

Sustainable Development Goals (SDGs)

Country Report 2019 - South Africa



THE SOUTH AFRICA I KNOW, THE HOME I UNDERSTAND



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Department:
Statistics South Africa
REPUBLIC OF SOUTH AFRICA



Sustainable Development Goals: Country report 2019

Published by Statistics South Africa, Private Bag X44, Pretoria, 0001, South Africa, ISibalo House, Kock Street, Salvakop, Pretoria, 0002

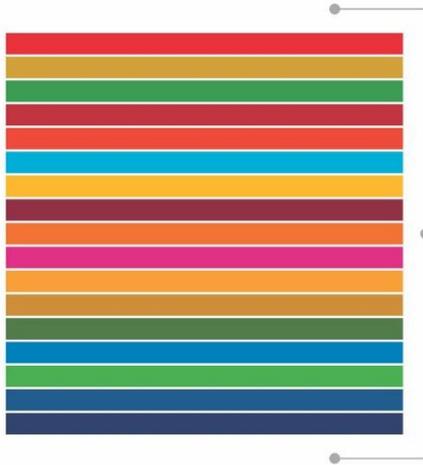
www.statssa.gov.za, info@statssa.gov.za, Tel +27 12 310 8911

316 pp

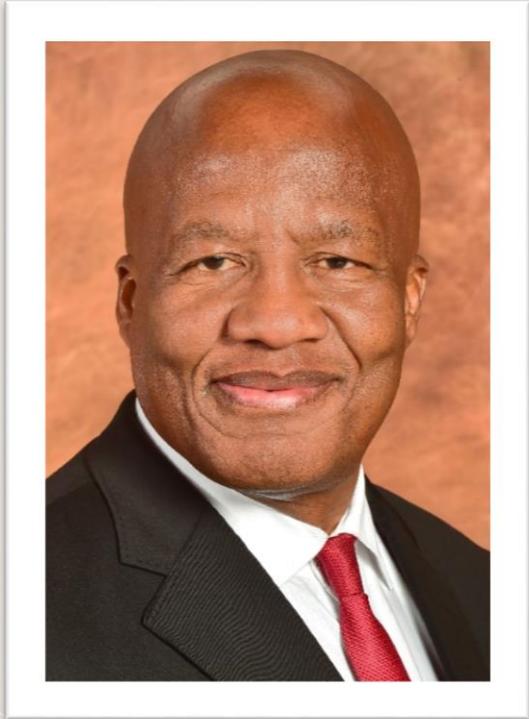
ISBN 978-0-621-47619-4

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Country report
2019

Published by
Statistics South Africa



FOREWORD





Minister Jackson Mthembu, the Minister in the Presidency: Planning, Monitoring and Evaluation

The SDGs are as much about development and transformation as they are about the restoration of the dignity of people around the world, more so in South Africa with its history of deprivation and exclusion of the majority of its people. In 2017, my predecessor, the Honourable Jeffrey Thamsanqa Radebe, in the foreword to the Indicator Baseline report, reminded us that for the SDGs to fulfil its transformative mission, and for development to truly respond to the aspirations of our own NDP, we have to build meaningful, lasting and effective partnerships. He further reminded us that we have a window of opportunity during which “to accelerate the implementation of sustainable development in South Africa; to deliver the goals and bring governments, businesses, and people together to embark on a new path towards a more sustainable and better planet for all.” History will judge us harshly if we do not heed this call to action and unity in purpose to deliver on the hopes and dreams of our people.

The National Development Plan (NDP): Vision 2030 – “Our future – make it work” was adopted in 2012, as South Africa’s development lodestar and roadmap. It predated the post-2015 development agenda of the United Nations 2030 Agenda for Sustainable Development as well as the African Union Agenda 2063. The NDP has a 74% convergence with the Sustainable Development Goals (SDGs), and prioritises job creation, the elimination of poverty, the reduction of inequality and growing an inclusive economy by 2030.

South Africa established a national coordinating mechanism to strengthen implementation of development policies. The coordination arrangement further facilitates national engagements and reporting in a coordinated and integrated manner on the developmental agendas of UN 2030 Agenda, the AU Agenda 2063, the Southern African Development Community (SADC) Regional Indicative Strategic Development Plan (RISDP) as well as our own Vision 2030, as encapsulated in the National Development Plan.

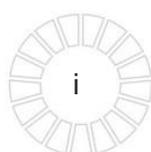
The 2019 SDG Country Report for South Africa, follows the Voluntary National Review report that was presented at the 2019 High Level Political Forum. The country report provides us with a timely reminder, not only of our successes, given our historical context, but more so of the challenges that have to be addressed if we wish to attain the goals and targets set out in this global development framework. We now have a solid foundation that evaluates our progress to date and the extent of the tasks that lies ahead. It serves as an encouragement to double our efforts in areas where we are not doing so well. It further puts us on a path to build a strong and resilient economy that sets us on a trajectory to confront the triple challenge of poverty, unemployment and inequality. This will require of all the social partners to work together, grow South Africa, to ensure that our country is able to eliminate poverty, create jobs and employment opportunities for its people and to create a more equitable society.

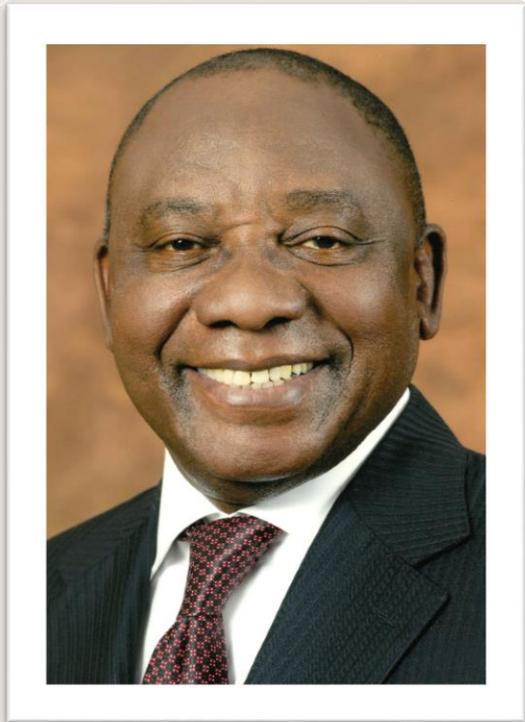
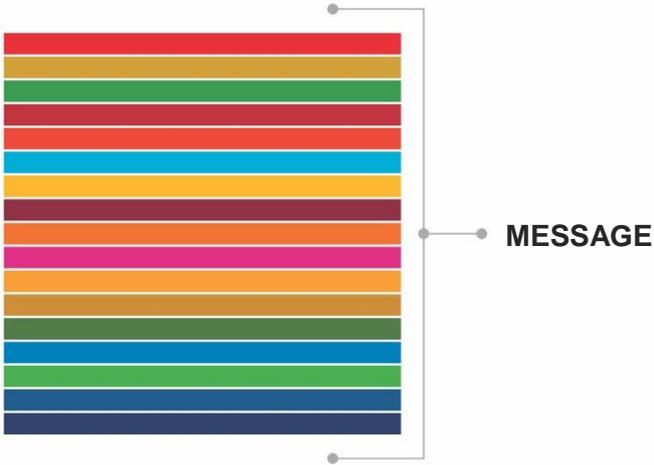
I am acutely aware that in order for our social compact to be effective, a lot still has to be done to overcome our challenges. As government we recommit ourselves to work together with business, organised labour and civil society organisations to ensure that this country delivers on its transformative agenda. We continue on our path to build a non-racial, non-sexist democratic society.



J Mthembu

Minister in the Presidency, Republic of South Africa







His Excellency Mr Cyril Ramaphosa, President of The Republic Of South Africa

This, the first Sustainable Development Goals (SDGs) Country report reflecting on progress of our development trajectory, is a timely reminder of what we, as a nation have achieved during 25 years of democracy in South Africa. It also reminds us of the enormity of the tasks that still lies ahead. In the work of aligning the global agenda to our own blueprint for the development of our country – the National Development Plan, Vision 2030 – we have found resonance and, as such, I am confident that the SDGs, generally, address our own aspirations as expressed through our vision. Our Government is promoting sustainable development policies which seek to make significant interventions in reducing poverty, unemployment and inequality.

The SDGs give us the opportunity to collaborate more sharply, more effectively and more deliberately in “leaving no one behind”. We seek to eradicate poverty and create conditions for our people to resonate with the programmes of Government as well as trust the objectives of multilateral fora of governance and international organisations like the United Nations and the African Union. As the SDGs are interlinked, their realisation requires an integrated policy response. Indeed, accelerating inclusive growth to deliver on the SDGs must be at the centre of all our actions.

We need to refine our energies and resources to focus the National Development Plan (NDP) and position it as a centerpiece that will put us in line to achieve the objectives set out in Africa’s Agenda 2063. Furthermore, our bold ambitions and actions should place our nation and our continent on a pedestal to contribute to global development. As people of the world, we can only contribute to complete humanity, if all nations of the world work together.

We cannot ignore the fact that we are facing a fourth industrial revolution that is having a significant impact on South Africa, Africa and the rest of the world. If we wish to remain relevant within the global community, we need to work together and invest in education, training, reskilling and new skills, to be able to cope with the challenges of the future.

People all over the world have hope. Those who suffer most from poverty or exclusion, those who have been left behind and who have no access to development, peace or respect and dignity look unto us, as leaders, with hope for a better tomorrow. We cannot and dare not fail them.

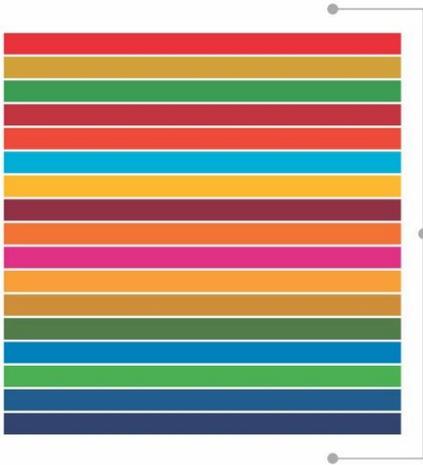
Finally, I want to encourage all to mobilise behind the vision of the SDGs and indeed our own NDP so that we can face our challenges and march together towards the new dawn of a better tomorrow. We all have it within our reach to define our destiny.

Yours sincerely,


MC Ramaphosa

PRESIDENT OF THE REPUBLIC OF SOUTH AFRICA





ACKNOWLEDGEMENTS





The Sustainable Development Goals (SDGs) are a universal call to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The SDGs, which are closely aligned to our own National Development Plan, will be our yardstick to measure our progress globally and, more so, locally, to gauge the extent to which we as a country have been able to deliver on the dreams and ideals of our people of a “better life for all”.

Two years since South Africa launched its baseline report, we are on the threshold of releasing our country’s first full-scale report – Sustainable Development Goals (SDGs): Country Report 2019 – a report which gives an overview of our successes but also highlights the many challenges the country still faces in its efforts to rid itself of its triple challenge of poverty, inequality and unemployment.

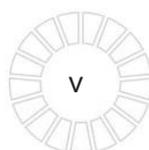
As a country, we are acutely aware that meaningful reporting is underpinned by proper measurement of the phenomena that will guide us to make rational decisions on whether, and to what extent, the country has been able to effect meaningful changes to the living conditions and life circumstances of its masses of people yearning for a better life. Thus, the statistics we produce and use become a conduit for delivering the hopes and dreams of nations yearning for prosperity for their people. As the Statistician-General, I have taken stock of the indicators that the country reports on and what needs to be done to close the gap on those indicators we currently are unable to measure. I am confident that our envisaged strategic tool to deal with this data paucity will not only promote consistency in reporting on various developmental frameworks, but also take us closer to the SDG dictum of “leaving no one behind”. I wish to acknowledge the many role-players from government departments, civil society organisations, business, organised labour, research and academic institutions, as well as international agencies that contributed towards the richness of this Country Report.

We are particular grateful and indebted to the public – our respondents – who selflessly sacrifice their time to provide information about their life circumstances so that the statistics produced accurately reflect the reality of life in this country.

I am, therefore, confident that this first Country report provides a solid foundation towards accelerating achievement of the ideals contained within the National Development Plan and Global Agenda on Sustainable Development over the next 11 years.

Risenga Maluleke

Statistician-General of South Africa



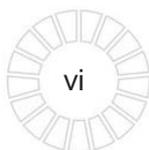




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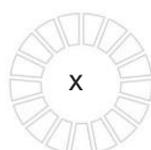




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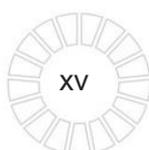


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ABBREVIATIONS

1HH 1H	One Household One hectare
4IR	Fourth Industrial Revolution
10YFP	Ten-Year Framework Programme on SCP
ACHPR	African Commission on Human and Peoples' Rights
AFIS	Advanced Fire Information System
AIDS	Acquired Immunodeficiency Syndrome
AIP	Alien Invasive Plant
AIS	Alien Invasive Species
ANA	Annual National Assessment
APRM	African Peer Review Mechanism
ARC	Agricultural Research Council
ARSCP	African Roundtable for Sustainable Consumption and Production
ART	Antiretroviral Therapy
ARV	antiretroviral
AsgiSA	Accelerated and Shared Growth Initiative for South Africa
ASIDI	Accelerated School Infrastructure Delivery Initiative
ATM	Automated Teller Machine
AU	African Union
B-BBEE	Broad-Based Black Economic Empowerment
BC	Biodiversity and Conservation
BCEA	Basic Conditions of Employment Act
BCM	Bromochloromethane
BEE	Black Economic Empowerment
BERD	Business Expenditure on Research and Development
BNG	Breaking New Ground
BPF	Biodiversity Planning Forum
BRICS	Brazil, Russia, India, China and South Africa
CAPS	Curriculum Policy Assessment Statement
CBD	Convention on Biological Diversity
CCHIP	Community Childhood Hunger Identification Project
CERD	Capital Expenditure on Research and Development
CET	Community Education and Training
CGE	Commission for Gender Equality
CHE	Council on Higher Education
CIS	Cooperative Incentive Scheme
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMA	Catchment Management Agency





CoGTA	Department of Cooperative Governance and Traditional Affairs
COP	Conference of the Parties
CRDP	Comprehensive Rural Development Programme
CS	Community Survey
CSG	Child Support Grant
CSIR	Council for Scientific and Industrial Research
CSO	Civil Society Organisation
DAC	Development Assistance Committee
DAFF	Department of Agriculture, Forestry & Fisheries
DALY	Disability-adjusted Life Year
DBE	Department of Basic Education
DBSA	Development Bank of Southern Africa
DCS	Department of Correctional Services
DEA	Department of Environmental Affairs
DeST	Decision Support Tool
DFI	Development Finance Institution
DHET	Department of Higher Education and Training
DHIS	District Health Information System
DHS	Department of Human Settlements
DM	District Municipality
DMC	Domestic Material Consumption
DoH	Department of Health
DPCI	Directorate for Priority Crime Investigation
DPME	Department of Planning, Monitoring and Evaluation
DPSA	Department of Public Service and Administration
DRDLR	Department of Rural Development and Land Reform
DRR	Disaster Risk Reduction
DSD	Department of Social Development
DST	Department of Science and Technology
DWA	Department of Water Affairs
DWS	Department of Water and Sanitation
ECD	Early Childhood Development
EDD	Economic Development Department
EEA	Employment Equity Act
EFAL	English First Additional Language
EGRS	Early Grade Reading Study
EP	Environmental Programmes
EPWP	Expanded Public Works Programme
ERDT	Expanded Report Drafting Team



ES	Equitable Share
ESMOE	Essential Steps in Managing Obstetric Emergencies
FAO	Food and Agriculture Organization
FBAE	Free Basic Alternative Energy
FBE	Free Basic Electricity
FBIP	Foundational Biodiversity Information Programme
FDI	Foreign Direct Investment
FET	Further Education and Training
FOSAD	Forum of South African Director-Generals
FPL	Food Poverty Line
FTE	Full-Time Equivalent
G77	Group of 77
GDP	Gross Domestic Product
GEAR	Growth, Employment and Redistribution
GER	General Education Requirement
GERD	Gross Domestic Expenditure on Research and Development
GFIP	Gauteng Freeway Improvement Programme
GFU	Gender Focal Units
GHG	Greenhouse Gases
GHS	General Household Survey
GNI	Gross National Income
GPI	Gender Parity Index
GPLMS	Gauteng Primary Literacy and Mathematics Strategy
GPSJ	Governance, Public Safety and Justice
HAART	Highly Active Antiretroviral Therapy
HCFC	Hydrochlorofluorocarbon
HE	Higher Education
HEI	Higher Education Institution
HIV	Human Immunodeficiency Virus
HSRC	Human Sciences Research Council
IAM	Infrastructure Asset Management
IBRD	International Bank for Reconstruction and Development
ICASA	Independent Communications Authority of South Africa
ICM	Integrated Coastal Management
ICT	Information and Communications Technology
IDA	International Development Association
IDC	Industrial Development Corporation
IDP	Integrated Development Plan
IEE	Industrial Energy Efficiency



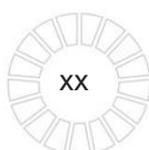
IES	Income and Expenditure Survey
IFC	International Finance Corporation
IFF	Illicit Financial Flow
IFSS	Integrated Food Security Strategy
IHR	International Health Regulations
ILO	International Labour Organization
IMF	International Monetary Fund
IMR	Infant Mortality Rate
INEP	Integrated National Electrification Programme
INLNS	Integrated National Literacy and Numeracy Strategy
IPAP	Industrial Policy Action Plan
IPID	Independent Police Investigative Directorate
IPP	Independent Power Producer
IRIS	Integrated Regulatory Information System
ISC	International Science Council
ISPESE	Integrated Strategy for the Promotion of Entrepreneurship and Small Enterprises
ISRDP	Integrated Sustainable Rural Development Plan
ISRDS	Integrated Sustainable Rural Development Strategy
IWEM	Integrated Water and Environment Management
IWRM	Integrated Water Resources Management
JCPS	Justice, Crime Prevention and Security
JICS	Judicial Inspectorate of Correctional Services
JMC	Joint Monitoring Committee
JMP	Joint Monitoring Programme
KBA	Key Biodiversity Area
LBPL	Lower-Bound Poverty Line
LCRPGR	Land Consumption Rate to Population Growth Rate
LCS	Living Conditions Survey
LGBTI	Lesbian, Gay, Bisexual, Transgender, and Intersex
LNI	Literacy and Numeracy Intervention
LPD	Land Productive Dynamics
LRA	Labour Relations Act
LTE	Long-Term Evolution
M&E	Monitoring and Evaluation
MAR	Mean Annual Run-off
MCD	Mortality and Causes of Death
MDG	Millennium Development Goal
MIC	Middle-Income Country
MIGA	Multilateral Investment Guarantee Agency



MIMS	Marine Information Management System
MLRA	Marine Living Resources Act
MMR	Maternal Mortality Ratio
MPA	Marine Protected Area
MRV	Measuring, Reporting and Verification
MST	Mathematics, Science and Technology
MSW	Municipal Solid Waste
MTM	Marine Transport and Manufacturing
MTSF	Medium Term Strategic Framework
NAAQS	National Ambient Air Quality Standards
NAS	National Adaptation Strategy
NBA	National Biodiversity Assessment
NBF	National Biodiversity Framework
NBSAP	National Biodiversity Strategy and Action Plan
NCA&VES	Natural Capital Accounting and Valuation of Ecosystem Services
NCCEMD	National Committee for Confidential Enquiry into Maternal Deaths
NCCHAP	National Climate Change Health Adaptation Plan
NCCRP	National Climate Change Response Policy
NCR	National Credit Regulator
NCS	National Curriculum Statement
NDA	National Department of Agriculture
NDB	New Development Bank
NDC	Nationally Determined Contributions
NDMC	National Disaster Management Centre
NDMF	National Disaster Management Framework
NDP	National Development Plan
NEES	National Energy Efficiency Strategy
NEET	Not in Education, Employment or Training
NEF	National Empowerment Fund
NEMA	National Environmental Management Act
NEMBA	National Environmental Management Biodiversity Act
NEMPA	National Environmental Management: Protected Areas Act
NFA	National Forests Act
NFSD	National Framework for Sustainable Development
NGM	National Gender Machinery
NGO	Non-Governmental Organisation
NGP	New Growth Path
NHA	National Health Act
NHFC	National Housing Finance Corporation



NHI	National Health Insurance
NICD	National Institute of Communicable Diseases
NIPF	National Industrial Policy Framework
NISCWT	National Integrated Strategy to Combat Wildlife Trafficking
nMAR	Natural Mean Annual Run-off
NPAES	National Protection Areas Expansion Strategy
NPC	National Planning Commission
NRDS	National Research and Development Strategy
NSC	National Senior Certificate
NSNP	National School Nutrition Programme
NSO	National Statistical Office
NSP	National Sanitation Policy
NSSD	National Strategy for Sustainable Development
NTP	Nutritional Therapeutic Programme
NURCHA	National Urban Reconstruction and Housing Agency
NW&SMP	National Water & Sanitation Master Plan
NWA	National Water Act
NWMS	National Waste Management Strategy
NWP	National Water Policy
NWRS	National Water Resources Strategy
NYDA	National Youth Development Agency
O&M	Operation and Maintenance
OCIMS	Oceans and Coastal Information Management System
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OHCHR	Office of the High Commissioner for Human Rights
OSW	Office of the Status of Women
PAIA	Promotion of Access to Information Act
PEPUDA	Promotion of Equality and Prevention of Unfair Discrimination Act
PFMA	Public Finance Management Act
PHC	Primary Health Care
PM10	Particulate matter
PMO	Programme Management Office
POA	Programme of Action
POP	Persistent Organic Pollutant
PPP	Purchasing Power Parity
PSC	Public Service Commission
PSEE	Private Sector Energy Efficiency Programme
PSRIP	Primary School Reading Improvement Programme



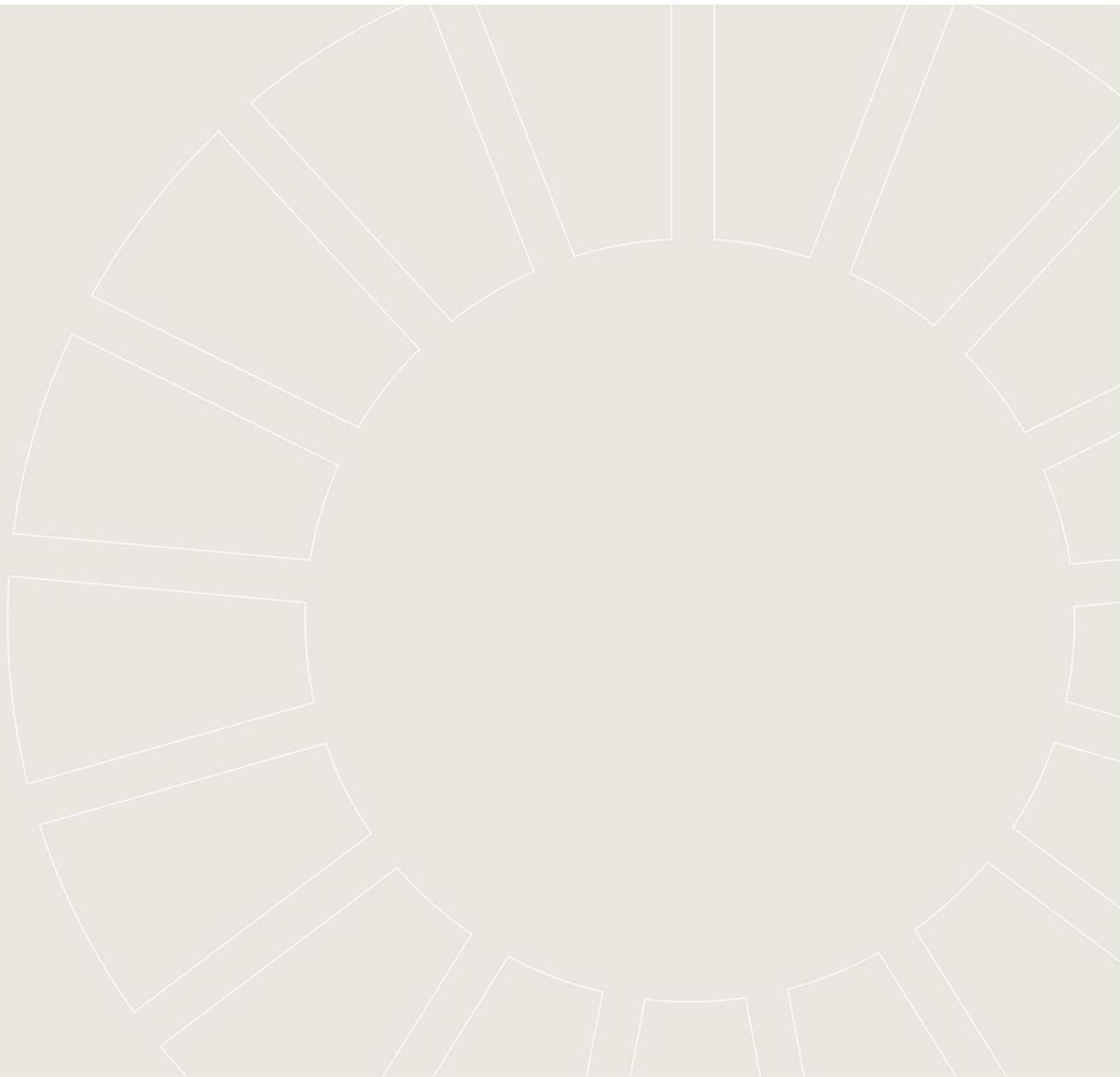
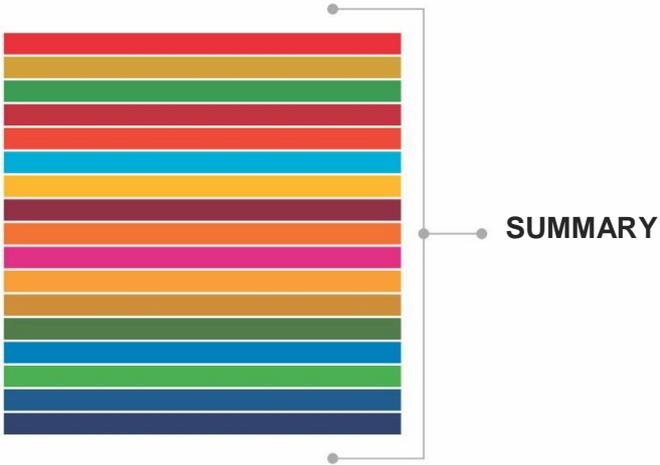


R&D	Research and Development
RDP	Reconstruction and Development Programme
REIPPP	Renewable Energy Independent Power Producers Procurement Programme
RHLF	Rural Housing Loan Fund
RLI	Red List Index
RSA	Republic of South Africa
SADC	Southern African Development Community
SADCO	South African Data Centre for Oceanography
SADHS	South African Demographic and Health Survey
SAHRC	South African Human Rights Commission
SALGA	South African Local Government Association
SAMPI	South African Multidimensional Poverty Index
SANBI	South African National Biodiversity Institute
SANEDI	South African National Energy Development Institute
SANRAL	South African National Roads Agency
SAPS	South African Police Service
SARB	South African Reserve Bank
SARIR	South African Research Infrastructure Roadmap
SARVA	South African Risk and Vulnerability Atlas
SASSA	South African Social Security Agency
SC	Senior Certificate
SCP	Sustainable Consumption and Production
SDG	Sustainable Development Goal
SDH	Social Determinants of Health
SEDA	Small Enterprise Development Agency
SEFA	Small Enterprise Finance Agency
SEIAS	Socio-Economic Impact Assessment System
SETA	Sector Education and Training Authority
SFS	Sustainable Food Systems Programme
SFWS	Strategic Framework on Water Services
SGB	School Governing Body
SHS	Solar Home System
SMME	Small, Medium and Micro Enterprise
SOA	Sexual Offences and Related Matters Act
SRN	School Register of Needs
SSB	Sugar Sweetened Beverages
SSFP	Small Scale Fisheries Policy
STARS	School Transformation and Reform Strategy
Stats SA	Statistics South Africa



STEM	Science, Technology, Engineering and Mathematics
STER	Single Transport Economic Regulator
STI	Sexually Transmitted Infection
SWG	Sectoral Working Group
TB	Tuberculosis
TFM	Technology Facilitation Mechanism
the dti	Department of Trade and Industry
TIMSS	Trends in International Mathematics and Science Study
TNC	Third National Communication
TVET	Technical and Vocational Education and Training
UBPL	Upper-Bound Poverty Line
UHC	Universal Health Coverage
UIF	Unemployment Insurance Fund
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
UPR	Universal Period Review
US	United States
VEP	Victim Empowerment Programme
VNR	Voluntary National Review
VOCS	Victims of Crime Survey
WCDRR	World Conference for Disaster Risk Reduction
WfE	Working for Ecosystems
WfF	Working for Forests
WfL	Working for Land
WfW	Working for Water
WHO	World Health Organization
WoF	Working on Fire
WRC	Water Research Commission
WSA	Water Services Act
WSDP	Water Services Development Plan
WSS	Water Supply System
WUA	Water User Association
WWF	World Wildlife Fund for Nature
WWTW	Waste Water Treatment Works







Introduction

In 2015, leaders representing 193 countries adopted the 2030 Agenda for Sustainable Development as a framework to guide global development for the subsequent fifteen years. Many say the SDGs constitute the world's most ambitious set of development goals yet. South Africa was one of the early supporters of the 2030 Agenda for Sustainable Development. This commitment is intertwined with its contribution to setting Africa's long-term development goals.

In 2013, South Africa played a leading role in the African Union (AU) to define eight long-term development ideals for the continent. These ideals were later translated into the seven aspirations of the AU's Agenda 2063. At the same time, Heads of State and Government of the AU established a High-Level Committee, which comprised ten member states, including South Africa. This committee had the task of developing the Common African Position on the post-2015 development agenda. Subsequently, on the sidelines of the UN General Assembly, in September 2014, the ministers of the G77 plus China (G77+China) elected South Africa as a rotating Chair of the group for 2015. In this capacity, South Africa was responsible for leading the group during international negotiations that took place in 2015.

In South Africa, the significant convergence between South Africa's National Development Plan (NDP) and the SDGs is often emphasised. According to an unpublished analysis by the Department of Planning, Monitoring and Evaluation (DPME) and the UN Development Programme (UNDP), 74% of the SDG targets are directly addressed by the NDP, and sectoral programmes address 19% of the remaining targets (DPME, 2019). Seen in this way, the SDGs have the potential to accelerate the realisation of the NDP's vision, notably by fostering greater policy coherence and reducing duplication and inefficiencies.

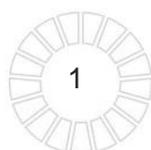
Process

This report builds on the *SDG Indicator Baseline Report* released by Statistics South Africa (Stats SA) in 2017 and covered Tier I and Tier II indicators on which reliable data is available. At the time of publication, 156 of 230 indicators had agreed standards and methods. South Africa was able to report on 63% of these indicators. These indicators included both Tier I and Tier II indicators, as well as domesticated indicators.

Indicator numbering

A slightly modified numbering system to that used in the UN documents, has been adopted for this report. Certain suffixes were introduced to differentiate amongst the different types and levels of indicators. These are indicated below:

- An indicator number without any suffix (e.g. 1.1.1 and 1.a.2) indicates an unmodified SDG indicator which comprises of three different tiers according to UN classification namely;
 - Tier I: Indicator is conceptually clear, has an internationally established methodology and standards are available, and data is regularly produced by countries for at least 50 per cent of countries and of the population in every region where the indicator is relevant.
 - Tier II: Indicator is conceptually clear, has an internationally established methodology and standards are available, but data is not regularly produced by countries.
 - Tier III: No internationally established methodology or standards are available yet for the indicator, but methodology/standards are being developed.
- An indicator number with a lower case letter in the middle (e.g. 1.a.2) also refers to a "means of implementation" SDG indicator.
- An indicator number followed by an upper case D (e.g. 1.3.1D) refers to a domesticated indicator (a proxy to SDG indicator);



- An indicator number followed by either an upper case A (e.g. 1.2.1A) or an upper case A combined with a number (e.g. 16.2.3A1 and 16.2.3A2) indicates an additional indicator; while
- An indicator number followed by a lower case letter (e.g. 4.4.1a) or a combination of upper and lower case letters (e.g. 4.6.1Db and 11.1.1Da) refers to the disaggregated components of an indicator.

The number of Tier I, Tier II and multiple SDG indicators were 199 of 232 as of December 2018, Tier III indicators are not included. South Africa is thus able to report on 64% (128 of 199) of the indicators classified as Tier I and Tier II or Domesticated indicators, as shown in Figure 1. South Africa is able to report on a further 26 Additional indicators.

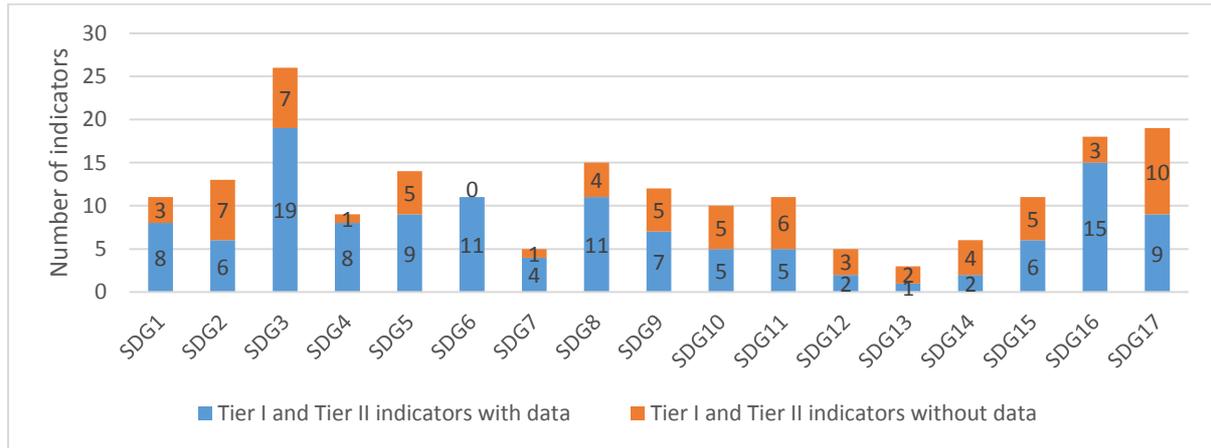


Figure 1: SDG Tier I and Tier II indicators with and without data for South Africa

The source of evidence on which this report is based is official and other data provided by Stats SA and other data producing agencies. Stats SA is a national South African government department and accountable to the Minister in the Presidency. It is regulated by the Statistics Act (Act No. 6 of 1999), which mandates Stats SA ‘to advance the production, dissemination, use and coordination of official and other statistics to assist organs of state, businesses, other organisations and the public in planning, monitoring and decision-making’. Stats SA’s independence and the impartiality of its statisticians are guaranteed and safeguarded by the Statistics Act.

Close collaboration between Stats SA and the Department of Planning, Monitoring and Evaluation (DPME), which is responsible for the drafting of South Africa’s 2019 Voluntary National Review (VNR), ensured coherence between the SDG Report and the VNR. An interdepartmental agreement ensured that inputs from the Goal, Thematic and Country Reports could be used to draft the VNR.

Context

The 2030 Agenda and its SDGs are realised within the context of South Africa’s medium- and long-term development planning, which commenced with the *Reconstruction and Development Programme* (RDP) in 1994. The RDP’s overarching aim was to ‘mobilise all people and the country’s resources toward the final eradication of the results of apartheid’ by building a ‘democratic, non-racial and non-sexist future’ (Presidency, 1994). Underlying the RDP was the notion of ‘social transformation’, which included redressing apartheid political and economic inequalities through meeting basic needs, poverty eradication, democratisation, redistribution and securing human rights (Groener, 2000).

In 1996, the *Growth, Employment and Redistribution* (GEAR) macroeconomic policy was formulated and implemented as an extension of the RDP. GEAR had intertwined aims of meeting basic needs, developing human resources, increasing participation in the democratic institutions of civil society and implementing the RDP in all its facets.



GEAR focused on reducing restrictions on direct foreign investment, promoting the privatisation of state assets, export-led growth, and integration into the global economy as a model for economic development.

The macroeconomic strategy targeted an economic growth rate of between 3% and 6% by 2000, and 400 000 jobs to be created during the corresponding period.

The *Accelerated and Shared Growth Initiative for South Africa* (AsgiSA) was launched in 2006. AsgiSA intended addressing the following six constraints to inclusive economic growth, namely:

1. deficiencies in government's capacity to delivery programmes;
2. the volatility of the currency;
3. low levels of investment infrastructure and infrastructure services;
4. shortages of suitably skilled graduates, technicians and artisans;
5. insufficiently competitive industrial and services sectors and weak sector strategies; and
6. inequality and marginalisation.

After extensive consultation, South Africa adopted the *NDP* in 2012. Its adoption was preceded by the National Planning Commission's (NPC) Diagnostic Report, which outlined South Africa's achievements and shortcomings since 1994 (NPC, 2011a). The Diagnostic Report identified persistent high levels of unemployment, low quality of education provided especially to black South Africans, inadequate and poorly located infrastructure, South Africa's resource-intensive and therefore environmentally unsustainable growth path, an 'ailing' public health system, an inefficient public service, corruption and a lack of social cohesion as the main challenges that face South Africa.

In response to these challenges, the *NDP* identified nine focus areas, namely:

1. creating employment;
2. expanding infrastructure;
3. transitioning to a low-carbon economy;
4. transforming urban and rural communities;
5. improving education and training;
6. ensuring quality healthcare;
7. building a capable state;
8. fighting corruption and improving accountability; and
9. consolidating social cohesion.

Priorities

The three dimensions of sustainable development – economic, social and environmental – are profoundly interlinked. Economic growth without social inclusion or at the expense of the natural environment is as unwise as environmental protection at the expense of vulnerable groups and individuals. This is why signatories to the 2030 Agenda for Sustainable Development, in article 2 of the Preamble, commit themselves to achieving the three dimensions of sustainable development in a balanced and integrated manner.

