ZAMBIA

CLIMATIC SHOCKS, HIGH FOOD PRICES WORSEN ZAMBIA FOOD INSECURITY

IPC ACUTE FOOD INSECURITY ANALYSIS
JULY 2022 – MARCH 2023
Published on August 30, 2022

CURRENT SITUATION JULY- SEPTEMBER 2022

1.35M
10% of the population analysed

People facing high acute food insecurity (IPC Phase 3 or above)

IN NEED OF URGENT ACTION

Phase 5	0 People in Catastrophe
Phase 4	0 People in Emergency
Phase 3	1,352,000 People in Crisis
Phase 2	6,132,000 People Stressed
Phase 1	6,007,000 People in food security

PROJECTION OCTOBER - MARCH 2023

1.95M
14% of the population analysed

People facing high acute food insecurity (IPC Phase 3 or above)

IN NEED OF URGENT ACTION

Phase 5	0 People in Catastrophe
Phase 4	0 People in Emergency
Phase 3	1,952,000 People in Crisis
Phase 2	6,601,000 People Stressed
Phase 1	4,937,000 People in food security

Overview

Over 1.35 million Zambians (10% of the analysed population) are experiencing severe food insecurity (IPC Phase 3 - Crisis) between July and September 2022, due to high food prices and climatic shocks. This population requires urgent humanitarian action to reduce food gaps, protect and restore livelihoods, and prevent acute malnutrition.

The current vulnerability in Zambia has been driven by a high incidence of poverty, the impact of the COVID-19 pandemic, macroeconomic instability, and exposure to climatic shocks. This has resulted in an increase in food insecurity in the analysed districts primarily driven by these shocks such as prolonged dry spells, flooding, reduced livelihood opportunities due to restrictions linked to COVID-19, pests and diseases, and high input and food prices. Most of these shocks occurred during the flowering and grain filling periods for most staple crops between December 2021 and March 2022. Though the cost of maize has declined since the start of the 2022/2023 consumption year, they remain above the 5-year average.

Out of 91 districts that were assessed and analysed, 14 districts have been classified in IPC Phase 3 (Crisis), with the remaining districts classified in IPC Phase 2 (Stressed) while one district is in IPC Phase 1 (Minimal) during the current period. Ninety-one districts were analysed out of 116 in the country.

During the projected period, between October 2022 and March 2023, food insecurity is expected to worsen with additional 34 districts being classified in IPC Phase 3 (Crisis), taking the total number of hotspot districts to forty-eight. During this period, which coincides with the start of the lean season, it is projected that about 1,95 million people (14% of the analysed population) will be classified in IPC Phase 3. These people will likely require urgent humanitarian assistance to reduce food gaps, protect and restore livelihood and prevent acute malnutrition.

Key Drivers

Flooding

Parts of Central, Eastern, parts of Muchinga, parts of Copperbelt, Luapula, Lusaka, Southern and Western provinces experienced flooding due to excessive rains leading to waterlogging of crops.

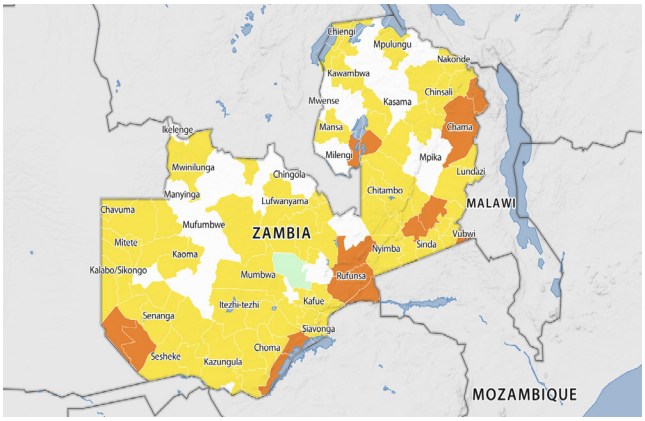
High food prices

Food Prices remained higher than the five-year average due to stifled supply chains due to COVID-19 restrictions and food inflation pressure.

Fall army worm

Almost all provinces experienced Armyworm infestations that devastated field crops in selected districts.

Current Acute Food Insecurity: July - Sept 2022



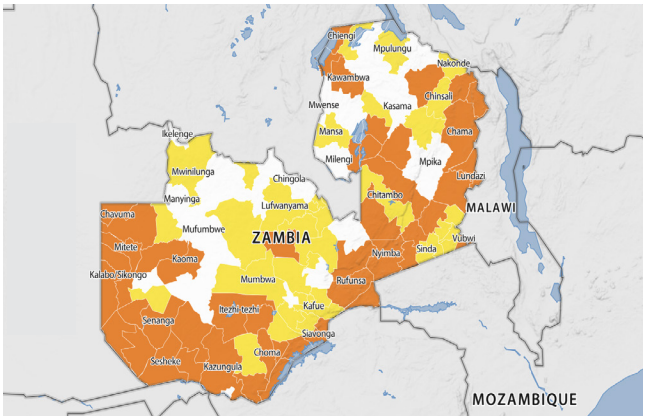
Key for the Map

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

- 1 - Minimal
- 2 - Stress
- 3 - Crisis
- 4 - Emergency
- 5 - Famine
- Areas not analysed

