TOWARDS MEASURING THE EXTENT OF

FOOD SECURITY IN SOUTH AFRICA

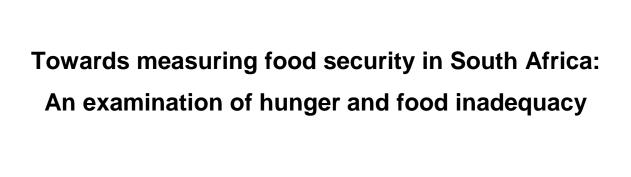
an examination of hunger and food inadequacy

Report: 03-00-14









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Preface

This report presents the extent of food security in South Africa by looking at households' involvement in agricultural activities, households' level of adequacy in accessing food as well as households' experiences of hunger. The report is based on the results of the General Household Survey conducted by Statistics South Africa in 2017. Food security consists of four dimensions, namely availability, accessibility, utilization and stability; however, due to data limitations, this report will mainly focus on examining issues related to food availability and accessibility.

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Risenga Maluleke

Statistician-General

Concepts and definitions

Food poverty line refers to the amount of money that an individual will need to afford the minimum required daily energy intake. This is also commonly referred to as the "extreme" poverty line.

Gini coefficient refers to the ratio of the area between the 45-degree line in the Lorenz curve and the area of the entire triangle. As the coefficient approaches zero, the distribution on income or consumption approaches absolute equality and absolute inequality if it approaches one.

Household is a group of persons who live together and provide themselves jointly with food and/or other essentials for living, or single person who lives alone.

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

Income gap refers to income between one group and another, the commonest income gap is that between 'rich' and 'poor' with the rich usually being defined at the top 20% of income earners (top quintile), and the poor the bottom 20% (bottom quintile).

Multidimensional Poverty Index identifies multiple deprivations at the household and individual level in health, education, standard of living and economic activity. It uses micro data from household surveys, censuses and community survey.

Rural areas are farms and traditional areas characterised by low population densities, economic activity and low levels of infrastructure.

Settlement type is a classification according to settlement characteristics.

South African Multidimensional Poverty Index is the domesticated Multidimensional Poverty Index.

Unemployed persons are those (aged 15–64 years) who:

- a) Were not employed in the reference period; and
- b) Actively looked for work or tried to start a business in the four weeks preceding the survey interview; and
- Were available for work, i.e. would have been able to start work or a business in the reference period;
 or
- d) Had not actively looked for work in the past four weeks, but had a job or business to start at a definite date in the future and were available.

Urban areas refers to formal cities and towns characterised by higher population densities, high levels of economic activities and high levels of infrastructure.

Abbreviations

FAO - Food and Agriculture Organisation

CS - Community Survey

DAFF - Department of Agriculture, Forestry and Fisheries

FAO - Food and Agriculture Organisation

GDP - Gross Domestic Product

GHI - Global Hunger Index

GHS - General Household Survey

HFIAS - Household Food Insecurity Access Scale

IES - Income and Expenditure Survey

IFAD - International Fund for Agricultural Development

LCS - Living Condition Survey

NDP - National Development Plan

QLFS - Quarterly Labour Force Survey

SAMPI - South African Multidimensional Poverty Index

SDGs - Sustainable Development Goals

Stats SA - Statistics South Africa

UNICEF - United Nations Children's Emergency Fund

WFP - World Food Programme

WHO - World Health Organisation

1. Introduction

Issues of household food and nutrition security have received increasing worldwide attention recently as the impact of climate change and tough economic conditions puts new and additional stress on food systems. A report by Food and Agriculture Organisation (FAO) (in collaboration with FAD et al, 2018) warned that the world is not on track to eradicate hunger by 2030 as envisioned in the Sustainable Development Goals (SDGs). Recent evidence indicates that approximately 821 million people in the world were undernourished in 2017 (FAO, IFAD, UNICEF, WFP and WHO, 2018). Furthermore, the Global Hunger Index showed that 52 out of 119 countries had GHI scores, rated as having either "serious", "alarming", or "extremely alarming" hunger in the same year (IFPRI,2017). Ultimately, more and more countries are recognizing the need to expand the measurement of food and nutrition security and its importance in informing planning and monitoring of progress towards achieving the 2030 targets.

1

Significant efforts have been made by the South African government to promote food security and to domesticate international indicators on food security to monitor development in different organs of the State. An inter-ministerial National Food Security and Nutrition Plan has been developed by the SA government and its coordination occurs at the Presidency. Additionally, the country's National Development Plan (NDP) recognises agricultural productivity and rural development among the essential priorities for creation of employment, economic growth, reducing poverty and addressing food security in South Africa.

The right to food is enshrined in the South African Constitution. Section 27(1) (b) of the Constitution of the Republic of South Africa states that, "everyone has the right to sufficient food and water" and Section (27) (b) emphasises that "the State must formulate reasonable legislative efforts and take other measures within its available resources, to achieve the progressive realisation of these rights." The right to food requires that food be available, accessible, and adequate for everyone without discrimination. The Department of Agriculture, Forestry and Fisheries (DAFF) is responsible for developing agricultural policies and initiate support programmes to ensure that South Africans are able to produce their own food and reduce food insecurity. The Food and Nutrition Security Policy is key in achieving the objectives of the National Development Plan and that of the global SDGs. Goal 2 of the SDGs commits to ending hunger, achieving food security, improved nutrition, and promote sustainable agriculture by 2030.

Thus collection, processing and analysis of data on food and nutrition security has become more critical to study the impact of, and to inform decisions on government initiatives towards reducing food and nutrition insecurity in South Africa. Since the concept of food security is broad, this therefore makes its measurement complex. According to the FAO, food security exists when all people at all times have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and health life.

