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**IMPROVING LIVES THROUGH DATA ECOSYSTEMS**



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## Abbreviations

EC	Eastern Cape
FS	Free State
GP	Gauteng
KZN	KwaZulu-Natal
LP	Limpopo
MP	Mpumalanga
NC	Northern Cape
NW	North West
RSA	South Africa
WC	Western Cape
BUF	Buffalo City
COJ	City of Johannesburg
CPT	City of Cape Town
EKU	Ekurhuleni Metropolitan Municipality
ETH	City of eThekweni
MAN	Mangaung Municipality
NMB	Nelson Mandela Bay Metropolitan Municipality
TSH	City of Tshwane
CAPI	Computer Assisted Personal Interviews
CATI	Computer Assisted Telephonic Interviews
CV	Coefficient of Variance
Deff	Design Effect
DU	Dwelling Unit
EA	Enumerator Area
GHS	General Household Survey
HFIAS	Household Food Insecurity Access Scale
MYPE	Mid-Year Population estimates
NQF	National Qualifications Framework
NTC	National Technical Certificate
OHS	October Household Survey
PAPI	Pen and Paper Interviews
PSU	Primary Sampling Unit
Stats SA	Statistics South Africa
SRD	Special COVID-19 Social Relief of Distress Grant
TVET	Technical and Vocational Education and Training

## Summary and Key Findings

The General Household Survey (GHS) tracks the progress of development in South Africa and identifies persistent service delivery gaps. Since its inception in 2002 the survey has yielded a rich set of information across a wide variety of fields. The following figures summarise some of the most significant results from the report.

Families and households are profoundly important to the developmental, emotional and cognitive growth of children and parents and/or caregivers can play a central role in this development. The survey found that 18,8% of children lived with neither their biological parents while 33,8% lived with both parents, and 43,4% lived with their mothers. Approximately 11,5% of children were orphaned, having lost one or both parents.

COVID-19 has changed the nature of child care arrangements. The percentage of children aged 0–4 years that remained at home with a parent, guardian, other adults or children increased from 57,8% in 2019 to 64,6% in 2021. During the same time, the percentage of children that attended grade R, pre-school, nursery school, crèche, and edu-care centres decreased from 36,8% in 2019 to 28,5% in 2021.

COVID-19 also negatively affected school attendance as the percentage of children aged five who did not attend an education institution increased from 10,9% in 2019 to 37,7% in 2020, before dropping off to 19,4% in 2021. A similar pattern was observed for children aged six (3,5% in 2019 increasing to 11,8% in 2020 before declining to 5,9% by 2021). Although participation (enrolment) in education was still relatively high, data shows that a slightly higher percentage of children in older age groups were not attending school compared to 2019.

The percentage of individuals aged 20 years and older who did not have any education decreased from 11,4% in 2002 to 3,2% in 2021, while those with at least a grade 12 qualification increased from 30,5% to 50,5% over the same period. Inter-generational functional literacy has also decreased markedly. While 35,8% of South Africans over the age of 60 years did not complete at least a grade 7 qualification, this figure dropped to only 3,2% for those aged 20–39 years of age.

Social grants remain a vital safety net, particularly in the poorest provinces. The rollout of the special COVID-19 Social Relief of Distress grant (SRD) in 2020 has played a central role in protecting individuals and households against the loss of income during this period. Grants were the second most important source of income (51,0%) for households after salaries (59,4%), and the main source of income for about one-fifth (24,4%) of households nationally. A larger percentage of households received grants compared to salaries as a source of income in Free State (60,0% versus 53,2%), Eastern Cape (63,7% versus 46,2%), Limpopo (65,7% versus 49,7%) and Mpumalanga (66,2% versus 50,9%). Grants were most important as a main source of income for households in Eastern Cape (42,0%) and Limpopo (35,2%).

Due to the high uptake of the R350 per month grant, the percentage of individuals who accessed grants increased to 35,7% in 2021, while the percentage of households that received at least one grant increased to 50,6% in 2021. Nationally, 5,8% of individuals accessed the COVID-19 SRD grants in 2021. Individual access to the SRD grant was notably higher in metros at 25,2%.

The percentage of households with access to an improved source of water increased from 84,4% to 88,7% between 2002 and 2021. The increases were most notable in Eastern Cape (+14,9 percentage points) and KwaZulu-Natal (+11,6 percentage points). Despite these notable improvements, access to water actually declined in six provinces between 2002 and 2021. The largest decline was observed in Limpopo (-4,4 percentage points), Mpumalanga (-4,3 percentage points) and North West (-2,2

percentage points). The declines, however, belie the fact that more households had access to piped water in 2021 than two decades earlier.

Through the provision and the efforts of government, support agencies and existing stakeholders, the percentage of households with access to improved sanitation increased by 22,4 percentage points between 2002 and 2021, growing from 61,7% to 84,1%. The most improvement was noted in Eastern Cape where the percentage of households with access to improved sanitation increased by 58,3 percentage points to 91,7%, and Limpopo in which access increased by 31,6 percentage points to 58,5%. The installation of pit toilets with ventilation pipes played an important part in achieving the large improvements. A range of reasons, including rapid household growth and urbanisation, as well as a preference for flush toilets have all contributed to the slow progress over the reference period. The relative scarcity of water and regular water interruptions experienced in many parts of the country might increasingly lead to the use of alternative sources of sanitation.

It is notable that the percentage of households whose members usually wash hands with soap and water increased notably between 2019 and 2021 (from 43,6% to 59,1%), while the percentage of households whose members only rinsed their hands with water decreased from 50,8% to 35,2% over the same period of time. Almost three-quarters (73,5%) of households reported that they had access to hand washing facilities.

An increase in the percentage of households that were connected to the electricity supply from the mains from 76,7% in 2002 to 89,3% in 2021, was accompanied by a decrease in the use of wood (20,0% to 7,7%) and paraffin (16,1% to 3,5%) over the same period. The common use of wood and coals for cooking purposes in rural provinces such as Limpopo (32,9%) and Mpumalanga (21,0%) is, however, an indication that available resources are still very accessible and, most likely, less expensive than using electricity. Over one-fifth (22,3%) of households did not use electricity for cooking in 2021.

Three-fifths (62,9%) of households in South Africa had their refuse removed weekly or less regularly in 2021. It is notable that refuse removal was much more common in urban than in rural areas (85,4% compared to 11,8%), while 86,3% of households in metropolitan areas had access to these services.



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## Note to data users

The low response rates reported in GHS 2020 and other Stats SA household surveys due to the introduction of Computer Assisted Telephone Interviewing (CATI) have been a point of concern for many users. Although the response rate has increased slightly from 39,4% for GHS 2020 to 40.1% for GHS 2021, it remains low. A series of quality checks were done to ensure that high quality data is released.

The coefficient of variation (CV) was used to make a determination of which estimates to publish. Estimates with CVs not exceeding 30% were published and data users were advised to use such estimates with caution. Although many metro / non-metro estimates had CVs of more than 30% many response categories reported lower CVs and users are hence cautioned to use estimates with care,

Stats SA re-introduced face-to-face interviews in 2022 and we trust that the response rates will return to pre-Covid levels for GHS 2022.

# 1 Introduction

This statistical release presents a selection of key findings from the General Household Survey (GHS) 2021 that was conducted between February and December 2021.

## 1.1 Purpose

Statistics South Africa has been conducting the GHS annually since 2002. The survey replaced the October Household Survey (OHS) that took place between 1993 and 1999. The survey is an omnibus household-based instrument aimed at determining the progress of development in the country. It measures, on a regular basis, the performance of programmes as well as the quality of service delivery in a number of key service sectors in the country. Six broad areas are covered in the survey, namely education, health and social development, housing, households' access to services and facilities, food security, and agriculture.

This report has three main objectives, namely:

- To present the key findings of GHS 2021.
- To provide trends across a twenty-year period since the GHS was introduced in 2002;
- To provide a more in-depth analysis of selected service delivery issues.

Two additional reports, viz. Selected provincial development indicators (P0318.2) and Selected development indicators: metros (P0318.3) are published with this report.

## 1.2 Survey scope

The target population of the survey consists of all private households and residents in workers' hostels across all nine provinces of South Africa. The survey does not cover other collective living quarters such as students' hostels, old-age homes, hospitals, prisons and military barracks, and is therefore only representative of non-institutionalised and non-military persons or households in South Africa.

The findings of the GHS 2021 provide a critical assessment of the levels of development in the country as well as the extent of service delivery and the quality of services in a number of key service sectors. Amongst these are: education, health, disability, social security, housing, energy, access to and use of water and sanitation, environment, refuse removal, telecommunications, transport, household income, access to food, and agriculture.

## 1.3 A note on the collection of GHS 2021

Stats SA suspended face-to-face data collection for all its surveys in early 2020 to ensure that the field staff and respondents were not exposed to the risk of contracting the coronavirus and to contain its spread. The restrictions remained in place for most of 2021.

As in 2020, data collection continued using Computer-Assisted Telephone Interviews (CATI) rather than face-to-face Computer Assisted Personal Interviews (CAPI). Since Stats SA uses a dwelling unit sample, the GHS 2019 sample was re-used and households that provided operational telephone numbers in 2019 were contacted by Survey Officers (SOs) in 2020 and in 2021.

Non-contacts were, however, quite high since many households did not provide useable contact numbers in 2019 while many contact numbers were furthermore found to be invalid. All of these were regarded as non-contacts and were adjusted for during the weighting processes. Dwellings that were out-of-scope in 2019 remained so in 2020 and 2021. To increase the number of households that could

be contacted, survey officers physically visited all households without legitimate telephone numbers, including those that were out-of-scope in 2019, to source updated contact details. This exercise yielded positive results.

Despite the slight improvements, the change in the survey mode of collection from CAPI to CATI, and the fact that the GHS 2021 estimates are not based on a full sample, comparisons with previous years should be made with caution. More technical information is available in Section 18.

## 2 Basic population statistics

### 2.1 Population estimates

The population figures in Table 2.1 are based on mid-year population estimates produced for 2021 using the 2017 series mid-year population estimates (MYPE).

**Table 2.1: Population per province, 2002–2021**

	Total population (Thousands)									
	WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
<b>2002</b>	4 756	6 515	1 030	2 645	9 660	3 054	9 764	3 478	5 019	<b>45 921</b>
<b>2003</b>	4 858	6 505	1 040	2 652	9 718	3 097	10 010	3 530	5 050	<b>46 461</b>
<b>2004</b>	4 960	6 498	1 050	2 661	9 783	3 141	10 258	3 586	5 085	<b>47 021</b>
<b>2005</b>	5 063	6 493	1 060	2 670	9 853	3 186	10 511	3 643	5 123	<b>47 602</b>
<b>2006</b>	5 168	6 489	1 071	2 680	9 928	3 232	10 772	3 701	5 165	<b>48 205</b>
<b>2007</b>	5 276	6 484	1 082	2 691	10 005	3 281	11 044	3 760	5 207	<b>48 830</b>
<b>2008</b>	5 388	6 480	1 093	2 704	10 087	3 330	11 325	3 820	5 252	<b>49 479</b>
<b>2009</b>	5 502	6 478	1 105	2 717	10 175	3 382	11 612	3 883	5 299	<b>50 152</b>
<b>2010</b>	5 618	6 477	1 117	2 732	10 268	3 434	11 910	3 947	5 349	<b>50 850</b>
<b>2011</b>	5 738	6 476	1 130	2 748	10 365	3 488	12 219	4 012	5 400	<b>51 574</b>
<b>2012</b>	5 860	6 476	1 143	2 764	10 468	3 545	12 539	4 078	5 453	<b>52 325</b>
<b>2013</b>	5 985	6 477	1 156	2 782	10 576	3 603	12 868	4 147	5 511	<b>53 104</b>
<b>2014</b>	6 112	6 481	1 170	2 802	10 691	3 663	13 203	4 218	5 573	<b>53 912</b>
<b>2015</b>	6 242	6 486	1 184	2 822	10 812	3 726	13 549	4 291	5 638	<b>54 750</b>
<b>2016</b>	6 374	6 492	1 199	2 844	10 941	3 790	13 906	4 367	5 707	<b>55 620</b>
<b>2017</b>	6 510	6 499	1 214	2 867	11 075	3 856	14 278	4 444	5 779	<b>56 522</b>
<b>2018</b>	6 650	6 508	1 230	2 891	11 215	3 925	14 661	4 523	5 854	<b>57 458</b>
<b>2019</b>	6 794	6 519	1 246	2 917	11 363	3 997	15 055	4 605	5 933	<b>58 429</b>
<b>2020</b>	6 941	6 530	1 263	2 945	11 519	4 070	15 465	4 689	6 015	<b>59 437</b>
<b>2021</b>	7 091	6 542	1 280	2 973	11 682	4 146	15 888	4 776	6 102	<b>60 482</b>

The 2017 series MYPE replaced the previously used 2013 series since it better reflected the demographic shifts observed during Census 2011, ensuring much better alignment to complementary data such as, for instance, the number of children attending school. The 2017 series model will be used until a new projection model is introduced in future, probably after the results of Census 2022 become available. Users must consult the Statistical release P0302 for the most recent population estimates.

## 2.2 Household estimates

Table 2.2 outlines the estimated number of households to which the GHS data were benchmarked in each province. Household estimates were developed using the United Nations headship ratio methodology.

**Table 2.2: Number of households per province, 2002–2021**

	Total households (Thousands)									
	WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
<b>2002</b>	1 217	1 506	247	679	2 070	767	2 785	801	1 121	<b>11 194</b>
<b>2003</b>	1 251	1 518	252	692	2 105	789	2 882	827	1 144	<b>11 459</b>
<b>2004</b>	1 287	1 526	257	703	2 137	812	2 982	851	1 164	<b>11 718</b>
<b>2005</b>	1 323	1 530	261	715	2 168	834	3 088	876	1 181	<b>11 977</b>
<b>2006</b>	1 360	1 532	266	726	2 198	858	3 202	902	1 199	<b>12 243</b>
<b>2007</b>	1 396	1 541	272	738	2 240	881	3 305	929	1 222	<b>12 522</b>
<b>2008</b>	1 432	1 551	277	751	2 284	906	3 416	956	1 247	<b>12 819</b>
<b>2009</b>	1 469	1 561	282	763	2 331	930	3 537	984	1 272	<b>13 128</b>
<b>2010</b>	1 507	1 571	287	775	2 382	956	3 668	1 013	1 298	<b>13 456</b>
<b>2011</b>	1 547	1 580	293	787	2 434	982	3 807	1 043	1 324	<b>13 797</b>
<b>2012</b>	1 585	1 596	299	801	2 495	1 008	3 938	1 074	1 357	<b>14 152</b>
<b>2013</b>	1 626	1 611	305	815	2 556	1 037	4 075	1 105	1 390	<b>14 521</b>
<b>2014</b>	1 670	1 624	311	830	2 619	1 067	4 220	1 138	1 424	<b>14 904</b>
<b>2015</b>	1 718	1 636	318	845	2 683	1 099	4 377	1 172	1 459	<b>15 307</b>
<b>2016</b>	1 771	1 648	325	862	2 752	1 135	4 546	1 208	1 495	<b>15 744</b>
<b>2017</b>	1 823	1 667	333	882	2 827	1 172	4 709	1 248	1 537	<b>16 199</b>
<b>2018</b>	1 877	1 685	342	901	2 905	1 210	4 884	1 289	1 579	<b>16 671</b>
<b>2019</b>	1 933	1 702	350	921	2 985	1 248	5 072	1 332	1 621	<b>17 163</b>
<b>2020</b>	1 962	1 709	354	931	3 026	1 267	5 174	1 354	1 641	<b>17 418</b>
<b>2021</b>	2 021	1 725	363	952	3 111	1 308	5 384	1 399	1 684	<b>17 947</b>

This model estimates that the number of households increased from 11,2 million in 2002 to 17,9 million in 2021. Gauteng had the largest number of households, followed by KwaZulu-Natal, Western Cape and Eastern Cape. Northern Cape – the least populous province – also had the smallest number of households.

### 3 Household composition

#### 3.1 Household composition and living arrangements

Most individuals rely on their families and households for their physical, social and economic well-being and survival; hence most people consider families and households as their most important social institutions and social reference groups. Although traditional family structures are constantly changing, they remain very important in countries such as South Africa where large proportions of the population are subject to debilitating poverty and unemployment and institutional support is inadequate.

Stats SA defines households as all individuals who live together under the same roof or in the same yard, and who share resources such as food or money to keep the household functioning. The definition is much more restrictive than the concept of a family which usually refers to individuals who are related by blood and who may live very far apart. Although household members are usually related, blood relations are not a prerequisite for the formation of a household. The living arrangements of individuals are generally defined in terms of marital status and the composition of households.

**Figure 3.1: Marital or relationship status for individuals aged 18 years and older, 2021**

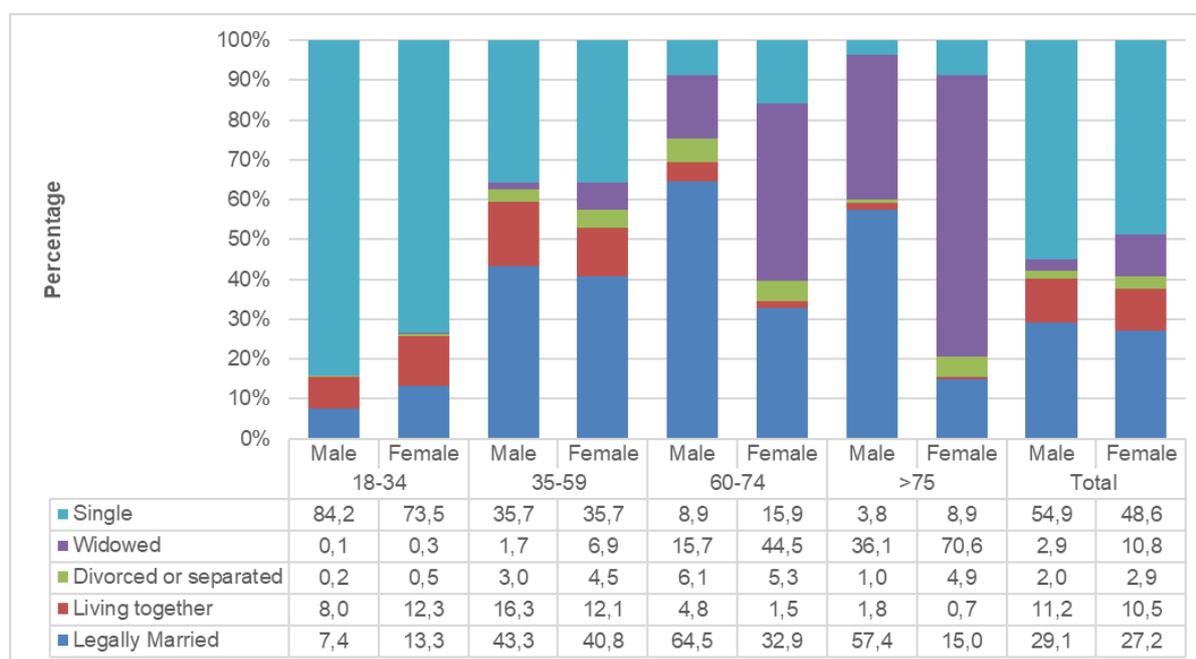
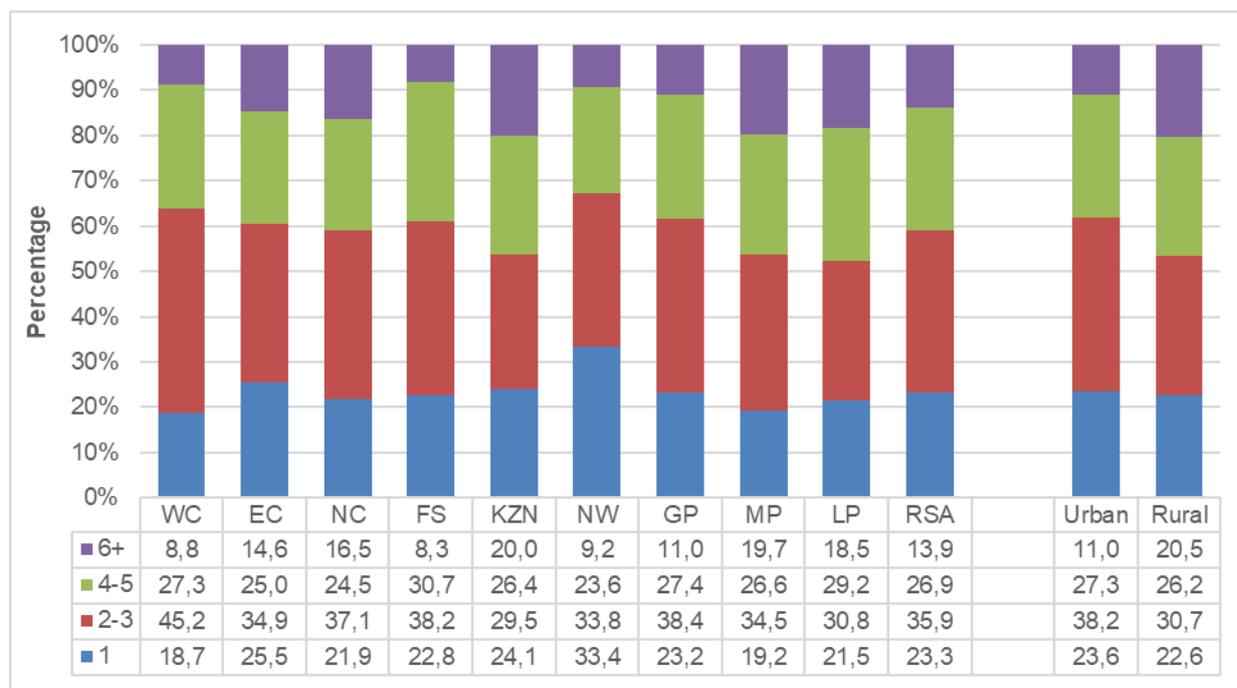


Figure 3.1 shows that a slightly larger percentage of males than females aged 18 years and older (54,9% compared to 48,6%) were categorised as single. A larger percentage of females than males in this age group were widowed (10,8% compared to 2,9%), or divorced/separated (2,9% compared to 2,0%). The picture changes notably when relationship status is compared between different age groups.

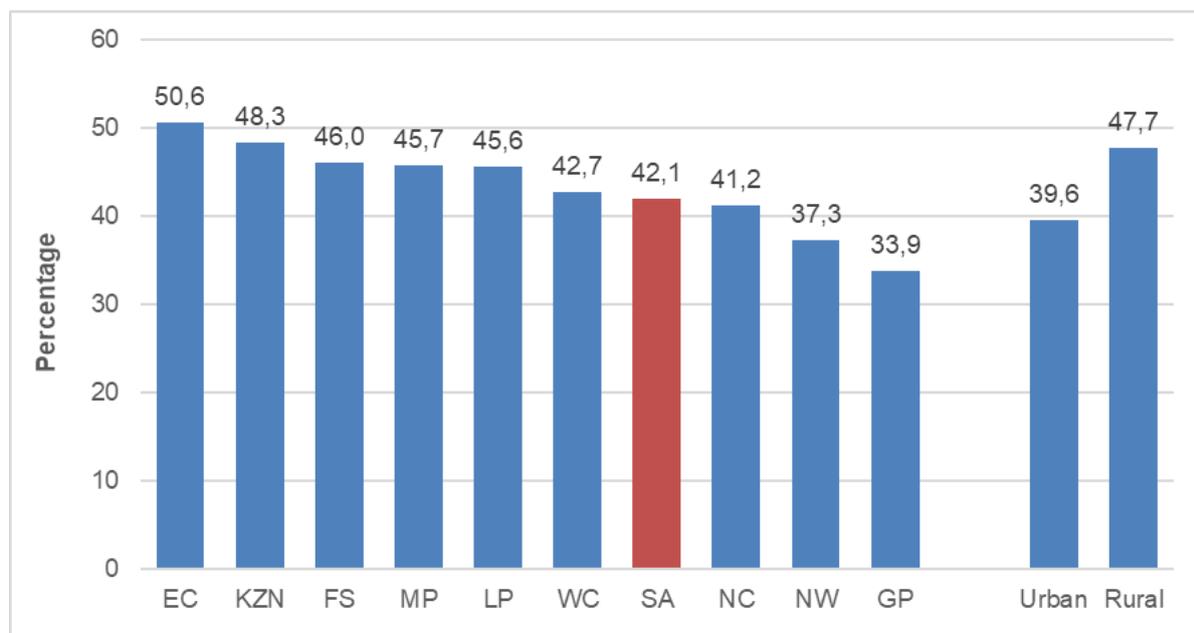
Although marriage and cohabitation are more common among women than men in the age group 18–34 years, the situation is reversed during older age groups, particularly for women older than 60 years of age. Marriage was much more common amongst males than females in both the 60–74 and over 75 year age groups (64,5% compared to 32,9%, and 57,4% compared to 15,0%). By contrast, 79,5% of women in the age group 75 years and older remained single or widowed compared to 39,9% of males in this age group.

**Figure 3.2: Percentage household size by province and rural/urban status, 2021**



More than one-fifth (23,3%) of South African households consisted of a single person in 2021. Single-person households were most common in North West (33,4%) and least common in Western Cape (18,7%). By contrast, households that comprised six persons or more were most common in KwaZulu-Natal (20,0%), and more generally in rural areas (20,5% compared to 11,0% for urban areas).

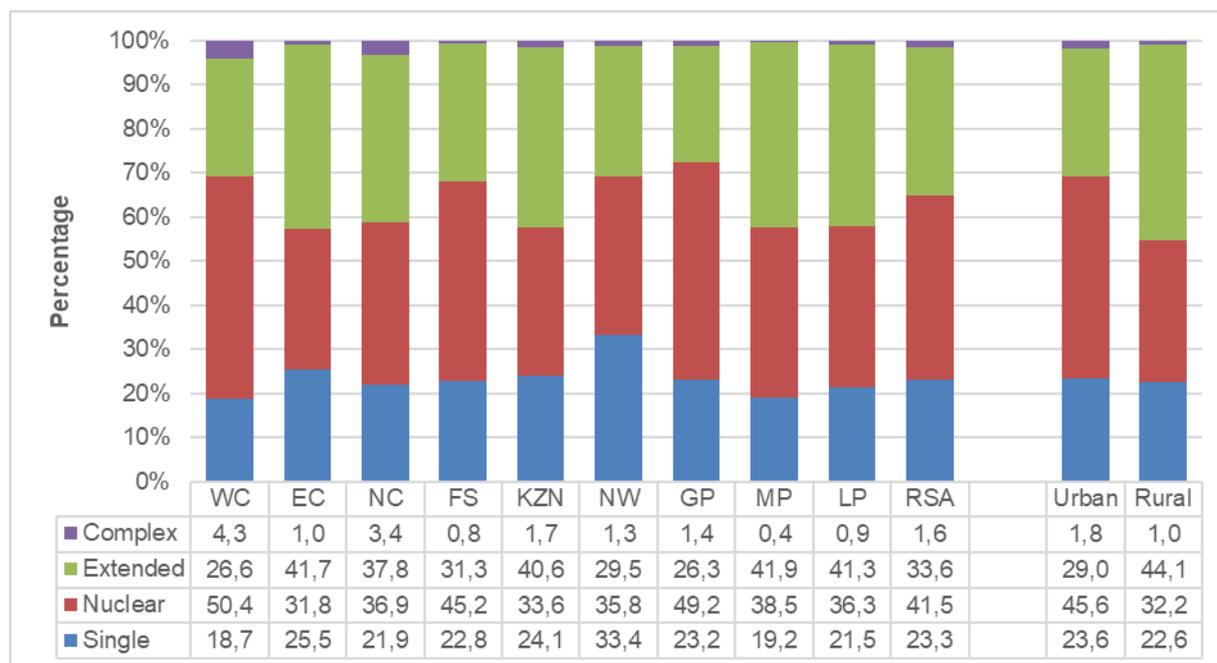
**Figure 3.3: Percentage distribution of female-headed households by province and urban/rural status, 2021**



More than four-tenths (42,1%) of the households in South Africa were headed by women. Figure 3.3 shows that 39,6% of urban households were headed by women compared to 47,7% of those in rural areas. Female-headed households were most common in provinces with large rural areas such as

Eastern Cape (50,6%), KwaZulu-Natal (48,3%), and least common in the most urbanised province, Gauteng (33,9%).

**Figure 3.4: Percentage distribution of household composition by province and rural/urban status, 2021**



Households can be configured in a variety of ways. Figure 3.4 describes a configuration based around the core nuclear unit. Nationally, an estimated 41,5% of households were classified as nuclear (couples, or one or more parent(s) with children) while 33,6% of households were classified broadly as extended households (a nuclear core combined with other family members such as parents or siblings). Only 1,6% of households were classified as complex, meaning they contained at least one non-related person. It is noticeable that extended households were much more common in rural than urban areas (44,1% compared to 29,0%), while nuclear families were more common in urban areas (45,6% compared to 32,2%). Nuclear households were most common in Western Cape (50,4%) and Gauteng (49,2%). Extended households were most common in Mpumalanga (41,9%) and Eastern Cape (41,7%).

**Figure 3.5: Percentage distribution of inter-generational households by province and rural/urban status, 2021**

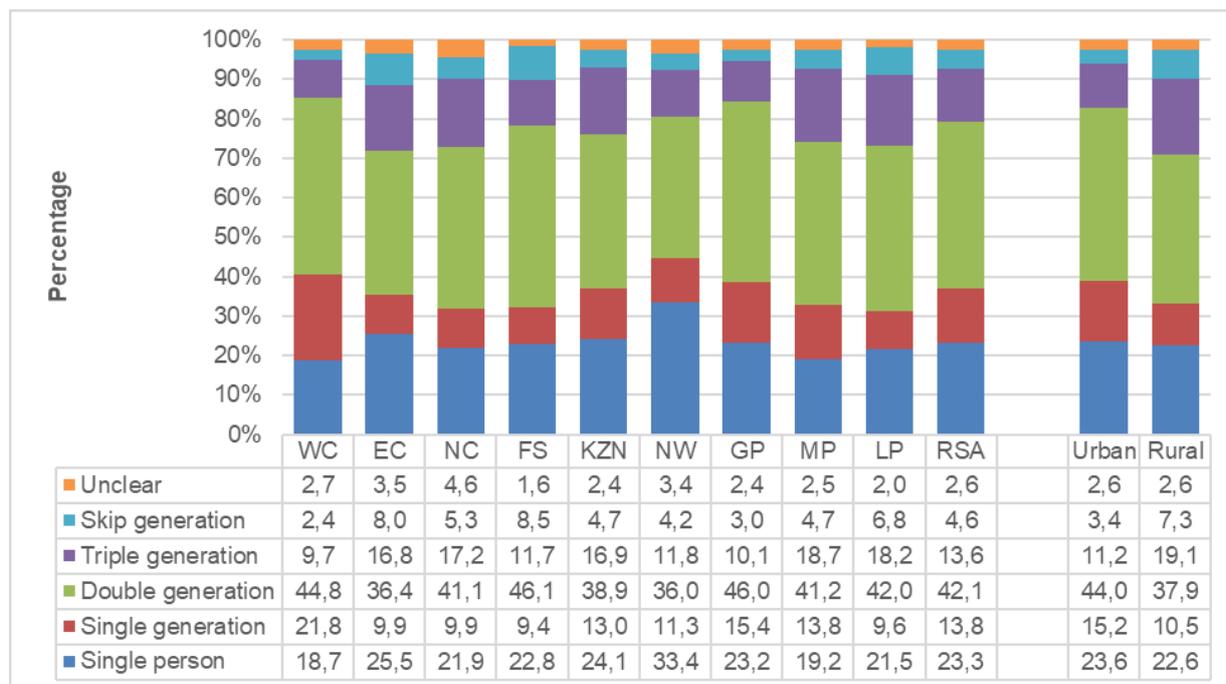


Figure 3.5 outlines household membership based on an inter-generational configuration. Nationally, 42,1% of households were classified as double generational households (comprising parents and children) while 13,8% of households could be classified as single generation households (partners or siblings living together). Approximately 13,6% of households contained three generations, while 4,6% were skip-generation households in which grandparents lived with grandchildren. The highest percentage of skip-generation households were found in Free State (8,5%) and Eastern Cape (8,0%). Triple generational (or inter-generational) households were also most common in Mpumalanga (18,7%) and Limpopo (18,2%). Skip- and triple generational households were noticeably more common in rural than in urban areas.

### 3.2 Living arrangements of children

Figure 3.6 outlines the percentage of children according to their orphanhood status. Orphans are commonly defined as children under the age of 18 years who have lost one or both parents to any cause of death.