Evidence Level
** Medium

Projected Acute Food Insecurity:Oct 2022 - March 2023



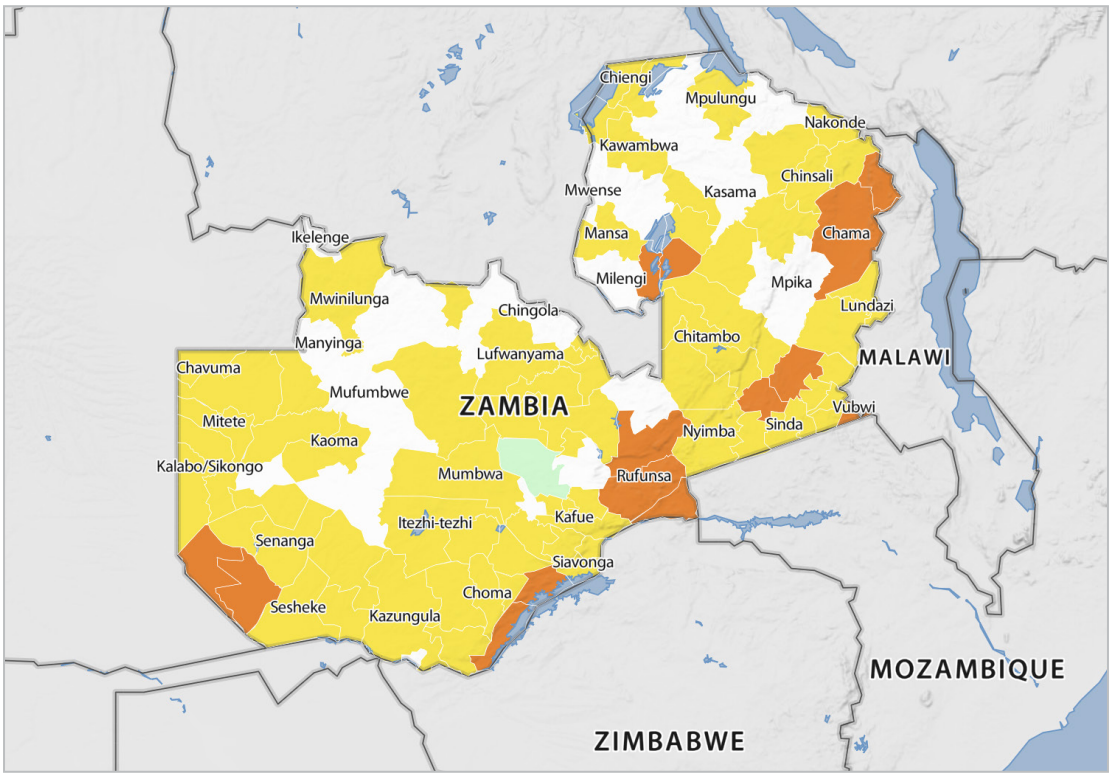
Key for the Map

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

- 1 - Minimal
- 2 - Stress
- 3 - Crisis
- 4 - Emergency
- 5 - Famine
- Areas not analysed

Evidence Level
** Medium

CURRENT ACUTE FOOD INSECURITY MAP AND POPULATION TABLE (JULY – SEPTEMBER 2022)



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
- Areas not analysed

Evidence Level

** Medium

Provincial population table for the current period: July – September 2022

Province	Rural Population analysed	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5		Phase 3 +	
		#people	%	#people	%	#people	%	#people	%	#people	%	#people	%
Central	1,476,386	836,124	57	551,682	37	88,580	6	0	0	0	0	88,580	6
Copperbelt	1,276,564	659,453	52	540,859	42	76,253	6	0	0	0	0	76,253	6
Eastern	2,452,529	1,000,384	41	1,123,696	46	328,449	13	0	0	0	0	328,449	13
Luapula	921,399	347,603	38	441,689	48	132,107	14	0	0	0	0	132,107	14
Lusaka	3,167,664	1,412,632	45	1,571,615	50	183,418	6	0	0	0	0	183,418	6
Muchinga	385,727	172,720	45	171,431	44	41,576	11	0	0	0	0	41,576	11
North-Western	340,979	184,077	54	124,990	37	31,912	9	0	0	0	0	31,912	9
Northern	330,558	128,290	39	160,732	49	41,536	13	0	0	0	0	41,536	13
Southern	2,096,674	879,580	42	944,830	45	272,264	13	0	0	0	0	272,264	13
Western	1,041,833	385,762	37	500,518	48	155,554	15	0	0	0	0	155,554	15
Total	13,490,313	6,006,624	45	6,132,042	45	1,351,647	10	0	0	0	0	1,351,647	10

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.

IPC ACUTE FOOD INSECURITY CURRENT SITUATION OVERVIEW (JULY – SEPTEMBER 2022)

The analysis of the food security situation in the 91 districts that suffered from shocks indicates that about 1.35 million people, which is about 10 percent of the analysed population, will be in IPC Phase 3 (Crisis) between July and September 2022 and require urgent humanitarian action to reduce food gaps, protect and restore livelihood and prevent acute malnutrition. The shocks that affected these districts include prolonged dry spells, floods, outbreaks of pests and disease, high maize prices and the continued impact of COVID19. Though the price of maize has declined since the start of the 2022/2023 consumption year, they remain above the 5-year average. Results show that out of the 91 districts assessed and analysed, 14 have been classified in IPC Phase 3 (Crisis), 76 are classified in IPC Phase 2 (Stress), while 1 district is in IPC Phase 1 (Minimal).

The 2021/2022 rainfall performance was generally below normal for most parts of the country except for the extreme northern parts of the country that received relatively average to above average rainfall. The areas with significant departures from average are mainly in the Central, Lusaka, Southern and Eastern parts of the country. The lowest seasonal rainfall total (570 mm) was recorded in Gwembe, which lies in the Southern province. Using the Water Requirements Satisfaction Index (WRSI), the water requirement for maize has been satisfied for much of Zambia, with most of the country indicating good to excellent growth conditions except for the Central, Eastern, Lusaka and Southern parts of the country. However, compared to the long-term average (2001-2021) of WRSI values, the end-of-season WRSI anomaly shows below normal conditions, with poor growing conditions mainly over the eastern, central and western parts of the country. Severe drought conditions (negative WRSI anomaly) are primarily located in the areas bordering Zimbabwe, Malawi and Mozambique on the Eastern side of the country.

