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# Food Security in South Africa in 2019, 2022 and 2023: Evidence from the General Household Survey

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### Preface

This report is derived from findings obtained through the application of the Food Insecurity Experience Scale (FIES) developed by the Food and Agriculture Organization (FAO), which assesses the extent of food insecurity in a country.

The prevalence of food insecurity is measured by two indicators: moderate to severe food insecurity, and severe food insecurity. These indicators are analysed geographically and demographically by household composition and size, employment status of household members, involvement of the household in agricultural activities, main reasons for being involved in agriculture, the main income source, as well as the highest level of educational attained by the household head.

-luleke

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### **Definition of Terms**

**Chronic food insecurity** is defined as situations where individuals are unable to meet their basic needs for an extended period of time.

**Complex households** refer to households that contain at least one non-related person.

**Dwelling unit** is any structure or part of a structure or group of structures occupied, or intended for occupation by one household. Examples include houses, townhouses, flats or apartments, huts as well as informal dwellings such as shacks, etc. An arrangement where a group of structures, huts or rondavels make up a dwelling unit is common in some rural areas. A structure which is vacant and/or under construction, but which can be lived in at the time of the survey, counts as a dwelling unit.

**Extended households** are defined as a nuclear core combined with other family members such as parents or siblings.

**Food insecurity** exists when people are undernourished due to the physical unavailability of food, their lack of social or economic access, and/or inadequate food utilisation.

**Food security** is defined as a state which exists when all people, at all times, have physical and economic access to sufficient, safe, nutritious food to meet their dietary needs and food preferences for an active life.

**Highest level of education** is the highest grade completed at school or the highest post-school qualification fully completed or obtained.

**Household head** is a person recognised as such by the household, usually the main decision-maker or the person who owns or rents the dwelling, or the person who is the main breadwinner.

**Household** is a group of persons who live together and provide themselves jointly with food and/or other essentials for living, or a single person who lives alone. This should have occurred for at least four nights in a week on average during the four weeks prior to the survey interview.

**Moderate food insecurity** is generally associated with the inability to regularly eat healthy, nutritious diets and will typically eat low-quality diets and might have been forced to also reduce the quantity of food they would normally eat.

Nuclear households are defined as couples or one or more parent(s) living with children.

**Severe food insecurity** is more strongly related to insufficient quantity of food and thus closely associated with hunger, and is experienced by people who have typically run out of food and, at worst, have gone a day (or days) without eating.

Single households refer to households that consist of one person.

**Transitory food insecurity** is brief and temporary, arising when there is a sudden decrease in the capability to produce or obtain sufficient food.

### Abbreviations

FAO	Food and Agriculture Organization
FIES	Food Insecurity Experience Scale
GHS	General Household Survey
НН	Household
IFAD	International Fund for Agricultural Development
MS	Master Sample
Stats SA	Statistics South Africa
UN	United Nations
UNICEF	United Nations Children's Emergency Fund
WFP	World Food Programme
WHO	World Health Organization

### 1. Introduction

Food security has been a significant issue for many countries, including South Africa, where many households face challenges in accessing safe, nutritious food. As stated by the 2024 publication of the State of Food Security and Nutrition in the World, roughly 28,9% of the world population (2,33 billion people) were suffering from moderate to severe food insecurity, which means they did not have consistent access to sufficient food (FAO, IFAD, UNICEF, WFP and WHO, 2024). Food insecurity affects societies around the world, even in years of good harvests. This confirms that food availability does not automatically mean food and nutrition security. Even when food is available, it may not be accessible to everyone who needs it, and sometimes the food that is available and accessible may not provide the nutrients needed for physical growth and development.

Food security is a multi-dimensional phenomenon which is difficult to define and understand. The concept of food security has undergone various changes over the years, which led the 1996 World Food Summit to define the phenomenon as follows: "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets the daily needs and preferences for an active and healthy life." (FAO 1996). This widely accepted World Food Summit (1996) definition reinforces the multidimensional nature of food security, and four main dimensions of food security can be identified from this definition: availability; access; the utilisation of food; and stability of both availability and access to food.

Food availability pertains to the supply aspect of food security and is influenced by factors such as the volume of food production, inventory levels, and trade activities. Food must be available in sufficient quantities and be of the required quality. In addition, increased production does not translate into food security, meaning that food availability is important for attaining food security, but it is not the only dimension (FAO 2008). The availability of food does not always imply that households can actually access and utilise food. In terms of food access, the availability of food on a national scale does not necessarily ensure food security at the household level. Access to food consists of two key components, which are physical accessibility and financial accessibility. Food accessibility ensures that individuals can obtain food both physically and financially through a variety of methods such as growing, buying, trading as well as food assistance. Thus, the idea of food accessibility encompasses both the food's availability and the capacity to obtain it once it becomes available.

Food utilisation describes how households ultimately use the food after it has been acquired. Generally speaking, it refers to how the body maximises the different nutrients found in food. Health education and health care services, nutrition, sanitation, and the availability of safe water all have a significant impact on this dimension of food security. Even if our food consumption is sufficient today, we are still regarded as food insecure if we have insufficient access to food on an irregular basis, which could threaten our nutritional health (FAO 2008). Unfavourable weather patterns, political unrest, or economic issues (joblessness, increasing food costs) can have an impact on our food security status. Consequently, it is crucial to effectively manage these stresses and negative shocks to maintain food security. Another crucial requirement is that all the other dimensions must remain stable because utilisation can only occur if food is accessible, which in turn depends on food being available.

Food insecurity is defined as the "situation when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development and an active and healthy life." (FAO 2008). Ritchie (2023) indicates that two primary types of food insecurity have been recognized to analyse the duration of the food insecurity issue: chronic food insecurity and transitory food insecurity.

When examining food insecurity, it is important not only to consider how long individuals have been facing the issue, but also to assess the intensity or severity of the impact that the identified problem has on their overall food security condition. This report presents the prevalence rates of moderate to severe and severe food insecurity in South Africa for the years 2019, 2022, and 2023, utilising data obtained from the General Household Survey (GHS) for those specific years.

### 2. Purpose and outline of the report

In 2019, Statistics South Africa released its first report on food security utilising the FIES to provide insight into the nation's food security situation. This report is the most recent edition in this series discussing food insecurity in South Africa for 2019, 2022, and 2023. The report offers details on the geography of households impacted by food insecurity, including province, metropolitan area, and type of settlement, along with information about their demographic features. Moreover, the report analyses various aspects that could influence the food security status of households, such as participation in agricultural activities, being recipients of social grants, size of the household, household composition, main reason for being involved in agriculture, the main income source, and the educational level of the household head.

The report is organized into six sections. The introduction (Section 1) and the purpose of the report (Section 2) offer an overview of the report's context. Section 3 outlines the methodology employed by the FIES module to determine the prevalence rates of food insecurity, along with the data sources utilised throughout this process. Section 4 provides the results of the FIES analysis across a disaggregation of variables, results for selected female-headed households, as well as the results for factors that could influence the experience of food insecurity. A summary of the key findings highlighting what has been discovered is presented in Section 5 and the report concludes with Section 6.