Finding the balance between the three dimensions of sustainable development within a particular socio-economic environment is an ongoing endeavour requiring commitment from all major societal actors and will differ from country to country. This is certainly the case for South Africa. Clustered together as social, environmental, economic and governance, peace, justice and security, the following key priorities are suggested to fast-track South Africa's realisation of the SDGs. In brackets, the key SDG targets to be impacted are highlighted.



Social goals

- Improve social protection and improve access to social services (1.1, 1.3, 10.1, 3.8)
- Expand ECD programmes (4.2, 2.2, 5.4, 8.5)
- Promote higher quality and industry-relevant education and training (4.4, 9.2, 8.3)
- Address the unequal share of unpaid care and domestic work (5.5, 5.4, 10.3)
- Promote innovative and sustainable health financing (3.c, 3.8, 1.1)
- Improve frontline health-care services (3.c, 3.8, 1.1)
- Prioritise social determinants of health (3.c, 3.8, 1.1)
- Correct gaps in legislation and policy which address discrimination (5.1, 5.2, 5.5)

Economic goals

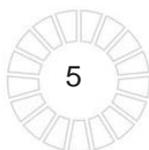
- Promote effective governance, robust leadership and a participative citizenry (8.1, 16.6, 16.7)
- Build an effective policy environment (8.1, 16.6, 16.7)
- Encourage innovation and entrepreneurship (8.1, 9.2, 9.b)
- Increase local and international investment (8.1, 8.10, 17.11)
- Implement high-quality economic regulation of network industries (9.1, 7.3, 1.4)
- Decouple economic growth from resource use and reduction in waste generation (12.5, 12.6, 12.7, 12.4)

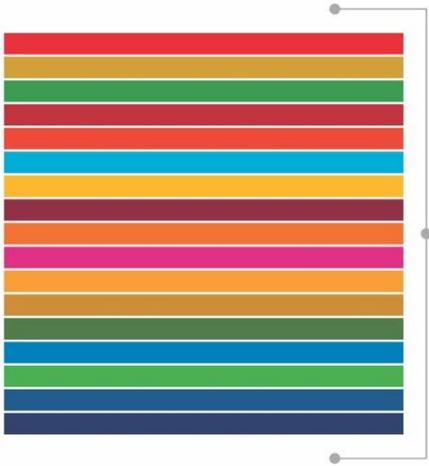
Environmental goals

- Continue to strengthen the national climate change response environment (13.1, 13.2, 13.b)
- Revisit the water sector, stabilise the water sector institutional environment, improve water infrastructure asset management, stabilise the water sector revenue environment, improve water sector information and data management (6.4, 6.1, 6.2, 6.3, 6.5, 6.6, 6.a, 6.b, 1.1, 2.1)
- Actively manage marine development trade-offs (14.1, 14.2, 14.3, 14.5, 14.7)
- Overcome data challenges in the ocean economy (14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7)
- Mainstream ecosystems and biodiversity into national planning (15.9, 15.1, 15.5, 14.5)
- Address programme and data gaps around energy affordability (7.b, 7.1, 7.3)
- Fast-track off-grid electrification (7.1, 7.2, 7.3)
- Accelerate informal settlement upgrading (11.1, 11.3, 7.1, 6.1, 6.2, 1.1)

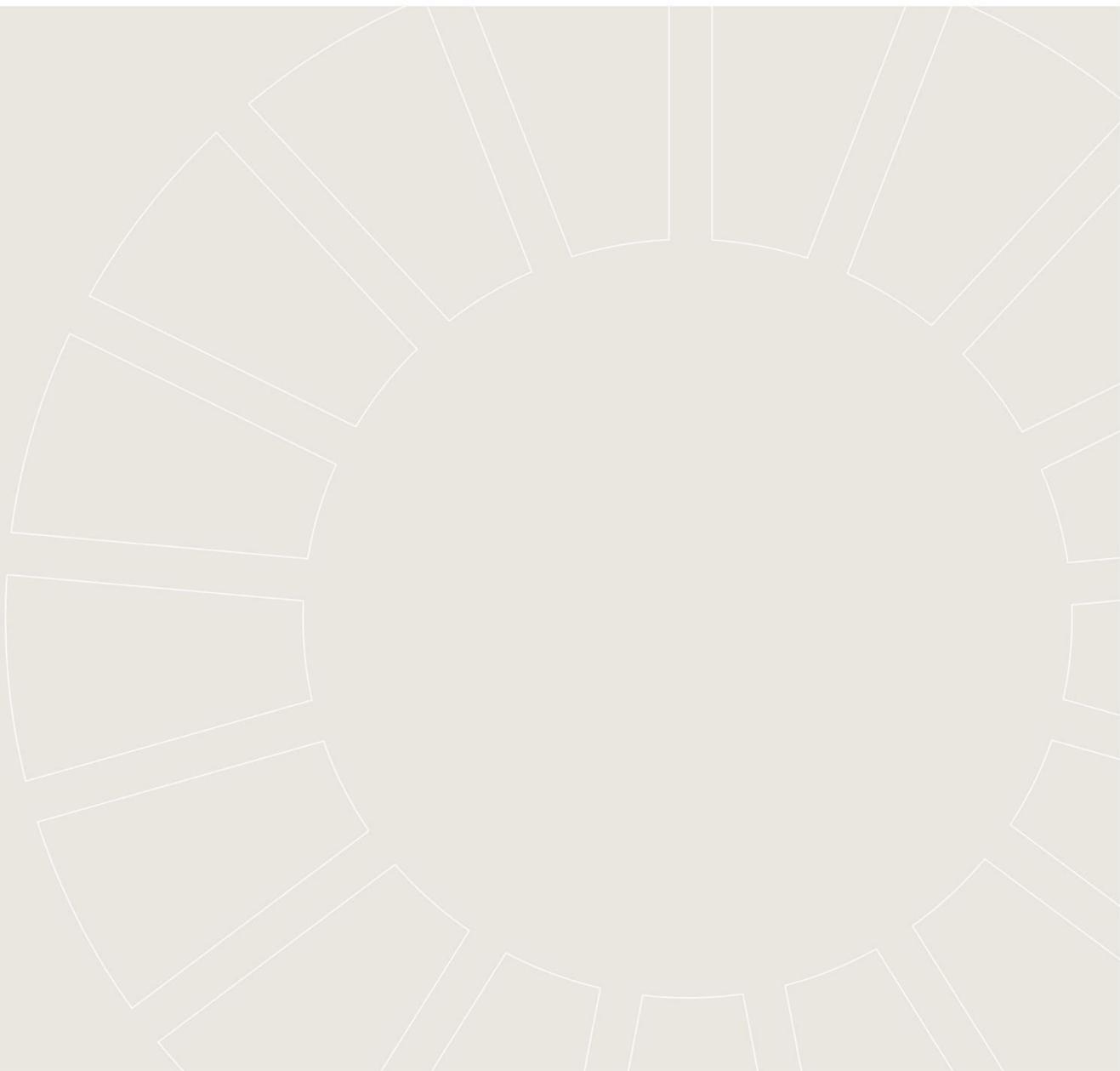
Governance, peace, justice and security goal

- Focus on the developmental aspects of the White Paper on Safety and Security (16.1, 16.2, 5.2)
- Increase access to justice for all (16.3, 16.6)
- Strengthen and broaden South Africa's participation in international bodies (16.8)
- Strengthen mechanisms to prevent illicit financial flows (16.4)
- Combat corruption and bribery and promote and protect the right of public access to information (16.5, 16.6, 16.7, 16.10)





1. BACKGROUND





1.1 The 2030 Agenda in South Africa

In 2015, leaders representing 193 countries adopted the 2030 Agenda for Sustainable Development as a framework to guide global development for the subsequent fifteen years. Many say the SDGs constitute the world's most ambitious set of development goals yet. The genesis of the SDGs can be found in the United Nations (UN) Conference on Sustainable Development held in Rio de Janeiro, Brazil (Rio+20) in 2012. The conference's outcome document, *The Future We Want* (UN, 2012), proposed a set of sustainable development goals that should drive the sustainability agenda. These goals were required to be aligned with the process aimed at designing the UN's post-2015 development agenda. The UN constituted a 30-member Open Working Group, and at the 2014 UN General Assembly this group proposed 17 Sustainable Development Goals (SDGs). With their 169 targets and 232 indicators, the SDGs cover significantly more themes than its predecessor, the Millennium Development Goals (MDGs).

The SDGs are built on what is commonly referred to as the five Ps (UN, 2015a).

- People: 'We are determined to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.'
- Planet: 'We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.'
- Prosperity: 'We are determined to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature.'
- Peace: 'We are determined to foster peaceful, just and inclusive societies that are free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development.'
- Partnership: 'We are determined to mobilize the means required to implement this Agenda through a revitalized Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people.'

South Africa was one of the early supporters of the 2030 Agenda for Sustainable Development. This commitment is intertwined with its contribution to setting Africa's long-term development goals. In 2013, South Africa played a leading role in the African Union (AU) to define eight long-term development ideals for the continent. These ideals were later translated into the seven aspirations of the AU's Agenda 2063. At the same time, Heads of State and Government of the AU established a High-Level Committee, which comprised ten member states, including South Africa. This committee had the task of developing the Common African Position on the post-2015 development agenda. Subsequently, on the sidelines of the UN General Assembly, in September 2014, the ministers of the G77 plus China (G77+China) elected South Africa as rotating Chair of the group for 2015. As Chair of the G77+China, South Africa was responsible for leading the group during international negotiations that took place in 2015.

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1.2 The transition from the MDGs to the SDGs

1.2.1 Context from the Millennium Development Goals (MDGs)

In many ways the SDGs build on the ‘unfinished business’ of the Millennium Development Goals (UNDP, 2016). An analysis by the World Bank (2016a) provides a snapshot of challenges that remained in the post-2015 era. This serves as background to South Africa’s performance, discussed below.

- MDG indicator 1.1 (Proportion of population below \$1 per day): 57% of countries met target
- MDG indicator 1.9 (Proportion of population below minimum level of dietary energy consumption): 30% of countries met target
- MDG indicator 2.2 (Proportion of pupils starting Grade 1 who reach last grade of primary school): 36% of countries met target
- MDG indicator 3.1 (Ratios of girls to boys in primary, secondary and tertiary education): 53% of countries met target
- MDG indicator 4.1 (Under-5 mortality rate): 39% of countries met target
- MDG indicator 4.2 (Infant mortality rate): 26% of countries met target
- MDG indicator 5.1 (Maternal mortality ratio): 12% of countries met target
- MDG indicator 7.8 (Proportion of population using an improved drinking-water source): 50% of countries met target
- MDG indicator 7.9 (Proportion of population using an improved sanitation facility): 30% of countries met target

In 2015, South Africa launched the Millennium Development Goals country report 2015, at the UNGA session. This report covered approximately 75% indicators (MDG and Domesticated).

Table 1 provides an overview of the targets achieved (green) and those not achieved (red) during the MDG era:

MDG 1: Eradicate extreme poverty and hunger	
Proportion of population below \$1.25 (PPP) per day	7.4% (2011)
Proportion of population below \$2.00 (PPP) per day	20.8% (2011)
Poverty gap ratio (\$1.25 (PPP) per day)	1.9% (2011)
Poverty gap ratio (\$2.00 (PPP) per day)	6.5% (2011)
Poverty gap ratio (\$2.50 (PPP) per day)	10.3% (2011)
Share of the poorest quintile in national consumption	2.7% (2011)
Proportion of households SAMPI poor	8% (2011)
Intensity of SAMPI poor	423 (2011)
SAMPI score	0.03 (2011)
Percentage growth rate of GDP per person employed	-1.1% (2013)
Employment-to-population ratio	42.8 (2014)



Percentage of employed people living below \$1 (PPP) per day	3.9% (2009)
Percentage of own-account and contributing family workers in total employment	9.3% (2009)
Percentage of people who report experiencing hunger	12.9% (2011)
Prevalence of underweight children under five years of age	8.3% (2008)
Prevalence of stunting in children under five years of age	23.9% (2015)
MDG 2: Achieve universal primary education	
Adjusted net enrolment ratio in primary education	99.3% (2013)
Proportion of learners starting Grade 1 who reach last grade of primary	96% (2013)
Literacy rate of 15–24-year-olds	94% (2013)
National Senior Certificate (NSC) pass rate	76% (2014)
Adjusted net enrolment ratio in tertiary education	19.4% (2013)
Bachelor pass	28% (2014)
MDG 3: Promote gender equality and empowerment of women	
GER & GPI at primary school	0.99:1 (2013)
GPI secondary	1.03:1 (2013)
GPI tertiary	1.41:1 (2013)
Ratio of literate females to literate males 15–24 years	1.05:1 (2013)
Female share of non-agricultural wage employment	45% (2013)
Ratio of female unemployed to male unemployed 15–64 years	1.0:1 (2013)
Proportion of seats held by females in national parliament	42%
MDG 4: Reduce child mortality	
Under-5 mortality rate	34.3 per 1 000 (2013)
Infant mortality rate	23.6 per 1 000 (2013)
Proportion of one- year-old children immunised against measles	91.2% (2014)
MDG 5: Improve maternal health	
Maternal mortality ratio	141 per 100 000 (2013)
Proportion of births attended by skilled health personnel	91% (2003)
Delivery rate in health facilities	85.6% (2014)
Contraceptive prevalence rate	50.2% (2003)
Couple year protection rate	52.7% (2014)
Antenatal care coverage	92.9% (2014)
MDG 6: Combat HIV/AIDS, malaria and other diseases (tuberculosis)	
HIV prevalence among population aged 15–24 years	7.1% (2012/2013)
HIV prevalence among pregnant women aged 15–24 years	21.7% (2012)
Condom use at last high-risk sex	58.4% (2012/2013)
Ratio of school attendance of orphans to non-orphans aged 10–14	1:1 (2012)
Incidence of malaria	8 851 cases (2013)
Death rates associated with malaria	0.6 per 100 000 (2013)
Incidence of TB	860 per 100 000 (2013)



Death rates associated with TB	76 per 100 000 (2013)
Proportion of TB cases detected and cured under DOTS	90% (2012/2013)
MDG 7: Ensure environmental sustainability	
Consumption of ozone-depleting substances: hydrochlorofluorocarbons	284.8 ODP metric tonnes (2013)
Consumption of ozone-depleting substances: bromochloromethane	0 (2013)
Consumption of ozone-depleting substances: methylbromide	140.5 ODP metric tonnes (2013)
Proportion of species threatened with extinction	Not achieved (no data)
Proportion of population using an improved drinking-water source	90.8% (2013)
Proportion of population using an improved sanitation facility	76.8% (2013)
MDG 8: Develop a global partnership for development	
Investment share in GDP	20.1% (2013)
Inflation rate by headline consumer price index	5.7% (2013)
Fixed telephone lines per 100 population	7.1 per 100 (2013)
Cellular telephone subscribers per 100 population	145 per 100 (2013)

Table 1: MDG progress barometer

In the sections below the transition from the MDGs to the SDGs is discussed in more detail. The discussion is clustered according to social SDGs (SDG 1, SDG 2, SDG 3, SDG 4 and SDG 5), economic SDGs (SDG 8, SDG 9, SDG 10, SDG 12 and SDG 17), environmental SDGs (SDG 6, SDG 7, SDG 13, SDG 14 and SDG 15) and the governance, peace, justice and security SDG (SDG 16).

1.2.2 Social goals

SDG 1 is a significant expansion on MDG 1 – both in terms of scope and ambition. It endeavours to eradicate extreme poverty completely by 2030 and to halve poverty – understood in its multidimensional sense – in all countries.

SDG 2 also builds on and expands MDG 1. Elevating of the issues of hunger to a separate Goal allowed the international community to expand on its targets and include monitoring of dimensions pertaining to nutrition, increased agricultural productivity and sustainable agriculture. Thus, the *SDG 2* does not look at the outcome-level assessment only, but also aims to evaluate and assess structural causes of food insecurity, the monitoring of which assists in identifying solutions that would lead to positive changes at the outcome level.

With regard to *SDG 3*, South Africa is faced with the challenge of improving the uneven progress made on numerous fronts. South Africa did not reach the targets set for reducing under-5 mortality or maternal mortality, and neither did South Africa manage to increase life expectancy to 70 years of age. HIV prevalence in women and men between 15 and 49 increased from 15.6% to 18.8%, and the proportion of the population with advanced HIV infection and access to antiretroviral drugs reached 65.5% – far below the target of 100%. The incidence of tuberculosis also increased from 253 out of every 100 000 South Africans to 860 out of every 100 000.

In conceptualising education, the MDGs took a narrower perspective than is the case with *SDG 4*. However, some of MDG 2 targets were not achieved. This includes the literacy rate of 15–25-year-olds (target: 100%; achieved: 91.9% male; 96.1% female), enrolment in FET/TVET colleges (target: 1 million; achieved: 794 250), adjusted net enrolment in tertiary education (male; target: 20%; achieved: 15%), electricity infrastructure (target: 100% of schools; achieved: 95%), water infrastructure (target: 100% of schools; achieved: 97%) and sanitation infrastructure (target: 100% of schools; achieved: 98%).



While MDG 3 aimed to promote gender equality and to empower women, *SDG 5* aims to achieve gender equality and to empower all women and girls. *SDG 5* is envisioned to further improve the achievement of gender equality and empowerment of all women and girls by expanding on the targets set out by MDG 3. The targets in *SDG 5* encompass a wide range of issues, such as eliminating discrimination and gender-based violence, recognising unpaid domestic and care work, increasing access to reproductive healthcare, land and various economic resources, and implementing legislation and policies that serve to provide an enabling environment for women's empowerment.

1.2.3 Economic goals

Despite the fact that South Africa has made progress to fill the huge gaps created by decades of poverty, inequality and unemployment, much more needs to be done to achieve the social and economic goals set by the former MDG targets and more recently the SDG targets (Stats SA, 2015). To ensure a successful transition from the MDGs to the SDGs, and to address the way these targets relate to South Africa's own development strategies, it is essential to recognise the specific progress made to date, rectify the relevant shortcomings, and build on lessons learnt in pursuit of the previous set of targets.

The SDGs related to the economy have linkages with the majority of the MDGs. *SDG 8* is strongly focused on (a) the eradication of poverty – MDG 1; (b) the promotion of quality education – MDG 2; (c) ensuring gender equality – MDG 3; (d) a favourable demographic structure – MDGs 4 to 6; (e) environmental sustainability – MDG 7; and (f) macroeconomic and socio-economic advancement (a global partnership agenda) – MDG 8.

SDG 9 follows on primarily from MDG 8, and more specifically from the last four targets of MDG 8: MDG 8.10, capital expenditure on research and development (CERD) as a percentage of GDP (*SDG 9.5.1* and *9.5.2* specifically); MDG 8.11, official development assistance received as a percentage of GNI (*SDG 9.a.1* specifically), MDG 8.12 and 8.13, fixed telephone lines per 100 population and cellular telephone subscribers per 100 population (*SDG 9.c.1D*).

SDG 10 is closely linked to MDG 1, which was aimed at eradicating extreme poverty and hunger (Stats SA, 2015), and considered a high priority primarily for developing and low-income economies. Thus, as rightly put by the UN, the SDGs aspire to complete the unfinished agenda of the MDGs to eradicate extreme poverty among countries (UN, 2017).

Sustainable consumption and production (*SDG 12*) was neither included nor addressed in the MDGs, although it has been on the international agenda since the early 1990s (Clark, 2007). The omission of SCP from the MDGs is viewed as a 'missed opportunity' (UN, 2013), since the implementation of the MDGs coincided with an increase in production, consumption and waste in developing countries (Akenji & Bengtsson, 2014). This situation has now been rectified by the inclusion of SCP in the SDGs. The MDGs focused on developing countries, with funding support from developed countries. By contrast, all countries, irrespective of their development status, are expected to work towards implementing the SDGs, and for *SDG 12* specifically this means decoupling economic growth and consumption of resources and the associated waste generation.

Conceptually, *SDG 17* is largely a derivative and expansion of MDG 8. An important distinction, however, as noted in the 2030 Agenda, is that the SDGs aim to define more explicitly the means of implementation for achievement of the SDGs. More broadly, *SDG 17* demonstrably undertakes a more collaborative approach at the global level, rather than the unilateral approach adopted under MDG 8. O'Sullivan (2017) suggests that *SDG 17* has improved on MDG 8 by being substantively more comprehensive. In this way, *SDG 17* emphasises the importance of partnerships but at the same time acknowledges the sovereignty of developing countries and the responsibility of developed countries.



1.2.4 Environmental goals

SDG 6 emerged as a specific advancement on MDG 7: Ensure Environmental Sustainability. The foundation of *SDG 6* is the growing global concern over the availability and quality of water resources, not just to meet water supply and sanitation needs, but also to support economic growth and urbanisation (Renata, Ortigara, Kay, & Uhlenbrook, 2018). *SDG 6* also emerged from the realisation that water-related ecosystems are deteriorating, and excessive pollution is impacting on the water quality of resources and related ecosystems (UN Environment, 2018:7).

Notably, *SDG 6* presents a thematically broader, more detailed and context-specific framework for water, beyond the issues of water supply and sanitation, which were the main focus of MDG Target 7c. Through this expansion, issues of water quality, water use efficiency and demand management, protection of water-related ecosystems and implementation of integrated water resources management (IWRM) at a local and transboundary level are brought into focus.

The broader scope of *SDG 6* necessitates the utilisation of more diverse and inclusive approaches supported by research, development and innovation in order to meet the 2030 targets, while remaining cognizant of the country's scarce water resources. Therefore, ahead of 2030, South Africa must deliberate on how to provide safely managed sanitation facilities that are both water-smart and sustainable to underserved areas. The current waterborne sanitation infrastructure system is unsustainable, considering that South Africa is a water-scarce country and water scarcity is likely to increase as a consequence of climate variability.

The MDGs contained eight goals; however, none of the goals included in the MDGs made any direct references to energy. Considering that the MDGs did not explicitly refer to energy, *SDG 7* and its respective targets were brand new additions to the SDGs set. This means that the developing countries who were subject to MDGs were yet to measure and compare their progress with each other with respect to access to sustainable and affordable energy. The introduction of *SDG 7* and onboarding of a wider range of countries, irrespective of their income levels, allowed for a more comprehensive and accurate monitoring and assessment of the countries' positions relative to each other, identification of their interlinkages and interrelatedness, and promotion of global and high-level advocacy.

The shift in ambition and scope of global development objectives inherent to the SDGs is reflected in the *SDG 11*'s focus on cities and their role in the attainment of sustainable development objectives (Zinkernagel et al., 2018). This is a recognition of the spatial nature of development and cities as incubators of local development. References to the spatial basis of development, and the role of cities in furthering development, are muted in the MDG, with the sole reference to cities evident in Target 4 of MDG 7 (UN, 2015a). The goal, in this instance, seeks to 'ensure environmental sustainability', while the target reads 'achieving by 2020 a significant improvement in the lives of at least 100 million slum dwellers' (UN, 2015a). The other three targets included in MDG 7 reference the importance of sustainable development, the protection of environmental resources, and improved access to basic services.

When turning to *SDG 13*, the MDG most directly linked to climate change and disaster risk reduction was MDG 7, 'Ensure environmental sustainability'. Sustainable development and disaster risk reduction are linked, since sustainable development cannot be attained while disasters continue to undermine economic growth and social progress. The first agreement on the post-2015 development agenda was the Sendai Framework for Disaster Risk Reduction 2015–2030 (Sendai Framework), which was adopted by the UN Member States at the 3rd UN World Conference for Disaster Risk Reduction (WCDRR) in March 2015 in Sendai, Japan. The framework is a 15-year non-binding agreement, which recognises that the state has a primary role to reduce disaster risk; however, responsibility is shared with other stakeholders, which include local government, the private sector and other stakeholders. The



Framework acknowledges that disasters, many of which are exacerbated/aggravated by climate change and are increasing in frequency and intensity, significantly impede progress towards sustainable development. It acknowledges and emphasises the importance of climate change and sustainable development for disaster risk reduction, and vice versa. Countries are to align their DRR strategies and plans with the Sendai Framework in order to implement the Framework within their regions.

SDG 14 and *SDG 15* build on MDG 7. As was the case for many countries, South Africa found environmental sustainability a challenging area in terms of progress in tracking and achieving MDG 7. A key lesson emerged in relation to data gathering and reporting. While MDG 7 offered a general context to evaluate environmental sustainability, the process of harnessing data for reporting was a major gap in country reporting outcomes.

Taken together, it can be concluded that, despite its achievements, South Africa's post-2015 transition has faced challenges in policy implementation and mobilisation of the resources for monitoring action. Strengthening operational and reporting capacity, including the underlying mechanisms to ensure improved monitoring and evaluation, will enhance essential levers for South Africa in tracking its SDG progress.

1.2.5 Governance, peace, justice and security goal

In September 2000 the heads of states and governments gathered in the UN General Assembly 'at the dawn of a new millennium' and joined together in affirming a wide-ranging Declaration, which was suffused with the issues that now make up the content of SDG 16. Unfortunately, only a very limited proportion of the content of this Declaration found its way into the Millennium Development Goals that were supposed to implement it (Hill et al., 2010). The MDGs were soon criticised for the extent to which they lacked focus on the broader conditions that so directly affected the capacity to alleviate poverty.

The UN Office of the High Commissioner for Human Rights (OHCHR) tried to promote a 'human rights approach' to the MDGs in an attempt to promote a more sustainable approach to a development agenda that was insufficiently aligned with human rights standards and principles, particularly those of equality, participation, non-discrimination and transparency (OHCHR, 2008).

In contrast to the process leading to the adoption of the MDGs, the International Human Rights Community, along with civil society more generally, engaged at unprecedented levels with the process of developing the 2030 Agenda (Winkler & Williams, 2017). OHCHR was able shortly afterwards to applaud the extent to which the SDGs were 'unequivocally anchored in human rights' (OHCHR, 2015), though others have pointed out that the final agenda fell short of what had earlier appeared possible (Pogge & Sengupta, 2015).

The protection of human rights in the Constitution of South Africa is described – in the language of the Constitution itself – as a cornerstone of its democracy. With respect to the essence of SDG 16, the Constitution provides, for example, that everyone is equal before the law, that the state may not unfairly discriminate against anyone, and must enact legislation to prevent or prohibit unfair discrimination (Article 9). It provides for the right to life (Article 11) and makes clear that everyone has the right to freedom and security of the person (Article 12); this includes the right not to be detained without trial as well as the right 'to be free from all forms of violence from either public or private sources'. It includes a number of participatory political rights, including to free, fair and regular elections (Article 19), as well as labour rights, such as the right to fair labour practices (Article 23).

It establishes that everyone has the right of access to information held by the state or that is necessary to exercise or protect any other rights (Article 32). Everyone has the right to just administrative action (Article 33) and to access justice through the courts (Articles 34 and 35).



Given the ways in which pursuit of the SDGs intersects with the protection of human rights, it is worth noting at the outset South Africa's engagement with the international mechanisms designed to safeguard human rights. South Africa has undergone three cycles of the Universal Periodic Review of the Human Rights Council (in 2008, 2012 and 2017), and taken an active role in the review of other states (Etone, 2017). Since 2003, South Africa has extended a standing invitation to UN Special Procedure mandate-holders, though the most recent visit was that by the UN Special Rapporteur on Violence against Women (in December 2015). Of the nine core international human rights treaties, South Africa has ratified seven. It has most recently been reviewed by the Committee on Economic, Social and Cultural Rights and by the Committee on the Rights of Persons with Disabilities. To give an impression of the aggregate impact of these engagements, the Danish Institute for Human Rights has recently put together a compilation of Special Procedure recommendations, Treaty Body observations and Universal Periodic Review (UPR) recommendations as they relate to the SDGs. That database identifies 18 Special Procedures recommendations, 76 Treaty Body observations and 64 UPR recommendations that pertain directly (or jointly) to SDG 16 (Danish Institute, 2019).

South Africa has also ratified the African Charter on Human and Peoples' Rights, and participates as a Member State in the Ordinary Sessions of the African Commission on Human and Peoples' Rights. In 2016, after a long period of non-reporting, South Africa's second periodic report (covering the years 2003–2014) was reviewed by the Commission, which adopted Concluding Observations. South Africa also welcomed a delegation from the African Commission on Human and Peoples' Rights on a promotional mission in September 2018. In addition to this, South Africa participates in the African Peer Review Mechanism (APRM) – a voluntary tool AU member states use to diagnose strengths and weaknesses in democratic and political governance, economic governance and management, corporate governance, and social economic development, and they commit to addressing challenges identified in the review. South Africa is one of 37 African countries that are members of the APRM and one of 21 APRM states that have undergone peer review.

1.3 Objectives

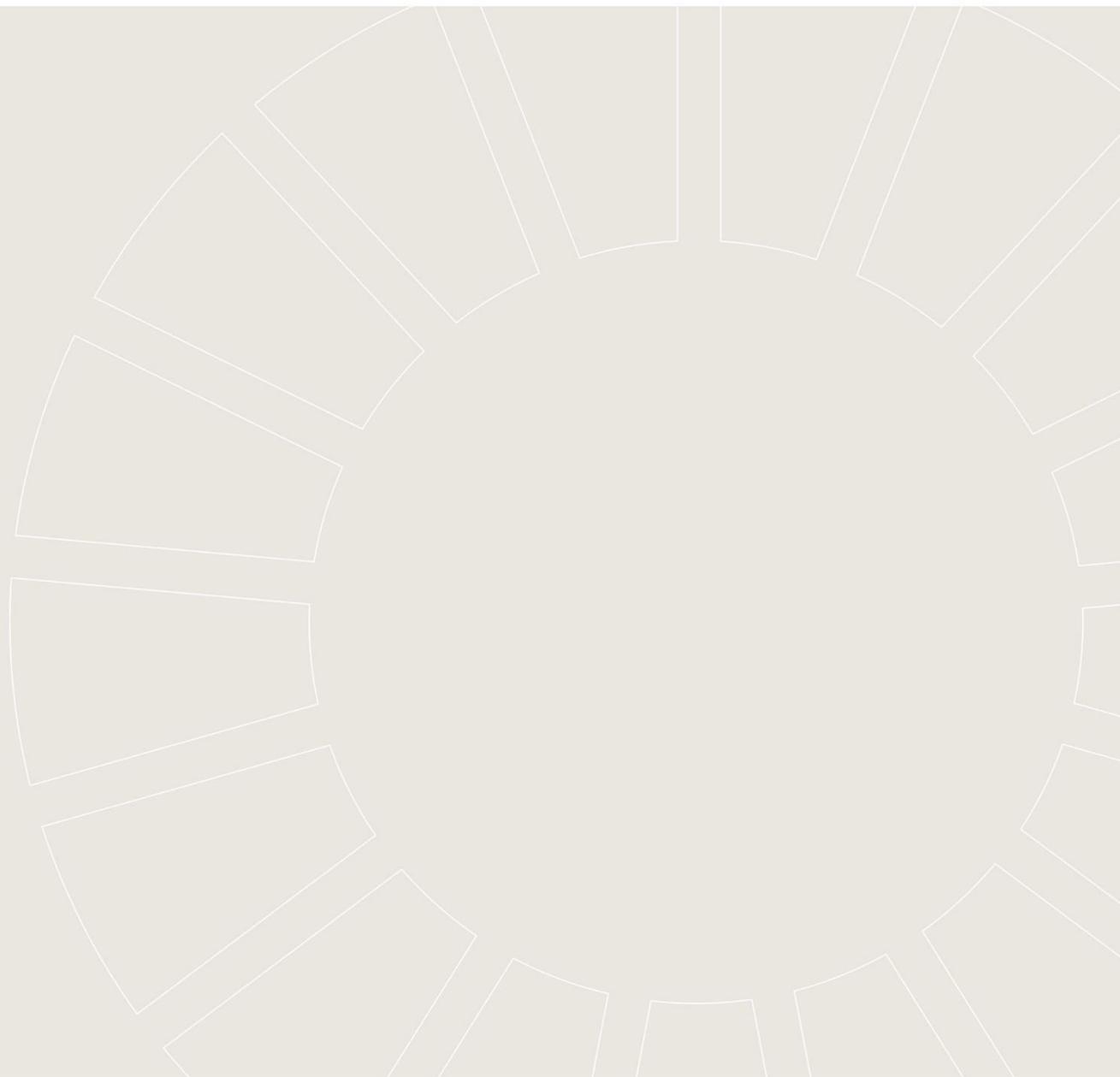
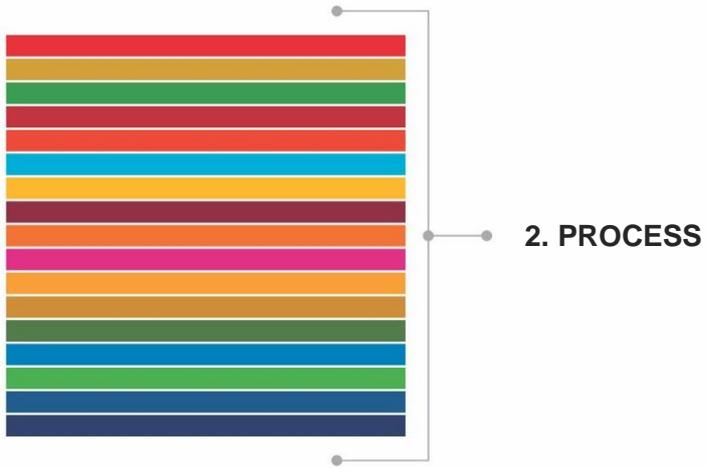
The objective of the South African SDG country report is to synthesise findings from the four thematic reports (social, economic, environment and peace, justice and security). The specific objectives are to synthesise:

- The background for all the seventeen goals in the context of social and economic upliftment, environmental sustainability, peace and justice.
- The lessons learnt from the MDG era and the transition to the SDGs.
- The overarching policies and strategies to accelerate the achievement of the SDGs in South Africa.
- Progress made towards achieving the SDGs, using selected targets and indicators with data and reflecting on related challenges that affect the achievement of the SDGs by 2030.
- Interlinkages among the different goals and identify potential spinoffs to leverage from.
- Priorities and accelerators based on the interlinkages for the South African government to consider in deriving its long-term development initiatives in the context of the 2030 agenda.

1.4 Report structure

The South African SDG country report is divided into five sections including this introduction, which covers the background and the transition from the MDG era. Section 2 looks at the processes followed, the type of data provided for the different indicators and the process of collecting and collating such data. Section 3 presents the South African context in terms of challenges and the potential spinoffs arising from interlinkages among the different goals. Section 4 presents a summary of the relevant overarching policies and progress for the SDG indicators that have data. Section 5 concludes with the priorities and accelerators based on the interlinkages among the respective goals.





2.1 Building on the SDG Indicator Baseline Report 2017

In 2017, Statistics South Africa (Stats SA) released South Africa's *SDG Indicator Baseline Report*. This report covered 98 (63%) indicators with reliable data out of 156 Tier I and Tier II indicators that had agreed standards and methods. The different tiers are UN classification of data and defined below as per the *SDG Indicator Baseline Report*.

- Tier I: Indicator is conceptually clear, has an internationally established methodology and standards are available, and data is regularly produced by countries for at least 50 per cent of countries and of the population in every region where the indicator is relevant.
- Tier II: Indicator is conceptually clear, has an internationally established methodology and standards are available, but data is not regularly produced by countries.
- Tier III: No internationally established methodology or standards are available yet for the indicator, but methodology/standards are being developed.

In 2019, the SDG country report focuses on 199 Tier I, II and mixed/multiple indicators (as at December 2018 UN Tier classification). As shown in Table 2, South Africa is able to report on 64% (128 out of 199) of these indicators. Figure 1 provides a graphic representation of South Africa's SDG data availability.

SDG	Number of SDG targets	Number of SDG Tier I & Tier II indicators to report on	Number of Tier I & Tier II indicators (either SDG or Domesticated) with data	Percentage of Tier I & Tier II indicators (either SDG or Domesticated) reported on (%)	Number of additional indicators with data
SDG 1 ^(a)	7	11	8	73	1
SDG 2	8	13	6	46	0
SDG 3	13	26	19	73	6
SDG 4	10	9	8	89	5
SDG 5 ^(e)	9	14	9	64	2
SDG 6	8	11	11	100	0
SDG 7	5	5	4	80	2
SDG 8 ^(b)	12	15	11	73	2
SDG 9	8	12	7	58	1
SDG 10 ^(c)	10	10	5	50	0
SDG 11 ^(a)	10	11	5	45	1
SDG 12 ^(b)	11	5	2	40	0
SDG 13 ^(a)	5	3	1	33	0
SDG 14	10	6	2	33	1
SDG 15	12	11	6	55	0
SDG 16 ^{(c) (d) (e)}	12	18	15	83	5
SDG 17 ^(d)	19	19	9	47	0
TOTAL	169	199	128	64	26

(a) SDG 1, SDG 11 and SDG 13 share an indicator

(b) SDG 8 and SDG 12 share an indicator

(c) SDG 10 and SDG 16 share an indicator

(d) SDG 16 and SDG 17 share an indicator

(e) SDG 16 and SDG 5 share an indicator

Table 2: South Africa's SDG data availability in 2019



2.2 Features of South Africa’s 2019 SDG reporting process

2.2.1 Iterative

The drafting of the Country Report is the culmination of an iterative process that consisted of three phases and all three phases was coordinated by Stats SA. During the first phase, various experts were commissioned to draft 17 preliminary SDG Goal Reports. These reports formed the basis for numerous engagements with key stakeholders from all sectors. Goal Reports were updated after each engagement with stakeholders. Stakeholders were ultimately responsible for validating Goal Reports.

In the second phase, Goal Reports were used as the basis for compiling four Thematic Reports, which covered the following SDGs:

- Social Thematic Report: SDG 1, SDG 2, SDG 3, SDG 4 and SDG 5
- Economic Thematic Report: SDG 8, SDG 9, SDG 10, SDG 12 and SDG 17
- Environmental Thematic Report: SDG 6, SDG 7, SDG 11, SDG 13, SDG 14 and SDG 15
- Governance, Peace, Justice and Security Thematic Report: SDG 16

Draft Thematic Reports were used as the basis for engagement with stakeholders in a process similar to the drafting of the Goal Reports.