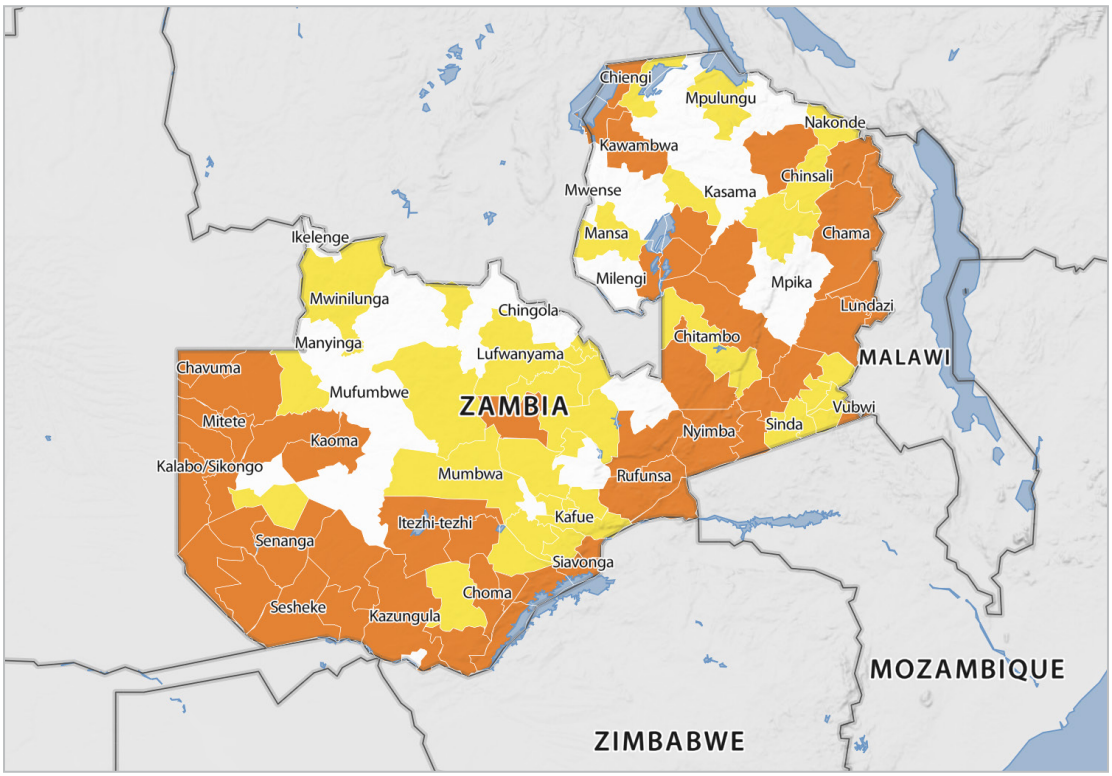
Further, Central, Copperbelt, Lusaka, Luapula, Southern, and parts of Northwestern and Western Provinces experienced flooding. The cumulative rainfall and distribution since the start of the season indicate that the highest amount of rainfall recorded from meteorological stations up to 31st March, 2022 were from Kasempa 1428mm, Mpulungu 1326mm, Kafironda 1321mm, Ndola 1276mm, Kasama 1265mm, Mwinilunga 1262mm, Mpika 1165mm, Mansa met 1156mm, Misamfu 1080mm, Kawambwa 1023mm, Serenje 1068mm, Zambezi 1043mm, Chinsali 1025mm, Msekera 1015mm, Mongu 1018mm, Isoka and Kabompo 981. The rest of the stations recorded rainfall amounts below 900mm.

In terms of production of agricultural commodities, maize production in Zambia for the 2022/2023 consumption decreased from 3,620,244 MT the previous season to 2,706,243 MT, representing a 25 percent decrease in production. Adding the carry-over stock of 1,503,432 MT, the total available maize stock in-country stands at 4,209,675 MT. With the total national maize requirement (human and animal) at 3,004,763 MT there is a maize surplus of 1,204,912 MT. Sorghum production decreased by 19 percent from 18,372 MT the previous season to 14,843 MT in the 2021/2022 agricultural season. Rice production stood at 62,280 MT while the national requirement was at 108,911 MT, leaving a deficit of 45,000MT.

Between the end of the 2021/22 lean season in March and the start of the 2022/2023 consumption season in April, the price of maize grain increased seasonally faster than the previous year. This increase was partially caused by projections for a smaller harvest in 2022, leading to tighter domestic supplies during the 2022–2023 consumption season. Due to localised maize deficits due to decreased production in some districts in Zambia, maize grain prices are anticipated to rise further. However, to guarantee that it has enough supplies for domestic consumption, Zambia won't begin exporting maize from its current harvest until the end of September.

The food security indicators show a fair situation in most districts for the current period compared to the food situation in the previous consumption year. However, it is projected that the situation will deteriorate due to the already high food prices that are being experienced currently and with a possibility of further fuel price increases compounded by the Ukraine-Russia conflict, the situation may further deteriorate.

PROJECTED IPC ACUTE FOOD INSECURITY MAP AND POPULATION TABLE (OCTOBER 2022 – MARCH 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
- Areas not analysed

Evidence Level

** Medium

Provincial population table for the projected period: October 2022 – March 2023

Province	Rural Population analysed	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5		Phase 3 +	
		#people	%	#people	%	#people	%	#people	%	#people	%	#people	%
Central	1,476,386	737,746	50	590,614	40	148,025	10	0	0	0	0	148,025	10
Copperbelt	1,276,564	529,964	42	639,136	50	107,464	8	0	0	0	0	107,464	8
Eastern	2,452,529	821,749	34	1,200,209	49	430,571	18	0	0	0	0	430,571	18
Luapula	921,399	291,541	32	455,323	49	174,535	19	0	0	0	0	174,535	19
Lusaka	3,167,664	1,237,806	39	1,583,286	50	346,571	11	0	0	0	0	346,571	11
Muchinga	385,727	144,967	38	180,856	47	59,904	16	0	0	0	0	59,904	16
North-Western	340,979	170,088	50	121,931	36	48,961	14	0	0	0	0	48,961	14
Northern	330,558	104,704	32	167,790	51	58,064	18	0	0	0	0	58,064	18
Southern	2,096,674	622,888	30	1,094,813	52	378,973	18	0	0	0	0	378,973	18
Western	1,041,833	275,727	26	567,051	54	199,055	19	0	0	0	0	199,055	19
Total	13,490,313	4,937,182	37	6,601,009	49	1,952,123	14	0	0	0	0	1,952,123	14

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.

IPC ACUTE FOOD INSECURITY PROJECTED SITUATION OVERVIEW (OCTOBER 2022 – MARCH 2023)

In the projected period, which represents the lean season in Zambia, between October 2022 and March 2023, the food security situation is expected to deteriorate as more households rely on food markets. It is estimated that about 1.95 million people will be classified in IPC Phase 3 (Crisis) during this period. This represents an increase of 23% compared to the population in IPC Phase 3 in 2021/22, however, this increase does not only represent an increase in food insecurity in the same areas but also an increase in the number of analysed districts compared to last year.

