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List of Abbreviations

EC Eastern Cape FS Free State GΡ Gauteng **KZN** KwaZulu-Natal LP Limpopo MP Mpumalanga NC Northern Cape NW North West WC Western Cape **RSA** South Africa

ASER Age-specific Enrolment Ratio
CVs Coefficient of Variations
DOA Department of Agriculture

DUs Dwelling Units
EAs Enumeration Areas

GHS General Household Survey
PSUs Primary Sampling Units

RDP Reconstruction and Development Programme

UN United Nations

VIP Pit Toilet with ventilation WSA Water Services Authorities

1 Introduction and methodology

1.1 Background

The execution of the General Household Survey (GHS) in 2009 was preceded by extensive stakeholder consultation. The main objective of the consultation was to align the questionnaire and survey process more with user needs and adjust the questionnaire accordingly. The process yielded the following results:

- Specific linkages were established between the monitoring and evaluation indicators of each government department and the GHS questionnaire.
- It was found that in some instances the GHS was the only or main source of this information, but in other cases the various departments use the GHS information to verify their information from administrative records and/or other sources.
- Questions were modified and/or added where necessary.
- The users expressed a need for an earlier release of the indicator information to enable them to more effectively report on their activities.
- Several departments indicated that they did not have staff capable of analysing the GHS data and engaging consultants for this purpose was not always possible as a result of funding constraints.

It was therefore decided to develop a new GHS release specifically aimed at reporting on the various development indicators measured and/or verified by means of this particular survey instrument. The first report was released in early May 2010 as a discussion document.

1.2 Methodology and fieldwork

This survey uses a multi-stage design which is based on a stratified design with probability proportional to size selection of primary sampling units (PSUs) at the first stage and sampling of dwelling units (DUs) with systematic sampling at the second stage. After allocating the sample to the provinces, the sample was further stratified by geography (primary stratification), and by population attributes using Census 2011 data (secondary stratification). Survey officers employed and trained by Stats SA visited all the sampled dwelling units in each of the nine provinces. During the first phase of the survey, sampled dwelling units were visited and informed about the coming survey as part of the publicity campaign. The actual interviews took place four weeks later. A total of 19 649 households (including multiple households) were successfully interviewed during face-to-face interviews.

Two hundred and thirty-three enumerators (233) and 62 provincial and district coordinators participated in the survey across all nine provinces. An additional 27 quality assurors were responsible for monitoring and ensuring questionnaire quality. National refresher training took place over a period of two days. The national trainers then trained provincial trainers for two days at provincial level. For a more detailed discussion on sampling and fieldwork please refer to the Technical notes as described in Section 3.

1.3 Data revisions

The questionnaires were scanned and processed. Editing and imputation was done using a combination of manual and automated editing procedures. Details about this process can be found in the GHS 2019 report (P0318). Section 4 describes the methods used to calculate each indicator value. When calculating percentages, missing and do not know values were discarded from the denominator unless otherwise stated.

Risenga Mululeke Statistician-General STATISTICS SOUTH AFRICA 4 P0318.2

2 Indicator tables

2.1 Agriculture

Table 2.1: Agriculture indicators by province

Indicators					Pro	vince				
Indicators	wc	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
% of households who engaged in agricultural activities during the past 12										
months	2,7	30,4	11,0	15,7	18,2	9,1	4,3	28,1	38,2	15,3
Livestock production	0,9	25,4	5,7	2,1	12,5	6,6	0,4	9,6	13,8	7,7
Poultry production	0,3	20,5	2,4	1,0	9,9	4,6	0,3	7,3	8,8	5,7
Grains and food crops	0,2	15,8	0,4	3,2	10,5	1,6	0,3	16,6	27,7	7,7
Industrial crops	0,0	0,1	0,1	0,0	0,0	0,2	0,0	0,2	0,3	0,1
Fruit and vegetable production	1,8	13,1	6,2	14,4	4,4	3,1	3,8	20,9	21,3	8,2
Fodder, grazing/pasture or grass for animals	0,0	0,2	0,4	0,2	0,0	0,0	0,0	0,1	0,2	0,1
Fish farming/aquaculture	0,0	0,0	0,1	0,0	0,1	0,0	0,0	0,0	0,0	0,0
Forestry	0,0	0,0	0,1	0,0	0,1	0,0	0,0	0,0	0,0	0,0
Game farming	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0

