

### CRISIS OVERVIEW

On 29 February 2024, Zambia declared a national emergency as a result of a prolonged drought. As at 1 March, the drought was affecting 84 of the 116 districts across Zambia's Central, Copperbelt, Eastern, Lusaka, Northwestern, Southern, and Western provinces (Euronews 01/03/2024; Africanews 01/03/2024). Although the summer rainy season typically occurs from November–April, as at 29 February, precipitation had been below average throughout the country since mid-January, and some areas had received no rain for over five weeks (AJ 29/02/2024). Climate change and El Niño are driving such drought conditions (Oxfam 06/03/2024; AJ 29/02/2024).

As at 5 March, the lack of rainwater had destroyed one million hectares of maize (almost half the country's maize under cultivation) (UN RC Zambia/UNICEF 04/03/2024). As at 6 March, over six million people from farming households were at risk of acute food shortages and malnutrition until the next planting season in December. According to the latest IPC figures, over 23% of the population could face Crisis (IPC Phase 3) or worse food insecurity levels between October 2023 and March 2024 (IPC 13/11/2023). As at 6 March, the need for urgent support, particularly for food and clean water, had increased (Oxfam 06/03/2024).

The drought has also affected the country's electricity supply. Zambia depends heavily on hydroelectric power, but low water levels in crucial dams such as Itzhi-Tezhi, Kafue Gorge, and Kariba have decreased power generation, leading to more frequent power outages. To address this, the Government, on 29 February, has announced plans to import and ration electricity, prioritising support for the economy, notably the mining industry (LT 16/02/2024; Barron's 29/02/2024; Tridge 23/02/2024).

The continuing drought coincides with Zambia's efforts to address the worst cholera outbreak in southern Africa, alongside another dry spell and lingering impacts of the flooding in January 2023 (Oxfam 06/03/2024; WHO 09/02/2023). Since October 2023, the country has been experiencing the worst cholera outbreak in two decades, affecting all of Zambia's ten provinces and recording over 21,000 cases and over 700 deaths as at 8 March 2024. On 12 February, the Ministry of Education reopened schools after the cholera outbreak forced a five-week closure, marking the end of learning disruption for nearly 4.3 million children across the country (UNICEF 07/03/2024).

### CRISIS IMPACTS

#### Food security and nutrition

According to the latest IPC analysis, over 20% of Zambia's population was projected to face IPC 3 or worse food insecurity levels between October 2023 and March 2024. With reduced rainfall and crop failures, many households are struggling to produce or access adequate food, leading to widespread food shortages and increased vulnerability to malnutrition among the population, particularly in rural areas where agriculture is the primary livelihood source (Oxfam 06/03/2024; AJ 29/02/2024). The drought, which had destroyed over one million hectares of maize as at 5 March, has significantly reduced crop yields, particularly of maize, the country's staple food (Times of Zambia 28/02/2024). This has increased food prices across all Zambian provinces and decreased the availability of affordable food items, worsening food insecurity for millions of people across the country (FEWS NET 08/11/2023 and 12/03/2024).

The drought has aggravated the nutritional status of many Zambians, particularly children and women in rural areas and other at-risk populations. Children experiencing food insecurity are especially at risk, as malnutrition weakens their immune system and heightens their susceptibility to illness (WHO 01/03/2024; Govt. Zambia/SADC 31/07/2019). The reduced availability of and access to diverse food as a result of the drought are expected to heighten social vulnerability levels and worsen malnutrition.

#### Livelihoods and economic growth

Changing climate patterns affect Zambia's economic performance, primarily because of the country's heavy dependence on sectors particularly sensitive to climate conditions, such as agriculture and hydropower (IFPRI 10/11/2023). Smallholder farmers cultivate 60% of maize crops throughout the country, over 90% of which are rain-fed (Ngoma et al. 27/08/2021). The current drought has devastated nearly half of Zambia's maize crops, a crucial staple food, threatening both food availability and the incomes of a large proportion of the population (AJ 29/02/2024). Around 80% of the communities in Southern province, regarded as Zambia's food basket, depend on subsistence farming and animal husbandry as their main livelihood source (IFRC 19/12/2023).

With over 22% of Zambia's employed workforce reliant on agriculture for income, the impact expands beyond food security, as lower harvests and reduced revenue will likely limit income-earning opportunities for poorer families in the 2024–2025 agricultural season, beginning in October (ZSA/MLSS 06/2023; FEWS NET 08/11/2023). During the 2015–2016 El Niño event, rural households reported a 20% decrease in maize yields and an up to 37% reduction in income (FAO 02/2019).