### 3. Methodology and Data Sources

#### 3.1 Methodology

In order to categorise households based on their level of food security, this report uses the Food Insecurity Experience Scale (FIES) methodology which is an analytical technique created by the Food and Agriculture Organization (FAO). The FIES assesses the extent of food insecurity, which is interpreted as a hidden characteristic related to the inability to access the necessary food for maintaining a healthy, active, and dignified life. The measure relies on conditions and actions reported in the responses to the eight questions shown in Table 3.1, resulting from the inability to access food due to a lack of money or other resources.

Table 3.1.1: FIES questions framed for households using a reference period of 12 months

FIES QUESTIONS	LABEL	RESPONSE OPTIONS
(Q1) During the last 12 MONTHS, was there a time when you or others in your household worried about not having enough food to eat because of a lack of money or other resources?	FSD_WORRIED	YES, NO, DO NOT KNOW, REFUSED
(Q2) During the last 12 MONTHS, was there a time when you or others in your household were unable to eat healthy and nutritious food because of a lack of money or other resources?	FSD_HEALTHY	YES, NO, DO NOT KNOW, REFUSED
Q3) During the last 12 MONTHS, was there a time when you or others in your nousehold ate only a few kinds of foods because of a lack of money or other resources?	FSD_FEWFOODS	YES, NO, DO NOT KNOW, REFUSED
(Q4) During the last 12 MONTHS, was there a time when you or others in your household had to skip a meal because there was not enough money or other resources to get food?	FSD_SKIPPED	YES, NO, DO NOT KNOW, REFUSED
(Q5) During the last 12 MONTHS, was there a time when you or others in your nousehold ate less than you thought you should because of a lack of money or other resources?	FSD_ATELESS	YES, NO, DO NOT KNOW, REFUSED
(Q6) During the last 12 MONTHS, was there a time when your household ran out of food because of a lack of money or other resources?	FSD_RANOUT	YES, NO, DO NOT KNOW, REFUSED
(Q7) During the last 12 MONTHS, was there a time when you or others in your nousehold were hungry but did not eat because there was not enough money or other resources for food?	FSD_HUNGRY	YES, NO, DO NOT KNOW, REFUSED
(Q8) During the last 12 MONTHS, was there a time when you or others in your nousehold went without eating for a whole day because of a lack of money or other resources?	FSD_WHLDAY	YES, NO, DO NOT KNOW, REFUSED

Source: GHS 2019, 2022 and 2023.

The binary responses (i.e. "yes" or "no") to the eight questions in the FIES can effectively facilitate the creation of a one-dimensional measure by applying a Rasch model, a statistical approach utilised for analysing FIES data. Each household in the sample is given a probability of exceeding a certain level of severity of food insecurity, based on the assessed severity of their situation, in order to create an estimate of the prevalence rates of food insecurity. By comparing the measurements derived from estimating the Rasch model parameter to a standard global reference scale, these prevalence rates of food insecurity are made comparable across countries (Cafiero et al. 2018). The two FIES-based indicators that result from this process are:

- FI mod+sev = Proportion of households (or the population) experiencing moderate to severe food insecurity
- FI sev = Proportion of households (or the population) experiencing severe food insecurity

The FIES ShinyApp is an online open access application created by the Food and Agricultural Organisation for the purpose of generating and analysing FIES data. The features of the app are organized into multiple tabs, with each tab representing a distinct phase of the analysis process. The ultimate output provides food insecurity prevalence rates at varying degrees of severity, namely (i) the percentage of households facing moderate to severe food insecurity and (ii) the percentage of households dealing with severe food insecurity. Before data can be uploaded to the app, the data file needs to be converted to a CSV format with the eight FIES questions populated in the first eight columns followed by the household sample weights and individual sample weights in columns nine and ten, respectively. Given that the application can only accommodate twelve variables, the disaggregation variables (such as settlement type and province) are placed in columns eleven

and twelve. Multiple CSV input files are created to generate and analyse all the different disaggregation variables.

After the FIES data is uploaded, the app generates item (question) and respondent (raw score) parameters regarding the quality of the data, such infit and outfit statistics, as well as Rasch reliability and residual correlations. The ideal value for the fit statistics is 1,0 while values between 0,7 and 1,3 are considered adequate to meet the assumptions of the model. If the infit statistic for a particular item (question) is higher than 1,3, that item (question) is dropped from the analysis. For this report, the item "WORRIED" for 2019 had an infit statistic of 1,414 and was thus, dropped from the analysis. This means that only seven items (questions) were used to generate the 2019 estimates. In terms of outfit statistics, a value greater than 2 is considered high and requires further review. These statistics can be used to identify outliers because they are sensitive to the existence of cases with unusual or unexpected response patterns. As long as the infit statistics are reasonable and within the acceptable range indicated above, higher outfit values are not usually criteria for eliminating or dropping items (questions) from the analysis. For this report, even though a few of the outfit statistics for some items (questions) was greater than 2, we did not drop any items (questions) from the analysis based on the outfit statistics.

The Rasch reliability statistic provides information about the discriminatory power of the overall scale, measuring the proportion of variability in the data that is explained by the Rasch model. For an eight-item FIES scale, a Rasch reliability value of at least 0,7 is considered acceptable; however, this threshold changes in cases where an item was dropped as was the case for 2019 which was based on a seven-item FIES scale. Fortunately, even after dropping one item, the value for 2019 was 0,71. For 2022 and 2023, the Rasch reliability measures were 0,74 and 0,75, respectively. A residual correlation between a pair of items is considered high if it exceeds0,4. For this report, the residual correlation between any pair of items did not exceeded this threshold for any of the years.

After assessing the quality of the data, a procedure known as equating needs to be done to compare measures across two different applications of the FIES such as when comparing the results of two different countries. During equating, we select items (questions) which we consider common between our scale and the global scale. Any items which we consider unique between the scales are de-selected to ensure better comparability. For this report, the item "RUNOUT" was de-selected to produce globally comparable estimates of the prevalence rates of food insecurity.

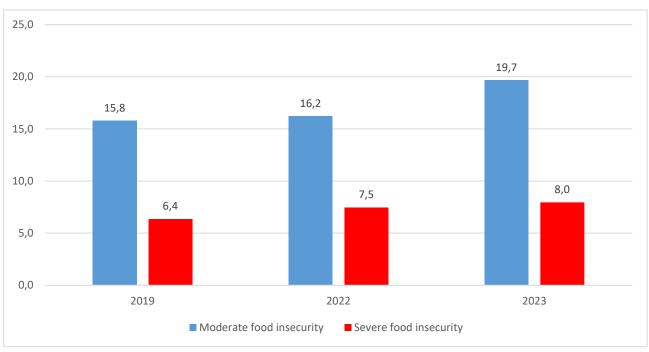
#### 3.2 Data Sources

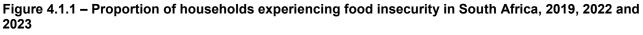
Data collected from the General Household Survey (GHS) 2019, 2022 and 2023 were used to calculate the prevalence of moderate to severe food insecurity and severe food insecurity experienced by South African households during this period. Unfortunately, the survey didn't contain the FIES module in 2020 and 2021, and thus, estimates for those years cannot be provided. Statistics South Africa has carried out the GHS annually since 2002. The survey is a household-based survey designed to assess the progress of development within the nation. It regularly assesses the effectiveness of programmes and the quality of service delivery across several key service sectors in the country. The survey encompasses six general categories, namely education, health and social development, housing, access to services and facilities for households, food security, and agriculture.