According to the International Research Institute for Climate and Society (IRI), the 2022/2023 rainfall season has been forecasted to be normal in most southern African countries. Hence it is expected that poor households will likely rely more on labour opportunities for food and income between October 2022 and March 2023. Flooding is also expected to occur, especially in flood-prone areas in the north and northeastern parts of the country, affecting most households in those areas. Covid – 19 will continue to pose risks to areas close to main urban areas, and the possibility of the spread of the Monkeypox virus also on the horizon.

The price of agricultural inputs will likely dampen the production capacities of small-scale farmers. The cost of fertilisers and agricultural chemicals in the country have risen by more than 40 percent in the last year and a half and may force small farmers to reduce the amount of land put to the crops requiring such inputs. This price increase has been occasioned by the prevailing economic shocks resulting from global crises, majorly the Ukraine –Russia conflict.

Food prices are expected to stabilise in the short run due to the post-harvest food situation. However, they are not expected to be below the 5-year average. Prices are projected to increase as the lean season in southern Africa sets in. This will be compounded by the effects of inflation which is expected to reduce households' financial access to food. The prices of maize grain declined only moderately with the harvest in May, reflecting a below-average production in 2022 and upward pressure from international prices. These prices are expected to remain stable up to September before beginning to increase in October. One of the major drivers of maize prices in areas bordering Malawi and the Democratic Republic of the Congo (DRC), is the attractive prices being offered in these neighbouring countries compared to Zambia, and this is expected to continue to put pressure on local prices. The price of substitute goods for vegetable oil, such as soya bean and ground nuts, are expected to increase due to global shortages impacted by the Ukraine-Russia conflict.

During this period, food security outcomes are expected to deteriorate as households increase coping strategies as food from production depletes and increases reliance on market purchase and casual labour opportunities. The price of maize, which is expected to remain high, will limit households' access.

Key Assumptions for the projection period

- **Labour Opportunities:** Labour opportunities and wages for poorer households in urban areas will likely be significantly lower than average due to increases in the cost of agricultural inputs. Rural households will have reduced casual labour opportunities due to increases in the price of agricultural inputs, although the seasonal forecast shows an above-normal 2022/2023 rainfall season.
- **Food Availability:** Maize grain supplies are expected to remain normal across markets in both surplus and deficit-producing areas. No expected imports according to the Food Balance Sheet (Stock from the previous year's production, about half of the current season's production).
- **Informal Cross Border Trade:** Informal cross-border inflows are expected to be normal despite COVID-19-related border restrictions.
- **Food prices:** Maize prices are expected to trend at least 10% higher than five-year average prices throughout the projection period.
- **Seasonal Forecast:** The Climate Prediction Centre (CPC) and the International Research Institute for Climate and Society (IRI) forecasts a normal 2022/2023 rainfall season which might result in flooding in southern areas of the country.
- **Labour Migration:** Labour migration to neighbouring districts of Namibia, Malawi as well as Mozambique is expected to be normal during the projected period due to the lack of internal movement restrictions in Zambia.
- **Covid-19 Impact:** Labour opportunities and rates for tourism and related sectors will likely bounce back to normal at the national level as the impact of COVID 19 reduces.
- **Ukraine/Russia War:** At the national level, the U/R conflict will continue to adversely affect the prices of various commodities and services, including agricultural commodities. In the near term, the disruption of the trade from the Black Sea region, which resulted in an increase in fuel price by over 34% between February 2022 and April 2022, will continue to put pressure on fuel prices. However, the Government of Zambia is expected to continue stabilising the fuel price, as was the case in May 2022 when the price of diesel went down.
- **Income:** Expected increased income for farmers that grew soybean, sunflower and groundnuts as substitute goods for vegetable oil. Income from the sale of maize is expected to be higher than average for maize farmers.

Impact of the war in Ukraine in Zambia

At the national level, Zambia will continue to be adversely affected by the Ukraine–Russia war. The prices of various commodities and services, including agricultural commodities, will be negatively affected. In the near term, the disruption of trade from the Black Sea region, which resulted in an increase in fuel price by over 34% between February 2022 and April 2022, will continue to put pressure on fuel prices. However, the Government of Zambia is expected to continue to adopt measures to stabilise the price of fuel as was the case in May 2022 when the price of diesel went down. The conflict is likely to impact the imports of key commodities, mainly wheat sourced from Russia and agricultural inputs. For the 2022/2023 consumption year, there is a wheat deficit of about 95000MT, which will need to be imported from elsewhere. This is not expected to be imported from South Africa as it also imports about half of its annual wheat needs. As wheat is a winter crop, and the region's winter crop season started at the end of April 2022, expectations are that South Africa, the major regional supplier, will increase its hectarage to offset any expected imports from Russia and Ukraine. Global cereal supplies are expected to decline in 2022 (FAO (2022)), with expected massive declines as a direct result of the Ukraine-Russia conflict. Global Cereal Price Index went down by 4.1% in June from May, but 27.6% above June 2021 levels, and global wheat prices were down 5.7% in June but 48.5% above June 2021.

Consequently, the supply chain for commodities will be affected. The price of substitute goods such as soya beans and ground nuts for vegetable oil is expected to increase due to global shortages impacted by the war.

RECOMMENDATIONS FOR ACTION

Response Priorities

The following response priorities are proposed for the current period:

- Urgent action is required to save lives, reduce food consumption gaps and protect livelihoods for populations in districts categorised as being in Crisis (IPC Phase 3) by improving access to food through appropriate modalities for a household in deficit areas.
- Income and Expenditure: Interventions that strengthen households' economy and resilience are recommended to ensure households remain food and nutrition secure.
- Nutrition Security: Ensure the nutrition situation is monitored and a follow-up SMART survey is conducted for districts exhibiting a high risk of malnutrition.
- Livelihood resilience: Rural livelihoods are under a lot of pressure due to the consecutive poor rainfall seasons and high prices of inputs, forcing households to engage in negative coping strategies. Emphasis should be placed on rebuilding rural livelihoods through income diversification, strengthening household economy, and building productive community assets.

Situation Monitoring and Update of Activities

The key factors to monitor include:

- Prices for staple commodities
- Informal cross border food trade
- The headline and Food Inflation
- Rainfall pattern for next season
- Impact of the Ukraine –Russia war on the supply chain

PROCESS, METHODOLOGY AND LIMITATIONS

Process and Methodology

The Zambia Vulnerability Committee (ZVAC) carries out annual assessments informed by shocks occurrence within the country.