**Figure 3.6: Percentage of children orphanhood status by province, 2021**

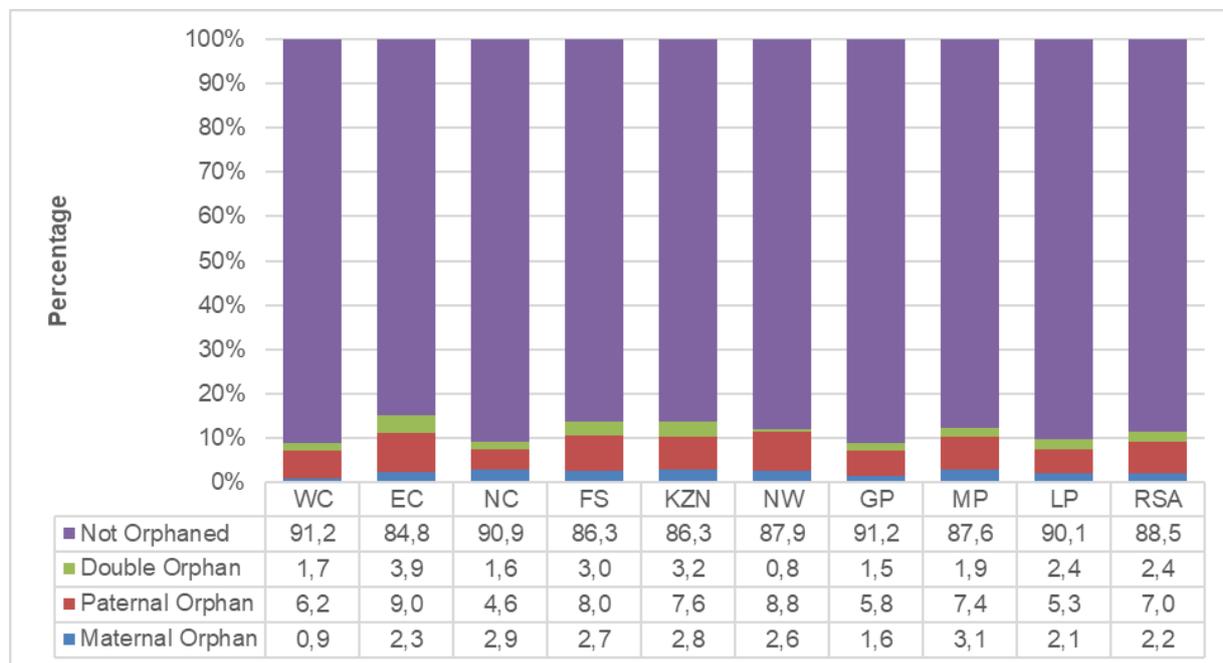


Figure 3.6 shows that, nationally, 11,6% of children were classified as orphans. The survey found that 2,2% of children lost their mothers, 7,0% of children had lost their fathers, and 2,4% of children lost both parents. The percentage of orphaned children was highest in Eastern Cape (15,2%) and Free State (13,7%) and lowest in Western Cape (8,8%).

**Figure 3.7: Percentage of children’s living arrangements by province and urban/rural status, 2021**

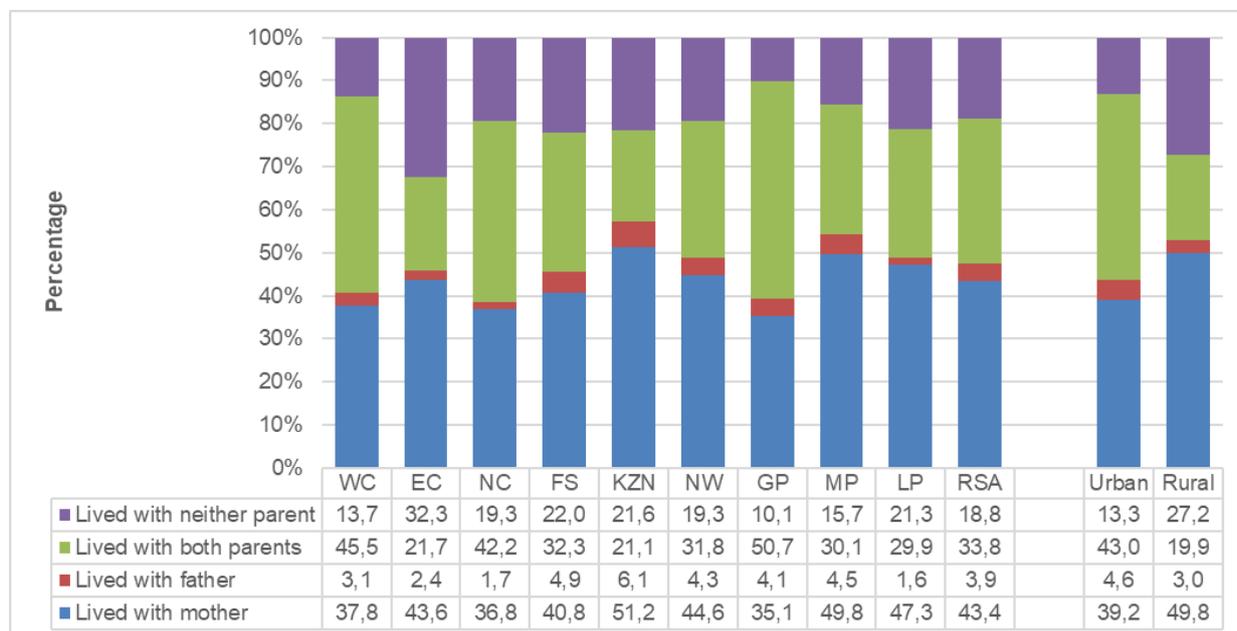


Figure 3.7 shows that about one-fifth (18,8%) of all children lived with neither their parents while one-third (33,8%) lived with both parents. A much larger percentage of children lived only with their mothers (43,4%) than with their fathers (3,9%). Not living with either parent was most common in Eastern Cape (32,3%), Free State (22,0%) and KwaZulu-Natal (21,6%) and least common in Gauteng (10,1%) and Western Cape (13,7%). Living with both biological parents was most common in Gauteng (50,7%) and Western Cape (45,5%).

While the largest percentage of children in urban areas lived with both parents (43,0%) or with their mothers (39,2%), almost one-half (49,8%) of children in rural areas lived with their mothers while only 19,9% lived with both parents.

Families and households are profoundly important to the developmental, emotional and cognitive growth of children. Although biological parents can play a central role in the development of children, the value of living with biological parents depends on the quality of care they can provide. Children that are left in the care of other relatives, such as grandparents, are not necessarily more disadvantaged than children who lived with their biological parents.

## 4 Education

All South Africans have a right to basic education and the Bill of Rights obliges the government to progressively make education available and accessible to everyone through reasonable measures. Human resources constitute the ultimate basis for the wealth of a nation, and it is therefore vital that a country develops the skills and knowledge of its residents for the greater benefit of all.

By tracking a number of core education and education-related indicators on an annual basis, particular aspects of the circumstances of learners can be analysed. As noted earlier, the focus of this section is to provide an overview of various aspects of the education profile of South Africans over the period 2002 to 2021. In this regard, the report will highlight important patterns and trends with respect to educational attendance of persons aged 0–4 years, individuals currently attending schools and higher education institutions, general attendance rates and educational achievements of individuals aged 20 years and older.

### 4.1 Educational profile of learners aged 0–4 years

Policy decisions and investments by government related to access to early childhood development (ECD) provisioning has increased over time. It is very difficult to measure the direct contribution of the state towards ECD activities since a household based survey, such as the GHS, is not designed to accurately identify the suppliers of ECD services. These surveys can, however, quantify the children making use of such services. That notwithstanding, access to and participation in ECD activities among children aged 0–4 has overall increased over time.

**Table 4.1: Percentage of children aged 0–4 years using different child care arrangements by province, 2021**

Care arrangements for children aged 0–4 years	Province (Per cent)									
	WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
Grade R, Pre-school, nursery school, crèche, edu-care centre	39,8	25,4	16,4	39,6	18,8	18,6	38,1	23,7	27,7	28,5
Day mother	8,4	1,7	7,1	8,3	6,8	0,0	6,5	2,5	8,0	5,6
At home with parent or guardian	44,0	67,0	66,3	43,3	58,7	73,2	51,8	64,5	55,5	57,3
At home with another adult	5,4	4,4	7,8	8,2	15,3	6,2	2,7	6,9	8,2	7,3
At home with someone younger than 18 years	0,4	0,0	0,3	0,0	0,0	0,0	0,1	0,0	0,0	0,1
At somebody else's dwelling	2,0	1,5	1,0	0,7	0,3	2,0	0,7	2,4	0,3	1,1
Other	0,0	0,0	1,2	0,0	0,1	0,0	0,2	0,0	0,3	0,1
<b>Total</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>

Table 4.1 summarises the attendance of young children aged 0–4 years at different types of ECD facilities or care arrangements, and the extent to which children were exposed to stimulation activities across provinces during 2021. Nationally, almost two-thirds (64,6%) of children aged 0–4 stayed home with a parent or guardian, or with another adult. This figure was most pronounced in North West (79,4%), Northern Cape (74,1%) and KwaZulu-Natal (74,0%). Only 28,5% of children in this age group attended formal ECD facilities, nationally. Attendance of ECD facilities was most common in Western Cape (39,8%) and Free State (39,6%).

## 4.2 General attendance of individuals aged 5 years and older at educational institutions

Almost one-third (31,5%) of individuals aged five years and older attended some kind of educational institution. Table 4.2 shows that, nationally, 87,6% of these individuals attended primary or secondary schools, while a further 5,6% attended tertiary institutions. Only 2,1% of individuals attended Technical Vocational Education and Training (TVET) colleges.

**Table 4.2: Percentage of individuals aged 5 years and older who are attending educational institutions by province and type of institution attended, 2021**

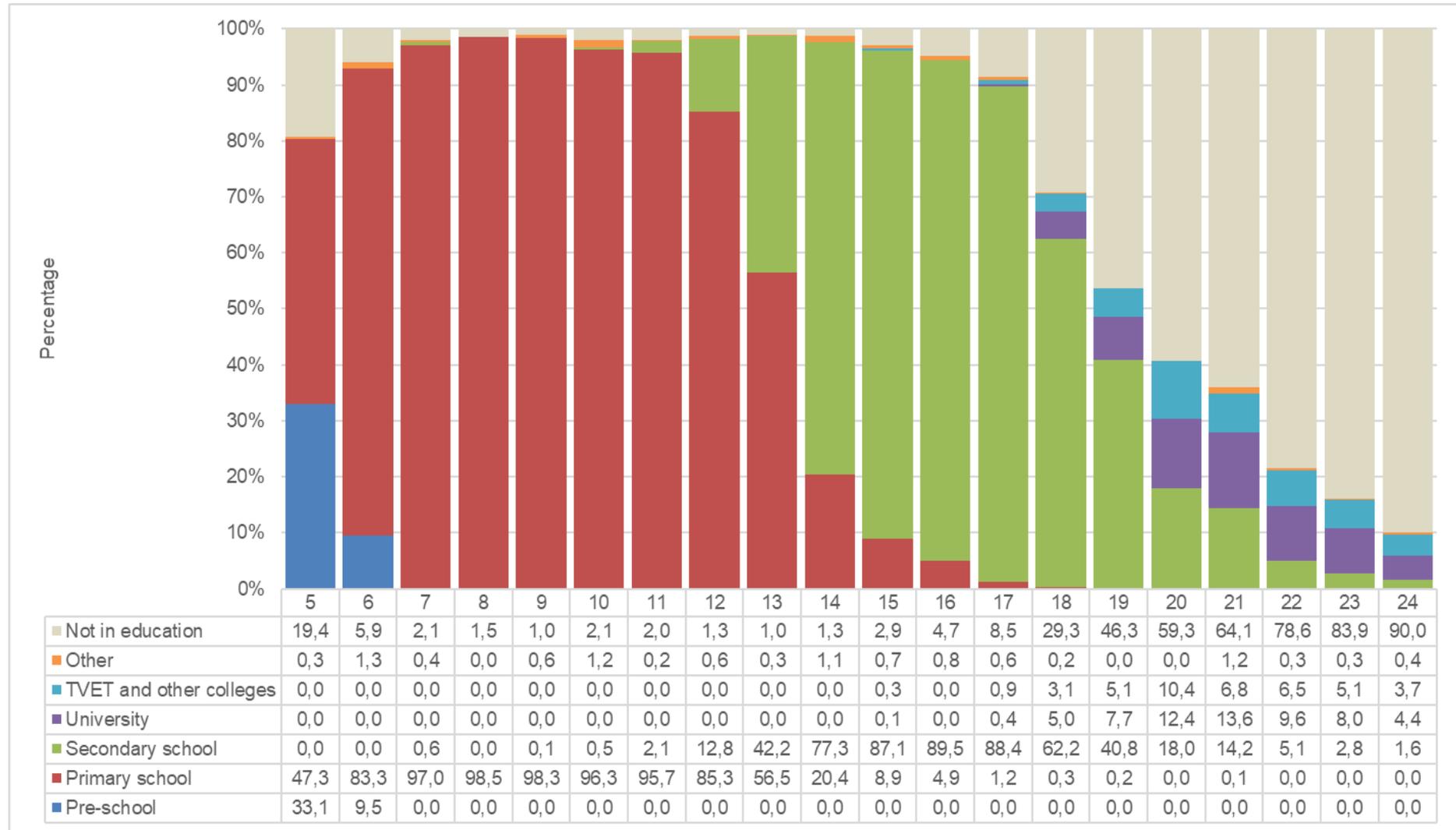
Type of institution	Province (per cent)									
	WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
Pre-school	3,5	2,4	3,5	4,8	1,8	1,5	3,4	2,9	2,5	2,8
School	85,8	92,4	85,7	83,8	90,1	90,9	80,2	90,4	92,7	87,6
Higher education institutions	6,9	3,2	3,6	7,0	5,9	4,9	9,5	1,9	1,7	5,6
TVET	1,1	1,1	3,3	3,2	1,2	1,6	2,8	3,9	2,5	2,1
Other colleges	2,0	0,7	1,4	0,4	0,3	0,9	2,8	0,8	0,5	1,3
Home Schooling	0,0	0,1	1,5	0,4	0,2	0,2	0,4	0,0	0,1	0,2
Other	0,7	0,1	1,1	0,5	0,4	0,0	1,0	0,1	0,2	0,5
<b>Total (thousands)</b>	<b>1 792</b>	<b>2 054</b>	<b>318</b>	<b>873</b>	<b>3 588</b>	<b>1 192</b>	<b>3 983</b>	<b>1 355</b>	<b>1 999</b>	<b>17 154</b>

Unspecified was excluded from the denominator when calculating percentages

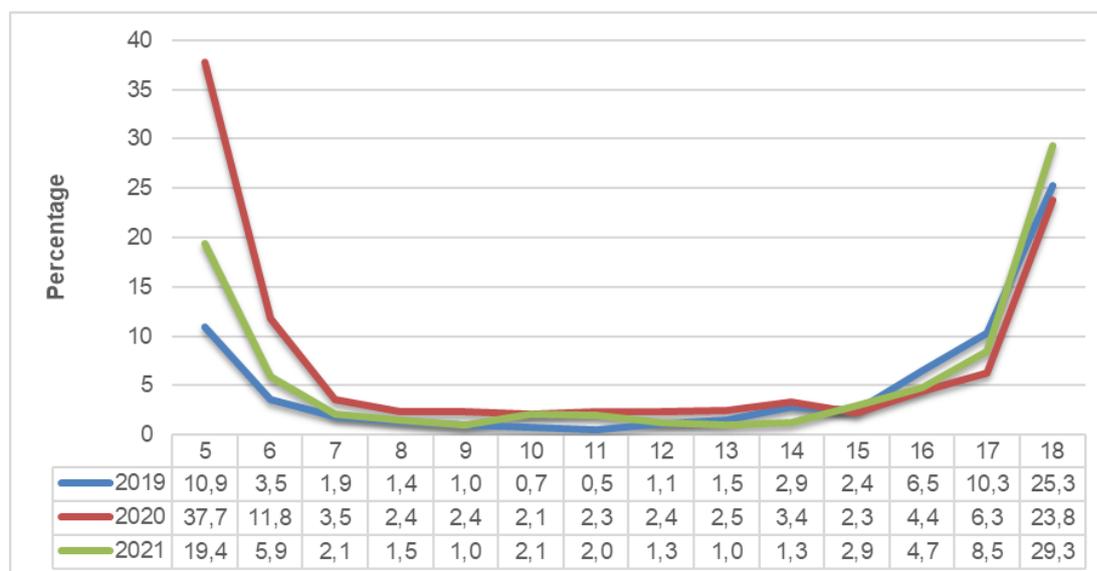
The percentage of individuals aged five years and older and who attended school was the highest in Limpopo (92,7%) and Eastern Cape (92,4%), and lowest in Gauteng (80,2%). Attendance of higher education institutions was most common in Gauteng (9,5%), Free State (7,0%) and Western Cape (6,9%).

The percentage of individuals aged 5–24 years that attended educational institutions by single ages is presented in Figure 4.1. The figure shows very high school attendance in the age group 7–14 years, after which the attendance of educational facilities drops sharply. By the age of 24 years, approximately 10,0% of individuals were still attending an educational facility. The figure also shows a noticeable representation of learners who were older than the ideal graduation age in primary and secondary schools.

Figure 4.1: Type of educational institution attended by individuals aged 5–24 years, 2021



**Figure 4.2: Percentage of individuals aged 5 to 18 years who did not attend educational institutions, 2019–2021**



The percentage of individuals aged 5–18 years who did not attend any educational institutions between 2019 and 2021 is compared in Figure 4.2. The figure highlights the negative effect of COVID-19 on particularly young children by showing that a much higher percentage of children aged five and six years old were not attending educational institutions in 2020 and 2021 than in 2019, before COVID-19 started. Amongst five year olds the percentage of children who did not attend any education institutions increased from 10,9% in 2019 to 37,7% in 2020, before declining to 19,4% in 2021. It is clear that the young age groups were worst affected by the closure of nursery schools and pre-school centres during this time.

**Figure 4.3: Percentage of individuals aged 7 to 24 years who attended educational institutions by province, 2002 and 2021**

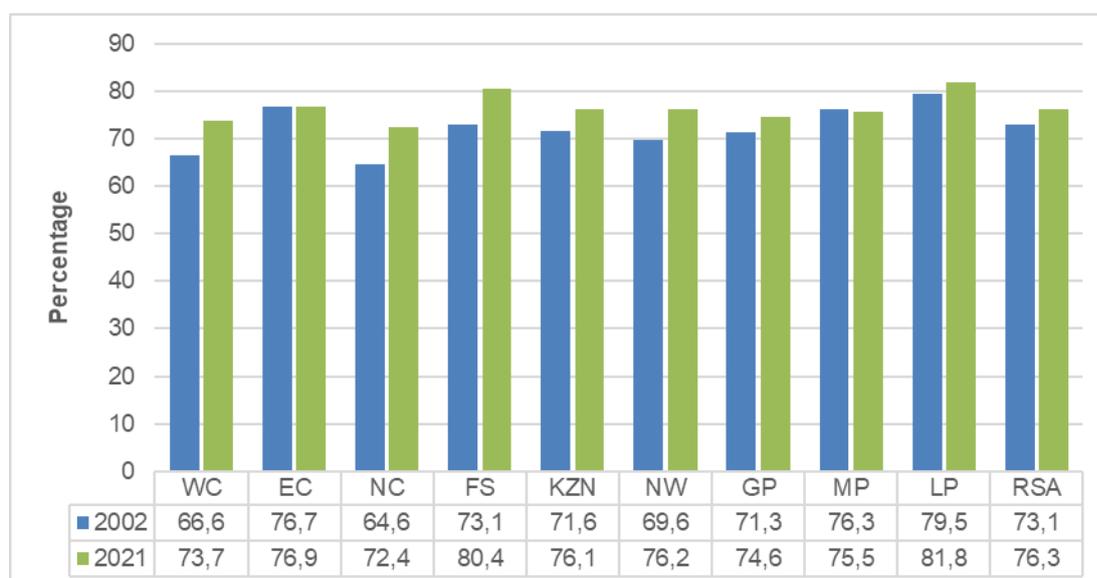
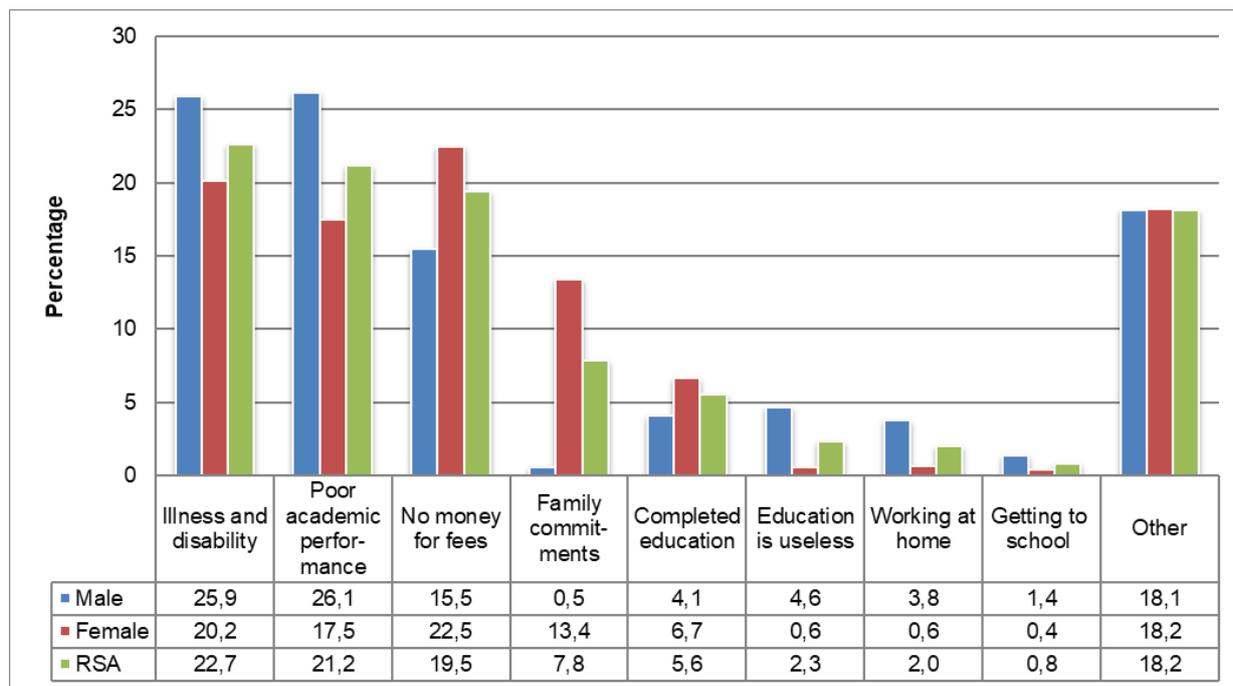


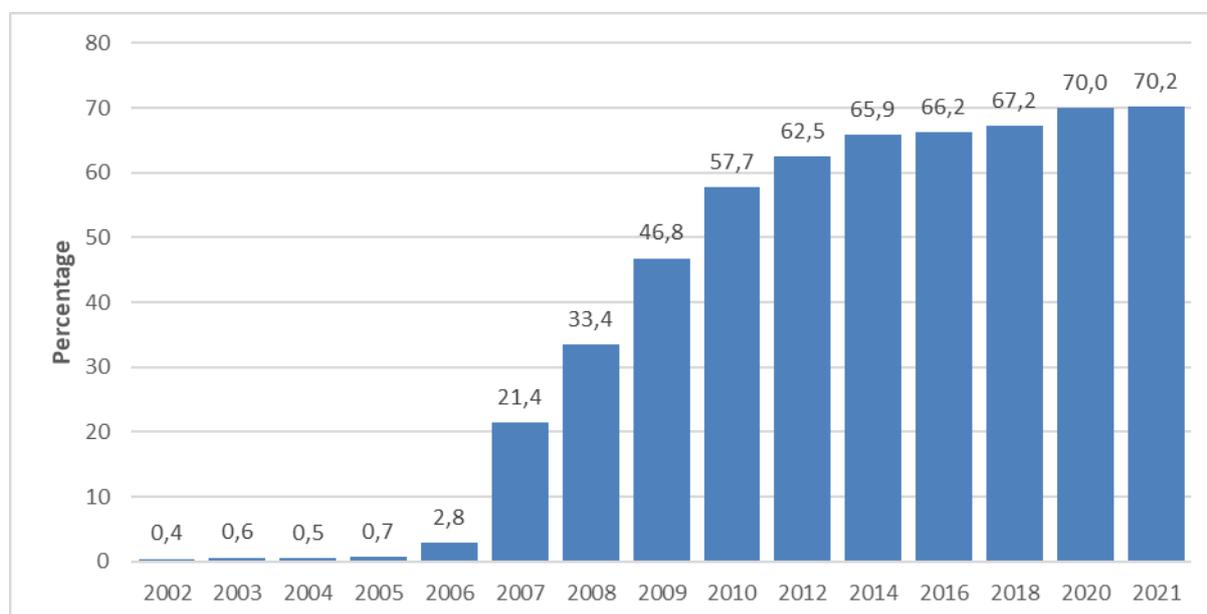
Figure 4.3 shows that the percentage of persons aged 7 to 24 who attended educational institutions increased from 73,1% in 2002 to 76,3% in 2021. Attendance increased across most provinces between 2002 and 2021, with the highest increase observed in Northern Cape (+7,8 percentage points) and Free State (+7,3 percentage points).

**Figure 4.4: Percentage distribution of main reasons given by individuals aged 7 to 18 years for not attending an educational institution by sex, 2021**



The main reasons provided by males and females in the age group 7–18 years for not attending any educational institutions are depicted in Figure 4.3. Learners most commonly reported illness and disability (22,7%), poor academic performance (21,2%) and a lack of money for fees (19,5%) as the main reason for not attending an educational institution. Although 7,8% of individuals left their studies as a result of family commitments (i.e. getting married, minding children and pregnancy), it is noticeable that females were much more likely to offer these as reasons than males (13,4% compared to 0,5%). Approximately 2,3% of individuals reported that education was useless. Males were more likely to share this sentiment than females in this instance.

**Figure 4.5: Percentage of individuals aged 5 years and older who attended schools and who did not pay tuition fees, 2002–2021**



Although inadequate access to money to pay for fees remains a major hurdle for learners, attendance of no-fee schools has increased notably since 2002 (Figure 4.5). The percentage of learners aged 5 years and older who attended schools where no tuition fees were levied increased from 0,4% in 2002 to 65,9% in 2014, before increasing more slowly to 70,2% in 2021. Provincially, 92,8% of learners in Limpopo and 78,7% of learners in Eastern Cape attended no-fee schools, compared to 49,7% of learners in Western Cape and 56,4% in Gauteng.

### 4.3 School attendance

There were approximately 15 million learners at school in 2021. The largest percentage of these learners attended schools in KwaZulu-Natal (21,5%) and Gauteng (21,3%). Although only 5,6% of learners attended private schools, there were large variations between provinces. While 12,5% of learners in Gauteng attended private schools, only 2,4% of learners in North West and Eastern Cape attended such institutions.

**Figure 4.6: Percentage of learners attending public schools who benefited from the school nutrition programme by province, 2009 and 2021**

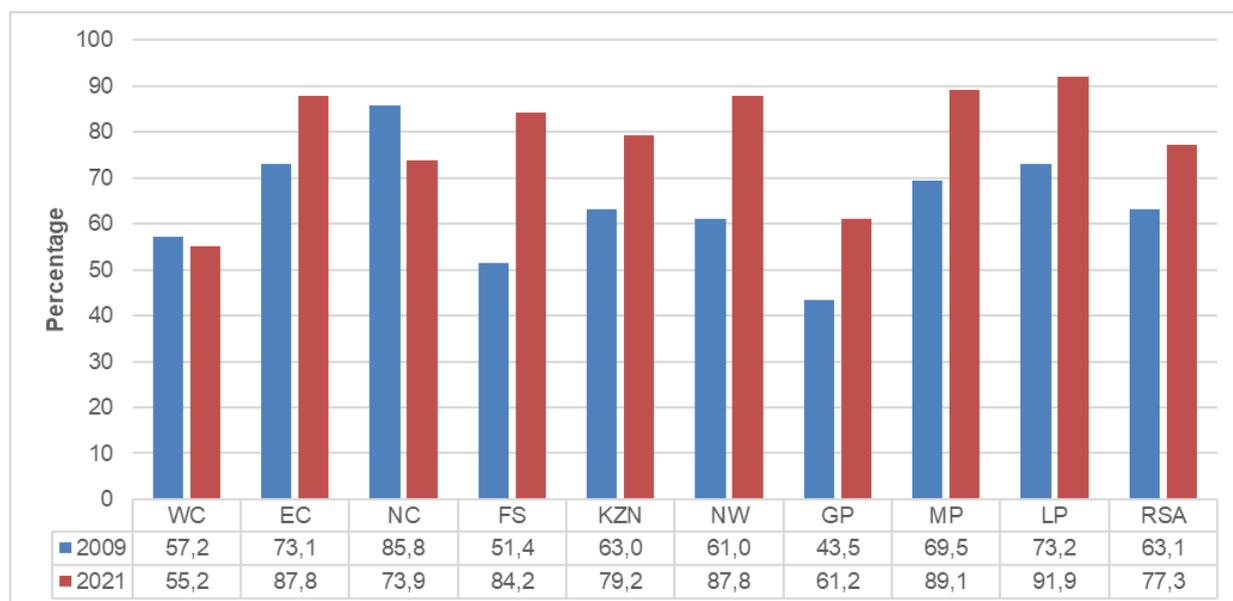


Figure 4.6 presents the percentage of individuals who attended public schools and who benefited from a school nutrition programme in each province in 2009 and 2021. More than three-quarters (77,3%) of learners who attended public schools benefitted from school feeding schemes in 2021, compared to 63,1% in 2009. Learners in Limpopo (91,9%) and Mpumalanga (89,1%) most commonly benefitted from this programme, while only 55,2% of learners in Western Cape and 61,2% of learners in Gauteng benefitted from this type of programme.

#### 4.4 Attendance of institutions of higher education

Table 4.3 shows that the total number of students enrolled at higher education institutions increased by almost 57,8% between 2002 and 2021, growing to 968 109. The percentage of black African students increased by 13,3 percentage points to 73,5% during this time, while the percentage of white students virtually halved to 14,8%.

**Table 4.3: Distribution of students enrolled at higher education institutions by population group, 2002 and 2021**

	2002	2021
<b>Black African</b>	60,2	73,5
<b>Coloured</b>	6,6	7,3
<b>Indian/Asian</b>	5,8	4,4
<b>White</b>	27,5	14,8
<b>Total per cent</b>	<b>100,0</b>	<b>100,0</b>
<b>Total Number</b>	<b>613 359</b>	<b>968 109</b>

Even though most students are black African, the education participation rate of this population group remained proportionally low in comparison with the Indian/Asian and white population groups.

**Figure 4.7: Percentage distribution of student participation rates for individuals aged 18 to 29 years by population group, 2002 and 2021**

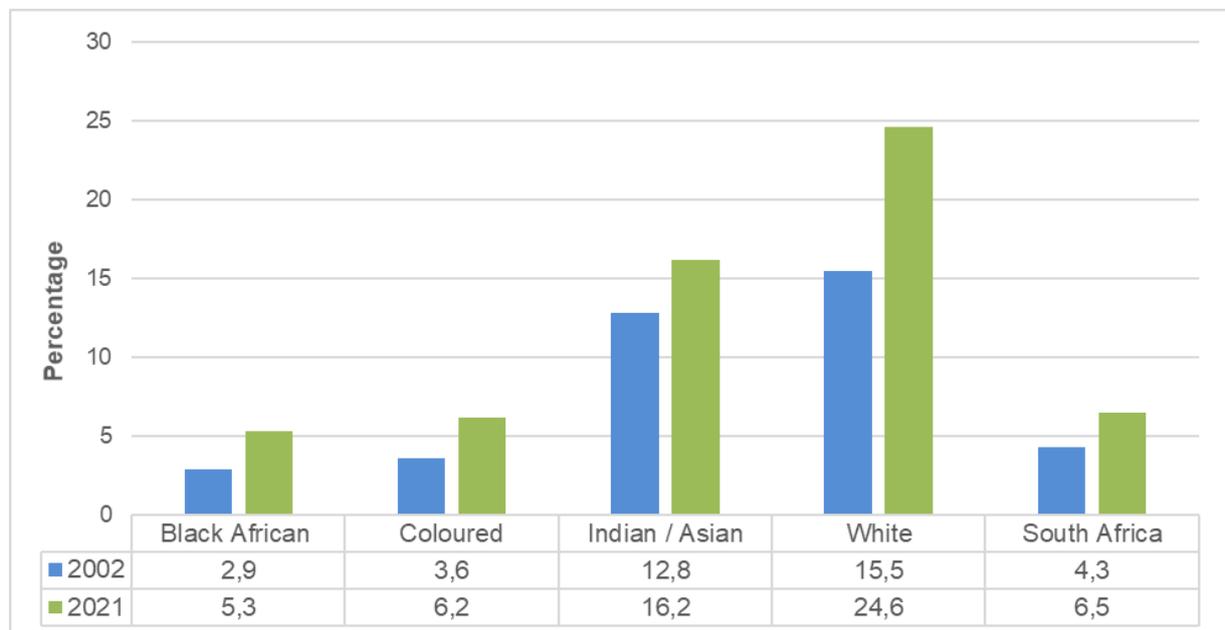
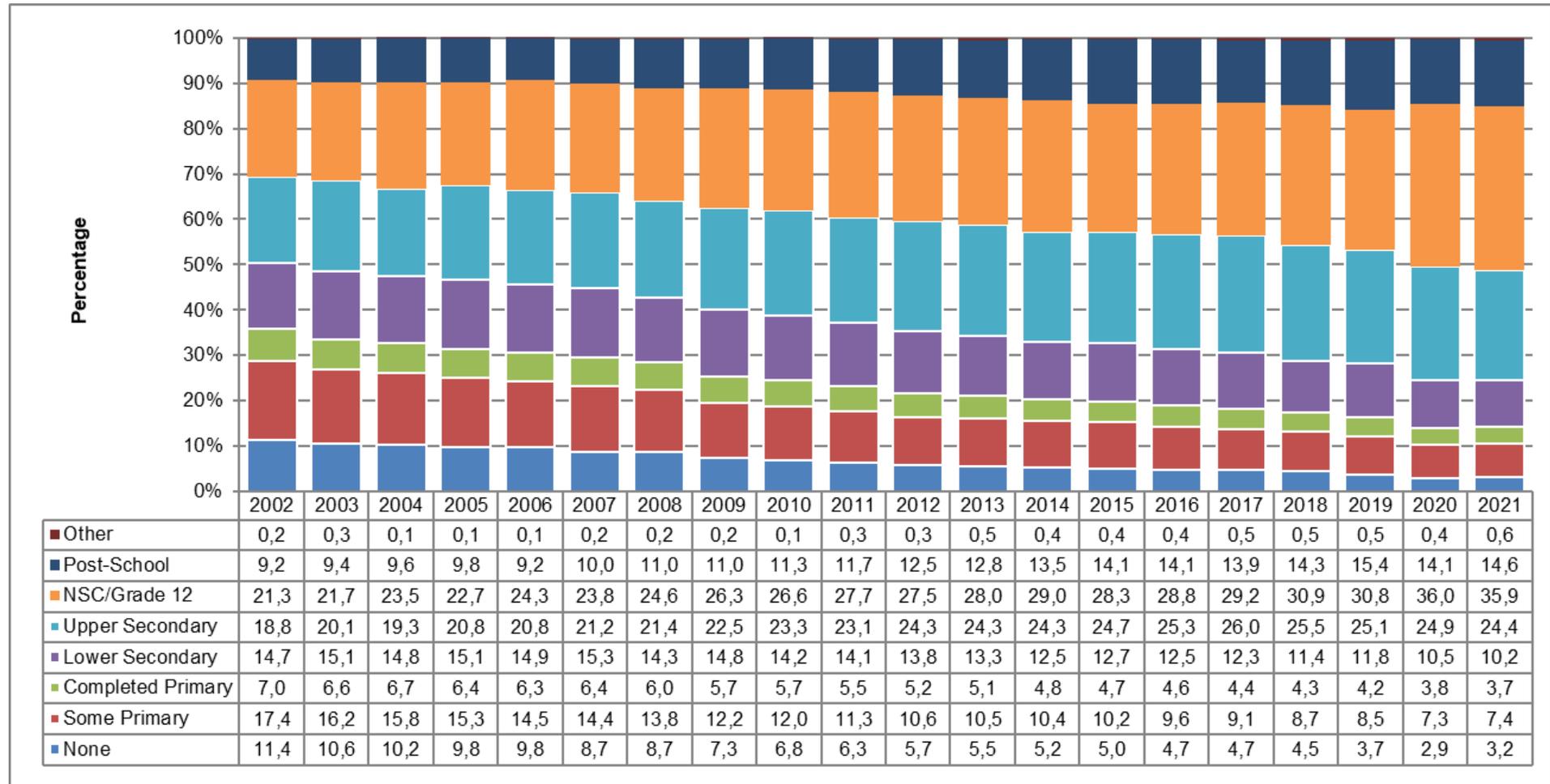


Figure 4.7 shows that the percentage of persons aged 18 to 29 that were enrolled at an institution of higher education in the country increased from 4,3% in 2002 to 6,5% in 2021. Enrolment at a higher education institution was most common among Whites (24,6%) and Indian/Asians (16,2%), while only 6,2% of the coloured and 5,3% of the black African population groups were enrolled.