The drought is also expected to affect the energy sector, which plays a critical role in supporting Zambia's copper industry. Hydropower provides 85% of the country's installed capacity (ITA 08/07/2022). In 2024, the energy sector was projected to face a deficit of nearly 450MW, potentially exceeding 500MW. As a result, the Government plans to import and ration electricity to sustain the economy and industries, particularly the heavily reliant mining industry (BBC accessed 15/03/2024; Reuters 29/02/2024). The combined effects of power rationing and drought create a significant challenge for the Zambian copper industry, the second largest in Africa, which accounts for 11% of Zambia's GDP. Power limitations and water scarcity hamper production, potentially leading to job losses, decreased revenue, and a negative effect on the country's overall copper output (ZambiaInvest accessed 15/03/2024; IFPRI 10/11/2023). By 2023, diminished rainfall had led to a 60–70% decline in productivity within the manufacturing sector, which contributed an average of 7% to GDP from 2010–2017 (UNU-WIDER et al. 09/2020).

Zambia has been coping with debt for decades, dating back to the 1970s. After a brief respite in the early 2000s, the country resumed borrowing, notably from China, primarily for infrastructural ventures (Kabemba and Kabwe 21/02/2024; FP 07/09/2022). The convergence of borrowing and the economic downturn precipitated by the COVID-19 pandemic culminated in Zambia defaulting on its debt obligations in 2020. The debt burden has placed immense pressure on Zambia's financial resources. With a substantial portion of government revenue allocated to servicing interest payments, funds for vital sectors – such as healthcare, education, and social welfare – have decreased (Africanews 13/10/2023; MOFNP et al. 25/09/2022).

## High food prices

In Zambia, maize grain and maize meal are vital food commodities and key food security indicators. According to a January 2024 FEWS NET market assessment of provincial centres, there has been a noticeable uptick in maize prices nationwide. As at 12 March, in areas of high production, such as Choma in Southern province and Chipata in Eastern province, maize prices had risen by over 30% compared to the same period in 2024 and were nearly double the five-year average (FEWS NET 12/03/2024).

Staple food prices are increasing seasonally because people's stock from their own production is on the decline and demand is increasing, as households are more reliant on market purchases for food. Between the end of the 2021–2022 lean season in March and

the start of the 2022–2023 consumption season in April, the price of maize grain increased faster seasonally than the previous year. This increase resulted from a 25% decrease in maize production, from 3,620,244MT in 2021–2022 to 2,706,243MT during the 2022–2023 season (IPC 30/08/2022). In 2023, with the Russia-Ukraine war stifling supply chains, leading to pressure on food inflation and increasing fuel prices, food prices remained higher than the five-year average (IPC 13/11/2023).

The estimated national-level household food expenditure required to meet basic food needs showed that, in May 2023, the average cost of a standard food basket was ZMW 1,257 (US 68.70), representing a 6.9% increase compared to the first quarter of 2023. In June, the food expenditure value stood at ZMW 1,253.76 (US 64.60), reflecting a 6.9% change, primarily influenced by fluctuations in maize grain prices (WFP 08/08/2023).

## ANTICIPATED IMPACTS

Seasonal forecasts anticipate below-average precipitation to continue in the south throughout March–June 2024. Temperatures are also expected to remain above average across the entire country, potentially worsening the continuing drought and leading to unfavourable conditions for wheat planting, which typically occurs between May–June (Copernicus accessed 12/03/2024; WMO accessed 12/03/2024; USDA accessed 12/03/2024).

The continuing drought has affected access to food, worsened food security, and led to increasing cases of malnutrition. These impacts are projected to extend to early 2025. Malnourished individuals are more susceptible to infection and are at higher risk of developing complications from illness (Morales et al. 19/12/2023). The heightened demand for healthcare services, coupled with the risk of malnutrition and disease, is expected to further strain the healthcare system, potentially leading to increased mortality rates.

2024's expected below-average harvests will lead to an unusual rise in imported maize to fulfil consumer demand in the 2024–2025 period, further escalating already elevated maize prices. Food prices in southern African countries, including Zambia, are anticipated to surpass both 2023 prices and the five-year average. The combination of high food costs and restricted income access is likely to keep household purchasing power low across the region (FEWS NET 08/11/2023).