In June 2022, data collection was carried out in districts that experienced shocks during the 2021/2022 Agriculture Season, resulting in 91 districts being analysed. Overall data analysis was done using the IPC Technical Manual Version 3.1 The IPC AFI Analysis workshop was a hybrid including both virtual and face to face analysis.

Analysts were given specific districts to analyse and the IPC GSU provided technical support in person.

Sources of Data

The main source of data was from the 2022 ZVAC Assessment which provided outcome as well as contributing factor evidence. Other sources of data included the Ministry of Agriculture's Crop Forecast Survey for production, Meteorology department with climate data, the National Statistic Office and WFP for price data, relief data from DMMU and Food Security reports from other institutions.

Limitations of the Analysis

Data collected for the Anthropometric measurements could not be used due to quality and minimum sample size. The Food Consumption Score (FCS) had challenges due to enumeration errors. There was a desire to Assess the entire country but faced limitations in funding.

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

Sikaona, Lenganji
IPC Technical Working Group Chair
lenganji.sikaona@gmail.com

IPC Global Support Unit
www.ipcinfo.org

This analysis has been conducted under the patronage of the Disaster Management and Mitigation Unit under the Office of the Vice President. It has benefited from the technical and financial support of SADC and the IPC GSU

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, FEWSNET, 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 · Oxfam · Save the Children · unicef for every child · WFP World Food Programme wfp.org · World Vision

ANNEX I: Population Table for the Current Period: July - September 2022

Province	District	Total population analysed	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5		Area Phase	Phase 3+	
			#people	%	#people	%	#people	%	#people	%	#people	%		#people	%
Central	Chibombo	288,458	245,189	85	43,269	15	-	0	0	0	0	0	1	-	0
	Chitambo	70,633	28,253	40	35,317	50	7,063	10	0	0	0	0	2	7,063	10
	Kabwe	292,520	146,260	50	131,634	45	14,626	5	0	0	0	0	2	14,626	5
	Kapiri mposhi	336,181	168,091	50	151,281	45	16,809	5	0	0	0	0	2	16,809	5
	Luano	36,936	11,081	30	18,468	50	7,387	20	0	0	0	0	3	7,387	20
	Mumbwa	250,544	175,381	70	62,636	25	12,527	5	0	0	0	0	2	12,527	5
	Ngabwe	30,704	10,746	35	15,352	50	4,606	15	0	0	0	0	2	4,606	15
	Serenje	170,410	51,123	30	93,726	55	25,562	15	0	0	0	0	2	25,562	15
	Total	**1,476,386**	**836,124**	**57**	**551,682**	**37**	**88,580**	**6**	**0**	**0**	**0**	**0**		88,580	**6**
Copperbelt	Luanshya	225,604	90,242	40	124,082	55	11,280	5	0	0	0	0	2	11,280	5
	Lufwanyama	113,489	39,721	35	62,419	55	11,349	10	0	0	0	0	2	11,349	10
	Masaiti	150,145	97,594	65	45,044	30	7,507	5	0	0	0	0	2	7,507	5
	Mpongwe	134,999	40,500	30	80,999	60	13,500	10	0	0	0	0	2	13,500	10
	Ndola	652,327	391,396	60	228,314	35	32,616	5	0	0	0	0	2	32,616	5
	Total	**1,276,564**	**659,453**	**52**	**540,859**	**42**	**76,253**	**6**	**0**	**0**	**0**	**0**		76,253	**6**
Eastern	Chadiza	90,701	45,351	50	36,280	40	9,070	10	0	0	0	0	2	9,070	10
	Chama	150,185	45,056	30	75,093	50	30,037	20	0	0	0	0	3	30,037	20
	Chasefu	144,307	72,154	50	50,507	35	21,646	15	0	0	0	0	2	21,646	15
	Chipangali	177,696	62,194	35	97,733	55	17,770	10	0	0	0	0	2	17,770	10
	Chipata	339,354	118,774	35	186,645	55	33,935	10	0	0	0	0	2	33,935	10
	Kasenengwa	141,833	49,642	35	78,008	55	14,183	10	0	0	0	0	2	14,183	10
	Katete	232,720	139,632	60	69,816	30	23,272	10	0	0	0	0	2	23,272	10
	Lumezi	135,475	67,738	50	47,416	35	20,321	15	0	0	0	0	2	20,321	15
	Lundazi	188,390	103,615	55	56,517	30	28,259	15	0	0	0	0	2	28,259	15
	Lusangazi	95,818	28,745	30	47,909	50	19,164	20	0	0	0	0	3	19,164	20
	Mambwe	99,631	39,852	40	39,852	40	19,926	20	0	0	0	0	3	19,926	20
	Nyimba	122,913	49,165	40	55,311	45	18,437	15	0	0	0	0	2	18,437	15
	Petauke	252,651	75,795	30	138,958	55	37,898	15	0	0	0	0	2	37,898	15
	Sinda	216,399	86,560	40	108,200	50	21,640	10	0	0	0	0	2	21,640	10
	Vubwi	64,456	16,114	25	35,451	55	12,891	20	0	0	0	0	3	12,891	20
	Total	**2,452,529**	**1,000,384**	**41**	**1,123,696**	**46**	**328,449**	**13**	**0**	**0**	0	**0**		328,449	**13**
Luapula	Chiengi	165,126	66,050	40	74,307	45	24,769	15	0	0	0	0	2	24,769	15
	Kawambwa	128,833	45,092	35	64,417	50	19,325	15	0	0	0	0	2	19,325	15
	Lunga	34,700	10,410	30	17,350	50	6,940	20	0	0	0	0	3	6,940	20
	Mansa	264,295	105,718	40	132,148	50	26,430	10	0	0	0	0	2	26,430	10
	Nchelenge	220,907	77,317	35	110,454	50	33,136	15	0	0	0	0	2	33,136	15
	Samfya	107,538	43,015	40	43,015	40	21,508	20	0	0	0	0	3	21,508	20
	Total	**921,399**	**347,603**	**38**	**441,689**	**48**	**132,107**	**14**	**0**	**0**	0	**0**		132,107	**14**
Lusaka	Chilanga	154,765	69,644	45	77,383	50	7,738	5	0	0	0	0	2	7,738	5
	Chongwe	204,279	91,926	45	102,140	50	10,214	5	0	0	0	0	2	10,214	5
	Kafue	174,080	78,336	45	78,336	45	17,408	10	0	0	0	0	2	17,408	10
	Luangwa	35,134	14,054	40	14,054	40	7,027	20	0	0	0	0	3	7,027	20
	Lusaka	2,525,670	1,136,552	45	1,262,835	50	126,284	5	0	0	0	0	2	126,284	5
	Rufunsa	73,736	22,121	30	36,868	50	14,747	20	0	0	0	0	3	14,747	20
	Total	**3,167,664**	**1,412,632**	**45**	**1,571,615**	**50**	**183,418**	**6**	**0**	**0**	**0**	**0**		183,418	**6**