During the third phase, Thematic Reports were used to compile the Country Report. The draft Country Report was discussed with stakeholders and updated in a participatory and iterative process. Report-writing teams also drew on three secondary sources of information for analysis sections, namely peer-reviewed research, publicly available reports by reputable institutions and government publications on policies and programmes. The drafting of the Country Report is the culmination of an iterative process that consisted of three phases, as shown in Figure 2



Figure 2: The SDG Country Report writing process

2.2.2 Inclusive

Stats SA took responsibility for ensuring the inclusivity of the report-writing process. Representatives from a wide range of government departments and other organisations attended and contributed to the report-writing and validation processes. This included representatives from the *national government departments, provincial governments, cities and municipalities, United Nations agencies, civil society organisations, research institutions and state-owned companies.*

2.2.3 Evidence-based

The principal source of evidence on which this report is based is official data provided by Stats SA. Stats SA is a national South African government department and accountable to the Minister in the Presidency.



It is regulated by the Statistics Act (Act No. 6 of 1999), which mandates Stats SA 'to advance the production, dissemination, use and coordination of official and other statistics to assist organs of state, businesses, other organisations and the public in planning, monitoring and decision-making'. Stats SA's independence and the impartiality of its statisticians are guaranteed and safeguarded by the Statistics Act.

Report-writing teams also draw on three secondary sources of information, namely peer-reviewed research, publicly available reports by reputable institutions, and publicly available policies.

Report-writing teams were required to follow a standardised analysis methodology. In a first step, the policy environment of the respective SDGs was analysed, with a particular focus on relevant policies, linkages to the NDP, and interlinkages between different policies, formulated in terms of the respective SDG targets. Interlinkages with other SDGs were motivated in terms of peer-reviewed literature and authoritative reports. Special attention was given to the extent to which improvement in the quality of life of the most vulnerable groupings is prioritised.

In a second step, data provided by Stats SA was used to chart progress and challenges with respect to identified indicators. Special attention was again given to interlinkages between targets and across SDGs, and to the extent to which the quality of life of the most vulnerable groupings has improved or deteriorated. In a third step, priorities and selected accelerators were identified. This information was sourced from policies, societal actors and academia.

2.2.4 Coherent

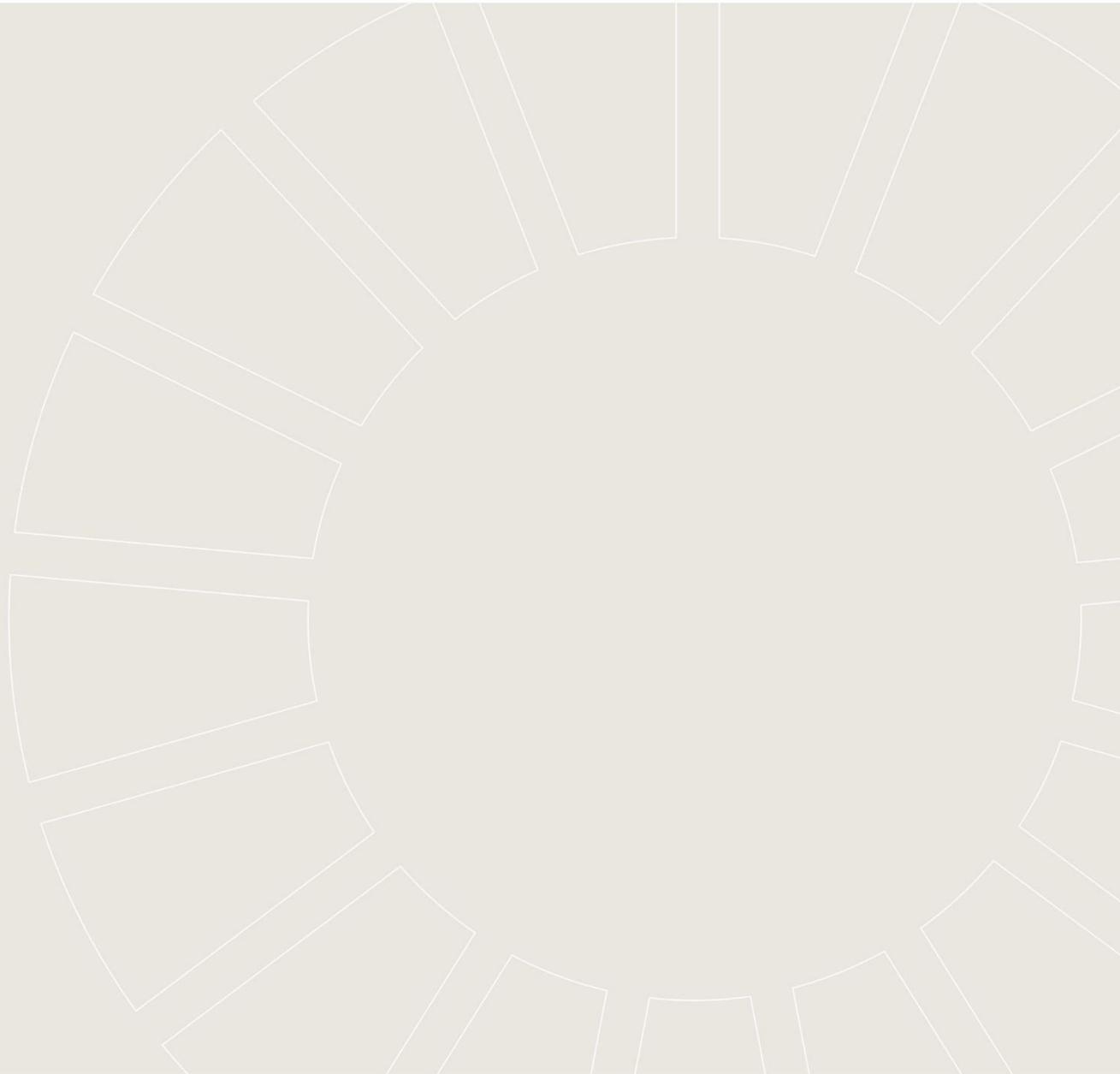
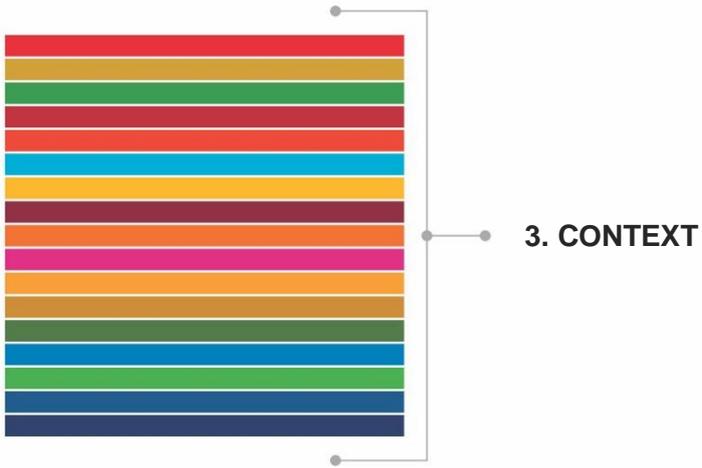
Close collaboration between Stats SA and the Department of Planning, Monitoring and Evaluation (DPME), which is responsible for the drafting of South Africa's 2019 Voluntary National Review (VNR), ensured coherence between the SDG Report and the VNR. An interdepartmental agreement ensured that draft Goal, Thematic and Country Reports could be used to draft the VNR.

2.3 Report validation

The respective goal and thematic reports were shared and reviewed with the respective Sectoral Working Group (SWG), which consisted of the relevant stakeholders from different sectors, including civil society. In addition to the SWG reviews, the SDG reports were validated by national stakeholders through engagement meetings convened by Statistics South Africa. Review feedback from both the SWGs and the national validation meetings was addressed in the respective goal and thematic reports. The country report used inputs from the different SDG reports synthesised through the four thematic reports.

2.4 Data limitations

Like any developing country, South Africa faces limitations in terms of data availability for some indicators. For example, not all indicators had disaggregated data at the subnational level, or in terms of sex and disabilities as required for some of the global indicators. This limitation is partly due to challenges arising from limited resources like finance to collect and collate data at such disaggregation. Where possible, global SDG indicators have been domesticated or additional indicators have been used to reflect the situation at the local level. This implies that progress for some of the SDGs is limited to the indicators with data for this 2019 reporting cycle.



3.1 South Africa at a glance

South Africa is a medium-sized country with a culturally diverse population. Its economy is amongst the largest in Africa and it is classified as an upper-middle-income country. Figure 3 provides an overview of a selection of South Africa's key characteristics.

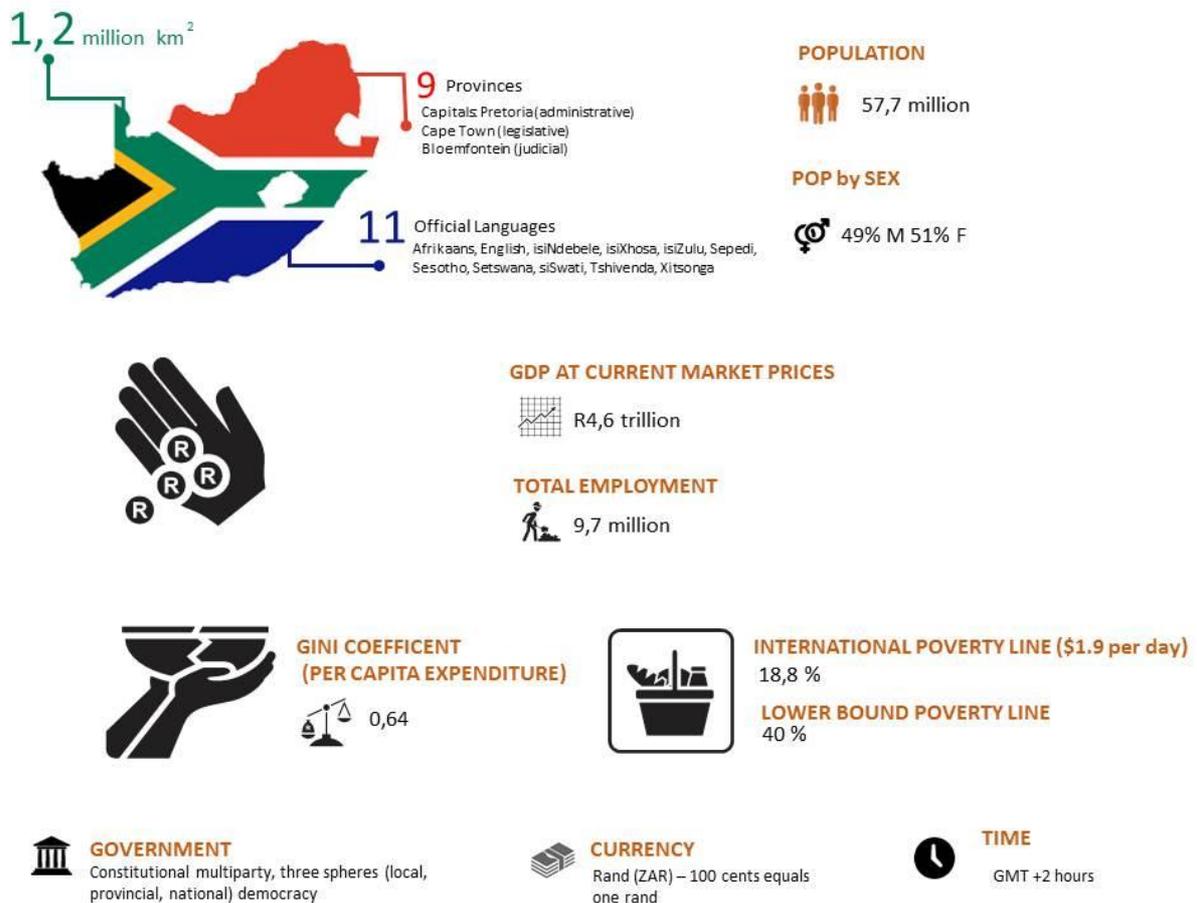


Figure 3: South Africa at a glance
Data source: Stats in Brief, Stats SA (2018)

3.2 Context and challenges to development

Based on our history of South Africa having come out of Apartheid 25 years ago, it bears noting that since 1994, good progress has been made in improving the lives of South Africans through the establishment of a solid foundation for democratic governance. This led to those who were excluded by the apartheid government to realise increases in access to education, provision of human rights, dignity accorded to people, health services, water, electricity, housing and social protection. Nevertheless, the country continues to struggle with the racial divisions, inequalities and poverty generated by apartheid. Ensuring universal access to critical services, particularly education, is essential to improve equity and equality to empower people to achieve their dreams for economic advancement.

The SDGs provide South Africa with an ambitious vision to address and ultimately solve its most pressing societal challenges. Few would disagree that high levels of inequality and persisting poverty are among the most urgent of these challenges.



According to recent data on global inequality, South Africa had a Gini coefficient (based on per capita expenditure) of 0.64 in 2015, making it one of the most unequal countries in the world. The per capita income Gini coefficient measures the extent of inequalities arising from access to income from wages, salaries and social grants, while per capita expenditure is based on consumption.

Figure 4 shows that income inequality is higher than consumption inequality. This may suggest that high consumption inequality is perpetuated by income inequality.

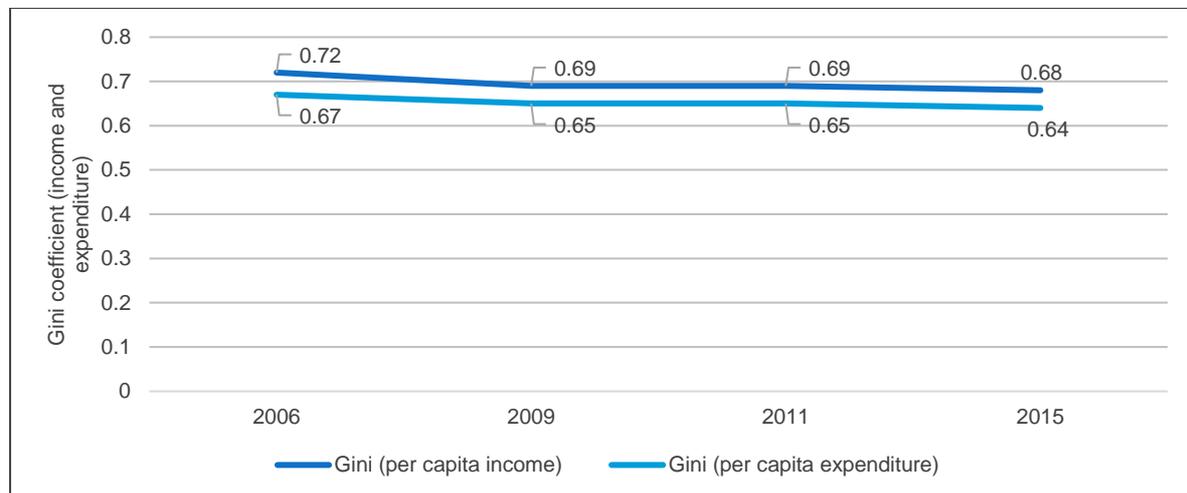


Figure 4: Gini coefficient based on per capita income and expenditure
Data source: Poverty Trends in South Africa, Stats SA (2017)

The inclusiveness of South Africa's consumption growth remains slow and wealth inequality continues to grow. The bottom 40% of the population has had consumption growth of 3.5% between 2006 and 2011 and a deceleration of 1.4% between 2011 and 2015. The world median in this period was 3.9%. South Africa's wealth inequality is even higher than its consumption inequality. Based on data collected between 2008 and 2015, the top percentile of households holds 70.9% of the wealth, with the bottom 60% holding a mere 7% (World Bank, 2018a).

South Africa has fared better in addressing poverty. The proportion of the South African population living below the international poverty line of \$1.9 per day decreased from 25.4% in 2006 to 18.8% in 2015. The trend shows a decline over a 10-year period, even though there are fluctuations showing a regress between 2011 and 2015. A World Bank report released in March 2018 similarly indicates that between 2006 and 2015, approximately 2.3 million South Africans escaped poverty, when using the national lower-bound poverty line of R758 per person per month in 2017 prices (World Bank, 2018a). Another analysis found that drivers of poverty entry and exit were changes in household composition (Finn and Leibbrandt, 2017). In addition, 23% of the sampled members used grant income as the main trigger leading to poverty exit between 2008 and 2015.

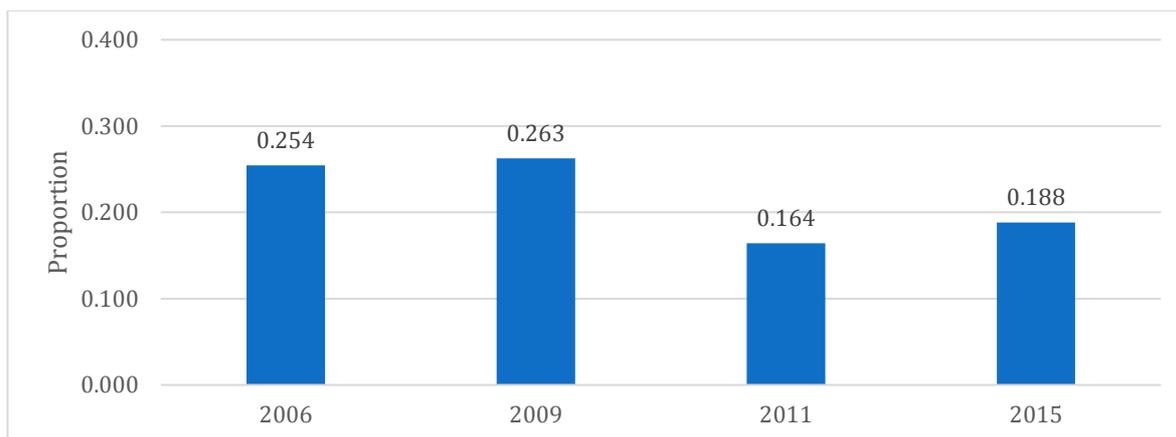


Figure 5: Proportion of South African population below the international poverty line
Data sources: IES 2006, LCS 2009, IES 2011, LCS 2015, Stats SA

According to Stats SA’s Living Conditions Survey (LCS), more than one out of every five adults (25.2%) were living below the food poverty line in 2015, while a third (33.8%) were living below the lower-bound poverty line and approximately half (40%) were living below the upper-bound poverty line. A South African’s likelihood of being trapped in poverty is to a large extent determined by gender, race and location. Figure 6 shows that female South Africans are more likely to live below the lower-bound poverty line than men. Table 3 shows that black South Africans are far more likely to be poor than white, Indian or coloured South Africans.



Figure 6: Percentage of people living below the LBPL by sex
Data sources: IES 2006, LCS 2009, IES 2011, LCS 2015, Stats SA

	2006	2009	2011	2015
South Africa	51.0	47.6	36.4	40.0
Black African	60.0	56.5	43.4	47.1
Coloured	35.7	30.4	20.2	23.3
Indian	5.0	4.3	2.9	1.2
White	0.6	1.1	0.5	0.4

Table 3: Percentage of people living below the LBPL across population (% of total population)
Data sources: IES 2006, LCS 2009, IES 2011, LCS 2015, Stats SA

In terms of labour force participation, there is a correlation between the labour force participation rate and poverty across provinces. A correlation analysis shows that provinces with low labour force



participation rates are likely to have a higher level of poverty. A low labour force participation rate is caused by a number of factors such as poor education, lack of economic opportunities, location, gender and race – factors that are also strong drivers of poverty.

Inequality is also visible in South Africans' vulnerability to crime. In 2018, it was estimated that 2% of police stations recorded 20% of all murders, and that 13% recorded 50% of murders (Faull, 2018). Within these precincts, it is almost certain that violence and murder are clustered in hot spots known to local police. Targeting these could significantly reduce murder and other violence.

3.3 Overcoming inequality and poverty

Since its first democratic election in 1994, South Africa has made concerted efforts to overcome its high levels of inequality and pervasive poverty. In 1994, the RDP was declared the first national development policy framework. The RDP's overarching aim was to 'mobilise all people and the country's resources toward the final eradication of the results of apartheid' by building a 'democratic, non-racial and non-sexist future' (Office of the President, 1994).

Underlying the RDP was the notion of 'social transformation', which included redressing apartheid political and economic inequalities through meeting basic needs, poverty eradication, democratisation, redistribution and securing human rights (Groener, 2000). Five programmes were identified as key to realising this social transformation:

- Meeting basic needs, focusing on jobs, land, housing, water, electricity, telecommunications, transport;
- Human resource development, focusing on education and training;
- Building the economy by addressing structural matters such as racial and gender inequalities;
- Democratising the state, focusing on a 'people-centred approach'; and
- Creating structures to implement the RDP.

In 1996, the GEAR macroeconomic policy was formulated. GEAR was formulated and implemented as an extension of RDP, with the intertwined aims of meeting basic needs, developing human resources, increasing participation in the democratic institutions of civil society and implementing the RDP in all its facets (Department of Finance, 1996). GEAR focused on reducing restrictions on direct foreign investment, promoting the privatisation of state assets, export-led growth, and integration into the global economy as a model for economic development. The macroeconomic strategy targeted an economic growth rate of between 3% and 6% by 2000, and 400 000 jobs to be created during the corresponding period.

The *Accelerated and Shared Growth Initiative for South Africa* (AsgiSA) was launched in 2006. AsgiSA was based on addressing six constraints to inclusive economic growth, namely:

- Deficiencies in government's capacity to delivery programmes;
- The volatility of the currency;
- Low levels of investment infrastructure and infrastructure services;
- Shortages of suitably skilled graduates, technicians and artisans;
- Insufficiently competitive industrial and services sectors and weak sector strategies; and
- Inequality and marginalisation.



AsgiSA responded to these 'binding constraints' by prioritising infrastructure programmes, industrial strategies, skills and education initiatives, interventions in the so-called 'second economy', and attending to macroeconomic and public sector issues.

After extensive consultation, South Africa adopted the *NDP* in 2012. Its adoption was preceded by the National Planning Commission's (NPC) Diagnostic Report, which outlined South Africa's achievements and shortcomings since 1994 (NPC, 2011a). The Diagnostic Report identifies persistently high levels of unemployment, low quality of education provided especially to black South Africans, inadequate and poorly located infrastructure, South Africa's resource-intensive and therefore environmentally unsustainable growth path, an 'ailing' public health system, an inefficient public service, corruption and a lack of social cohesion as the main challenges that face South Africa.

In response to these grand challenges, the *NDP* identifies nine focus areas, namely:

- Creating employment;
- Expanding infrastructure;
- Transitioning to a low-carbon economy;
- Transforming urban and rural communities;
- Improving education and training;
- Ensuring quality healthcare;
- Building a capable state;
- Fighting corruption and improving accountability; and
- Consolidating social cohesion.

The *NDP* aims to eliminate poverty and reduce inequality by 2030 by reducing the proportion of households with monthly income below R419 per person from 39% to zero and to reduce the Gini coefficient from 0.69 to 0.60. To achieve this, the plan emphasises inclusive economic growth. The *NDP* also provides a long-term strategy to increase employment. It identifies a number of sectors through which employment and opportunities can be created. These include education, vocational training and work experience, public employment programmes, health and nutrition, and public transport, among others. To reduce the effects of poverty in the short term, the *NDP* made a number of proposals.

- Introduce active labour market policies and incentives to grow employment, particularly for young people and in sectors employing relatively low-skilled people.
- Expand public employment programmes to one million participants by 2015 and two million by 2020.
- Strengthen primary health-care services, broaden district-based health programmes, such as community health worker and midwife programmes.
- Expand welfare services and public employment schemes, enabling the state to service and support poor communities, especially those with high levels of crime and violence.
- Improve the quality of education in underperforming schools and in further education and training colleges.
- Promote mixed housing strategies and more compact urban development to aid with access to services.

- Invest in public transport to benefit low-income households facilitating mobility.
- When turning to South Africa's national programmes aimed at addressing inequality and poverty, two large-scale initiatives stand out.

When compared to other middle-income countries (MICs), South Africa has an extensive social support system. The system consists of social insurance for those in formal employment and social assistance for those not covered by social insurance, notably vulnerable groups and people. Funds for social insurance in the public sector are raised through levies and taxes such as the Unemployment Insurance Fund, Road Accident Fund and Compensation Fund, while those for social assistance are financed out of the national budget. Social insurance is considered as a poverty-prevention rather than a poverty-reduction measure. In the private sector, social insurance takes the form of retirement insurance, health insurance and life insurance for those in formal employment.

Social security grants are the largest poverty-reduction programme in South Africa and administered by the Department of Social Development. They provide financial assistance to about 17 million people and include old-age pensions, child support grants, disability grants, care dependency grants, grant-in-aid and foster child grants.

The social grants are based on sections 24 through 29 of the Bill of Rights in the Constitution, which recognizes the socioeconomic rights of South African people (GroundUP, 2017). Old-age pensions are available to the elderly; disability grants are made available to children and adults with disability; child support grants are for poor children, and foster care grants are received by those fostering children of other parents. It is estimated that 71.9% of elderly people received an old-age pension by 2015, while 92.2% of those classified as poor received social grants. Child support grants were provided to 34.3% of households with children. The care dependency grant is for caregivers to help them care for people with mental or physical disability. Grant-in-aid is provided to recipients of old-age pensions, or disability or war veteran grants for those requiring regular care.

In cases where families are unable to provide for their children's basic needs, assistance must be given by the state (Delany et al., 2016) through the *Child Support Grant* (CSG) and other types of grants. It has been postulated that social grants enable caregivers to buy food and other basic items, and there is a correlation between the CSG and improved health and nutritional outcomes for children (Delany et al., 2016). This indicates the essence of the grant system run by the DSD, namely to enable access to food by the vulnerable and the poor.

South Africa's *Expanded Public Works Programme* (EPWP) emanated from the Growth and Development Summit of 2003. This programme supports government policy priorities of decent work and sustainable livelihoods, education, health, rural development, food security and land reform (EPWP, 2017). The programme seeks to provide poverty and income relief through temporary work for the unemployed to carry out socially useful activities. The programme targets infrastructure, non-state, environment and culture as well as social sectors. The programme also offers training and enterprise development support to those it employs. The sectors and types of jobs created through the programme accommodate employees with relatively low levels of education and work experience (NDA, 2013).

The EPWP covers a very wide range of sectors. An illustrative example of its impact and potential for reaching both economic and environmental objectives is the 'Working on/for' programmes run in the environmental sector. These programmes are part of promoting the environment as a sector for job creation in South Africa. There is a general split between infrastructure-related EPWP programmes (waste, coasts and land) and those related to natural resources (water, ecosystems, forests, wetlands and fire). The former straddle environmental protection, conservation and sustainability goals, creation of work opportunities, and skills development for the purposes of enabling beneficiaries to secure



permanent employment. The latter series span water resources management, biodiversity conservation, ecosystem services and natural systems, whilst helping to ensure sustainable livelihoods opportunities.

The longstanding *Working for Water* (WfW) subprogramme emerged in 1995 to address the control of alien invasive species for protecting ecosystem services such as water resources, rangeland productivity and biodiversity (Van Wilgen and Wannenburg, 2016). The WfW initiative integrates terrestrial and freshwater conservation, biodiversity protection and ecosystem services enhancement. While this particular nexus is paramount in South Africa as a semi-arid country, the success of WfW lies in its two-pronged goal of employment creation and ecosystem protection, measured through performance indicators. These include the area of invasive alien plants treated; the number of sites where biological control agents are established; the number of emerging invasive alien species controlled; and the number of full-time equivalent jobs created (with subtargets for women, young people and people with disabilities (Van Wilgen and Wannenburg, 2016). These metrics indicate operating elements targeted at terrestrial and ecosystem conservation, land and habitat degradation as well as alien species control to collectively address the programme's objectives.

An offshoot of the WfW programme is *Working for Forests* (WfF), which has a specific focus on degraded state-owned forests. The aim is to promote the development and management of new afforestation, transform alien invasive plant stands and degraded forests into utilizable resources for use by neighbouring communities, as well as to minimise the risk of further alien plant invasions. WfF therefore lends itself to supporting sustainable forest management and invasive species control.

Another subprogramme targeted at freshwater ecosystems is *Working for Wetlands*, which was introduced in 2002 as a joint initiative between DEA, DAFF and the Department of Water and Sanitation (DWS). The subprogramme is aimed at addressing lost and/or degraded wetlands in South Africa and therefore parallels the objectives outlined in both economic and environmental targets.

The NRM directorate within the DEA also runs the EPWP subprogramme, *Working for Ecosystems* (WfE). It is primarily concerned with the problem of land and environmental degradation in South Africa. The aim is to reverse environmental degradation through ecological restoration and maintenance. This is done through regaining natural habitat composition, structure and function, and thereby enhancing ecosystem services such as carbon sequestration, water regulation and purification (DEA, 2019b). The focus on ecosystem services encompasses underlying ecosystem thinking coupled with livelihoods improvements.

Importantly, WfE also has embedded within it a Monitoring and Evaluation (M&E) programme to provide measurable reporting, data collection and collation processes. This is done in collaboration with students and education institutions with the goal of providing work opportunities, for example, in conservation agencies (DEA, 2019b). This feedback loop indicates South Africa has in place activities that support the implementation of a range of SDGs and mechanisms to monitor their effectiveness.

A final EPWP programme that sits within the NRM directorate is *Working on Fire* (WoF). Established in 2003, WoF combines land management principles and best practices for firefighting, with the need to create jobs and develop skills (DEA, 2014b). WoF relies on several supporting objectives that promote the underlying principles of environmental sustainability. These include control of invasive plants, fire damage, land rehabilitation and biomass risk-management practices. Through WoF, there are thus means for achieving the SDG land degradation targets (SDG 15). As is the case with the other EPWPs, WoF also embeds thinking around benefit-sharing and ecosystem-based poverty alleviation.

The DEA's *Working for Energy* (*Biomass Energy*) focuses on the sustainable acquisition, processing and use of biomass to produce various forms energy for various application. While these aims are more



directly linked to SDG 7, Working for Energy is an example of using terrestrial ecosystems sustainability using closed-loop waste-to-energy concepts. Similarly, the *Eco-Furniture* programme is grounded on the notion of 'value-added industries', utilising products from otherwise alien invasive species. In addition to addressing Target 15.8, the programme provides mechanisms to contribute to land restoration and rehabilitation, tree planting and various biodiversity elements of the goal.

Working for Land (WfL) is a DEA-run programme that seeks to address degradation of land as a result of desertification, overgrowing, soil erosion and other land practices in a manner that supports improvements of livelihoods. In addition, WfL promotes sustainable land use practice, including resource conservation ethics.

3.4 Localisation of SDGs in South Africa

The Constitution of the Republic of South Africa (1996) mandates local government to: provide democratic and accountable government for local communities, ensure the provision of services to communities in a sustainable manner, promote social and economic development, promote a safe and healthy environment and encourage the involvement of communities and community organisations in the matters of local government. This Constitutional mandate puts local government as the "Spinal Cord of Service delivery" for the citizens of our country. This means that local government is responsible for making the aspirations of the SDGs become real to communities, households and individuals, particularly to those who are at risk of falling behind. Therefore, scaling and accelerating local implementation of the sustainable development goals in municipalities across the country can no longer be over-emphasised.

The establishment of a countrywide system of deracialised, democratic and developmental local government was indeed a monumental achievement for the citizens of South Africa. To date local government has been able to deliver on its developmental mandate as envisaged by the 1998 Local Government White Paper and described in the objects of local government in the country's Constitution. It is therefore against this backdrop that South Africa agrees with the sentiments raised by the United Cities and Local Governments (UCLG) in the 2018 report entitled "Towards the localisation of the SDGs" that the SDGs are truly effective and context-sensitive at the local level. Moving from central to local development implies a process of decentralisation that suggests moving closer to the people.

South Africa has implemented a number of policy imperatives for planning, implementation, monitoring and reporting over the years to ensure that local government implements not its own community identified needs but provincial, national, continental and international priorities.

Development planning in the past 25 years has focused various planning tools and mechanisms for integrated planning aimed at ensuring that intergovernmental priority setting, resource allocation and implementation take place in an integrated, effective, efficient and sustainable way. The Integrated Development Plans (IDPs) are the legislated primary instruments for local development planning. The IDPs play a critical role in ensuring that local government achieves the developmental agenda and fulfil their constitutional mandate.

IDPs are required to have various Sector Plans that guide municipalities on different programmes that they implement e.g. Human Settlements Chapter (Plan), Disaster Management Plan, Transport Plan, and Water Services Plan. The alignment of the municipal plans with those at national and provincial level is also crucial.

One of the most important characteristics of the 2030 Agenda is its universality. The global goals aim to be of relevance to all community levels, from global to local. Localization of global goals and sustainability efforts have played an important role in the advancement of sustainable development



around the world. This is because it aims to engage local stakeholders in the processes that affect local, national and global development.

The service delivery imperative suggests that local institutions are better qualified to understand the needs and requirements of the people, hence allowing better public service delivery by prioritising expenditures (World Bank, 2001). Thus, decentralization implies improved accountability at all level of government.

The new District Based Service Delivery Model, is an important innovation adopted by the South African government. The model, which currently focuses on forty-four (44) districts and eight metros, will ensure coherence and integration in planning, budgeting and implementation of service delivery projects in all districts by all three spheres of government – national, provincial and local;

The model is anchored on the Intergovernmental Relations Framework Act, 2005 (Act 13 of 2005), which provides for a framework for a coordinated and integrated alignment of developmental priorities, and objectives between the three spheres of government. It is also meant to enhance other alignment initiatives like integrated development plans with a clear focus of implementing one plan in each district across all spheres of government;

Localisation of the SDG through the District Coordination Model assures the development-driven decentralization but also considers local development as an endogenous open process, for which the local government takes primary responsibility and mobilises local resources. This is seen as both complementary and supplementary to national development and further promotes local development as additional benefit in a positive sum game.

The localization approach is taken, assuming that achieving the SDGs at the local level requires the integration of decentralization and centralization “bottom up” and “top down”. Localizing the SDGs to promote a bottom-up approach to the development agenda can develop robust institutions while simultaneously having profound impacts on local communities.

It is an opportune time to move from central to local development through a process of decentralization in the context of moving government decision-making closer to people (decentralization) on the grounds of efficiency, accountability, and responsiveness.

South Africa through its democratic processes of public participation is committed to work with local government and communities to renew and plan our cities and human settlements as well as building community cohesion and personal security and to stimulate innovation and employment

The District Coordination model is further aimed at combining the benefits of both centralization and decentralization. Similarly, localisation includes advantages of a decentralised mode of governance such as tailoring priorities to the needs of local communities and promoting accountability and transparency at the local level thus, building cohesive, vibrant and resilient communities and making sure that no one is left behind.

3.5 An integrated response

An effective response to poverty and inequality requires the context-specific integration of the three dimensions of sustainable development – economic, social and environmental. Economic growth without social inclusion or at the expense of the natural environment is as unwise as environmental protection at the expense of vulnerable groups and individuals.



This is why signatories to the 2030 Agenda for Sustainable Development, in article 2 of the Preamble, commit themselves to achieving the three dimensions of sustainable development in a balanced and integrated manner.

Yet finding the balance between the three dimensions of sustainable development within a particular socio-economic environment is an ongoing endeavour requiring commitment from all major societal actors. According to a recent analysis by the UN, the integration of the three dimensions of sustainable development requires a moral commitment to the well-being of current generations as well as generations to come. This moral commitment is at odds with thinking that promotes short-term economic or political gains. Taken together, the UN emphasises four normative shifts (UN, 2015b):

- Social justice and ecological sustainability need to become fundamental policy objectives rather than marginal policy objectives;
- All stakeholders, notably policymakers, need to move beyond the short-term policy horizon to a long-term horizon that seeks the long-term benefits for all;
- Development should be defined using measures beyond only economic metrics such as Gross National Product; and
- Planetary boundaries, and with this the inability of technology to go beyond the earth's limited national resources, should be acknowledged as a given.

The integrated realization of the three dimensions of sustainable development also depends on integrated thinking on the modes of implementation. On a general level, it is clear that interlinkages should be established between sectors and societal actors, and – because of the cross-border impacts of climate change – between countries (Stafford-Smith et al., 2016). At the same time, this cannot mean that efforts at building sectoral expertise and issue-specific consensus within specific groupings of actors should be weakened (Nilsson and Persson, 2017).

In reality, integration between the dimensions of sustainable development, sectors, actors and countries should be fostered, while specific expertise, interests, challenges and strengths are strengthened.

Integrating the three dimensions of sustainable development will differ from country to country. This is certainly an issue for South Africa. As is discussed in a subsequent section, the objectives of the NDP and the SDGs show significant overlaps. At the same time, the NDP is embedded in South Africa's very specific socio-political history and realities (Fourie, 2018). The NDP explicitly seeks to redress 'the inequalities of the past'. This is a direct reference to the political ideology of apartheid, which characterized South Africa's political system before 1994 and led to the socio-economic, political and cultural exclusion of many South Africans on racial grounds. It is not possible to address South Africa's developmental challenges without responding to the legacy of apartheid, which explains many of the NDP's objectives, such as improving the poor quality of education of most black learners, correcting the poor location of infrastructure, and altering unjust spatial patterns, as well as addressing the fact that South Africa remains a divided society.

At least partly because of the legacy of apartheid, South Africa also experiences inordinately high levels of violent crime. When comparing the significant emphasis on ensuring safe communities in the NDP, with the emphasis on related themes in the SDGs, it is clear that the way in which development goals are prioritized and integrated differs from context to context.

Despite differences in the particularities of country contexts, the SDGs provide a framework not only for tracking progress and creating global accountability, but also for interrogating context-specific interlinkages between targets. Significant work in this regard has been done by the International



Science Council (ISC) (ISC, 2017) and research groups around the world. Understanding interlinkages between SDGs will enable the identification of targets with enabling effects across multiple SDGs, and with the potential to accelerate progress towards realizing the SDGs. Yet research on SDG interlinkages remains limited. This is particularly the case for SDG interlinkages in middle-income countries as well as countries in Africa.

The preparation of the South Africa SDG Country Report presents South Africa with the opportunity to investigate interlinkages between SDG targets; this could lay the foundation for identifying, in subsequent research and reports, targets with accelerating effects across numerous SDGs.

This report uses 17 Goal Reports compiled by groups of experts in the respective fields as the basis for a preliminary identification of targets with enabling effects across more than one SDG. Experts were required to complete an SDG interaction matrix, based on the ISC's SDG interaction scoring matrix, as addendum to their respective Goal Report. This provided the basis for identifying five targets with strong enabling effects across SDGs.