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Food security is comprised of four dimensions, namely, food availability, food accessibility, food utilisation and food stability. Food availability refers to physical existence of food at national and household levels. It relates to food production, supply and distribution. Food accessibility is ensured when all households have enough resources to obtain food in sufficient quantities, good quality and diversity for a nutritious diet. Food utilisation refers to the digestion of the food consumed, which in turn is influenced by health status, water and sanitation conditions, and the microbiological and chemical safety of the food.

However, this dimension also includes nutritional knowledge, food habits, child-feeding practices, and the social role of food in the family and in the community. Food stability is achieved when the supply of food at national and household levels remains constant during the year and in long-term. Ultimately, this multidimensionality and complexity around the nature of food security is what makes the measurement (and subsequent collection of data) difficult. This report, therefore, does not fully cover all dimensions of food security. It focuses on three main indicators, namely, households' involvement in agricultural activities, households' experiences of hunger and households' access to food.

1.1 Purpose of the report

This report is the first of a series of reports to be compiled by Statistics South Africa (Stats SA) towards shedding greater light on the state of food and nutrition security in South Africa. It seeks to provide information on the extent of households' experiences of hunger and access to food, as well as to provide insight on the location and the profile of households that are food insecure in terms of access to food and exposure to hunger. The report also provides insight on the extent of households' involvement in agricultural activities.

1.2 Data sources and methods

This section covers data sources used in this report and the methodology used to compute hunger and food access indicators.

1.2.1 Data sources and method of data collection

Data collected from the General Household Survey (GHS) 2017 are used in this report. The GHS is an annual survey conducted by Stats SA since 2002. It is based on a two-staged probability sample of households selected randomly in all nine provinces of South Africa to participate in the survey. The sample is therefore representative at national and provincial levels. The survey utilises structured face-to-face interviews where interviewers ask the respondents the same questions in the same way. The GHS covers 6 broad areas namely, education, health and social development, housing, households' access to services and facilities, food security, and agriculture. The food security and agriculture sections in the GHS are limited to questions regarding households' involvement in agricultural activities, , hunger and food access, as well as how frequently have households experienced inadequate access to food.

1.2.2 Method of computing main indicators

Measurement of hunger and food access is calculated using a shortened version of the Household Food Insecurity Access Scale (HFIAS). The GHS asks respondents whether households have experienced hunger in the past 12 months (see Table 1). To compute the hunger indicator, households that reported "sometimes", "often", or "always" going without food are classified as having experienced hunger.

Table 1: Questions on hunger extracted from the GHS

In the past 12 months, did any adult (18 years and above) in this household go hungry because there wasn't enough food?

In the past 12 months, did any child (17 years or younger) in this household go hungry because there wasn't enough food?

To compute the food adequacy indicator eight questions are used from the GHS i.e.

Table 2: Questions on food adequacy extracted from the GHS

Did your household run out of money to buy food during the past 12 months?

Has it happened 5 or more days in the past 30 days?

Did you cut the size of meals during the past 12 months because there was not enough food in the house?

Has it happened 5 or more days in the past 30 days?

Did you skip any meals during the past 12 months because there was not enough food in the house?

Has it happened 5 or more days in the past 30 days?

Did you eat a smaller variety of foods during the past 12 months than you would have liked to, because there was not enough food in the house?

Has it happened 5 or more days in the past 30 days?

Households who respond positively to two to five of these questions are classified as having inadequate access to food. Those who respond positively to 6 to 8 of these questions are then classified as having severe inadequate access to food. Those with a score of less than 2 are considered to have adequate access to food.

1.3 Outline of the report

This report has 4 chapters. The current chapter provides background and contextual information about this report. Chapter 2 contextualises food security in South Africa. Chapter 3 highlights the key findings of the report pertaining to hunger and food access and presents household access to land for agricultural activities as well as type of activities performed. Chapter 4 provides the summary and conclusion of the report.

2. Contextualizing food security in South Africa

Various studies have established that there are synergies between food security, unemployment, poverty and inequality (FAO 2017, Wight et al 2014). The country's NDP also stresses this relationship. According to the NDP, food insecurity is both a cause and a consequence of poverty. Research on poverty in South Africa shows that the unyielding poverty stance in South Africa is attributed to former policies of the apartheid regime that purported racial inequality, segregation and unsustainable settlement patterns (Bhorat and Kanbur, 2006). The Spatial Planning and Land Use Management Act, Act 16 of 2013, however, redresses access to land for the previously disadvantaged and protects prime agricultural land and environmental resources (COGTA, 2018). This chapter aims to provide the context to food insecurity in South Africa by presenting poverty and inequality levels and other factors that may influence food insecurity such as unemployment, households' involvement in agricultural activities, and climate change (i.e. droughts, etc.).

2.1 Poverty and inequality in South Africa

In 2017, Statistics South Africa released a report looking at poverty and inequality trends in South Africa between 2006 and 2015. The report indicates that more than a quarter (25,2%) of the population was living below a food poverty line (R441 per person per month in 2015 prices) in 2015 compared to almost a third (28,4%) in 2006. Between 2006 and 2009, South Africa experienced an increase in the proportion of people living below the food poverty line rising from 28,4% to 33,5%. This increase was followed by a notable decline of 12,1 percentage points by 2011 to 21,4%, followed by an increase of 3,8 percentage points to 25,2% in 2015 (see Figure 1). The significant increase in food poverty noted in 2009 coincided with the global economic recession that also affected South Africa. Households in the lowest income categories tend to be significantly more affected by economic shocks compared to households in higher income categories, hence the significant increase in food poverty levels during the economic crisis.