ANNEX I: Population Table for the Current Period: July - September 2022 (continued)

Province	District	Total population analysed	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5		Area Phase	Phase 3+	
			#people	%	#people	%	#people	%	#people	%	#people	%		#people	%
Muchiga	Chinsali	63,082	37,849	60	22,079	35	3,154	5	0	0	0	0	2	3,154	5
	Isoka	53,098	15,929	30	29,204	55	7,965	15	0	0	0	0	2	7,965	15
	Kanchibiya	59,921	20,972	35	29,961	50	8,988	15	0	0	0	0	2	8,988	15
	Lavushimanda	29,701	13,365	45	13,365	45	2,970	10	0	0	0	0	2	2,970	10
	Mafinga	48,863	14,659	30	24,432	50	9,773	20	0	0	0	0	3	9,773	20
	Nakonde	87,598	52,559	60	30,659	35	4,380	5	0	0	0	0	2	4,380	5
	Shiwangandu	43,464	17,386	40	21,732	50	4,346	10	0	0	0	0	2	4,346	10
	Total	**385,727**	**172,720**	**45**	**171,431**	**44**	**41,576**	**11**	**0**	**0**	0	**0**		41,576	**11**
North-Western	Chavuma	25,974	7,792	30	14,286	55	3,896	15	0	0	0	0	2	3,896	15
	Kabompo	32,516	24,387	75	6,503	20	1,626	5	0	0	0	0	2	1,626	5
	Kasempa	50,760	30,456	60	15,228	30	5,076	10	0	0	0	0	2	5,076	10
	Mwinilunga	76,390	38,195	50	30,556	40	7,639	10	0	0	0	0	2	7,639	10
	Solwezi	96,261	62,570	65	28,878	30	4,813	5	0	0	0	0	2	4,813	5
	Zambezi	59,078	20,677	35	29,539	50	8,862	15	0	0	0	0	2	8,862	15
	Total	**340,979**	**184,077**	**54**	**124,990**	**37**	**31,912**	**9**	**0**	**0**	0	**0**		31,912	**9**
Northern	Chilubi	59,695	23,878	40	26,863	45	8,954	15	0	0	0	0	2	8,954	15
	Kaputa	51,365	25,683	50	20,546	40	5,137	10	0	0	0	0	2	5,137	10
	Luwingu	38,424	17,291	45	17,291	45	3,842	10	0	0	0	0	2	3,842	10
	Mpulungu	71,165	28,466	40	35,583	50	7,117	10	0	0	0	0	2	7,117	10
	Mungwi	109,909	32,973	30	60,450	55	16,486	15	0	0	0	0	2	16,486	15
	Total	**330,558**	**128,290**	**39**	**160,732**	**49**	**41,536**	**13**	**0**	**0**	0	**0**		41,536	**13**
Southern	Chikankanta	86,606	43,303	50	34,642	40	8,661	10	0	0	0	0	2	8,661	10
	Chirundu	68,438	37,641	55	20,531	30	10,266	15	0	0	0	0	2	10,266	15
	Choma	261,172	91,410	35	143,645	55	26,117	10	0	0	0	0	2	26,117	10
	Gwembe	76,783	34,552	45	23,035	30	19,196	25	0	0	0	0	3	19,196	25
	Itezhi-tezhi	99,169	44,626	45	39,668	40	14,875	15	0	0	0	0	2	14,875	15
	Kalomo	272,762	81,829	30	163,657	60	27,276	10	0	0	0	0	2	27,276	10
	Kazungula	151,403	60,561	40	68,131	45	22,710	15	0	0	0	0	2	22,710	15
	Mazabuka	247,297	123,649	50	98,919	40	24,730	10	0	0	0	0	2	24,730	10
	Monze	277,363	124,813	45	124,813	45	27,736	10	0	0	0	0	2	27,736	10
	Namwala	148,696	44,609	30	81,783	55	22,304	15	0	0	0	0	2	22,304	15
	Pemba	97,117	48,559	50	33,991	35	14,568	15	0	0	0	0	2	14,568	15
	Siavonga	61,974	40,283	65	12,395	20	9,296	15	0	0	0	0	2	9,296	15
	Sinazongwe	146,887	73,444	50	44,066	30	29,377	20	0	0	0	0	3	29,377	20
	Zimba	101,007	30,302	30	55,554	55	15,151	15	0	0	0	0	2	15,151	15
	Total	**2,096,674**	**879,580**	**42**	**944,830**	**45**	**272,264**	**13**	**0**	**0**	0	**0**		272,264	**13**

ANNEX I: Population Table for the Current Period: July - September 2022 (continued)

Western	Kalabo/Sikongo	120,603	42,211	35	60,302	50	18,090	15	0	0	0	0	2	18,090	15
	Kaoma	149,292	52,252	35	82,111	55	14,929	10	0	0	0	0	2	14,929	10
	Lukulu	84,610	38,075	45	33,844	40	12,692	15	0	0	0	0	2	12,692	15
	Mitete	39,703	15,881	40	17,866	45	5,955	15	0	0	0	0	2	5,955	15
	Mongu	186,236	102,430	55	55,871	30	27,935	15	0	0	0	0	2	27,935	15
	Mulobezi	44,063	8,813	20	28,641	65	6,609	15	0	0	0	0	2	6,609	15
	Mwandi	36,218	7,244	20	23,542	65	5,433	15	0	0	0	0	2	5,433	15
	Nalolo	80,321	24,096	30	44,177	55	12,048	15	0	0	0	0	2	12,048	15
	Senanga	102,534	35,887	35	51,267	50	15,380	15	0	0	0	0	2	15,380	15
	Sesheke	63,388	19,016	30	34,863	55	9,508	15	0	0	0	0	2	9,508	15
	Shangombo	73,455	18,364	25	40,400	55	14,691	20	0	0	0	0	3	14,691	20
	Sioma	61,410	21,494	35	27,635	45	12,282	20	0	0	0	0	3	12,282	20
	Total	1,041,833	385,762	37	500,518	48	155,554	15	0	0	0	0		155,554	15
Grand Total		**13,490,313**	**6,006,624**	**45**	**6,132,042**	**45**	**1,351,647**	**10**	**0**	**0**	**0**	**0**		**1,351,647**	**10**