Based on the analysis of SDG interlinkages, the following five SDG targets were identified as those with the most enabling connections. This implies a strong relationship among these SDGs and the potential spinoffs from achieving the interlinked targets.

Target 8.1: Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7% gross domestic product growth per annum in the least developed countries

Target 8.1 emerged as the target with the strongest enabling effect across the SDGs. In many respects this is not surprising. Low rates of economic growth in South Africa have had a direct impact on its ability to expand and sustain social protection and to expand access to social services. These low rates have also impeded the country's ability to prepare for the effects of climate change – notably in the water sector and with regard to protecting key ecosystems and maintaining biodiversity hotspots.

Target 7.3: By 2030, double the global rate of improvement in energy efficiency

Target 7.3 emerged as the target with the second strongest enabling effect across SDGs. On the one hand, South Africa's energy production remains heavily reliant on coal, which impacts negatively on the country's greenhouse gas emissions. This is despite significant progress with regard to the provision of sustainable energy. On the other hand, the country's intermittent energy supply interruptions have highlighted the need for increased energy efficiency. Increased energy efficiency can contribute to a more stable electricity grid, which in turn could ensure that the most vulnerable groups continue to have access to essential services and that businesses remain productive.



Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

Eradicating poverty is inseparable from promoting access to food and ending hunger. The prominence of Target 2.1 therefore expresses the acknowledgement that without sufficient and sustained access to nutritious food, South Africans will not be able to live dignified lives. This means that they will not be able to make the most of educational and economic opportunities, which in turn will have a negative impact on the country's prospects for economic growth.

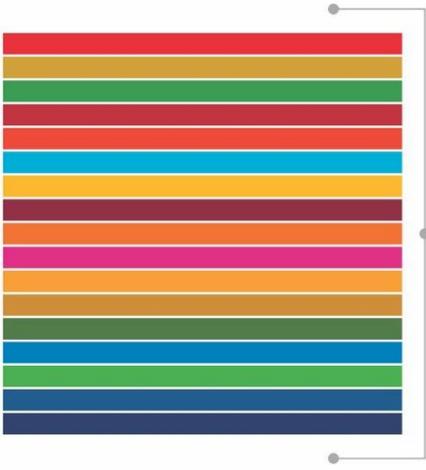
Target 5.1: End all forms of discrimination against all women and girls everywhere

In many respects gender equality is the pillar on which the other 16 SDGs rely. The achievement of the other SDGs cannot be possible if one half of the population continues to be denied basic human rights and freedoms. The basis for SDG 5 is therefore the realisation that women are an essential part of the achievement of sustainable development. This is also reflected in the identification of Target 5.1 as an important enabling target.

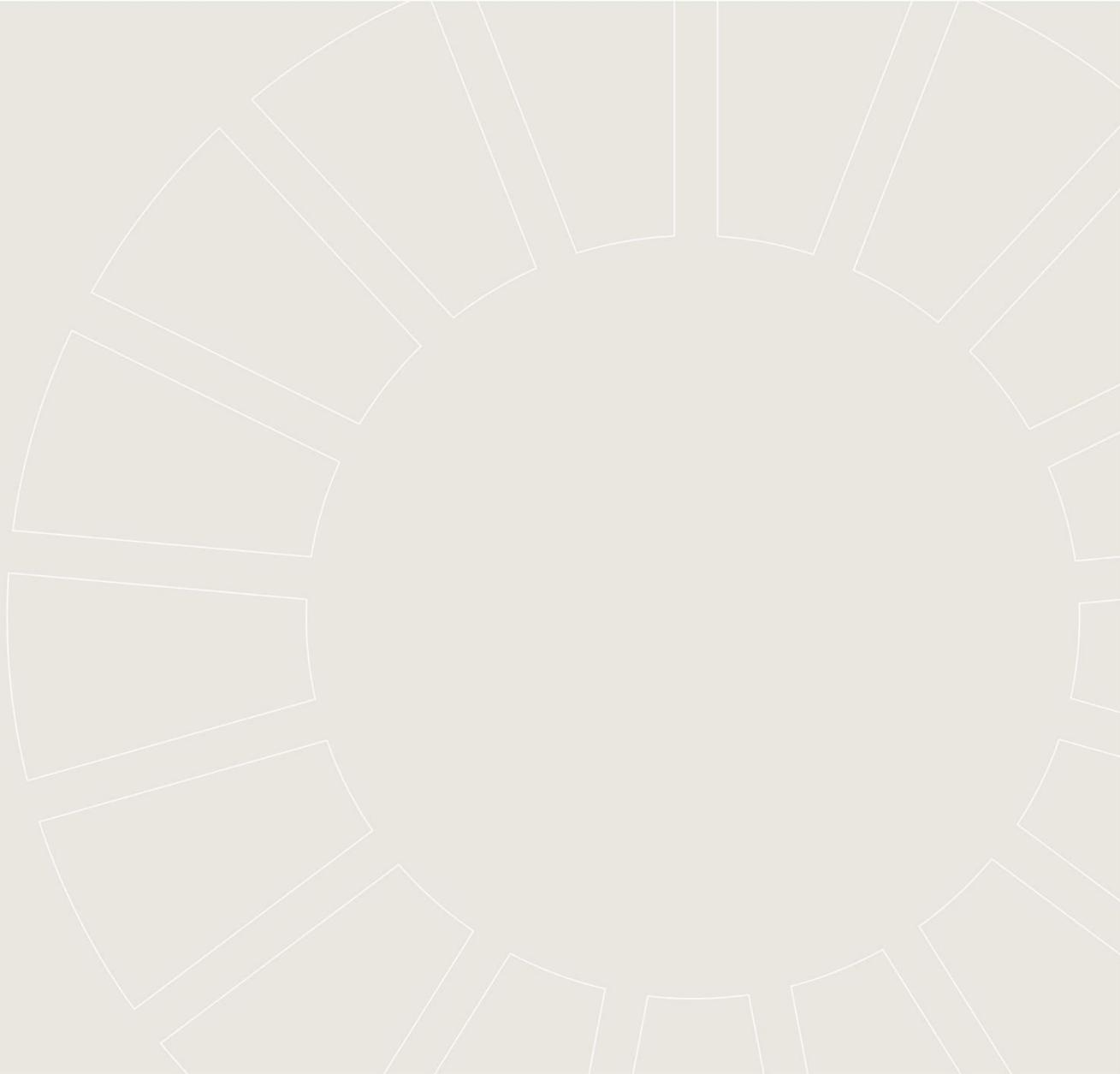
Target 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

As a water-scarce country, the expected increased variability in rainfall and an increase in droughts will have a far-reaching impact on South Africa's ability to reach the SDG targets. The deterioration of South Africa's freshwater-related ecosystems is putting further pressure on the water provision system. This can be ascribed to an increase in population, rapid urban expansion, mining activities, over-abstraction, invasive alien species and poor agricultural practices. The protection of freshwater ecosystems is crucial for ensuring that the valuable ecosystem functions of regulating flow and purifying water are preserved.





4. PROGRESS





4.1 Background on progress

South Africa's achievement of the SDGs is ultimately framed and directed by its Constitution. Acknowledged as one of the most progressive constitutions in the world, South Africa's Constitution places obligations on the state to progressively realise socio-economic rights.

These rights are inalienable and the Constitution protects first- and second-generation rights. First-generation rights cover basic rights to life, dignity, equality and privacy. Included in first-generation rights are also the fundamental freedoms associated with democracy, notably freedom of expression, association, assembly, opinion, belief and religion, and movement. Second-generation rights cover the right to health care, food, water, social security and education. All South Africans are also afforded language and cultural rights. Both the Bill of Rights and section 187 of the Constitution focuses on promoting gender equality on all levels of society.

Section 27 of the Constitution famously articulates the rights to health care, food, water and social security as follows:

- 'Everyone has the right to have access to health-care services, including reproductive health care; sufficient food and water; and social security, including, if they are unable to support themselves and their dependents, appropriate social assistance;
- The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights; and
- No one may be refused emergency medical treatment.'

Section 28 of the Constitution focuses on the rights of children, emphasising that 'a child's best interests are of paramount importance in every matter concerning the child'. These rights guarantee the right to basic nutrition, shelter, basic health-care services and social services, as well as the right to be protected from maltreatment, neglect, abuse or degradation.

Environmental rights are enshrined in section 24 of the Constitution. This section guarantees a healthy environment to all South Africans and mandates the State to ensure this right is upheld, through legislative means. Among the rights enshrined in section 24 is the right to have the environment protect for the benefit of both present and future generations. This includes preventing pollution, promoting conservation and securing ecologically sustainable development.

Despite South Africa's progressive constitutional guarantees, many South Africans do not enjoy the rights set out in the Constitution, in particular their second-generation rights. As discussed in the previous section, high levels of poverty and inequality hamper the realisation of these rights. This section discusses South Africa's progress and challenges with regard to addressing high levels of inequality and eradicating poverty. Each section is framed by the overarching policy imperatives set by the NDP.

4.2 Social goals

4.2.1 Overview

The Social thematic section presents a synthesis of the social SDGs, which include: end poverty in all its forms everywhere (SDG 1); end hunger, achieve food security and improved nutrition and promote sustainable agriculture by 2030 (SDG 2); ensure healthy lives and promote well-being for all at all ages (SDG 3); ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (SDG 4); and achieve gender equality and empower women in all spheres of life, including the economic, political and social spheres (SDG 5). The five SDGs form part of the social theme and are interrelated in different ways, such that the achievement of one goal can promote the achievement of the other towards improving social livelihoods for the majority of the population who are facing the



challenges of poverty, high unemployment and a skewed distribution of resources reflected in high inequality. The overarching challenge that cuts across all the social goals is addressing poverty, which implies that an improvement in the poverty conditions of the population can have positive spillover to drive the achievement of the other social goals. It is in view of this argument that poverty is treated as the central issue for synthesis in this thematic section.

4.2.2 Interlinkages between the social goals, the NDP and MTSF (2014–2019)

The main objective of South Africa's NDP is to ensure that all South Africans enjoy the standard of living guaranteed to them by the Constitution. According to the NDP, the core elements of a decent standard of living are:

- Housing, water, electricity and sanitation
- Safe and reliable public transport
- Quality education and skills development
- Safety and security
- Quality health care and universal health coverage
- Social protection
- Employment
- Recreation and leisure
- Clean environment
- Adequate nutrition

As such, the NDP seeks to eradicate poverty in all its forms, as articulated by SDG 1.

SDG 2 is closely aligned with the policy environment created by chapter 6 of the NDP. This chapter of the NDP prioritises the creation of an inclusive rural economy, focusing on reviewing land tenure and creating an enabling environment for micro and small farmers. These priorities are translated to outcome 7 of the MTSF (2014–2019), which focuses on creating vibrant, equitable and sustainable rural communities that contribute to improved food security.

According to the MTSF (2014–2019), this requires attention to the following:

- Improved land administration and spatial planning for integrated development in rural areas;
- Sustainable land reform contributing to agrarian transformation;
- Improved food security;
- Smallholder producer development and support for agrarian transformation;
- Increased access to quality infrastructure and functional services, particularly in education, healthcare and public transport in rural areas; and
- Growth of sustainable rural enterprises and industries – resulting in rural job creation.

SDG 3 largely corresponds with chapter 10 of the NDP, which sets the overarching goal of increasing average life expectancy to 70 years. Medium-term priorities aimed at achieving this goal is found in outcome 2 (A long and healthy life for all South Africans) of the MTSF (2014–2019).

According to the MTSF (2014–2019), the progressive introduction of universal health coverage for all South Africans by implementing National Health Insurance and thus fundamentally reconfiguring the entire health system is one of the most important enablers for better health outcomes. Added to this, attention is given to re-engineering primary health care, reducing health-care costs, improving the management of health-care institutions and improving infrastructure development. The MTSF (2014–2019) also devotes attention to the deployment of more efficient health management systems and improved training. With regard to South Africa's disease burden, the MTSF (2014–2019) highlights the effective management of HIV/AIDS and tuberculosis.



Maternal, infant and child mortality, non-communicable diseases and injuries and trauma are also highlighted as specific points of focus over the medium term.

Chapter 9 of the NDP focuses on improving South Africa's education, training and innovation outcomes, which compares well with SDG 4. It proposes a comprehensive response to South Africa's persisting educational challenges.

Early childhood development is identified as a key requirement for ensuring sustained, sustainable and inclusive economic growth. Over and above the economic benefits, the NDP also acknowledges the intrinsic benefits of early childhood development: it affords young South Africans the opportunity to live fulfilling and dignified lives. This is why the NDP sets a target of at least two years' pre-school education for all children. With regard to the quality of education, the NDP requires that 90% of all learners in Grades 3, 6, and 9 should achieve 50% or more in national literacy, maths and science assessments. Between 80% and 90% of all learners should complete 12 years of schooling or vocational training, with at least 80% successfully passing exit exams.

The unequal provision of school infrastructure remains a serious problem, which is why the NDP sets the target of eradicating all infrastructure backlogs. The NDP also acknowledges the need to invest in a quality post-school education and training beyond the university system. This is also why the building of a quality college system and industry-relevant vocational training is prioritised.

When turning to SDG 5, it is worthwhile to note that South Africa acknowledges the eradication of gender inequality as a cross-cutting issue. This has not only been targeted explicitly through the removal of previous barriers and development of empowerment mechanisms, but has also been addressed implicitly in the policies and strategies of all levels in government. The NDP intrinsically addresses the challenges South African women face by prioritising a number of subsidiary goals that affect women. With specific reference to gender, the NDP reinforces the notion that women's empowerment and participation in the economy is critical for economic transformation in South Africa. Furthermore, the NDP recommends that:

- specific focus should be placed on unemployed women in relation to public employment;
- all sectors of society should support the promotion of women leadership;
- measures should be put in place to provide women with access to basic services, as well as antiretroviral treatment and routine micro-biocides; and
- women should feel protected by law, having no fear of crime.

DPME, together with the UNDP, assessed the convergence between the NDP and the SDGs. There are several linkages between the social SDGs and a number of outcomes of the MTSF (2014–2019) and the NDP chapters. The social theme goals are the most widely covered goals within the MTSF and NDP as compared to the goals from the other three themes. These linkages, as adapted from DPME and UNDP (2018), are presented in Table 4 below.



NDP area	MTSF outcome	SDG target
Economy and employment (3)	Outcome 4: Decent employment through inclusive growth	<p>1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day</p> <p>1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions</p> <p>1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable</p> <p>1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance</p> <p>1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters</p> <p>1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions</p> <hr/> <p>2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round</p> <p>2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons</p> <p>2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment</p> <p>2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries</p>
Economic infrastructure (4)	Outcome 6: An efficient, competitive and responsive economic infrastructure network	<p>1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance</p> <hr/> <p>5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women</p>
Environmental sustainability and resilience (5)	Outcome 10: Protect and enhance our environmental	<p>1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance</p>



NDP area	MTSF outcome	SDG target
	assets and natural resources	<p>2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment</p> <p>2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality</p> <p>2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed</p> <p>2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries</p>
Inclusive rural economy (6)	Outcome 7: Vibrant, equitable, sustainable rural communities contributing towards food security for all	<p>1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day</p> <p>1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions</p>
		<p>2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round</p> <p>2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons</p>
		<p>5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws</p>
South Africa in the region and the world (7)	Outcome 11: Create a better South Africa and contribute to a better Africa and a better world	<p>2.b Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round</p> <p>2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility</p>
Transforming human settlements (8)	Outcome 8: Sustainable human settlements and improved quality of household life	<p>1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance</p>



NDP area	MTSF outcome	SDG target
Improving education, training and innovation (9)	Outcome 1: Quality basic education and skills	<p>4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes</p> <p>4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education</p> <p>4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university</p> <p>4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship</p> <p>4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations</p> <p>4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy</p> <p>4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development</p> <p>4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all</p>
	Outcome 5: A skilled and capable workforce to support an inclusive growth path	<p>4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes</p> <p>4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education</p> <p>4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university</p> <p>4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship</p> <p>4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations</p> <p>4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy</p> <p>4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development</p>



NDP area	MTSF outcome	SDG target
Health care for all (10)	Outcome 2: A long and healthy life for all South Africans	<p>1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day</p> <p>1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions</p> <p>1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance</p> <hr/> <p>3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100 000 live births</p> <p>3.2 By 2030, end preventable deaths of new-borns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births</p> <p>3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases</p> <p>3.4 By 2030, reduce by one third premature mortality from noncommunicable diseases through prevention and treatment and promote mental health and wellbeing</p> <p>3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol</p> <p>3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents</p> <p>3.7 By 2030, ensure universal access to sexual and reproductive healthcare services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes</p> <p>3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all</p> <hr/> <p>5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences</p>
Social protection (11)	Outcome 13: A comprehensive, responsive and sustainable social protection system	<p>1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day</p> <p>1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions</p> <p>1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable</p> <p>1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance</p>



NDP area	MTSF outcome	SDG target
		1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions
		2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round 2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons
		4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations 4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
Building safer communities (12)	Outcome 3: All people in South Africa are and feel safe	3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol 3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents 3.7 By 2030, ensure universal access to sexual and reproductive healthcare services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
		5.1 End all forms of discrimination against all women and girls everywhere

Table 4: Interlinkages between the National Development Plan (NDP), the Medium-Term Strategic framework (MTFS) and the social SDGs

Source: Adapted from DPME & UNDP (2018)
(Numbers in parenthesis refer to NDP chapters)

4.2.3 SDG 1: End poverty in all its forms everywhere



SDG 1 calls for an end to poverty in all its manifestations by 2030. It also aims to ensure social protection for the poor and vulnerable, increase access to basic services and support people harmed by climate-related extreme events and other economic, social and environmental shocks and disasters (UN, 2019).

SDG 1 contains the following seven targets:

- 1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day
- 1.2: By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
- 1.3: Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable
- 1.4: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance
- 1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
- 1.a: Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions
- 1.b: Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions

4.2.3.1 The policy environment

Poverty in South Africa remains strongly influenced by pre-1994 patterns of spatial development and provision of education and health-care services. Black South Africans remain the group most vulnerable to poverty. This is why South Africa has launched a range of programmes aimed at changing the structure of its economy, thereby fostering inclusive growth that reaches those furthest behind first.

In order to address the massive imbalance in landholding, the newly elected South African government also launched a land reform programme in 1994. This programme consisted of three sub-programmes, namely tenure reform, land redistribution and land restitution. The target in 1994 was to redistribute 30% of agricultural land by 2014. From its inception, land reform was aimed at correcting past injustices with regard to land distribution in such a way that it reduces poverty and improves food security.

Black Economic Empowerment (BEE) is aimed at creating fair patterns of economic participation and ownership, and in this way correcting imbalances created in the pre-1994 era. Even though referenced explicitly in the RDP, the institutionalisation and resultant acceleration of BEE can be traced back to the creation of the BEE Commission under the chairpersonship of Cyril Ramaphosa in 1999.



In response to the release of its report in 2001, the government both started ‘to bring the process of asset transfer within a legal framework to promote BEE’ and started to broaden the nature of BEE, which led to the emergence of *Broad-Based Black Economic Empowerment (B-BBEE)*. B-BBEE covered ‘human resource development, employment equity, enterprise development, preferential procurement, as well as investment, ownership and control of enterprises and economic assets’ (Acemoglu et al., 2007).

South Africa has adopted a pro-poor approach to its development policies, including policies such as the Basic Conditions of Employment Act, employment tax incentives and sectoral minimum wage laws. Yet escaping poverty remains particularly challenging for South Africans living in rural areas (for South Africa’s response to urban poverty, see SDG 11). This is why rural development is one of South Africa’s key strategies to address poverty. The *Integrated Sustainable Rural Development Strategy (ISRDS)*, which was later launched as *Integrated Sustainable Rural Development Plan (ISRDP)*, is a national intervention to address rural poverty. It does so by building socially cohesive and stable rural communities with viable institutions, sustainable economies and universal access to social amenities, able to attract and retain skilled and knowledgeable people, who are equipped to contribute to growth and development.

The *Comprehensive Rural Development Programme (CRDP)* is another national intervention aimed at eradicating rural poverty. Its aim is to ‘mobilise and empower rural communities to take initiatives aimed at control of their destiny’. Pathways to reaching this aim include achieving social cohesion and ensuring access to basic services, enterprise development and village industrialisation. The programme is based on the premise that rural areas have the potential to grow economically and thus create employment opportunities, which contributes to a reduction of rural-to-urban migration. The CRDP consists of a number of phases, namely meeting basic needs, enterprise development, and establishment of village industries and provision of access to credit facilities.

Despite these and other high-level interventions, poverty continues to persist. This is partly due to the multifaceted nature of poverty. In order to adequately identify and address patterns of poverty, South Africa uses comprehensive definitions of poverty. In line with the UN, Stats SA (2014a, 2014b) defines absolute poverty as a ‘condition characterised by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information’.

South Africa developed the *South African Multidimensional Poverty Index (SAMPI)*. This is the broader definition of poverty that recognises that poverty is multidimensional and goes beyond income to include access to basic services (Statistics South Africa (Stats SA), 2014b). The Multidimensional Poverty Index (MPI) measures serious deficits in health, education and living standards, looking at both the number of deprived people and the intensity of their deprivations. This index includes information from eight to ten indicators that are grouped into three dimensions, namely health; education and living standards.

Other internationally recognised measures of poverty include the food poverty line (FPL), the lower-bound poverty line (LBPL), and the upper-bound poverty line (UBPL). The food poverty line (FPL) is defined by Stats SA (2014a:7) as the rand value below which individuals are not in a position to purchase or consume enough food to meet their minimum per-capita-per-day energy requirement for adequate health. By 2018, it was standing at R547 (in April 2018 prices) per person per month (Stats SA, 2018b: 3).

The lower-bound poverty line (LBPL) is defined by Stats SA (2014a: 7) as a line where an individual does not have enough resources to acquire both food and non-food items and is therefore forced to



choose between food and important non-food items. The LBPL is pegged at R785 (in April 2018 prices) per person per month (Stats SA, 2018b:3).

The upper-bound poverty line (UBPL) is defined as a line below which people cannot afford the minimum lifestyle desired (Stats SA, 2014a:7) but such individuals can afford to purchase both adequate food and non-food items. According to Stats SA (2018b:3), the upper-bound poverty line is currently at R1 183 (in April 2018 prices) per person per month.

These three poverty lines enable South Africa to monitor poverty in all of its dimensions. The FPL is the rand value below which individuals are unable to purchase or consume enough food to supply them with the minimum per-capita-per-day energy requirements for adequate health. The LBPL and UBPL use the FPL as base, but also include a non-food component. Individuals at the LBPL do not have command over enough resources to purchase or consume both adequate food and non-food items, and are therefore forced to sacrifice food to obtain essential non-food items. Individuals at the UBPL can purchase both adequate levels of food and non-food items.

4.2.3.2 Indicators

Indicator 1.1.1: Proportion of the population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

Indicator 1.1.1 looks at the proportion of the population below the international poverty line, disaggregated by sex, age, employment status and geographical location. According to Stats SA (2017), about 13.8 million people are extremely poor, which means that 25.2% of the population lives in extreme poverty. The data presented in Figure 7 shows the proportion of the population living in extreme poverty between 2006 and 2015. Results show that the proportion of the South African population living below the international poverty line of \$1.9 per day decreased from 25.4% in 2006 to 18.8% in 2015. In general, the data shows a declining trend over a 10-year period, even though there are fluctuations showing a regress during 2006 and 2011, with 2009 recording the highest proportion of 26.3%.

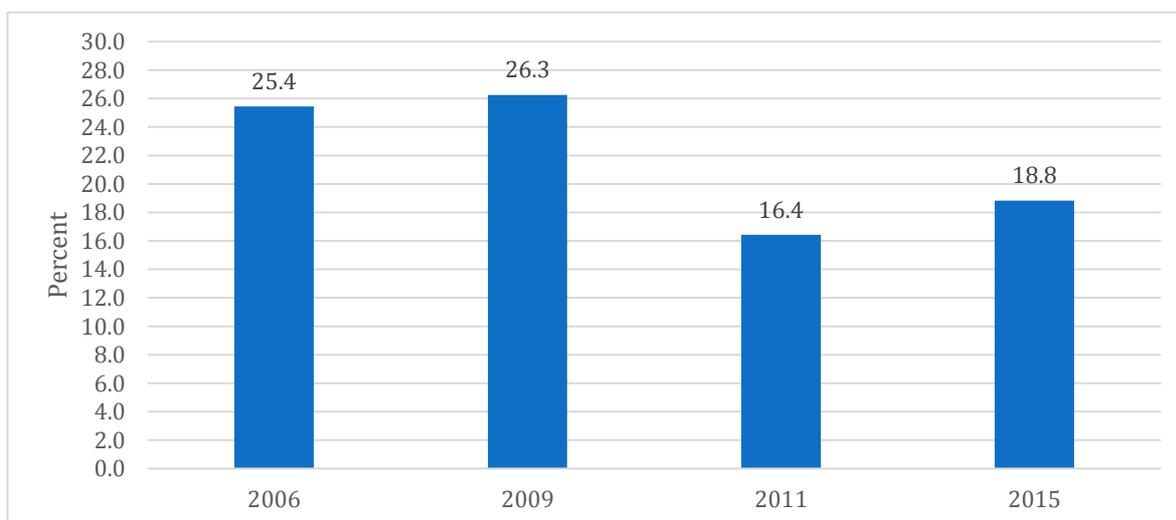


Figure 7: Percentage of South African population below the international poverty line
Data sources: IES 2006, LCS 2009, IES 2011, LCS 2015, Stats SA

Indicator 1.2.1: Proportion of population living below the national poverty line, by sex and age

This indicator measures poverty using national poverty lines, focusing on three poverty lines: the food poverty line (FPL), the lower-bound poverty line (LBPL), and the upper-bound poverty line (UBPL). Data on the FPL is represented in Figure 8, which shows a modest decline in the proportion of the population living below the FPL.

When presented as a percentage, the proportion of people who live below the FPL decreased from 28% to 25% between 2006 and 2015. However, using the FPL in absolute terms, approximately 343 000 more people were worse off in 2015 than in 2006. This reduction in FPL is relatively lower than the decline in the lower-and upper-bound measures. The data confirms the link between poverty (SDG 1) and access to food (SDG 2).

The proportions of the population living below the LBPL and UBPL are presented in Figure 8. When presented as a percentage, 51% of South Africans lived below the LBPL and almost 67% lived below the UBPL in 2006. Both measures show a decline of about 10 percentage points by 2015. These findings are in line with the general decline in the proportion of the population living in poverty. However, although the long-term poverty trend is declining, South Africa's aggregate poverty increased from 36.4% to 40% between 2011 and 2015.

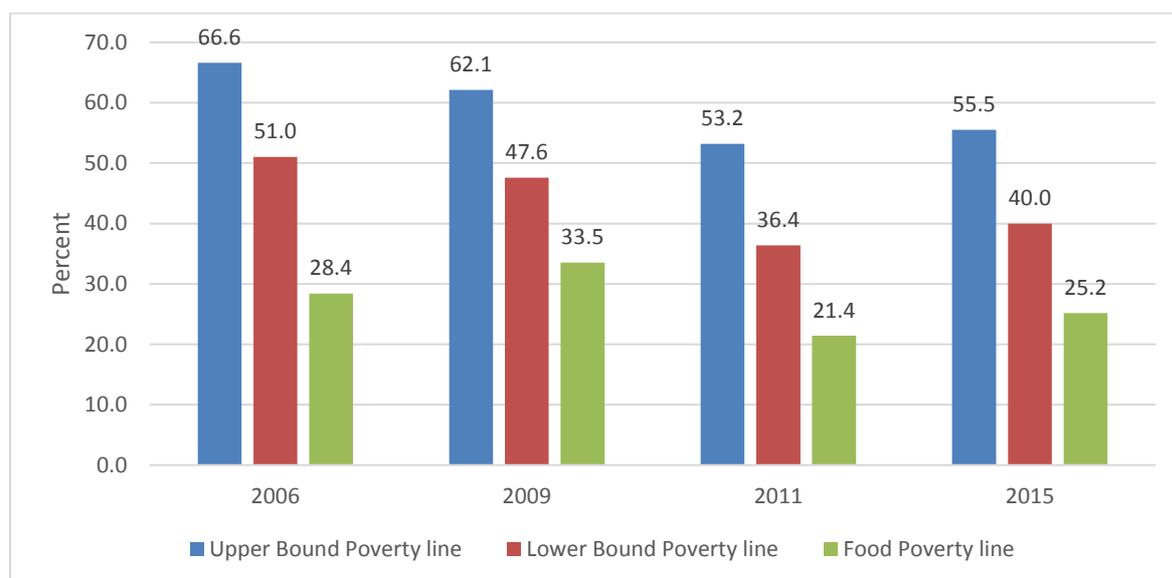


Figure 8: Percentage of South African population below the upper-bound, lower-bound and food poverty lines
Data sources: IES 2006, LCS 2009, IES 2011, LCS 2015, Stats SA

Indicator 1.2.2: Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions (SAMPI scores)

Indicator 1.2.2 uses the South African Multidimensional Poverty Index (SAMPI) – a broader definition of poverty that recognises the multidimensional nature of poverty and which goes beyond income to include access to basic services (Stats SA, 2014b). This poverty index is presented in two measures in terms of headcount and poverty intensity.

The data on the SAMPI headcount and intensity is presented in Figure 9 and shows a steady decline between 2001 and 2016. SAMPI intensity similarly declined from 43.9 in 2001 to 42.8 in 2016 (Figure 10).

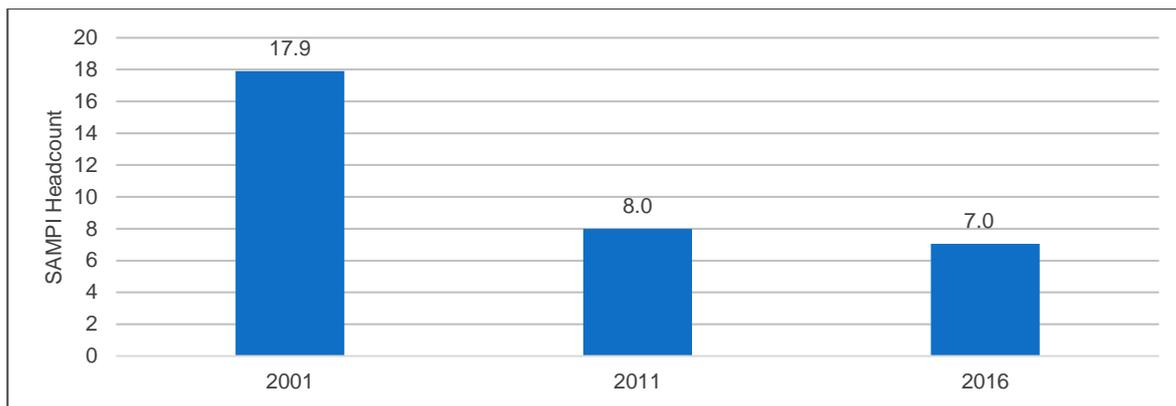


Figure 9: South African Multidimensional Poverty Index (SAMPI) headcount.
Data sources: Census 2001, Census 2011, CS 2016, Stats SA

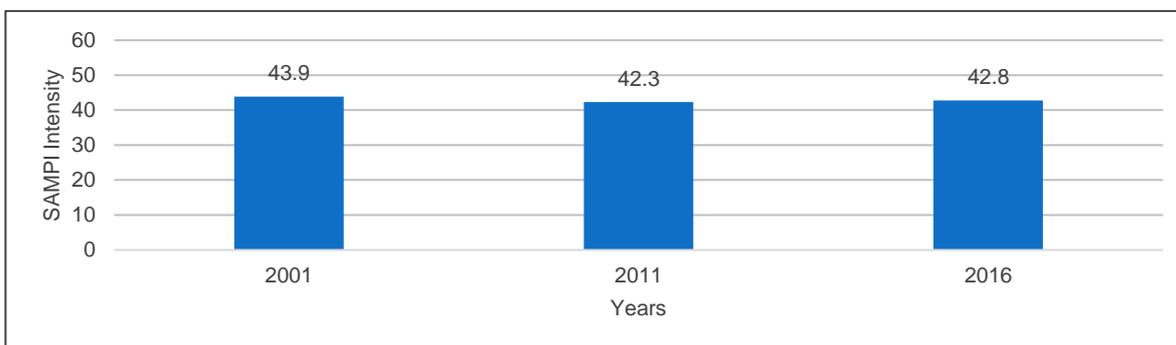


Figure 10: South African Multidimensional Poverty Index (SAMPI) intensity
Data sources: Census 2001, Census 2011, CS 2016, Stats SA

Indicator 1.3.1D: Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work injury victims and the poor and the vulnerable
Indicator 1.2.1A: Number of social grants

Social assistance has been successful in reducing extreme poverty in South Africa. By 2015, social grants had reduced the poverty headcount rate by approximately 7.9% and the poverty gap by 29.5% (Stats SA, 2018).

Figure 11 shows that the percentage of the population covered by social protection (grants) increased from 28.9% to 30.3% between 2013 and 2018.

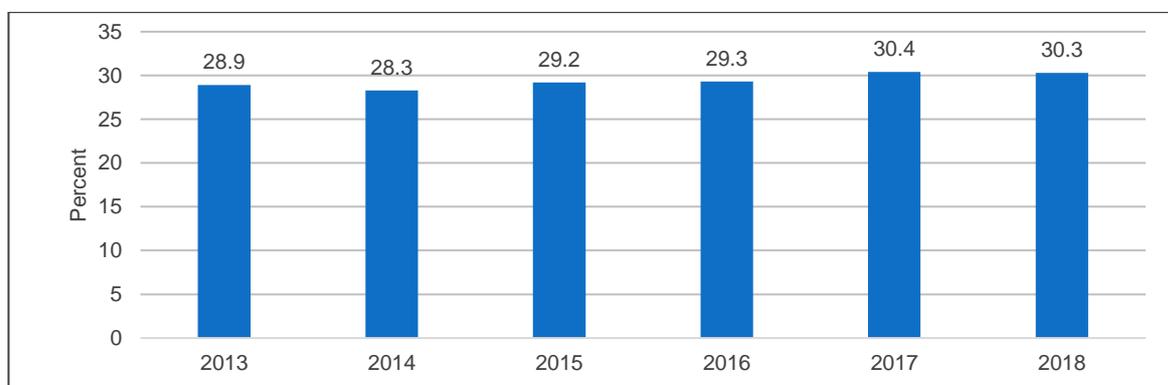


Figure 11: Percentage of people effectively covered by social protection systems
Data source: Social Pension 2013–2018, DSD



Similar to the upward trend in the percentage of people covered by social protection systems, the number of South Africans who receive social grants increased from 16 million in 2013 to 17.5 million in 2018, as shown in Figure 12.

The upward trend in the percentage of people covered by social grants was not as steep as the total number of grants received. This indicates that even though the number of people receiving social grants increased, the percentage increase was relatively small.

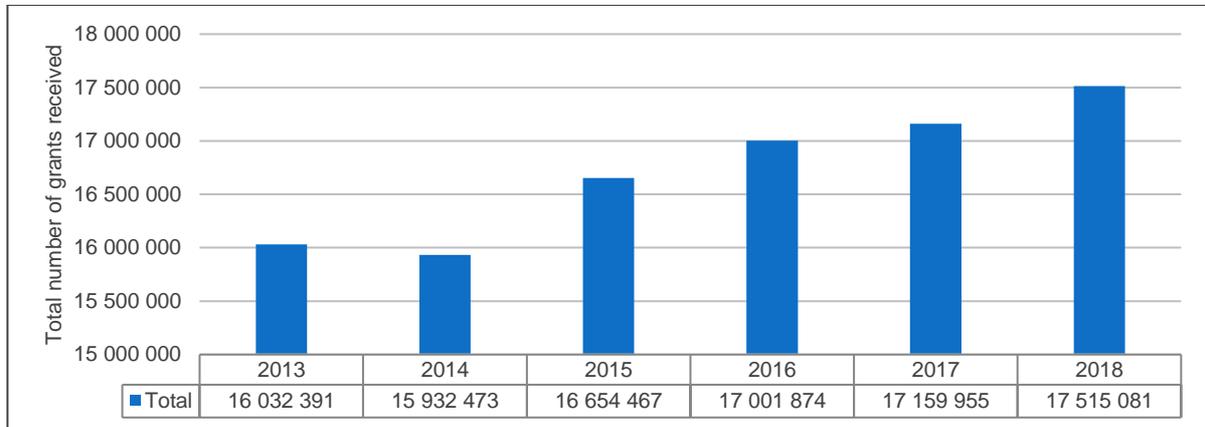


Figure 12: Number of social grants received
Data source: Social Pension 2013–2018, DSD

Indicator 1.4.1D: The proportion of the population living in households with access to improved (a) sanitation facilities, (b) electricity and (c) improved water facilities

As shown in Figure 13, the percentage of households with access to selected basic services is improving. Notwithstanding this progress, access to improved water facilities has seen a decline from 87.5% of the population in 2015 to 86.4% in 2017.

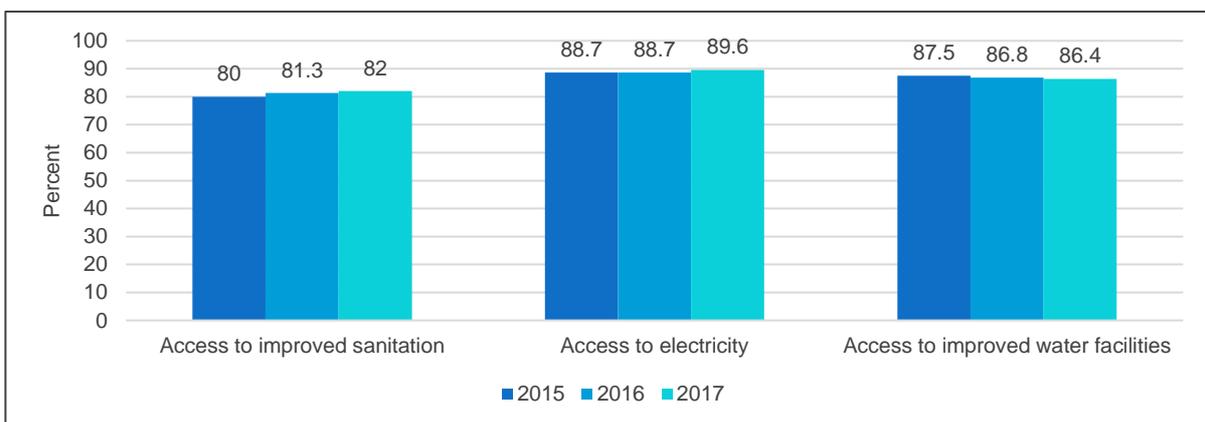


Figure 13: Percentage of population living in households with access to basic services
Data sources: GHS 2015, GHS 2016, GHS 2017, Stats SA

Figure 14 below shows access to basic services presented using LBPL by type of basic service per poverty category.