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Table 2.1: Agriculture indicators by province (concluded)

la disease a					Prov	ince				
Indicators	wc	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
% of households involved in different crop p	lanting activ	vities:								
Farm land (communal or private)	0,2	1,1	1,0	0,5	2,8	0,6	0,2	1,2	1,8	1,0
Backyard garden	1,7	20,0	5,7	14,4	9,7	3,2	3,7	22,8	31,7	10,8
School garden	0,0	0,1	0,0	0,1	0,1	0,0	0,0	0,0	0,1	0,1
Communal garden	0,0	0,0	0,0	0,0	0,4	0,0	0,1	0,5	0,4	0,2
On verges of roads and unused public/ municipal land	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,2	0,2	0,0
Other	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,1	0,2	0,0
~										
% of households who produce crops on 1 or more hectares	0,2	0,5	0,8	0,1	0,9	0,2	0,1	0,2	0,5	0,3
% of households who own the land on which they produce crops	77,1	31,5	68,6	88,3	62,4	95,1	91,4	93,8	77,2	71,7
% of households who sell most of the agricultural produce they produce	23,8	11,3	34,3	8,5	10,8	31,4	5,5	8,4	8,4	10,9
Food access adequate	82,2	78,1	71,5	73,9	82,5	70,4	86,1	76,0	94,5	82,2
Food access inadequate	10,4	15,4	16,2	18,3	10,6	18,2	10,7	11,8	2,7	11,5
Food access severely inadequate	7,4	6,5	12,2	7,8	6,9	11,4	3,2	12,3	2,8	6,3

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2.2 Education

Table 2.2: Education indicators by Province

Indicators	Province												
Indicators	wc	EC	NC	FS	KZN	NW	GP	MP	LP	RSA			
Age-specific Enrolment Ratio (ASER) expre	essed as a p	ercentage											
Primary School	98,1	98,8	98,6	99,2	99,2	99,2	98,6	99,3	98,6	98,8			
All	94,5	95,7	92,6	97,1	96,0	96,4	95,7	95,9	96,8	95,9			
% of 16-18-year-olds who attend any institution	82,2	84,5	76,3	89,1	85,7	88,5	87,0	84,4	91,1	82,2			
% of children with special needs aged 7-15 NOT enrolled in educational													
institutions	6,5	11,1	7,8	8,4	11,0	1,6	3,7	6,0	5,2	6,4			
% of learners in public schools that do not pay school fees	52,7	79,6	58,7	79,2	68,4	73,8	58,4	65,0	92,8	70,3			
% of learners in schools receiving social		-			·					·			
grants	54,5	74,7	60,1	70,8	70,0	67,5	46,6	67,3	66,7	63,5			
Numbers of learners enrolled (16–18) in any institution N ('000)	217	280	49	116	499	180	550	193	284	2 368			

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Table 2.2: Education indicators by Province (concluded)

Indicators	wc	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
% of learners in schools who										
walk for more than 30 minutes to										
the nearest school of its kind	1,3	9,5	3,5	6,3	19,6	6,7	2,8	9,1	8,7	9,6
% of learners in public schools										
benefiting from free scholar										
transport	6,2	4,1	10,0	5,1	2,1	7,0	5,0	5,3	3,1	4,4
% of learners in public schools										
benefiting from the nutrition										
programme	57,5	86,7	80,6	80,6	77,0	80,8	55,5	85,2	90,4	75,6
% of learners attending school										
who reported incidents of										
corporal punishment	2,4	10,5	3,8	9,4	12,7	10,4	1,9	4,3	2,6	6,8
Adult literacy rates (persons 20										
years and older with less than										
Grade 7 as highest level of										
education)	7,5	18,2	16,1	15,0	14,6	18,2	5,7	15,6	17,8	12,2

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2.3 Environmental indicators

Table 2.3: Environmental related indicators by Province

Indicators					Prov	rince				
mulcators	wc	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
Number of households using borehole water N ('000)	11	12	13	30	111	109	45	57	218	607
Number of households using wood/coal for cooking N ('000)	8	180	13	39	256	96	20	261	523	1 396
% of households whose refuse is removed by a local authority or co,	87,3	39,7	59,9	69,8	49,5	50,5	84,6	40,8	22,1	61,3
% of households who feel that they a	re experienc	ing problem	with:							
Littering	20,9	35,8	41,4	55,8	33,7	28,1	34,2	52,9	28,6	34,6
Water pollution	5,6	19,3	22,9	22,2	20,5	15,3	17,1	14,6	12,3	16,2
Air pollution	6,3	18,4	28,9	22,5	15,7	29,8	19,6	21,4	13,0	17,9
Land degradation	8,3	43,1	34,8	47,5	21,6	54,5	23,4	64,1	35,8	31,5
Excessive noise pollution	8,1	10,4	18,7	17,0	9,3	12,2	20,7	11,1	8,4	13,5