**Figure 4.8: Percentage distribution of educational attainment for individuals aged 20 years and older, 2002–2021**

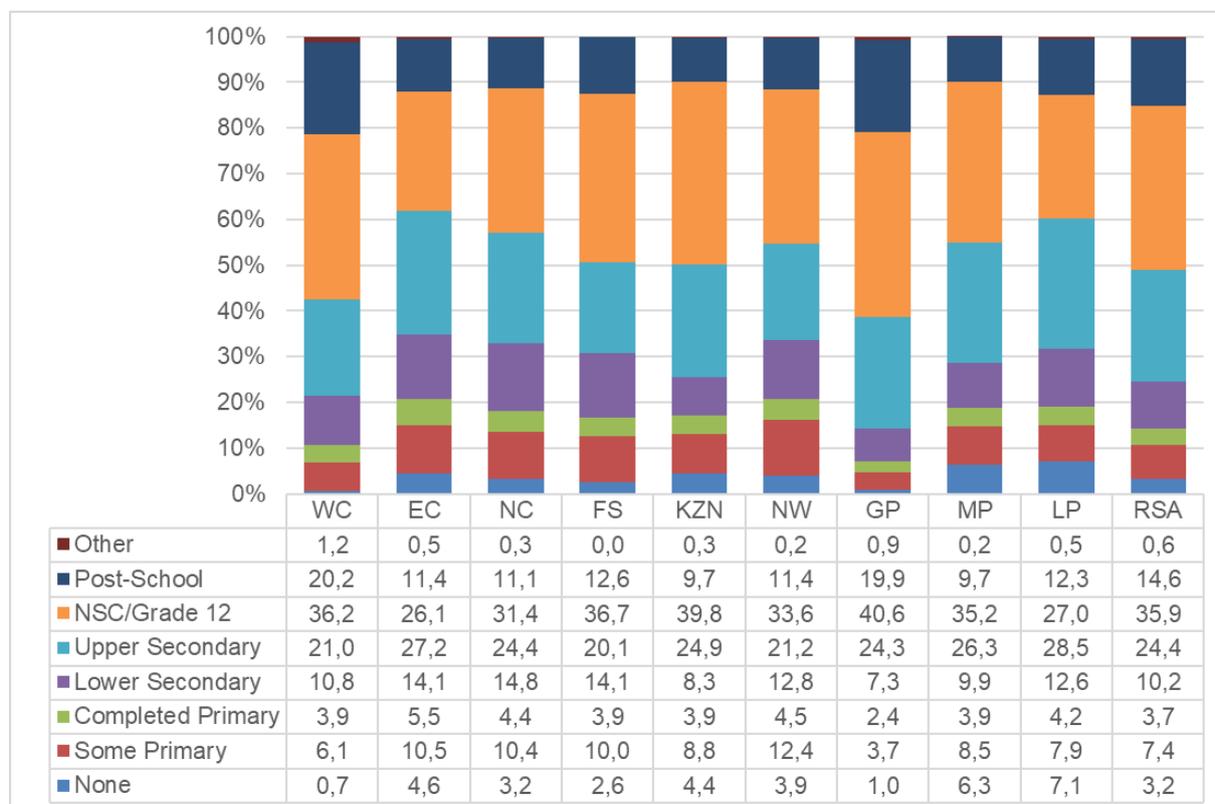


**Note:** Post-school education refers to any qualification higher than Grade 12.  
 Lower secondary refers to grades 8 and 9. Upper secondary refers to grade 10 and 11.

### 4.5 Educational attainment of persons aged 20 years and older

Figure 4.8, on the previous page, shows that the percentage of individuals aged 20 years and older who have attained at least Grade 12 has been increasing consistently since 2002, expanding from 30,5% in 2002 to 50,5% in 2021. Over this period, the percentage of individuals with some post-school education increased from 9,2% to 14,6%. The percentage of individuals without any schooling decreased from 11,4% in 2002 to 3,2% in 2021.

**Figure 4.9: Percentage distribution of educational attainment for individuals aged 20 years and older by province, 2021**



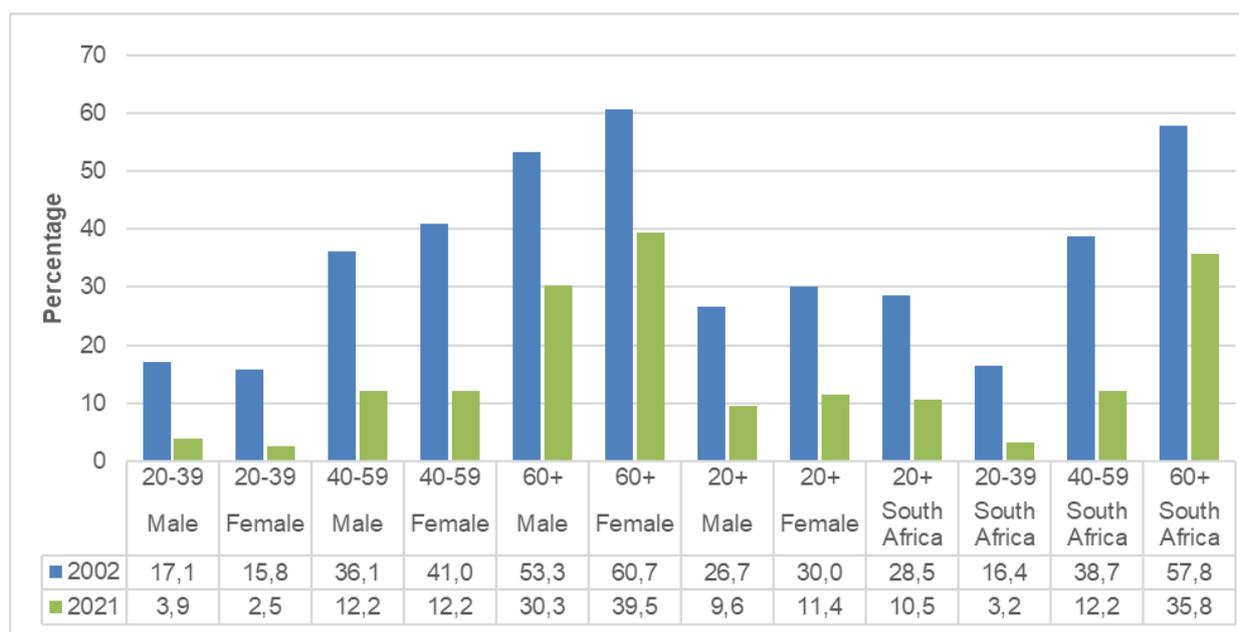
According to Figure 4.9, individuals without any formal education were most common in Limpopo (7,1%) and Mpumalanga (6,3%), and least common in Western Cape (0,7%) and Gauteng (1,0%). The figure shows that 21,3% of people aged 20 years or older have attained some academic qualifications that are equivalent to or less than Grade 9. Grade 9 is the final year of the senior phase and learners are allowed to leave school on its completion or when they turn 15 years old, whichever comes first. Individuals with lower secondary qualifications or less were most common in Eastern Cape (30,1%) and Northern Cape (29,6%).

Nationally, more than one-third (35,9%) of persons aged 20 years and older have attained Grade 12 while 14,6% have attained some post-school qualifications. Post-school qualifications were most common in Western Cape (20,2%) and Gauteng (19,9%) and least common in Mpumalanga and KwaZulu-Natal (both 9,7%).

### 4.6 Functional literacy

Literacy rates can be used as a key social indicator of development. Although a simple definition of literacy is the ability to read and write in at least one language, the simplicity of this measure is complicated by the need to know what is read and written, and for what purpose and also how well it is done. Because it is so difficult to measure literacy, the GHS has historically measured adult literacy rates based on an individual's functional literacy, e.g. whether they have completed at least Grade 7. This measure is closely related to educational attainment as described above, and it is presented in Figure 4.10.

**Figure 4.10: Percentage of individuals aged 20 years and older with no formal education or highest level of education less than Grade 7 (functional illiteracy) by sex and age group, 2002 and 2021**



According to Figure 4.10, the percentage of individuals over the age of 20 years who could be regarded as functionally illiterate (who have either received no schooling or who have not completed Grade 7 yet) has declined from 28,5% in 2002 to 10,5% in 2021.

Individuals over the age of 60 years have consistently remained most likely to be functionally illiterate, followed by individuals in the age groups 40–59 and 20–39. Improved access to schooling has led to a significant decline in the percentage of functionally illiterate individuals in the 20–39 age group. Between 2002 and 2021, the prevalence of functional illiteracy in the age group 20–39 years declined noticeably for men (17,1% to 3,9%) and women (15,8% to 2,5%). With the exception of women in the age group 20–39, women remain more likely to be functionally illiterate across all age groups. The difference between men and women has, however, declined significantly over time. Although a higher percentage of women than men over the age of 60 years were functionally illiterate in 2021 (39,5% compared to 30,3%), the difference has declined in each successive age group, to the point that, in 2021, a smaller percentage of women in the age group 20–39 were functionally illiterate than their male peers (2,5% compared to 3,9%).

Since educational achievement is not necessarily a good reflection of individuals' literacy ability, a question that directly measures literacy was introduced in 2009. The question requires respondents to indicate whether they have 'no difficulty', 'some difficulty', 'a lot of difficulty' or are 'unable to' read newspapers, magazines and books in at least one language; or write a letter in at least one language. These questions were not asked in 2021 but will be included again in future GHS questionnaires.

## 5 Health

### 5.1 Health care provision

The type of healthcare facility consulted by household members are influenced by factors such as the number and distribution of health facilities in communities, households' proximity to facilities, as well as personal preferences based on factors such as affordability and the perceived quality of services. Figure 5.1 presents the type of healthcare facility that households generally visit first when household members fall ill or have accidents.

**Figure 5.1: Percentage distribution of the type of health-care facility consulted first by households when members fall ill or get injured by province, 2021**

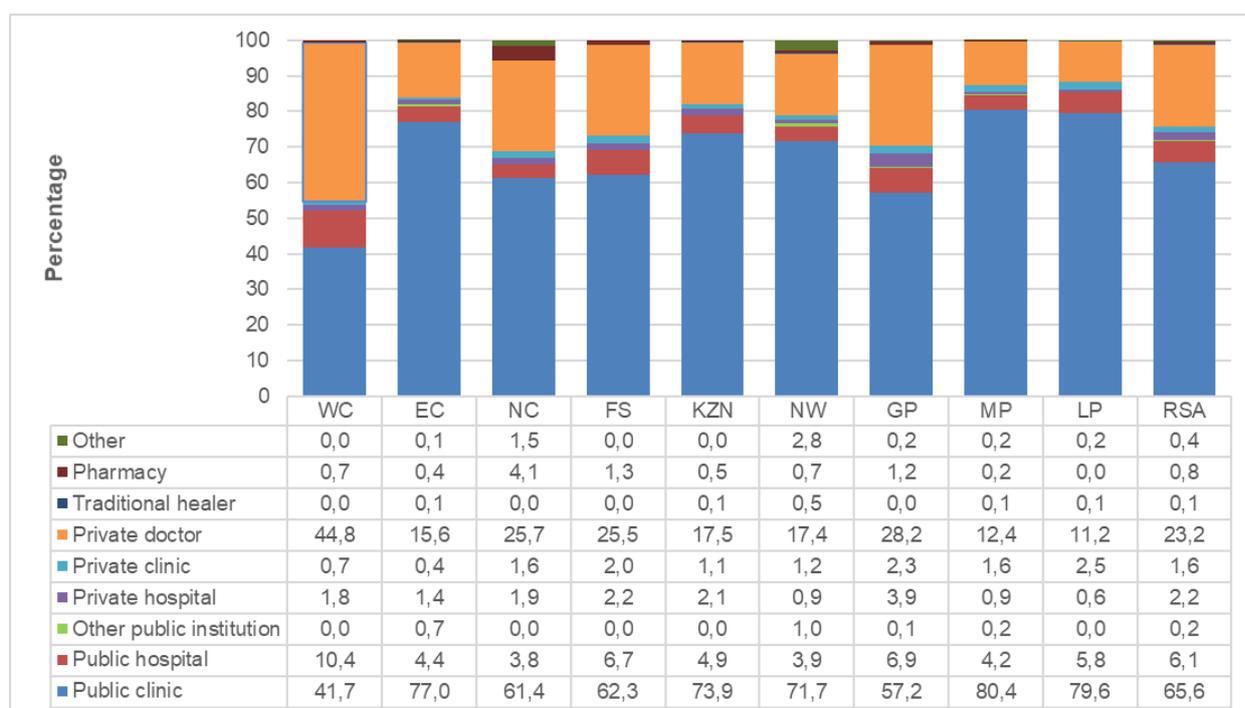


Figure 5.1 shows that, nationally, 71,9% of households said that they would first go to public clinics, hospitals or other public institutions, while 27,0% of households said that they would first consult a private doctor, private clinic or hospital. The use of public health facilities was least common in Western Cape (52,1%), Gauteng (64,2%), and most common in Limpopo (85,4%), Mpumalanga (84,8%) and Eastern Cape (82,1%).

## 5.2 Medical aid coverage

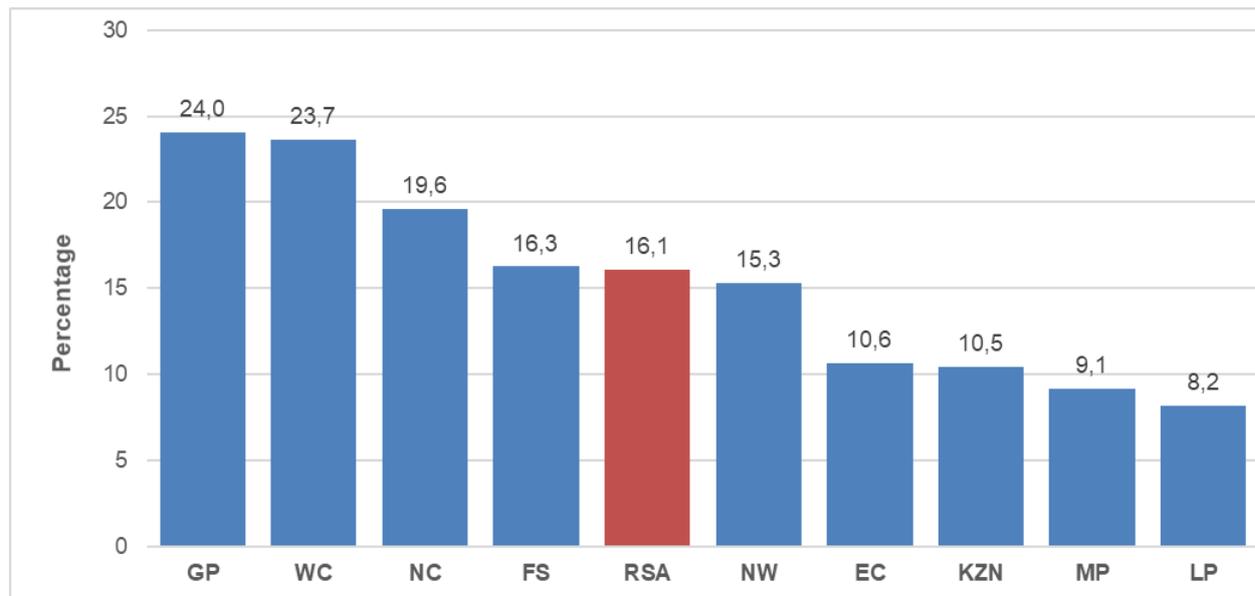
Despite some minor fluctuations over the period, Table 5.1 shows that the percentage of individuals who were covered by a medical aid scheme changed very little between 2002 and 2022, increasing only slightly from 15,9% to 16,1%. It is, however, notable that the number of individuals who were covered by a medical aid scheme increased from 7,3 million to just over 9,7 million persons during this period.

**Table 5.1: Medical aid coverage, 2002–2021**

Indicator (Numbers in thousands)	Year										
	2002	2004	2008	2010	2012	2014	2016	2018	2019	2020	2021
Number covered by a medical aid scheme	7 284	7 268	8 057	8 967	9 157	9 470	9 447	9 380	10 069	9 017	9 706
Number not covered by a medical aid scheme	38 445	39 666	41 266	41 606	42 819	43 946	45 646	47 628	48 262	50 328	50 629
<b>Subtotal</b>	<b>45 728</b>	<b>46 934</b>	<b>49 322</b>	<b>50 573</b>	<b>51 976</b>	<b>53 416</b>	<b>55 093</b>	<b>57 008</b>	<b>58 330</b>	<b>59 346</b>	<b>60 336</b>
<b>Percentage covered by a medical aid scheme</b>	<b>15,9</b>	<b>15,5</b>	<b>16,3</b>	<b>17,7</b>	<b>17,6</b>	<b>17,7</b>	<b>17,1</b>	<b>16,4</b>	<b>17,2</b>	<b>15,2</b>	<b>16,1</b>
Do not know	140	58	101	23	58	46	53	42	99	63	100
Unspecified	53	29	56	254	291	451	474	408	0	27	47
<b>Total population</b>	<b>45 868</b>	<b>46 992</b>	<b>49 423</b>	<b>50 596</b>	<b>52 034</b>	<b>53 461</b>	<b>55 146</b>	<b>57 050</b>	<b>58 429</b>	<b>59 409</b>	<b>60 436</b>

Figure 5.2 shows that medical aid coverage was most common in Gauteng (24,0%) and Western Cape (23,7%), and least common in Limpopo (8,2%) and Mpumalanga (9,1%).

**Figure 5.2: Percentage of individuals who are members of medical aid schemes per province, 2021**



**Figure 5.3: Percentage of individuals who are members of medical aid schemes by population group, 2021**

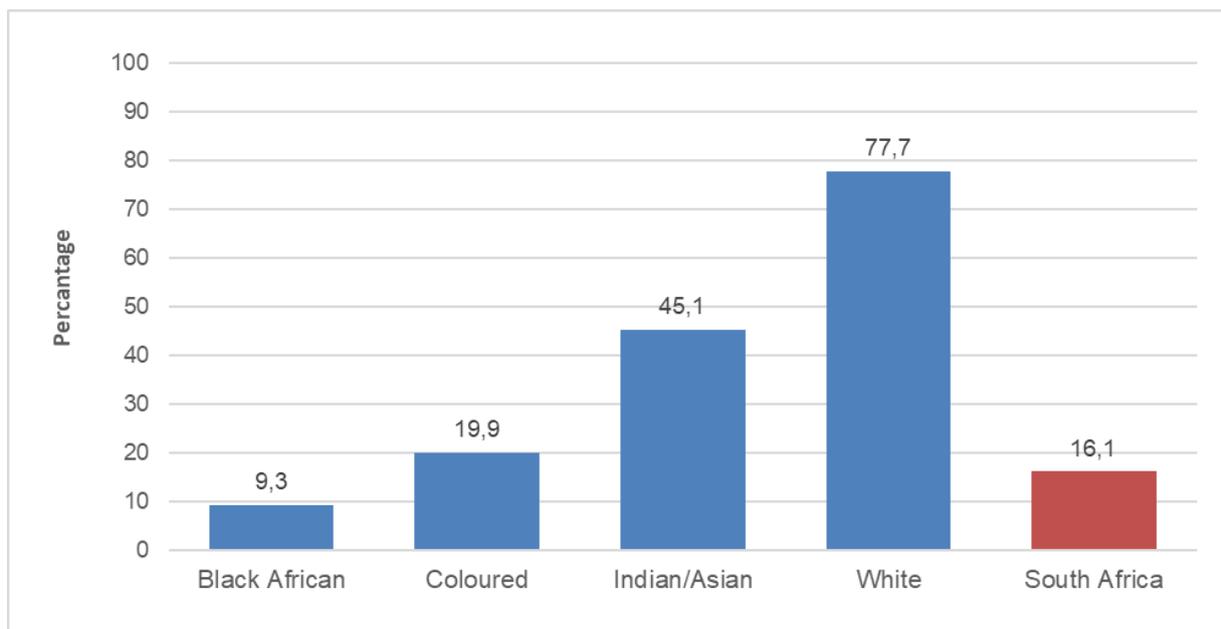


Figure 5.3 shows that 77,7% of white individuals were members of a medical aid scheme compared to 45,1% of Indian/Asian individuals, 19,9% of coloureds and 9,3% of black Africans.

### 5.3 Teenage pregnancy

The questionnaire enquired whether any females between the ages of 12 and 50 years were pregnant during the 12 months before the survey. The results for teenagers aged 14 to 19 years of age are presented in Figure 5.4.

**Figure 5.4: Percentage of females aged 14–19 who were pregnant during the year preceding the survey, 2021**

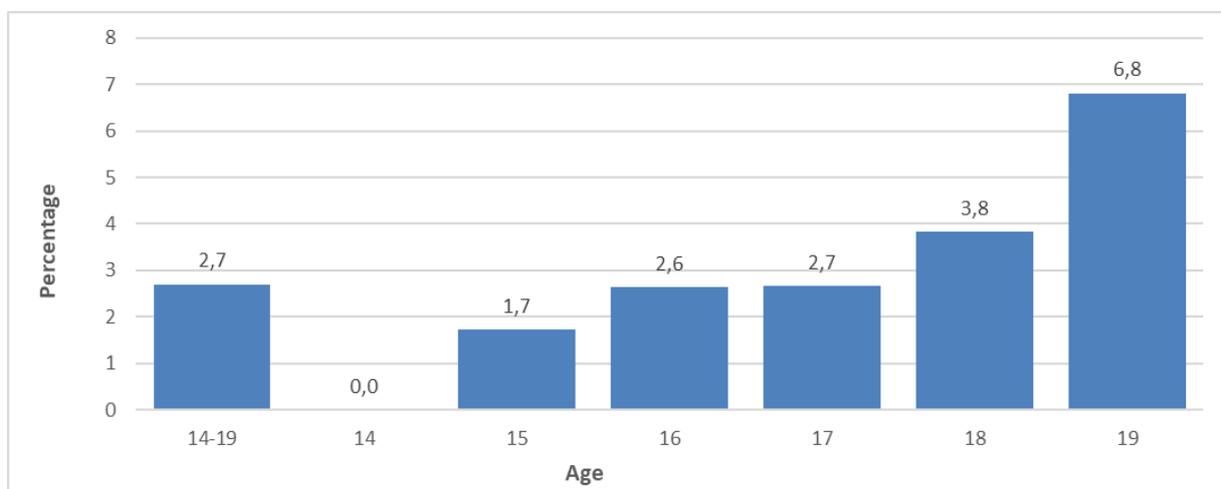


Figure 5.4 shows that 2,7% of females in the age group 14–19 years were at different stages of pregnancy during the 12 months before the survey. The prevalence of pregnancy increased with age, rising from 1,7% for females aged 15 years, to 6,8% for females aged 19 years.

## 6 Disability

The questions used for disability were developed by the Washington Group and were first introduced in the 2009 questionnaire. These questions require each person in the household to rate their ability to perform a range of activities such as seeing, hearing, walking a kilometre or climbing a flight of stairs, remembering and concentrating, self-care, and communicating in his/her most commonly used language (including sign language). During the analysis, individuals who said that they had some difficulty with two or more of the activities or had a lot of difficulty, or were unable to perform any one activity, were classified as disabled. The analysis was only confined to individuals aged 5 years and older as children below the age of five years may often be mistakenly categorised as being unable to walk, remember, communicate or care for themselves when it may be due to their level of development rather than any innate disabilities they might have. The findings are presented in Table 6.1.

**Table 6.1: Individuals aged 5 years and older with disability by gender and province, 2021**

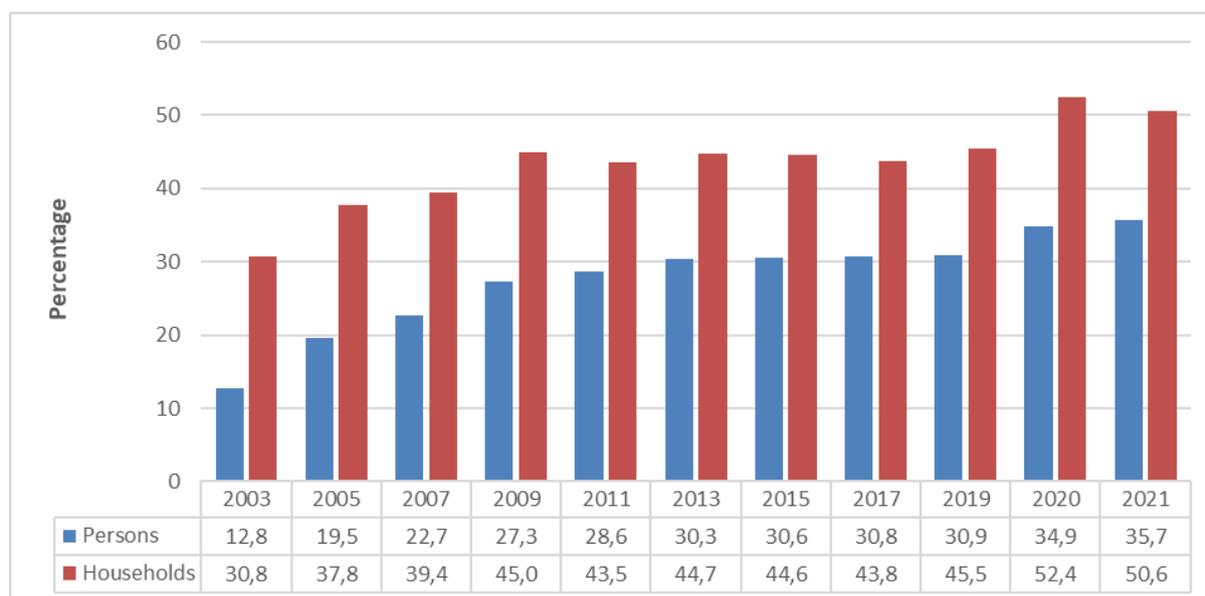
Indicator	Statistic (number in thousands)	Province									
		WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
Male	Number	154	109	35	52	248	74	195	77	136	1 081
	Per cent	4,9	4,0	6,2	4,2	4,9	4,1	2,6	3,9	5,2	4,1
Female	Number	163	167	45	80	335	97	260	86	140	1 374
	Per cent	4,8	5,5	7,9	5,6	6,1	5,0	3,7	3,8	5,1	4,9
<b>Total</b>	<b>Number</b>	<b>318</b>	<b>276</b>	<b>80</b>	<b>132</b>	<b>583</b>	<b>171</b>	<b>455</b>	<b>162</b>	<b>276</b>	<b>2 454</b>
	<b>Per cent</b>	<b>4,9</b>	<b>4,8</b>	<b>7,1</b>	<b>4,9</b>	<b>5,5</b>	<b>4,6</b>	<b>3,1</b>	<b>3,8</b>	<b>5,2</b>	<b>4,5</b>
<b>Subtotal</b>	<b>Number</b>	<b>6 536</b>	<b>5 806</b>	<b>1 136</b>	<b>2 682</b>	<b>10 547</b>	<b>3 740</b>	<b>14 550</b>	<b>4 230</b>	<b>5 360</b>	<b>54 586</b>
Unspecified	Number	-	-	1	-	19	5	18	-	3	47
<b>Total</b>	<b>Number</b>	<b>6 536</b>	<b>5 806</b>	<b>1 137</b>	<b>2 682</b>	<b>10 566</b>	<b>3 746</b>	<b>14 568</b>	<b>4 230</b>	<b>5 363</b>	<b>54 633</b>

Table 6.1 shows that 4,5% of South Africans aged 5 years and older were classified as disabled in 2021. A larger percentage of women (4,9%) than men (4,1%) were classified as disabled. Disability was most common in Northern Cape (7,1%) and least common in Gauteng (3,1%).

## 7 Social security

The percentage of individuals that benefited from social grants steadily increased from 12,8% in 2003 to approximately 31% between 2017 and 2019 before increasing sharply to 35,7% in 2021. This growth was tracked closely by that of households that received at least one social grant (growing 30,8% in 2003 to 45,5% in 2019, and 50,6% in 2021). This is presented in Figure 7.1.