In terms of sample design, the GHS uses the Master Sample (MS) frame which is a general-purpose survey frame that is used for household-based surveys conducted by Stats SA. An estimated 33 000 dwelling units (DUs) make up the Master Sample, which consists of 3 324 primary sampling units (PSUs). With a probability proportional to size sampling of PSUs in the first stage and a sampling of dwelling units (DUs) in the second, the GHS sample is based on a stratified two-stage design (Stats SA 2019, 2022 2023). For more information about the GHS, please refer to statistical release P0318 which is accessible on Stats SA's website.

### 4. Results

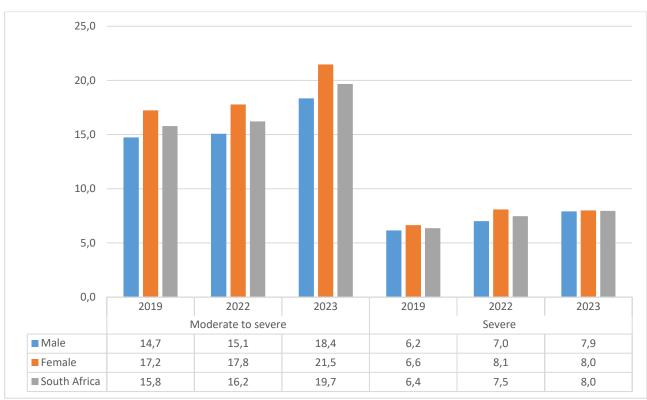
#### 4.1 FIES module analysis results





Source: GHS 2019, 2022 and 2023.

According to Figure 4.1.1, the proportion of households in South Africa that experienced moderate to severe food insecurity was estimated at 15,8% in 2019, 16,2% in 2022, and 19,7% in 2023. Over this period, the proportion of households that experienced severe food insecurity was estimated to be 6,4%, 7,5%, and 8,0%, respectively. In terms of moderate to severe food insecurity, the proportion of households showed an upward trend by increasing 2,5% (0,4 of a percentage point) from 15,8% in 2019 to 16,2% in 2022 and by 21,6% (3,5 percentage points) from 16,2% in 2022 to 19,7% in 2023. Households who experienced severe food insecurity followed a similar upward path, rising 17,2% (1,1 percentage points) from 6,4% in 2019 to 7,5% in 2022 and 6,7% (0,5 of a percentage point) from 7,5% in 2022 to 8,0% in 2023.

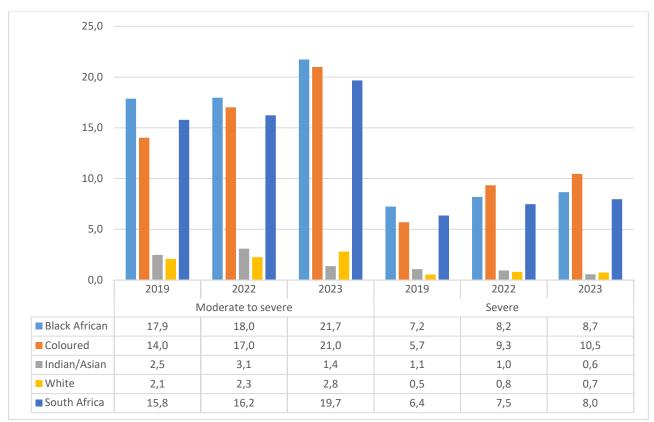


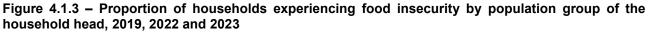
# Figure 4.1.2 – Proportion of households experiencing food insecurity by sex of the household head, 2019, 2022 and 2023

Source: GHS 2019, 2022 and 2023.

Figure 4.1.2 shows the proportion of households that experienced moderate to severe and severe food insecurity disaggregated by the sex of the household head. Female-headed households had the highest prevalence rates for moderate to severe food insecurity during the period under review compared with their male counterparts. Based on the figure, the proportion of female-headed households that experienced moderate to severe food insecurity increased from 17,2% in 2019 to 17,8% in 2022 and an increase of 20,8% (3,7 percentage points) to 21,5% in 2023. On the other hand, households headed by males who also experienced moderate to severe food insecurity were estimated at 14,7% in 2019, which increased to 15,1% in 2022 with an increase of 21,9% (3,3 percentage points) to 18,4% in 2023.

In terms of households being affected by severe food insecurity, the figure illustrates that prevalence rates for female-headed households were also higher than the prevalence rates for male-headed households; however, to a lesser degree. Interestingly, in 2023 the prevalence rates for both male- and female-headed households were close to or equal to the national average of 8,0%.





Source: GHS 2019, 2022 and 2023.

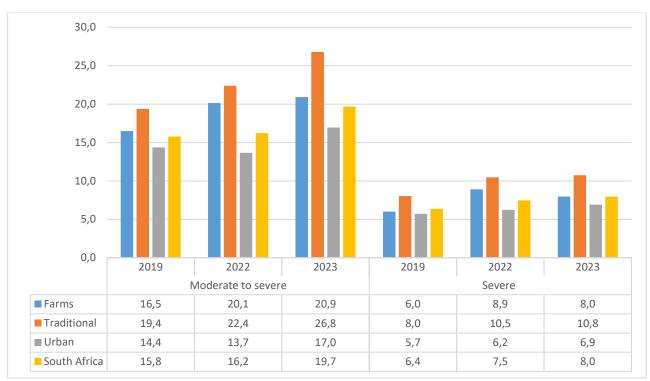
Figure 4.1.3 depicts the proportion of households that experienced moderate to severe and severe food insecurity disaggregated by the population group of the household head. The prevalence of moderate to severe food insecurity has been on an upward trajectory since 2019 for all population groups, except for Indian-/Asian-headed households which showed a decline of 54,8% (1,7 percentage points) from 3,1% in 2022 to 1,4% in 2023. Black African-headed households had the highest prevalence rates for moderate to severe food insecurity during the period under review relative to the other population groups, which was also higher than the national average in each of the years under review. According to the figure, slightly more than one in every five black African-headed households (21,7%) experienced moderate to severe food insecurity, which translates into a 20,6% (3,7 percentage points) increase from 18,0% in 2022 to 21,7% in 2023. Coloured-headed households had the second-worst experience in terms of moderate to severe food insecurity, rising from 14,0% in 2019 to 17,0% in 2022 and a 23,5% (4 percentage points) increase to 21,0% in 2023. In addition, the prevalence rates for coloured-headed households were higher than the national average for most of the years, with the exception of 2019. The households that were least affected by moderate to severe food insecurity were white-headed households with estimates of 2,1%, 2,3%, and 2,8%, respectively.