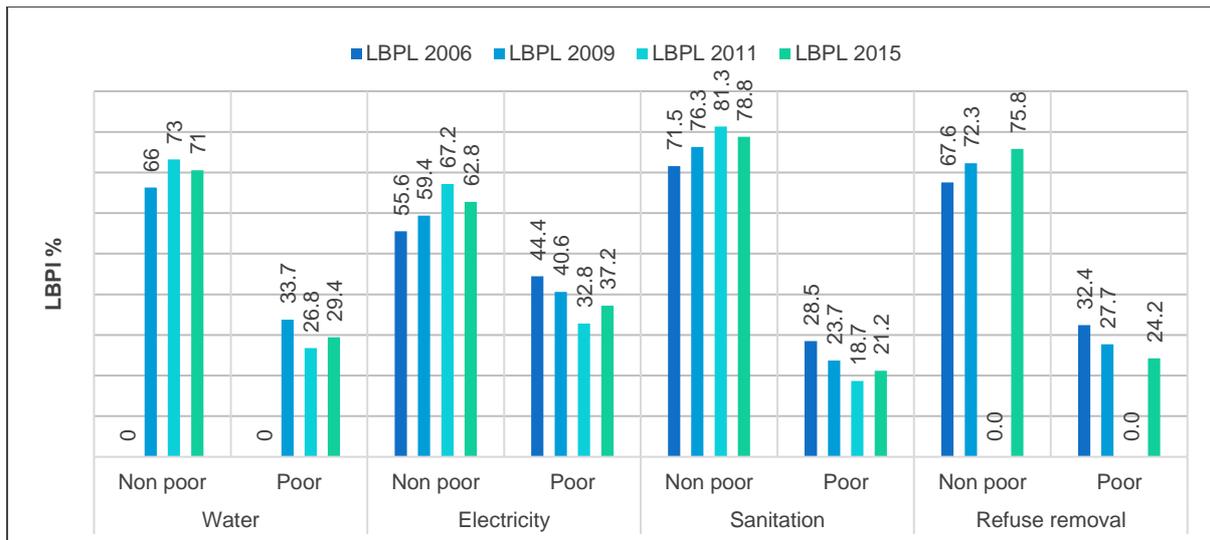


Figure 14: Percentage of households with access to basic services using LBPL
Data sources: IES 2006; LCS 2009; IES 2011, LCS 2015, Stats SA

Indicator 1.5.1D: Number of deaths, missing persons and persons affected by disaster per 100 000 people

Figure 15 shows the number of deaths as a result of natural disasters per year from 1997 to 2016. Natural disasters, as defined by this indicator, include the following: excessive exposure to excessive natural heat, excessive exposure to excessive natural cold, excessive exposure to sunlight, lightning, earthquakes, volcanic eruptions, avalanches, landslides and other earth movements, cataclysmic storms, floods and other forces of nature.

The general trend in the number of deaths caused by natural disasters has been relatively constant over time, with peaks in 2004, 2005, 2006 and 2016.

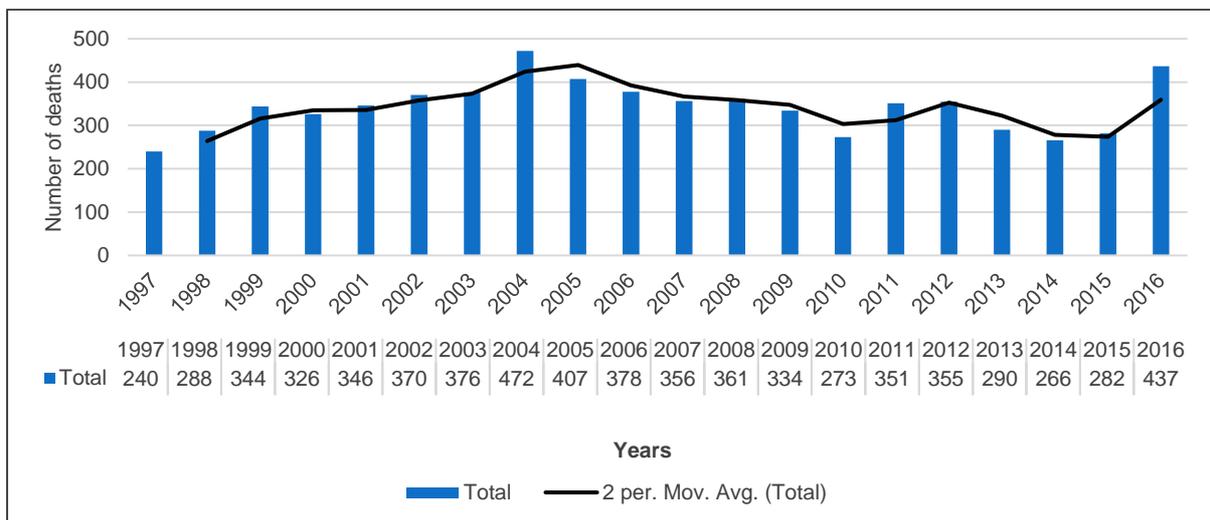


Figure 15: Number of deaths per year due to natural disasters
Data source: MCD 1997–2017, Stats SA



Indicator 1.5.3D: Number of national and local disaster risk-reduction strategies adopted by South Africa

This indicator is discussed in the section on SDG 13 as Indicator 13.1.2D. This is also reported on as Indicator 11.b.2D.

Indicator 1.a.2: Proportion of total government spending on essential services (education, health and social protection)

The South African government has implemented a 'social wage', which enables free education, free primary health care, social protection (most notably old persons' grants and child support grants), access to free housing and the provision of free basic services (water, electricity and sanitation) to poor households. The social wage is aimed at improving the quality of life of vulnerable South Africans. Figure 16 shows the proportion of total spending on essential services as a percentage of government expenditure from 2013/14 to 2015/16. The general trend over the period has been relatively constant at 0.2. When disaggregated, social development accounted for 0.11 of government spending, health accounted for 0.03, higher education accounted for 0.05 and basic education accounted for 0.02.

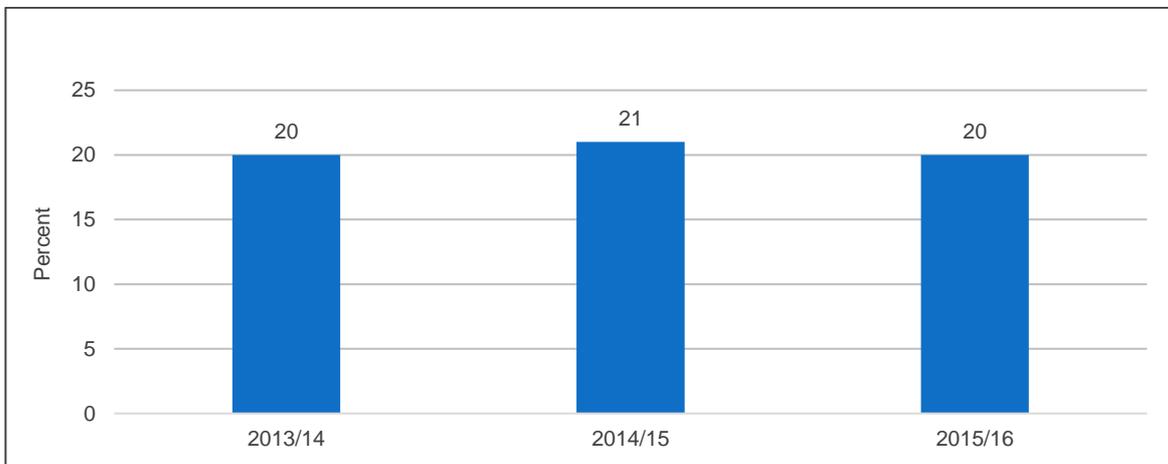


Figure 16: Total spending on essential services as a percentage of total government expenditure
Data source: National Treasury Estimates of National Expenditure 2013/2014-2015/2016

4.2.3.4 Summary

South Africa's progress with regard to SDG 1's indicators with data is summarised in Table 5 below. South Africa is able to report on eight SDG 6 indicators, of which four are Tier I or Tier II SDG indicators and four our domesticated indicators. The table shows that the number of social grants have increased (1.2.1A, 1.3.1D) and that government spending on essential services remains high (1.a.2), but that access to services (1.4.1D) seems to be on the decline.



SDG 1: End poverty in all its forms everywhere

Indicator	Key data points
1.1.1: Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)	<p>25.4% (2006), 26.3% (2009), 16.4% (2011), 18.8% (2015)</p> <p>Male: 45.9% (2006) 46.2% (2009) 45.5% (2011) 46.3% (2015)</p> <p>Female: 53.9% (2006) 53.8% (2009) 54.5% (2011) 53.7% (2015)</p>
1.2.1: Proportion of population living below the national poverty line, by sex and age	<p>Below the FPL: 28.4% (2006), 33.5% (2009) 21.4% (2011), 25.2% (2015)</p> <p>Male: 26.5% (2006), 32.0% (2009), 20.2% (2011), 23.7% (2015)</p> <p>Female: 30.1% (2006), 35.0% (2009), 22.6% (2011), 26.5% (2015)</p>
	<p>Below the LBPL: 51% (2006), 47.6% (2009), 36.4% (2011), 40% (2015)</p> <p>Male: 48.3% (2006), 34.7% (2011), 45.6 (2019), 38.2% (2015)</p> <p>Female: 53.6% (2006), 49.6% (2009), 38.1% (2011), 41.7% (2015)</p>
	<p>Below the UBPL: 66.6% (2006), 62.1% (2009), 53.2% (2011), 55.5% (2015)</p> <p>Male: 64.1% (2006), 60.1% (2009), 51.4% (2011), 53.7% (2015)</p> <p>Female: 68.9% (2006), 63.9% (2009), 54.9% (2011), 57.2% (2015)</p>
1.2.1A: Number of social grants (additional indicator)	<p>16 032 391 social grants (2013), 17 001 874 social grants (2016), 17 515 081 (2018)</p>
	<p>Male 1 863 706 (2015), 1 922 185 (2016), 1 976 180 (2017), 2 048 963 (2018)</p>
	<p>Female 14 790 761 (2015), 15 079 689 (2016), 15 183 775 (2017), 15 466 118 (2018)</p>
	<p>SAMPI headcount: 17.9% (2001), 8% (2008), 7% (2016)</p>



1.2.2: Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	SAMPI intensity: 43.9% (2001), 42.3% (2011), 42.8% (2016)
1.3.1D: Percentage of population covered by social protection systems, distinguishing children, older persons and persons with disabilities (domesticated indicator)	28.9% (2013), 29.3% (2016), 30.3% (2018)
	Male: 7.0% (2016), 7.4% (2018)
	Female: 52.2% (2016), 52.1% (2018)
1.4.1D: Proportion of population living in households with access to (a) improved sanitation facilities, (b) electricity and (c) improved water facilities (domesticated indicator)	<i>Improved sanitation</i> 80.0% (2015), 81.3% (2016), 82.0% (2017)
	Male 80.0 (2015) 81.2 (2016) 82.0(2017)
	Female 80.0(2015) 81.4 (2016) 82.1 (2017)
	<i>Improved electricity</i> 88.7% (2015), 88.7% (2016), 89.6% (2017)
	Male 87.9 (2015) 87.8 (2016) 88.7(2017)
	Female 89.5(2015) 89.7 (2016) 90.6(2017)
	<i>Improved water</i> 87.5% (2015), 86.8% (2016), 86.4% (2017)
	Male 87.6 (2015), 86.9(2016), 86.4(2017)
	Female 87.4 (2015) 86.8 (2016) 86.3(2017)
1.5.1D: Number of deaths, missing persons and directly affected persons attributed to disasters per 100 000 population	378 (2006), 351 (2011), 437 (2016)
1.5.3D: Number of national and local disaster risk reduction strategies adopted by South Africa (domesticated and duplicate indicator)	13 strategies (2019)
1.a.2: Proportion of total government spending on essential services (education, health and social protection)	20% (2013/14), 21% (2014/15), 20% (2015/16)

Table 5: SDG 1 indicator progress

4.2.4 SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture



SDG 2 contains the following eight targets:

- 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round
- 2.2: By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons
- 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
- 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
- 2.5: By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed
- 2.a: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries
- 2.b: Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round
- 2.c: Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility

4.2.4.1 Policy environment

South Africa is making progress in ending hunger. Whereas roughly 50% of the population was food secure in 2005, 75% of the population was food secure in 2008. The GHS of 2017 indicated that there was a decline in the percentage of households that were vulnerable to hunger, from 24.2% in 2002 to 10.4% in 2017. Equally, the proportion of people vulnerable to hunger decreased from 29.3% to 12.1% during the 2002–2017 period. South Africa has implemented a variety of interventions to address hunger. One of the interventions that contributed to addressing hunger is South Africa's commitment towards social assistance. South Africa is the lead country in Africa that allocates more to social assistance (3%) as a proportion of GDP (World Bank, 2018a).

Notwithstanding the progress made, over three million households were reported to have run out of money to buy food at the end of 2016, of which 90.8% of these households were black African (Stats SA, 2016). In addition, 13.0% of children under 5 years were regarded as overweight, which is more than double the global average of 6.1%. Furthermore, the percentage of children who were considered short for their age was 27% in 2016, as opposed to 23.9% in 2008. The challenge of stunting was found to be more severe in rural areas, followed by urban informal areas (DSD and DAFF, 2014). Though the two statistics cannot be compared as they were derived from different surveys, stunted growth is still a material concern in South Africa.

The South African government is championing various initiatives aimed at combating food insecurity.

The *National Policy on Food and Nutrition Security* responds to the challenge of persistent household food insecurity in South Africa. This policy is championed by DSD and DAFF, and addresses the following challenges:

- The need to streamline data collection and analysis;
- The need to strengthen existing strategies and policies related to food security;
- Steps to improve access to markets for smallholder farmers, and
- An emphasis on agro-ecological approaches to farming.

The *Integrated Food Security Strategy* (IFSS), aims to 'streamline, harmonise and integrate the diverse food security programmes' (NDA, 2002). One of the objectives of the IFSS is to overcome rural food insecurity through the increased involvement of food insecure households in productive agriculture (NDA, 2002).

The improvement in household food production by rural people was expected to create forward and backward linkages, thereby resulting in increased job opportunities for trade and distribution linked with the produce from small-scale farmers. The Cabinet approved the IFSS as a means of intersectoral action and synchronisation of food security interventions and information systems, rather than placing the emphasis on agriculture and food stocks (Hendriks, 2014).

The *Agricultural Policy Action Plan* (2015–2019), the *Integrated Growth and Development Plan* (2012), and the *Strategic Plan for the Department of Agriculture Forestry and Fisheries* (2015–2020) provide the overarching framework for strengthening the government's commitment to support smallholder producers, promote climate-smart agriculture, protect indigenous genetic resources, and redirect trade to sustainable markets, among others.

Furthermore, there is a range of policies primarily targeting infants and young children to prevent malnutrition and its long-term effects. Examples include the *South African Infant and Young Feeding Policy* and the *National Integrated Early Childhood Development Policy*. The former stresses the importance of promoting optimal nutritional status of young children (DoH, 2013b), while the latter aims to transform early childhood development service delivery by ensuring the availability of, and equal



access to, services (DSD, 2015). Moreover, the two policies are premised on achieving child survival and optimum health outcomes.

There are key programmes to enhance access to food through increased exposure to economic opportunities at household level. Key examples include the Fetsa Tlala Food Production initiative and the One Household One Hectare (1HH 1H) programme, led by DAFF and DRDLR, respectively.

The government, through its *National School Nutrition Programme* (NSNP), strives to provide nutritious meals to learners in poorer and primary and secondary schools (DBE, n.d.). The programme also aims to educate parents and learners on how to live a healthy lifestyle and it encourages the cultivation of school vegetable gardens. The goals clearly outline the government's role in improving direct access to (nutritious) food by the poor, coupled with education on easy access to vegetables through gardening.

A targeted feeding programme in specific areas aims to benefit people experiencing hunger and malnutrition (WCG, n.d.). The target beneficiaries of the programme are persons who fall outside the *Nutritional Therapeutic Programme* (NTP) (previously known as the National Supplementation Programme (NSP)).

4.2.4.2 Indicators

Indicator 2.1.2D: Prevalence of moderate or severe food insecurity in the population (based on the Community Childhood Hunger Identification Project (CCHIP) index

Figure 17 shows the progress that was made by South Africa with respect to eradicating food insecurity between 2005 and 2012. The data shows that about three-quarters of the population were food secure in 2008, showing an improvement of roughly 50% over the three-year period from 2005. In 2012, food insecurity remained unchanged.

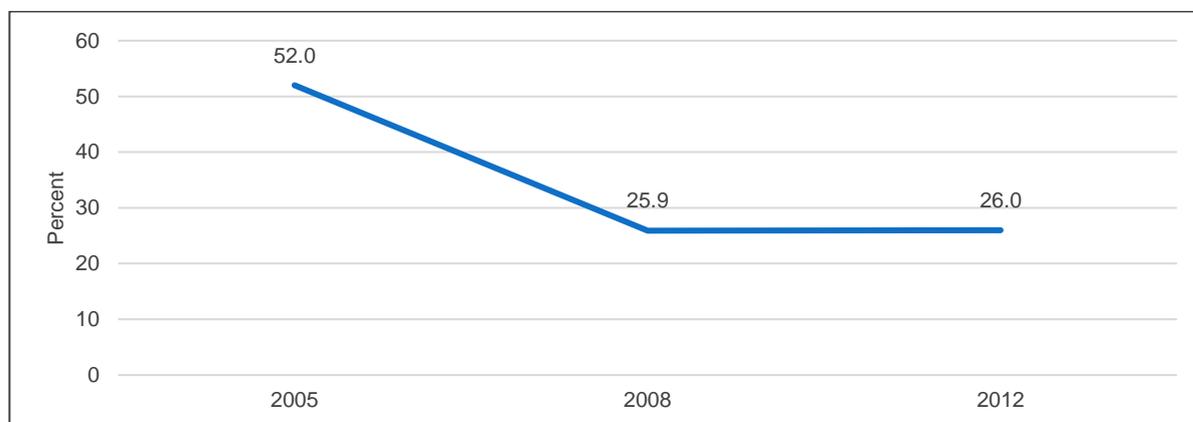


Figure 17: Prevalence of food insecurity (CCHIP) in South Africa
Data source: SANHANES-1, HSRC

Furthermore, the GHS of 2017 indicated that there was a decline in the percentage of households that were vulnerable to hunger, from 24.2% in 2002 to 10.4% in 2017. However, the trend was interrupted as the percentage increased to 13.2% in 2008 before declining again (Stats SA, 2017d). This suggests that the global financial crisis also had a negative effect on addressing hunger in South Africa. Equally, the proportion of people vulnerable to hunger decreased from 29.3% to 12.1% during the 2002–2017 period (Stats SA, 2017d).



Indicator 2.2.1: Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age

Figure 18 presents the prevalence of stunting among children. It shows that the percentage of children under 5 years who were considered short for their age increased from 23.9% in 2008 to 27% in 2016; however, care should be taken when comparing these statistics as they are derived from different surveys that may have used dissimilar methodologies. Nonetheless, despite increasing the number of beneficiaries of child support grants, South Africa's prevalence of stunting still remained high. Furthermore, stunting was found to be more severe in rural areas, followed by urban informal areas (DSD and DAFF, 2014).

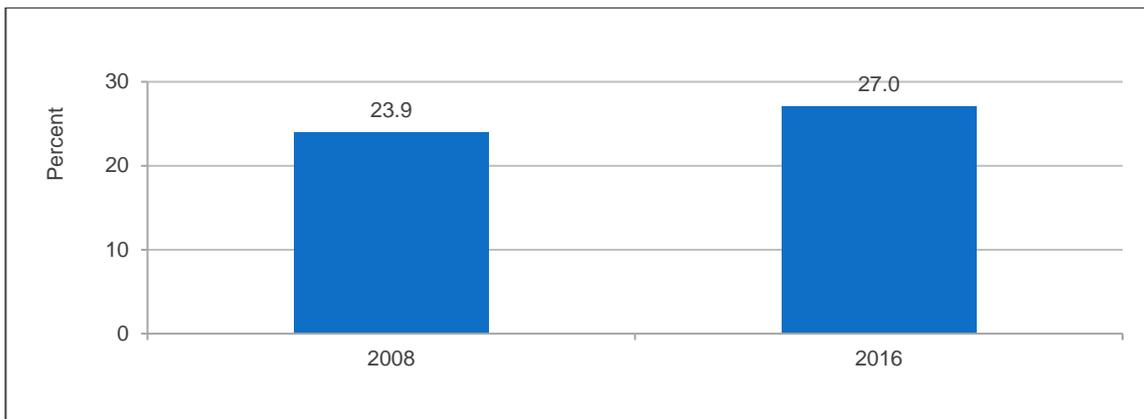


Figure 18: Prevalence of stunting among children under 5 years of age
Data sources: SANHANES-1, HSRC and SADHS 2016, DoH, Stats SA, SAMRC and ICF

Indicator 2.2.2: Prevalence of malnutrition (weight for height $>+2$ or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)

Figure 19 shows the proportion of children (below 5 years) suffering from wasting and excess weight for 2016 only, limiting effective analysis of progress made since 2015. However, comparing with global trends, it can be stated that South Africa's proportion of overweight children below 5 years (13.0%) was more than double the global average of 6.1% (Stats SA, 2017a).

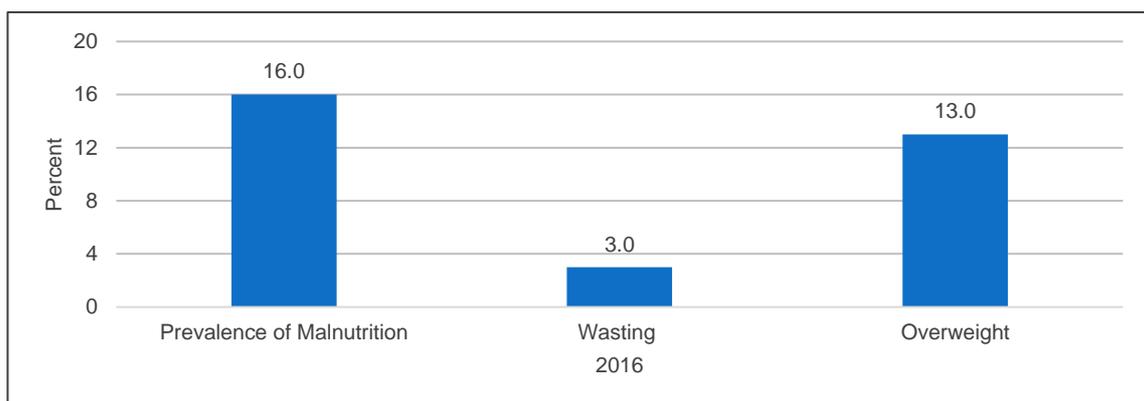


Figure 19: Prevalence of malnutrition among children below 5 years in South Africa
Data source: SADHS 2016, DoH, Stats SA, SAMRC and ICF

Indicator 2.5.1: Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities

The progress that South Africa is making towards the conservation of plant genetics is indicated by the stock count of all plant and animal gene banks currently under the stewardship of the ARC. Figure 20 provides a summary of the stock count of plant genetic resources in South Africa. Despite a general gradual increase, the stock of deciduous fruit shows a decline.

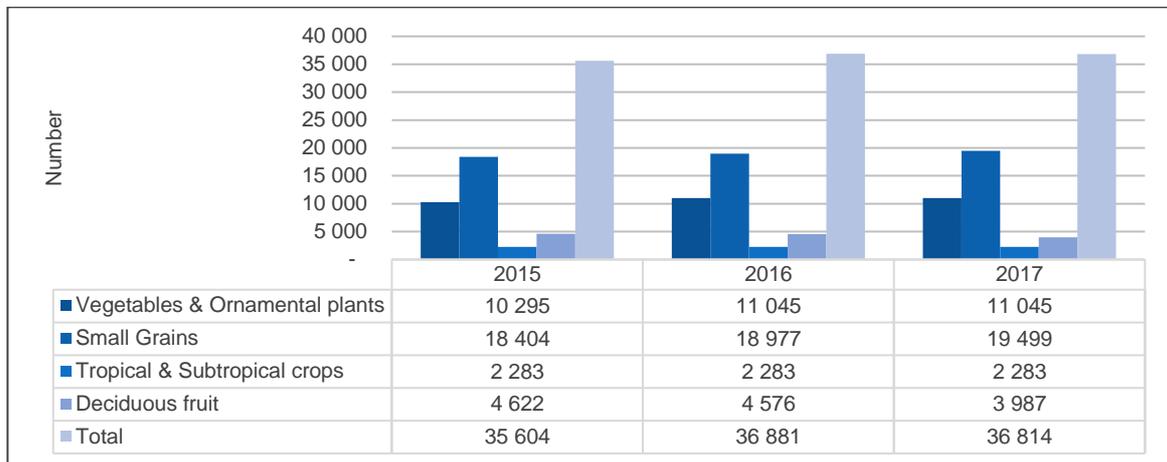


Figure 20: Plant genetic resources 2015–2017
 Data source: ARC National Public Goods Assets Annual Reports 2015–2017

In terms of animal genetic resources, Livestock Development Centres (LDCs) and research farms are used to conserve farm animal genetics. Breeds included in the gene banks are cattle, sheep, goats, pigs, and chicken. A summary of the number of animal genetic resources in South Africa is provided in Figure 21. Based on data provided by the ARC, South Africa’s stock of animal genetic resources remained relatively stable at 14 in 2015 and 15 in 2017.

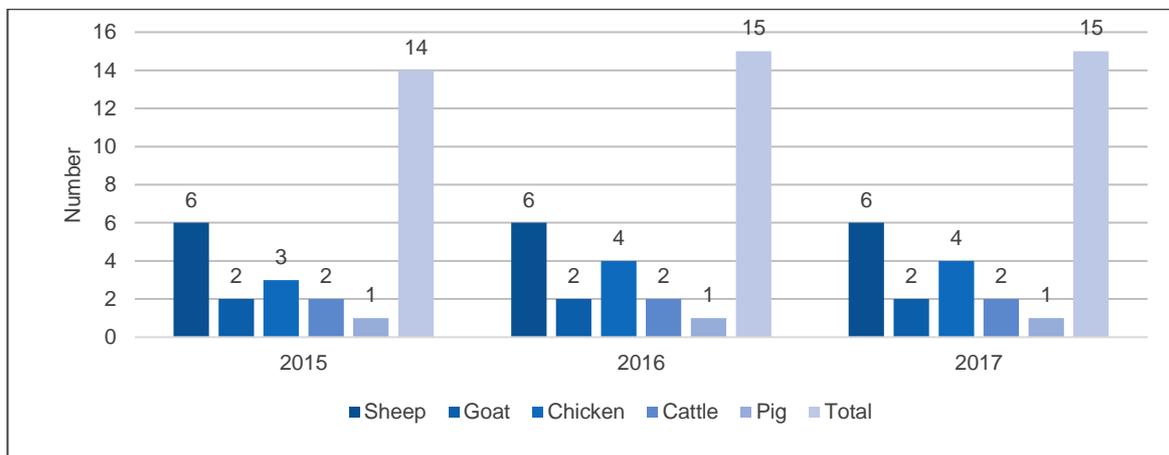


Figure 21: Animal genetic resources 2015–2017
 Data source: National Public Goods Assets Annual Report, Agricultural Research Council, 2015–2017

Indicator 2.5.2D: Number of producers benefiting from animal improvement schemes

Figure 22 shows that the total number of farmers who benefited from government-funded animal-improvement schemes grew from 1 288 to 8 676 between 2011 and 2017. The large increase in farmers who received assistance provides a positive outlook for the quality and quantity of livestock production in South Africa, and increased livestock production could contribute towards food security as well as improved livelihoods in rural communities.

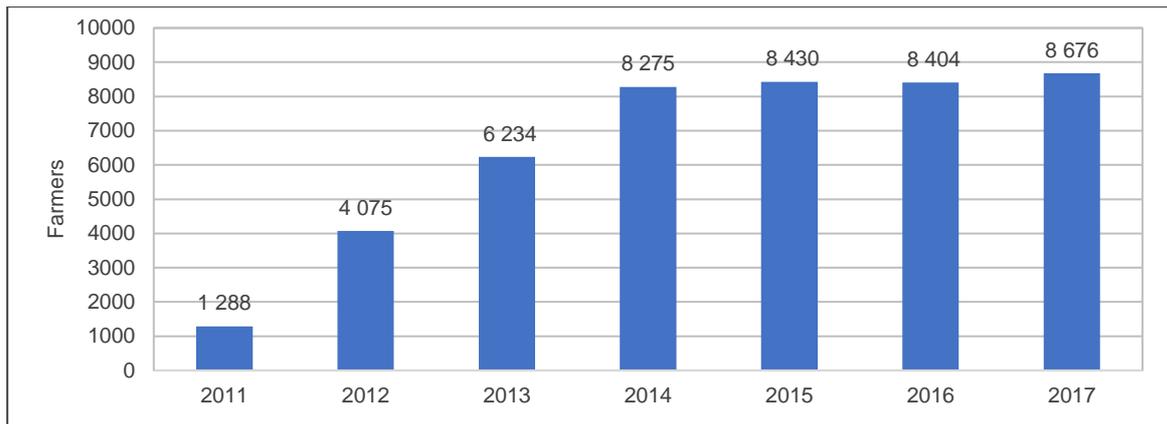


Figure 22: Number of farmers benefiting from animal improvement schemes 2011–2017
Data source: KyD 2011–2017, ARC

Indicator 2.a.2: Total official flows (official development assistance plus other official flows) to the agriculture sector

Figure 23 shows that the total official development assistance to the agriculture sector increased sharply between 2013/2014 and 2014/2015 – from R889 000 to R2 657 000.

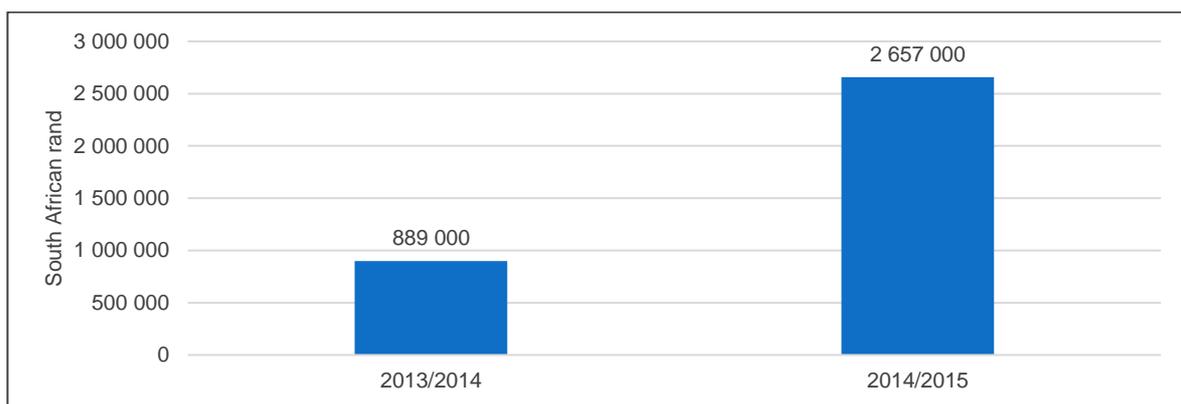


Figure 23: Official development assistance to the agricultural sector
Data source: Estimates of National Expenditure 2013/2014–2014/15, National Treasury

4.2.4.3 Summary

South Africa's progress with regard to SDG 2's indicators with data is summarised in Table 6 below. South Africa advanced its position in ending hunger, shown by the six SDG 2 indicators reported on (Table 6). Of these indicators, four are Tier I or Tier II SDG indicators and two are domesticated. About three-quarters of the population were food secure in 2008, showing an improvement of roughly 50% from 2005 (2.1.2D). Yet, food insecurity shows a slight increase between 2008 and 2012, from 25.9% to 26% of the population. Notwithstanding the progress made, the number of South Africans who experience food insecurity remain high. In addition, 13.0% of children under five years were regarded as overweight (2.2.2). Furthermore, the percentage of children who were considered short for their age was 27% in 2016, as opposed to 23.9% in 2008 (2.2.2).

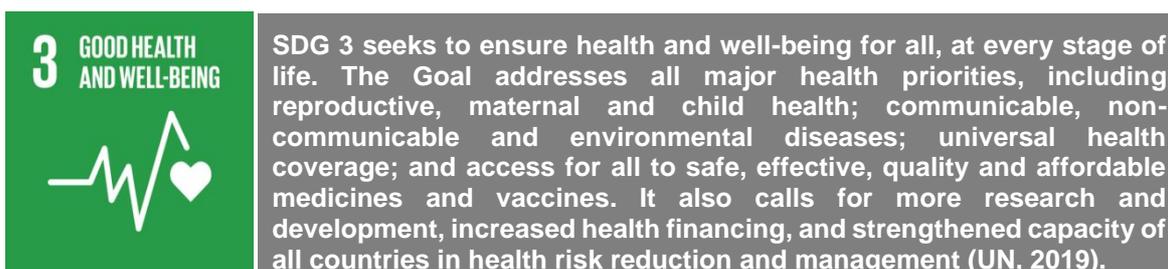


SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Indicator	Key data points
2.1.2D: Prevalence of moderate or severe food insecurity in the population (based on the Community Childhood Hunger Identification Project (CCHIP) index)	52% (2005), 25.9% (2008), 26% (2012)
2.2.1: Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age	23.9% (2008), 27% (2016)
2.2.2: Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)	Malnutrition: 16% (2016)
	Wasting: 3% (2016)
	Overweight: 13% (2016)
2.5.1: Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities (domesticated indicator)	Plants: 35 604 (2015), 36 881 (2016), 36 814 (2017)
	Animals: 14 (2016), 15 (2015), 15 (2017)
2.5.2D: Number of producers benefiting from animal improvement schemes	1 288 (2011), 8 430 (2015), 8 676 (2017)
2.a.2: Total official flows (official development assistance plus other official flows) to the agriculture sector	R899 000 (2013/14), R2 657 000 (2014/15)

Table 6: SDG 2 indicator progress

4.2.5 SDG 3: Ensure healthy lives and promote well-being for all at all ages



SDG 3 contains the following thirteen targets:

- 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100 000 live births
- 3.2: By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1 000 live births and under-5 mortality to at least as low as 25 per 1 000 live births
- 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
- 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
- 3.5: Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
- 3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents
- 3.7: By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
- 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
- 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
- 3.a: Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate
- 3.b: Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
- 3.c: Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing states
- 3.d: Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks



4.2.5.1 Policy environment

South Africa's Bill of Rights guarantees the right to equitable health care for all South Africans as well as the progressive realisation of improvements in access to and quality of care. The *National Health Act* provides the framework for a structured health system, taking into account the obligations imposed by the Constitution and other laws on national, provincial and local government with regard to health services.

The objects of the National Health Act (NHA) are to:

- unite the various elements of the national health system in a common goal to actively promote and improve the national health system in South Africa;
- provide for a system of cooperative governance and management of health services, within national guidelines, norms and standards, in which each province, municipality and health district must address questions of health policy and delivery of quality health-care services;
- establish a health system based on decentralised management, principles of equity, efficiency, sound governance, internationally recognised standards of research and a spirit of enquiry and advocacy which encourage participation;
- promote a spirit of cooperation and shared responsibility among public and private health professionals and providers and other relevant sectors within the context of national, provincial and district health plans; and
- create the foundation of the health-care system.

Free services for mothers and children, followed by free primary health care for all and a clinic-building programme stemmed from the Reconstruction and Development Programme. Approximately 1 600 new clinics were built. These measures advanced access to essential health care and the income-graded fee system for public hospitals added to financial risk protection. However, even today the historic inequities of apartheid still stain the health system. This has led to a policy focus on achieving universal health coverage.

Taken together, health policies, strategies and interventions in South Africa are aimed at responding to the following challenges:

- complex, quadruple burden of disease (including HIV/AIDS and TB, high child and maternal mortalities, non-communicable disease, and injuries and trauma);
- concerns about quality of care;
- ineffective and inefficient health system; and
- spiralling private health-care costs.

The *Bill on National Health Insurance* (NHI) outlines the phased implementation of NHI in South Africa to achieve the goal of universal health coverage. The stated benefits of the NHI are:

- improved financial risk protection through prepayment funding and reducing out-of-pocket payments;
- reduced inequities and fragmentation in both funding and provision of health services in both the public and private health sectors;
- improved access to quality health care;
- improved efficiency and cost containment through streamlined strategic purchasing; improved accountability on the use of public funds through appropriate governance mechanisms and transparency in performance reporting; and
- better health outcomes across all socio-economic groups through improved coverage.



South Africa's *National Strategic Plan for HIV, TB and STIs* (NSP) have guided the country's response to the HIV, STI and TB epidemics. The NSP 2017–2022 is the product of a multi-stakeholder collaboration by government, civil society, communities and the private sector to achieve a reduction of HIV, TB and STI morbidity and mortality in South Africa. A consultative process and evidence-based reviews were conducted to identify and analyse progress, key gaps and challenges, in developing the NSP, which has a number of goals:

- Accelerate prevention to reduce new HIV, TB and STI infections;
- Reduce morbidity and mortality by providing treatment, care and adherence support for all;
- Reach all key and vulnerable populations with comprehensive, customised and targeted interventions;
- Address the social and structural drivers of HIV, TB and STI infections, including human rights;
- Promote leadership at all levels and shared accountability for a sustainable response to HIV, TB and STIs;
- Mobilise resources to support the achievement of NSP goals and ensure a sustainable response; and
- Strengthen strategic information to drive progress towards achievement of NSP goals.