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2.4 Health

Table 2.4: Health Indicators by Province

attending educational institutions % of people 20 years and older with	Province												
Indicators	wc	EC	NC	FS	KZN	NW	GP	MP	LP	RSA			
% of orphans aged 7-18 years													
attending educational institutions	89,2	93,5	87,7	94,2	93,5	94,3	92,5	94,0	94,8	93,3			
% of people 20 years and older with													
no schooling	1,2	5,1	4,4	3,3	4,8	6,6	1,3	6,1	7,1	3,7			
% of persons with medical aid													
coverage	24,1	10,9	19,3	14,7	13,1	16,3	24,9	12,6	9,9	17,3			
% of households for which the													
usual place of consultation is a													
public facility	56,1	80,9	74,1	71,1	78,6	77,1	65,2	81,2	84,0	72,4			

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2.5 Human settlement

Table 2.5: Human Settlement indicators by Province

Indicators	Province													
Indicators	wc	EC	NC	FS	KZN	NW	GP	MP	LP	RSA				
% of households who live in an RDP														
or state-subsidised house	21,1	21,7	24,0	31,6	20,6	20,8	14,7	19,3	15,7	19,2				
% of households receiving a														
housing subsidy from the state	15,3	14,9	16,4	25,7	15,3	17,1	12,0	15,5	13,9	14,9				
% of households living in informal														
dwellings/tents/caravans	18,7	5,5	14,9	17,9	5,5	18,4	18,8	7,3	3,6	12,7				
% of households who state that the														
condition of the walls of their state														
provided/subsidised housing is														
weak/very weak	14,5	16,0	18,0	16,5	13,6	8,2	3,3	8,7	9,8	10,9				
% of households who state that the														
condition of the roof of their state														
provided/subsidised housing is														
weak/very weak	15,0	13,8	18,2	12,5	13,6	7,2	3,9	10,2	12,2	10,8				
% of households who pay rent for a														
state provided/RDP house	17,6	15,1	10,0	6,8	8,9	6,3	10,3	7,4	6,4	10,3				
% of households who fully own their														
dwellings	49,8	65,3	64,3	66,6	63,9	69,9	36,2	73,9	78,5	57,1				

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2.6 Social development

Table 2.6: Social development indicators by Province

Indicators					Prov	rince				
Indicators	wc	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
Number of persons 60 years and older N('000)	635	689	125	266	851	359	1 183	330	450	4 887
Number of households with at least one person 60 years and older N ('000)	441	541	96	223	653	281	899	273	378	3 783
% of persons 60 years and older who are disabled (UN definition)	18,0	30,4	36,5	34,8	28,7	28,5	19,4	25,8	20,8	24,9
% of persons 60 years and older who are severely disabled	12,1	18,0	23,3	21,3	15,6	20,3	11,4	17,4	13,4	15,2
% of people 60 years and older who received old-age grant	52,9	79,3	78,1	73,5	78,7	74,1	56,9	76,1	85,3	70,0
% of people 60 years and older who received social grants	52,9	79,3	78,1	73,6	78,8	74,3	56,9	76,3	85,4	70,0
% of households with persons 60 years and o	lder and cl	assified as:								
Food access adequate	87,1	82,8	75,6	77,2	85,1	76,3	89,4	79,1	95,9	85,3
Food access inadequate	7,9	14,1	14,7	17,4	9,8	14,2	8,4	12,8	2,8	10,3
Food access severely inadequate	5,0	3,1	9,8	5,4	5,2	9,5	2,2	8,1	1,3	4,4
Number of households classified as N ('000):										
Food access adequate	15 90	1 330	250	681	2 464	878	4 368	1 012	1 532	14 104
Food access inadequate	200	261	57	168	316	227	541	157	44	1 972
Food access severely inadequate	143	111	43	72	205	142	164	163	45	1 088
% of poor households with children aged 7-										
18 who do not spend money on school fees	76,1	85,6	68,8	84,9	80,6	77,9	74,8	71,0	96,3	81,7
Number of households classified as poor										
using household monthly expenditure of	270	832	105	460	1 100	629	1 600	640	005	7 162
below R2 500 as the cut-off N ('000) Number of households classified as poor	370	032	135	460	1 408	629	1 690	643	995	1 102
using household monthly expenditure of										
below R2 500 as the cut-off and who have										
children aged 7–18 N ('000)	103	337	57	217	653	240	468	299	501	2 875