In the peak of the 2024–2025 lean season in early 2025, food assistance requirements are projected to escalate beyond the levels seen in the first quarter of 2024. Impoverished households in the most severely affected areas are expected to face significant food consumption deficits, signalling Emergency (IPC Phase 4) food insecurity levels if humanitarian food aid is not provided. This projection hails from an anticipated loss of nearly 50% of maize yields and a historically below-average harvest (OCHA/RIASCO 12/03/2024; GEOGLAM Crop Monitor 07/03/2024).

## DRIVERS OF THE CRISIS

### El Niño

El Niño, which typically triggers drought, erratic rainfall, flooding, and high temperatures in southern Africa, has a significant impact on rainfall patterns in Zambia (MGEE 10/2023; UNICEF 11/2023). During El Niño, the country tends to experience substantial reductions in rainfall and above-average temperatures between January–April (FEWS NET accessed 12/03/2024; Met Office accessed 12/03/2024). Alongside the severe impacts on maize production, El Niño also increases disease and pest outbreaks, including among livestock and crops (OCHA/RIASCO 12/03/2024).

### Climate change

High rainfall variability typically characterises Zambia’s climate. It triggers an alternation of flooding and dry spells, both of which are among the main food insecurity drivers in the country (Silengo 15/09/2022; IFRC 11/11/2020). In the past three decades, as a result of climate change, rainfall variability has increased, leading to more frequent floods, dry spells, and a higher incidence of pest infestations (IFPRI 10/11/2023). Climate change is also projected to reduce precipitation and significantly increase average temperatures, which may have long-term impacts on maize cultivation (Ngoma et al. 27/08/2021). Between 1971–2005, annual rainfall decreased by 6% compared to the preceding 30-year period. Notably, shorter rainy seasons were observed in southwestern Zambia. In the last two decades, the Agro-Ecological Region I (covering the southern parts of Central, Lusaka, and Southern provinces) experienced significantly lower, unpredictable, and unevenly distributed rainfall (Ngoma et al. 27/08/2021; Govt. Zambia 09/2020). On the 2023 INFORM Risk Index, Zambia scored high on drought frequency (7.6/10) and lack of coping capacity (6.3/10), mainly from limited institutional disaster risk reduction and response capacities, high socioeconomic vulnerability levels (including one of the highest multidimensional poverty rates), poor infrastructure, and limited healthcare access (IASC 11/07/2023).

### 2023 flooding

In January 2023, Zambia experienced its most severe floods in 50 years, affecting nine of its ten provinces and over 400,000 people. Southern province – one of the largest maize producers in the country – experienced the most severe impact (IFRC 19/12/2023; WFP 22/01/2024). These floods occurred at a time when the country, including flood-affected

provinces, was already experiencing food insecurity. As a result of the floods, which destroyed an unreported amount of farmland, over 3.8 million more people faced food insecurity as at 8 August (WFP 08/08/2023).

As floods destroy crops and disturb planting cycles, they present a significant threat to food security. Disruptions to planting cycles occur when flooded land remains too wet or inaccessible for the planting of new crops, leading to increased food insecurity.

## COMPOUNDING FACTORS

### Cholera outbreak

The current drought is occurring at a time when the country is still managing the worst cholera outbreak in southern Africa (Oxfam 06/03/2024). Zambia experienced three cholera outbreaks in different regions in 2023, with almost 700 confirmed cases and 14 deaths (Sylvia Masebo 19/10/2023). Between October 2023 and 8 March 2024, all ten Zambian provinces reported cholera cases, and seven provinces had confirmed cholera outbreaks. 61 out of 116 districts had confirmed local cholera transmission. During this period, the country recorded over 21,000 cases and more than 700 deaths. The current cholera season is expected to continue until June (UNICEF 07/03/2024; Oxfam 06/03/2024). The epicentre of the outbreak is concentrated in the unplanned high-density areas of Central, Copperbelt, and Lusaka provinces. Heightened risks are observed in the fishing camps and districts of Central and Southern provinces, which are recognised as cholera hotspots and are currently experiencing below-average rainfall (WHO 20/01/2024; UNICEF 07/03/2024).

While the Government had successfully reduced daily reported cases by 50% as at 6 March, the potential water shortage resulting from low rainfall could worsen the current outbreak. Limited access to clean water may compel people to resort to using unsafe sources for domestic purposes (UNICEF 07/03/2024). The worldwide shortage of oral cholera vaccines has also led to the prolonged active spread of the disease. In 2023, 14 countries requested a total of over 76 million doses of the vaccine, but only 38 million were available, and stockpiles were depleted by the start of 2024. Despite WHO’s directive to administer a single dose instead of the customary two, as a measure address the global shortage of oral vaccines, the anticipated above-average rainfall and warmer temperatures, particularly in southern Africa, could heighten disease transmission (The Conversation 12/03/2024; MSF 23/02/2024).