The NSP is underpinned by a number of programmes and interventions implemented as a response to the burden of HIV that have yielded positive outcomes. These include the NDOH Health Sector HIV Strategy, National She Conquers Campaign for Girls and Young Women, National Sex Worker HIV Plan, National LGBTI HIV Framework and the Framework and Strategy for Disability and Rehabilitation Services in South Africa. The NSP is also aligned with other regional and global frameworks. The NSP is directly linked to Goal 3 of the SDGs, Target 3.3, which includes ending the epidemics of AIDS and tuberculosis by 2030.

The *National Adolescent and Youth Health Policy* aims to promote the health and well-being of young people in South Africa. The purpose of this policy is to address equitable distribution of resources to meet the health needs of young people and enhance access to youth-friendly services at all health facilities. The objective of this programme is to provide, inter alia through the Integrated School Health Programme, practical information about HIV/AIDS and TB, mental health, sexual and reproductive health, nutrition and healthy weight, substance abuse and violence prevention (DoH, 2017b).

Well-being as part of the SDG 3 agenda opens up a scope wider than health services. This includes, for instance, the potential of sport as part of the health and wellness agenda. The potential of sport to have a positive impact on many spheres of society is recognised by the highest world forums. In 2015, the UN adopted Resolution A/Res/70/1, on the 2030 Sustainable Development Goals. In this Resolution, it is stated that the UN recognises 'the growing contribution of sport to the realisation of development and peace in its promotion of tolerance and respect and the contributions it makes to the empowerment of women and of young people, individuals and communities as well as to health, education and social inclusion objectives'. Physical activity must be integrated back into the daily lives of all South Africans through the design of cities, communities and built environment, as recognised in the NDP. This is a powerful, preventive course of action, ripe for innovation, investment and impact on positive human development.

4.2.5.2 Indicators

Indicator: 3.1.1: Maternal mortality ratio

The trend in the maternal mortality ratio showed an improvement from 276 per 100 000 live births in 2007 to 121 in 2016, as shown in Figure 24. This improvement can be attributed to a number of interventions, including the implementation of a monitoring system of maternal deaths, known as the National Committee for the Confidential Enquiry into Maternal Deaths (NCCEMD), increasing coverage of Highly Active Antiretroviral Therapy (HAART) at population level, as well as the Essential Steps in Managing Obstetric Emergencies (ESMOE). A strengthening of the interventions, including institutionalising quality of care processes and programmes, such as clinical audits through District Clinical Specialist Teams, is likely to help South Africa sustain the improvements in reducing maternal mortality trends.

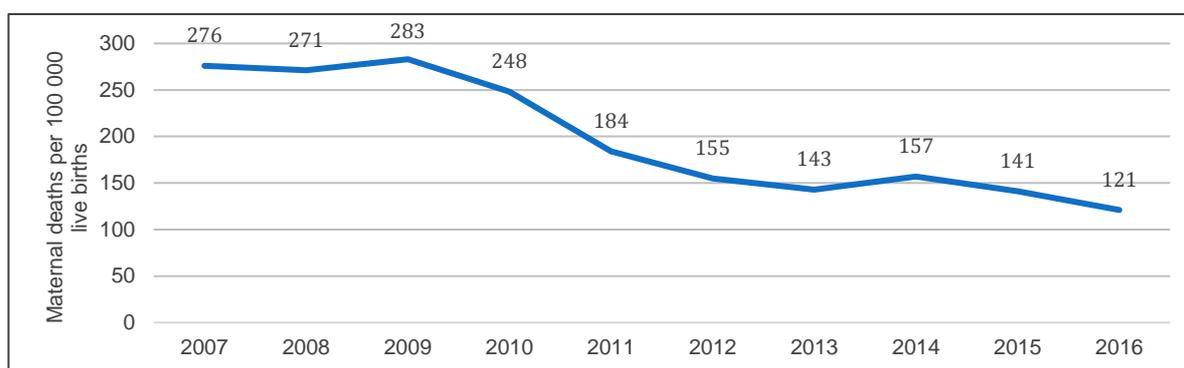


Figure 24: Maternal mortality ratio
Data source: CRVS 2007–2016, Stats SA

Indicator: 3.1.2: Proportion of births attended by skilled health personnel

Indicator 3.1.2A: Percentage of mothers and children who receive post-natal care either at home or in a facility and within 6 days of delivery

The South Africa Demographic and Health Survey of 2016 showed that 96.7% of births were attended to by skilled health personnel, compared to 84% in 1998. The presence of, and delivery with the assistance of, a skilled birth attendant is a critical strategy for reducing maternal morbidity and mortality. It is estimated that the risk of stillbirth or death as a result of intra-partum related complications can be reduced by 20% with the presence of a skilled birth attendant. In South Africa the key is not access, but the skills of the care provider. Evidence of improvements in this regard is a drop in mortality from obstetric haemorrhages from 25.0% in 2011 to 20.3% in 2017.

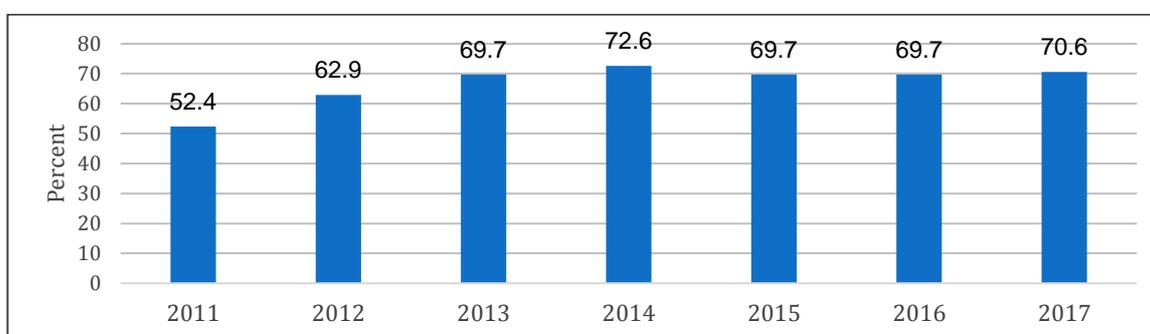


Figure 25: Post-natal care for mother in a facility and within 6 days of delivery.
Data source: DHIS 2011–2017, DoH

Figure 25 provides a visual representation of South Africa's progress with the provision of post-natal care. Despite a slight decrease since 2014, levels in 2017 remain significantly higher than in 2011.



Indicator: 3.2.1: Under-5 mortality rate

The under-5 mortality rate is an important indicator of the level of child health and overall development in countries and reflects not just health services, but also the social, economic and environmental conditions in which children live. This indicator is generally able to show disparities between rural and urban areas as well as across socio-economic groups. Figure 26 shows that the trend in the under-5 mortality rate has steadily declined from 47.7 per 1 000 live births in 2010 to 30.2 per 1 000 live births in 2015.

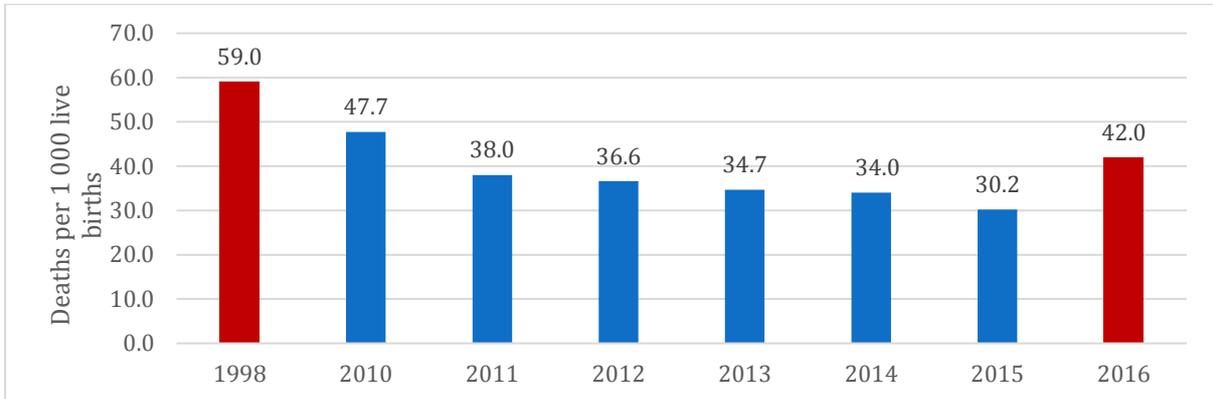


Figure 26: Under-5 mortality rate
Data source: CRVS 2010–2015, Stats SA; SADHS 1998, 2016

Indicator: 3.2.2: Neonatal mortality rate

The neonatal mortality rate, which measures the number of children who died during the first 28 days of life, shows that it has increased from 11.0 in 2012 to 12.0 in 2015 (Figure 27). In terms of the SDG targets, South Africa has already achieved the target, but it would be important to disaggregate the data to district level. This is to ensure that no one is left behind. Stats SA estimates that 72% of neonatal deaths occur in health facilities. The neonatal mortality rate is one of the most important measures of perinatal care and is therefore of critical public health importance.

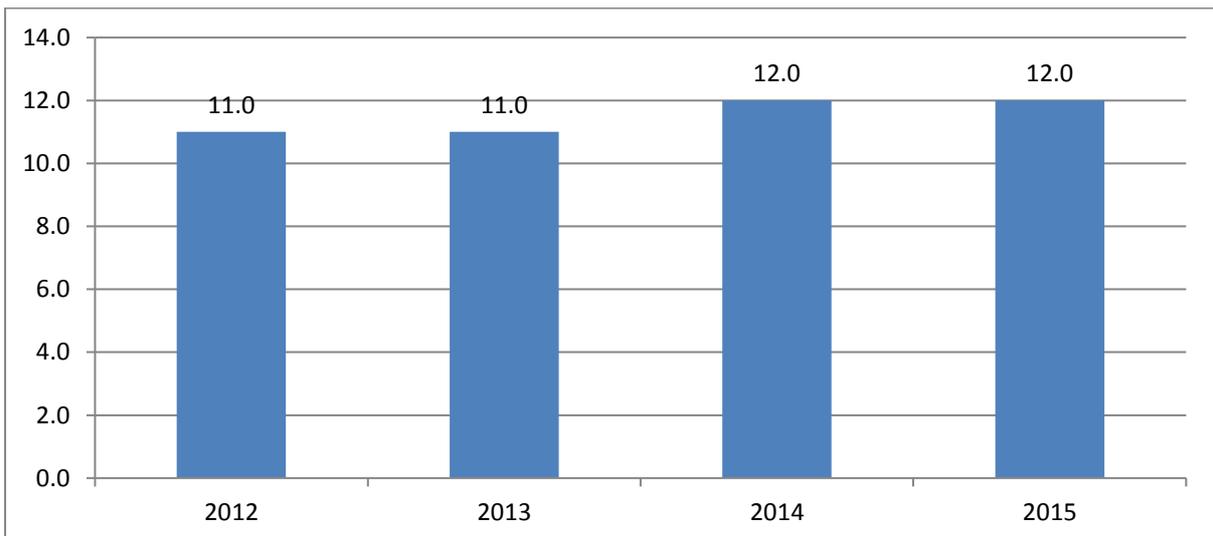


Figure 27: Neonatal mortality rate
Data source: CRVS 2012–2015, Stats SA



Indicator: 3.2.2A1: Infant mortality rate

The infant mortality rate (IMR) trend shows a decline from 33.4 per 1 000 live births in 2010 to 22.3 per 1 000 live births in 2015 (Figure 28). IMR is said to be an indicator of the overall physical health of a community and a high IMR is considered to be indicative of unmet health, education, nutrition, sanitation and medical care needs. South Africa will therefore continue to monitor the causes of infant mortality and implement evidence-based interventions to improve the health of infants in order to achieve the SDG targets.

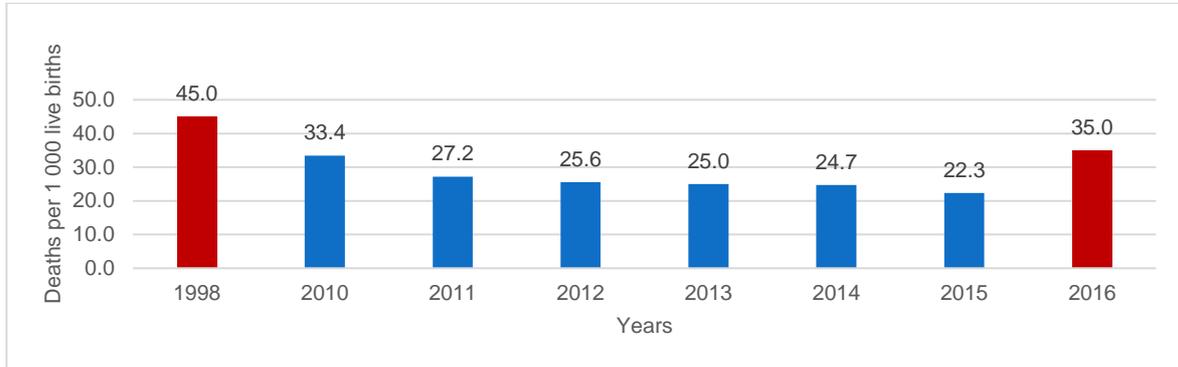


Figure 28: Infant mortality rate
Data source: CRVS 2010–2015, Stats SA; SADHS 1998, 2016

Indicator: 3.2.2A2: Stillbirth rate (per 1 000 total births)

The stillbirth rate trend shows that the stillbirth rate has ranged between 20.2 and 21.3 between 2014 and 2018 (Figure 29). The stillbirth rate gives a measure of the health of pregnant women and the standard of care they receive during pregnancy and labour. The 2014 perinatal deaths report estimated that stillbirths accounted for 66% of all perinatal deaths.

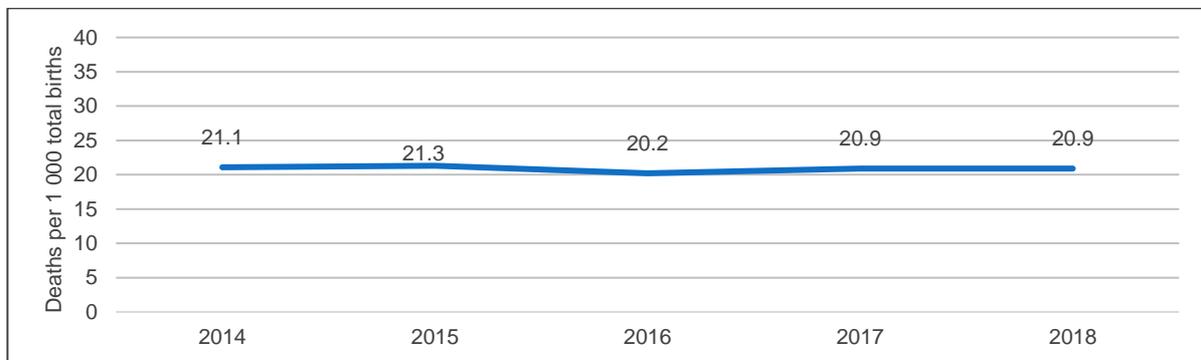


Figure 29: Stillbirth rate
Data source: DHIS 2014–2018, DoH

Indicator: 3.3.1: Number of new HIV infections per 1 000 uninfected population, by sex, age and key populations

The number of new HIV infections decreased from 2.8 to 1 per 1 000 uninfected population for 15-24-year-olds from the 2002–2005 period to 2012–2017 and from 2.2 per 1 000 uninfected population during the 2002–2005 period to 0.8 per 1 000 uninfected population among the 15-49-year-olds during the 2012–2017 period (Figure 30). A decrease in the number of new HIV infections was the result of the enormous effort in combating the disease through policies, programmes and access to anti-retroviral therapy.

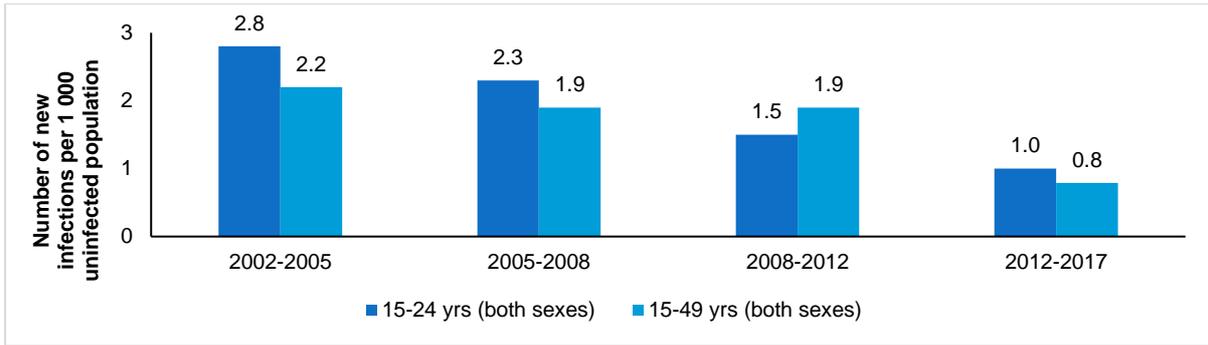


Figure 30: Number of new HIV infections among 15–24 and 15–49-year-olds, per 1 000 uninfected population
Data sources: SABSSM 2012, SABSSM 2017, HSRC

Indicator: 3.3.1A1: HIV prevalence

HIV prevalence shows a mixed picture. The prevalence among men and women aged 15 to 49 seems to be increasing (from 15.6% in 2002–2005 to 20.6% in 2012–2017), while prevalence among men and women aged 15 to 24 seems to be stabilising (Figure 31). It should be noted, however, that the success of the expanding ART coverage is enabling South Africans with HIV to live longer, which contributes to higher HIV prevalence. In this context, it is important to note that Indicator 3.3.1 shows a decrease in new HIV infections.

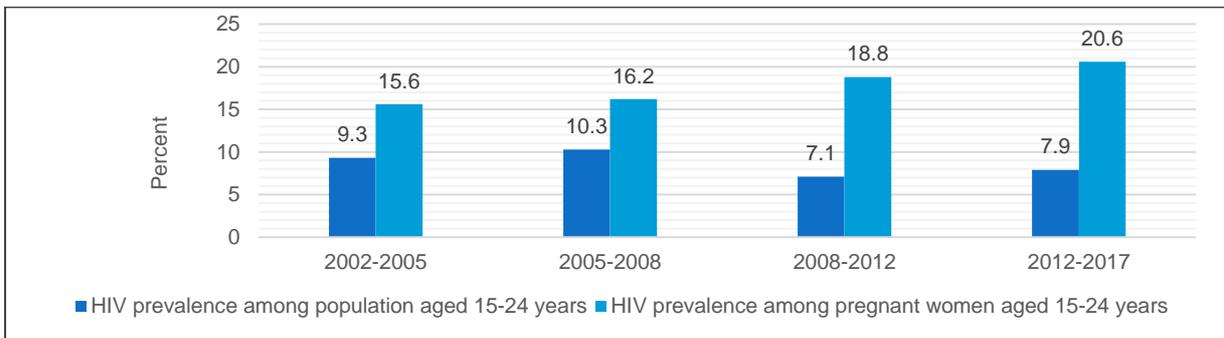


Figure 31: HIV prevalence
Data sources: SABSSM 2012, SABSSM 2017, HSRC

Indicator: 3.3.1A2: The number and percentage of people living with HIV exposed to antiretroviral treatment by age and sex

The percentage of people living with HIV on ART increased. Between 2012 and 2017, 56.3% of all men living with HIV and 65.5% of all women living with HIV were on ART (Figure 32). This is a significant increase from 25.7% and 34.7% for men and women, respectively, in the period 2008 to 2012. When disaggregated by age, a significant increase in the number of people between 15 and 24 can also be observed (Figure 33), notably from 14.3% (2008–2012) to 39.9% (2012–2017). It should be noted that the increased number of people on ARVs is also a reflection of changes in eligibility criteria.

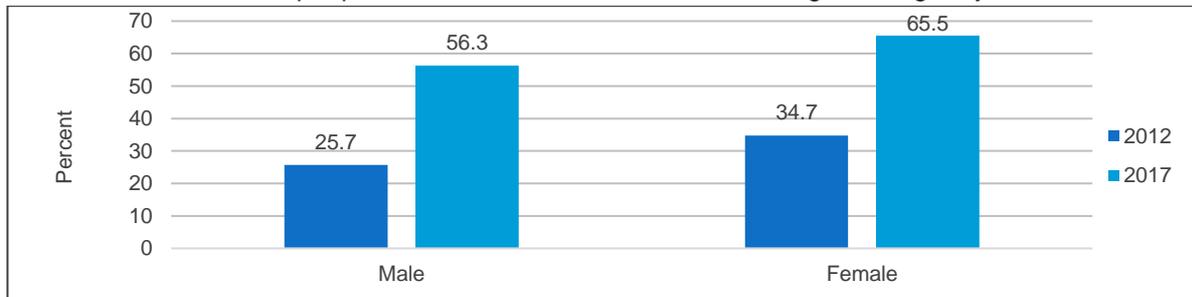


Figure 32: Percentage of people living with HIV on ART, disaggregated by sex
Data sources: SABSSM 2012, SABSSM 2017, HSRC

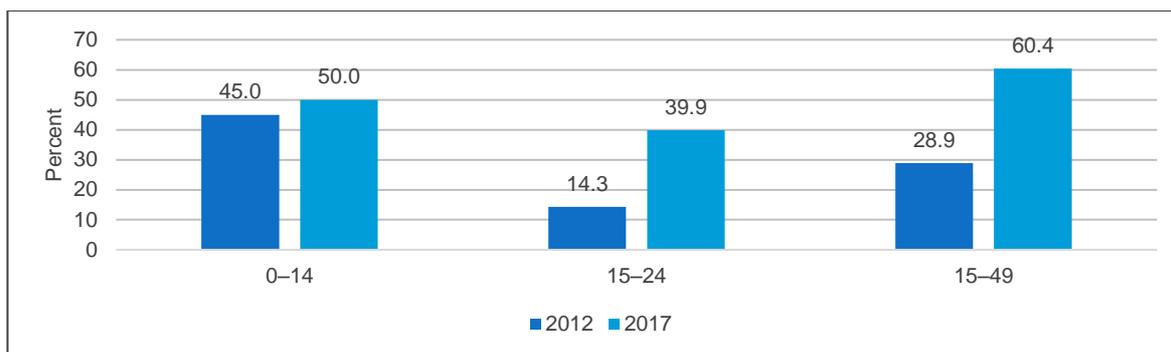


Figure 33: Percentage of people living with HIV on ART, disaggregated by age
Data sources: SABSSM 2012, SABSSM 2017, HSRC

Indicator: 3.3.2: Tuberculosis incidence per 100 000 population

The incidence of TB decreased from 981 per 100 000 population in 2010 to 567 per 100 000 population in 2017 (Figure 34). TB cases have been declining, from 406 082 in 2009 to 216 502 in 2017, in concert with the improved HIV programme and TB services. The proportion of clients lost to follow-up declined from 19.0% in 1997 to 6.5% in 2017. The rate of new TB patients who successfully completed treatment rose from a low of 61% in 2001 to 84.4% in 2017.

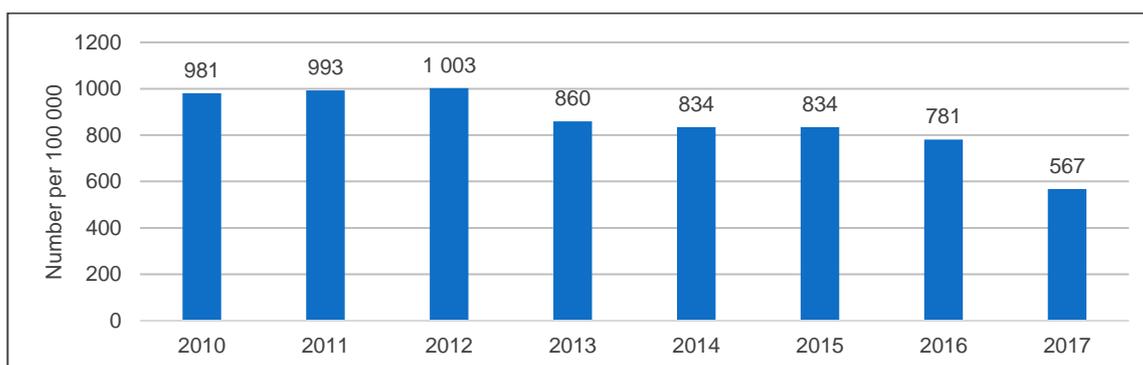


Figure 34: Tuberculosis incidence
Data source: Global TB Reports 2010–2017, WHO

Indicator: 3.3.3: Malaria incidence per 1 000 population

The malaria incidence among the population at risk in general increased from 1.4 per 1 000 population in 2010 to 2.3 per 1 000 population in 2014 and decreased after that to 0.4 in 2016 (Figure 35). An increase was observed in 2017 – which was the highest incidence during the period 2010 to 2018 – and then decreased again in 2018 to 1.4 per 1 000 population. Malaria elimination is the target, and so a concerted effort must be made to ensure that the goal to end malaria is achieved. The 2017 rate is high, which was due to unusual climatic conditions, which led to malaria occurring in areas that had been considered to be malaria-free and had therefore not been subjected to spraying. Nevertheless, malaria management remained a priority. The 2018 decrease reflects the investment that was made so that spraying could be done; hence the reduction in incidence.

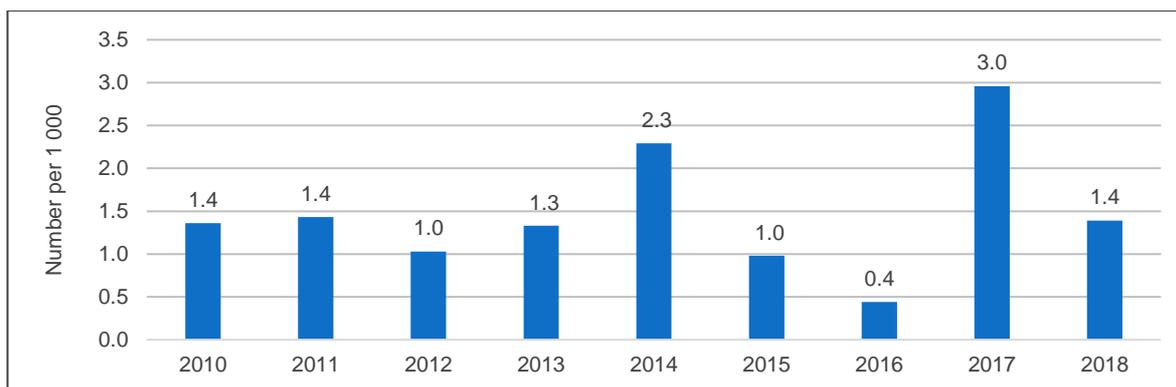


Figure 35: Malaria incidence
Data source: Malaria Information System 2010–2018, DoH

Indicator: 3.3.4D: Mortality due to hepatitis B, per 100 000 population

South Africa introduced the hepatitis B vaccine into the routine childhood vaccine programme in 1995. Mortality due to hepatitis B has remained low and almost unchanged over time at around 0.5 per 100 000 population (Figure 36).

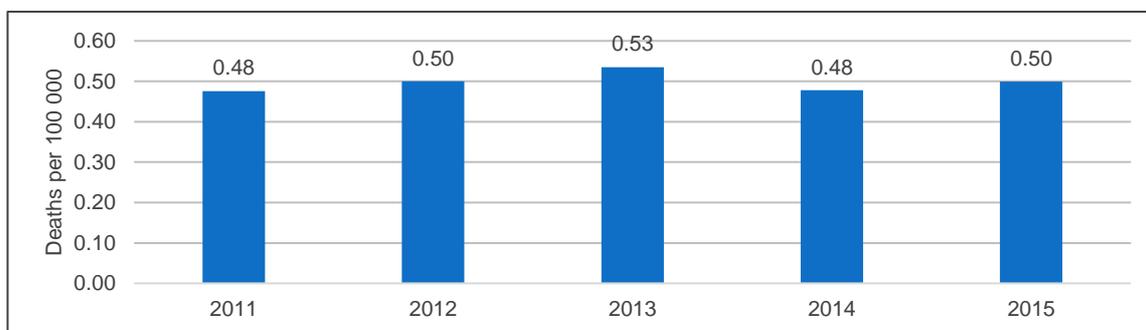


Figure 36: Mortality due to hepatitis B
Data source: CRVS 2011–2015, Stats SA

Indicator: 3.4.1: Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease

As shown in Figure 37, the mortality rates attributed to cardiovascular disease, cancer, diabetes and chronic respiratory diseases have remained relatively stable between 2011 and 2016.

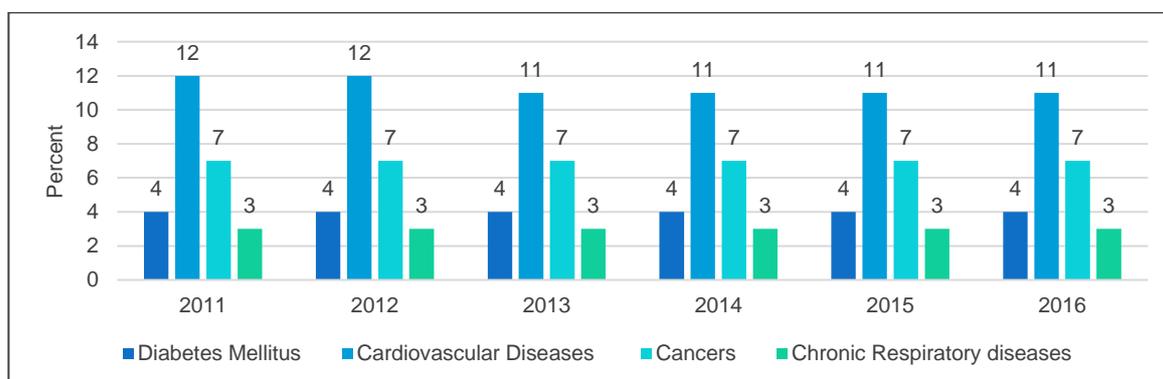


Figure 37: Mortality rate attributed to non-communicable diseases
Data source: CRVS 2011–2016, Stats SA

Indicator: 3.4.2: Suicide mortality rate

The suicide mortality rate was on the increase until 2013, when it peaked at 2.8 per 100 000 population, after which it decreased to 1.3 per 100 000 population in 2015 (Figure 38). Suicide occurs throughout the lifespan and was the second leading cause of death among 15- to 29-year-olds globally in 2016 (WHO, 2018). Suicide does not just occur in high-income countries, but is a global phenomenon. In fact, over 79% of global suicides occurred in low- and middle-income countries in 2016. Suicide is a serious public health problem; however, suicides are preventable with timely, evidence-based and often low-cost interventions. For national responses to be effective, a comprehensive, multisectoral suicide-prevention strategy is needed (WHO, 2018). South Africa needs to develop one and address the factors determining suicide and improve mental health services.

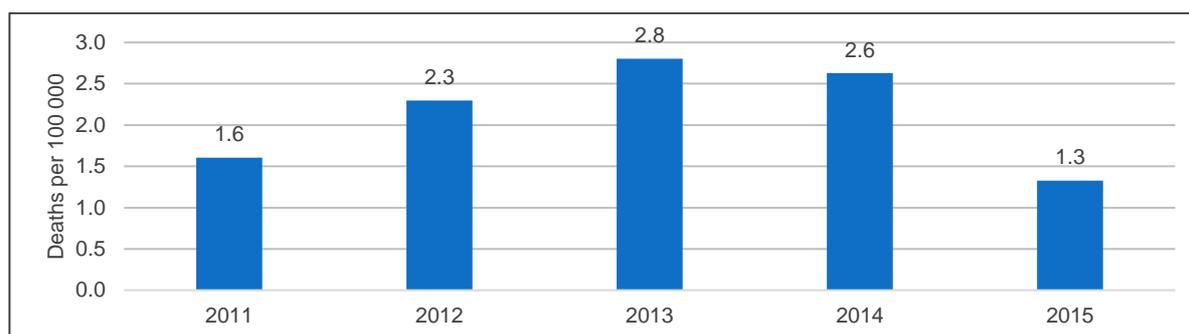


Figure 38: Suicide mortality rate
Data source: CRVS 2011–2015, Stats SA

Indicator: 3.5.2: Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol

Alcohol consumption remained steady at around 7 litres per capita per annum during 2011 to 2017 (Figure 39). The harmful use of alcohol is one of the leading risk factors for population health worldwide and has a direct impact on many health-related targets of the SDGs, including those for maternal and child health, infectious diseases (HIV, viral hepatitis, tuberculosis), non-communicable diseases and mental health, injuries and poisonings (WHO, 2018). In 2016, the harmful use of alcohol resulted in some 3 million deaths (5.3% of all deaths) worldwide and 132.6 million disability-adjusted life years (DALYs) – i.e. 5.1% of all DALYs in that year (WHO, 2018).

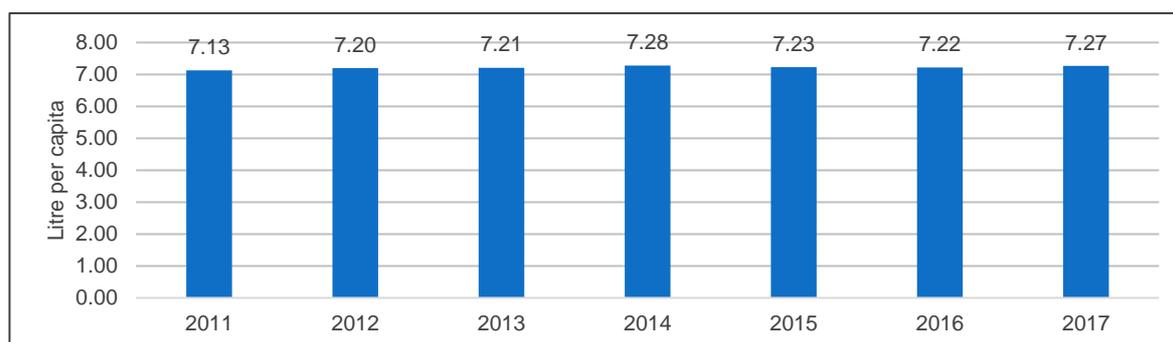


Figure 39: South Africa's use of alcohol, expressed as litre per capita
Data source: SAWIS 2011–2017

Indicator: 3.6.1: Death rate due to road traffic injuries

As shown in Figure 40, deaths as a result of road traffic injuries decreased from 27.5 deaths per 100 000 population in 2010 to 24.9 deaths per 100 000 population in 2017, with the SDG target being to halve the 2010 rate. Road traffic injuries are a major cause of morbidity and mortality worldwide, especially in low- and middle-income countries.



According to the Global Status Report on Road Safety 2018, the number of road traffic deaths continued to rise steadily, reaching 1.35 million in 2016 (WHO, 2018). The burden of road traffic injuries is disproportionately borne by pedestrians, cyclists and motorcyclists, in particular those living in developing countries.

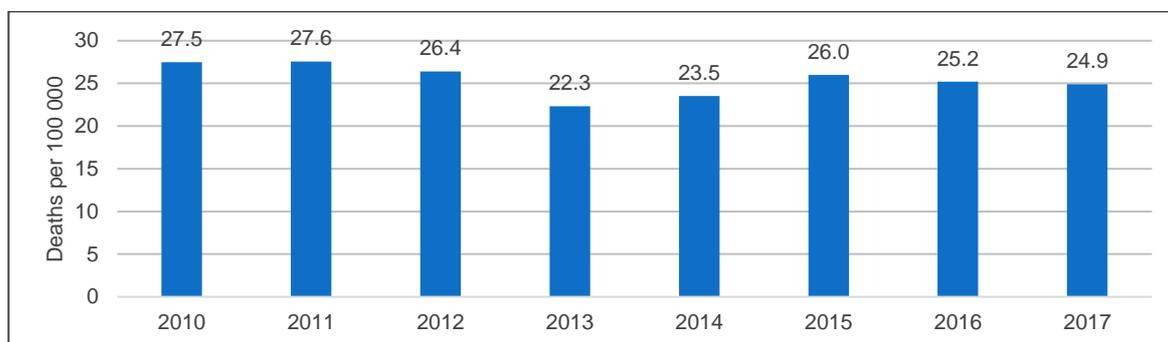


Figure 40: Mortality due to road traffic injuries
Data source: State of Road Safety Reports, 2010–2017, RTMC

Indicator: 3.7.1: Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods

According to the South Africa Demographic and Health Survey 2016 Key Indicator Report, the overall use of modern contraception is high (75.7%) with a wide range of methods being utilised. The use of the pill, injectable contraceptives and sterilisations has declined since 1998, while the use of male condoms for contraception has increased; currently, 15% of women and their partners use male condoms as their contraceptive method (Stats SA, 2017).

Indicator: 3.7.1A: Couple year protection rate

The couple year protection rate increased from 33.4% in 2010 and peaked in 2016 at 68.0% (Figure 41). The rate decreased to 61.2% in 2017.