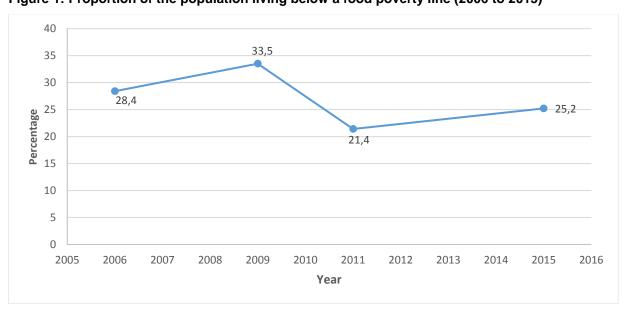


Figure 1: Proportion of the population living below a food poverty line (2006 to 2015)

Source: Statistics South Africa, Income and Expenditure Survey 2005/06 and 2010/11 and Living Conditions Survey 2008/09 and 2014/15

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According to the South African Multidimensional Poverty Index (SAMPI) - which was constructed using four dimensions of poverty; Health (Nutrition and Child Mortality), Education (years of schooling and school attendance), Living standards (fuel for cooking, lighting and heating sanitation, water, type of dwelling, and assets), and economic activity (adult unemployment) - multidimensional poverty in South Africa declined between 2001 and 2016. Figure 2 provides the results of the SAMPI.

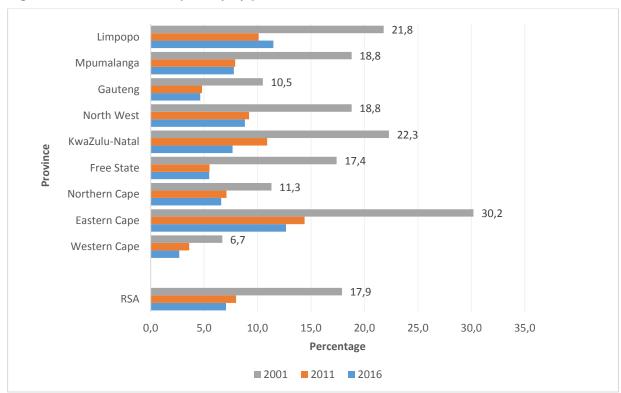


Figure 2: Multidimensional poverty by province in South Africa in 2001, 2011 and 2016

Source: Statistics South Africa, Census 2001 & 2011 and Community Survey 2016

Multidimensional poverty in South Africa declined from 17.9% in 2001 to 7% in 2016 (Figure 2). The Eastern Cape (30,2%), KwaZulu-Natal (22,3%) and Limpopo (21,8%) were provinces that had the highest poverty headcount rates in 2001. The SAMPI results show that after 10 years poverty decreased by almost half in 2011 in most of the provinces, particularly those that had the highest poverty rates in 2001. It is therefore unsurprising that in South Africa, hunger, poverty and inadequate access to food all decreased within the same period.

Whilst poverty declined, inequality remained high in South Africa as depicted by figure 3. The income per capita Gini coefficient (income inequality) remained close to 0,70 (0,72 in 2006; 0,69 in 2009, 0,69 in 2011 and 0,68 in 2015).

0,80 0,72 0,69 0,69 0,70 0,68 0,60 Gini coefficient 0,50 0,40 0,30 0,20 0,10 0,00 2006 2009 2011 2015 Year

Figure 3: Income Gini-coefficient (2006 to 2015)

Source: Statistics South Africa, Income and Expenditure Survey 2005/06 & 2010/11 and Living Conditions Survey 2008/09 & 2014/15

This high level of inequality may partly explain the contrasting scenarios of South Africa being food secure at national level but not at household level. According to the Altman, et al. (2009), South Africa is food secure at national level. The GHS results reveals that 6,8 million people experienced hunger and 10,4 million people had inadequate access to food in 2017.

While there is sufficient food available for everyone in South Africa through domestic food production and food imports, the means to access food at household level is still a challenge to some as indicated by the high levels of income inequality (e.g. the income gap in 2015 was 0,51). High levels of unemployment exacerbates the situation. According to the Quarterly Labour Force Survey (QLFS), the unemployment rate stood at 27,5% in quarter 3 of 2017.

2.2 Drought and household involvement in agricultural activities

Drought and climate variability and its extremes reduces yield. They also affect exports and imports as countries try to compensate for domestic production. The Western Cape Province in South Africa has been the hardest hit by drought in 2018 (Masante et al, 2018). The city of Cape Town and surrounding areas has been receiving below average monthly rainfalls since 2015, which led to imposing water restrictions through water cuts and rationing. The drop in agricultural production in country contributed mainly to the contraction of the GDP in 2018.

Household agricultural production has not been spared. Figure 4 shows the proportion of households involved in agricultural production activities by province between 2011 and 2016 using data collected from the Census 2011 and Community Survey (CS) 2016. Between 2011 and 2016, South Africa experienced a decline in the proportion of households involved in agricultural activities. In 2011, about 2,9 million households (19,9%) reported that they were involved in agricultural activities and in 2016, this declined to 2,3 million households (13,8%). A decrease of 6,1 percentage points was observed. However the decrease in households' agricultural production occurred in all provinces.

40,0 35,4 35,0 33,0 30,0 27,9 28,2 24.5 24,4 24.1 25,0 Percentage 20.2 19.9 18,6 18.2 18,3 20,0 16,6 13,8 13,8 13.4 15,0 10,0 7,1 5,2 4,9 5,0 0,0 kwalilu Matal Mothern Cape Moundanes kreestate RSA

Province
2011

2016

Figure 4: Proportion of households involved in agricultural production activities by province (2011 and 2016)

Source: Statistics South Africa, Census 2011 and Community Survey 2016

All these factors discussed above have a direct and indirect influence on food security in the country. High poverty levels and unemployment impacts on households' ability to access food. Inequality due to significant differences in income levels results in some households struggling to access food even though food is available in the country. Droughts and declining numbers of household involved in agricultural activities negatively affect food availability and accessibility at household level. The next section provides known trends in households' experiences of hunger and food access in South Africa.