## Socioeconomic vulnerability

Over half of Zambia's population grapples with extreme poverty, living on less than USD 1.90 per day (CARE 03/02/2023; WFP 06/11/2023; WB 04/2020). Poverty is particularly harsh in rural areas, where communities rely heavily on rain-fed agriculture for their livelihood. In 2022, the rural poverty rate was 78% (ZSA 09/2023). Dependence on unpredictable weather presents a constant threat, as drought and floods can devastate harvests and disrupt food availability (PreventionWeb 21/02/2021).

Even when Zambia has sufficient food nationally, distribution networks often fail to reach isolated or marginalised communities, creating pockets of food insecurity despite a national surplus. Dependence on rain-fed agriculture makes Zambian farmers susceptible to climate shocks such as drought and floods, affecting harvests and food availability (PreventionWeb 21/02/2021). The national overreliance on maize as a staple crop limits dietary diversity and makes Zambians more vulnerable to price fluctuations, further jeopardising food security, particularly for the most impoverished (IHED 22/08/2019; D+C 05/11/2020).

In 2023, Zambia ranked 113th out of 125 countries on the Global Hunger Index, with malnutrition rates among the highest in the world (GHI accessed 07/03/2024). Prior to the national emergency declared on 29 February 2024, approximately 48% of the population (17.4 million people) were unable to meet minimum calorie requirements. According to the latest National Demographic Health Survey conducted in 2018, only 13% of children aged 6–23 months received a minimum acceptable diet. Urban children were more likely to receive a minimum acceptable diet compared to rural children, with rates of 18% and 9%, respectively, in 2018 (Oxfam 06/03/2024; ZSA et al. 01/2020). Overall, 4% of children under five and 7% of children aged nine to ten months faced acute malnutrition in 2019. Acute malnutrition was highest among children in Muchinga province, at 8%, and lowest among children in Eastern, Northwestern, and Southern provinces (at 2% each). As at 26 February 2024, however, these three provinces were also among those most affected by the drought, which is expected to contribute to an increase in acute malnutrition among children (ZSA et al. 01/2020; IFRC 26/02/2024).

In the national Demographic and Health Survey conducted between July 2018 to January 2019, chronic malnutrition was most prevalent (46%) among children aged 18–23 months and least prevalent (19%) among those under six months. Children in rural areas were more prone to chronic malnutrition (36%) than their urban counterparts (32%). At the provincial level, Northern province had the highest percentage of chronically malnourished children (46%), followed by Luapula province (45%). Conversely, chronic malnutrition levels were lowest in Southern and Western provinces (at 29% each) (ZSA et al. 01/2020).

In 2020, Zambia also faced an additional challenge to food security: a high prevalence of HIV cases, particularly among women aged 15–49 (14.2%), as compared to 7.5% for men.

While there have been slight declines in recent years, the rates remain concerning. HIV and malnutrition can create a vicious cycle, reducing an infected person's food intake, increasing energy needs, and hindering nutrient absorption. Malnutrition can also accelerate HIV progression, weaken the immune system, and impair the body's ability to recover from illness (Duggal et al. 02/01/2012; ZSA et al. 01/2020; UNAIDS 2020).

## HUMANITARIAN RESPONSE

### Humanitarian access constraints

Zambia's diverse landscape, which includes remote areas, presents logistical challenges for humanitarian organisations seeking to provide assistance. Deficient infrastructure, such as poorly maintained roads and insufficient transportation networks, can impede the prompt delivery of humanitarian assistance to affected regions. In rural Zambia in 2017, only 17% of the population resided within 2km of an all-season road, approximately half the African average. Consequently, around 7.5 million rural residents remained disconnected from the country's road network (WB 04/05/2017 and 03/2010). Recurrent high fuel prices might also increase transportation costs for humanitarian assistance, further reducing access to people in need (Phoenix FM 10/03/2023).

In 2017, Zambia implemented stricter regulations on foreign workers, reducing their permitted stay from two years to six months. This change has affected the operations of humanitarian organisations, as staff must frequently return to the embassy for visa renewal (BAL 06/06/2017). NGOs in Zambia also face other costly requirements, such as the need to re-register every five years (ICNL 06/2011).