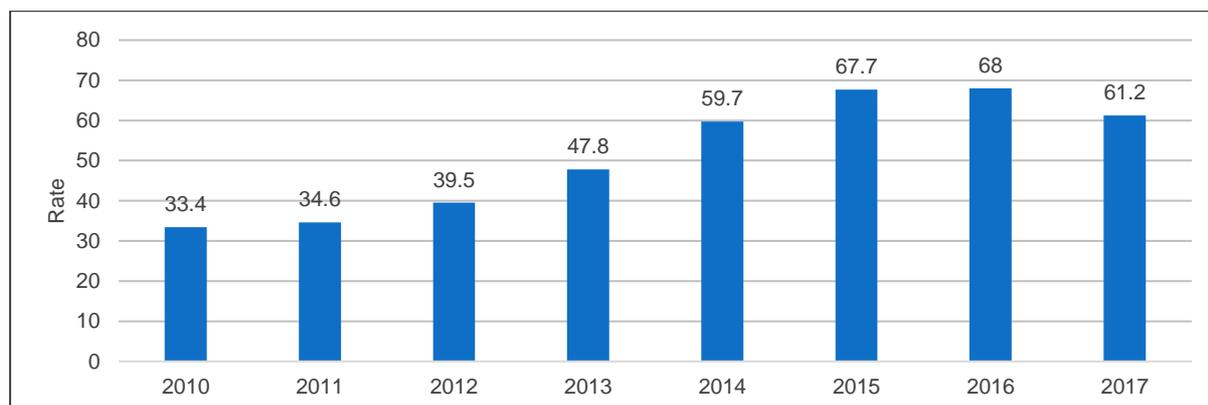


Figure 41: Couple year protection rate
Data source: DHIS 2010–2017, DoH

Indicator: 3.7.2: Adolescent birth rate (aged 10–14 years aged 15–19 years) per 1 000 women in that age group

The number of births among females aged 10–14 years halved from 1.2 per 1 000 females in 2010 to 0.6 per 1 000 females in 2017, while the corresponding values for those aged 15–19 years declined from 65.0 to 46.2 (Figure 42).



There was significant progress in 2016/17, suggesting that interventions are having an effect. The trend should be continuously monitored to see if further interventions are needed.

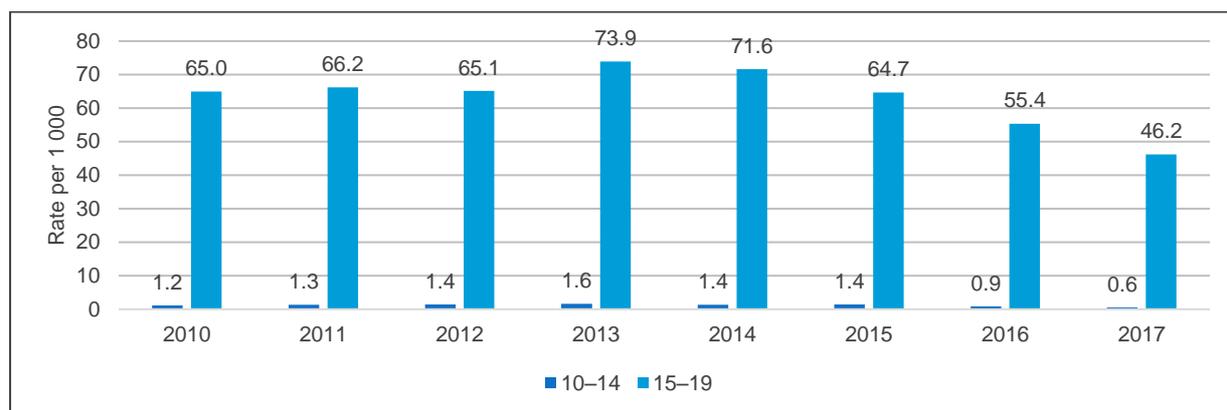


Figure 42: Adolescent birth rate
Data source: CRVS 2010–2017, Stats SA

Indicator: 3.9.3: Mortality rate attributed to unintentional poisoning

Unintentional poisoning accounted for 0.2 deaths per 100 000 population in 2011, which reached a high of 0.4 deaths per 100 000 in 2013 (Figure 43). By 2015, the rate had declined to the 2011 level.

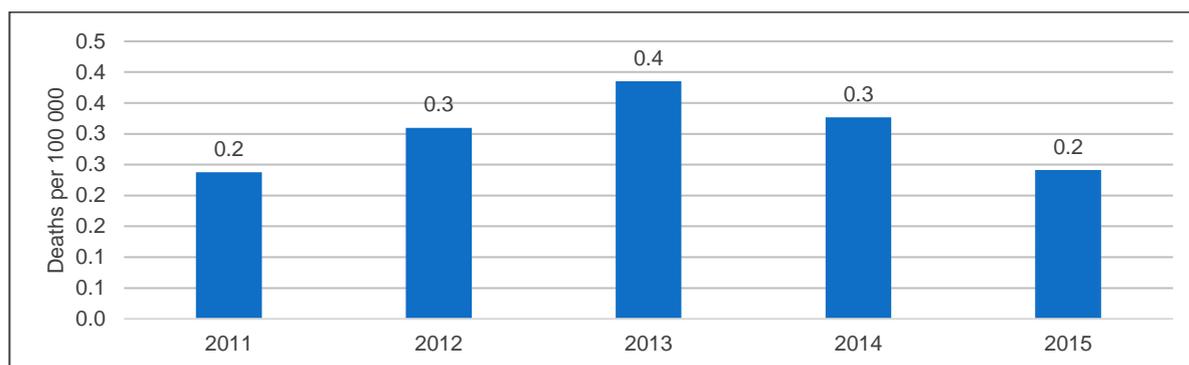


Figure 43: Mortality rate attributed to unintentional poisoning
Data source: CRVS 2011–2015, Stats SA

Indicator: 3.a.1: Age standardized prevalence of current tobacco use among persons aged 15 years and older

The prevalence of tobacco use amongst both males and females decreased between 1998 and 2016 (Figure 44). No data is available for 2017–2018, although there are numerous attempts at tobacco control in South Africa. Of importance is a Bill that at the time of writing was available for public comment. The Bill will see a strengthening of tobacco legislation in South Africa and the introduction of key recommendations of the FCTC such as the introduction of pictorial warnings on cigarette packs. The excise tax for tobacco has also been steadily rising and has had a significant impact on prevalence.

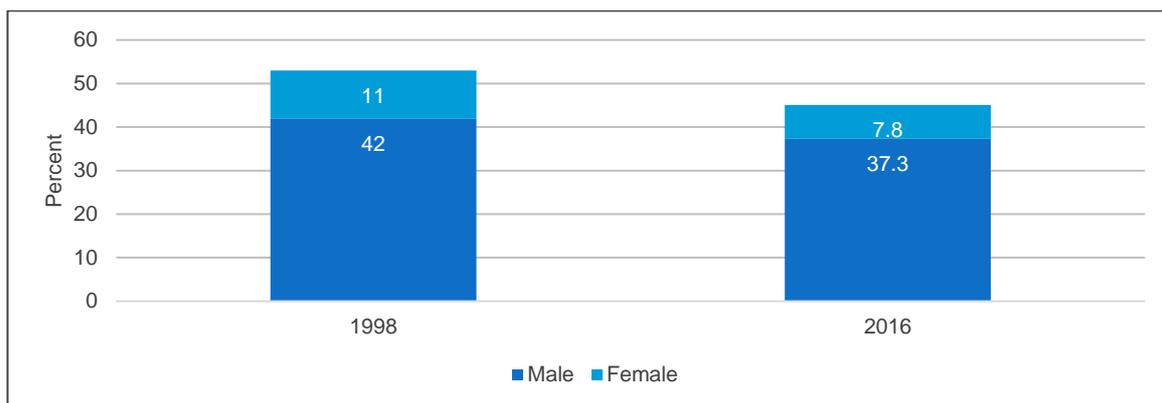


Figure 44: Prevalence of tobacco use by sex (15 years and older)
Data source: SADHS 1998, SADHS 2016, DoH, Stats SA, SAMRC and ICF

Indicator: 3.b.1: Proportion of the target population covered by all vaccines included in their national programme

There is a gradual increase in the vaccine uptake for most from 2010 to 2017, as shown in Figure 45. South Africa has supported research into the development of vaccines and new drugs, in particular for HIV, TB and malaria, and has been extensively involved in field trials of products developed elsewhere. The country purchases medicines for the public sector through national bulk tenders, resulting in prices dramatically lower than in the private sector. These medicines are then available at no cost to public sector users, or incorporated into a global service fee for those who meet the criterion to contribute to the cost of their public hospital care. However, even with bulk tenders, the price of some medicines can still be at a level that puts pressure on the health budget.

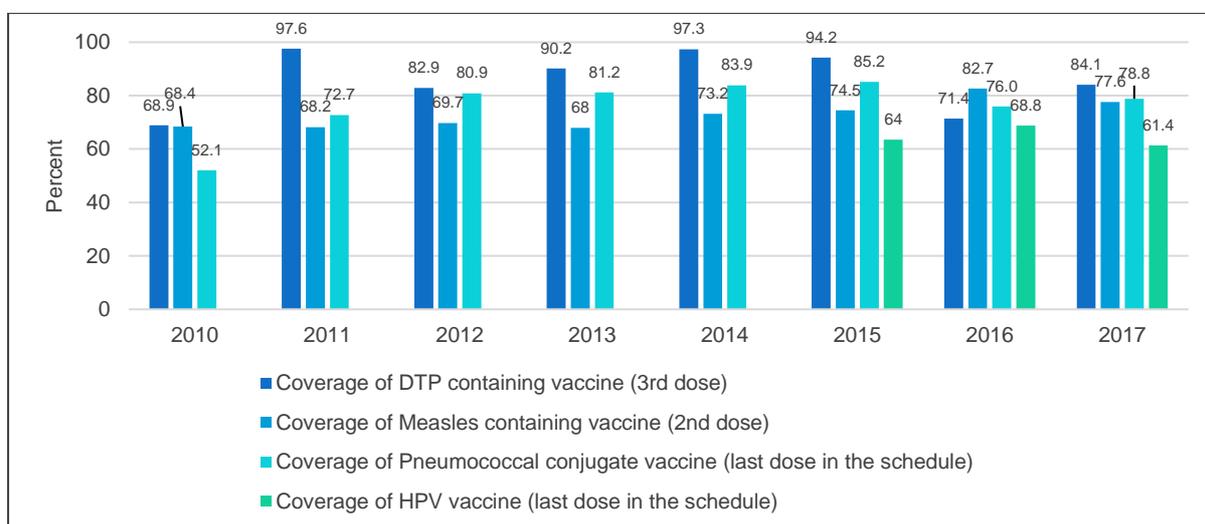


Figure 45: Proportion of the target population covered by all vaccines included in their national programme
Data source: DHIS 2010–2017, DoH

Indicator: 3.b.3D: Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis

While there have been some challenges experienced with shortages of medicine in provincial systems at different times, medicines are widely available, The proportion of health facilities with a core set of relevant medicines available reached 90% in 2018 (Figure 46). The proportion of health facilities that had stock-outs varied between 25.8% in 2013 to 22.6% in 2017.

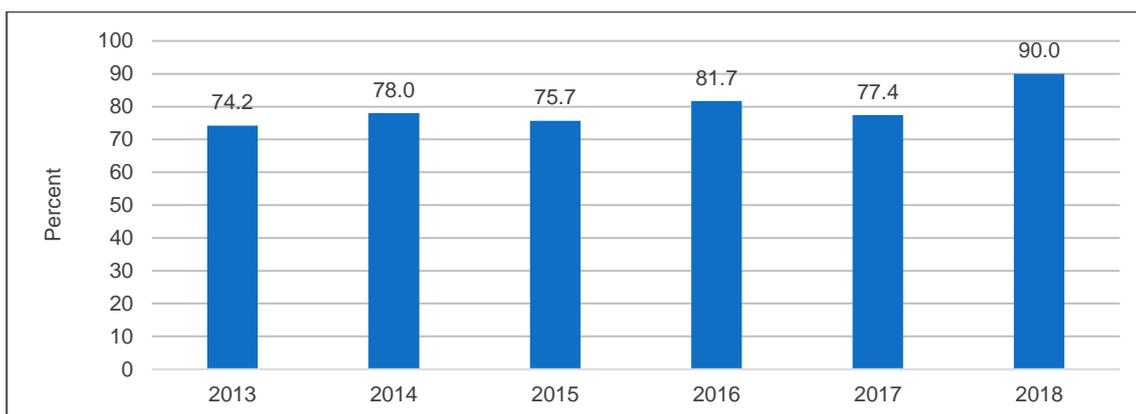


Figure 46: Proportion of health facilities that had a core set of relevant medicines available
Data source: SVS 2013–2018, DoH

3.d.1: Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

This indicator covers a range of topics and is calculated as the percentage of attributes of 13 core capacities that have been attained at a specific point in time. The core capacities are national legislation, policy and financing; coordination and national focal point communications; surveillance; response; preparedness; risk communication; human resources; laboratory; points of entry; zoonotic events; food safety; chemical events; and radionuclear emergencies. Table 7 provides an overview of South Africa's progress since 2010.

Level of disaggregation	Unit: Percentage								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
National legislation	75	100	75	75	100	100	Not assessed	Not assessed	100
Coordination and National Focal Point	83	73	73	73	100	100	Not assessed	Not assessed	100
Communications	90	71	100	100	100	100	Not assessed	Not assessed	100
Surveillance	68	90	50	80	100	100	Not assessed	Not assessed	85
Response	83	100	94	88	100	100	Not assessed	Not assessed	85
Preparedness	48	50	80	83	100	100	Not assessed	Not assessed	100
Risk communication	90	71	100	100	100	100	Not assessed	Not assessed	100
Human resources	16	25	40	50	100	100	Not assessed	Not assessed	100
Laboratory	94	90	90	91	100	100	Not assessed	Not assessed	90
Points of entry	88	60	33	12	100	100	Not assessed	Not assessed	15
Zoonotic events	92	100	100	100	100	100	Not assessed	Not assessed	100
Food safety	93	100	60	80	100	100	Not assessed	Not assessed	100
Chemical events	14	92	92	77	100	100	Not assessed	Not assessed	100
Radionuclear	20	83	93	77	100	100	Not assessed	Not assessed	100

Table 7: International Health Regulations (IHR) capacity and health emergency preparedness
Data source: WHO IHR Core Capacities Implementation Status (2010–2018)

4.2.5.3 Summary

South Africa's progress with regard to SDG 3's indicators with data is summarised in the Table 8 below. South Africa is able to report on 19 SDG 3 indicators, of which 17 are Tier I and/or Tier II SDG indicators and two are domesticated. South Africa has made notable progress in reducing the maternal mortality ratio (3.1.1), the under-5 mortality rate (3.2.1), neonatal mortality rate (3.2.2) and the infant mortality rate (3.2.2A1). New HIV infections have also slowed down (3.3.1) and the incidence of tuberculosis has declined (3.3.2). Despite significant progress, the incidence of HIV and tuberculosis remains very high. South Africa is seeing an increase in the harmful use of alcohol (3.5.2).



SDG 3: Ensure healthy lives and promote well-being for all at all ages

Indicator	Key data points
3.1.1: Maternal mortality ratio	276 (2007), 184 (2011), 121 (2016) (unit: deaths per 100 000 live births)
3.1.2: Proportion of births attended by skilled health personnel	84% (1998), 96.7% (2016)
3.1.2A: Percentage of mothers and children who receive post-natal care either at home or in a facility and within 6 days of delivery (additional indicator)	52.4% (2011), 72.6% (2014), 70.6% (2017)
3.2.1: Under-5 mortality rate	47.7 (2010), 34.7 (2013), 30.2 (2015) (unit: rate per 1 000 live births)
3.2.2: Neonatal mortality rate	19.8 (1998), 21 (2016) (unit: rate per 1 000 live births)
3.2.2A1: Infant mortality rate (additional indicator)	33.4 (2010), 25 (2013), 22.3 (2015) (unit: rate per 1 000 population)
3.2.2A2: Stillbirth rate	21.1 (2014), 21.3 (2015), 20.2 (2016), 20.9 (2017), 20.9 (2018) (unit: rate per 1 000 live births)
3.3.1: Number of new HIV infections per 1 000 uninfected population, by sex, age and key populations	15–24-year-olds: 2.8 (2005), 2.3 (2008), 1.5 (2012), 1 (2017) (unit: new HIV infections per 1 000 uninfected population)
	Male 1.0 (2012) 0.5 (2017) (unit: new HIV infections per 1 000 uninfected population)
	Female 1.5 (2012) 2.1 (2017) (unit: new HIV infections per 1 000 uninfected population)
	15–49-year-olds: 2.2 (2002–2005), 1.9 (2008), 1.9 (2012), 0.8 (2017)



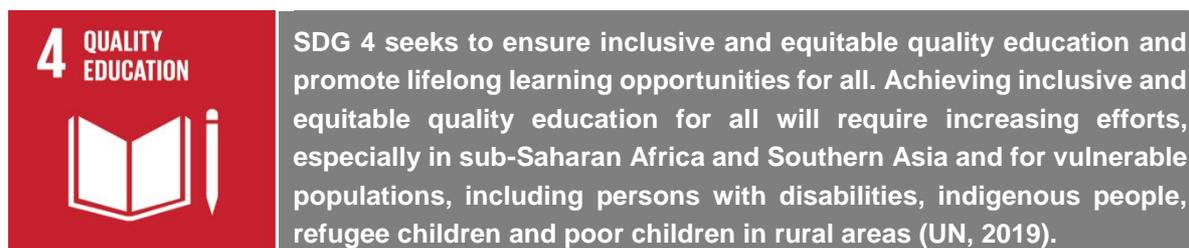
	(unit: new HIV infections per 1 000 uninfected population)
	Male 1.6 (2012) 0.7 (2017) (unit: new HIV infections per 1 000 uninfected population)
	Female 2.1(2012) 0.9 (2017) (unit: new HIV infections per 1 000 uninfected population)
3.3.1A1: HIV prevalence (additional indicator)	15–24-year-olds: 9.3% (2005), 10.3% (2008), 7.1% (2012), 7.9% (2017)
	15–49-year-olds: 15.6% (2005), 16.2% (2008), 18.8% (2012), 20.6% (2017)
3.3.1A2: The number and percentage of people living with HIV exposed to antiretroviral treatment by age and sex (additional indicator)	Male: 25.7% (2012), 56.3% (2017)
	Female: 34.7% (2012), 65.5% (2017)
3.3.2: Tuberculosis incidence per 100 000 population	981 (2010), 1 003 (2012), 834 (2014), 567 (2017) (unit: incidence per 100 000)
3.3.3: Malaria incidence per 1 000 population	1.4 (2010), 2.3 (2014), 1.4 (2018) (unit: incidence per 1 000)
3.3.4D: Mortality due to hepatitis B, per 100 000 population (domesticated indicator)	0.48 (2011), 0.53 (2013), 0.5 (2015) (unit: deaths per 100 000)
3.4.1: Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	Diabetes mellitus: 4% (2011), 4% (2013), 4% (2016)
	Cardiovascular diseases: 12% (2011), 11% (2013), 11% (2016)
	Cancers: 7% (2011), 7% (2013), 7% (2016)
	Chronic respiratory diseases: 3% (2011), 3% (2013), 3% (2016)
3.4.2: Suicide mortality rate	1.6 (2011), 2.8 (2013), 1.3 (2015) (unit: deaths per 100 000)
3.5.2: Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol	7.13 (2011), 7.28 (2014), 7.23 (2015), 7.22 (2016), 7.27 (2017) (unit: litre per capita per year)
3.6.1: Death rate due to road traffic injuries	27.5 (2010), 22.3 (2013), 23.5 (2014), 26.0 (2015), 25.2 (2016), 24.9 (2017) (unit: deaths per 100 000)
3.7.1: Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods	75.7% (2016)



3.7.1A: Couple year protection rate (additional indicator)	33.4% (2010), 59.7% (2014), 67.7% (2015), 68% (2016), 61.2% (2017)
3.7.2: Adolescent birth rate (aged 10–14 years; aged 15–19 years)	10–14-year-olds: 1.2 (2010), 1.6 (2013), 1.4 (2015), 64.7 (2016), 0.6 (2017) (unit: per 1 000 females)
	15–19-year-olds: 65 (2010), 73.9 (2013), 64.7 (2015), 55.4 (2016) 46.2 (2017) (unit: per 1 000 females)
3.9.3: Mortality rate attributed to unintentional poisoning	0.2 (2011), 0.4 (2013), 0.2 (2015) (unit: deaths per 100 000)
3.a.1: Age-standardized prevalence of current tobacco use among persons aged 15 years and older	Male: 42% (1998), 37.3% (2016)
	Female: 11% (1998), 7.8% (2016)
3.b.1: Proportion of the target population covered by all vaccines included in their national programme	DTP: 68.9% (2010), 97.3% (2014), 94.2 (2015), 71.4 (2016), 84.1% (2017)
	Measles: 68.4% (2010), 73.2% (2014), 74.5 (2015), 82.7 (2016), 77.6% (2017)
	Pneumococcal conjugate: 52.1% (2010), 83.9% (2014), 85.2 (2015), 76.0 (2016), 78.8% (2017)
	HPV: 64% (2015), 68.8% (2016), 61.4% (2017)
3.b.3D: Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis (domesticated indicator)	74.2% (2013), 75.7 (2015), 81.7% (2016), 77.4 (2017), 90% (2018)
3.d.1: Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks	<i>Progress reported between 2010 and 2018</i>

Table 8: SDG 3 Indicator progress

4.2.6 SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



SDG 4 contains the following ten targets:

- 4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- 4.2: By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
- 4.3: By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- 4.5: By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
- 4.6: By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
- 4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
- 4.a: Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all
- 4.b: By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing states and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
- 4.c: By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states



4.2.6.1 Policy environment

Education at all levels is a priority in overall policy formulation and planning. South Africa's socio-economic policy is driven at the highest level by the 2013 *National Development Plan* (NDP). The NDP stresses the role of education, training and innovation at all levels in eliminating poverty and reducing inequality, while also emphasising education's impact on realising common citizenship and social upliftment (National Planning Commission, [2012]). The aims of the NDP are embodied in the *Medium-Term Strategic Framework 2014–2019* (MTSF), which is the action plan for implementation of the NDP in all spheres, including education. The *Twenty Year Review, 1994–2014*, which will shortly be succeeded by the 25-year review, takes stock of government's performance over twenty years, thereby monitoring progress in implementation, including in education (DPME, 2014).

The basic education sector is unique in that there is a sector-specific plan known as the *Action Plan to 2019: Towards the Realisation of Schooling 2030*. Three Action Plans have been developed to date 2014, 2019 and 2024, which is currently in draft. The Action Plans provide continuity insofar as it follows the basic structure of the previous sector plan. The Action Plan has 27 goals covering a broad range of issues and interventions. Of these 27 goals, 13 deal with performance and participation outcomes and 14 deal with the 'how' of realising these outcomes. To promote focus within the system, however, five of the 27 goals have been identified as priority goals.

The Action Plan is highly aligned to the NDP and may be seen to be taking forward South Africa's National Development Plan 2030, It also aligns with many of the SDG targets for basic education (DBE, 2015a). The White Paper for Post-School Education and Training: Building an expanded, effective and integrated post-school system is the basic document for contemporary HE, and includes an emphasis on TVET and the post-school college system.

Basic education: Key policy documents and legislation

Much policy in relation to access to schools in the years immediately after 1994 was directed at eliminating categorisation and organisation by race and ethnicity. This involved creating unified departments of education, nationally and provincially, and deracialising schools. In parallel, the question of school management was addressed, with a particular focus on working towards a capable and effective teaching force and efficient school principals, and on issues of curriculum and assessment. Key documents and legislation that were enacted during this period are listed below.

- *White Paper on Education and Training in a Democratic South Africa: First Steps to Develop a New System*. This was the founding policy document of the new educational dispensation in South Africa after 1994.
- *National Education Policy Act*, 1996. The responsibilities of the Minister of Education and the relationship between national and provincial education authorities are stipulated in this act. Other aspects stipulated in the act include the structures to implement the system; and the means to formulate national policies across academic, technical and vocational education and training in curriculum, assessment, language and quality assurance.
- *South African Schools Act*, 1996. The Act guarantees access for all learners to quality education; makes schooling compulsory for children aged 7–15; democratises school governance through school governing bodies (SGBs) in all public schools; and ensures funding to prioritise redress and target poverty.
- *Employment of Educators Act*, 1998. The Act lays out teachers' duties and terms of employment.



- *Education White Paper on Early Childhood Education (2016)*. The primary recommendation of the White Paper is that all 5-year-olds be enrolled in pre-school Grade R education; and it mandated improvements in the quality, curricula and teaching for the categories birth to 4 years old, and 6 to 9 years old.
- *Education White Paper on Inclusive Education*. This White Paper elaborates the provisions with regard to inclusive education at all levels by 2020 and in so doing enabling disabled and vulnerable learners to participate in formal education and providing support to improve retention of learners at risk of dropping out of school.
- *Education Laws Amendment Act, 2005*. This law amended the South African Schools Act to authorise the declaration of 'no fee' schools in impoverished communities.
- The *National Policy Framework for Teacher Education and Development in South Africa (2006)*. This policy document, building on earlier initiatives, aims to provide an overall strategy for the successful recruitment, retention and professional development of teachers. This aspiration coexists with and is at times in tension with teachers seen as a body of unionised workers, as is apparent in the *Education Labour Relations Council* and other fora, where union opposition to educational policy initiatives, such as implementation of the DBE's *Annual National Assessments*, may be evident.
- The *Education Laws Amendment Act, 2007*, further modified in 2016, laid out the functions and responsibilities of school principals, key figures in the success or otherwise of schools.
- *National Policy for an Equitable Provision of an Enabling School Physical Teaching and Learning Environment (2010)*. The policy addresses inequality in the provision of acceptable school infrastructure.
- *Rural Education Draft Policy (2018)*. This policy talks to the educational issues linked to rural poverty and deprivation.

Curriculum and assessment have been contested areas in South African school education. Drawing on a predominantly didactic educational tradition, the attempt was made from the late 1990s onwards to introduce *outcomes-based education*, founded on the principle of problem-solving and the outcomes of what pupils could do. For reasons including, amongst others, a lack of resources and inadequate preparation of teachers, the policy was not a success, particularly in poorer and less well-resourced schools. This policy was replaced by the National Curriculum Statement Grades R-12 which was implemented progressively between 2012 and 2014. This statement consists of three documents, namely a) *The National Policy Pertaining to the Programme and Promotion Requirements of the National Curriculum Statement Grade R-12*; b) *Curriculum and Assessment Statements (CAPS)* and c) *The National Protocol of Assessment for Grade R-12*. The revised policy takes an arguably more realistic approach to what is possible in the light of actual conditions in the great majority of South African schools: see, for instance, the 2015 *National Policy Pertaining to the Programme and Promotion Requirements of the National Curriculum Statement Grades R-12* (DBE, 2015c) and the 2017 CAPS implementation report, *DPME/Department of Basic Education (2017) Implementation Evaluation of the National Curriculum Statement Grade R to 12 Focusing on the Curriculum and Assessment Policy Statements (CAPS)*, Pretoria: Department of Planning, Monitoring and Evaluation/Department of Basic Education.

The Department of Social Development (DSD) has an important role in ECD (the promotion of the well-being of children from birth to entry to primary schooling). As part of this responsibility, the department registers ECD service providers and provides funding to support registered ECD centres. The provision of ECD has expanded rapidly in South Africa in recent years. The *National Integrated Early Childhood*



Development Policy (2015) provides the enabling framework; defines the components of ECD; identifies role players and establishes a coordinating structure (Department of Social Development, 2015). Within the context of this framework, DSD is responsible for oversight in this sector, DBE for curriculum development and practitioner training and the Department of Health (DOH) for nutrition and health care, whilst infrastructure has to be delivered by local municipalities.

During the State of the Nation Address on 07 February 2019, President Cyril Ramaphosa indicated that: “This year, we will migrate responsibility for ECD centres from Social Development to Basic Education, and proceed with the process towards two years of compulsory ECD for all children before they enter Grade 1”. This announcement supports the recommendations made in the National Development Plan. Following the NDP and State of the Nation (SONA) directives, the DBE and the DSD has embarked on the National Macro Organisation of Government (NMOG) process that is being led by the Department of Public Service Administration (DPSA). The NMOG process is expected to be completed by 30 March 2020, this will implications for policy, and indicator measurement in relation to the SDGs moving forward.

Higher education and training: Key policy documents and legislation

The key policy documents and legislation that guide higher education and training in South Africa are indicated below.

- *Higher Education Act, 1997*. The Act is the foundational HE legislation enabling the formation of new institutions and other matters.
- *Skills Development Act, 1998*. This legislation enabled the formation of Sector Education and Training Authorities (SETAs), the bodies responsible for vocational skills training.
- *National Student Financial Aid Scheme Act, 1999*. The prescriptions contained in this act guide the provision of financial support to qualifying poor students in HE.
- *Adult Basic Education and Training Act, 2000*. The Act provides for the establishment, governance and funding of public adult learning centres and for the registration of private adult learning centres.
- *Continuing Education and Training Act, 2006*. The law provides the provisions necessary for the continuing and vocational education system.
- *National Qualifications Framework Act, 2008*. This Act underlies the national qualifications system and associated organisations.
- *National Policy for the implementation of the Recognition of Prior Learning*. The policy provides guidelines for the recognition of prior learning in the higher education (HE) system.
- *National Policy on Community Education and Training Colleges*. The National Policy provides guidelines for the expansion and improvement of community education.

DHET is also responsible for overseeing 21 Sector Education and Training Authorities (SETAs). SETAs' role is to implement the National Skills Development Strategy and to increase skills in their respective sectors. The SETAs are funded through a levy paid by employers. Learnerships, based on partnerships between the SETAs, employers and service providers, are the key responsibility of the SETAs. SETAs have largely taken over the role previously filled by the apprenticeship system.

4.2.6.2 Indicators

Indicator 4.1.1: Proportion of children and young people (a) in Grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex

Indicator 4.1.1A1: Percentage of children in the population who completed: a) Grade 7; b) Grade 9; c) Grade 12, by sex

Indicator 4.1.1A2: Percentage of youth aged 15–24 (and 15–34) years who were not currently attending school or who dropped out of school without completing Grade 12

Indicator 4.1.1D measures numeracy and literacy amongst children in Grades 2/3, at the end of their primary school education, and the end of their secondary school education.

Figure 47 provides a visual representation of South Africa's progress between 2011 and 2014. The figure suggests that numeracy levels amongst learners in Grade 3 and Grade 6 have improved according to the ANA tests, although these tests were not designed to be strictly comparable across time. The more reliable measure of progress, namely the Trends in International Mathematics and Science Study (TIMSS) demonstrated significant improvements in both mathematics and science at the grade 9 level between 2002 and 2011, and again to 2015.

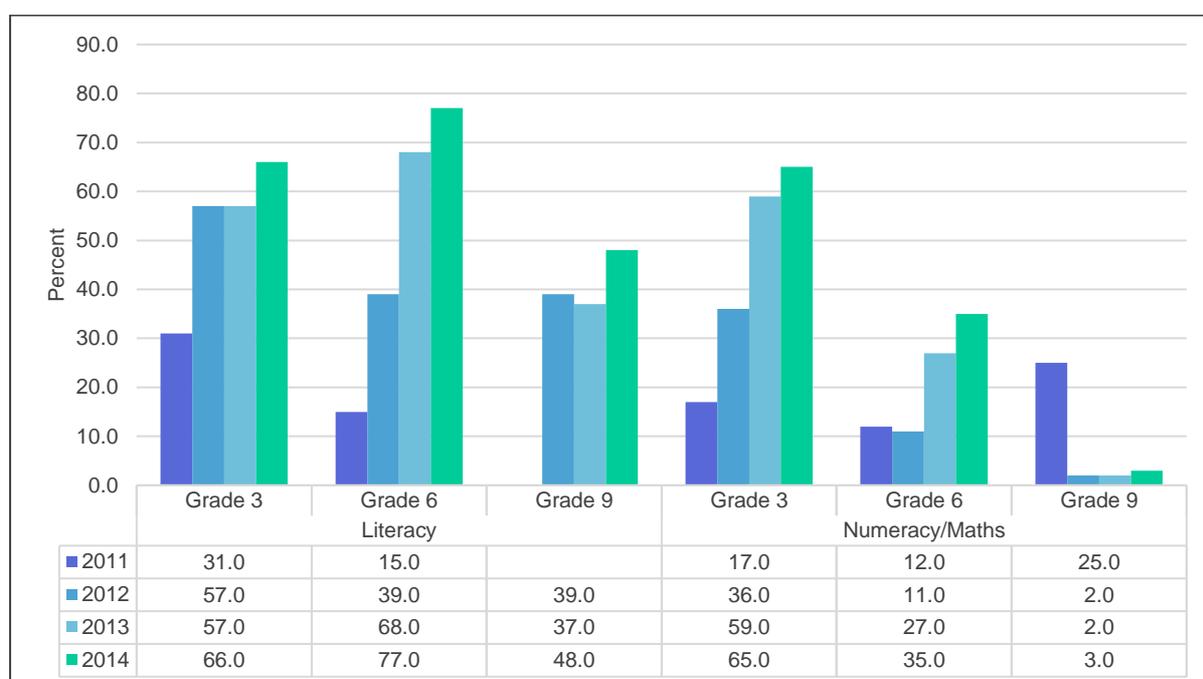


Figure 47: Percentage of children and young people (a) in Grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, 2011–2014

Data sources: ANA, PIRLS, TIMSS 2011–2014, DBE

The Annual National Assessment (ANA) achievement for Grade 9 mathematics is especially low. A number of factors may have contributed to this outcome. Firstly, it is known from other international assessments at Grade 9 level (in particular the TIMSS assessment) that South Africa's achievement is indeed low. Secondly, compared to the primary school grades ANAs, the Grade 9 mathematics test in ANA was extremely long (making it difficult) and covered an extensive part of the curriculum. This would also contribute to the paper's level of difficulty as certain sections of the curriculum may not yet have been covered, or would have been covered some time prior to the assessment. As the international discussions about it show, this indicator is a challenge to report on in a meaningful way. However, the



issue of quality learning outcomes in reading and mathematics is such an important goal that it remains a priority to continue reporting against this indicator, and to improve the reporting methodology and data sources. The newly designed Systemic Evaluation (part of the new National Integrated Assessment Framework) is an important step in this regard that South Africa is taking in 2019.

Identified as key to the success of the National Strategy for Mathematics, Science and Technology (MST) Education 2019–2030 are teacher development, review of the MST curriculum and provision of appropriate learning support material. Of equal importance is the teaching of vocational skills at secondary level and dedicated learning resources to equip disabled children for the workplace. The Mathematics Teaching and Learning Framework identifies key areas to be addressed in order to improve numeracy, and also takes account of how and by whom teacher development programmes are to be developed and implemented, and the role that language, including Home Language in the Foundation Phase, plays in teaching, learning and understanding mathematics.

As part of this initiative, DBE provides workbooks for Grade R to 9 learners. These are intended to improve both literacy and numeracy, and to assist teachers to track learners' progress and provide additional support, if needed (Department of Basic Education, [2019]). The workbooks comply with the latest CAPS and are issued free of charge. DBE is also working on the development of an Early Grade Mathematics Project, which would provide cost-effective policy and programmatic interventions to improve Foundation Phase Mathematics (DBE, 2019).

Such initiatives build on predecessors including the Foundations for Learning Campaign, which started in 2008 and focused on literacy and numeracy, as did the Integrated National Literacy and Numeracy Strategy (INLNS) in the following years, which aimed to coordinate provincial initiatives in areas including teachers' content knowledge, support materials and Grade R teaching. Many of the INLNS-related activities took place in wealthier provinces or those with greater capacity: for example, the Literacy and Numeracy Intervention (LNI) in the Western Cape and the Gauteng Primary Literacy and Mathematics Strategy (GPLMS). Initiatives in other provinces included the School Transformation and Reform Strategy (STARS) in Mpumalanga, the LitNum Strategies in KwaZulu-Natal and the Free State and the Eastern Cape's Learner Attainment Improvement Strategy (DBE, 2019).

Implementation by provincial departments indicated that they required guidance, suggesting that initiatives to improve literacy and numeracy need to continue to focus on the provincial level.

Where it was implemented, the Dinaledi programme for Grade 12, which providing additional teachers, training and mathematics and physical science resources, had a significant impact on the National Senior Certificate pass rate (DBE, 2019).

In 2013 and 2014 up to 66% of Grade 3s, 77% of Grade 6s and 48% of Grade 9s achieved the required standard in *literacy*; the higher scores in the lower grades suggest that, as learners come through the system, they are doing so with increasingly better literacy levels. This may be due to a steady improvement in teaching and learning methods, learning materials and other essential inputs. However, the 'minimum proficiency' – which learners are expected to have in order to score – should be monitored; if it is set too low, it may mean that learners are not being equipped with the literacy skills that they need to progress well in school and to thrive after school.

Any appraisal of achievements in specific areas of learning such as literacy or numeracy needs to take into account the participation rate of the population group under consideration. South Africa's primary and secondary school (Grade 7 to 9) participation rates are effectively 100 per cent. These figures decline for the higher Grades (10–12) and TVET streams. Only 86% of youth aged 16–18 years attend education institutions. Globally, the figures are approximately 90 per cent for primary and 68 per cent for secondary, with female participation higher than male. Given the high participation rates, it ought to



be the case that the country's young people are able to acquire adequate levels of literacy and numeracy during their school years. Among the reasons why this is not universally the case are the effects of poverty on learning, including not only lack of reading materials but distances travelled to school, and the cost of doing so, allied with factors such as inadequate diet and lack of good lighting for after-school studies.

Improving literacy is a priority for DBE as is support for the use of African languages as learning and teaching mediums. The aim of the Department's 2015 *Framework for Strengthening the Learning and Teaching of Languages* is to ensure parity of esteem and equitable treatment for all official languages in schools; this is in line with the aims of the NDP. At the same time, there is a focus on strengthening English as a subject and as a medium of instruction in the intermediate phase and beyond. In support of this approach is a commitment to providing sufficient reading materials, particularly in African languages, and through such strategies to improve learner performance to appropriate levels. This approach is aligned with the concept that learners who can use their home languages proficiently will learn effectively in other languages also, thus increasing overall literacy rates and linguistic abilities as well as promoting social cohesion, economic empowerment and the preservation of heritage and cultures.

A key initiative is the Early Grade Reading Study (EGRS), which DBE has been implementing at provincial level since 2015, in collaboration with academic researchers. In North West province, 230 schools were targeted. The main finding has been that a structured learning programme aligned to the National Curriculum Statement (NCS), with additional high-quality reading support materials and accompanied by skilful teaching, can make a significant difference to learning outcomes. Currently underway in Mpumalanga province is a second EGRS focusing on the acquisition of English as a First Additional Language (EFAL) in the Foundation Phase. Based on this evidence the EGRS programme is currently being extended in North West through the Reading Support Project targeting 260 schools and providing support in both Setswana Home Language and EFAL.