	Мо	derate to severe	)	Severe			
Province	2019	2022	2023	2019	2022	2023	
Western Cape	15,6	13,9	13,9	5,5	5,9	5,8	
Eastern Cape	17,7	14,5	20,0	5,1	4,2	6,3	
Northern Cape	26,3	30,2	34,5	14,3	17,4	16,6	
Free State	23,6	20,8	18,7	9,3	8,3	7,7	
KwaZulu-Natal	15,5	20,8	26,5	7,0	11,8	10,9	
North West	26,3	27,0	29,7	10,8	12,2	13,5	
Gauteng	12,5	12,5	17,1	5,3	5,9	7,0	
Mpumalanga	21,9	24,0	26,6	8,7	9,7	10,1	
Limpopo	5,0	3,6	5,7	2,0	1,4	2,1	
South Africa	15,8	16,2	19,7	6,4	7,5	8,0	

Table 4.1.1 – Proportion of households experiencing food insecurity by province, 2019, 2022 and 2023

Source: GHS 2019, 2022 and 2023.

Table 4.1.1 illustrates the proportion of households that experienced food insecurity in the different provinces for the three years under review. In general, the prevalence of both moderate to severe and severe food insecurity showed an upward trajectory between 2019 and 2023, except for the Free State. The prevalence of moderate to severe food insecurity in the Northern Cape was estimated at 26,3% in 2019, which increased by 14,8% (3,9 percentage points) to 30,2% in 2022. In 2023, this estimate increased by 14,2% (4,3 percentage points) to 34,5% in 2023, which had the highest prevalence in the country. This was followed by North West and Mpumalanga, which displayed a similar upward trajectory at 29,7% and 26,6% respectively for 2023. Limpopo was the province with the lowest proportion of households who experienced moderate to severe food insecurity at 5,0% (2019), 3,6% (2022) and 5,7% (2023), as well as the lowest household prevalence of severe food insecurity at 2,0% (2019), 1,4% (2022) and 2,1% (2023). As previously mentioned, the Free State was the only province that showed a downward movement in terms of moderate to severe food insecurity from 23,6% in 2019 with a decline of 11,9% (2,8 percentage points) to 20,8% in 2022 and a 10,1% (2,1 percentage points) decrease to 18,7% in 2023. In terms of severe food insecurity, the Free State also displayed a downward path from 9,3% in 2019 to 8,3% in 2022, and 7,7% in 2023.



# Figure 4.1.4 – Proportion of households experiencing food insecurity by type of settlement, 2019, 2022 and 2023

Source: GHS 2019, 2022 and 2023.

Figure 4.1.4 depicts the proportion of households who experienced food insecurity at both moderate to severe and severe levels by settlement type during the three years under review. Households residing in traditional areas had the highest prevalence of moderate to severe food insecurity relative to other settlement types. For instance, the proportion of households experiencing moderate to severe food insecurity residing in traditional areas was estimated at 19,4% in 2019, which increased by 15,5% (3,0 percentage points) to 22,4% in 2022 and to 26,8% in 2023 (an increase of 19,6% – 4,4 percentage points). Households living in urban areas had the lowest prevalence of moderate to severe food insecurity at 14,4% in 2019, rising by 24,1% (3,3 percentage points) from 13,7% in 2022 to 17,0% in 2023.

In terms of severe food insecurity, households residing in traditional areas – again – had the highest proportion of households affected by this category of food insecurity, which was also above the national average. In 2019 the estimate was 8,0%, which increased at a rapid rate of 31,3% (2,5 percentage points) to 10,5% in 2022, but at a much slower rate of 2,9% (0,3 of a percentage point) in 2023. Similar to the moderate to severe food insecurity category, households living in urban areas were the least affected by severe food insecurity. In 2019 this food insecurity category was estimated at 5,7%, which increased by 11,3% (0,7 of a percentage point) to 6,2% in 2022 and to 6,9% in 2023.

	Мо	derate to seve	re	Severe			
Metro	2019	2022	2023	2019	2022	2023	
City of Cape Town	19,3	16,7	14,8	6,7	7,2	6,3	
Buffalo City	10,2	11,5	19,4	4,5	4,1	4,8	
Nelson Mandela Bay	14,6	9,7	11,1	3,0	3,0	5,3	
Mangaung	34,1	24,5	23,7	17,2	13,1	11,6	
eThekwini	8,4	6,8	18,5	3,5	4,2	6,5	
Ekurhuleni	9,7	10,6	14,6	3,9	4,7	4,6	
City of Johannesburg	14,1	14,3	19,9	7,6	7,7	9,7	
City of Tshwane	9,6	9,5	11,4	3,0	4,0	4,7	
South Africa	15,8	16,2	19,7	6,4	7,5	8,0	

 Table 4.1.2 – Proportion of households experiencing food insecurity by metropolitan area, 2019, 2022

 and 2023

Source: GHS 2019, 2022 and 2023.

Table 4.1.2 depicts the proportion of households experiencing food insecurity in the eight metropolitan areas of South Africa for the period under review. According to the table, the Mangaung metro in the Free State had the highest proportion of households affected by moderate to severe food insecurity. The prevalence rates associated with moderate to severe food insecurity in Mangaung was estimated at 34,1% in 2019, which declined by 28,2% (9,6 percentage points) to 24,5% in 2022 and by 3,2% (0,8 of a percentage point) to 23,7% in 2023. The City of Tshwane had the lowest proportion of households that experienced moderate to severe food insecurity with estimates of 9,6% in 2019, 9,5% in 2022 and an increase of 20% (1,9 percentage points) to 11,4% in 2023. The proportion of food-insecure households residing in the metros mostly followed an upward trajectory, except for Mangaung, Nelson Mandela Bay, and the City of Cape Town.

When examining severe food insecurity in the metros, Mangaung again had the highest prevalence rates estimated at 17,2% in 2019, which decreased by 31,3% (4,1 percentage points) to 13,1% in 2022 with a further reduction of 11,5% (1,5 percentage points) to 11,6% in 2023. As with moderate to severe food insecurity, the Tshwane metro has the lowest proportion of households impacted by severe food insecurity with estimates of 3,0% in 2019, which rose by 33,3% (1 percentage point) to 4,0% in 2022 with a further increase of 17,5% (0,7 of a percentage point) to 4,7% in 2023.