**Figure 7.1: Percentage of households and individuals who have benefited from social grants, intermittent years between 2003 and 2021**



**Figure 7.2: Percentage of individuals and households benefiting from social grants per province, 2021**

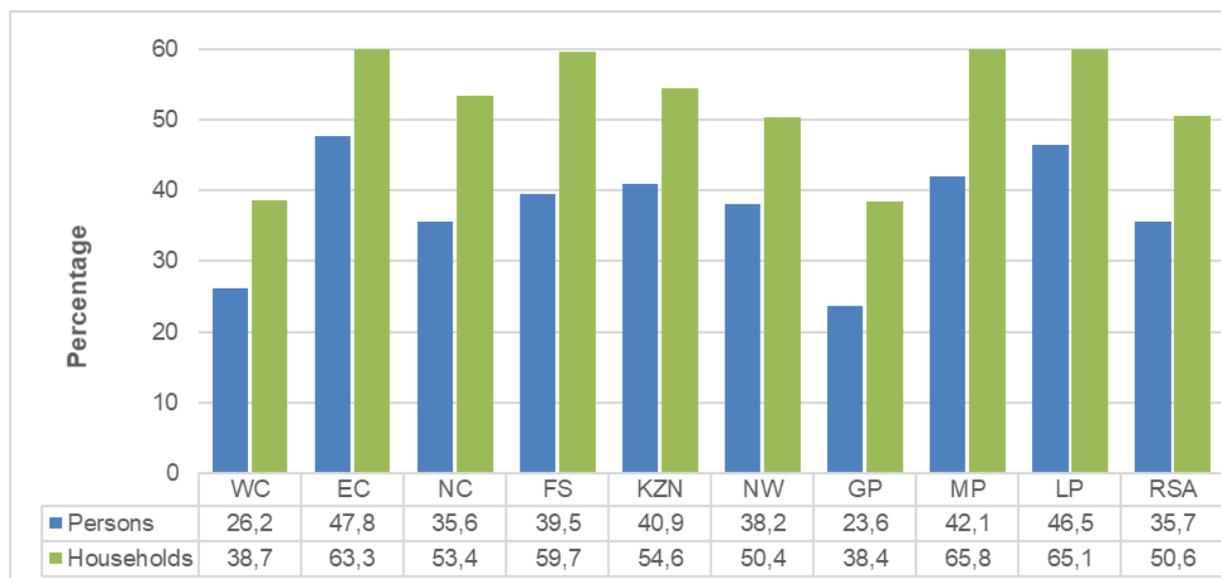
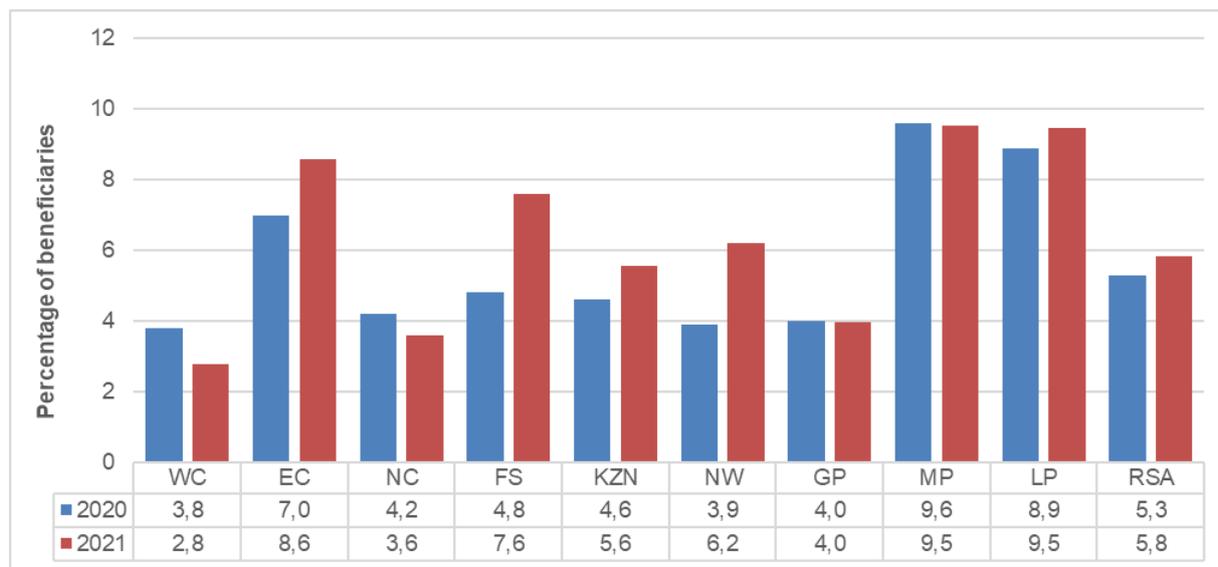


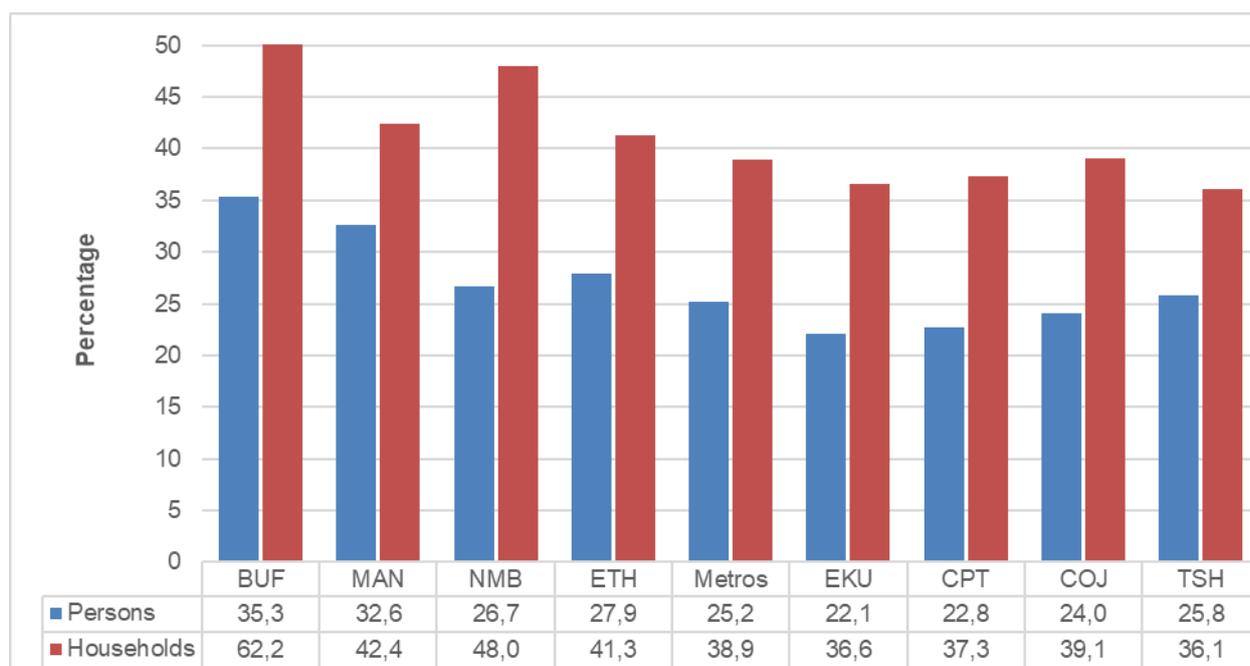
Figure 7.2 summarises the provincial distribution of individuals and households that benefited from social grants in 2021. Grant beneficiaries were most common in Eastern Cape (47,8%) and Limpopo (46,5%) and least widespread in Gauteng (23,6%) and Western Cape (26,2%). Households that received at least one type of social grant were most common in Mpumalanga (65,8%), Limpopo (65,1%), and Eastern Cape (63,3%), and least common in Gauteng (38,4%) and Western Cape (38,7%).

**Figure 7.3: Percentage of individuals aged 18 years and older that benefitted from the special COVID-19 social relief of distress grant by province, 2020 and 2021**



The Special Covid-19 Social Relief of Distress grant of R350 per month was introduced in 2020 in an attempt to offset the impact of COVID-19. Nationally, 5,8% of respondents received the grant in 2021 compared to 5,3% in 2020. The highest uptake in 2021 was noted in Mpumalanga and Limpopo (both 9,5%), while the grants were least common in Western Cape (2,8%) and Gauteng (4,0%). This is presented in Figure 7.3.

**Figure 7.4: Percentage of individuals and households benefiting from social grants per metropolitan area, 2021**



The percentage of individuals and households that received social grants in the various metropolitan areas during 2021 are presented in Figure 7.4. The figure shows that 25,2% of all individuals, and 38,9% of all households in metropolitan areas received some kind of social grant (compared to 35,7% of individuals and 50,6% of households nationally). Individual grant receipt was highest in Buffalo City (35,3%) and Mangaung (32,6%) and least common in Johannesburg (24,0%) and Tshwane (25,8%).

A similar pattern is evident for households at metropolitan level. Figure 7.4 shows that the receipt of one or more social grants was most common for households in Buffalo City (62,2%) and Nelson Mandela Bay (48,0%) and least common in Tshwane (36,1%) and the City of Johannesburg (39,1%).

## 8 Housing

One of the major objectives of the GHS is to collect information from households regarding their access to a range of basic services as well as their general living conditions. In this regard, this section presents selected findings over the period 2002 to 2021. The analyses will focus on the type of dwellings in which South African households live and the extent of use of state-subsidised housing as well as the perceived quality thereof.

Shelter satisfies a basic human need for physical security and comfort and the characteristics of the dwellings in which households live provide an important indication of the well-being of household members.

**Figure 8.1: Percentage of households that lived in formal, informal and traditional dwellings by province, 2021**

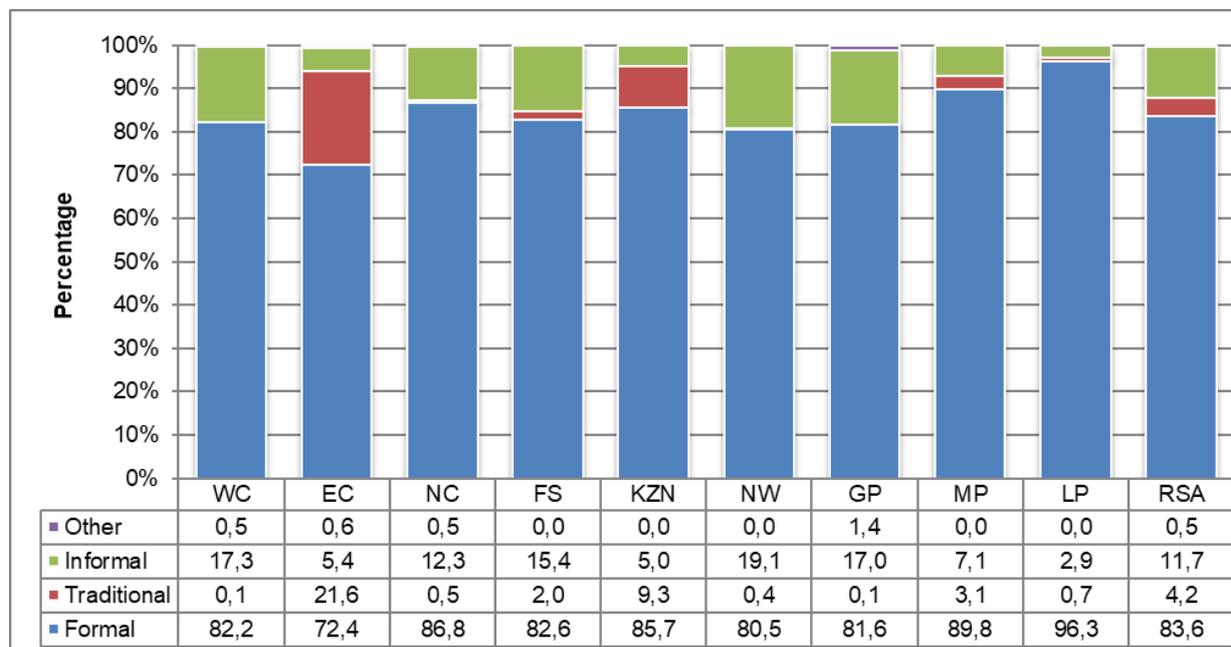


Figure 8.1 shows that slightly more than eight-tenths (83,6%) of South African households lived in formal dwellings in 2021, followed by 11,7% in informal dwellings, and 4,2% in traditional dwellings. Households that lived in formal dwellings were most common in Limpopo (96,3%) and Mpumalanga (89,8%). Approximately one-fifth of households in Gauteng (17,0%) and Western Cape (17,3%) lived in informal dwellings. Traditional dwellings were most common in Eastern Cape (21,6%) and KwaZulu-Natal (9,3%).

**Figure 8.2: Percentage of households that lived in formal, informal and other types of dwellings by metropolitan area, 2021**

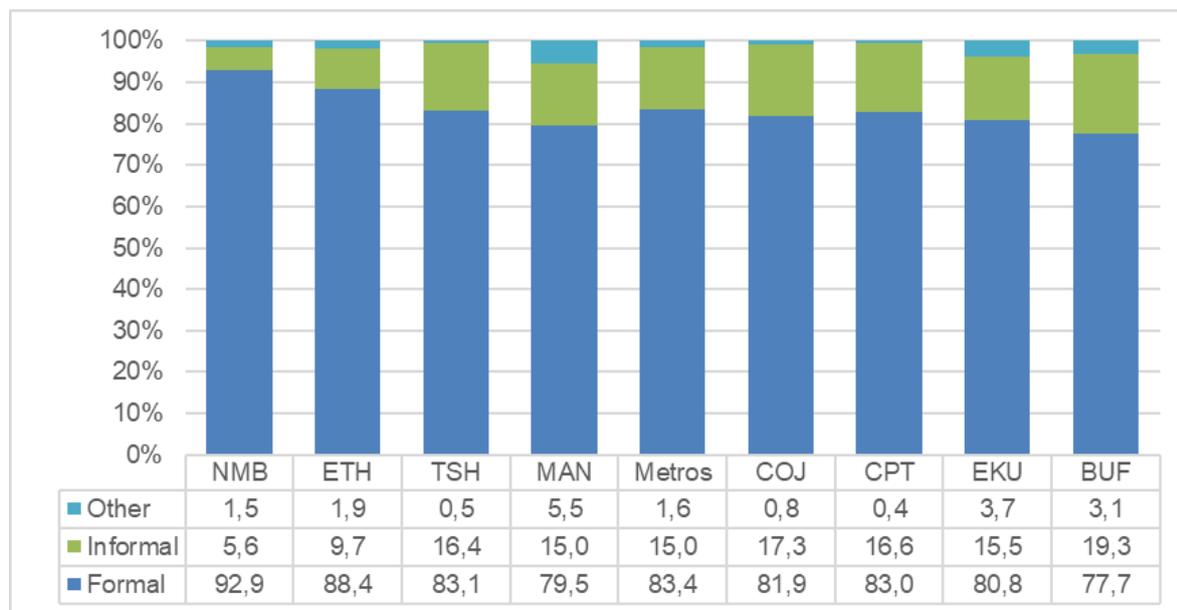


Figure 8.2 shows that 83,4% of households in metropolitan areas lived in formal dwellings while 15,0% lived in informal dwellings. Informal dwellings were most common in Buffalo City (19,3%), Johannesburg (17,3%) and Cape Town (16,6%), and least common in Nelson Mandela Bay (5,6%).

**Figure 8.3: Percentage of dwelling units by tenure status and province, 2021**

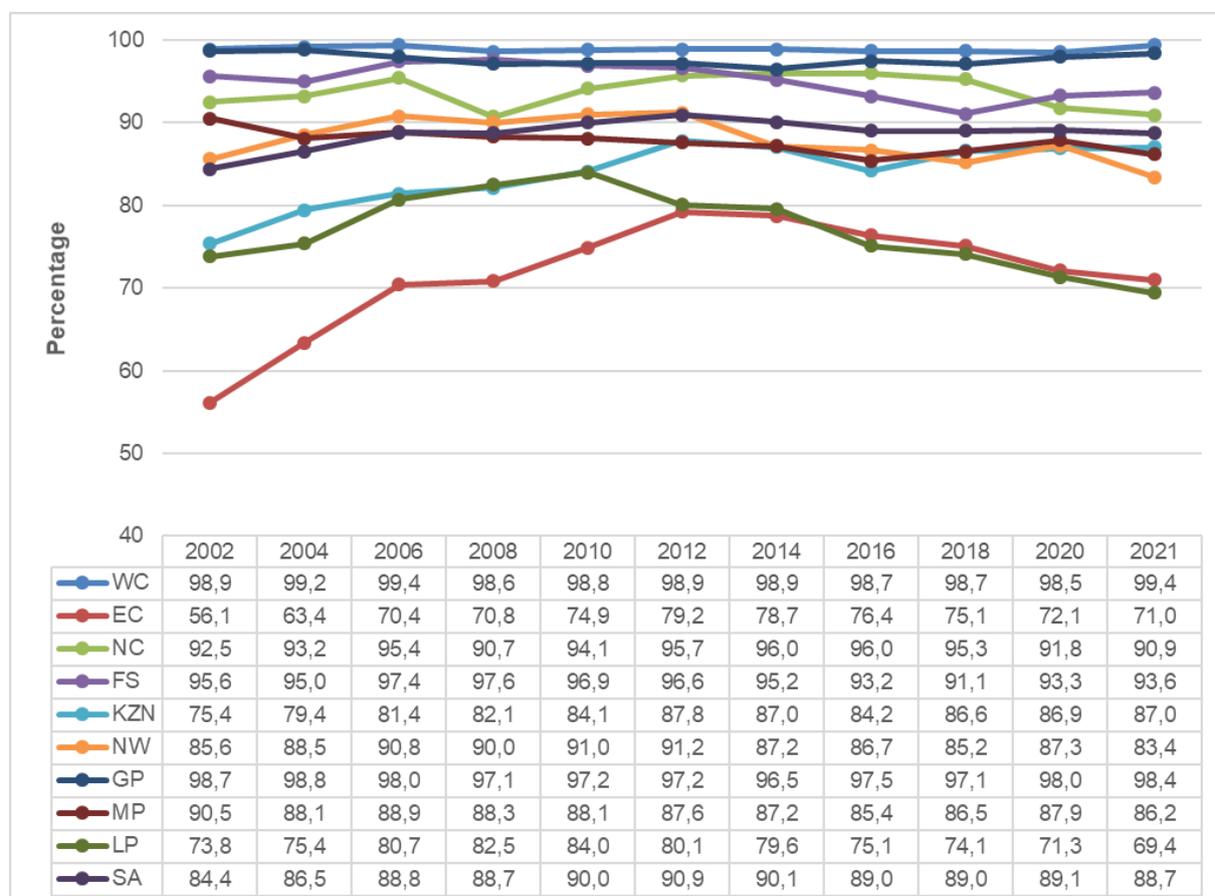


Figure 8.3 shows that households that lived in rented dwellings were most common in Gauteng (30,6%) and Western Cape (23,9%) and least common in Mpumalanga (7,5%), Limpopo (8,4%) and Eastern Cape (8,5%). By comparison, the largest percentage of households that lived in dwellings that were either paid off or being occupied rent-free were found in Limpopo (89,5%) and Mpumalanga (89,6%) while the smallest percentages were observed in Gauteng (57,2%) and Western Cape (59,5%).

## 9 Drinking water

The provision of safe and readily available water is important for public health and poverty reduction. The proportion of households with access to piped or tap water in their dwellings, off-site or on-site by province is presented in Figure 9.1.

**Figure 9.1: Percentage of households with access to piped or tap water in their dwellings, off-site or on-site by province, 2002–2021**



**Access to drinking water on-site:** Water accessed in the dwelling or in the yard

**Access to drinking water off-site:** Water accessed outside the yard using the neighbour's tap, public or communal taps.

Figure 9.1 shows that tap water inside their dwellings, off-site or on-site was most common among households in Western Cape (99,4%), Gauteng (98,4%), and Free State (93,6%) and least common in Limpopo (69,4%) and Eastern Cape (71,0%). Since 2002, the percentage of households in Eastern Cape with access to water in the dwelling, on- or off-site increased by 14,9 percentage

points and those in KwaZulu-Natal by 11,6 percentage points. Nationally, the percentage of households with access to tap water in their dwellings, off-site or on-site increased by 4,3 percentage points during the same period.

Despite these notable improvements, access to water actually declined in six provinces between 2002 and 2021. The largest declined was observed in Limpopo (-4,4 percentage points), Mpumalanga (-4,3 percentage points), North West (- 2,2 percentage points) and Free State (-2,0 percentage points). In addition, access to water has been declining in both Eastern Cape and Limpopo since at least 2014. On the positive side one should, however, take into account that many more households were provided with water in 2021 than two decades earlier.

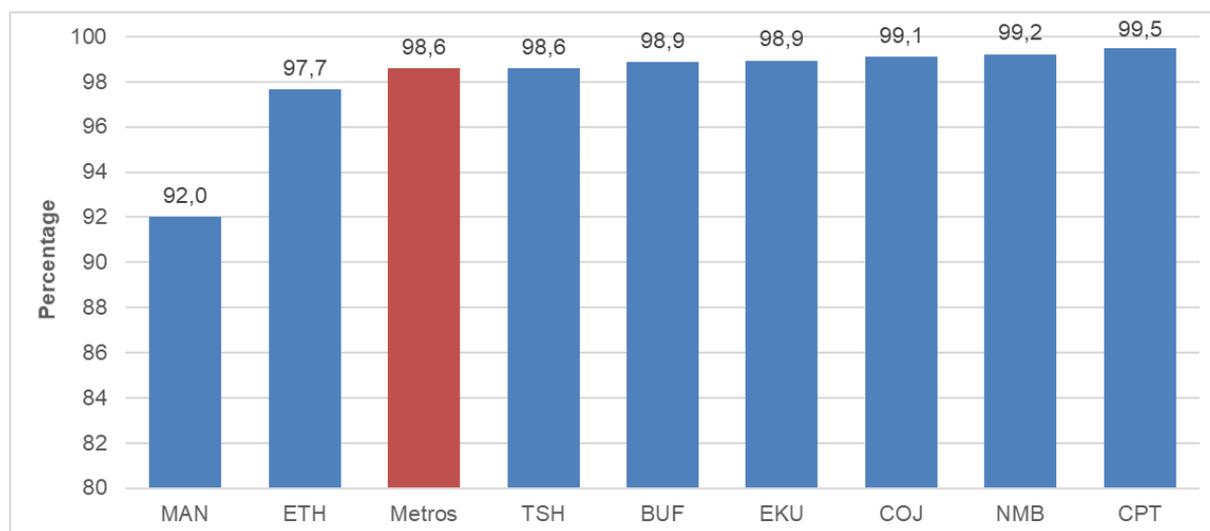
**Table 9.1: Comparison of the main water source for drinking used by households, 2002–2021**

Water source	Year									
	2002	2004	2006	2008	2010	2012	2014	2016	2020	2021
<b>Percentage</b>										
Piped (tap) water in dwelling	40,4	40,1	41,2	43,7	42,8	44,6	46,4	46,6	46,6	45,2
Piped (tap) water on site/yard	27,7	29,3	30,2	27,1	29,1	27,6	27,0	26,8	28,3	29,4
Borehole on site	2,7	1,6	1,2	1,2	1,1	1,4	1,9	1,8	1,9	2,3
Rain-water tank on site	1,3	0,3	0,4	0,5	0,3	0,6	0,4	0,8	1,2	1,5
Neighbour's tap	0,6	2,3	2,1	2,6	2,5	2,9	2,7	2,4	1,7	1,9
Public/communal tap	13,6	14,8	15,4	15,6	15,5	15,9	14,0	13,2	12,5	12,2
Water-carrier/tanker	0,6	0,6	1,1	1,1	1,4	1,4	1,2	2,4	1,8	1,7
Water vendor	-	-	-	-	-	-	-	-	1,8	1,6
Borehole outside yard	2,8	2,7	2,3	1,9	1,3	1,1	1,2	1,6	1,1	0,9
Flowing water/stream/river	5,9	4,7	3,3	3,5	3,2	2,3	2,7	2,1	1,9	1,8
Stagnant water/dam/pool	0,7	0,6	0,3	0,3	0,3	0,2	0,4	0,2	0,2	0,1
Well	1,4	1,0	1,0	0,6	0,3	0,4	0,5	0,3	0,3	0,2
Spring	2,0	1,8	1,3	1,5	1,5	1,3	0,9	1,0	0,6	0,6
Other	0,3	0,2	0,2	0,3	0,6	0,5	0,7	0,9	0,3	0,5
<b>Total</b>	<b>100,0</b>									
<b>Number</b>										
Piped (tap) water in dwelling	4 521	4 698	5 037	5 582	5 757	6 304	6 908	7 339	8 122	8 119
Piped (tap) water on site/yard	3 097	3 429	3 695	3 460	3 920	3 902	4 023	4 214	4 936	5 280
Borehole on site	301	190	140	153	154	196	278	288	325	405
Rain-water tank on site	143	40	51	68	45	79	65	121	212	274
Neighbour's tap	63	267	253	337	341	411	409	378	288	337
Public/communal tap	1 522	1 737	1 882	1 995	2 089	2 241	2 084	2 078	2 179	2 190
Water-carrier/tanker	71	70	135	144	194	191	184	370	306	312
Water vendor	-	-	-	-	-	-	-	-	309	286
Borehole outside yard	315	311	280	248	172	158	185	249	189	167
Flowing water/stream/river	660	553	405	447	428	323	401	335	327	318
Stagnant water/dam/pool	83	66	31	37	40	30	52	34	26	25
Well	159	120	127	70	36	54	73	50	43	36
Spring	224	208	163	190	205	184	140	154	101	101
Other	28	18	25	33	74	67	101	134	56	96
<b>Subtotal</b>	<b>11 187</b>	<b>11 707</b>	<b>12 223</b>	<b>12 765</b>	<b>13 456</b>	<b>14 140</b>	<b>14 904</b>	<b>15 744</b>	<b>17 163</b>	<b>17 947</b>
<b>Unspecified</b>	<b>8</b>	<b>12</b>	<b>0</b>	<b>55</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>11 194</b>	<b>11 718</b>	<b>12 223</b>	<b>12 819</b>	<b>13 456</b>	<b>14 152</b>	<b>14 904</b>	<b>15 744</b>	<b>17 163</b>	<b>17 947</b>

-: Category was only introduced in 2019.

Table 9.1 presents a comparison of the main sources of drinking water used by households. An estimated 45,2% of households had access to piped water in their dwellings in 2021. A further 29,4% accessed water on-site while 12,2% relied on communal taps and 1,9% relied on neighbours' taps. Although generally households' access to water improved, 2,7% of households still had to fetch water from rivers, streams, stagnant water pools, dams, wells and springs in 2021.

**Figure 9.2: Percentage of households with access to piped or tap water in their dwellings, off-site or on-site by metropolitan area, 2021**



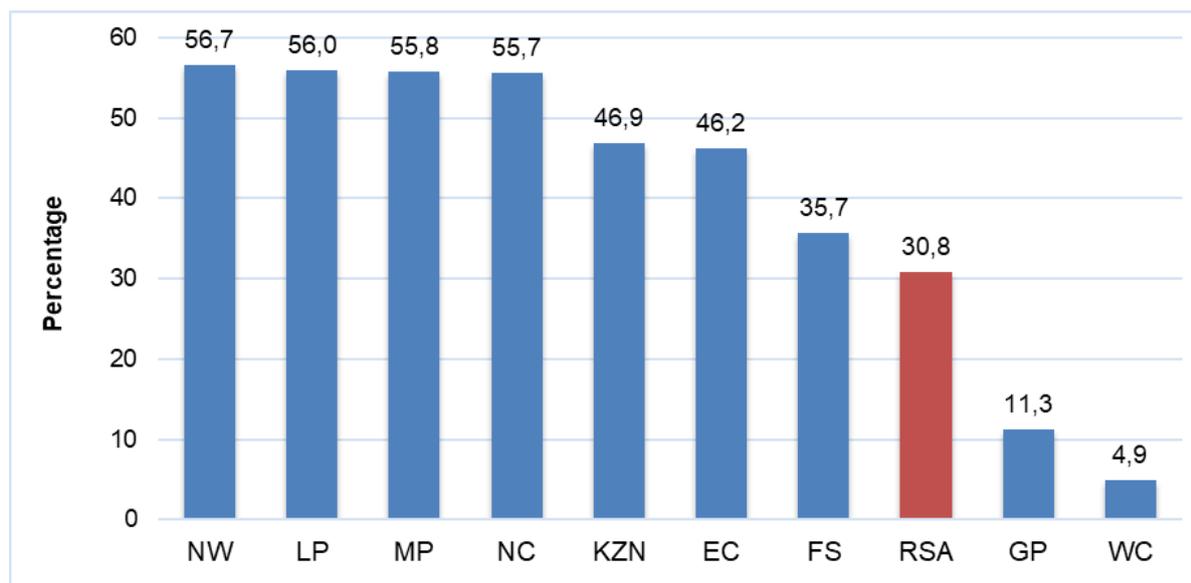
The percentage of households with access to piped or tap water in their dwellings, off-site or on-site by metropolitan area, is presented in Figure 9.2. The figure shows that 98,6% of households in metros had access to tap water. This type of access to water was most common in Cape Town (99,5%), Nelson Mandela Bay (99,2%), and Johannesburg (99,1%). Mangaung (92,0%) and Ethekwini (97,7%) recorded the lowest access amongst metros.

**Table 9.2: Access to piped municipal water supplies, 2006–2021**

		Year											
		2006	2007	2008	2009	2010	2011	2012	2014	2016	2018	2020	2021
Yes	N	9 349	9 993	9 556	10 951	11 491	11 611	11 975	12 646	13 294	13 769	14 550	14 821
	%	76,5	80,1	74,9	83,9	86,5	85,5	86,0	86,0	86,5	85,4	84,7	83,6
No	N	2 867	2 487	3 204	2 107	1 796	1 965	1 949	2 059	2 073	2 360	2 634	2 900
	%	23,5	19,9	25,1	16,1	13,5	14,5	14,0	14,0	13,5	14,6	15,3	16,4
<b>Subtotal</b>	<b>N</b>	<b>12 216</b>	<b>12 480</b>	<b>12 760</b>	<b>13 058</b>	<b>13 287</b>	<b>13 576</b>	<b>13 924</b>	<b>14 705</b>	<b>15 367</b>	<b>16 129</b>	<b>17 184</b>	<b>17 721</b>
	<b>%</b>	<b>100,0</b>											
Unspecified	N	27	42	59	70	168	221	227	198	377	541	235	226
<b>Total</b>	<b>N</b>	<b>12 243</b>	<b>12 522</b>	<b>12 819</b>	<b>13 128</b>	<b>13 455</b>	<b>13 797</b>	<b>14 151</b>	<b>14 903</b>	<b>15 744</b>	<b>16 671</b>	<b>17 419</b>	<b>17 947</b>

Table 9.2 confirms that the number and percentage of households with access to piped water had increased since 2006, showing that 14,8 million households had access to piped water in 2021 compared to 9,3 million in 2006.

**Figure 9.3: Percentage of households that reported water interruptions by province, 2021**



The functionality of municipal water supply services measures the extent to which households that received water from a municipality had reported, over the 12 months before the survey, interruptions that lasted more than 2 days at a time, or more than 15 days in total during the whole period. Figure 9.3 shows that households in North West (56,7%), Limpopo (56,0%) and Mpumalanga (55,8%) reported the most interruptions, while households in Western Cape (4,9%) and Gauteng (11,3%) experienced the least interruptions. Approximately one-third (30,8%) of South African households reported some dysfunctional water supply service in 2021.

**Figure 9.4: Percentage of households that reported water interruptions by metropolitan area, 2021**

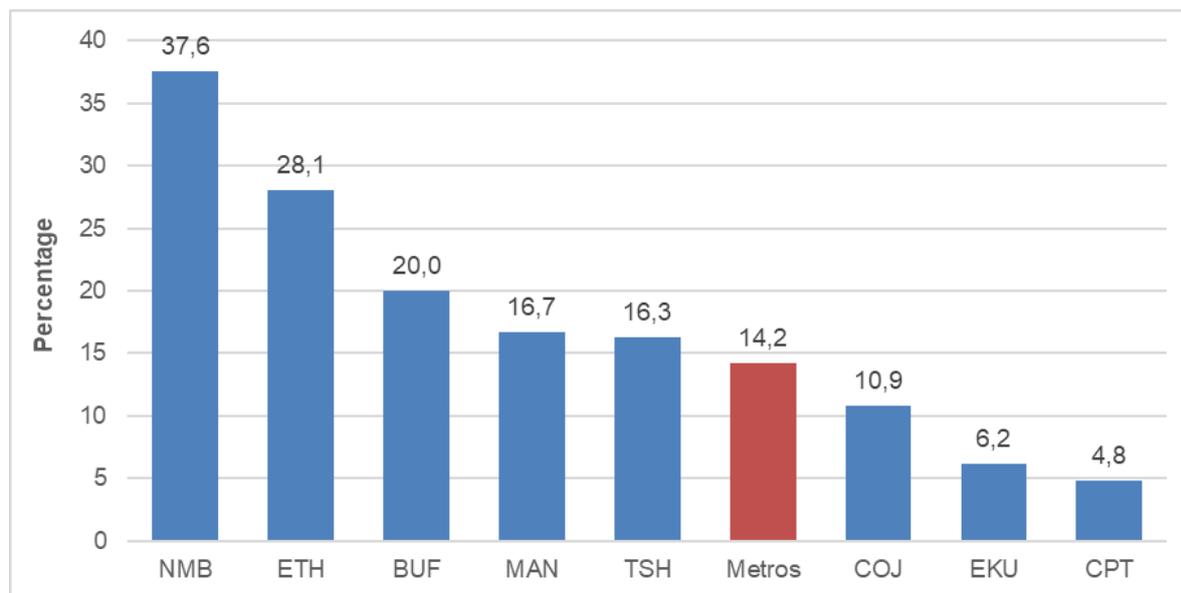
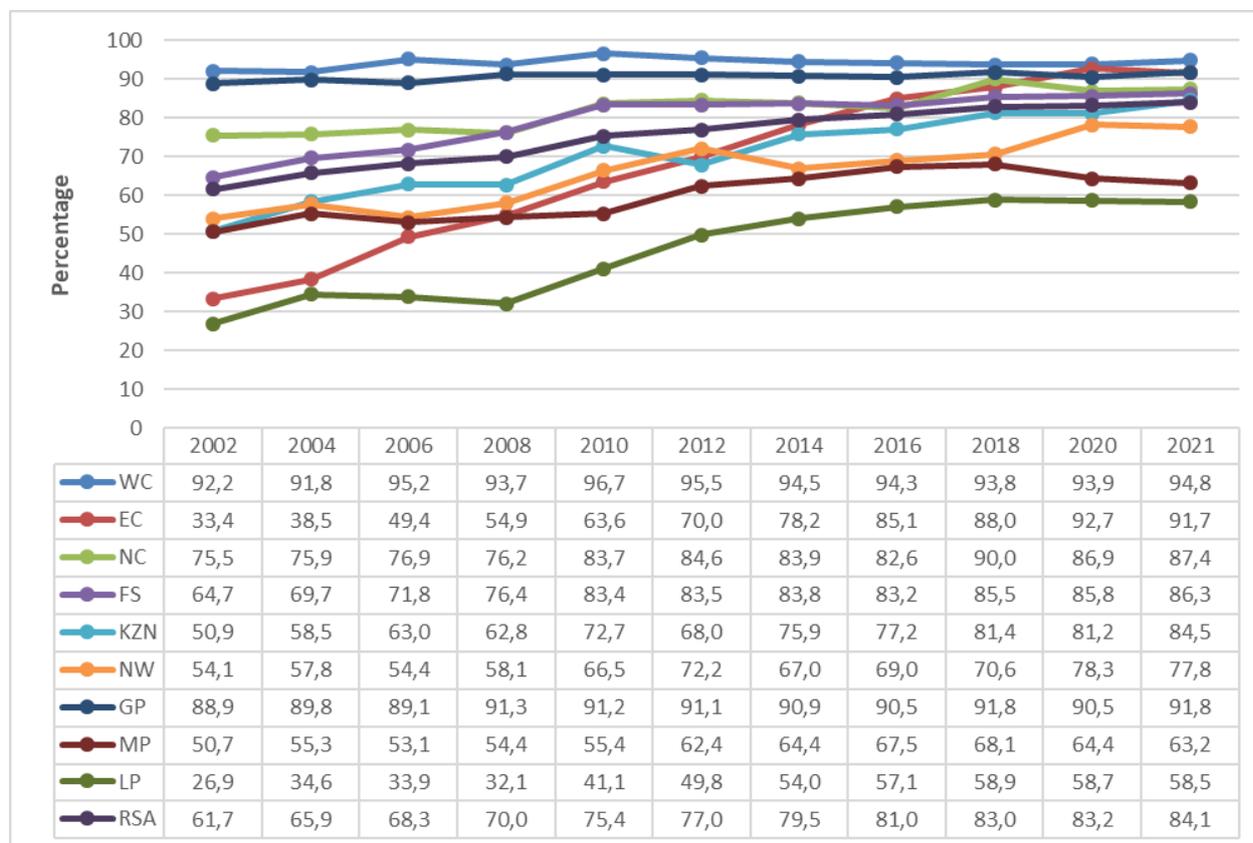


Figure 9.4 shows the percentage that reported water interruptions by metropolitan areas. Compared to households nationally, a much smaller percentage of households in metropolitan areas reported water interruptions (14,2% compared to 30,8%). Water interruptions were most common in Nelson Mandela Bay (37,6%), eThekweni (28,1%), and Buffalo City (20,0%) and least common in Cape Town (4,8%) and Ekurhuleni (6,2%).