2.3 Hunger and food access in South Africa

The General Household Survey has been collecting data on experience of hunger since 2002. Figure 5 illustrates the number of households and persons who had experienced hunger in South Africa in the past 15 years. In 2002 there were 13,5 million South Africans who experienced hunger and this number dropped to 6,8 million in 2017. Households that experienced hunger also decreased from 2,7 million to 1,7 million households within the same period.

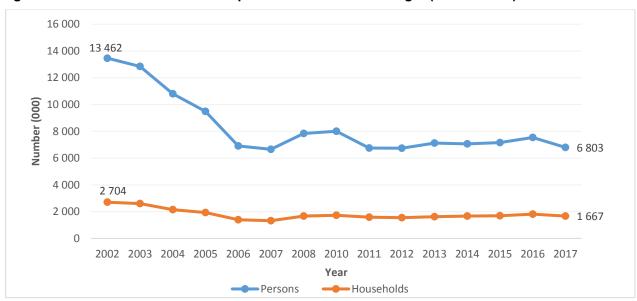


Figure 5: Number of households and persons vulnerable to hunger (2002 to 2017)

Source: Statistics South Africa, General Household Survey 2002-2017

It is evident in figure 6 that the number of households experiencing hunger in South Africa is declining, so is the proportion of households that had severe inadequate food. In addition, a slight increase in the proportion of households that had adequate access to food is observed between 2010 and 2017. However, this decline in households experiencing inadequate and severely inadequate food access is still very small, and the pace is slow to achieve the goal of zero hunger by 2030.

100,0 6,6 6,5 6,1 5,8 6,0 6,0 5,5 7,4 90,0 15,8 14,6 14,8 16,8 16,4 16,5 16,0 16,3 80,0 70,0 60,0 Percentage 50,0 40,0 78,8 78,7 78,7 76,4 77,1 77,7 77,5 77,9 30,0 20,0 10,0 0,0 2010 2011 2012 2013 2014 2015 2016 2017 Year Adequate ■ Inadequate ■ Severely inadequate

Figure 6: Percentage distribution of households by level of adequacy in accessing food (2010 to 2017)

3. Findings

This chapter presents the findings of this report and is divided into three sections. Section 3.1 discusses households' involvement in agricultural production activities while Section 3.2 focuses on households' access to food. Section 3.3 deals with households' experience of hunger.

3.1 Households' involvement in agricultural activities

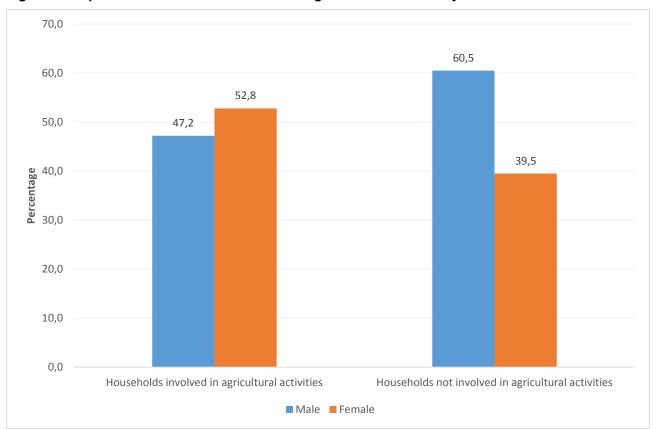
This section first describes the different types of agricultural activities performed by households, and presents the main reasons for involvement in agricultural production activities. The data used for analysis is from the GHS 2017. Table 3 shows that an estimated 2,5 million households in South Africa were engaged in agricultural activities in 2017.

Table 3: Percentage distribution of households involved in agricultural production activities

Involvement in agricultural activities	Number (000)	Percent
Households involved in agricultural activities	2 506	15,6
Households not involved in agricultural activities	13 594	84,4
Total	16 100	100,0

Figure 7 indicates that more than half (52,8%) of the households involved in agricultural activities were headed by females whereas just below a half (47,2%) were headed by males. Research shows that female-headed households spend more resources on welfare of children than on consumption of adult goods (Seebens, 2009).

Figure 7: Proportion of households involved in agricultural activities by sex of household head



Source: Statistics South Africa, General Household Survey 2017

The results in figure 8 show that provinces that are predominantly rural and with high levels of poverty such as Limpopo (25%), Eastern Cape (20%) and KwaZulu-Natal (20%) had the highest proportions of households involved in agricultural activities. Northern Cape (1%) and Western Cape (2%) had the lowest proportions of households involved in agricultural activities.

Western Cape 2%

Limpopo 25%

Eastern Cape 20%

Northern Cape 1%

Free State 6%

KwaZulu-Natal 20%

NorthWest 4%

Figure 8: Percentage distribution of households involved in agricultural activities by province

Figure 9 shows the percentage of households involved in agricultural activities according to type of activity. The majority reported involvement in the production of fruits and vegetables (53,4%), followed by those involved in the production of grains and other food crops (51,8%) and then those involved in livestock farming (47,1%). Very small proportions of households were involved in fish farming, forestry, game farming and other agricultural produce.