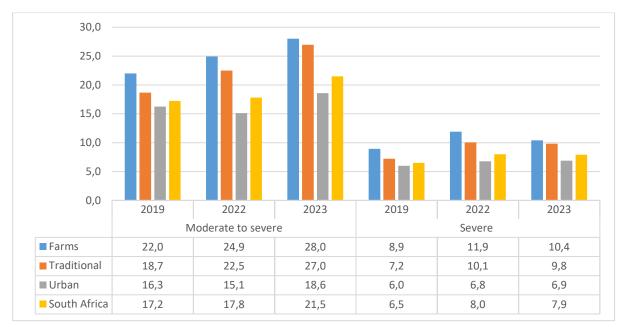
	Мо	derate to severe		Severe			
Province	2019	2022	2023	2019	2022	2023	
Western Cape	16,3	15,9	18,1	5,4	7,1	7,2	
Eastern Cape	17,6	14,8	20,6	4,1	3,7	5,0	
Northern Cape	29,3	36,0	41,8	15,6	20,1	19,6	
Free State	26,1	23,5	19,8	9,7	9,6	8,2	
KwaZulu-Natal	17,3	25,4	29,8	7,6	14,0	11,7	
North West	27,7	25,0	30,6	10,5	10,3	11,8	
Gauteng	14,9	13,1	18,7	6,0	6,1	6,9	
Mpumalanga	22,0	24,9	24,5	7,7	9,3	7,9	
Limpopo	5,1	3,0	6,1	2,2	1,2	2,2	
South Africa	17,2	17,8	21,5	6,5	8,0	7,9	

Table 4.2.1 – Proportion of female-headed households experiencing food insecurity by province, 2019, 2022 and 2023

Source: GHS 2019, 2022 and 2023.

Table 4.2.1 depicts the proportion of households that are headed by females and affected by food insecurity during the three years under review. Female-headed households in the Northern Cape that experienced moderate to severe food insecurity had the highest prevalence rates compared with other provinces and were estimated at 29,3% in 2019, 36,0% in 2022, and a further increase of 16,1% (5,8 percentage points) to 41,8% in 2023. North West had the second-highest prevalence rates for female-headed households that were affected by moderate to severe food insecurity, estimated at 27,7% in 2019, 25,0% in 2022, and 30,6% in 2023; this translates into a 22,4% increase between 2022 and 2023. These estimates for the Northern Cape and North West, as well as those for the Free State and Mpumalanga, were above the national average for the three years concerned. Limpopo had the lowest prevalence rates for female-headed households estimated at 5,1% in 2019 and 3,0% in 2022, but saw a notable increase to 6,1% in 2023.

In relation to female-headed households that experienced severe food insecurity, a similar pattern emerges. Northern Cape had the highest proportion of households estimated at 15,6% in 2019, 20,1% in 2022 and a slight 2,5% reduction to 19,6% in 2023. Female-headed households in the North West had the second-highest prevalence rates at 10,5% in 2019, 10,3% in 2022, and 11,8% in 2023. These estimates for female-headed households affected by severe food insecurity in the Northern Cape, North West, Free State, KwaZulu-Natal and Mpumalanga were above the national average for this particular food insecurity category. Once again, Limpopo had the lowest prevalence rates for female-headed households affected by severe food insecurity, estimated at 2,2% in 2019, 1,2% in 2022, and 2,2% in 2023. The estimates for Limpopo, in addition to the Western Cape, Eastern Cape and Gauteng, had prevalence rates that were below the national average.



## Figure 4.2.1 – Proportion of female-headed households experiencing food insecurity by type of settlement type, 2019, 2022 and 2023

Source: GHS 2019, 2022 and 2023.

Figure 4.2.1 shows the proportion of female-headed households who experienced food insecurity in the different settlement types they resided in during the period under review. Female-headed households living in farming areas affected by moderate to severe food insecurity had the highest prevalence rates relative to the other settlement types, estimated at 22,0% in 2019, 24,9% in 2022, and increasing by 12,4% to 28,0% in 2023. In general, households residing on farms and traditional areas had prevalence rates that were higher than the national average. Urban female-headed households affected by moderate to severe food insecurity had the lowest prevalence rates, which were estimated at 16,3% in 2019, 15,1% in 2022, and 18,6% in 2023 (a 23,2% increase from 2022). The estimates for urban households were below the national average, which could be because female-headed households residing in urban areas generally have greater access to economic opportunities compared with their counterparts residing in other settlement types.

In terms of severe food insecurity, a similar pattern is observed where female-headed households residing on farms had the highest prevalence rates, followed by those households residing in traditional areas. Urban female-headed households remain the settlement type with the lowest prevalence rates, which is also lower than the national average for the three years under review.

	Mo	derate to severe	)	Severe		
Metro	2019	2022	2023	2019	2022	2023
City of Cape Town	20,8	19,3	20,3	7,2	9,2	8,7
Buffalo City	9,4	12,2	17,6	3,1	5,0	3,3
Nelson Mandela Bay	17,7	9,9	11,2	3,1	2,2	3,9
Mangaung	36,0	28,9	25,1	18,2	16,4	12,6
eThekwini	10,2	10,1	21,4	4,3	6,3	7,6
Ekurhuleni	12,3	11,5	15,5	4,6	4,7	4,0
City of Johannesburg	18,4	14,2	22,6	9,7	7,6	10,2
City of Tshwane	9,5	10,6	12,2	2,0	4,6	4,5
South Africa Source: GHS 2019, 2022 and 20	17,2	17,8	21,5	6,5	8,0	7,9

## Table 4.2.2 – Proportion of female-headed households experiencing food insecurity by metropolitan area, 2019, 2022 and 2023

Source: GHS 2019, 2022 and 2023.

Table 4.2.2 displays the proportion of female-headed households in the eight metropolitan areas of South Africa for the three years under review. Based on the table, the Mangaung metro – even though it shows a downward trajectory between 2019 and 2023 – had the highest proportion of female-headed households that were affected by moderate to severe food insecurity, estimated at 36,0% in 2019, 28,9% in 2022, and 25,1% in 2023. This was also the case for female-headed households that experienced severe food insecurity, which were estimated at 18,2% in 2019, 16,4% in 2022, and 12,6% in 2023.

Female-headed households living in the City of Cape Town had the second-highest prevalence rates estimated at 20,8% in 2019, 19,3% in 2022, and 20,3% in 2023. In addition, the estimates for both Mangaung and the City of Cape Town were higher than the national average during the period under review. In relation to female-headed households affected by severe food insecurity, the City of Johannesburg had the second-highest prevalence rates estimated at 9,7% in 2019, 7,6% in 2022, and 10,2% in 2023. The metropolitan area with the lowest prevalence rates across both food insecurity categories was the City of Tshwane, whose estimates for female-headed households affected by severe food insecurity were 2,0%, 4,6% and 4,5% for 2019, 2022 and 2023, respectively. The estimates for those affected by moderate to severe food insecurity were 9,5%, 10,6%, and 12,2% for the three years under consideration.