## 10 Sanitation

Environmental hygiene plays an essential role in the prevention of many diseases. It also impacts on the natural environment and the preservation of important natural assets, such as water resources. Proper sanitation is one of the key elements in improving environmental hygiene.

**Figure 10.1: Percentage of households that have access to improved sanitation per province, 2002–2021**

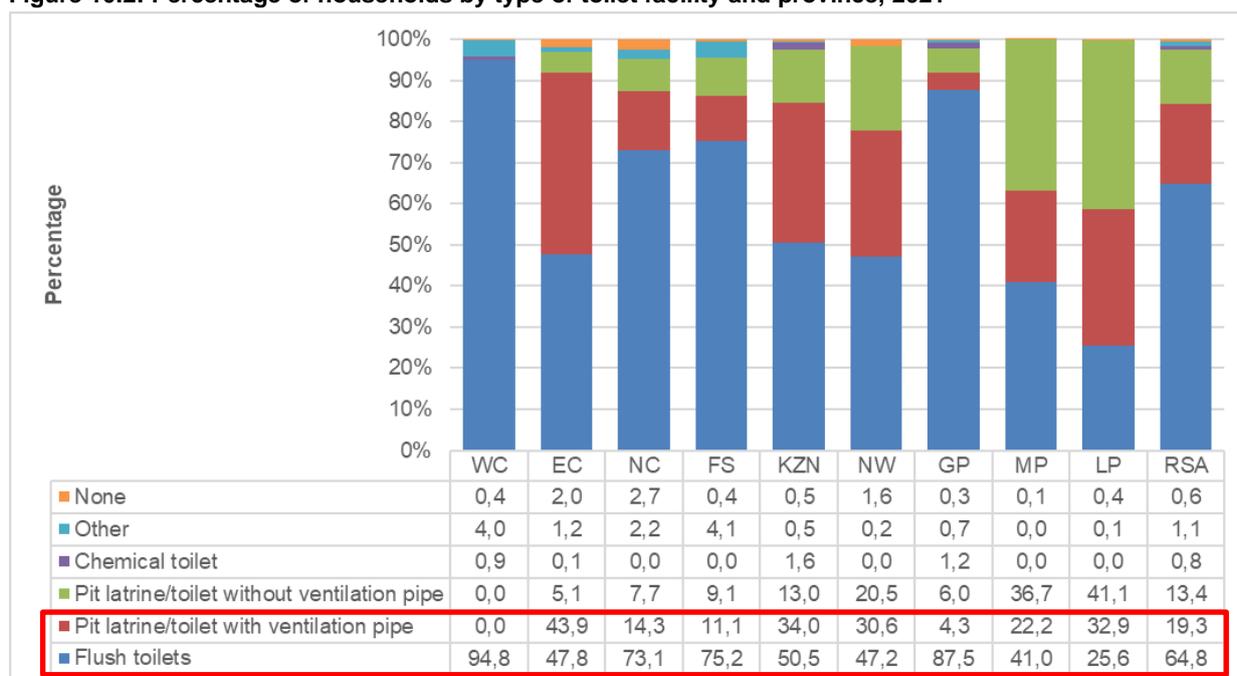


**Improved sanitation** is defined as flush toilets connected to a public sewerage system or a septic tank, or a pit toilet with a ventilation pipe

Figure 10.1 shows the percentage of households per province that had access to improved sanitation facilities. Nationally, the percentage of households with access to improved sanitation increased from 61,7% in 2002 to 84,1% in 2021. Households’ access to improved sanitation was highest in Western Cape (94,8%) Gauteng (91,8%) and Eastern Cape (91,7%), and most limited in Limpopo (58,5%) and Mpumalanga (63,2%). In Eastern Cape, households’ access to improved sanitation facilities increased by 58,3 percentage points between 2002 and 2021, growing from 33,4% to 91,7%.

The distribution of different sanitation options by province in 2021 is presented in Figure 10.2.

**Figure 10.2: Percentage of households by type of toilet facility and province, 2021**



Nationally, almost two-thirds (64,8%) of households used flush toilets that were either connected to a public sewerage system or a septic or conservancy tanks, while another 19,3% used pit toilets that are connected to ventilation pipes. Households that did not have access to improved sanitation facilities largely depended on pit toilets without ventilation pipes (13,4%). Improved sanitation facilities are outlined in red in Figure 10.2.

The use of flush toilets was most common in Western Cape (94,8%), Gauteng (87,5%) and Free State (75,2%). About one-quarter (25,6%) of households in Limpopo used improve sources of sanitation. The largest percentage of pit toilets with ventilation pipes were observed in Eastern Cape (43,9%), KwaZulu-Natal (34,0%) and Limpopo (32,9%).

In the absence of flush toilets, 74,0% of households in Limpopo used pit latrines, most (41,1%) without ventilation pipes. More than one-third (36,7%) of households in Mpumalanga and 20,5% of households in North West used pit toilets without ventilation pipes.

**Figure 10.3: Percentage of households that have access to improved sanitation by metropolitan area, 2021**

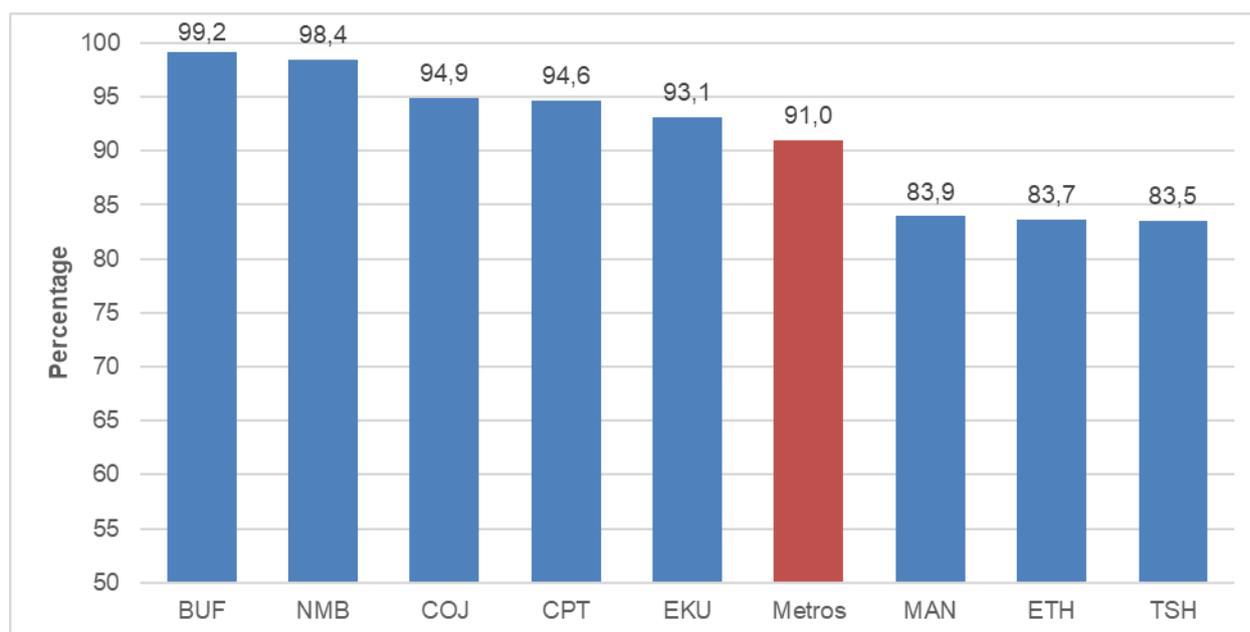
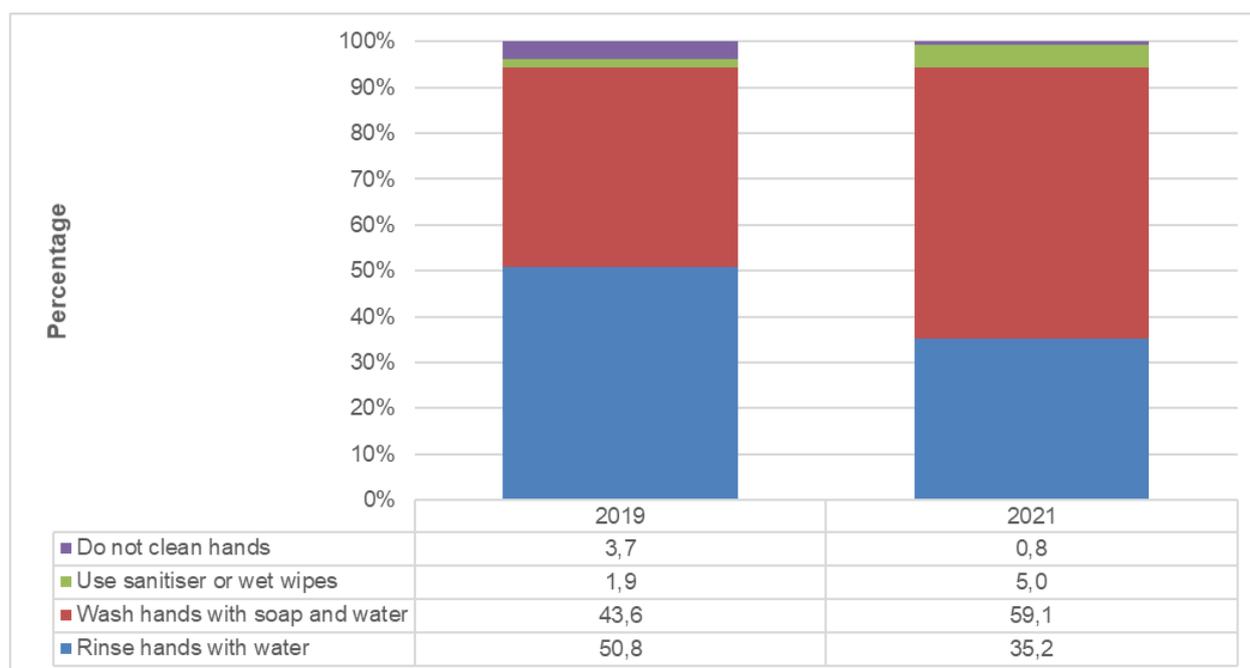


Figure 10.3 shows that households' access to improved sanitation was highest in Buffalo City (99,2%) and Nelson Mandela Bay (98,4%) and least common in eThekweni (83,7%) and Tshwane (83,5%).

**Figure 10.4: Percentage of households by the methods usually used by household members to clean their hands after using the toilet by province, 2019 and 2021**



The methods used nationally by household members in 2019 (before the start of COVID-19) and 2021 to clean hands after using the toilet are presented in Figure 10.4. The figure shows that the percentage of households whose members usually wash hands with soap and water increased notably from 43,6% to 59,1% between 2019 and 2021, while the percentage of households whose members only rinsed their hands with water decreased from 50,8% to 35,2% over the same period of time. The percentage of households whose members did not clean hands decreased from 3,7% to 0,8% during this period.

**Figure 10.5: Percentage of households by the methods usually used by household members to clean their hands after using the toilet by province and the percentage of households with access to hand washing facilities, 2021**

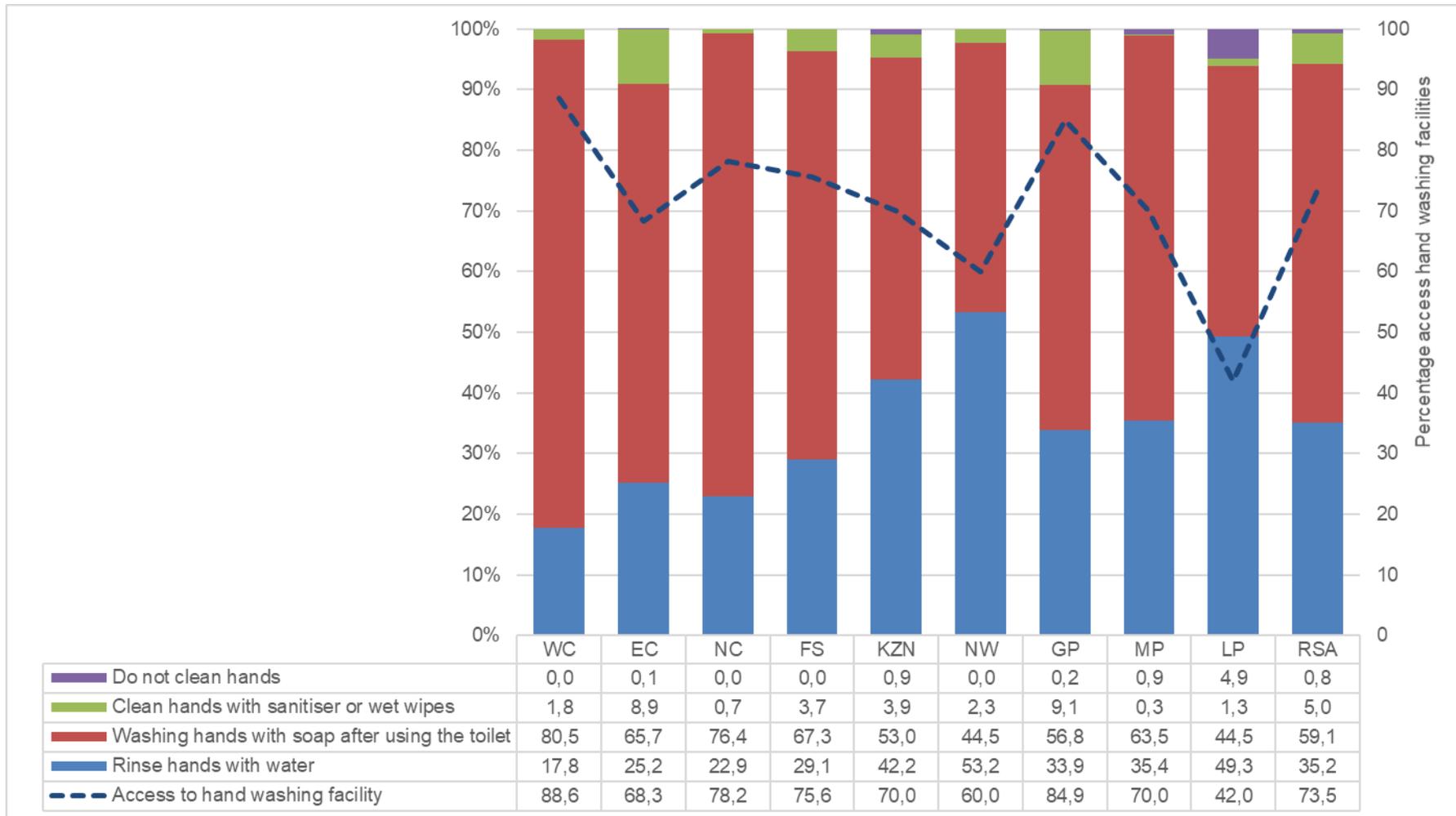


Figure 10.5 shows that about seven-tenths (73,5%) of households had access to hand washing facilities, nationally. Hand washing facilities were most common in Western Cape (88,6%) and Gauteng (84,9%), and least widespread in Limpopo (42,0%) and North West (60,0%).

All households were also asked to indicate whether (and how) household members usually washed their hands after they had used the toilet. Washing hands with soap was most common among households in Western Cape (80,5%) and Northern Cape (76,4%), and rarest in Limpopo and North West (both 44,5%). Just rinsing hands with water was most common in North West (53,2%) and Limpopo (49,3%) and least common in Western Cape (17,8%). Another 4,9% of households in Limpopo also reported that household members did not clean their hands at all after using the toilet.

## 11 Refuse removal

The proper disposal of household waste and refuse is important to maintain environmental hygiene of the households' neighbourhoods.

Figure 11.1: Percentage distribution of household refuse removal, 2002–2021

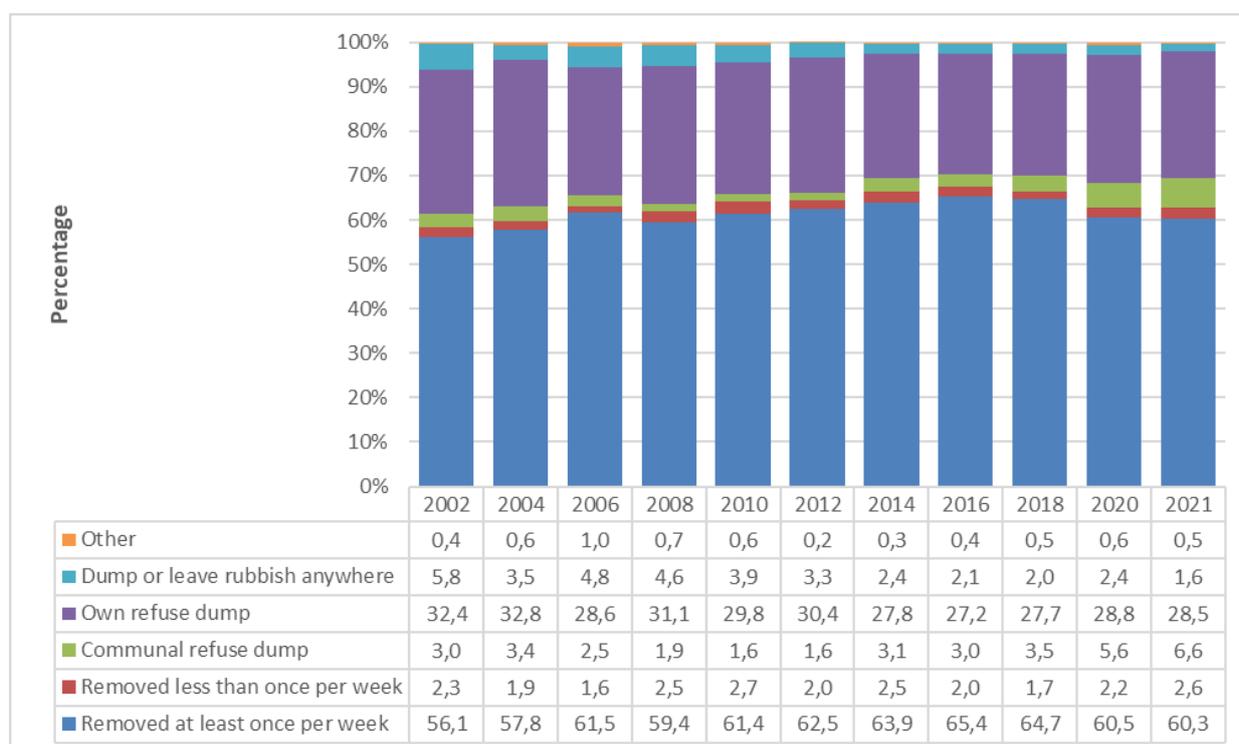


Figure 11.1 shows that household refuse were removed at least once per week for 60,3% of all households nationally. More than one-third (35,1%) of households had to rely on communal or household refuse dumps, while 1,6% of households had no facilities at all. It is notable that most of these figures have changed little over the years.

The national figures, however, hide large discrepancies between rural and urban areas, but also between urban and metropolitan areas. Households in urban areas are much more likely to receive some rubbish removal services than those in rural areas, while a much larger percentage of rural households are left to rely on their own refuse dumps. This is presented in Table 11.1

**Table 11.1: Households refuse removal by province and urban/rural status, 2021**

Province	Urban / Rural status	Removed at least once a week or less often	Communal refuse dump	Own refuse dump	Other
Western Cape	Rural	49,9	34,5	10,2	5,4
	Urban	91,6	8,2	0,2	0,1
	<b>Total</b>	<b>89,4</b>	<b>9,6</b>	<b>0,7</b>	<b>0,4</b>
Eastern Cape	Rural	1,9	2,4	95,4	0,3
	Urban	76,7	6,2	13,8	3,3
	<b>Total</b>	<b>42,3</b>	<b>4,5</b>	<b>51,4</b>	<b>1,9</b>
Northern Cape	Rural	14,1	3,3	76,9	5,8
	Urban	76,7	5,1	8,4	9,8
	<b>Total</b>	<b>57,7</b>	<b>4,6</b>	<b>29,1</b>	<b>8,6</b>
Free State	Rural	35,3	9,3	41,3	14,2
	Urban	78,7	7,0	7,1	7,3
	<b>Total</b>	<b>71,4</b>	<b>7,4</b>	<b>12,8</b>	<b>8,4</b>
KwaZulu-Natal	Rural	8,9	5,5	84,8	0,8
	Urban	86,2	3,9	9,9	0,0
	<b>Total</b>	<b>53,1</b>	<b>4,6</b>	<b>42,0</b>	<b>0,3</b>
North West	Rural	23,5	4,5	68,6	3,5
	Urban	82,6	7,9	5,6	4,1
	<b>Total</b>	<b>48,9</b>	<b>5,9</b>	<b>41,4</b>	<b>3,7</b>
Gauteng	Rural	23,8	27,7	41,9	6,6
	Urban	87,1	7,0	3,7	2,2
	<b>Total</b>	<b>85,8</b>	<b>7,5</b>	<b>4,5</b>	<b>2,3</b>
Mpumalanga	Rural	11,5	6,7	80,1	1,7
	Urban	75,3	4,5	18,1	2,2
	<b>Total</b>	<b>39,1</b>	<b>5,7</b>	<b>53,3</b>	<b>1,9</b>
Limpopo	Rural	7,4	8,9	83,3	0,5
	Urban	91,4	1,9	6,3	0,4
	<b>Total</b>	<b>23,9</b>	<b>7,5</b>	<b>68,1</b>	<b>0,4</b>
South Africa	Rural	11,8	7,0	79,4	1,8
	Urban	85,4	6,4	5,9	2,2
	<b>Total</b>	<b>62,9</b>	<b>6,6</b>	<b>28,5</b>	<b>2,1</b>

Table 11.1 shows that, nationally, about two-thirds (62,9%) of households had their refuse removed on a weekly basis, or less often, while 28,5% had to use their own refuse dumps. Refuse removal was most common in Western Cape (89,4%) and Gauteng (85,8%), and least common in Limpopo (23,9%). Relative little refuse removal took place in rural areas, and refuse removal was least common in the rural areas of Eastern Cape (1,9%) and Limpopo (7,4%). Overall, 86,4% of households in rural areas discarded refuse themselves compared to only 12,3% of households in urban areas.

**Figure 11.2: Percentage distribution of household refuse removal by metropolitan areas, 2021**

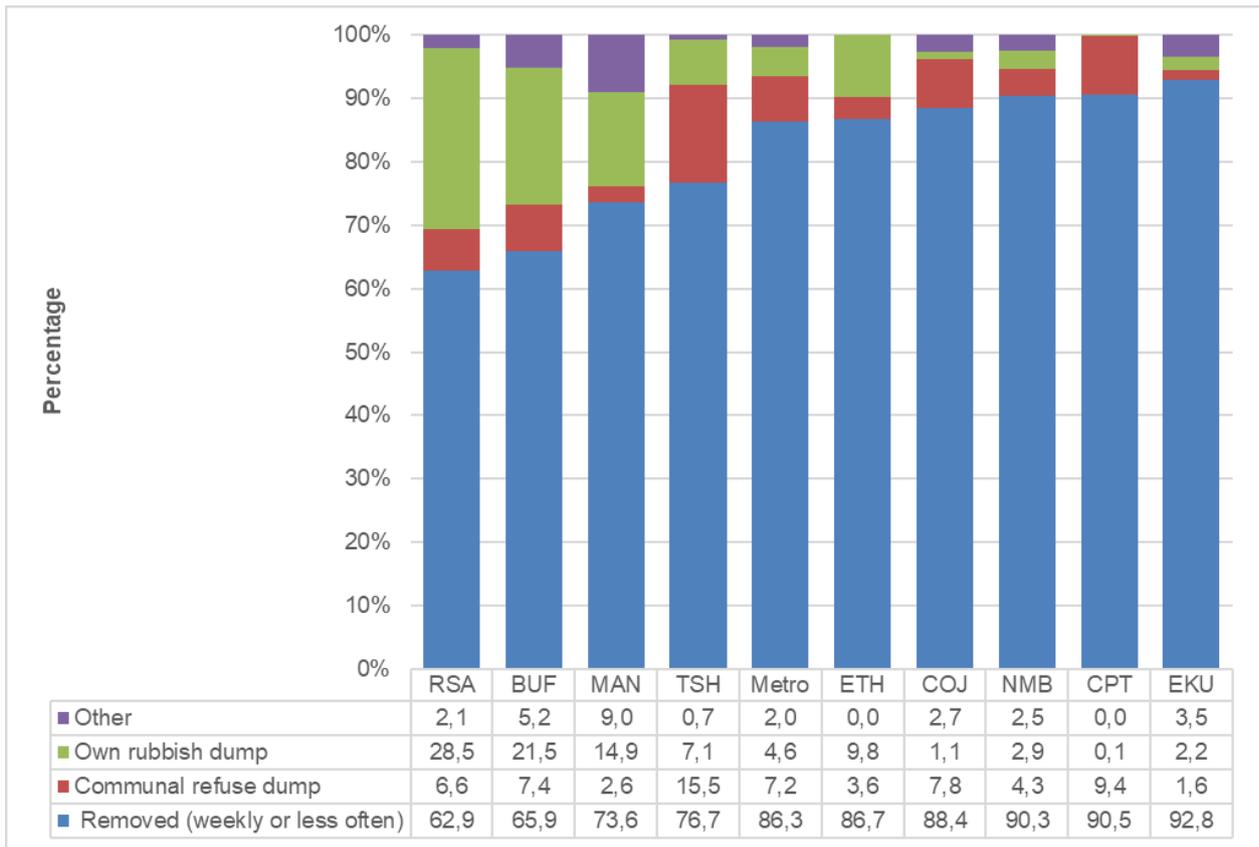


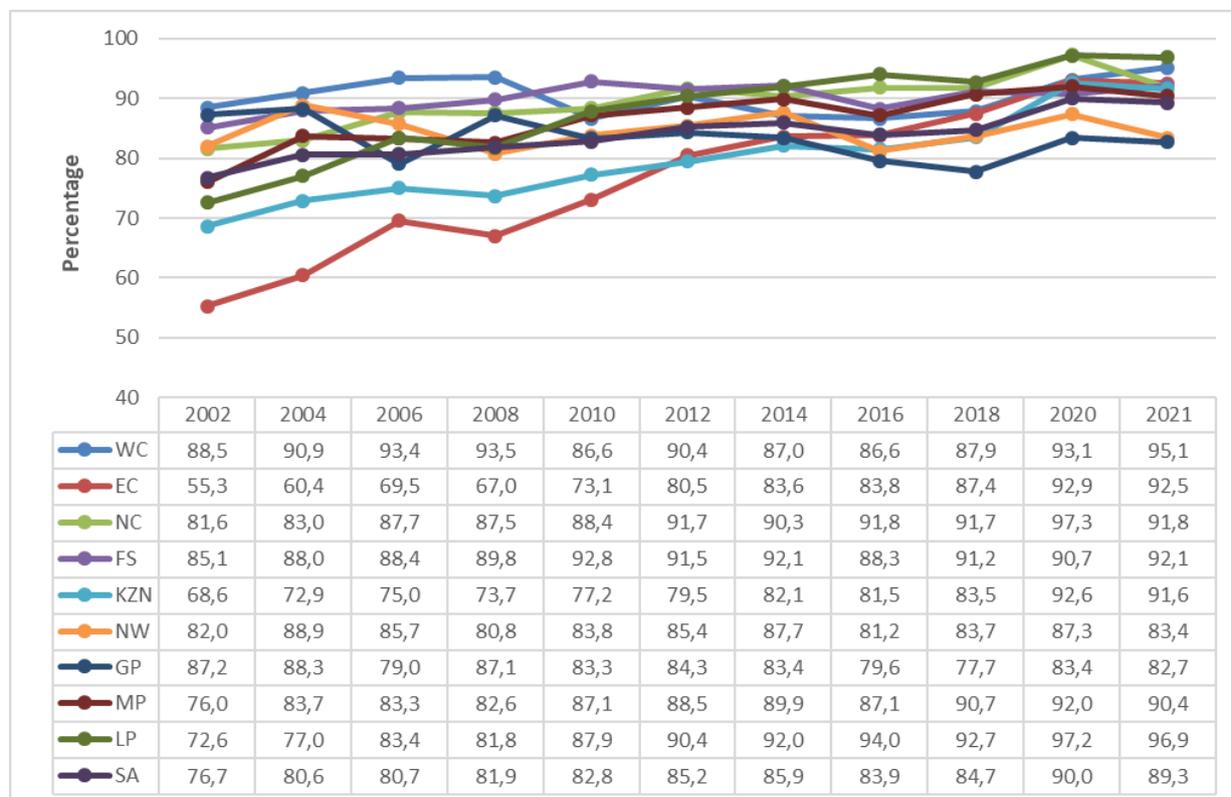
Figure 11.2 shows that refuse is removed at least once per week or less often for 86,3% of all households in metropolitan areas, notably higher than the national figure of 62,9%. Refuse removal was most common in Ekurhuleni (92,8%) and Cape Town (90,5%) and least common in Buffalo City (65,9%), Mangaung (73,6%) and Tshwane (76,7%).

It is important to note that the City of Tshwane metropolitan area includes a very large rural hinterland where refuse removal services do not take place.

## 12 Energy

Having adequate and affordable access to energy sources is vital to address household poverty. In order to assess household access to energy, the GHS measures the diversity, and main sources of energy used by households to satisfy basic human needs (cooking, lighting, heating water, space heating). In addition to measuring access to electricity, the GHS is also concerned with measuring the extent to which households are connected to, and use grid or mains electricity as this could provide a useful measure to guide future electrification programmes.

**Figure 12.1: Percentage of households connected to the mains electricity supply by province, 2002–2021**



**Mains electricity** is provided by the municipality or by Eskom. Electricity from generators are not considered part of the mains supply.

The percentage of South African households that were connected to the mains electricity supply increased from 76,7% in 2002 to 89,3% in 2021. This is presented in Figure 12.1. Households with access to mains electricity were most common in Limpopo (96,9%), Western Cape (95,1%), and Northern Cape (92,5%), and least common in Gauteng (82,7%) and North West (83,4%).

The largest increases between 2002 and 2021 were observed in Eastern Cape (+37,2 percentage points), and Limpopo (+24,3 percentage points). The percentage of households with access to mains electricity actually declined in Gauteng (-4,5 percentage points) during the same period. This decline can be associated with the rapid in-migration experienced by the province and the associated increase in household numbers.