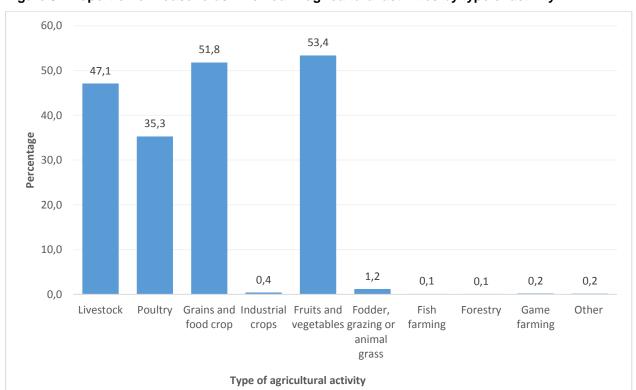


Figure 9: Proportion of households involved in agricultural activities by type of activity

Source: Statistics South Africa, General Household Survey 2017

Household assets including income, land and others can determine a household's access to food. Figure 10 indicates the main source of income for all South African households. More than half (58.3%) of South African households' main source of income was salaries, followed by social grants (19,9%). As the majority of households depend on salaries, price volatility and unemployment tend to affect the households' food security.

No income Other income sources Main source of income Sales of farming products and services Grants 19,9 Pensions Remittances 8,9 Income from a business 8,4 Salaries 58,3 0,0 10,0 20,0 30,0 40,0 50,0 60,0 70,0 Percentage

Figure 10: Percentage distribution of households by main source of income

Source: Statistics South Africa, General Household Survey 2017

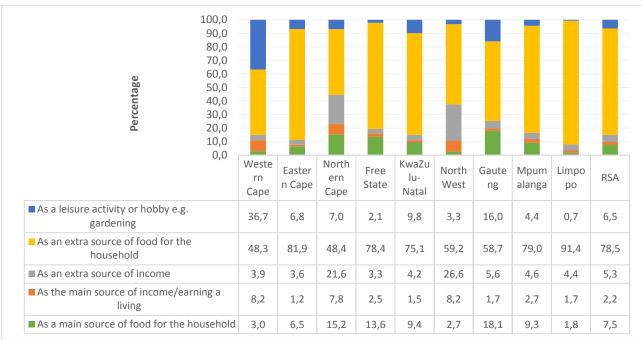
Figure 11 further shows the source of income for households that are involved in agricultural activities. The results indicate that more than four out of ten households (44.2%) involved in agricultural activities reported social grants as their main source of income followed by salaries or wages or commission (30,9%). Surprisingly only 0,5 percent of these households reported sales from farming products and services as their least main source of income, which means that these households do agricultural activities to secure an additional source of food or purely for subsistence.

No income 0,8 Other income 0,7 Main source of income Sales of farming products and services 0,5 Grants 44,2 Pensions 2,0 Remittances 11,8 Income from a business Salaries/wages/commission 30,9 10,0 30,0 5,0 15,0 20,0 25,0 40,0 50,0 35.0 45.0 Percentage

Figure 11: Proportion of households involved in agricultural activities by main source of income

Figure 12 illustrates that 78.5% of South African households are involved in agricultural activities to supplement food for the household. Limpopo (91,4%), Eastern Cape (81,9%) and Mpumalanga (79,0%) have the highest proportion of those households.

Figure 12: Percentage distribution of households involved in agricultural activities by province and reason for involvement



Source: Statistics South Africa, General Household Survey 2017

It is worth noting that in the North West province most households were engaged in agricultural activities for income purposes other than to provide food for the households.

3.2 Households' access to food

This section covers information about households' access to food using the Household Food Insecurity Access Scale (HFIAS). This is a modified HFIAS as indicated in Section 1.2.2. It produces three major household food access categories, namely, adequate food access, inadequate food access and severe inadequate food access.

3.2.1 Households food access levels

Figure 13 reveals that out of 16,2 million households in 2017, about 12,7 million (78,7%) households reported that they have adequate access to food, about 2,5 million (15,8%) reported that their food access is inadequate and almost 0,9 million (5,5 %) of households described their food access as severely inadequate.

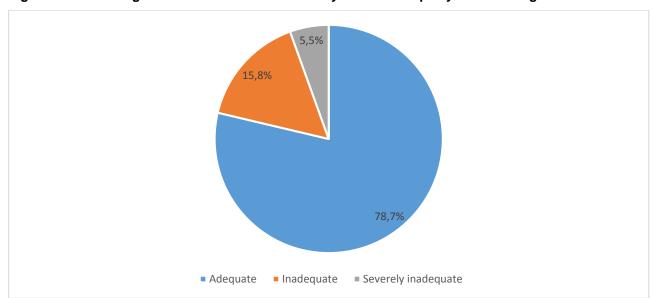


Figure 13: Percentage distribution of households by level of adequacy in accessing food

Source: Statistics South Africa, General Household Survey 2017

Figure 14 provides the percentage distribution of households by province and level of adequacy in accessing food. Limpopo had the highest proportion (93,6%) of households with adequate access to food, followed by Gauteng (84,0%). Households in the North West (24,5%), Northern Cape (20,5%), Eastern Cape (20,1%), KwaZulu-Natal (18,6%), and Mpumalanga (18,6%) had the highest proportions of households that reported inadequate access to which are above the national average of 15,8%.

Northern Cape (13,0%), Mpumalanga (12,3%) and Northwest (11,6%) were the only three provinces with severe inadequate access to food that was almost twice the national average.