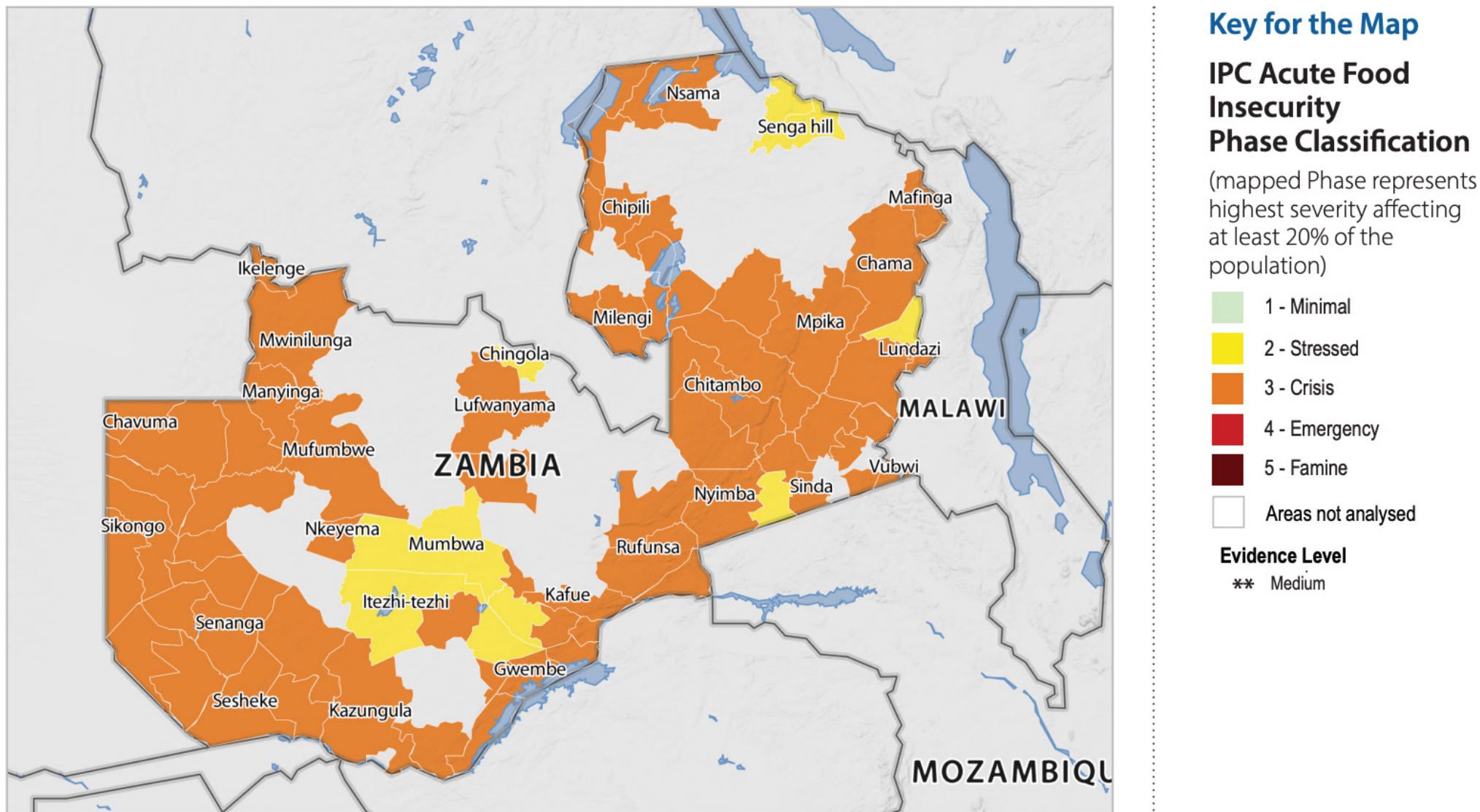
### Funding and response capacity

Between October 2023 and March 2024, the Disaster Management and Mitigation Unit under the Ministry of Community Development and Social Services aided around two million individuals with relief food (LT 06/03/2024).

In his national address on 29 February 2024, President Hakainde Hichilema announced adjustments to the 2024 national budget to allocate more resources to mitigating the impacts of the drought (Zambia Monitor 10/03/2024; AJ 29/02/2024).

As at December 2023, some humanitarian organisations were facing funding shortages. UNHCR, for instance, reported having only 43% of the funds it required (UNHCR 04/03/2024).

**FIGURE 1. IPC FOOD INSECURITY PROJECTIONS BETWEEN OCTOBER 2023 AND MARCH 2024**



Source: IPC (13/11/2023)