ANNEX II: Population Table for the Projected Period: Oct 2022 - March 2023

Province	District	Total population analysed	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5		Area Phase	Phase 3+	
			#people	%	#people	%	#people	%	#people	%	#people	%		#people	%
Central	Chibombo	288,458	216,344	75	57,692	20	14,423	5	0	0	0	0	2	14,423	5
	Chitambo	70,633	24,722	35	35,317	50	10,595	15	0	0	0	0	2	10,595	15
	Kabwe	292,520	131,634	45	131,634	45	29,252	10	0	0	0	0	2	29,252	10
	Kapiri mposhi	336,181	134,472	40	168,091	50	33,618	10	0	0	0	0	2	33,618	10
	Luano	36,936	7,387	20	22,162	60	7,387	20	0	0	0	0	3	7,387	20
	Mumbwa	250,544	162,854	65	75,163	30	12,527	5	0	0	0	0	2	12,527	5
	Ngabwe	30,704	9,211	30	15,352	50	6,141	20	0	0	0	0	3	6,141	20
	Serenje	170,410	51,123	30	85,205	50	34,082	20	0	0	0	0	3	34,082	20
	Total	**1,476,386**	**737,746**	**50**	**590,614**	**40**	**148,025**	**10**	**0**	**0**	**0**	**0**		148,025	**10**
Copperbelt	Luanshya	225,604	67,681	30	135,362	60	22,560	10	0	0	0	0	2	22,560	10
	Lufwanyama	113,489	34,047	30	62,419	55	17,023	15	0	0	0	0	2	17,023	15
	Masaiti	150,145	75,073	50	60,058	40	15,015	10	0	0	0	0	2	15,015	10
	Mpongwe	134,999	27,000	20	87,749	65	20,250	15	0	0	0	0	2	20,250	15
	Ndola	652,327	326,164	50	293,547	45	32,616	5	0	0	0	0	2	32,616	5
	Total	**1,276,564**	**529,964**	**42**	**639,136**	**50**	**107,464**	**8**	**0**	**0**	**0**	**0**		107,464	**8**
Eastern	Chadiza	90,701	36,280	40	40,815	45	13,605	15	0	0	0	0	2	13,605	15
	Chama	150,185	22,528	15	97,620	65	30,037	20	0	0	0	0	3	30,037	20
	Chasefu	144,307	57,723	40	57,723	40	28,861	20	0	0	0	0	3	28,861	20
	Chipangali	177,696	53,309	30	97,733	55	26,654	15	0	0	0	0	2	26,654	15
	Chipata	339,354	101,806	30	186,645	55	50,903	15	0	0	0	0	2	50,903	15
	Kasenengwa	141,833	42,550	30	78,008	55	21,275	15	0	0	0	0	2	21,275	15
	Katete	232,720	93,088	40	104,724	45	34,908	15	0	0	0	0	2	34,908	15
	Lumezi	135,475	54,190	40	54,190	40	27,095	20	0	0	0	0	3	27,095	20
	Lundazi	188,390	94,195	50	56,517	30	37,678	20	0	0	0	0	3	37,678	20
	Lusangazi	95,818	28,745	30	47,909	50	19,164	20	0	0	0	0	3	19,164	20
	Mambwe	99,631	29,889	30	49,816	50	19,926	20	0	0	0	0	3	19,926	20
	Nyimba	122,913	43,020	35	55,311	45	24,583	20	0	0	0	0	3	24,583	20
	Petauke	252,651	75,795	30	126,326	50	50,530	20	0	0	0	0	3	50,530	20
	Sinda	216,399	75,740	35	108,200	50	32,460	15	0	0	0	0	2	32,460	15
	Vubwi	64,456	12,891	20	38,674	60	12,891	20	0	0	0	0	3	12,891	20
	Total	**2,452,529**	**821,749**	**34**	**1,200,209**	**49**	**430,571**	**18**	**0**	**0**	0	**0**		430,571	**18**
Luapula	Chiengi	165,126	49,538	30	82,563	50	33,025	20	0	0	0	0	3	33,025	20
	Kawambwa	128,833	38,650	30	64,417	50	25,767	20	0	0	0	0	3	25,767	20
	Lunga	34,700	6,940	20	17,350	50	10,410	30	0	0	0	0	3	10,410	30
	Mansa	264,295	92,503	35	132,148	50	39,644	15	0	0	0	0	2	39,644	15
	Nchelenge	220,907	66,272	30	110,454	50	44,181	20	0	0	0	0	3	44,181	20
	Samfya	107,538	37,638	35	48,392	45	21,508	20	0	0	0	0	3	21,508	20
	Total	**921,399**	**291,541**	**32**	**455,323**	**49**	**174,535**	**19**	**0**	**0**	0	**0**		174,535	**19**
Lusaka	Chilanga	154,765	54,168	35	85,121	55	15,477	10	0	0	0	0	2	15,477	10
	Chongwe	204,279	81,712	40	91,926	45	30,642	15	0	0	0	0	2	30,642	15
	Kafue	174,080	60,928	35	87,040	50	26,112	15	0	0	0	0	2	26,112	15
	Luangwa	35,134	12,297	35	15,810	45	7,027	20	0	0	0	0	3	7,027	20
	Lusaka	2,525,670	1,010,268	40	1,262,835	50	252,567	10	0	0	0	0	2	252,567	10
	Rufunsa	73,736	18,434	25	40,555	55	14,747	20	0	0	0	0	3	14,747	20
	Total	**3,167,664**	**1,237,806**	**39**	**1,583,286**	**50**	**346,571**	**11**	**0**	**0**	**0**	**0**		**346,571**	**11**