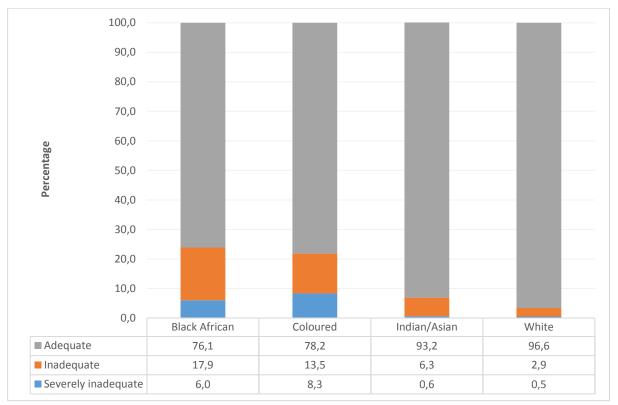
100,0 90,0 80,0 70,0 60,0 Percentage 50,0 40,0 30,0 20,0 10,0 0,0 Western Eastern Northern Free KwaZulu-North Mpumal South Gauteng Limpopo Cape Cape Cape State Natal West anga Africa ■ Severely inadequate 4,5 13,0 12,3 5,5 7,3 6,0 4,8 11,6 3,1 1,1 ■ Inadequate 15,5 20,1 20,5 15,7 18,6 24,4 12,9 18,6 5,3 15,8 ■ Adequate 77,2 75,4 66,5 78,3 76.6 64.0 84.0 69.1 93.6 78.7

Figure 14: Percentage distribution of households by level of adequacy in accessing food and province

Source: Statistics South Africa, General Household Survey 2017

Figure 15 shows the percentage distribution of households by population group and level of adequacy in accessing food. Black African headed households had the highest proportion (17,9%) of households who reported inadequate access to food, followed by coloured headed households (13,5%). In addition, households headed by coloureds had the highest proportion of households with severe inadequate access to food (8,3%). Households headed by Whites (96,6%) and Indian/Asians (93,2%) had the highest proportions of households who reported having adequate access to food.

Figure 15: Percentage distribution of households by population group of the household head and level of adequacy in accessing food



According to the GHS (2017), the national average household size in South Africa was 3,24. Table 4 provides the number and percentage distribution of households by household size and level of adequacy in accessing food. A high proportion of households (81,4%) with fewer household members (less than 3 members) reported that they have adequate access to food. Severe inadequate access to food is mostly found among households with more than 8 household members. A bigger number of household members exert more pressure on food consumption in the household.

Table 4: Number and percentage of households by household size and level of adequacy in accessing food

	Food security (N'000)			
Household size	Adequate	Inadequate	Severely inadequate	Total
Total	12 749 (78,7%)	2 560 (15,8%)	890 (5,5%)	16 199 (100,0)
1-3	8 166 (81,4%)	1 375 (13,7%)	492 (4,9%)	10 032 (100,0%)
4-7	4 049 (75,5%)	993 (18,5%)	324 (6,0%)	5 365 (100,0%)
8+	534 (66,7%)	192 (24,0%)	75 (9,3%)	801 (100,0%)

3.2.2 Children and level of adequacy in accessing food

Table 5 indicates that 80,8% of households with no children reported that their food access was adequate and only about 5% of those households experienced severe inadequate access to food. On the other hand, almost two thirds (62,8%) of households with more than 3 children had adequate access to food with the highest proportion (29,6%) reporting that food access was inadequate. This proportion is almost twice the national average. Households with no children or fewer children were more likely to have adequate access to food than those with many children.

Table 5: Number and percentage distribution of households with children 5 years or younger by level of adequacy in accessing food

No. of children		Food security (N'000)		Tatal
in the household	Adequate	Inadequate	Severely inadequate	Total
Total	12 749 (78,7%)	2 560 (15,8%)	890 (5,5%)	16 199 (100,0%)
No child	9 314 (80,8%)	1 653 (14,3%)	566 (4,9%)	11 532 (100,0%)
1	2 543 (75,0%)	630 (18,6%)	219 (6,5%)	3 392 (100,0%)
2	740 (71,6%)	206 (19,9%)	87 (8,5%)	1 033 (100.0%)
3+	151 (62,8%)	71 (29,6%)	18 (7,6%)	241 (100,0%)

Source: Statistics South Africa, General Household Survey 2017

3.3 Vulnerability to hunger

This section examines household's vulnerability to hunger. It provides a profile of households' experiences of hunger in terms of sex and population group of household head as well as their geographic location such as province and the settlement type. For the purpose of this report, "rural" is derived by combining traditional areas and farms.

3.3.1 Profiling households vulnerable to hunger

Poverty has been identified as the main cause of hunger in the world (FAO, 2017). Table 6 indicates the percentage of households that were vulnerable to hunger in 2017. Out of the 16,2 million households in South Africa, 1,7 million households were vulnerable to hunger in 2017 and that constituted 10,5% of all South African households. The majority of these households were headed by black Africans (91,1%) ,followed by coloured people (7,3%), white people (1,3%) and Indians/Asians (0,4%).

It is worth noting that out of the top three provinces (Limpopo, KwaZulu-Natal, and Eastern Cape) that had the highest proportion of households involved in agricultural activities, only Limpopo had the least number of households experiencing hunger in 2017. Gauteng is one of the two provinces with the lowest poverty levels as indicated in figure 2 and the second highest proportion of households with adequate food access as depicted in figure 14. However, it had the highest percentage of households that experienced hunger as shown in Table 6.