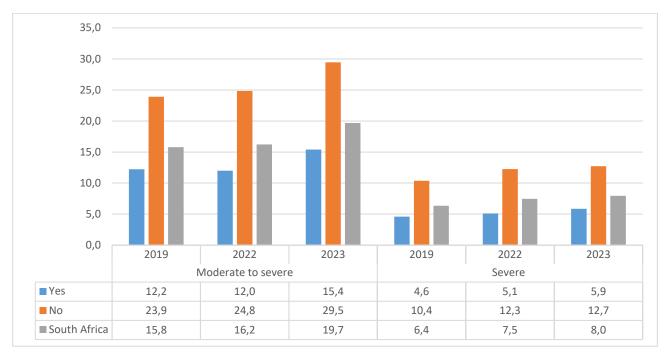
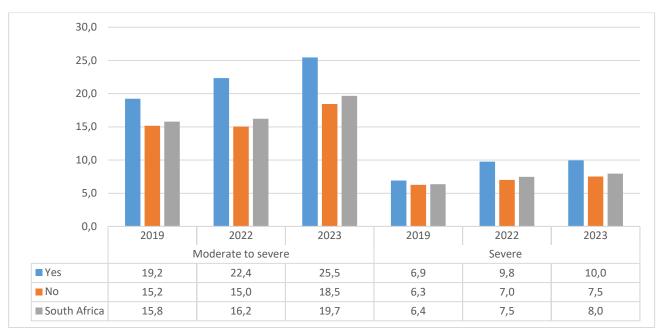


Figure 4.3.1 – Proportion of households experiencing food insecurity by at least one household member employed, 2019, 2022 and 2023

Source: GHS 2019, 2022 and 2023.

Figure 4.3.1 shows the proportion of households who experienced moderate to severe and severe food insecurity where at least one member of the household was economically active (i.e. employed) during the three years under review. It should be noted that there might be instances where more than one household member of the same household is economically active. The proportion of households where at least one household member was economically active and experienced moderate to severe food insecurity showed an overall upward trajectory from 12,2% in 2019 to 15,4% in 2023. The prevalence rates for those households with no household member employed showed a similar pattern to households with at least one household member employed, but had twice the magnitude.

Households affected by severe food insecurity where at least one household member was employed display a similar upward trend in their prevalence rates, moving from 4,6% in 2019 to 5,1% in 2022 with a further increase of 15,7% (0,8 of a percentage point) to 5,9% in 2023. The estimates for households where at least one household member was employed were also lower than the national average for the period under review. The prevalence rates for those households with no household member employed show a similar pattern to households with at least one household member employed, but at much higher levels (more than double) at 10,4%, 12,3%, and 12,7%, respectively.



## Figure 4.3.2 – Proportion of households experiencing food insecurity by involvement in agricultural activities, 2019, 2022 and 2023

Source: GHS 2019, 2022 and 2023.

Figure 4.3.2 depicts the proportion of households who have been involved in agricultural activities while also suffering from food insecurity. Interestingly, households who indicated that they were involved in agricultural activities had higher prevalence rates of moderate to severe food insecurity compared with those with no agricultural involvement. Their estimates increased from 19,2% in 2019 to 22,4% in 2022, with a further rise of 13,8% (3,1 percentage points) to 25,5% in 2023. Households who experienced moderate to severe food insecurity and reported no agricultural involvement had lower prevalence rates estimated at 15,2% in 2019, 15,0% in 2022, and 18,5% in 2023. What makes it interesting is that one would expect households involved in agricultural activities to have lower levels of food insecurity, given their investment into supplementing their food access through own production. It is possible that vulnerable households are more likely to engage in agricultural activities as a strategy to deal with that vulnerability and, if they hadn't done any own production, their levels of food insecurity could have been even higher.

A similar pattern is observed for agriculture-involved households who experienced severe food insecurity, increasing from 6,9% in 2019 to 9,8% in 2022, and then to 10,0% in 2023. As with households not involved in agricultural activities and affected by moderate to severe food insecurity, households not involved in agricultural activities and affected by severe food insecurity had lower prevalence rates estimated at 6,3% in 2019, 7,0% in 2022, and 7,5% in 2023. As noted above, this seems unusual as households involved in agricultural activities are believed to be in a better position to deal with their food insecurity issues. This could be explained by households not involved in agricultural activities accessing their food mainly from other sources that are more efficient than own production.

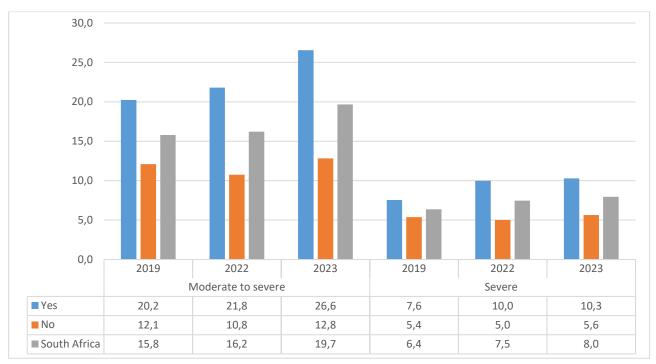
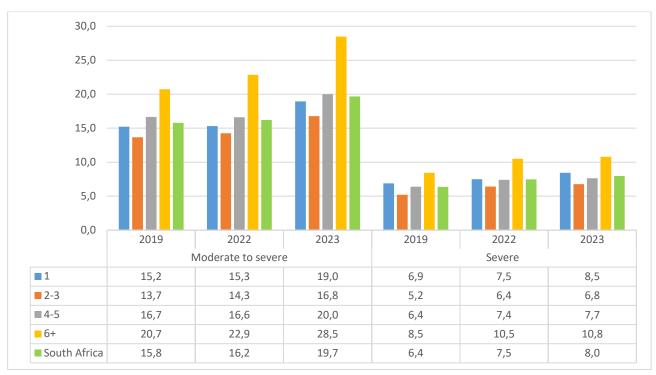




Figure 4.3.3 shows the proportion of households who were beneficiaries of social grants while also experiencing food insecurity during the period under review. The proportion of households who experienced moderate to severe food insecurity and who benefited from social grants was estimated at 20,2% in 2019, 21,8% in 2022, and 26,6% in 2023. In certain instances, this was more than double the estimates for households experiencing moderate to severe food insecurity and not benefiting from social grants, which were estimated at 12,1% in 2019, 10,8% in 2022, and 12,8% in 2023. This situation is possible because social grants are in most cases the only source of income for many households; in such cases, it would make sense for these recipient households to have challenges to obtain food. Nevertheless, it shows that financial assistance through social grants is a useful tool for providing support to food-insecure households.

Households that are affected by severe food insecurity and are social grant beneficiaries were estimated at 7,6%, 10,0%, and 10,3%, respectively, which were in some instances about double the rate of households who were not social grant beneficiaries. These prevalence rates were estimated at 5,4% in 2019, 5,0% in 2022, and 5,6% in 2023.

Source: GHS 2019, 2022 and 2023.

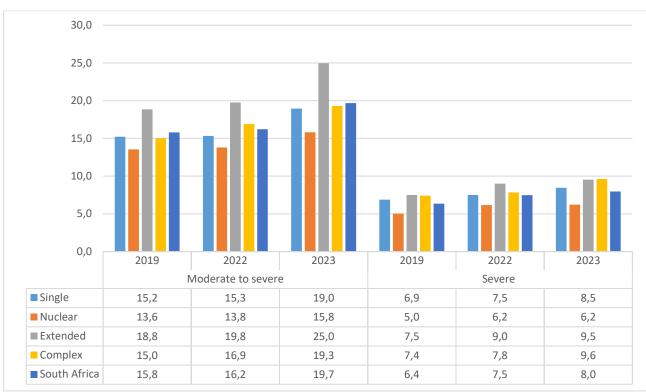


# Figure 4.3.4 – Proportion of households experiencing food insecurity by household size, 2019, 2022 and 2023

Source: GHS 2019, 2022 and 2023.