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2.7 Transport

Table 2.7: Transport indicators by Province

L. P					P	Province				
Indicators	wc	EC	NC	FS	KZN	NW	GP	МР	LP	RSA
# of passenger trips made per month w	ith each pub	lic transpor	t mode N	('000):						
Minibus/taxi	5 229	4 167	608	2 414	10 449	3 021	21 793	3 527	3 114	54 322
Bus	1 907	409	87	574	864	662	1 853	2 324	736	9 414
Train	777	95	0	0	240	25	1 591	6	0	2 734
% of the household's income spent on	transport pe	r month:								
1–10%	67,3	60,5	75,8	56,7	58,0	60,8	63,3	55,3	61,9	61,5
11–20%	18,8	18,5	15,0	22,2	19,7	17,7	18,3	21,7	17,3	18,9
21–30%	5,4	9,1	2,7	8,1	7,6	8,2	7,2	8,9	6,5	7,4
30% or more	8,5	11,9	6,5	13,0	14,7	13,3	11,2	14,1	14,3	12,2
% of learners travelling for longer than 30 minutes to an education institution	12,7	13,5	14,1	15,8	23,5	11,8	13,9	16,0	12,9	15,8
% of workers travelling for longer than 30 minutes to their place of work	31,8	14,9	20,3	23,3	36,2	28,7	40,9	34,0	27,8	33,3

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2.8 Water and sanitation

Table 2.8: Water and sanitation variables by Province

Indicators					Prov	vince				
Indicators -	wc	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
Number of households with water supply infrastructure of RDP standard										
or higher N ('000)	1 905	1 147	328	870	2 320	1 018	4 975	1 107	1 108	14 777
Number of households with water										
supply infrastructure less than RDP										
standard N ('000)	28	556	22	51	665	230	98	225	512	2 386
Number of households with no water										
supply infrastructure N ('000)	29	444	21	74	435	223	120	197	486	2 029
Number of consumers who experienced interruptions of 48 hours										
or more at a time N ('000)	68	415	107	243	710	298	372	552	510	3 276
Number of WSAs whose consumers										
have experienced a cumulative										
interruption of more than 15 days for										
the financial year N ('000)	50	328	89	185	490	275	175	514	423	2 530

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Table 2.8: Water and sanitation variables by province (concluded)

Indicators					Pro	vince				
muicators	wc	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
Number of households with access										
to a functioning basic sanitation										
facility (strategic framework) N ('000)	1 826	1 491	293	758	2 416	858	4 562	848	1 028	14 080
% households with access to										
improved sanitation facilities	94,5	87,6	83,9	82,3	80,9	68,8	90,0	63,7	63,4	82,1
Number of households using bucket										
toilets N ('000)	55	8	4	21	5	0	92	1	1	187
Number of households with										
substandard toilet facility N ('000)	93	129	32	148	503	359	493	455	560	2 772
% of households with substandard										
toilet facility	4,8	7,6	9,2	16,1	16,9	28,8	9,7	34,2	34,6	16,2
Number of households with no	7	74	40	0	40	20	7	25	07	231
sanitation facility N ('000)	/	71	18	9	40	28	/	25	27	231
Number of poor households										
¹ receiving free basic sewerage and sanitation										
	170	175	22	240	220	116	770	FO	FE	1 860
N ('000)	170	175	33	∠40	238	116	779	53	56	1 000
% of poor households receiving free	57.0	00.0	50.7	00.0	70.7	64.4	04.0	44.4	50.0	64.5
basic sewerage and sanitation	57,2	68,0	53,7	80,9	70,7	64,1	64,2	41,1	50,8	64,5

Table 2.9: Basic household and population data used for benchmarking the GHS 2019

Indicators	Province									
Indicators	WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
# of persons N ('000)	6 794	6 519	1 246	2 917	11 363	3 997	15 055	4 605	5 933	58 429
# of households N ('000)	1 933	1 702	350	921	2 985	1 248	5 072	1 332	1 621	17 163

¹ Households who spend less than R2 500 per month

3 Technical notes

3.1 Target population

The target population of the survey consists of all private households in all nine provinces of South Africa and residents in workers' hostels. 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.

3.2 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 surveys having design requirements that are reasonably compatible with the GHS. The GHS 2019 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 30 000 dwelling units (DUs). The number of PSUs in the current 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.

3.3 Allocating sample sizes to strata²

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

Let N be the total # of PSUs in the stratum, and the # of PSUs to be selected from the stratum is denoted by n , Also, let $^{\chi_i}$ denote the size measure of the PSU i within the stratum, where i=1,2,3,...,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 #s for the PSUs.