Table 6: Profile of households vulnerable to hunger

	N'000	%
South Africa	1 667	10,4
	Sex of household head	
Male	818	49,1
Female	849	50,9
	Population group of household he	ad
Black African	1 518	91,1
Coloured	121	7,3
Indian/Asian	7	0,4
White	21	1,3
	Province	
Western Cape	221	13,3
Eastern Cape	150	9,0
Northern Cape	56	3,4
Free State	104	6,3
KwaZulu-Natal	349	20,9
North West	157	9,4
Gauteng	420	25,2
Mpumalanga	155	9,3
Limpopo	54	3,3
	Settlement type	
Urban	1 057	63,4
Rural	610	36,6

Source: Statistics South Africa, General Household Survey 2017

In terms of type of settlement, in 2017 two thirds (63,4%) of households that reported experiencing hunger were located in the urban areas. This could be attributed to the fact that households living in rural areas are more prone to participate in subsistence farming, as they are more likely to have the necessary skills, tools and access to land for such activities.

3.3.2 Households vulnerable to hunger and household size

Figure 16 shows that households with larger households sizes (8 or more members) reported higher proportions of those that experienced hunger. The larger the household size, the higher are the chances of a household to experience hunger.

100,0 90,8 88,8 90,0 82,3 80,0 70,0 60,0 Percentage 50,0 40,0 30,0 17,7 20,0 11,2 9,2 10,0 0,0 1-3 1-7 8+ Household size Experienced hunger ■ Did not experience hunger

Figure 16: Percentage distribution of households by household size and whether they experienced hunger

Source: Statistics South Africa, General Household Survey 2017

3.3.3 Child hunger

The Constitution of the Republic of South Africa, Section 28 (1) (c) of the bill of rights gives every child the right to basic nutritious food, which depends on children's access to sufficient food. The government has introduced a number of programmes to alleviate and reduce hunger, malnutrition and food insecurity. Figure 17 shows that out of the 16,2 million South African households, almost seven out of ten households (about 11.5 million) had no child aged 5 years or younger. About three out of ten households (4,7 million) had children aged 5 years or younger of which 3,4 million households had one child, 1 million households had two children and 0,2 million households had three or more children aged 5 years or younger.

Two children
6%
Children
2%

One child
21%

No child
71%

Figure 17: Percentage distribution of households with children aged 5 years or younger by number of children

Table 7 shows the proportions of households with children aged 5 years and younger who reported hunger by province. There were 4,7 million households that had young children and only 611 126 households experienced hunger (13,1%). Child hunger was highest in Northern Cape (23,6%), Mpumalanga (16,7%), KwaZulu-Natal (17,6%) provinces. Limpopo (3,8%) had the least percentage of households that reported child hunger.

Table 7: Number and percentage of households with children aged 5 years or younger by province and whether they experienced hunger

Province	Hunger	Hunger (N'000)		
FIOVILLE	Did not experience hunger	Experienced hunger	Total	
RSA	4 038 (86,9%)	612 (13,1%)	4 650 (100,0%)	
Western Cape	397 (85,8%)	66 (14,2%)	463 (100,0%)	
Eastern Cape	434 (87,9%)	60 (12,1%)	494 (100,0%)	
Northern Cape	80 (76,5%)	25 (23,6%)	105 (100,0%)	
Free State	204 (85,5%)	35 (14,5%)	238 (100,0%)	
KwaZulu-Natal	698 (82,4%)	150 (17,6%)	848 (100,0%)	
North West	284 (84,9%)	50 (15,1%)	334 (100,0%)	
Gauteng	1 053 (88,6%)	136 (11,4%)	1 189 (100,0%)	
Mpumalanga	344 (83,3%)	69 (16,7%)	413 (100,0%)	
Limpopo	544 (96,2%)	21 (3,8%)	565 (100,0%)	

Source: Statistics South Africa, General Household Survey 2017

Urbanization is also another force that places more demand on food. Two thirds of the South African population reside in urban areas. As people urbanize fewer are directly involved in agricultural production. Table 8 shows percentage distribution of households with younger children by whether they experienced hunger and type of settlement. More than half (56,1%) of the households with younger children that experienced hunger reside in urban areas and 43,9% in rural areas.

Table 8: Number and percentage of households with children 5 years or younger and the experience of hunger by settlement type

	Hunger (
Settlement type	Did not experience	Experienced	Total
	hunger	hunger	
RSA	4 038 (86,9%)	611 (13,1%)	4 649 (100,0%)
Urban	2 499 (61,9%)	343 (56,1%)	2 842 (61,1%)
Rural	1 539 (38,1%)	268 (43,9%)	1 807 (38,9%)

Table 9 shows that female-headed households are disadvantaged households compared to their male counter parts, as more female headed households (compared to male-headed households) had children who experienced hunger.

Table 9: Number and percentage of households with children aged 5 years or younger by whether they experienced hunger and sex of the household head

	Hunger (N'000)		
	Did not experience	Experienced	Total
Sex of the household head	hunger	hunger	
RSA	4 038 (86,9%)	611 (13,1%)	4 649 (100,0%)
Male	2 133 (90,6%)	220 (9,4%)	2 353 (100,0%)
Female	1 905 (83,0%)	391 (17,0%)	2 296 (100,0%)

Source: Statistics South Africa, General Household Survey 2017

Poverty statistics show that black Africans and coloured people had the highest poverty rate compared to other population groups. A similar pattern is found when looking at child hunger. Table 10 illustrates that households headed by black Africans and coloured people with younger children had the highest percentages of households experiencing hunger compared to the households headed by other population groups.

Table 10: Number and percentage of households with children aged 5 years or younger by whether they experienced hunger and population group of the household head

Population group of the	Hunger (N'000)		
household head	Did not experience hunger	Experienced hunger	Total
RSA	4 056 (86,9%)	611 (13,1%)	4 667 (100,0%)
Black African	3 464 (85.9%)	568 (14,1%)	4 032 (100,0%)
Coloured	330 (89,4%)	39 (10,6%)	369 (100,0%)
Indian/Asian	73 (98,3%)	2 (1,7%)	75 (100,0%)
White	189 (98,7%)	2 (1,3%)	191 (100,0%)

Households with young children are more vulnerable to hunger. Table 11 indicates that 9,3% of households with no children reported the experience of hunger compared to the 20,9% of households with three or more children.