ANNEX II: Population Table for the Projected Period: Oct 2022 - March 2023 (continued)

Province	District	Total population analysed	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5		Area Phase	Phase 3+	
			#people	%	#people	%	#people	%	#people	%	#people	%		#people	%
Muchiga	Chinsali	63,082	31,541	50	25,233	40	6,308	10	0	0	0	0	2	6,308	10
	Isoka	53,098	13,275	25	29,204	55	10,620	20	0	0	0	0	3	10,620	20
	Kanchibiya	59,921	20,972	35	26,964	45	11,984	20	0	0	0	0	3	11,984	20
	Lavushimanda	29,701	10,395	35	13,365	45	5,940	20	0	0	0	0	3	5,940	20
	Mafinga	48,863	9,773	20	29,318	60	9,773	20	0	0	0	0	3	9,773	20
	Nakonde	87,598	43,799	50	35,039	40	8,760	10	0	0	0	0	2	8,760	10
	Shiwangandu	43,464	15,212	35	21,732	50	6,520	15	0	0	0	0	2	6,520	15
	Total	**385,727**	**144,967**	**38**	**180,856**	**47**	**59,904**	**16**	**0**	**0**	0	**0**		59,904	**16**
North-Western	Chavuma	25,974	6,494	25	14,286	55	5,195	20	0	0	0	0	3	5,195	20
	Kabompo	32,516	21,135	65	8,129	25	3,252	10	0	0	0	0	2	3,252	10
	Kasempa	50,760	27,918	55	15,228	30	7,614	15	0	0	0	0	2	7,614	15
	Mwinilunga	76,390	42,015	55	22,917	30	11,459	15	0	0	0	0	2	11,459	15
	Solwezi	96,261	57,757	60	28,878	30	9,626	10	0	0	0	0	2	9,626	10
	Zambezi	59,078	14,770	25	32,493	55	11,816	20	0	0	0	0	3	11,816	20
	Total	**340,979**	**170,088**	**50**	**121,931**	**36**	**48,961**	**14**	**0**	**0**	0	**0**		48,961	**14**
Northern	Chilubi	59,695	20,893	35	26,863	45	11,939	20	0	0	0	0	3	11,939	20
	Kaputa	51,365	17,978	35	25,683	50	7,705	15	0	0	0	0	2	7,705	15
	Luwingu	38,424	13,448	35	19,212	50	5,764	15	0	0	0	0	2	5,764	15
	Mpulungu	71,165	24,908	35	35,583	50	10,675	15	0	0	0	0	2	10,675	**15**
	Mungwi	109,909	27,477	25	60,450	55	21,982	20	0	0	0	0	3	21,982	20
	Total	**330,558**	**104,704**	**32**	**167,790**	**51**	**58,064**	**18**	**0**	**0**	0	**0**		58,064	**18**
Southern	Chikankanta	86,606	30,312	35	43,303	50	12,991	15	0	0	0	0	2	12,991	15
	Chirundu	68,438	30,797	45	23,953	35	13,688	20	0	0	0	0	3	13,688	20
	Choma	261,172	52,234	20	156,703	60	52,234	20	0	0	0	0	3	52,234	20
	Gwembe	76,783	30,713	40	26,874	35	19,196	25	0	0	0	0	3	19,196	25
	Itezhi-tezhi	99,169	39,668	40	39,668	40	19,834	20	0	0	0	0	3	19,834	20
	Kalomo	272,762	54,552	20	177,295	65	40,914	15	0	0	0	0	2	40,914	15
	Kazungula	151,403	45,421	30	75,702	50	30,281	20	0	0	0	0	3	30,281	20
	Mazabuka	247,297	86,554	35	123,649	50	37,095	15	0	0	0	0	2	37,095	15
	Monze	277,363	83,209	30	152,550	55	41,604	15	0	0	0	0	2	41,604	15
	Namwala	148,696	29,739	20	89,218	60	29,739	20	0	0	0	0	3	29,739	20
	Pemba	97,117	33,991	35	43,703	45	19,423	20	0	0	0	0	3	19,423	20
	Siavonga	61,974	34,086	55	15,494	25	12,395	20	0	0	0	0	3	12,395	20
	Sinazongwe	146,887	51,410	35	66,099	45	29,377	20	0	0	0	0	3	29,377	20
	Zimba	101,007	20,201	20	60,604	60	20,201	20	0	0	0	0	3	20,201	20
	Total	**2,096,674**	**622,888**	**30**	**1,094,813**	**52**	**378,973**	**18**	**0**	**0**	0	**0**		378,973	**18**

ANNEX II: Population Table for the Projected Period: Oct 2022 - March 2023 (continued)

	Kalabo/Sikongo	120,603	24,121	20	72,362	60	24,121	20	0	0	0	0	3	24,121	20
	Kaoma	149,292	44,788	30	74,646	50	29,858	20	0	0	0	0	3	29,858	20
	Lukulu	84,610	25,383	30	42,305	50	16,922	20	0	0	0	0	3	16,922	20
	Mitete	39,703	11,911	30	19,852	50	7,941	20	0	0	0	0	3	7,941	20
	Mongu	186,236	55,871	30	102,430	55	27,935	15	0	0	0	0	2	27,935	15
	Mulobezi	44,063	6,609	15	28,641	65	8,813	20	0	0	0	0	3	8,813	20
Western	Mwandi	36,218	7,244	20	21,731	60	7,244	20	0	0	0	0	3	7,244	20
	Nalolo	80,321	20,080	25	44,177	55	16,064	20	0	0	0	0	3	16,064	20
	Senanga	102,534	30,760	30	51,267	50	20,507	20	0	0	0	0	3	20,507	20
	Sesheke	63,388	15,847	25	34,863	55	12,678	20	0	0	0	0	3	12,678	20
	Shangombo	73,455	14,691	20	44,073	60	14,691	20	0	0	0	0	3	14,691	20
	Sioma	61,410	18,423	30	30,705	50	12,282	20	0	0	0	0	3	12,282	20
	Total	**1,041,833**	**275,727**	**26**	**567,051**	**54**	**199,055**	**19**	**0**	**0**	**0**	**0**		**199,055**	**19**
Grand Total		**13,490,313**	**4,937,182**	**37**	**6,601,009**	**49**	**1,952,123**	**14**	**0**	**0**	**0**	**0**		**1,952,123**	**14**