² Source: Sample Selection and Rotation for the Redesigned South African Labour Force Survey by G. Hussain Choudhry, 2007.

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 $X = \sum_{i=1}^N x_i$ measure of size for the stratum is given by $X_i = \sum_{i=1}^N x_i$. We define the normalised size measure $\sum_{i=1}^N p_i = 1$ where $\sum_{i=1}^N p_i = 1$ stratum. Then, $\sum_{i=1}^N p_i = 1$ for all strata. It should be noted that the value of $\sum_{i=1}^N p_i = 1$ must be less than one.

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 #s $Z_i = n \times p_i \times R$; $i = 1, 2, 3, \dots, N$. It is easy to verify that $\sum_{i=1}^N Z_i = n \times R$. Next, round the N real #s 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 R_i 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 $S = \sum_{i=1}^N \left[Z_i\right], \text{ where } [\cdot] \text{ is the integer function, then } R_i \text{ values can be obtained by rounding up the } "d" Z_i \text{ values with the largest fraction parts, and by rounding down the remaining } (N-d) \text{ of them. It should be noted that the integer sizes } are also the PSU inverse sampling rates (ISRs) for systematic sampling of dwelling units.}$

Step 4: Obtain cumulative ISR values

We denote by C_i ; i = 1, 2, 3, ..., 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:

$$C_1 = R_1,$$

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

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

Step 5: Generate an integer random # r between 1 and R, and compute n integers r_1, r_2, \cdots, 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 $i_1, i_2, ..., i_n$ such that:

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

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

.

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

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

3.4 Weighting 3

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. These were adjusted for four factors: Informal PSUs, Growth PSUs, Sample Stabilisation, and Non-responding Units.

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 weight. 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 imputation was done to retain these records.

3.5 Sampling and the interpretation of the data

Caution must be exercised when interpreting the results of the GHS at low levels of disaggregation. The sample and reporting are based on the provincial boundaries as defined in census 2011. These new boundaries resulted in minor changes to the boundaries of some provinces, especially Gauteng, North West, Mpumalanga/Limpopo and Eastern and Western Cape. In previous reports the sample was based on the provincial boundaries as defined in 2001, and there will therefore be slight comparative differences in terms of provincial boundary definitions.

3.6 Definitions of terms

Term	Definition
Household	A household is defined as a person, or group of persons, who 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. Basically, they live together and share resources as a unit. Other explanatory phrases can be 'eating from the same pot' and 'cook and eat together'.
	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.
	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.
Multiple households	Multiple households occur when two or more households live in one sampled dwelling unit. 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.

³ Source: Sampling and Weighting System for the Redesigned South African Labour Force Survey, by G. Hussain Choudhry, 2007

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Term	Definition
Household head/Acting household head	The head of the household is the person identified by the household as the head of that household and must (by definition of 'household') be a member of the household. If there is difficulty in identifying the head, the head must be selected in order of precedence as the person who:
	Owns the household accommodation,
	Is responsible for the rent of the household accommodation,
	 Has the household accommodation as an allowance (entitlement), etc.,
	 Has the household accommodation by virtue of some relationship to the owner, lessee, etc., who is not in the household,
	Makes the most decisions in the household.
	If two or more persons have equal claim to be head of the household, or if people state that they are joint heads or that the household has no head, then denote the eldest as the head.
Formal dwellings	Include a house on a separate stand, a flat or apartment in a block of flats, a townhouse, a room in a backyard, and a room or flatlet on a shared property.
Informal dwellings	Refer to shacks or shanties in informal settlements or in backyards
Piped water in dwelling or on site	Includes 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.
Electricity for cooking, heating and/or lighting	Refers to electricity from the public supplier.
UN disability	Concentrating and remembering are grouped together as one category. If an individual has 'Some difficulty' with two or more of the 6 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.
Severe disability	If an individual has 'A lot of difficulty' or is 'Unable to do' for one or more category they are classified as severely disabled.
Poor household	Poor households have been defined households who spend less than R2 500 per month.
Water of RDP standard or higher	'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 is less than 200 metres.
Improved sanitation facility	Flush toilet connected to a public sewerage system or septic tank or a pit latrine with ventilation pipe.