Table 11: Number and percentage of households with children aged 5 years or younger and their experience of hunger

Number of children in the	Hunger (N'000)		Total
household	Did not experience hunger	Experienced hunger	Total
RSA	14 357 (89,6%)	1 667 (10,4%)	16 024 (100,0%)
No child	10 319 (90,7%)	1 055 (9,3%)	11 375 (100,0%)
1	2 960 (87,6%)	419 (12,4%)	3 379 (100,0%)
2	887 (86,2%)	142 (13,8%)	1 029 (100,0%)
3+	191 (79,1%)	50 (20,9%)	241 (100,0%)

Source: Statistics South Africa, General Household Survey 2017

3.3.4 Vulnerability to hunger and living conditions of households

Studies have shown that there is a strong relationship between food insecurity and poor living conditions. A study conducted by Naicker, Mathee and Teare (2015) in an informal settlement in Johannesburg, South Africa, found that there is an association between food insecurity and the urban poor that lives in informal settlement. Figure 18 illustrates that those who were living in informal dwellings had the highest proportion (17,3%) of those who reported the experience of hunger in their households, followed by those living in traditional dwellings (16,1%).

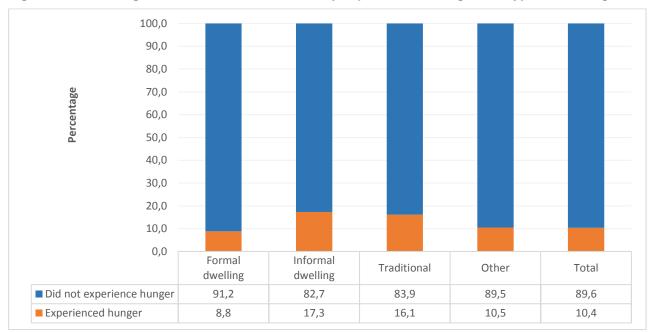


Figure 18: Percentage distribution of households by experience of hunger and type of dwelling

4. Summary and conclusion

The purpose of this report was to provide information on the extent of households' experiences of hunger and access to food, and as to provide insight on the location and the profile of households that are food insecure in terms of access to food and exposure to hunger. The report also provided insight into the extent of households' involvement in agricultural activities. Analysis was based on the GHS data collected in 2017.

Reviewed literature indicated a decline in the proportion of households involved in agricultural activities between 2011 and 2016, a decline in the proportion of households experiencing inadequate access to food between 2010 and 2017 and a decline in the proportion of households' experiencing hunger between 2002 and 2017. The literature further indicated high levels of food poverty (25,2%) and high levels of inequality (income Gini coefficient of 0,68) in South Africa in 2015. High levels of poverty and inequality, as various studies indicated, have a negative impact on households' ability to access food. South Africa produces and imports enough food to feed its population, however, results confirm that availability and access dimensions do not always follow the same trend; and that the presence of food in a country does not ensure that all persons in that particular country can access it.

4.1 Summary of the findings

The results indicated that out of 16,2 million households, about 2.5 million households (15,6%) were involved in agricultural activities in South Africa in 2017. Most of these households were found in Limpopo, Eastern Cape and KwaZulu-Natal. They were mainly headed by females. Furthermore, the results showed that most households involved in agricultural activities were involved in the production of fruits and vegetables, grain and

other food crops, as well as in livestock and poultry farming. The main source of income for these households was social grants. Furthermore, most households involved in agricultural activities indicated that the main reason for their involvement is to supplement food for the household.

Despite South Africa's being food secure at national level, almost 20% of South African households had inadequate or severe inadequate access to food in 2017. This varied by province, population group of household head and by household size. Limpopo (93,6%) and Gauteng (84,0%) had the highest proportion of households that reported adequate food access whilst North West (64,0%) and Northern Cape (66,5%) recorded the lowest proportions of households that had adequate food access. These two provinces can therefore be seen as being the least food secure. Households headed by black Africans and coloured were less likely to have adequate access to food compared to households headed by Indians/Asians and whites. In addition, households with larger household sizes were more likely to have inadequate or severe inadequate access to food compared to those with smaller household sizes.

Regarding hunger, the results indicated that about 1.6 million households experienced hunger in 2017. More than 60% of those households were found in urban areas. Despite being one of the poorest provinces, Limpopo had the smallest proportion (3,3%) of households that reported experiencing hunger. Gauteng is one of the richest provinces in South Africa, but it had the largest percentage (25,2%) of households that experienced hunger. Gauteng unlike Limpopo had a larger urban population and most of the households that reported the experience of hunger were located in urban areas. In addition, Gauteng had the lowest proportion of households involved in agricultural activities compared to other provinces.

Child hunger was still found to be a challenge in South Africa. More than half a million households with children aged five years or younger experienced hunger in 2017. Northern Cape and KwaZulu-Natal had the highest proportion of such households. More than half of households with young children that experienced hunger were located in urban areas. The results further indicated that the higher the number of children aged five years or younger in the household, the higher the chances of that household to experience hunger.

4.2 Conclusion

Whilst South Africa is food secure at national level, the country is still food insecure at household level. Food inadequacy and hunger are still a challenge. About 13,4 million households had inadequate or severe inadequate access to food and about 1,6 million households experienced hunger in 2017. Households headed by females and those headed by black Africans are more likely to experience hunger and inadequate or severe inadequate access to food. Households with a higher number of young children and those that are bigger in size are more likely to experience hunger and inadequate or severe inadequate access to food.

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