stressed
- 3 - Crisis
- 4 - Emergency
- 5 - Famine

**Evidence Level**  
 \*\*\* High

### Population table for the second projected period: April – June 2024

Region	Population analysed	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5		Area Phase	Phase 3+	
		#people	%	#people	%	#people	%	#people	%	#people	%		#people	%
Erongo	215,700	91,000	40	115,000	50	23,000	10	0	0	0	0	2	23,000	10
Hardap	95,049	49,000	50	34,000	35	15,000	15	0	0	0	0	2	15,000	15
Kavango East	160,670	50,000	30	66,000	40	50,000	30	0	0	0	0	3	50,000	30
Kavango west	92,239	46,000	50	33,000	35	14,000	15	0	0	0	0	2	14,000	15
Kharas	94,294	49,000	50	34,000	35	15,000	15	0	0	0	0	2	15,000	15
Khomas Region	496,546	212,000	40	212,000	40	106,000	20	0	0	0	0	3	106,000	20
Kunene	109,672	34,000	30	47,000	40	34,000	30	0	0	0	0	3	34,000	30
Ohangwena	267,835	136,000	50	82,000	30	55,000	20	0	0	0	0	3	55,000	20
Omaheke	77,212	20,000	25	31,000	40	23,000	30	4,000	5	0	0	3	27,000	35
Omusati	257,874	118,000	45	104,000	40	39,000	15	0	0	0	0	2	39,000	15
Oshana	202,656	104,000	50	73,000	35	31,000	15	0	0	0	0	2	31,000	15
Oshikoto	209,270	108,000	50	75,000	35	32,000	15	0	0	0	0	2	32,000	15
Otjozondjupa	163,776	67,000	40	67,000	40	33,000	20	0	0	0	0	3	33,000	20
Zambezi	107,433	55,000	50	39,000	35	17,000	15	0	0	0	0	2	17,000	15
<b>Grand Total</b>	<b>2,642,000</b>	<b>1,139,000</b>	<b>43</b>	<b>1,012,000</b>	<b>38</b>	<b>487,000</b>	<b>19</b>	<b>4,000</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>491,000</b>	<b>19</b>

Note: A population in Phase 3+ does not necessarily reflect the full population in need of urgent action. This is because some households may be in Phase 2 or even 1 but only because of receipt of assistance, and thus, they may be in need of continued action. Marginal inconsistencies that may arise in the overall percentages of totals and grand totals are attributable to rounding.



## ACUTE FOOD INSECURITY SECOND PROJECTION OVERVIEW (APRIL - JUNE 2024)

The number of people expected to experience food insecurity is expected to decrease by an estimated 7 percent from the projected period 1 of 695,000 to 491,000 people.

Out of this population in 4,000 (0.2 percent) are anticipated to face IPC Phase 4, Emergency; 487,000 (18 percent) in IPC Phase 3, Crisis; 1,012,000 (38 percent) in IPC Phase 2, Stressed and 1,142,000 (43 percent) in IPC Phase 1, Minimal.

The situation is expected to improve in seven out of thirteen regions in the second projection period compared to the current and/or first projection periods as households will have access to higher production. Kharas, Erongo, Hardap, Kavango West, Omusati, Erongo and Hardap region are expected to be in IPC Phase 2, Stressed and other six regions are likely to remain in IPC Phase 3, Crisis.

At regional level, the situation for the estimated population anticipated to be in IPC Phase 3 or above ranges from 35 percent to 10 percent with Omaheke having the highest population, followed by Kavango East with 30 percent and Erongo being the lowest with 10 percent of its population being in IPC Phase 3 or above.

However, it is important to note that, with the anticipated El Niño, which is likely to affect Africa, Central America, and Far East Asia during the 2023/24 agricultural season, the situation in the country will be negatively affected due to more dry and limited rainfall, which could put food security in the country at risk. Therefore, the projected population 491,000 anticipated to be in Phase 3 or above during April to June 2024 is likely to increase.

### Key Assumptions for the projection period

**Food availability:** Food availability for commodities including staples is expected to deteriorate and localized deficits will be experienced during the first projection period which is also the lean season

**Fuel prices:** Commodity prices are expected to trend at levels above five-year average prices throughout the projected periods being a result of the escalating fuel prices.

**Inflation:** Cost of fuel will likely affect the exchange rate and impact negatively on the economy. Growth is expected to slow down. Households will therefore bear the brunt of a strained economy.

**Dry spells and erratic rainfall:** Seasonal forecast from the European Commission latest forecast of the period until December 2023 shows below normal rainfall forecast for Namibia until December 2023 which will affect local food production and ultimately food security in the country. This may result in Namibia experiencing drought/dry spells which will affect food production in the projected periods.

**El Niño:** El Niño which is likely to negatively affect Africa, Central America and Far East Asia during the 2023/24 agricultural season, will negatively impact the situation in the country as a result of limited rainfall, increasing the level of household vulnerability to food insecurity.

**Humanitarian assistance:** Humanitarian Food Assistance (HFA) from the Office of the Prime Minister will likely continue through the projection period.