Figure 4.3.4 illustrates the proportion of households that experienced moderate to severe and severe food insecurity during 2019, 2022 and 2023 by household size. The proportion of households comprised of six or more members had the highest prevalence rates of moderate to severe food insecurity estimated at 20,7% for 2019, 22,9% for 2022, and 28,5% in 2023, which was a 24,5% increase on the 2022 estimate. In terms of severe food insecurity, households with six or more members also reported the highest prevalence rates. Households affected by moderate to severe food insecurity consisting of 4–5 members had the second-largest prevalence rates estimated at 16,7% for 2019, 16,6% for 2022, and 20,0% for 2023. One-member households experiencing severe food insecurity were estimated at 6,9% for 2019, 7,5% for 2022 and 8,5% for 2023.

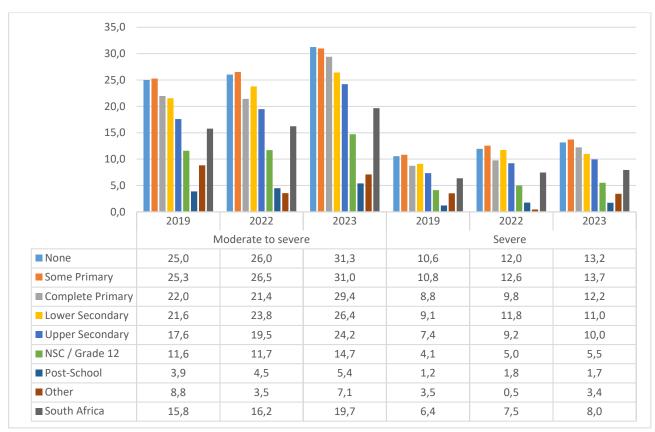
In general, it is expected that households consisting of one household member are less likely to suffer from any form of food insecurity (moderate to severe or severe) compared with their counterparts with two or more household members. During the period under review, the opposite happened where one-household-member households that experienced moderate to severe food insecurity had higher prevalence rates (15,2% in 2019, 15,3% in 2022, and 19,0% in 2023) than their counterparts comprising 2–3 household members, which were estimated at 13,7%, 14,3%, and 16,8% respectively for the three years under review.





Source: GHS 2019, 2022 and 2023.

Figure 4.3.5 shows the proportion of households experiencing food insecurity based on how households are configured. Extended households were more likely to be affected by moderate to severe food insecurity and had the highest prevalence rates relative to other household types estimated at 18,8% in 2019, 19,8% in 2022, and 25,0% in 2023, which was the result of a 26,3% increase between 2022 and 2023. Extended households also had the highest proportion of households that experienced severe food insecurity at 7,5%, 9,0%, and 9,5%, respectively for the three years under review. Nuclear households had the lowest prevalence rates compared with the other household composition types. In terms of moderate to severe food insecurity, the estimates were 13,6% for 2019, 13,8% for 2022, and 15,8% for 2023. In relation to severe food insecurity for nuclear households, the estimates were 5,0% in 2019, and 6,2% in both 2022 and 2023. The estimates for this particular household category were also lower than the national average for the three years concerned.

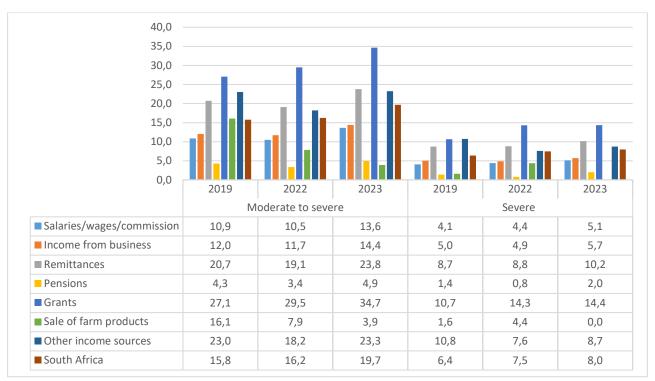


## Figure 4.3.6 – Proportion of households experiencing food insecurity by educational attainment (highest level of education) of the household head, 2019, 2022 and 2023

Source: GHS 2019, 2022 and 2023.

Figure 4.3.6 depicts the proportion of households that experienced both moderate to severe and severe food insecurity disaggregated by the highest level of educational attainment of the household head. Households headed by individuals with relatively low education levels are more likely to experience moderate to severe, as well as severe food insecurity compared with households where the household head has a relatively high level of education. For instance, households with "some primary" as the highest education level had the highest prevalence rates for moderate to severe food insecurity estimated at 25,3% in 2019, 26,5% in 2022, and 31,0% in 2023. These were followed by households whose head had "no schooling", "complete primary" and "lower secondary". It is evident that households have a higher probability of experiencing food insecurity the lower their highest level of education.

On the other hand, households headed by individuals with relatively high education levels are less likely to experience moderate to severe, as well as severe food insecurity compared with households where the household head has a relatively low education level. For instance, households with "post-school" as the highest level of education had the lowest prevalence rates of moderate to severe food insecurity estimated at 3,9% in 2019, 4,5% in 2022, and 5,4% in 2023.

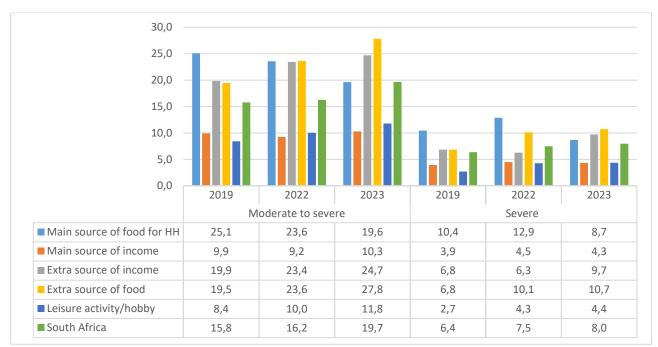


# Figure 4.3.7 – Proportion of households experiencing food insecurity by main income source of household head, 2019, 2022 and 2023

Source: GHS 2019, 2022 and 2023.

Figure 4.3.7 displays the proportion of households who experienced both moderate to severe and severe food insecurity by their main income source for the period under review. The proportion of households whose main income source was salaries/wages/commission or pensions was less likely to be affected by both moderate to severe and severe food insecurity. Households with their main income source as pensions had the lowest prevalence rates for moderate to severe food insecurity, estimated at 4,3% in 2019, 3,4% in 2022 and 4,9% in 2023. This was followed by households whose main income source was salaries, estimated at 10,9% in 2019, 10,5% in 2022 and 13,6% in 2023 for this food insecurity category. The same pattern emerged for households affected by severe food insecurity for these two main sources of income.