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3.7 Specific departmental indicators and question linkages

Table 3.1: Agriculture

Indicator	Annual reporting level	Questions in the GHS	GHS relative to other sources	Definitions and/or formulas
Percentage of households involved in agricultural production activities	National and provincial	AGR_Agri	Main source	# of households option 1 in AGR_Agri/total # of households who responded*100
Percentage of households involved in different agricultural production sectors	National and provincial	AGR_AGRI_TYPE_LIVE- AGR_AGRI_TYPE_GAME	Main source	# of households for each option in AGR_AGRI_TYPE_LIVE-AGR_AGRI_TYPE_GAME /total # of households who responded *100
Percentage of households involved in different crop planting activities	National and provincial	AGR_PLANT	Main source	# of households for each option in AGR_PLANT/total # of households who responded *100
Percentage of households who produce crops on 1 or more hectares	National and provincial	AGR_LANDSIZE	Main source	# of households who produce crops option 3 to 7 in AGR_LANDSIZE/total # of households who responded *100
Percentage of households who own the land on which they produce crops	National and provincial	AGR_LANDTENURE	Main source	# of households who produce crops option 1 in AGR_LANDTENURE/total # of households who produce crops*100
Percentage of households who sell most of the agricultural produce they produce	National and provincial	AGR_Sell	Main source	# of households who chose option 1 in AGR_Sell/total # of households who are involve in agricultural production activities*100
Percentage of households classified as: Food access adequate Food access inadequate Food access severely	National and provincial	FSD_WORRIED- FSD_WHLDAY	Main source	Adequate: one or no 'Yes' responses for the first part of FSD_WORRIED—FSD_WHLDAY Inadequate: 2–3 'Yes'
inadequate				responses for any of FSD_WORRIED – FSD_WHLDAY Severely inadequate:
				4–6 'Yes' responses for any of FSD_WORRIED – FSD_WHLDAY

Table 3.2: Education

Indicator	Annual reporting level	Questions in the GHS	GHS relative to other sources	Definitions and/or formulas
Age-specific Enrolment Ratio (ASER)	National Provincial UNESCO	EDU_GRDE, D	Main source	# (persons aged 7–13 attending educational institutions)/ # persons aged 7–13 * 100 # (persons aged 7–18 attending educational institutions)/ # persons aged 7–18 *100
Enrolment for 16–18-year-olds	National Provincial	EDU_GRDE, EDU_EDUI	Validation Data confrontation	# aged 16–18 who are enrolled in any institution # who attend any institution/(# 16– 18 years old) *100
Percentage of children with special needs aged 7–15 not enrolled in educational institutions	National Provincial	EDU_ATTEN D, EDU_RSNN	Main source	(# of persons aged 7-15 with disabilities ⁴ not enrolled)/#aged 7-15 yrs with disabilities)*100
Percentage of learners in public schools that do not pay school fees	National Provincial	EDU_TOTFE ES	Validation Data confrontation	# persons attend public school who do not pay school fees/# of persons attending public schools*100
Percentage of learners in schools receiving social grants	National Provincial	EDU_EDUI, SOC_GRAN T SOC_GRAN T_TYPE	Main source Data confrontation	# persons attending school who receive any grant/# of persons who attend school and answered the question*100
Percentage of learners who walk for more than 30 minutes to the nearest school	National Provincial	EDU_MODE _TR, EDU_NEAR EST	Main source	# learners who walk for 30 minutes or more to attend the nearest school/ # of persons attending schools*100
Percentage of learners in public schools benefiting from free scholar transport	National Provincial	EDU_ATTEND , EDU_EDUI, EDU_MODE_ TR	Validation source	# learners who chose option 6 in EDU_MODE_TR/ # of persons attending public schools*100
Percentage of learners in public ⁵ schools benefiting from the nutrition programme	National Provincial	EDU_EATFO OD	Validation source	# persons options 2–4 in EDU_EATFOOD/# of persons attending Grd 0–Grd 12*100
% of reported incidents of corporal punishment	National Provincial	EDU_VLNC_ EXP	Main source	# persons options 1 in EDU_VLNC_CORP/# of persons attending school (option 2 in EDU_EDUI)
Adult literacy rates	National Provincial	D,1,5	Validation source	# persons options with highest education less than Grd 7/# of persons 20 years and older