**Figure 12.2: Percentage of households connected to different sources of electricity by province, 2021**

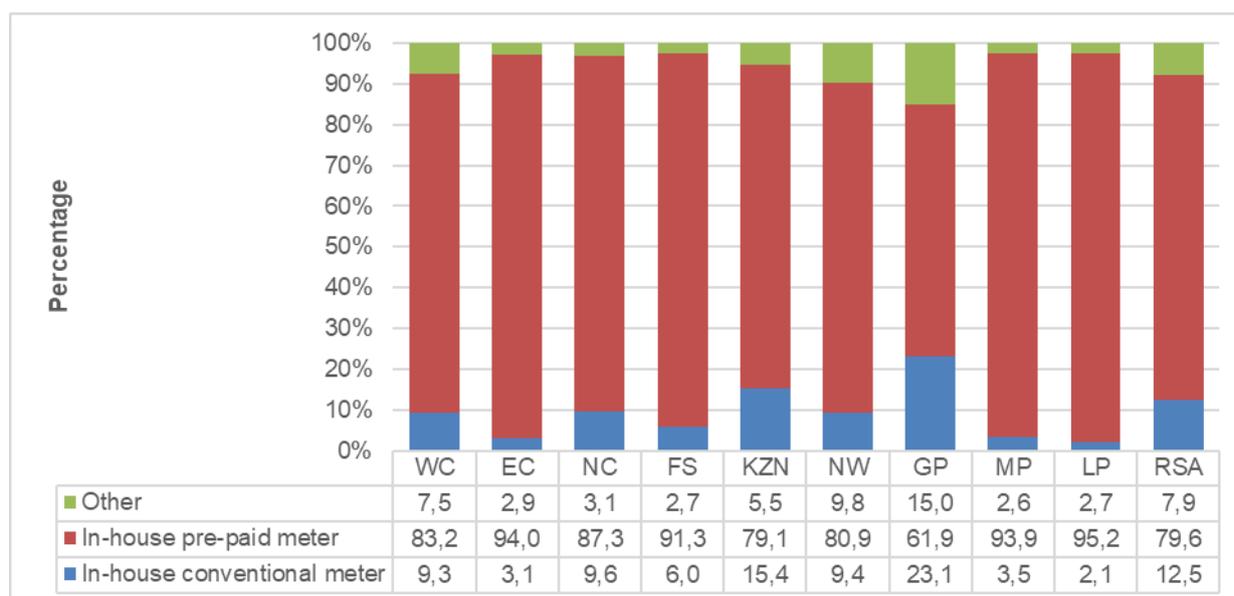
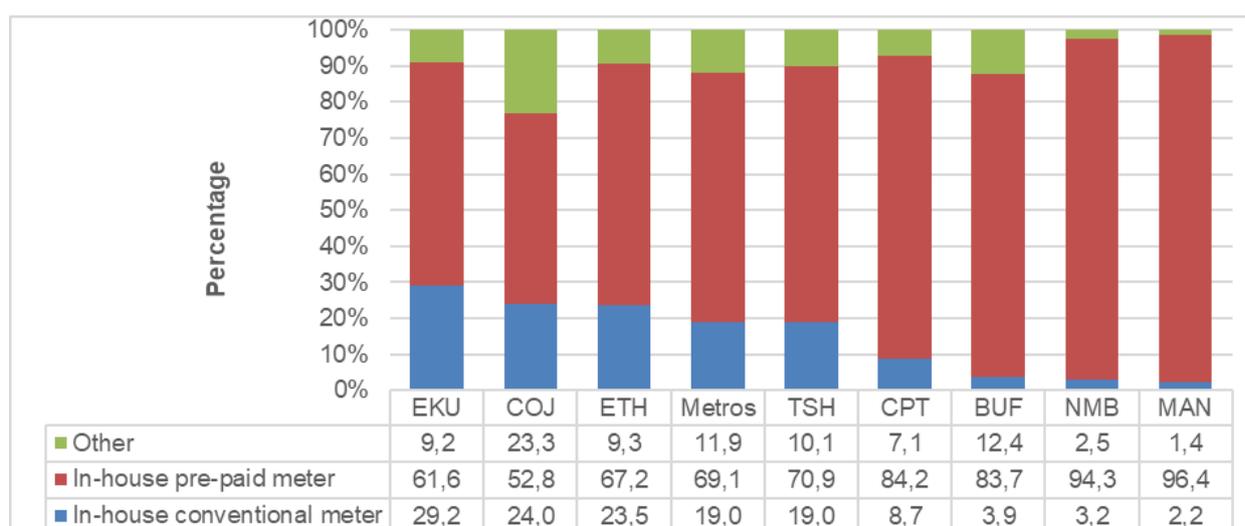


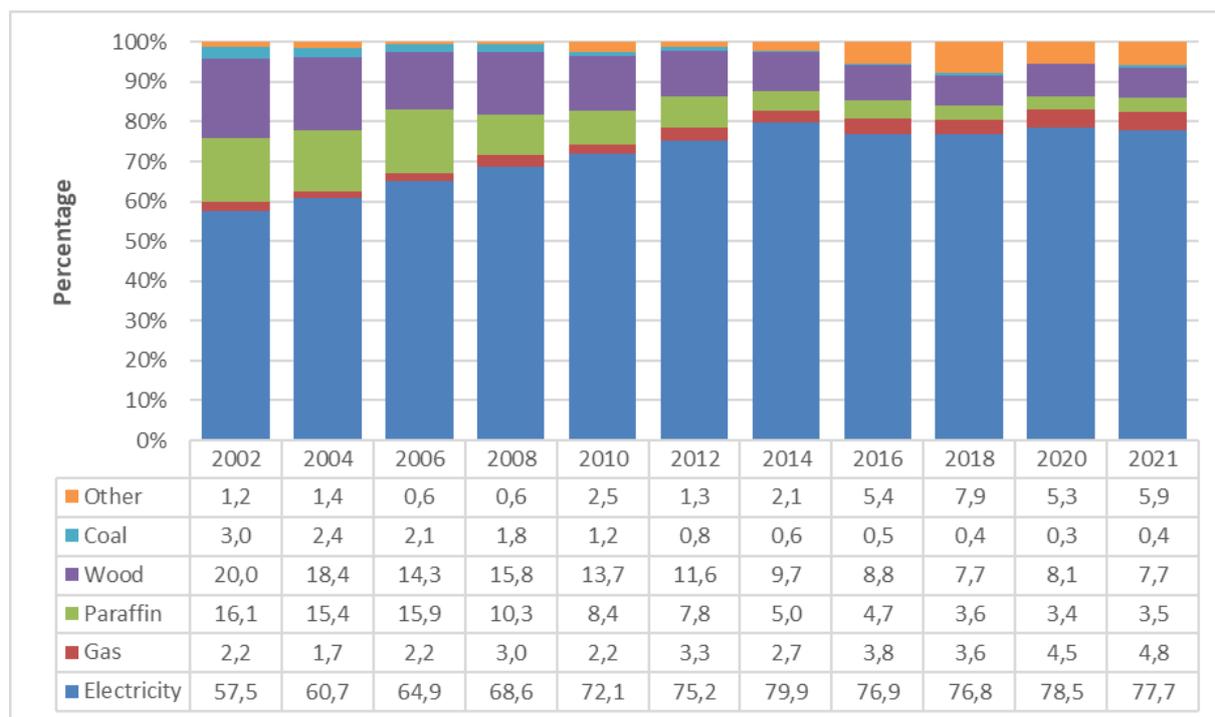
Figure 12.2 shows that 79,6% of South African households that had access to electricity used pre-paid meters, while 12,5% were still billed using a conventional meter. A large percentage (7,9%) of households obtained electricity from other sources (e.g. neighbour or landlord). This figure was particularly large in Gauteng (15,0%). The use of conventional meters was highest in Gauteng (23,1%) and KwaZulu-Natal (15,4%).

**Figure 12.3: Percentage of households connected to different sources of electricity by metropolitan area, 2021**



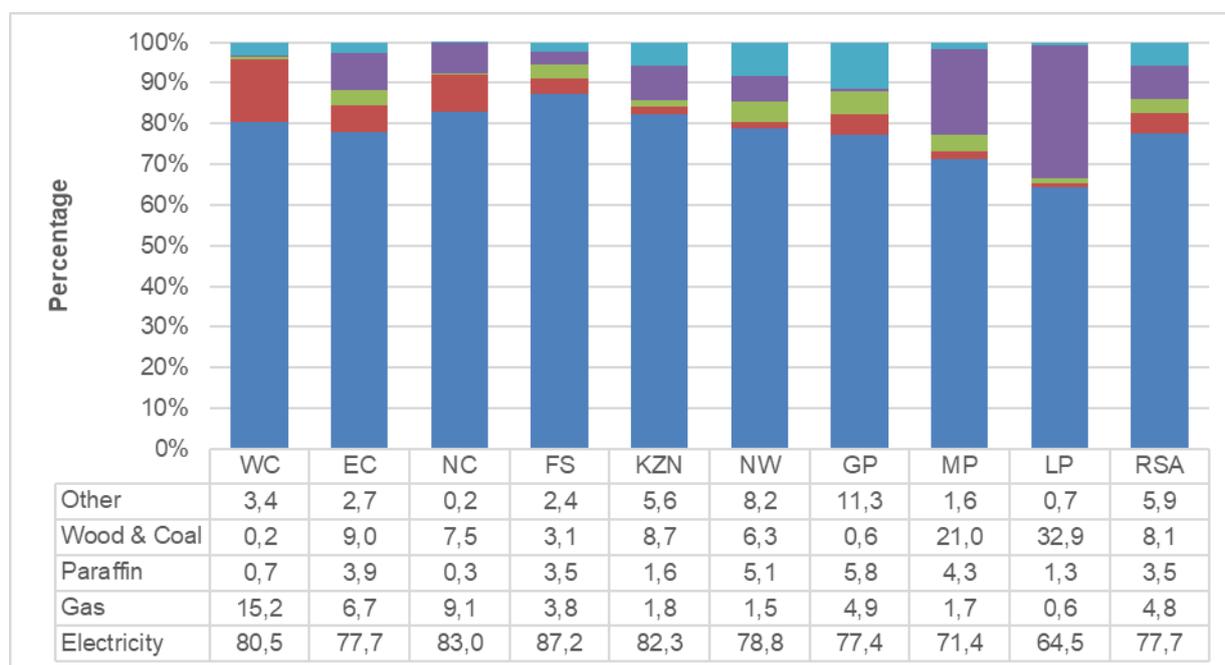
According to Figure 12.3 households that used conventional electricity meters were slightly more common in metros (19,0%) than nationally (12,5%). The use of conventional meters was most widespread in Ekurhuleni (29,2%) and Johannesburg (24,0%) and least common in Mangaung (2,2%) and Nelson Mandela Bay (3,2%). Pre-paid meters were, by contrast, most common in Mangaung (96,4%) and Nelson Mandela Bay (94,3%). It is notable that more than one-fifth (23,3%) of households in the City of Johannesburg obtained electricity from other sources (e.g. neighbour or landlord) compared to 11,9% across all metros.

**Figure 12.4: Percentage distribution of main sources of energy used for cooking by year, 2002–2021**



The main sources of energy used by households for cooking during the period 2002 to 2021 are presented in Figure 12.4. The figure shows that the percentage of households that used electricity for cooking increased from 57,5% in 2002 to 77,7% in 2021. Simultaneously, the use of paraffin, coal and fire wood declined notably. The percentage of households that used paraffin declined from 16,1% in 2002 to 3,5% in 2021, while the percentage of households that used firewood decreased from 20,0% to 7,7%. The percentage of households that used gas increased from 2,2% in 2002 to 4,8% in 2021.

**Figure 12.5: Percentage distribution of main sources of energy used for cooking by province, 2021**



The main sources of energy used for cooking in 2021 by province are presented in Figure 12.5. The percentage of households that used electricity as a main source of energy for cooking was highest in the Free State (87,2%) and Northern Cape (83,0%) and lowest in Limpopo (64,5%). The use of paraffin was most common in Gauteng (5,8%) and least common in Northern Cape (0,3%). The use of wood and coal was particularly noticeable in Limpopo (32,9%), Mpumalanga (21,0%), Eastern Cape (9,0%) and KwaZulu-Natal (8,7%). Less than one per cent of households used wood for cooking in Western Cape and Gauteng (0,2% and 0,6% respectively). Gas was most frequently used by households in Western Cape (15,2%) and Northern Cape (9,1%).

### 13 Telecommunications

Communication plays an important role in the fundamental operation of a society. It links people and businesses, facilitating communication and the flow of ideas and information, and coordinating economic activities and development.

**Figure 13.1: Percentage of households who have a functional landline and cellular telephone in their dwellings by province, 2021**

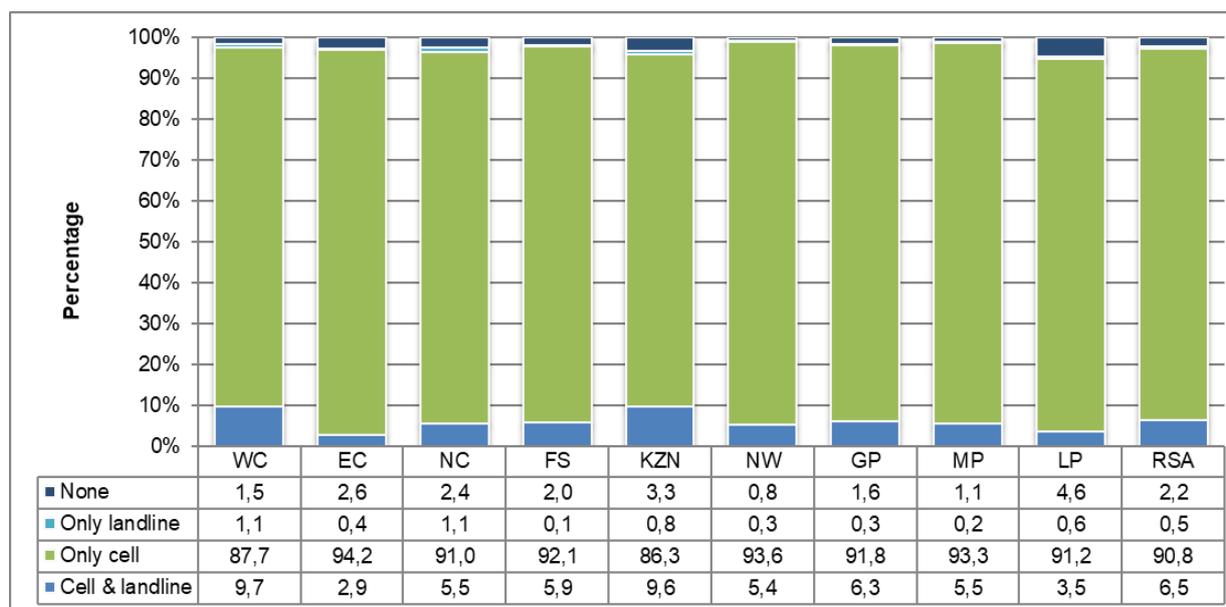


Figure 13.1 summarises statistics collected on access to functional landlines and cellular (mobile) phones within the sampled dwelling units during 2021. Nationally, only 2,2% of households did not have access to either landlines or cellular phones while only 0,5% of South African households only used landlines. By comparison, 90,8% of South African households exclusively use cellular phones. The exclusive use of cellular phones was most common in Eastern Cape (94,2%) and lowest in KwaZulu-Natal (86,3%). Households that had higher usage of both cellular phones and landlines were most common in Western Cape (9,7%) and KwaZulu-Natal (9,6%).

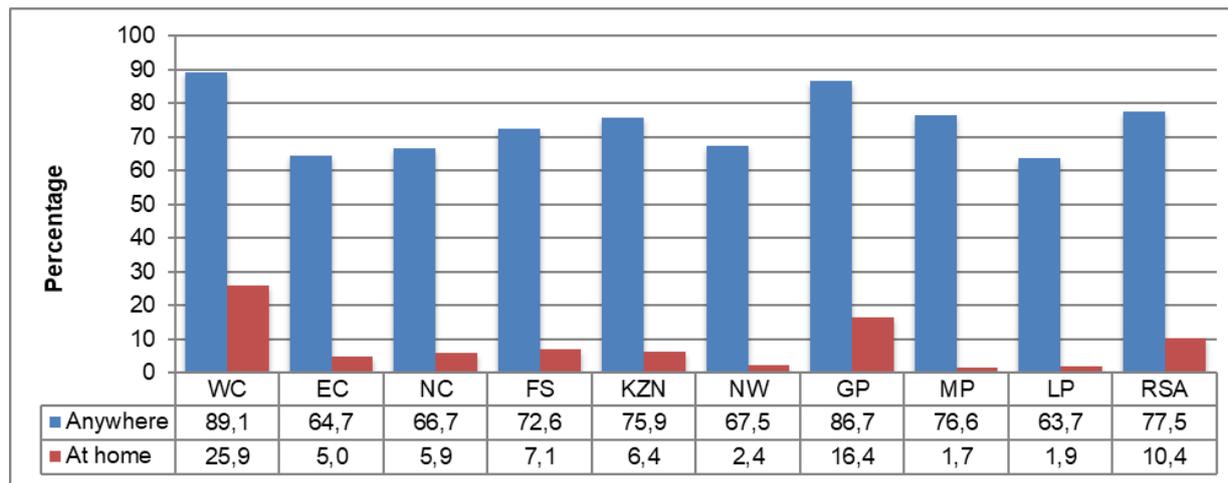
**Figure 13.2: Percentage of households with access to the Internet at home, or anywhere, by province, 2021**

Figure 13.2 shows that 77,5% of South African households had at least one member who had access to, or used the Internet at locations such as their homes, work, place of study, internet cafés, or at public hot spots. Access to the Internet using all available means was highest in Western Cape (89,1%) and Gauteng (86,7%), and lowest in Limpopo (63,7%) and Eastern Cape (64,7%). About one-tenth (10,4%) of South African households had access to fixed Internet at home. Access to the Internet at home was highest among households in Western Cape (25,9%) and Gauteng (16,4%), and lowest in Mpumalanga (1,7%) and Limpopo (1,9%).

**Table 13.1: Households' access to the Internet by place of access, urban/rural status and province, 2021**

Place where Internet is accessed	Rural/Urban status	Province (per cent)									
		WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
At home	Metro	30,3	10,7	-	12,1	10,2	-	16,5	-	-	17,2
	Urban	18,3	5,1	6,7	5,1	10,0	5,2	15,4	2,5	4,4	8,8
	Rural	12,2	0,2	4,1	4,5	0,2	0,3	29,7	1,0	1,3	1,2
	<b>Total</b>	<b>25,9</b>	<b>5,0</b>	<b>5,9</b>	<b>7,1</b>	<b>6,4</b>	<b>2,4</b>	<b>16,4</b>	<b>1,7</b>	<b>1,9</b>	<b>10,4</b>
At work	Metro	20,4	16,2	-	18,8	27,9	-	29,0	-	-	26,1
	Urban	27,9	11,8	18,1	9,4	22,3	13,0	20,1	10,0	17,8	17,1
	Rural	11,9	7,2	5,8	8,9	3,2	1,7	9,1	4,4	4,8	4,6
	<b>Total</b>	<b>22,2</b>	<b>11,3</b>	<b>14,4</b>	<b>12,1</b>	<b>17,3</b>	<b>6,6</b>	<b>27,8</b>	<b>6,8</b>	<b>7,3</b>	<b>17,6</b>
Using mobile devices	Metro	75,4	61,7	-	62,8	83,5	-	72,4	-	-	73,4
	Urban	78,9	73,2	64,3	66,3	80,8	72,9	74,5	68,7	79,1	73,7
	Rural	55,0	53,6	52,9	72,5	57,8	61,7	63,2	66,3	57,5	59,2
	<b>Total</b>	<b>75,4</b>	<b>60,5</b>	<b>60,8</b>	<b>66,0</b>	<b>73,2</b>	<b>66,5</b>	<b>72,6</b>	<b>67,3</b>	<b>61,7</b>	<b>69,4</b>
At Internet cafes or educational facilities	Metro	17,1	12,5	-	5,8	28,2	-	23,2	-	-	21,6
	Urban	18,3	1,6	1,4	6,5	7,4	3,6	24,6	18,8	1,7	11,1
	Rural	3,7	1,3	0,0	11,3	3,9	2,7	16,9	8,1	1,5	3,5
	<b>Total</b>	<b>16,8</b>	<b>5,4</b>	<b>1,0</b>	<b>6,9</b>	<b>14,4</b>	<b>3,1</b>	<b>23,3</b>	<b>12,7</b>	<b>1,5</b>	<b>13,6</b>

Table 13.1 shows that household access to the Internet at home was highest in Western Cape (25,9%) and Gauteng (16,4%) and lowest in Mpumalanga (1,7%) and Limpopo (1,9%). While 17,2% of households in metropolitan areas had access to the Internet at home, this was true for only 1,2% of rural households in general and less than one per cent of rural households in Eastern Cape (0,2%), North West (0,3%) and

KwaZulu Natal (0,2%). A larger percentage of households access the Internet at work (17,6%), Internet cafés or at educational institutions (13,6%) than at home (10,4%). Households in Gauteng (27,8%) and Western Cape (22,2%) were most likely to access the Internet at work, while those in North West (6,6%) were least likely to do so.

Using mobile devices to access the Internet includes access on cellular telephones or using mobile access devices such as 3G cards. It is clear from Table 13.1 that mobile access to the Internet has made it much more accessible to households in rural areas. Nationally, Internet access using mobile devices (69,4%) was the most common form of access to the Internet. Although the use of mobile Internet access devices in rural areas (59,2%) still lags behind its use in urban (73,7%) and metro areas (73,4%), it is much more common in rural areas than any of the alternative methods.

## 14 Transport

The transport questions asked in the GHS usually focus primarily on the use of public and/or state-subsidised transport, the cost of transport to households and the types of transport and time needed to travel to work, school and healthcare facilities.

Since individuals' need and ability to travel were restricted during the various phases of the COVID-19 lockdowns, most transport questions were removed from the GHS 2020 questionnaire. The questionnaire only retained questions on the type of transport utilised by household members during the preceding week, the associated cost, and the accessibility of the transport.

**Figure 14.1: Percentage of households who made use of public transport during the week preceding the survey by province, 2021**

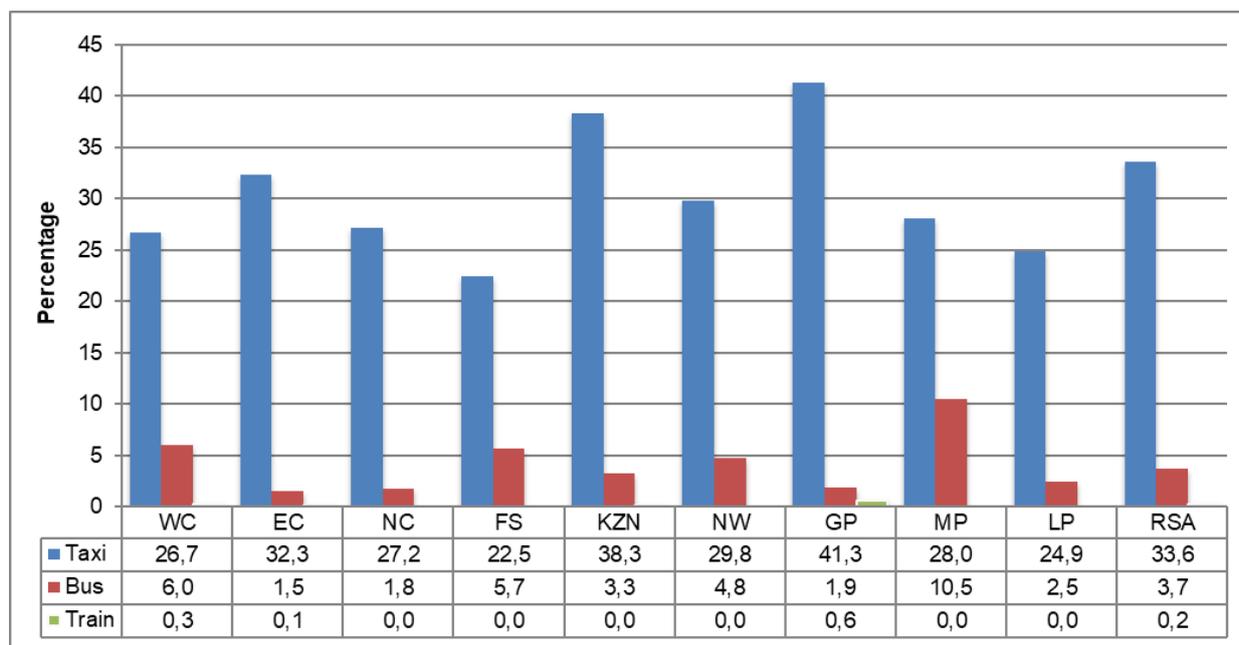


Figure 14.1 shows that 33,6% of South African households had at least one household member who used a minibus taxi/sedan taxi/bakkie taxi during the week preceding the survey. The use of minibus taxi was most common in Gauteng (41,3%) and KwaZulu-Natal (38,3%). By comparison, 3,7% of South African households used a bus during the preceding week. It is notable that 10,5% of households in Mpumalanga used the bus. Only 0,2% of households used trains.

## 15 Household assets and sources of income

### 15.1 Household assets

Assets, whether they are owned by individuals or by households, may provide a range of direct and indirect benefits, including status and security, to their owners. Household assets influence the extent to which households can diversify their livelihoods. Asset poverty is an economic and social condition that is more persistent and prevalent than income poverty.

Figure 15.1: Percentage distribution of households by selected assets owned, by urban/rural status, 2021

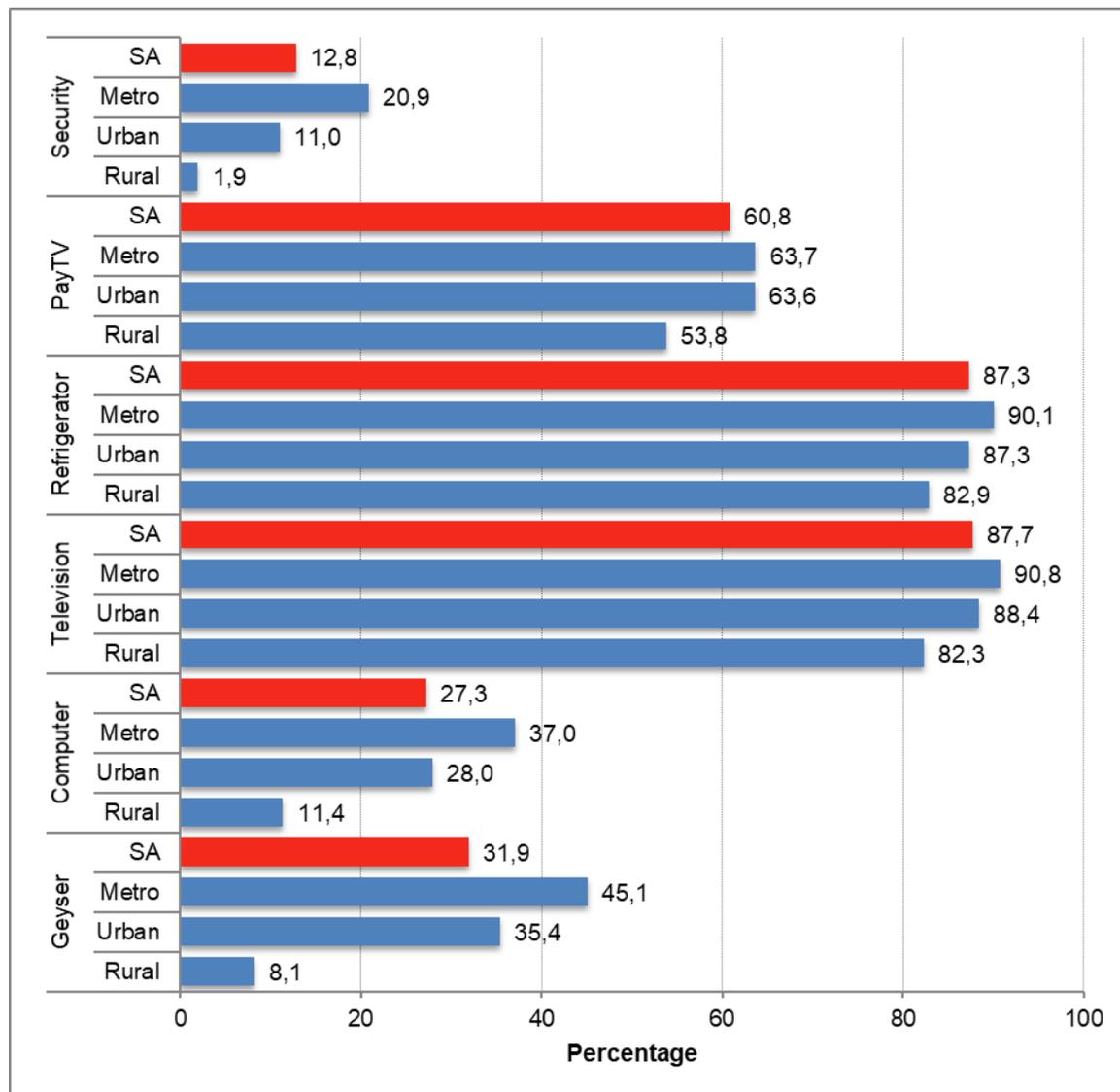
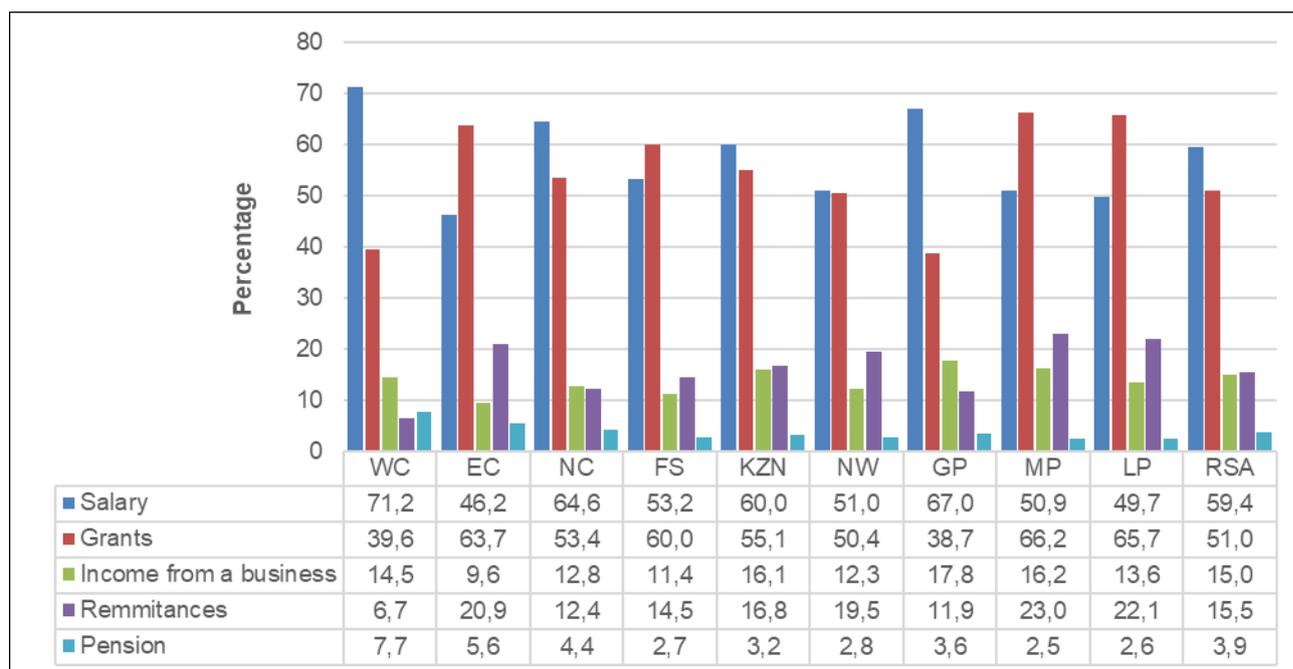


Figure 15.1 shows that 27,3% of households owned one or more computers while 87,7% owned televisions and 87,3% owned refrigerators. Households in urban and metropolitan areas were much more likely to own any of these assets than households in rural areas.

### 15.2 Household sources of income

The diversification of livelihood strategies is considered an important strategy to reduce poverty and to improve the livelihoods of households. A range of possible factors could motivate households to diversify the various sources of income they receive. These could, inter alia, include the need to generate enough income to ensure a sufficient livelihood; and limiting the risk associated with relying on a single source of income. Households were requested to list all their sources of income from a list of seven categories which included: salaries and wages; income from a business; remittances; grants; pensions; income from farming; and income generated through rental income and interest. The important categories are listed in Figure 15.2.

**Figure 15.2: Percentage distribution of sources of household income by province, 2021**

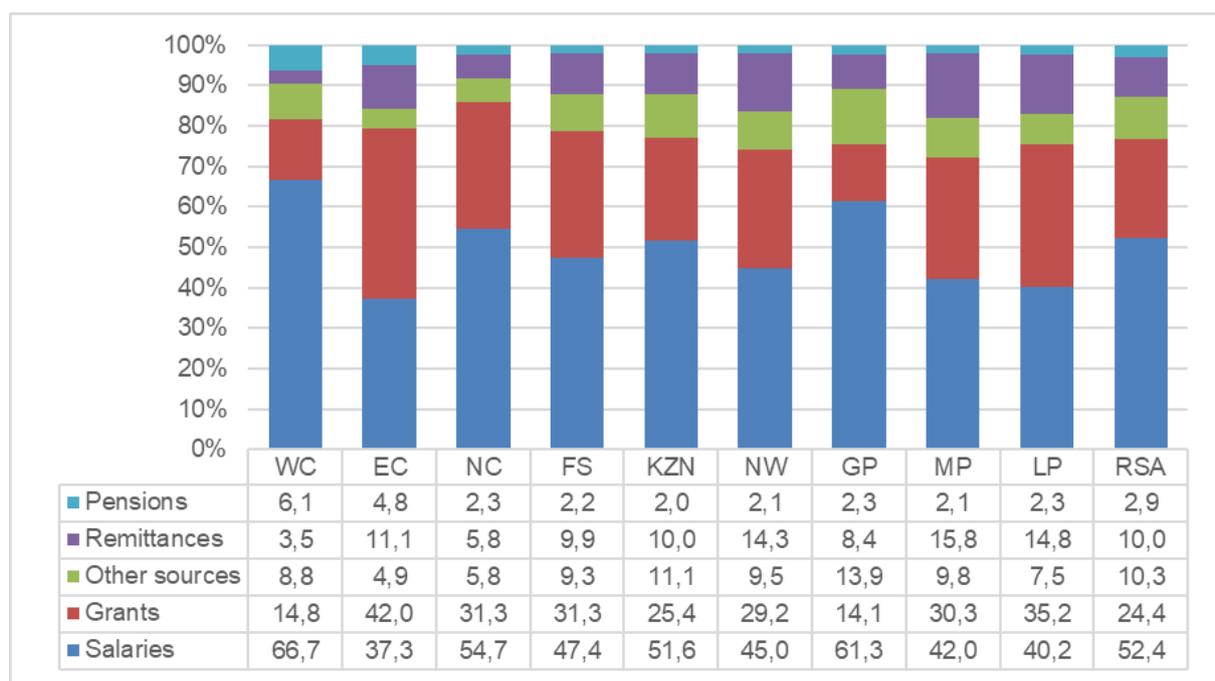


*A specific household can have more than one source of income. Percentages, therefore, do not add up to 100%.*

Figure 15.2 summarises the percentage of households according to the various sources of income reported by them. Nationally, salaries (59,4%) and grants (51,0%) were the most common sources of income reported by households.