On the other hand, households whose main income source was grants, remittances and other income had quite high prevalence rates for both moderate to severe and severe food insecurity. For instance, households with grants as their main income source had prevalence rates for moderate and severe food insecurity estimated at 27,1% in 2019, 29,5% in 2022 and 34,7% in 2023. In terms of severe food insecurity, households whose main source of income was grants also had the highest prevalence rates estimated at 10,7%, 14,3% and 14,4% for the three years under review.



# Figure 4.3.8 – Proportion of households experiencing food insecurity by main purpose for agricultural activities, 2019, 2022 and 2023

Source: GHS 2019, 2022 and 2023.

Figure 4.3.8 depicts the proportion of households who experienced both moderate to severe and severe food insecurity by their main reason for being involved in agricultural activities. As a main source of food for the household, extra source of income and an extra source of food was given as the main reasons for households' involvement in agricultural activities. For instance, households who experienced moderate to severe food insecurity and indicated main source of food as the reason for their involvement, had the highest prevalence rates estimated at 25,1% in 2019, 23,6% in 2022 and 19,6% in 2023. These households also had the highest prevalence rates in terms of severe food insecurity estimated at 10,4% in 2019, 12,9% in 2022 and 8,7% in 2023. Households who experienced moderate to severe food insecurity and indicated extra source of food as the reason for their involvement, had the second-highest prevalence rates estimated at 19,5% in 2019, 23,6% in 2022 and 27,8% in 2023. These households also had the second highest prevalence rates in terms of severe food severe food insecurity and indicated extra source of food as the reason for their involvement, had the second-highest prevalence rates estimated at 19,5% in 2019, 23,6% in 2022 and 27,8% in 2023. These households also had the second highest prevalence rates in terms of severe food insecurity estimated at 6,8% in 2019, 10,1% in 2022 and 10,7% in 2023.

### 5. Summary of Findings

- Almost one out of five (19,7%) households in 2023 experienced moderate to severe food insecurity, while 8,0% of households were affected by severe food insecurity.
- Female-headed households face a greater risk of food insecurity compared to their male counterparts due to a range of factors. In 2023, the highest prevalence rates for moderate to severe food insecurity was recorded for households headed by females estimated at 21,5%, while 8,0% of female-headed households experienced severe food insecurity.
- In 2023, roughly 21,7% of black African-headed households experienced moderate to severe food insecurity. The next highest was 21,0% for coloured-headed households, 1,4% for Indian/Asian-headed households, and 2,8% for households headed by whites.
- In 2023, the highest proportion of households who experienced moderate to severe food insecurity resided in the Northern Cape at 34,5%, while the highest proportion of households affected by severe food insecurity were also from the Northern Cape, estimated at 16,6%.
- Approximately, one out of four households that resided in traditional areas were affected by moderate
  to severe food insecurity in 2023 which was also the highest across all settlement types. In terms of
  severe food insecurity, about 10,8% of households residing in traditional areas experienced this food
  insecurity category which was also the highest relative to the other types of settlement.
- In 2023, about 23,7% of the households residing in the Mangaung metro in the Free State, followed by 19,9% in the City of Johannesburg experienced moderate to severe food insecurity. In terms of severe food insecurity, 11,6% were once again found in Mangaung, followed by City of Johannesburg at 9,7%.
- In 2023, the Northern Cape had the highest percentage of female-headed households experiencing moderate to severe food insecurity estimated at 41,8%, while the prevalence rates for severe food insecurity estimated at 19,6% were also higher compared to other provinces.
- In 2023, around one in four female-headed households living in farming areas faced moderate to severe food insecurity, representing the highest prevalence rate among all settlement types. Regarding severe food insecurity, approximately 10,4% of female-headed households living on farms were impacted, which was also the highest compared to other settlement types.
- In 2023, Mangaung, a metropolitan region in the Free State, had the largest share of female-headed households facing moderate to severe food insecurity, estimated at 25,1%. Additionally, the rates of severe food insecurity for female-headed households in Mangaung were higher than in other metropolitan areas, estimated at 12,6%.
- Regarding households facing moderate to severe food insecurity in 2023, the percentage of households without at least one employed member was 29,5%, whereas it was 15,4% for those with at least one member employed. In addition, the households affected by severe food insecurity showed a similar picture where those at with at least one household member is employed were estimated at 5,9%, while those without an employed member was estimate to be more than double at 12,7%. This highlights the importance of employment in tackling the problem of food insecurity.
- The percentage of households engaged in agricultural activities and facing moderate to severe food insecurity in 2023 was estimated to be 25,5%, while the percentage of households not involved in agriculture was surprisingly lower at 18,5%.
- In 2023, it was estimated that 26,6% of households facing moderate to severe food insecurity were
  recipients of social grants, whereas the percentage of non-beneficiary households that were food
  insecure stood at 12,8%. In the same year, 10,3% of households receiving social grants faced severe
  food insecurity, whereas those not receiving social grants were estimated at 5,6%.
- In 2023, the percentage of households with six or more members facing moderate to severe food insecurity reached its highest prevalence, estimated at 28,5%, while those facing severe food insecurity stood at 10,8% within this household size category.
- Regarding household composition, extended households experiencing moderate to severe food insecurity had the highest prevalence rates at 25,0% for 2023, while complex households showed a peak prevalence rate of 9,6% for those types that faced severe food insecurity.

• The higher the level of education for the household head, the less likely their households are to experiencing food insecurity. Households experiencing moderate to severe food insecurity and having "no schooling" as the highest level of education for the household head had the highest prevalence rates in 2023, estimated at 31,3%, while the lowest prevalence rates were estimated at 5,4% for households with "post-school" as the highest education level.

### 6. Conclusion

Households in South Africa continue to experience challenges related to both moderate to severe and severe food insecurity, despite the country being generally food secure at the national level. In 2023, about 19,7% (roughly 3,7 million households) experienced moderate to severe food insecurity while approximately 8,0% (1,5 million households) experienced severe food insecurity. Households led by women and those belonging to the black African population group are more susceptible to experiencing both moderate to severe and severe food insecurity.

Geographically speaking, the Northern Cape – the province with the lowest population – was home to the households that had the highest rates of moderate to severe and severe food insecurity. Households that lack employed members and those consisting of six or more individuals are at a higher risk of experiencing moderate to severe food insecurity compared with other households. Household heads whose highest education level is "post-school" or who are part of nuclear households are less prone to experience moderate to severe and severe food insecurity.

The "triple challenge" in South Africa, which includes poverty, inequality, and unemployment, consists of interrelated socio-economic issues that are important for tackling the household food insecurity crisis in the country. One mechanism to address the "triple challenge" is by enhancing economic growth, which has consistently fallen short of anticipated levels. Consequently, to effectively tackle the issue of food insecurity, it is essential to elevate economic growth to a level capable of addressing the challenges associated with household food insecurity.

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