 ⁴ Un definition of disabilities
 ⁵ Question on public and private school

Table 3.3: Environmental affairs

Indicator	Annual reporting level	Questions in the GHS	GHS relative to other sources	Definitions and/or formulas
# of households using borehole water	National and provincial	WAT_DRINK WAT	Supply data towards its calculation	# of households options 3 and 9 for WAT_DRINKWAT
# of households using wood or coal for cooking	National and provincial	ENG_COOK	Main source	# households option 5, 6 for ENG_COOK
Percentage of households whose refuse or rubbish is removed by a local authority or private company	National and provincial	SWR_RUB	Main source	# of households options 1–4 in SWR_RUB/# of households who answered the question*100
Percentage of households who feel that they are experiencing pollution by categories	National and provincial	SWR_ENV Option 1	Main source	# of households who answered 'Yes' for selected options in SWR_ENV_Lit- SWR_ENV_Noi/# of households who answered the question*100

Table 3.4: Health

Indicator	Annual reporting level	Questions in the GHS	GHS relative to other sources	Definitions and/or formulas
% of orphans aged 7–18 years attending educational institutions	National and provincial	HHC_FATH_ ALIVE, HHC_MOTH _ALIVE, EDU_EDUI, D	Main source	# of children aged 7–18 years who lost one or both of their biological parents attending school/ # of children aged 7–18 who lost one or both of their biological parents*100
% of people 20 years and older with no schooling	National and provincial	D, Education	Main source	# of persons 20 years and older with no schooling/# of persons 20 years and older*100
% of persons with medical aid coverage	National and provincial	HLT_MEDI	Main source	# of persons who responded 'Yes' in HLT_MEDI/# of persons who responded to the question*100
% of households for which the usual place of consultation is a public facility	National and provincial	HHW_HLTF AC	Descriptive/ interpretive One of the sources	# of persons who responded 'Yes' to options 1–3 in HHW_HLTFAC/# of persons who responded to the question*100

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Table 3.5: Human settlement

Indicator	Annual reporting level	Questions in the GHS	GHS relative to other sources	Definitions and/or formulas
Percentage of households who live in an RDP or state subsidised house	National and provincial	HSG_RDP	Main source	# of households who replied 'Yes' in HSG_RDP/# of households who answered the question*100
Percentage of households receiving a housing subsidy from the state	National and provincial	HSG_SUBSI DY	Validation source	# of households whose response is 'Yes' in HSG_SUBSIDY/# of households who answered the question*100
Percentage of households who state that the condition of the walls of their state provided/ subsidised housing is weak/very weak	National and provincial	HSG_COND _WALL, HSG_SUBSI DY	Validation source	# of households with a 'Yes' answer in HSG_SUBSIDY and response 1-2 in HSG_COND_WALL/# of households 'Yes' in HSG_SUBSIDY
Percentage of households who state that the condition of the roof of their state provided/ subsidised housing is weak/very weak	National and provincial	HSG_COND _ROOF, HSG_SUBSI DY	Validation source	# of households 'Yes' in HSG_SUBSIDY and response 1–2 in HSG_COND_ROOF/# of households 'Yes' in HSG_SUBSIDY
Percentage of households who pay rent for a state provided/ RDP house,	National and provincial	HSG_TENU RE, HSG_SUBSI DY	Main source	# of households 'Yes' in HSG_SUBSIDY and option 1 in HSG_TENURE/# of households 'Yes' in HSG_SUBSIDY
Percentage of households who fully own their dwellings	National and provincial	HSG_TENU RE	Main source	# of households options 5 in HSG_TENURE/# of households who answered the question*100

Table 3.6: Social development

Indicator	Annual reporting level	Questions in the GHS	GHS relative to other sources	Definitions and/or formulas
% of persons 60 years and older that are disabled	National and provincial	D, DSB	Only source	# of persons aged 60 years and older who are disabled UN definition/# of persons who answered the question *100
% of persons 60 years and older that are severely disabled	National and provincial	D, DSB	Only source	# of persons aged 60 years and older who are severely disabled/# of persons who answered the question *100
% of people 60 years and older who received old-age grant	National and provincial	D, SOC_GRA NT_TYPE	Only source	# of persons aged 60 years and older who received an old-age grant/# of persons who answered the question *100
% of people 60 years and older who received social grants	National and provincial	D, SOC_GRA NT	Only source	# of persons aged 60 years and older who received a social grant/# of persons who answered the question *100
% of households with persons 60 years and older with: Food access adequate Food access inadequate Food access severely inadequate	National and provincial	D, FSD_WOR RIED - FSD_WHL DAY	Descriptive/ interpretive Validation	# of persons aged 60 years and older who answered 'Yes' to FSD_WORRIED - FSD_WHLDAY/# of persons who answered the question *100

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Table 3.6: Social development (concluded)