## RECOMMENDATIONS FOR ACTION

### Response Priorities

The following response priorities are proposed:

- Urgent action is required to save lives, reduce food consumption gaps and protect livelihoods especially those classified in IPC Phase 3 or above (Crisis or worse).
- MAWLR to invest in development of water infrastructure equipment to be used to harvest and store water especially during the flood seasons which will be used for domestic and livestock use.
- MAWLR to avail more agricultural equipment's such as tractors to farmers for agricultural ploughing.
- MAWLR to provide financial support to non-operational green scheme to enable them to be functional, which provides food and employment opportunities to communities.
- MAWLR to develop the underground water aquifer in Ohangwena region to supply water to the northern Namibia
- Ministry of Gender Equality, Poverty Eradication and Social Welfare to continue with the food distribution for the Marginalized Communities.
- Ministry of Agriculture, Water and Land Reform (MAWLR) to promote resilience/climate-smart agricultural production in the areas which depend on crop and livestock activities, especially drought resistance cereal/crop seeds which matures early and able to give yield within a short period of time.
- It was observed during data collection that majority of the population do not have national documents, either due to transport costs or residency years requirements, hence not able to benefit from different social grants and children not able to enrolled in higher educations, therefore, Ministry of Home Affairs, Immigration Safety and Security (MHAISS) to reach out to the communities through household visits to register those eligible and re-look at the minimum cut off years of acquiring citizenship through naturalization etc.
- It was detected during data collection that majority of the households who depends on social grant as their main source of income spends more than half of the grants on food purchases leaving non-food items not attended to eg. Education, due to the inadequate income to cater for all the needs, especially households with bigger household sizes. Ministry of Gender Equality, Poverty Eradication and Social Welfare to consider raising social grants income.
- In case the key assumptions in section 6 holds e.g., the occurrence of the anticipated El Niño and seasonal rainfall performance, it is recommended that NAMVAC update the acute food insecurity projection figures especially the projection period 2 of April-June 2024 to updated figures.

### Risk factors to monitor

- Prices for staple commodities
- Informal cross-border food trade
- The impact of COVID-19 on food security
- Inflation and its impact on the Namibian Dollar
- Seasonal rainfall performance
- African migratory locust infestations across the country
- Flooding in the areas that are likely to receive above-normal rainfall
- The drought situation in Kunene, Omusati, Erongo and other potential regions

## PROCESS AND METHODOLOGY

The Namibia Vulnerability Assessment Committee (NamVAC) carried out a food security assessment to determine the situation across the 14 regions of Namibia. The review focused on the period between July to September 2023 and two projections, projecting for October 2023 to March 2024 and April to June 2024. The available data from the survey represents Evidence Level 3.

The data was based on sampling design that was guided by the Namibia Statistics Agency. The data was then cleaned and analysed for the various outputs used for the IPC analysis

Data collection and analysis was conducted by participants drawn from the NamVAC membership at National and Regional levels, Non- Governmental Organizations (Namibia Red Cross Society), University of Namibia and the United Nations (WFP, UNDP, WHO, FAO & UNICEF). The analysis workshop was facilitated by the IPC GSU.

Overall, data analysis was done using the IPC protocols based on the IPC Technical Manual Version 3.1. Analysts were split by regions to provide regional information into Information Support System according to IPC protocols. Namibia was the second country to use the new IPC developed system.

### Sources

The main source of data was from the NamVAC Assessment 2023/24, which provided outcome as well as contributing factor evidence. Other sources of data included but not limited to:

- Ministry of Agriculture and Land Reform on crops, livestock, WASH, pest's management and water levels;
- Ministry of Health and Social Services on disease outbreaks, malnutrition cases;
- Ministry of Works and Transport (Namibia Meteorological Services) on climate outlook;
- Regional Councils and Local Authorities on local reports;
- Bank of Namibia on macroeconomic information, repo rates and exchange rates;
- Namibia Statistics Agency on demographic, price and other information;
- World Food Programme on Seasonal: Rainfall & Vegetation data and Normalized Difference Vegetation Index (NDVI) data
- European Commission for the African Seasonal forecast

### Limitations of the analysis

- Insufficient capacity of certified IPC technical staff in the country.
- Data that needed deeper analysis before use based on the IPC protocols some of which may render information not useable
- Inadequate time for the refresher training and analysis
- Inadequate primary and secondary data at the time of the analysis on some outcome indicators mainly on mortality and malnutrition.

### What is the IPC and IPC Acute Food Insecurity?

The IPC is a set of tools and procedures to classify the severity and characteristics of acute food and nutrition crises as well as chronic food insecurity based on international standards. The IPC consists of four mutually reinforcing functions, each with a set of specific protocols (tools and procedures). The core IPC parameters include consensus building, convergence of evidence, accountability, transparency and comparability. The IPC analysis aims at informing emergency response as well as medium and long-term food security policy and programming.

For the IPC, Acute Food Insecurity is defined as any manifestation of food insecurity found in a specified area at a specific point in time of a severity that threatens lives or livelihoods, or both, regardless of the causes, context or duration. It is highly susceptible to change and can occur and manifest in a population within a short amount of time, as a result of sudden changes or shocks that negatively impact on the determinants of food insecurity.

### Contact for further Information

#### Hellen Likando

NamVAC CHAIR  
[Hellen.Likando@opm.gov.na](mailto:Hellen.Likando@opm.gov.na)

IPC Global Support Unit  
[www.ipcinfo.org](http://www.ipcinfo.org)

This analysis has been conducted under the patronage of the MVAC (e.g. Ministry of Agriculture). It has benefited from the technical and financial support of FAO/GSU for the analysis and USAID for data collection.

Classification of food insecurity and malnutrition was conducted using the IPC protocols, which are developed and implemented worldwide by the IPC Global Partnership - Action Against Hunger, CARE, CILSS, EC-JRC, FAO, FEWS NET, Global Food Security Cluster, Global Nutrition Cluster, IGAD, Oxfam, PROGRESAN-SICA, SADC, Save the Children, UNICEF and WFP.

### IPC Analysis Partners:



Food and Agriculture  
 Organization of the  
 United Nations



Namibia  
 Red Cross  
 Society

UNAM  
 UNIVERSITY OF NAMIBIA



unicef  
 for every child



World Food  
 Programme



World Health  
 Organization