Provincially, the largest percentage of households that earned salaries were found in Western Cape (71,2%) and Gauteng (67,0%). Grants were more prevalent than salaries as a source of income in Eastern Cape (63,7%), Limpopo (65,7%) and Mpumalanga (66,2%). Remittances as a source of income played an important role in most provinces, but especially in Mpumalanga (23,0%) and Limpopo (22,1%).

**Figure 15.3: Percentage distribution of main source of household income by province, 2021**



Households' main sources of income are presented in Figure 15.3. Nationally, 52,4% of households reported salaries/wages/commission as their main sources of income, followed by grants (24,4%), other sources of income (10,3%) and remittances (10,0%). Sources of main income varies considerably across provinces. Western Cape (66,7%) and Gauteng (61,3%) were the only two provinces in which more than three-fifths of households reported salaries as their main sources of income. By comparison, a large dependence on social grants is noticed in Eastern Cape (42,0%) and Limpopo (35,2%). Remittances was the main source of income for 15,8% of households in Mpumalanga and 14,8% in Limpopo.

**Figure 15.4: Percentage distribution of main source of household income by metropolitan area, 2021**



Note: Other sources of income refers to income from pensions, remittances, rental income, interest, income from a business or sales of farming products or services.

Households' main sources of income by metropolitan area are presented in Figure 15.4. Three-fifths (61,8%) of metropolitan households reported salaries or wages as their main source of income, while 14,3% of households reported social grants as the main source of income. Almost two-thirds of households in Cape Town (66,4%) and Johannesburg (65,1%) reported salaries and wages as their main source of income, compared to only 45,4% of households in Buffalo City and 48,4% of households in Mangaung. Social grants were most commonly considered the main source of income in Buffalo City (41,0%) and Nelson Mandela Bay (23,8%).

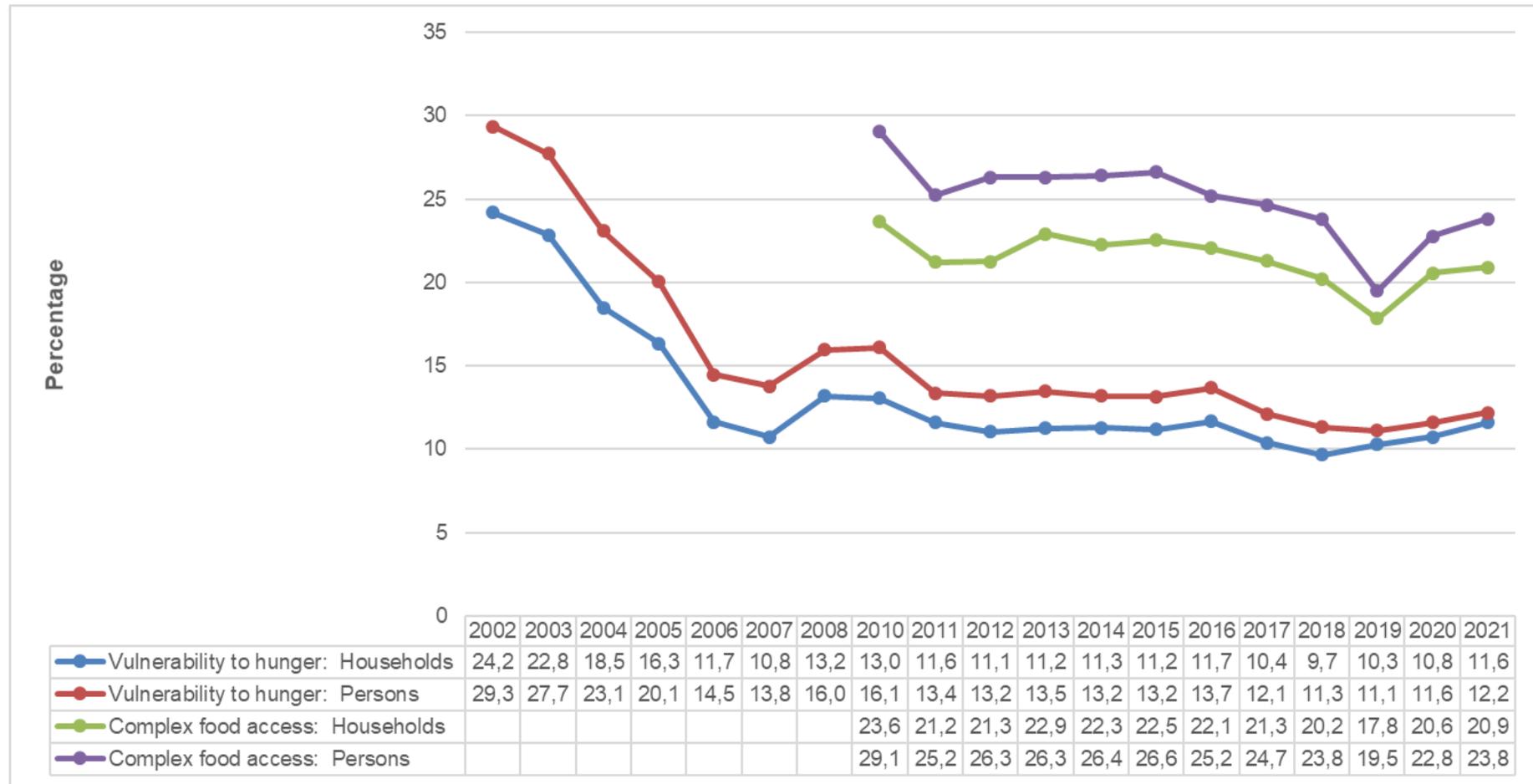
## 16 Access to food

Between 2002 and 2008, the GHS has asked households to indicate whether, and how often adults and children went hungry because there was not enough food in the household. The question was discontinued in 2009 but reinstated in the 2010 questionnaire and has been asked annually since then. Figure 16.1 shows that the percentage of persons that experienced hunger decreased from 29,3% in 2002 to 12,2% in 2021. The percentage of households who were vulnerable to hunger reflects the same pattern as experienced by persons as it declined from 24,2% in 2002 to 11,6% in 2021.

Since 2009, the GHS questionnaire has also included a set of questions based on the Household Food Insecurity Access Scale (HFIAS) to determine households' access to food. These questions aim to measure households' food access by asking households about modifications they made in their diet or eating patterns during the previous month because of limited sources available where they can obtain food. The index provides a slightly more sensitive measure of food access than the question on hunger. The question used in 2009 was expanded in 2010 with the addition of a question on possible decreases in the variety of foods consumed. The index seems to reflect a similar pattern, though it is slightly higher.

Figure 16.1 shows that the percentage of households that had limited access to food decreased from 23,6% in 2010 to 17,8% in 2019 before increasing to 20,9% in 2021. Simultaneously, the percentage of persons with more limited access to food declined from 25,2% in 2011 to 19,5% in 2019 before similarly increasing to 23,8% in 2021.

Figure 16.1: Vulnerability to hunger and access to food, 2002–2021



**Figure 16.2: Percentage of households experiencing food adequacy or inadequacy by province, 2021**

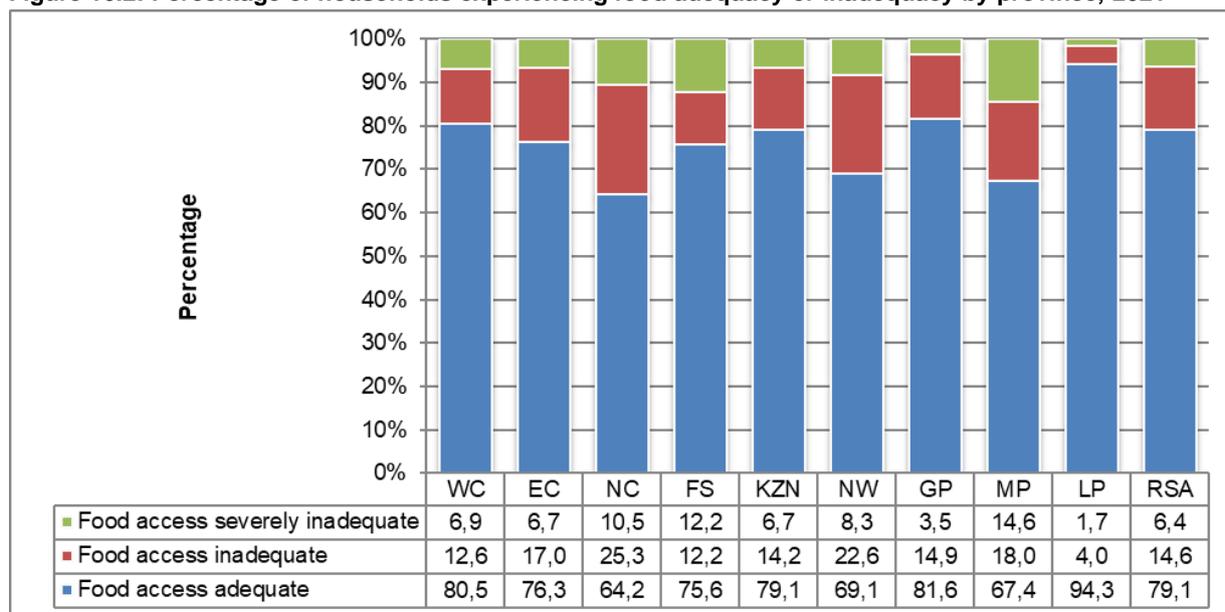


Figure 16.2 shows that more than one-fifth (20,9%) of households, nationally, considered their access to food as inadequate or severely inadequate. Food access problems were most common in Northern Cape (35,8%), Mpumalanga (32,6%) and North West (30,9%). Only 5,7% of households in Limpopo had inadequate or severely inadequate access to food.

**Figure 16.3: Percentage of households experiencing food adequacy or inadequacy by metropolitan areas, 2021**

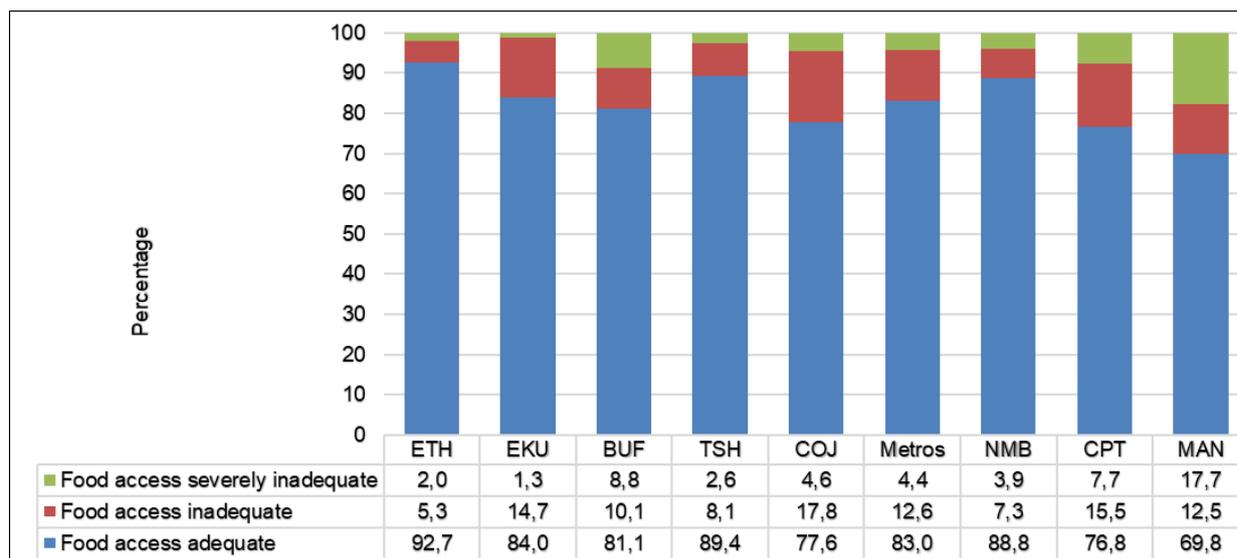


Figure 16.3 shows that 17,0% of metropolitan households had experienced inadequate or severely inadequate access to food during the preceding year. Food access problems were most common in Mangaung (30,2%) and Cape Town (23,2%).

## 17 Agriculture

Agriculture plays an important role in the process of economic development and can contribute significantly to household food security.

**Figure 17.1: Percentage of households involved in agricultural activities by province, 2021**

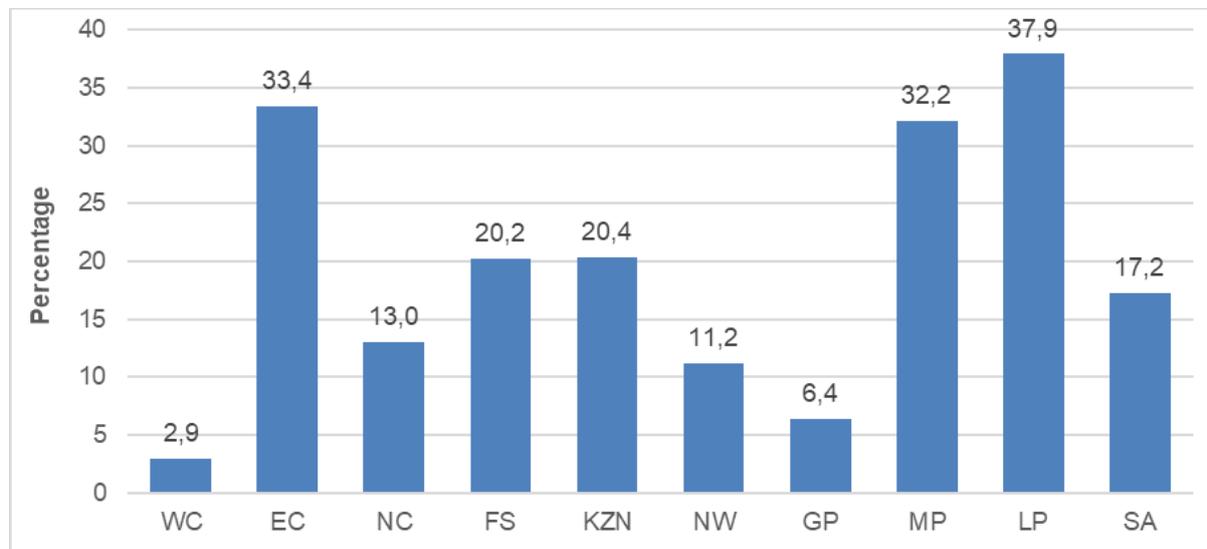


Figure 17.1 shows that only 17,2% of South African households were involved in some sort of agricultural production activities during the reference period. Households in Limpopo (37,9%), Eastern Cape (33,4%) and Mpumalanga (32,2%) were most involved, while only 2,9% of households in Western Cape, and 6,4% of households in Gauteng engaged in some agricultural activity.

**Figure 17.2: Percentage distribution of the main reasons for agricultural involvement in South Africa, 2021**

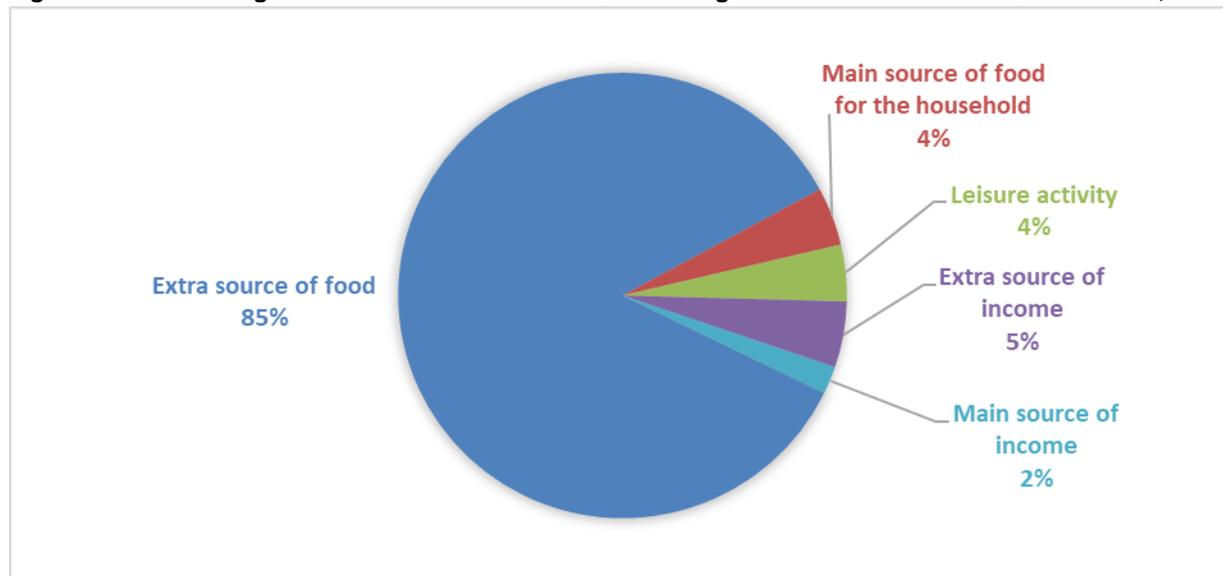


Figure 17.2 shows that more than four-fifths (85,0%) of South African households that were involved in agriculture were involved in an attempt to secure an additional source of food. Another 4% of households engaged in agriculture as subsistence activity (producing the main source of food), while 5% used agriculture to produce additional income.

**Table 17.1: Nature of agricultural production activities per province, 2021**

Production activity	Statistic (Thousands)	Province									
		WC	EC	NC	FS	KZN	NW	GP	MP	LP	SA
Livestock production	Number	7	286	26	10	230	52	10	58	124	801
	Percentage	11,2	49,7	54,4	5,0	36,4	35,6	2,9	12,9	19,4	26,0
Poultry production	Number	0	340	13	20	349	58	12	102	155	1 049
	Percentage	0,0	59,1	27,0	10,3	55,2	40,0	3,4	22,7	24,3	34,0
Grains and food crops	Number	0	305	6	27	402	14	52	288	501	1 595
	Percentage	0,0	53,1	11,8	13,9	63,6	9,9	15,0	64,2	78,6	51,7
Fruit and vegetable crops	Number	52	364	23	175	192	70	306	340	450	1 972
	Percentage	88,8	63,2	48,7	90,9	30,3	47,9	88,7	75,7	70,5	63,9

*A particular household can be involved in more than one activity and percentages therefore do not add up to 100%.*

Table 17.1 shows that, of the households that were engaged in agricultural production, 63,9% grew fruit and vegetables, 51,7% cultivated grains and 34,0% produced poultry, while livestock were produced by 26,0% of the country's households.

## 18 Technical notes

### 18.1 Response rates

The national response rate for the survey was 40,1%. The highest response rate (53,1%) was recorded in Limpopo and the lowest in Gauteng (26,1%). This is presented in Table 18.1.

**Table 18.1: Response rates per province, GHS 2021**

Province / Metropolitan Area	Response rates
<b>Western Cape</b>	<b>36,7</b>
Non Metro	42,5
City of Cape Town	34,1
<b>Eastern Cape</b>	<b>50,4</b>
Non Metro	53,5
Buffalo City	45,3
Nelson Mandela Bay	42,9
<b>Northern Cape</b>	<b>39,7</b>
<b>Free State</b>	<b>37,3</b>
Non Metro	42,7
Mangaung	25,1
<b>KwaZulu-Natal</b>	<b>49,1</b>
Non Metro	49,5
eThekweni	48,5
<b>North West</b>	<b>39,4</b>
<b>Gauteng</b>	<b>26,1</b>
Non Metro	30,0
Ekurhuleni	34,5
City of Johannesburg	20,8
City of Tshwane	22,8
<b>Mpumalanga</b>	<b>47,6</b>
<b>Limpopo</b>	<b>53,3</b>
<b>South Africa</b>	<b>40,1</b>

### 18.2 Sample design

The General Household Survey (GHS) uses the Master Sample frame which has been developed as a general-purpose household survey frame that can be used by all other Stats SA household-based surveys having design requirements that are reasonably compatible with the GHS. The GHS 2021 collection was based on the 2013 Master Sample. This Master Sample is based on information collected during the 2011 Census conducted by Stats SA. In preparation for Census 2011, the country was divided into 103 576 enumeration areas (EAs). The census EAs, together with the auxiliary information for the EAs, were used as the frame units or building blocks for the formation of primary sampling units (PSUs) for the Master Sample, since they covered the entire country and had other information that is crucial for stratification and creation of PSUs. There are 3 324 primary sampling units (PSUs) in the Master Sample with an expected sample of approximately 33 000 dwelling units (DUs). The number of PSUs in the current Master Sample (3 324) reflect an 8,0% increase in the size of the Master Sample compared to the previous (2008) Master Sample (which had 3 080 PSUs). The

larger Master Sample of PSUs was selected to improve the precision (smaller coefficients of variation, known as CVs) of the GHS estimates.

The Master Sample is designed to be representative at provincial level and within provinces at metro/non-metro levels. Within the metros, the sample is further distributed by geographical type. The three geography types are Urban, Tribal and Farms. This implies, for example, that within a metropolitan area, the sample is representative of the different geography types that may exist within that metro. The sample for the GHS is based on a stratified two-stage design with probability proportional to size (PPS) sampling of PSUs in the first stage, and sampling of dwelling units (DUs) with systematic sampling in the second stage.

**Table 18.2: Comparison between the 2007 (old) Master Sample and the new Master Sample (designed in 2013)**

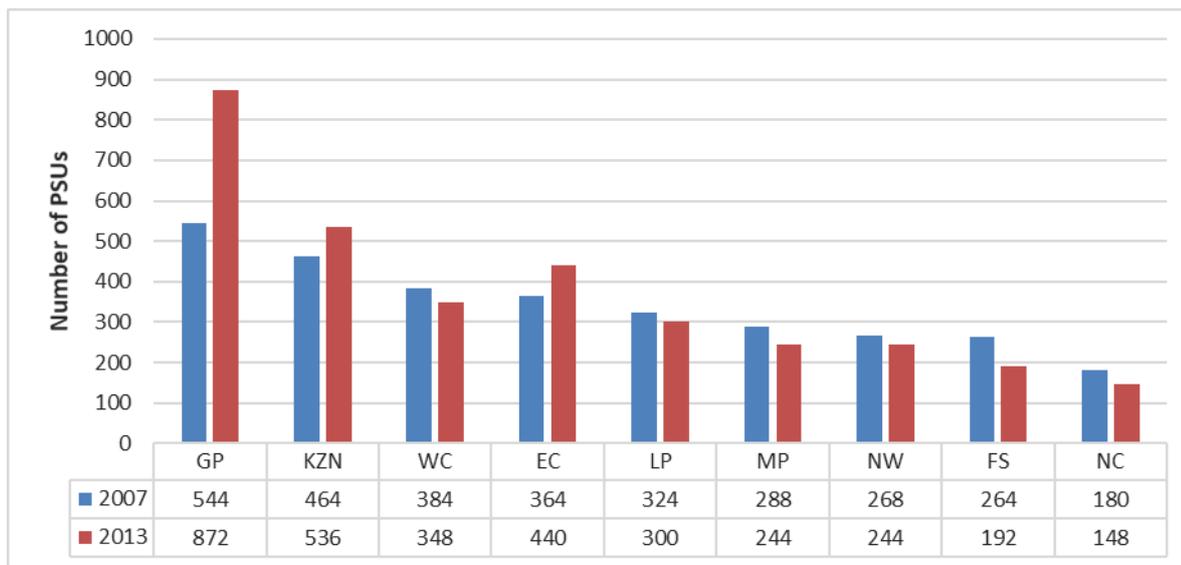
	<b>2007 Master Sample (GHS 2008-2014)</b>	<b>2013 Master Sample (GHS 2015 onwards)</b>
Design	Two-stage stratified design	Two-stage stratified design
Number of primary sampling units (PSUs)	3 080 PSUs	3 324 PSUs
Number of dwelling units (DUs)	Approximately 30 000 DUs	Approximately 33 000 DUs
Stratification	No stratification by geo-type within metros/non-metros	Stratification by geo-type within metros/non-metros
Geo-types	4 geo-types, namely urban formal, urban informal, tribal areas, and rural formal	3 geo-types, namely urban, traditional, and farms
Sample	Sample representative at national, provincial and metro levels, but estimates only produced to provincial level	Sample representative at national, provincial and metro levels Weights produced to publish estimates at metro level

There are a number of aspects in which the two Master Samples differ. The number of geo-types were, firstly, reduced from four to three (excluding urban informal, and keeping urban, rural traditional and rural farms). The new Master Sample, furthermore, allows for the publication of estimates at metro level.

Primary stratification occurred at provincial and metro/non-metro levels, for mining, and geography type, while the secondary strata were created within the primary strata based on the demographic and socio-economic characteristics of the population.

Given the change in the provincial distribution of the South African population between 2001 and 2011, the Master Sample was accordingly adjusted. This is presented in Figure 18.1. There was also an 8% increase in the sample size of the Master Sample of PSUs to improve the precision of the GHS estimates. In particular, the sample sizes increased most notably in Gauteng, Eastern Cape and KwaZulu-Natal.

**Figure 18.1: Distribution of primary sampling units by province, 2007 (old) Master Sample and the new Master Sample (designed in 2013)**



### 18.3 Allocating sample sizes to strata<sup>1</sup>

The randomised PPS systematic sampling method is described below. This procedure was applied independently within each design stratum.

Let  $N$  be the total number of PSUs in the stratum, and the number of PSUs to be selected from the stratum is denoted by  $n$ . Also, let  $x_i$  denote the size measure of the PSU  $i$  within the stratum, where  $i = 1, 2, 3, \dots, N$ . Then, the method for selecting the sample of  $n$  PSUs with the Randomised PPS systematic sampling method can be described as follows:

#### Step 1: Randomise the PSUs within the stratum

The list of  $N$  PSUs within the stratum can be randomised by generating uniform random between 0 and 1, and then by sorting the  $N$  PSUs in ascending or descending order of these random numbers. Once the PSUs have been randomised, we can generate permanent sequence numbers for the PSUs.

#### Step 2: Define normalised measures of size for the PSUs

We denote by  $x_i$  the measure of size (MOS) of PSU  $i$  within the design stratum. Then, the measure of size

for the stratum is given by  $X = \sum_{i=1}^N x_i$ . We define the normalised size measure  $p_i$  of PSU  $i$  as

$p_i = x_i / X; i = 1, 2, 3, \dots, N$ , where  $N$  is the total number of PSUs in the design stratum. Then,  $p_i$  is

the relative size of the PSU  $i$  in the stratum, and  $\sum_{i=1}^N p_i = 1$  for all strata. It should be noted that the value of

$n \times p_i$ , which is the selection probability of PSU  $i$  must be less than one.

<sup>1</sup> Source: Sample Selection and Rotation for the Redesigned South African Labour Force Survey by G. Hussain Choudhry, 2007.

**Step 3: Obtain inverse sampling rates (ISRs)**

Let  $R$  be the stratum inverse sampling rate (ISR). The stratum ISR is the same as the corresponding provincial ISR because of the proportional allocation within the province. It should also be noted that the proportional allocation within the province also results in a self-weighting design.

Then, the PSU inverse sampling rates (ISRs) are obtained as follows:

First, define  $N$  real numbers  $Z_i = n \times p_i \times R; i = 1, 2, 3, \dots, N$ . It is easy to verify that  $\sum_{i=1}^N Z_i = n \times R$ . Next, round the  $N$  real numbers  $Z_i; i = 1, 2, 3, \dots, N$  to integer values  $R_i; i = 1, 2, 3, \dots, N$  such that each  $R_i$  is as close as possible to the corresponding  $Z_i$  value and the  $R_i$  values add up to  $n \times R$  within the stratum. In other words, the sum of the absolute differences between the  $R_i$  and the corresponding  $Z_i$  values is minimised subject to the constraint that the  $R_i$  values add up to  $n \times R$  within the stratum. Drew, Choudhry and Gray (1978) provide a simple algorithm to obtain the integer  $R_i$  values as follows:

Let " $d$ " be the difference between the value  $n \times R$  and the sum  $S = \sum_{i=1}^N [Z_i]$ , where  $[.]$  is the integer function, then  $R_i$  values can be obtained by rounding up the " $d$ "  $Z_i$  values with the largest fraction parts, and by rounding down the remaining  $(N-d)$  of them. It should be noted that the integer sizes  $R_i; i = 1, 2, 3, \dots, N$  are also the PSU inverse sampling rates (ISRs) for systematic sampling of dwelling units.

**Step 4: Obtain cumulative ISR values**

We denote by  $C_i; i = 1, 2, 3, \dots, N$  the cumulative ISRs of the PSUs within the stratum. It should be noted that the PSUs within the stratum have been sorted according to the sequence numbers that were assigned after the randomisation. Then, the cumulative ISRs are defined as follows:

$$C_1 = R_1,$$

$$C_j = C_{(j-1)} + R_j; \quad j = 2, 3, \dots, N.$$

It should be noted that the value  $C_N$  will be equal to  $n \times R$ , which is also the total number of systematic samples of dwelling units that can be selected from the stratum.

**Step 5: Generate an integer random number  $r$  between 1 and  $R$ , and compute  $n$  integers  $r_1, r_2, \dots, r_n$  as follows:**

$$r_1 = r$$

$$r_2 = r_1 + R$$

$$r_3 = r_2 + R$$

.

.

$$r_i = r_{(i-1)} + R$$

.

.

$$r_n = r_{(n-1)} + R.$$

**Step 6: Select  $n$  PSUs out of the  $N$  PSUs in the stratum with the labels (sequence numbers) number**

**$i_1, i_2, \dots, i_n$  such that:**

$$C_{i_1-1} < r_1 \leq C_{i_1}$$

$$C_{i_2-1} < r_2 \leq C_{i_2}$$

.

.

$$C_{i_n-1} < r_n \leq C_{i_n}.$$

Then, the  $n$  PSUs with the labels  $i_1, i_2, \dots, i_n$  would get selected with probabilities proportional to size, and the selection probability of the PSU  $i$  will be given by  $\frac{R_i}{R}$ .

#### 18.4 Methodology and fieldwork

Stats SA suspended face-to-face data collection for all its surveys on 19 March 2020 as a result of the COVID-19 pandemic and restricted movement. This was to ensure that the field staff and respondents were not exposed to the risk of contracting the coronavirus and to contain its spread.

To facilitate data collection, Stats SA changed the mode of data collection for GHS 2020 from Computer Assisted Personal Interviews (CAPI) to Computer-assisted Telephone Interviews (CATI). Since Stats SA uses a dwelling unit sample, the GHS 2019 sample was reused and households that provided operational telephone numbers in 2019 were contacted by Survey Officers (SOs). Many households, however, did not provide useable contact numbers in 2019 and many contact numbers were found to be invalid while some calls were not answered. Some households also indicated that they were not residing in the dwelling units they were sampled in during 2019 anymore. All of these were regarded as non-contacts and were adjusted for during the weighting processes. Dwellings that were out-of-scope in 2019 remained so in 2020 and in 2021.

The details of how the adjustment was done are contained in the Technical notes in this report. Given the change in the survey mode of collection and the fact that the GHS 2021 estimates are based on a much smaller sample, comparisons with previous years should be made with caution.

## 18.5 Editing and imputation

Historically the GHS used a conservative and hands-off approach to editing. Manual editing, and little if any imputation was done. The focus of the editing process was on clearing skip violations and ensuring that each variable only contained valid values. Very few limits to valid values were set, and data were largely released as they were received from the field.

With GHS 2009, Stats SA introduced an automated editing and imputation system that was continued for GHS 2010–2015. The challenge was to remain true, as much as possible, to the conservative approach used prior to GHS 2009, and yet, at the same time, to develop a standard set of rules to be used during editing which could be applied consistently across time. When testing for *skip violations* and doing automated editing, the following general rules are applied in cases where *one question follows the filter question* and the skip is violated:

- If the filter question had a missing value, the filter is allocated the value that corresponds with the subsequent question which had a valid value.
- If the values of the filter question and subsequent question are inconsistent, the filter question's value is set to missing and imputed using either the hot-deck or nearest neighbour imputation techniques. The imputed value is then once again tested against the skip rule. If the skip rule remains violated, the question subsequent to the filter question is dealt with by either setting it to missing and imputing or, if that fails, printing a message of edit failure for further investigation, decision-making and manual editing.

In cases where *skip violations* take place for questions where *multiple questions follow the filter question*, the rules used are as follows:

- If the filter question has a missing value, the filter is allocated the value that corresponds with the value expected given the completion of the remainder of the question set.
- If the filter question and the values of subsequent questions values were inconsistent, a counter is set to see what proportion of the subsequent questions have been completed. If more than 50% of the subsequent questions have been completed, the filter question's value is modified to correspond with the fact that the rest of the questions in the set were completed. If less than 50% of the subsequent questions in the set were completed, the value of the filter question is set to missing and imputed using either the hot-deck or nearest neighbour imputation techniques. The imputed value is then once again tested against the skip rule. If the skip rule remains violated the questions in the set that follows the filter question are set to missing.

When dealing with *internal inconsistencies*, as much as possible was done using logical imputation, i.e. information from other questions is compared with the inconsistent information. If other evidence is found to back up either of the two inconsistent viewpoints, the inconsistency is resolved accordingly. If the internal consistency remains, the question subsequent to the filter question is dealt with by either setting it to missing and imputing its value or printing a message of edit failure for further investigation, decision-making and manual editing.

Two imputation techniques were used for imputing missing values: hot deck and nearest neighbour. In both cases the already published code was used for imputation. The variable composition of hot decks is based on a combination of the variables used for the Census (where appropriate), an analysis of odds ratios and logistic regression models. Generally, as in the QLFS system, the GHS adds geographic variables such as province, geography type, metro/non-metro, population group, etc. to further refine the decks. This was not done for Census 2001 and it is assumed that the reason for this is the differences in deck size and position for sample surveys as opposed to a multi-million record database.