Annual reporting level	Questions in the GHS	GHS relative to other sources	GHS relative to other sources	Definitions and/or formulas
# of households classified as: Food access adequate Food access inadequate Food access severely inadequate	National and provincial	FSD_WORRI ED - FSD_WHLD AY	Inputs towards indicator calculation	# of households who answered 'Yes' to FSD_WORRIED - FSD_WHLDAY
# of households classified as poor using household monthly expenditure of below R2 500 as the cut-off	National and provincial	FIN_EXP	-	# of households whose total monthly expenditure is below R2 500
# of households classified as poor using household monthly expenditure of below R2 500 as the cut-off and who have children aged 7–18	National and provincial	FIN_EXP	-	# of households with children aged 7-18 and total monthly expenditure is below R2 500
% of poor households with children aged 7–18 who do not spend money on school fees	National and provincial	D, EDU_EDUI, FIN_EXP	Main source	# of households with children aged 7–18 and monthly expenditure below R2 500 who did not spend any money on school fees for at least one of their children/# of households that are poor and have children aged 7–18 years

Table 3.7: Transport

Indicator	Annual reporting level	Questions in the GHS	GHS relative to other sources	Definitions and/or formulas
# of passenger trips made per month with each public transport mode: Minibus/taxi Bus Train	National and provincial	TRA	Validation	Only calculated for household members who made trips using public transport
% of the household's income spent on transport per month: 1-10% 11-20% 21-30% 30% or more	National and provincial	TRA, FIN_INC	Main source	Only calculated for households with valid income and expenditure on transport data
% of learners travelling for longer than 30 minutes to an educational institution	National and provincial	EDU_TIME	Main source	Only calculated for individuals attending educational institutions who provided a response to the question on time taken, Missing values were excluded from the denominator
% of workers travelling for longer than 30 minutes to their place of work	National and provincial	LAB_MINS	Main source	Only calculated for individuals working and who provided a response to the question on time taken, Missing values were excluded from the denominator

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Table 3.8: Water and sanitation

Indicator	Annual reporting level	Questions in the GHS	GHS relative to other sources	Definitions and/or formulas
# of households with water supply infrastructure of RDP standard or higher	National and provincial	WAT_DRINK WAT, WAT_DIST	Validation and data confrontation	On or above RDP is piped water in dwelling or yard or borehole in the yard (options 1,2&3) or tap less than 200 meters from yard (options 5,6&9) and option 1 WAT_DIST; all others are below,
# of households with no water supply infrastructure	National and provincial	WAT_DRINK WAT	Validation and data confrontation	'No water supply' is options 3, 4, 7–13,
# of consumers who experienced water supply interruptions of 48 hours or more at a time	National and provincial	WAT_INTE_ 2days	Validation and data confrontation	# of households option 'Yes' in WAT_INTE_2days/# of households who answered the question*100
# of consumers who have experienced a cumulative interruption of more than 15 days for the financial year	National and provincial	WAT_INTE_ 15DAYS	Supply data towards its calculation	# of households option 'Yes' in WAT_INTE_15DAYS/# of households who answered the question*100

Table 3.8: Water and sanitation (concluded)

Indicator	Annual reporting level	Questions in the GHS	GHS relative to other sources	Definitions and/or formulas
# of households with access to a functioning basic sanitation facility (strategic framework)	National and provincial	SAN_TOIL - SAN_LOCAT ION	Main source	'Basic facility' is defined as options 1, 2 and 5 in SAN_TOIL
% households with access to a functioning basic sanitation facility (strategic framework)	National and provincial	SAN_TOIL - SAN_LOCAT ION	Main source	# of households with basic facilities/# of households*100
# of households with substandard toilet facility	National and provincial	SAN_TOIL - SAN_LOCAT ION	Main source	'Substandard' is defined as options 4, 6, 7, 8, 9,10 in SAN_TOIL
% of households with substandard toilet facility	National and provincial	SAN_TOIL - SAN_LOCAT ION	Main source	# of households with substandard facilities/# of households*100
# of households using bucket toilets	National and provincial	SAN_TOIL - SAN_LOCAT ION	Main source	# of households who chose option 7 and 8
# of households with no sanitation facility	National and provincial	SAN_TOIL	Main source	# of households who chose option 10
# of poor households receiving free basic sewerage and sanitation	National and provincial	SAN_TOIL - SAN_PAY	Supply data towards its calculation	Poor households are households who spend less than R2 500 per month
% of poor households receiving free basic sewerage and sanitation	National and provincial	SAN_TOIL - SAN_PAY	Supply data towards its calculation	# of poor households who are connected to the sewerage system and answered 'Yes' to SAN_PAY/# of households who answered the question*100