The 'No' imputations assume that if the 'Yes'/'No' question had to be completed and there is a missing value next to any of the options, the response should have been 'No'. Missing values are therefore converted to the code for 'No', namely '2'. This is only done if there is some evidence that the questions have been completed. Otherwise all remain missing. For questions for which each option represents a question, no 'No' imputations were made.

## 18.6 Weighting <sup>2</sup>

The sample weights were constructed in order to account for the following: the original selection probabilities (design weights), adjustments for PSUs that were sub-sampled or segmented, excluded population from the sampling frame, non-response, weight trimming, and benchmarking to known population estimates from the Demographic Analysis Division within Stats SA.

The sampling weights for the data collected from the sampled households were constructed so that the responses could be properly expanded to represent the entire civilian population of South Africa. The design weights, which are the inverse sampling rate (ISR) for the province, are assigned to each of the households in a province.

Mid-year population estimates produced by the Demographic Analysis Division were used for benchmarking. The final survey weights were constructed using regression estimation to calibrate to national level population estimates cross-classified by 5-year age groups, gender and race, and provincial population estimates by broad age groups. The 5-year age groups are: 0–4, 5–9, 10–14, 55–59, 60–64; and 65 and over. The provincial level age groups are 0–14, 15–34, 35–64; and 65 years and over. The calibrated weights were constructed such that all persons in a household would have the same final weight.

The Statistics Canada software StatMx was used for constructing calibration weights. The population controls at national and provincial level were used for the cells defined by cross-classification of Age by Gender by Race. Records for which the age, population group or sex had item non-response could not be weighted and were therefore excluded from the dataset. No additional imputation was done to retain these records.

Household estimates that were developed using the UN headship ratio methodology were used to weight household files. The databases of Census 1996, Census 2001, Community Survey 2007 and Census 2011 were used to analyse trends and develop models to predict the number of households for each year. The weighting system was based on tables for the expected distribution of household heads for specific age categories, per population group and province.

## 18.7 Bias-adjustment procedure

The GHS 2021 data was collected using Computer-Assisted Telephone Interviews (CATI) due to COVID-19. The data collection was based on the 2019 sample, from which only households that provided contact information (i.e. telephone/cell phone) were enumerated. Therefore, this may attribute biasness in the sample due to differences in the characteristics of households and persons within households that provided contact information and those that did not.

The bias adjustment factors were computed using the GHS 2019 data, and the adjustment was applied to the GHS 2021 calibrated survey weights. The bias adjustment factors were computed for various household level, person level, and demographic characteristics at provincial, and metropolitan and nonmetropolitan area levels within provinces. The bias adjustment factors were computed as the ratio between the estimates for each cell of the selected variables (or cross-classification of the selected variables) for the full sample households

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<sup>2</sup> Source: Sampling and Weighting System for the Redesigned South African Labour Force Survey, by G. HussainChoudhry, 2007.

(households that provided contact information and those that did not) and households that provided contact information. Bias adjustment factor  $R^j$  is given as:

$$R^j = \frac{X_{full}^j}{X_{tel}^j}$$

Where  $X_{full}^j$  is the domain estimate derived from the full sample and  $X_{tel}^j$  is the domain estimate derived from the households or persons within households that provided contact information.

The GHS 2021 bias adjusted weights were used to compute the GHS 2021 estimates. These GHS 2021 estimates will not be consistent with the demographic population estimates because the bias adjustment factors are non-linear statistics. Therefore, the GHS 2021 estimates that were based on the bias adjusted weights were further adjusted to achieve consistency simultaneously with the known total population, and the internal consistency across all variables (or cross-classification of variables). These adjusted estimates were then used as control totals to compute the final survey weights as described in the next sub-section.

## 18.8 Final survey weights

In the final step of constructing the sample weights, the calibrated sample weights were raked by applying the raking procedure twice with different sets of control totals at each stage of raking. The person level and household level sample weights were raked independently.

In the first application of the raking procedure, the following control totals were used to compute the intermediate raked weights:

### Control totals set for person level weights

- Child care arrangement (36 cells)
- Attendance of educational institution (9 cells)
- Highest level of education (8 cells)
- Disability by gender (58 cells)
- Medical aid coverage (27 cells)
- Benefit from social grants (3 cells)

### Control totals set for household level weights

- Main dwelling type (22 cells)
- Tenure status (45 cells)
- Main source of energy or cooking (30 cells)
- Main source of water (18 cells)
- Access to sanitation (22 cells)
- Access to refuse removal (40 cells)
- Main source of household income (54 cells)
- Vulnerability to hunger (26 cells)

The intermediate raked weights computed above were further raked with the following control totals to compute the final survey weights:

### Control totals set for person level weights

- Age by Gender (32 cells)
- Age by Population Group (64 cells)
- Age by Province (54 cells)
- Age by Metro/Non-metro (68 cells)

- Gender by province (18 cells)

#### **Control totals set for household level weights**

- Age by Gender (8 cells)
- Age by Population Group (16 cells)
- Age by Province (36 cells)
- Age by Metro/Non-metro (68 cells)

The advantage of applying the raking procedure twice would be that the population estimates would be consistent with the known population totals from Demographic Analysis. Moreover, the second application of raking would introduce variability in the survey estimates while correcting for the bias due to non-coverage of the households that did not provide contact information.

### **18.9 Data revisions**

Stats SA survey data are benchmarked data against mid-year population estimates which are informed by the best available population data and most recent assumptions. Since populations change and estimates become less accurate the further they are projected into the future, benchmark figures have to be reviewed and replaced with more appropriate figures from time to time.

GHS data was reweighted in 2013 based on the 2013 series Mid-Year Population estimates which were released after the publication of Census 2011 data. Recent comparisons have, however, shown a discrepancy between the size and structure of the benchmark population and the Census 2011 data, and other complimentary data sources. It was therefore decided to replace the 2013 series MYPEs with the more recent 2017 series MYPEs as benchmarks for weighting the GHS data files.

In order to ensure comparability across the whole data series, the introduction of new benchmark totals means that all historical data also have to be reweighted. Weighting and benchmarking were also adjusted for the provincial boundaries that came into effect in 2011. The data for the GHS 2002 to 2021 as presented in this release are therefore comparable.

As a result of statistical programs used for weighting, which discard records with unspecified values for the benchmarking variables, namely age, sex and population group, it became necessary to impute missing values for these variables. A combination of logical and hot-deck imputation methods was used to impute the demographic variables of the whole series from 2002 to 2021.

Household estimates, developed using the UN headship ratio methodology, were used to calibrate household files. The databases of Census 1996, Census 2001, Community Survey 2007 and Census 2011 were used to analyse trends and develop models to predict the number of households for each year. The weighting system was based on tables for the expected distribution of household heads for specific age categories, per population group and province.

Missing values and unknown values were excluded from totals used as denominators for the calculation of percentages, unless otherwise specified. Frequency values have been rounded off to the nearest thousand. Population totals in all tables reflect the population and sub-populations as calculated with SAS and rounded off. This will not always correspond exactly with the sum of the preceding rows because all numbers are rounded off to the nearest thousand.

## 18.10 Sampling and the interpretation of the data

Caution must be exercised when interpreting the results of the GHS at low levels of disaggregation as the lower response rates obtained in 2021 have rendered some cell sizes quite small. The sample and reporting are based on the provincial boundaries as defined in 2011. These new boundaries resulted in minor changes to the boundaries of some provinces, especially Gauteng, North West, Mpumalanga, Limpopo, Eastern Cape, and Western Cape. In previous reports the sample was based on the provincial boundaries as defined in 2006, and there will therefore be slight comparative differences in terms of provincial boundary definitions.

## 18.11 Comparability with previous surveys

The revision of the GHS questions are never taken lightly but are necessitated by changing government priorities as well as gaps identified through stakeholder interaction. When modifying the questionnaire, a balance is always struck between trying to maintain comparability over time and improving the quality of our measurements over time. As a result, variables do not always remain comparable over time and it is advisable to consult the meta data or to contact Stats SA to establish comparability when in doubt.

In most instances, changes do not negatively affect comparability. Modifications in the questions on marital status, highest level of education, and social grants have, for instance, not affected comparability at all. However, the questions used to measure disability until 2008 and thereafter are not comparable as a set of questions devised by the Washington Group replaced the questions used until 2008. Each individual is asked to rate their ability to perform six different tasks and their inability to perform two or more of the activities, of alternatively being unable to do one renders them disabled. Similarly, the comparison of the total number of rooms in a dwelling should also be treated with caution as a single room with multiple uses were added in 2014, based on the Census 2011 categories.

The transition to CAPI has also required some modifications to the questions and response options. Although modifications were tested before they were implemented, slight variations linked to the electronic format, and changes in the question order, response options and entrenched skip patterns and enabling conditions might occur.

## 18.12 Questionnaire

Table 18.3 summarises the details of the questions included in the GHS questionnaire. The questions are covered in 15 sub-sections, each focusing on a particular aspect. Depending on the need for additional information, the questionnaire is adapted on an annual basis. New sections may be introduced on a specific topic for which information is needed or additional questions may be added to existing sections. Likewise, questions that are no longer necessary may be removed.

**Table 18.3: Summary of the contents of the GHS 2020 and 2021 questionnaire**

Person file			House file		
	2020	2021		2020	2021
Particulars of the dwelling unit			Housing	6	6
Particulars of the household			Water	6	6
Demographics	7	7	Sanitation	6	6
Personal relationship	10	10	Energy	7	7
Education	21	24	Solid waste management	1	1
Health and general functioning	13	14	ICT	10	10
Social grants	9	9	Transport	12	12
Economic activities	11	11	Health, welfare and food security	11	11
			Agriculture and household income, expenditure and ownership of assets	32	32

The GHS questionnaire has undergone some revisions over time. These changes were primarily the result of shifts in focus of government programmes over time. The 2002–2004 questionnaires were very similar. Changes made to the GHS 2005 questionnaire included additional questions in the education section with a total of 179 questions. Between 2006 and 2008, the questionnaire remained virtually unchanged. For GHS 2009, extensive stakeholder consultation took place during which the questionnaire was reviewed to be more in line with the monitoring and evaluation frameworks of the various government departments. Particular sections that were modified substantially during the review process were the sections on education, social development, housing, agriculture, and food security.

Even though the number of sections and pages in the questionnaire remained the same, questions in the GHS 2009 were increased from 166 to 185 between 2006 and 2008. Following the introduction of a dedicated survey on Domestic Tourism, the section on tourism was dropped for GHS 2010. Due to a further rotation of questions, particularly the addition of a module on Early Childhood Development (ECD) in 2015, the GHS 2016 questionnaire contained 219 questions. The number of ECD questions were decreased in 2019 in order to reduce respondent burden.

As from 2019, computer assisted personal interviews (CAPI) replaced paper and pen data collection (PAPI). Although the structure of the questionnaire remained recognisable, sections, questions and response options were modified, in most cases very slightly, to satisfy the requirements of the electronic platform. The number of questions were also further reduced to reduce interview time. The CAPI questionnaire was shortened further in 2020 due to transition to CATI as the mode of data collection. The 2021 questionnaire were kept largely unchanged from 2020 although a few additional questions were added.

### **18.13 Measures of precision for selected variables of the General Household Survey**

Since estimates are based on sample data, they differ from figures that would have been obtained from complete enumeration of the population using the same instrument. Results are subject to both sampling and non-sampling errors. Non-sampling errors include biases from inaccurate reporting, processing, and tabulation, etc., as well as errors from non-responses and incomplete reporting. These types of errors cannot be measured readily. However, to some extent, non-sampling errors can be minimised through the procedures used for data collection, editing, quality control, and non-response adjustment. The variances of the survey estimates are used to measure sampling errors.

#### **18.13.1 Variance estimation**

The most commonly used methods for estimating variances of survey estimates from complex surveys such as the QLFS are the Taylor-series Linearization, Jack-knife Replication, Balanced Repeated Replication (BRR), and Bootstrap methods (Wolter, 2007). The Fay's BRR method has been used for variance estimation in the QLFS because of its simplicity.

#### **18.13.2 Coefficient of variation**

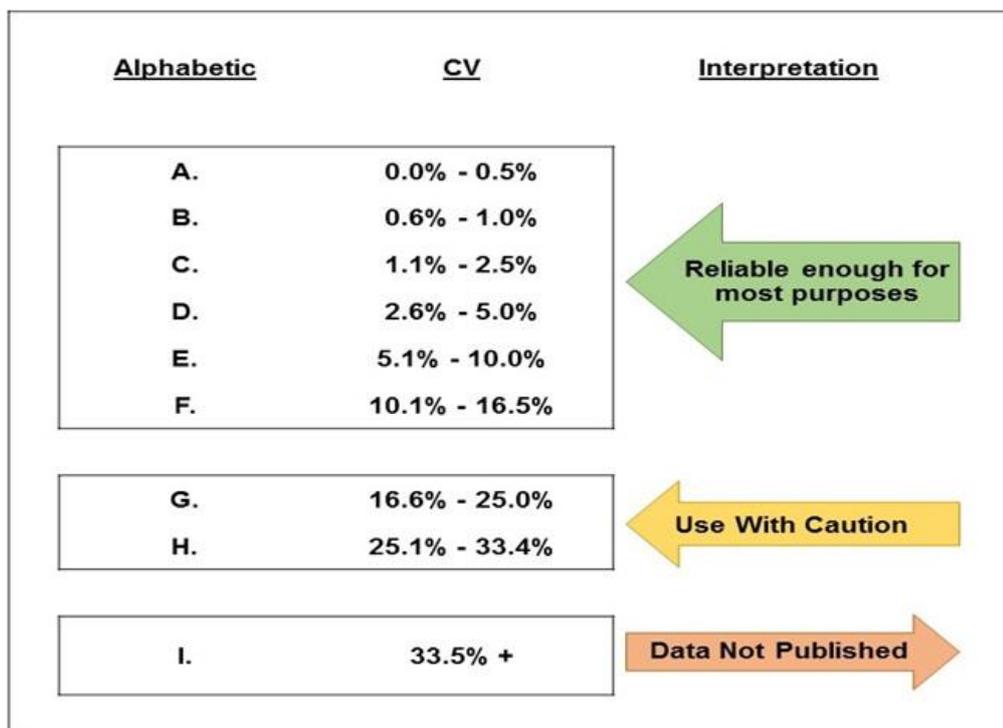
It is more useful in many situations to assess the size of the standard error relative to the magnitude of the characteristic being measured (the standard error is defined as the square root of the variance). The coefficient of variation (cv) provides such a measure. It is the ratio of the standard error of the survey estimate to the value of the estimate itself expressed as a percentage. It is very useful in comparing the precision of several different survey estimates, where their sizes or scales differ from one another.

Coefficient of variation (CV) is a measure of the relative size of error defined as  $100 \times (\text{standard error} / \text{estimated value})$ .

**18.13.3 P-value of an estimate of change**

The p-value corresponding to an estimate of change is the probability of observing a value larger than the particular observed value under the hypothesis that there is no real change. If the p-value 0,05, the difference is not significant.

**Figure 18.2: CV Thresholds**



**Table 18.4: Measures of precision for Main Dwelling**

Main Dwelling	Weighted Frequency	Percent	95% Confidence limits		Standard Error	Coefficient of Variation	Design Effect
Brick/concrete house	12 517 552	70,1	68,7	71,5	0,7	1,0*	2,3
Traditional dwelling	747 985	4,2	3,7	4,6	0,2	5,6*	1,3
Flat or apartment	653 104	3,7	2,9	4,4	0,4	10,8*	4,2
Cluster house in complex	73 723	0,4	0,2	0,7	0,1	29,6**	3,5
Town house	303 947	1,7	1,2	2,2	0,3	14,9*	3,7
Semi-detached house	241 532	1,4	1,0	1,7	0,2	13,3*	2,3
Dwelling/house/flat/room in backyard	737 091	4,1	3,4	4,8	0,4	8,6*	3,1
Informal dwelling/shack in backyard	651 164	3,6	3,1	4,2	0,3	7,9*	2,3
Informal dwelling/shack not in backyard	1 453 114	8,1	7,2	9,1	0,5	5,8*	2,8
Room/flatlet on a property	472 531	2,6	2,2	3,1	0,2	9,1*	2,1

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.5: Measures of precision for type of toilet facility**

Type of toilet	Weighted Frequency	Percent	95% Confidence Limits for		Standard Error of Percent	Coefficient of Variation	Design Effect
Flush toilet (connected to public sewerage system)	10 867 229	60,7	59,3	62,1	0,7	1,2*	2,0
Flush toilet (with septic tank or conservancy tank)	693 460	3,9	3,3	4,4	0,3	7,2*	2,0
Pour flush toilet	55 932	0,3	0,1	0,5	0,1	27,0**	2,2
Chemical toilet	134 207	0,7	0,5	1,0	0,1	18,7**	2,5
Pit toilet with ventilation (VIP)	3 463 353	19,3	18,3	20,4	0,5	2,7*	1,7
Pit toilet without ventilation	2 400 338	13,4	12,5	14,4	0,5	3,6*	2,0
Bucket toilet	151 238	0,8	0,5	1,2	0,2	21,5**	3,8
Portable flush toilet	18 130	0,1	0,0	0,2	0,0	48,9***	2,3
Composting toilet	9 430	0,1	0,0	0,1	0,0	53,3***	1,4
Open defecation (e.g. no facilities, field, or bush)	111 647	0,6	0,4	0,8	0,1	16,5*	1,6

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.6: Measures of precision for main source of drinking water**

Main source of drinking water	Weighted Frequency	Percent	95% Confidence Limits for		Standard Error	Coefficient of Variation	Design Effect
Piped water in dwelling	8 119 284	45,5	44,1	46,8	0,7	1,5*	1,8
Piped water in yard	5 279 661	29,6	28,2	30,9	0,7	2,4*	2,2
Borehole in yard	404 689	2,3	1,9	2,6	0,2	8,1*	1,4
Rain water tank	274 179	1,5	1,3	1,8	0,1	7,6*	0,9
Neighbour's tap	337 423	1,9	1,5	2,2	0,2	9,2*	1,6
Public tap	2 189 645	12,3	11,2	13,3	0,5	4,3*	2,5
Water tanker	311 779	1,7	1,3	2,1	0,2	11,7*	2,3
Water vendor	286 225	1,6	1,3	1,9	0,2	9,8*	1,5
Borehole outside yard	166 772	0,9	0,6	1,2	0,1	16,0*	2,3
Flowing water/river/stream	318 470	1,8	1,5	2,1	0,2	8,6*	1,3
Dam/pool/stagnant water	24 984	0,1	0,1	0,2	0,0	30,3**	1,2
Well	35 910	0,2	0,1	0,3	0,1	30,1**	1,7
Spring	101 372	0,6	0,4	0,7	0,1	14,8*	1,2

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.7: Measures of precision for tenure status**

Tenure status	Weighted Frequency	Percent	95% Confidence Limits		Standard Error	Coefficient of Variation	Design Effect
Rented from private owner	2 983 659	16,8	15,6	18,0	0,6	3,6*	2,5
Rented from other	340 680	1,9	1,4	2,5	0,3	14,5*	3,9
Owned but not yet paid off to bank	1 193 073	6,7	6,0	7,5	0,4	5,6*	2,2
Owned but not yet paid off to private owner	181 120	1,0	0,7	1,4	0,2	17,3**	2,9
Owned and fully paid off	11 021 467	62,0	60,6	63,4	0,7	1,2*	2,1
Occupied rent free	2 055 737	11,6	10,7	12,5	0,5	4,0*	2,0

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.8: Measures of precision for refuse removal**

Refuse Removal	Weighted Frequency	Percent	95% Confidence Limits		Standard Error	Coefficient of Variation	Design Effect
Removed by local authority/private company/community at least once a week	10 809 693	60,6	59,2	62,0	0,7	1,2*	2,0
Removed by local authority/private company/community less often than once a week	463 205	2,6	2,2	3,0	0,2	8,7*	1,9
Communal refuse dump	793 331	4,4	3,8	5,1	0,3	7,7*	2,6
Communal container	392 349	2,2	1,7	2,7	0,3	12,0*	3,1
Own refuse dump	5 101 319	28,6	27,5	29,7	0,6	2,0*	1,5
Dump anywhere	278 767	1,6	1,2	1,9	0,2	11,2*	1,9

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.9: Measures of precision for main source of energy used for cooking**

Main source of energy used for cooking	Weighted Frequency	Percent	95% Confidence Limits		Standard Error	Coefficient of Variation	Design Effect
Electricity from mains	13 942 811	78,1	76,9	79,3	0,6	0,8*	2,2
Other sources of electricity	948 695	5,3	4,6	6,0	0,3	6,6*	2,3
Gas	863 492	4,8	4,2	5,5	0,3	6,7*	2,2
Paraffin	628 967	3,5	2,9	4,1	0,3	8,9*	2,8
Wood	1 379 951	7,7	7,1	8,4	0,3	4,3*	1,5
Coal	65 816	0,4	0,2	0,5	0,1	22,5**	1,8
Animal dung	1 492	0,0	0,0	0,0	0,0	100,0***	0,8
Solar	21 002	0,1	0,0	0,2	0,1	45,0***	2,3

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.10: Measures of precision for main source of energy used for lighting**

Main source of energy used for lighting	Weighted Frequency	Percent	95% Confidence Limits		Standard Error	Coefficient of Variation	Design Effect
Electricity from mains	15 853 065	88,9	87,9	89,9	0,5	0,6*	2,4
Other sources of electricity	962 639	5,4	4,7	6,1	0,4	6,6*	2,4
Gas	23 205	0,1	0,0	0,2	0,1	41,5***	2,1
Paraffin	201 339	1,1	0,8	1,4	0,2	14,0*	2,2
Candles	697 020	3,9	3,3	4,5	0,3	8,2*	2,6
Solar	98 210	0,6	0,3	0,8	0,1	19,5**	2,0

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.11: Measures of precision for main source of energy used for heating**

Main source of energy used for heating	Weighted Frequency	Percent	95% Confidence Limits		Standard Error	Coefficient of Variation	Design Effect
Electricity from mains	14 585 876	82,0	80,8	83,1	0,6	0,7*	2,2
Other sources of electricity	956 564	5,4	4,7	6,1	0,4	6,6*	2,4
Gas	280 394	1,6	1,2	1,9	0,2	12,1*	2,2
Paraffin	603 047	3,4	2,8	4,0	0,3	8,6*	2,5
Wood	1 225 130	6,9	6,2	7,5	0,3	4,9*	1,7
Coal	51 209	0,3	0,2	0,4	0,1	23,4**	1,5
Animal dung	5 120	0,0	0,0	0,1	0,0	47,0***	0,6
Solar	81 189	0,5	0,3	0,6	0,1	18,3**	1,5

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.12: Measures of precision for health facility used by households**

Health facilities used by households	Weighted Frequency	Percent	95% Confidence Limits		Standard Error	Coefficient of Variation	Design Effect
Public hospital	1 091 499	6,1	5,3	6,9	0,4	6,4*	2,5
Public clinic	11 748 723	65,6	64,3	66,9	0,7	1,0*	1,9
Other public institution	34 462	0,2	0,1	0,3	0,1	34,0***	2,1
Private hospital	398 910	2,2	1,7	2,8	0,3	12,1*	3,2
Private clinic	280 447	1,6	1,2	1,9	0,2	12,2*	2,3
Private doctor	4 154 045	23,2	21,9	24,4	0,6	2,8*	2,2
Traditional healer	12 073	0,1	0,0	0,1	0,0	56,7***	2,1
Spiritual healer's/church	12 449	0,1	0,0	0,1	0,0	42,4***	1,2
Pharmacy	136 589	0,8	0,5	1,0	0,1	18,6**	2,6
Health facility provided by employer	42 561	0,2	0,1	0,3	0,1	22,5**	1,2
Alternative medicine	816	0,0	0,0	0,0	0,0	100,0***	0,4

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.13: Measures of precision for access to electricity**

Access to electricity	Weighted Frequency	Percent	95% Confidence Limits		Standard Error	Coefficient of Variation	Design Effect
Yes	16 924 626	94,4	93,6	95,2	0,4	0,4*	2,8
No	1 005 864	5,6	4,8	6,4	0,4	7,1*	2,8

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.14: Measures of precision for main source of electricity**

Main source of electricity	Weighted Frequency	Percent	95% Confidence Limits		Standard Error	Coefficient of Variation	Design Effect
Meter	2 120 714	12,6	11,4	13,7	0,6	4,6*	2,8
Prepaid	13 472 249	79,9	78,6	81,2	0,7	0,8*	2,5
Neighbour's line and paying	875 266	5,2	4,5	5,9	0,3	6,6*	2,2
Neighbour's line and not paying	377 140	2,2	1,8	2,7	0,2	10,7*	2,4
Generator	1 225	0,0	0,0	0,0	0,0	100,0***	0,7
Home solar system	21 913	0,1	0,0	0,2	0,0	36,8***	1,6

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.15: Measures of precision for educational institution attended**

Educational institution attended	Weighted Frequency	Percent	95% Confidence Limits		Standard Error	Coefficient of Variation	Design Effect
Pre-school	470 904	2,8	2,3	3,2	0,2	8,1*	2,0
Grade R - 12	15 026 435	88,0	87,1	88,9	0,5	0,5*	2,1
ABET/AET	2 371	0,0	0,0	0,0	0,0	100,0***	1,5
Higher education institutions	1 418	0,0	0,0	0,0	0,0	100,0***	0,9
TVET	968 109	5,7	5,0	6,3	0,3	6,0*	2,4
Other colleges	356 620	2,1	1,7	2,5	0,2	9,1*	1,9
Home schooling	213 939	1,3	0,9	1,6	0,2	15,1*	3,2

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.16: Measures of precision for highest level of education**

Highest level of education	Weighted Frequency	Percent	95% Confidence Limits		Standard Error	Coefficient of Variation	Design Effect
No schooling	2 551 615	4,8	4,5	5,0	0,1	3,1*	1,5
Grade R - 4	11 730 714	21,9	21,3	22,4	0,3	1,4*	1,7
Grade 5	2 639 411	4,9	4,6	5,2	0,2	3,1*	1,6
Grade 8 - 11	17 108 925	31,9	31,1	32,6	0,4	1,2*	2,0
Grade 12	13 858 097	25,8	25,1	26,6	0,4	1,5*	2,5
NTCI -II	77 892	0,1	0,1	0,2	0,0	18,2**	1,5
NTCIII	137 871	0,3	0,2	0,3	0,0	14,5*	1,7
N4 - N6	539 915	1,0	0,8	1,2	0,1	8,1*	2,1
Certificate/diploma without Grade12	120 374	0,2	0,1	0,3	0,0	18,0**	2,3
Certificate/diploma with Grade12	2 415 699	4,5	4,1	4,9	0,2	4,5*	3,1
Post matric qualifications	2 501 924	4,7	4,2	5,1	0,2	5,3*	4,4

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.17: Measures of precision for disability status**

Disability status	Weighted Frequency	Percent	95% Confidence Limits		Standard Error	Coefficient of Variation	Design Effect
No	52 132 172	95,5	95,1	95,9	0,2	0,2*	2,5
Yes	2 454 143	4,5	4,1	4,9	0,2	4,0*	2,5

\* Indicates 0% to 16,5% Coefficient of Variation for reliable enough statistics

\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

**Table 18.18: Measures of precision for medical aid coverage**

Medical aid coverage	Weighted Frequency	Percent	95% Confidence Limits		Standard Error	Coefficient of Variation	Design Effect
Yes	9 706 359	16,1	15,0	17,1	0,5	3,4*	7,8
No	50 629 352	83,8	82,7	84,8	0,5	0,7*	7,8
Do not know	99 740	0,2	0,1	0,2	0,0	21,6**	2,7

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\*\* Indicates 16,6% to 33,4% Coefficient of Variation for statistics that should be used with caution

\*\*\* Indicates Coefficient of Variation greater than 33,5%

## 18.14 Limitations of the study

The questionnaires for the GHS series were revised extensively in 2009 and some questions might not be exactly comparable to the data series before then. Please refer to Section 18.12 for more details about the questions that are not comparable. Analysts and users of the data are also advised not to do a comparative analysis over time before studying the questionnaires of the years concerned in detail, as there have also been small modifications to options to a number of questions that are not highlighted in Section 18.12.

In addition to changes to the questions, the data collection period has also changed since 2002. Between 2002 and 2008 data were gathered during July. The data collection period was extended to 3 months (July to September) between 2010 and 2012. As from 2013, the data collection period was extended to 12 months (January to December). Although the extension is not necessarily a limitation, it should be borne in mind when using the data for comparative purposes.

Given the change in the survey mode of collection from CAPI to CATI, and the fact that the GHS 2021 estimates are not based on a full sample, comparisons with previous years should be made with caution.

## 19 Glossary

<b>Household</b>	<p>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.</p> <p><b>Note:</b> The persons basically occupy a common dwelling unit (or part of it) for at least four nights in a week on average during the past four weeks prior to the survey interview, sharing resources as a unit. Other explanatory phrases can be 'eating from the same pot' and 'cook and eat together'.</p> <p>Persons who occupy the same dwelling unit but do not share food or other essentials, are regarded as separate households. For example, people who share a dwelling unit, but buy food separately, and generally provide for themselves separately, are regarded as separate households within the same dwelling unit. They are generally referred to as multiple households (even though they may be occupying the same dwelling).</p> <p>Conversely, a household may occupy more than one structure. If persons on a plot, stand or yard eat together, but sleep in separate structures (e.g. a room at the back of the house for single young male members of a family), all these persons should be regarded as one household.</p>
<b>Multiple household</b>	<p>When two or more households live in the same dwelling unit.</p> <p><b>Note:</b> If there are two or more households in the selected dwelling unit and they do not share resources, all households are to be interviewed. The whole dwelling unit has been given one chance of selection and all households located there were interviewed using separate questionnaires.</p>
<b>Household head</b>	<p>Main decision-maker, or the person who owns or rents the dwelling, or the person who is the main breadwinner.</p>
<b>Acting household head</b>	<p>Any member of the household acting on behalf of the head of the household.</p>
<b>Nuclear households</b>	<p>Consist of spouses living alone, or with their children</p>
<b>Extended households</b>	<p>Family that extends beyond the nuclear family and which consists of parents, their children, and other family members such as aunts, uncles, grandparents and cousins, all living in the same household.</p>
<b>Complex households</b>	<p>Consist of a nuclear or extended household core and non-related individuals.</p>
<b>Single generation households</b>	<p>Consist of family members from the same generation (i.e siblings, parents) living together.</p>
<b>Double generation households</b>	<p>Consist of family members from at least two generations, i.e. parents and children.</p>
<b>Triple generation households</b>	<p>Contains three generations of families (grandparents, parents and grandchildren) in the same household.</p>
<b>Skip generation households</b>	<p>Comprised of grandchildren living with one or more grandparents in the absence of any biological parents.</p>

<b>Formal dwelling</b>	Structure built according to approved plans, i.e. house on a separate stand, flat or apartment, townhouse, room in backyard, rooms or flatlet elsewhere. Contrasted with <i>informal dwelling</i> and <i>traditional dwelling</i> .
<b>Informal dwelling</b>	Makeshift structure not erected according to approved architectural plans, for example <i>shacks</i> or <i>shanties</i> in <i>informal settlements</i> or in backyards.
<b>Piped water in dwelling or on-site</b>	Piped water inside the household's own dwelling or in their yard. It excludes water from a neighbour's tap or a public tap that is not on site.
<b>Hygienic toilet facility</b>	Flush toilet, chemical toilet or pit latrine with ventilation pipe.
<b>UN disability</b>	Concentrating and remembering are grouped together as one category. If an individual has 'Some difficulty' with two or more of the six categories, then they are disabled. If an individual has 'A lot of difficulty' or is 'Unable to do' for one or more category they are classified as disabled.
<b>Severe disability</b>	If an individual has 'A lot of difficulty' or is 'Unable to do' for one or more category they are classified as severely disabled.
<b>Social Relief of Distress Grant</b>	<p>Social Relief of Distress is paid to South African citizens or permanent residents, who have insufficient means and meet one or more of the following criteria:</p> <ul style="list-style-type: none"> <li>• The applicant is awaiting payment of an approved social grant.</li> <li>• The applicant has been found medically unfit to undertake remunerative work for a period of less than 6 months.</li> <li>• The bread winner is deceased and application is made within three months of the date of death.</li> <li>• No maintenance is received from parent, child or spouse obliged in law to pay maintenance, and proof is furnished that efforts made to obtain maintenance have been unsuccessful.</li> <li>• The bread winner of that person's family has been admitted to an institution funded by the state (prison, psychiatric hospital, state home for older persons, treatment centre for substance abuse or child and youth care centre).</li> <li>• The applicant has been affected by a disaster as defines in the Disaster Management Act or the Fund Raising Act, 1978.</li> <li>• The person is not receiving assistance from any other organization or.</li> <li>• Refusal of the application for social relief of distress will cause undue hardships.</li> <li>• Period of Social Relief of Distress (New Policy)</li> </ul> <p>Social Relief of Distress is issued monthly for a maximum period of 3 months. An extension a further 3 months may be granted in exceptional cases.</p>
<b>COVID-19 SRD grants</b>	A special grant of R350 per month that was implemented by Government to ameliorate the impact of COVID-19. The grant is aimed at individuals who are currently unemployed, or who do not receive any form of income, social grant or UIF payment. The grant was initially meant to be paid for six months, but it has been extended a number of times.
<b>Improved source of water</b>	'Piped water in dwelling or in yard', and 'Water from a neighbour's tap or public/communal tap' are also included provided that the distance to the water source is less than 200 metres.

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