Other initiatives to improve literacy and numeracy include the national-level partnership between DBE and the National Education Collaboration Trust, which rolled out the Primary School Reading Improvement Programme (PSRIP) to over 1 600 schools across the country. One outcome has been the implementation of the English First Additional Language (EFAL) Reading programme. Another recent initiative by DBE is the English Across the Curriculum Toolkit. This provides exemplar lesson plans and recorded lessons demonstrating how the language aspect of each subject can be taught without deviating from the subject content. Supplementing these initiatives has been Read to Lead, launched by DBE in 2015. This emphasises the roles of not only schools in improving literacy, but also of parents, other caregivers and the community (DBE, 2015).

Indicator 4.1.1.A1 measures the percentage of children in the population who completed grades 7, 9 and 12. Figure 48 presents the data available for 2017. Figure 49 provides insight into the trend from 2008 to 2017, and shows a consistent increase in the percentage of learners who complete grade 7, grade 9 and grade 12.

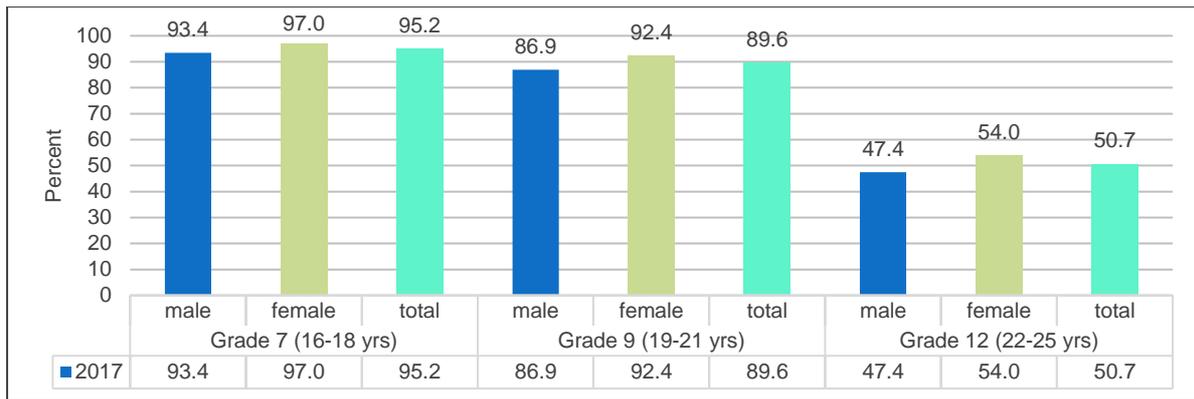


Figure 48: Percentage of children in the population who completed: a) Grade 7; b) Grade 9; c) Grade 12, by sex, 2017
Data source: GHS 2017, Stats SA

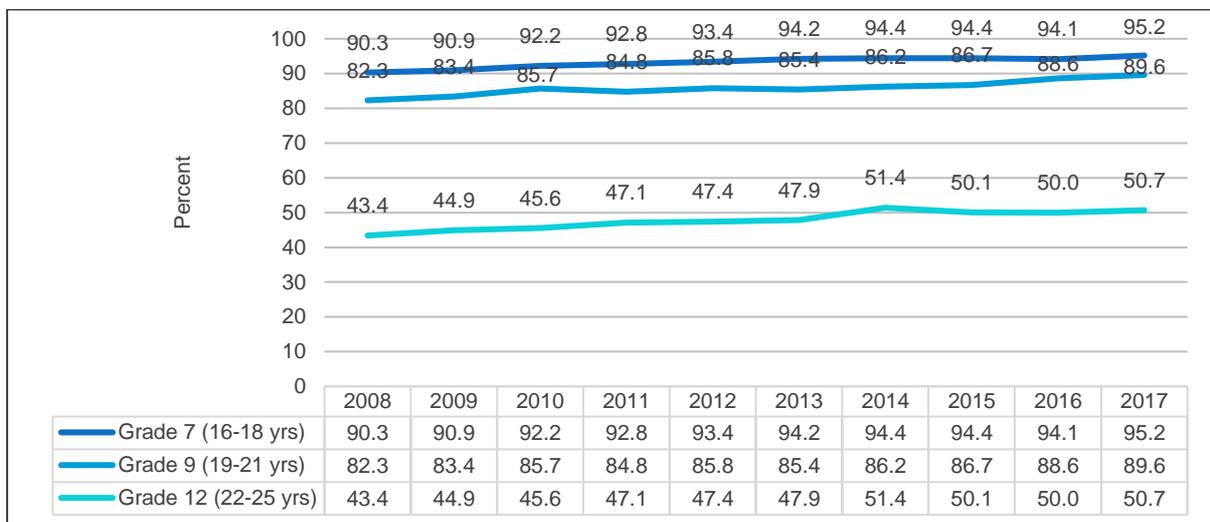


Figure 49: Percentage of children in the population who completed: a) Grade 7; b) Grade 9; c) Grade 12
Data source: GHS 2008-2017, Stats SA

Indicator 4.1.1A2 measures the percentage of youth aged 15–24 (and 15–34) years who were not currently attending school or who dropped out of school without completing Grade 12. As shown in Figure 50, the percentage of young people who complete grade 12 is increasing.

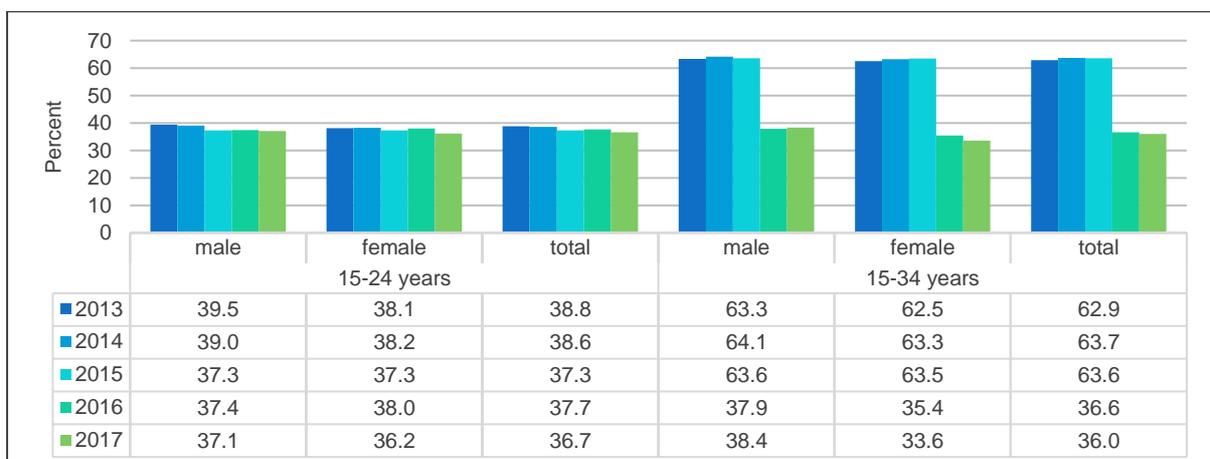


Figure 50: Percentage of youth aged 15–24 (and 15–34) years who were not currently attending school or who dropped out of school without completing Grade 12
Data source: GHS 2013–2017, Stats SA

Indicator 4.2.2: Percentage of children attending Grade 1 in the current year, after attending Grade R/0 in the previous year
 Indicator 4.2.2A: Number of children accessing registered ECD programmes

Indicator 4.2.2 (percentage of children attending Grade 1 in the current year, after attending Grade R/0 in the previous year) and Indicator 4.2.2A (number of children accessing registered ECD programmes) are closely related and progress with regard to these indicators is presented in Figure 51 and Figure 52. Figure 51 shows that, between 2009 and 2017, well over 90% of South African children in the year below the official primary school entry age participated in organised learning. By age 6, 32.5% are attending Grade R, which is provided at public primary schools. Even though these figures do not give information about the quality of the learning and/or of related issues such as the safety and general suitability of the places of learning, they do indicate a high rate of participation and may suggest a strong propensity on the part of parents to pay for early-years education in the not unreasonable expectation that this will provide their children with a head start when they join the formal schooling system. Differences in the ability to afford pre-school education should, however, be noted. A child of the same age from a wealthy household has a 90% chance of enjoying this benefit (Ilifa Labantwana, 2017: 35). Such differences demand serious attention as do the quality and range of resources available to these children, as well as the places of education that they attend. A 2013 audit reported on in a study by the Department of Economics at the University of Stellenbosch found that one in five ECD centres had inadequate drinking water and a quarter had poor ablution facilities and/or an inadequate electricity supply.

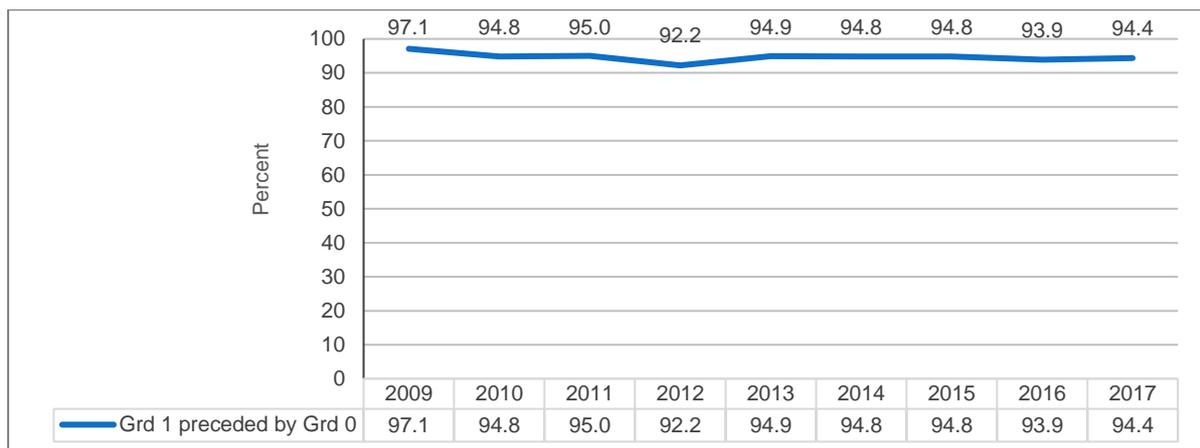


Figure 51: Participation rate in organised learning (one year before the official primary entry age)
 Data source: GHS 2009–2017, Stats SA

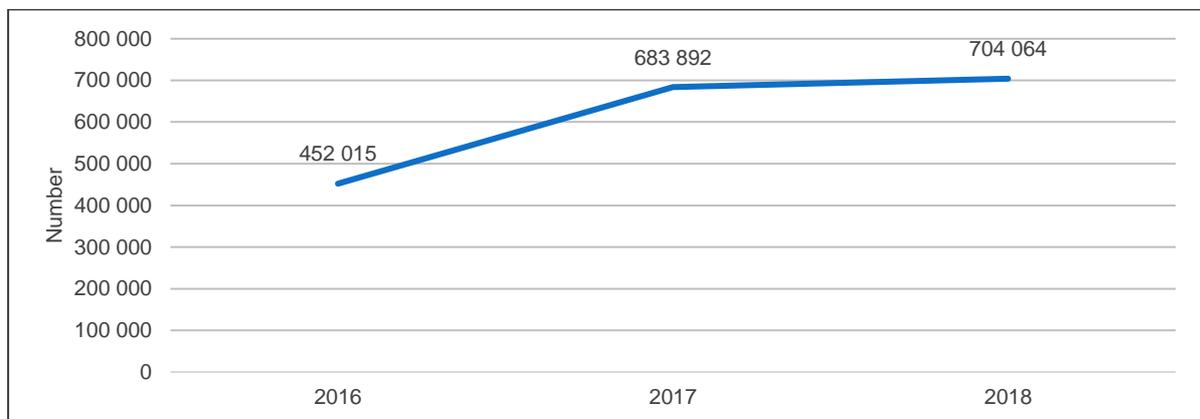


Figure 52: Number of children accessing registered ECD Programmes, 2016–2018
 Data source: DSD

Indicator 4.3.1: Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

Indicator 4.3.1 measures the percentage of youths aged 15–24 years attending education or training institutions. Figure 53 shows the participation rates in formal education and training among people aged 15 to 24 over the previous twelve months. Participation by disabled people was somewhat, but not dramatically, lower than that of the other categories of people. This suggests a need to ensure that the disabled are able fully to participate, but it does not seem to imply a major failure to provide them with opportunities, or at least that their opportunities to participate fall dramatically below those of others. Overall, however, the figures are low. In 2016, female participation, at 16%, was notably higher than male, at 11.5%, although the gap appears to have closed slightly in the following year. The low level of participation in post-school education and training is widely recognised as a challenge that the country must face, connected as it is not only to the possibilities of employment but to issues of crime, disaffection, inability to care successfully for the next generation of children, and many other matters of great socio-economic importance.

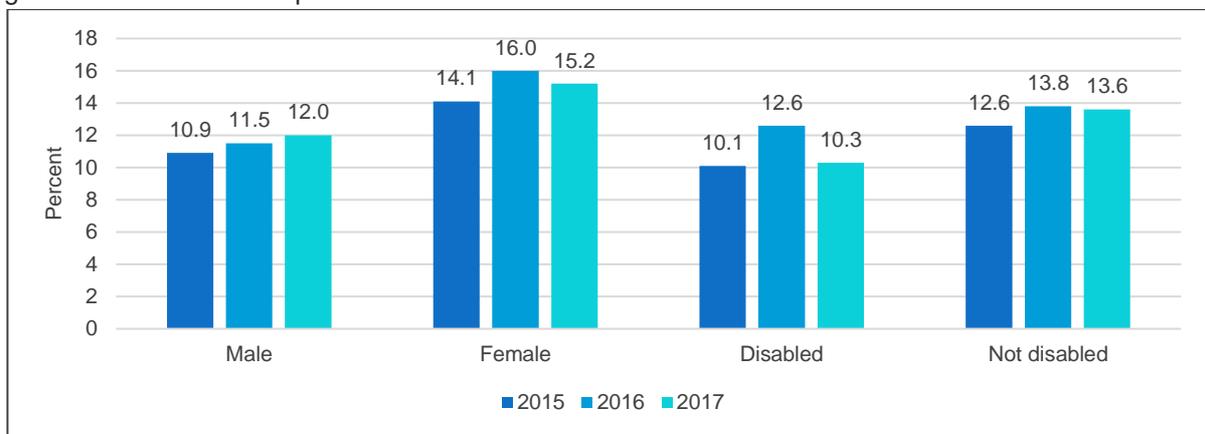


Figure 53: Participation rate of youth (15–24 years) in formal and non-formal education and training in the previous 12 months

Data source: GHS 2015–2017, Stats SA

This indicator also measures the percentage of adults aged 35–64 years attending education or training institutions in the previous twelve months. Figure 54 shows that participation rates for adults aged 35 to 64 years were significantly lower and remained stable for males, but declined slightly for females and the non-disabled and disabled between 2015 and 2017. Given South Africa’s extreme rates of unemployment, addressing participation rates is critical. Although not sufficient in itself, among the initiatives to increase participation and retention in formal and non-formal education is the Second Chance Matric Programme, which supports learners who have not previously been able to meet the requirements of the National Senior Certificate (NSC) or the extended Senior Certificate (SC) (Department of Higher Education and Training, 2019). The programme thus assists with meeting the goals of the NDP and MTSF, and also aims to create job opportunities, develop learners’ career paths and increase the likelihood that they will receive bursaries for further studies.

Although SDG 4 does not provide for assessing participation in post-school education by population group, the General Household Survey 2017 data indicates that the population group with the highest level of participation in post-secondary education remains the white group, with over 38% participation at that level. The equivalent figure for the black African group is 9.1%, marginally higher than that for the coloured group (8.1%). A great deal thus remains to be done to bring about equity of access.

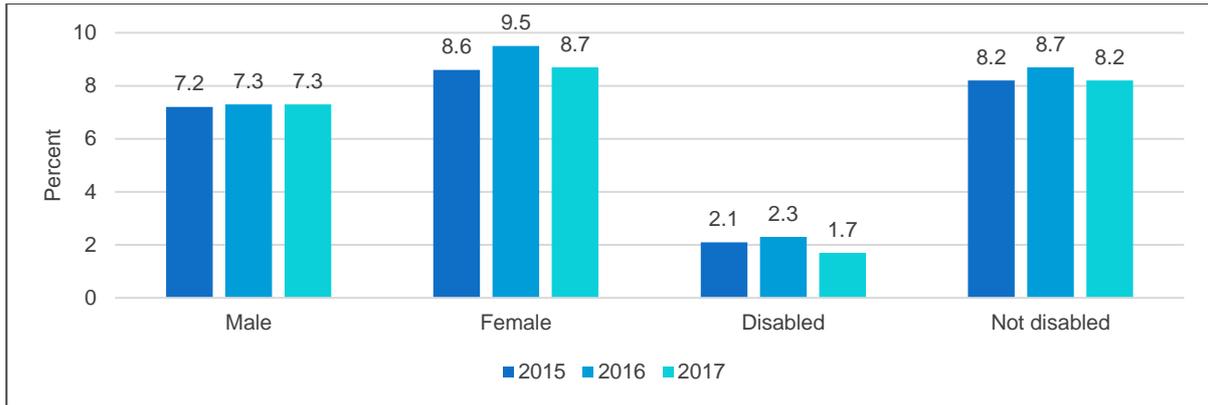


Figure 54: Participation rate of adults (35–64 years) in formal and non-formal education and training in the previous twelve months, 2015–2017
Data source: GHS 2015–2017, Stats SA

With regard to participation rates in post-school education system, it should be noted that, in 2016, South Africa had 26 public HEIs (approximately 975 000 students), 123 registered private HEIs (approximately 167 000 students), 50 TVET colleges (approximately 705 000 students), 279 registered private colleges and 9 Community Education and Training (CET) colleges.

According to DHET, in 2016, 111 460 students completed key exit levels (N3, N6 and NC(V) Level 4) in TVET colleges – a completion rate of 62.2% (Department of Higher Education and Training, 2019). Completion rates for level N6 were higher, at 66.1%. The completion rate among N3 engineering studies students was 65.8%; among N6 engineering studies it was lower, at 61.0%. The N6 business studies completion rate was 67.6%. While completion and pass rates that are as high as possible are desirable, these figures are not strikingly low and suggest that, for those who opt for this level of post-school education, the likelihood of exiting successfully is fairly high.

Although currently only approximately 12% of school leavers embark on TVET studies, the draft National Artisan Development Strategy (2017; gazetted in June 2018), intends to increase the number of TVET students. The draft National Artisan Development Strategy applies to people of all age groups. The 2013 White Paper for Post-School Education and Training provides for the establishment of community education and training colleges catering for post-school young people and adults who wish to pursue further learning, improve their employment skills and/or take up opportunities at TVET college or university level (DHET, 2019a). There are nine community colleges, one in each province, into which are incorporated 3 279 adult education and training centres. These colleges cater mainly for those who do not qualify for admission to TVET colleges or universities, and form an important part of government's goal of 1 million young people and adults in community education and training by 2030. Community education and training is also intended to contribute to improved community cohesion and social capital, and to respond to geographical and sectoral needs and challenges (DHET, 2019b).

Indicator 4.4.1D: Percentage of youth and adult university graduates by field of study
Indicator 4.4.1A: Number of graduates in (a) public and (b) private higher institutions

Indicator 4.4.1D provides information on youth and adult university graduates by field of study (Table 9). The number of graduated students are substantial in Business, Economics and Management Sciences and in Education, and low in, among others, Architecture and the Built Environment, Life Sciences and Communication, Journalism and related studies. To the extent that national policy and socio-economic development depend on graduates from fields of study in high demand, attention must be given to how enrolments can be increased in essential fields. This will require detailed understanding of the linkages between subjects studied at school and those taken at tertiary level; and support for increased success at school level to enable such post-school studies to be provided.



Field of study	Age 15–34		Age 35–64		Age 15–64	
	Number	%	Number	%	Number	%
Agriculture, Agricultural Operations & Related Sciences	54 256	2,40	33 784	2,34	88 040	2,38
Architecture and the Built Environment	38 684	1,71	24 526	1,70	63 210	1,71
Arts (Visual and Performing Arts)	27 456	1,22	15 068	1,04	42 524	1,15
Business, Economics and Management Sciences	417 398	18,49	251 305	17,43	668 703	18,08
Communication, Journalism and Related Studies	54 581	2,42	29 694	2,06	84 275	2,28
Computer and Information Sciences	111 895	4,96	56 650	3,93	168 545	4,56
Education	457 062	20,25	364 197	25,26	821 259	22,20
Engineering	203 793	9,03	118 664	8,23	322 457	8,72
Health Professions and Related Clinical Sciences	202 069	8,95	138 612	9,61	340 681	9,21
Family Ecology and Consumer Sciences	11 014	0,49	5 833	0,40	16 847	0,46
Languages, Linguistics or Literature	16 170	0,72	11 030	0,76	27 200	0,74
Law	99 637	4,41	64 161	4,45	163 798	4,43
Life Sciences	19 717	0,87	10 595	0,73	30 312	0,82
Physical Sciences	23 516	1,04	13 637	0,95	37 153	1,00
Mathematics and Statistics	16 927	0,75	10 588	0,73	27 515	0,74
Military Sciences	6 322	0,28	5 066	0,35	11 388	0,31
Philosophy, Religion and Theology	19 451	0,86	14 488	1,00	33 939	0,92
Psychology	48 311	2,14	28 010	1,94	76 321	2,06
Public Management and Services	81 645	3,62	48 212	3,34	129 857	3,51
Social Sciences	51 461	2,28	30 275	2,10	81 736	2,21
Other	295 825	13,11	167 580	11,62	463 405	12,53
Total	2 257 187	100	1 441 973	100	3 699 165	100

Table 9: Percentage of youth and adult university graduates by field of study, 2016
Data source: CS 2016, Stats SA

Indicator 4.4.1A measures the number of graduates in private and public higher education institutions. With regard to the number of graduates at private higher education institutions, only two data points could be provided. There were 39 686 students in 2016 and 35 922 in 2017. In the public system, the number of graduates increased from 160 625 in 2011 to 210 931 in 2016 (Figure 55).

Among the findings of the report of the Commission of Enquiry into Higher Education and Training, established in January 2016 and required to examine the feasibility of making higher education in South Africa fee-free, were that government should increase spending on higher education and training to a level similar to that of comparable countries; address the matter of affordable student accommodation; look further into the question of online and blended learning; fully subsidise learning and TVET colleges; and arrive at a suitable funding model for under- and postgraduate students. This model would take into account issues such as ability to pay, and proposed sharing of the costs and risks between government and commercial lenders (Presidency, 2017).

Internationally, approaches to funding higher and vocational education vary, using methods that include tax relief, loans and grants. It is widely recognised that aligning the skills required by an economy and



the availability of such skills is determined by a number of factors including individuals' preferences and their opportunities to acquire such skills; planned provision; and market determination. A model recommended by the Organisation for Economic Co-operation and Development (OECD) suggested providing a mix of VET programmes, including through apprenticeships; cost-sharing between government, employers and students; consultation with employers and unions about curriculum content; and ensuring that TVET programmes develop generic, transferable skills that enable life-long learning (OECD, 2009). A combined approach such as this may be the only viable one in a context where the world of work is constantly changing (World Bank, 2019).

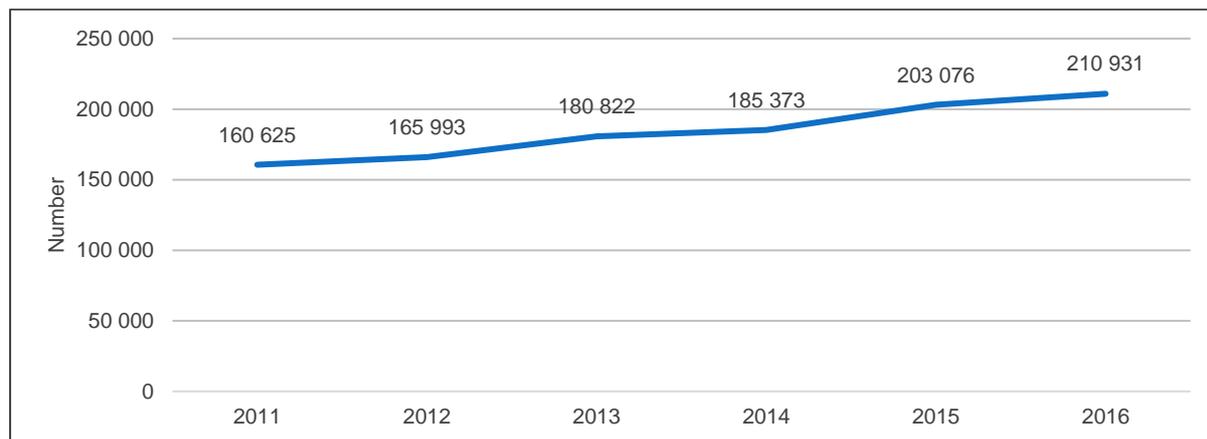


Figure 55: Number of graduates in public higher institutions, 2011–2016
Data source: HEMIS 2011–2016, DHET

Indicator 4.5.1: Gender Parity Index (a) tertiary education (b) for enrolment in tertiary education by population group

Indicator 4.5.1A: Percentage of 7–18-year-olds with disabilities who are attending educational institutions

South Africa has been able to calculate some of the parity indices required, with particular emphasis on gross enrolment levels in public tertiary institutions. A second indicator focuses on disability enrolment and gender parity for 7- to 18-year-olds with disabilities. The data for these three indicators has been sourced from the GHS. The balance between males and females in South African public tertiary education institutions leans towards females. The balance was already inclined towards female enrolment in 2007 at the beginning of the time-series illustrated here, and became steadily more marked after that, until a dip beginning in 2015 (Figure 56). It may be too soon to say whether this dip represents a longer-term trend. However, as of 2016, for every three male students in tertiary education, there were more than four females.

While in South Africa, as elsewhere, there are many issues relating to the status and remuneration of well-qualified women in the workforce, there is no doubt that as far as higher education qualifications are concerned, women increasingly predominate, at least at undergraduate level. Looked at in more detail, there are interesting subtrends. As the DHET 2013 White Paper for Post-school Education and Training notes, in relation to technical and vocational education and training, while the gender balance in TVET colleges was broadly equitable, 'Females dominate in certain categories traditionally associated with female employment ... while males strongly dominate the engineering and construction-related disciplines.' Women were increasingly present, however, in the technical disciplines and preponderant in management studies, finance, economics and accounting (DHET, 2013). The situation is similar in universities.

South Africa resembles many other countries in the growth of female participation in higher education. This trend is particularly marked in many economically advanced countries, and even in countries where



female participation has historically been low there is evidence in many cases, though not in all, of such an increase. South Africa is therefore part of a broader world trend (UNSTATS, 2019).

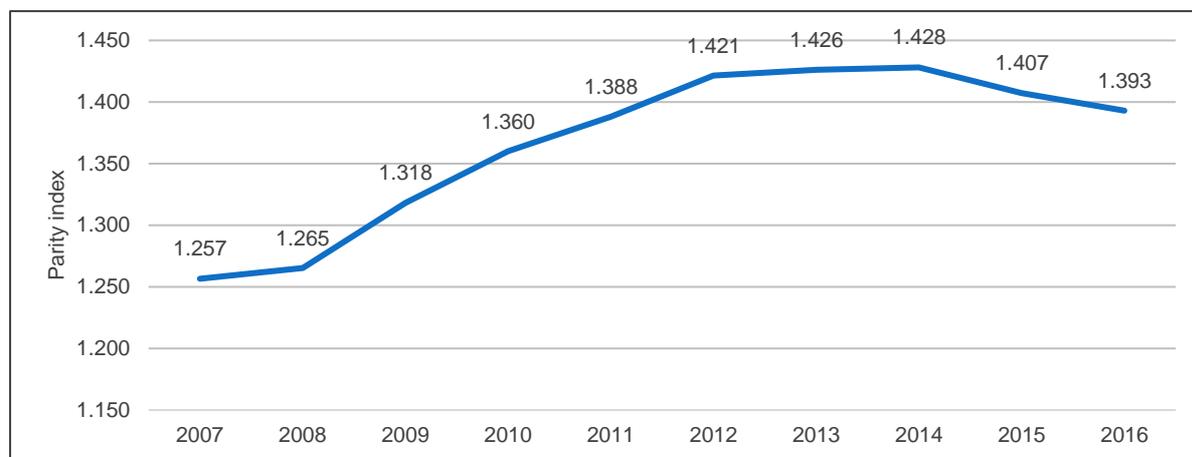


Figure 56: Gender Parity Index for tertiary education, 2007–2016
Data source: HEMIS 2007–2016, DHET

For some purposes, South Africa still utilises the four-fold racial categories inherited from apartheid (Figure 57). For social analysis and planning this has a certain utility, given the differential treatment of each group in the past and the need to overcome the legacy of the system of legislated disadvantage and develop remedies.

In all population groups, females have been a growing proportion of the tertiary student population, with a dip in the proportion of female students (except in the case of whites, where the proportion continued to rise) in the last year or two of the time series. As noted above, it is too soon to say whether this so far slight decline in the proportion of female students is temporary. The proportion of Indian/Asian and particularly coloured students who are female is striking; in 2016, there were nearly five female coloured students for every three males. It should be noted that the proportion of male and female students should be seen against the marked increase in black students generally as a proportion of the whole student population, with male students thus also increasing, though at a slower rate than females. This is not the case with coloured students. Also, while female students make up such a large proportion of the total, at postgraduate level this is not the case. Figures from the Council on Higher Education (CHE) for 2013 indicate that, at the undergraduate and Honours levels, many more women are enrolled than men, but that at Master's and doctoral levels there are more men than women, although the proportion of women has increased slightly (CHE, 2013). Also, although numbers of men and women in the academic faculty are comparable, with men in a small majority, females are in a more decided minority in the senior teaching faculty (CHE, 2012).

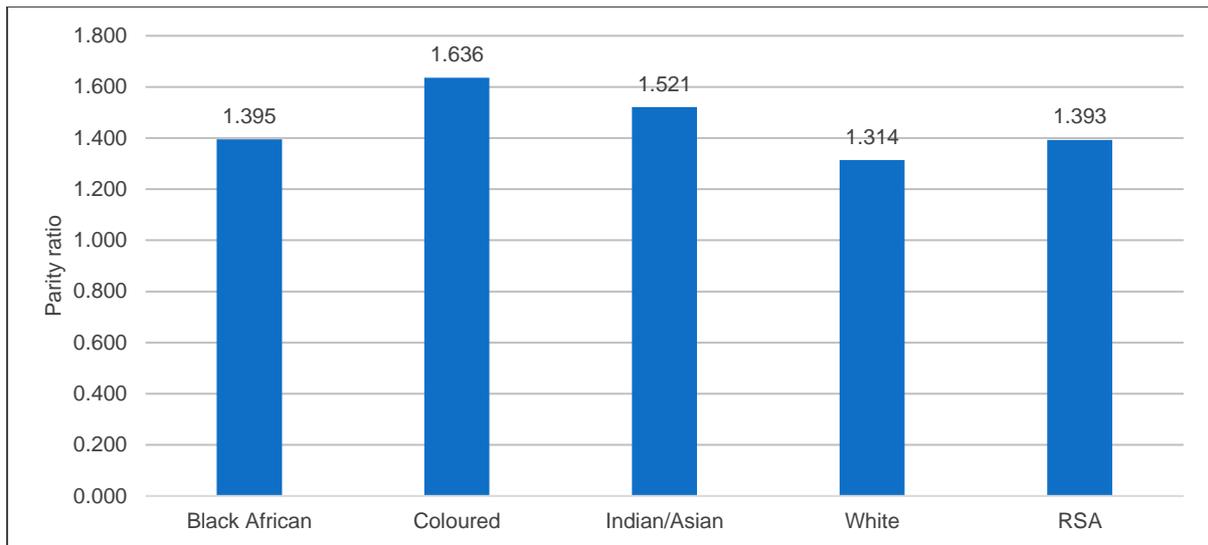


Figure 57: Gender Parity Index for tertiary education by population group, 2016
Data source: HEMIS 2016, DHET

Indicator 4.5.1A (Figure 58) shows that in 2017, among young disabled people aged 7 to 18, almost 90% attended an educational institution, with no major differences between female and male participation rates. The high participation rates, however, suggest that the learning environment does not prevent this level of participation

Insofar as the figures given here relate to disabled young people attending general schools and not those specially designed for their needs, it would be necessary to know how far these schools are equipped to cater for them. Improved support to learners with special educational needs has been a major focus of the DBE in recent years. For example, in 2018 for the first time, the National Senior Certificate examinations could be taken using sign language. The School Monitoring Survey (2017/18) showed that 78% of schools nationally complied with the set standard of having at least one educator who has received formal/informal training or an LSEN qualification to provide them with the specialisation for identifying and supporting learners with special education needs.

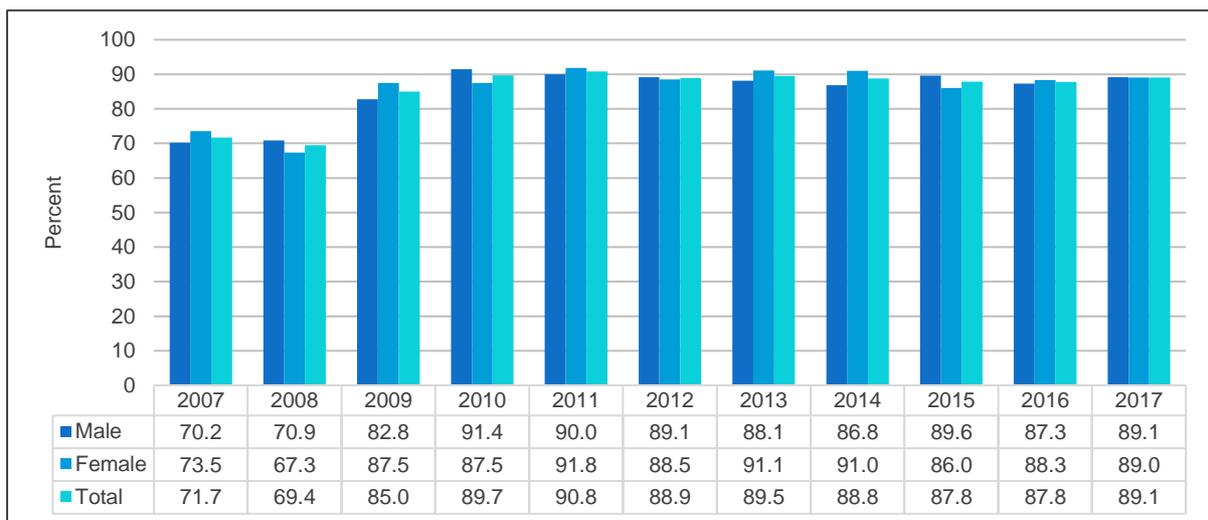


Figure 58: Percentage of 7–18-year-olds with disabilities who are attending an educational institution, by sex 2007–2017
Data source: GHS 2007–2017, Stats SA

Indicator 4.6.1D: Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex

Indicator 4.6.1D measures the proportion of the population that has achieved at least a fixed level of proficiency in functional literacy and numeracy.

Literacy is measured by the degree of proficiency in reading (e.g. newspapers, magazines, religious books) in at least one language or writing a letter in at least one language; the degree of proficiency in calculating/working out how much change he/she should receive when buying something in at least one language.

If an individual has 'no difficulty' or 'some difficulty' in reading (e.g. newspaper magazines, religious books) or writing a letter in at least one language, then the person is literate. If an individual has 'no difficulty' or 'some difficulty' in calculating/working out how much change he/she should receive when buying something in at least one language, then the person has functional numeracy.

Figure 59 reflects literacy indicator values for youth and adults between 2015 and 2017 as sourced from the GHS.

Figure 60 depicts numeracy values for youth and adults between 2015 and 2017. The figures show that, among people aged 15 to 64, the literacy rate was in all cases above 80%. Among males aged 15 to 34, it was approximately 93% and among females in the same group, approximately 96%.

Levels of functional numeracy were high, as depicted in Figure 60. In 2017, most age groups achieved numeracy of higher than 90%. Numeracy rates among 35–64-year-olds range between 78.9% and 81.7%.

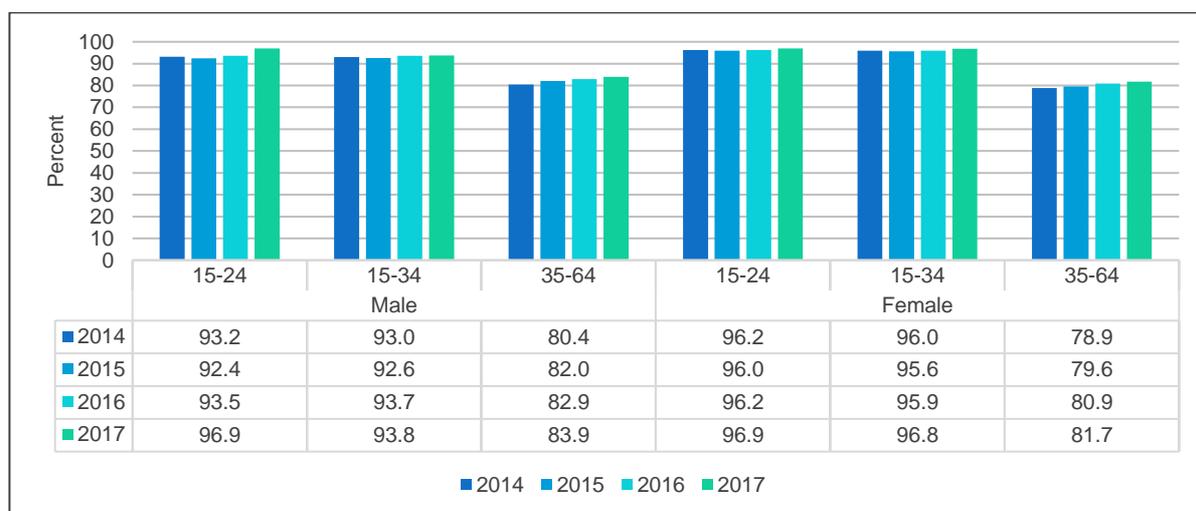


Figure 59: Percentage of population in a given age group achieving at least a fixed level of proficiency in functional literacy, by sex, 2014–2017
Data source: GHS 2014–2017, Stats SA

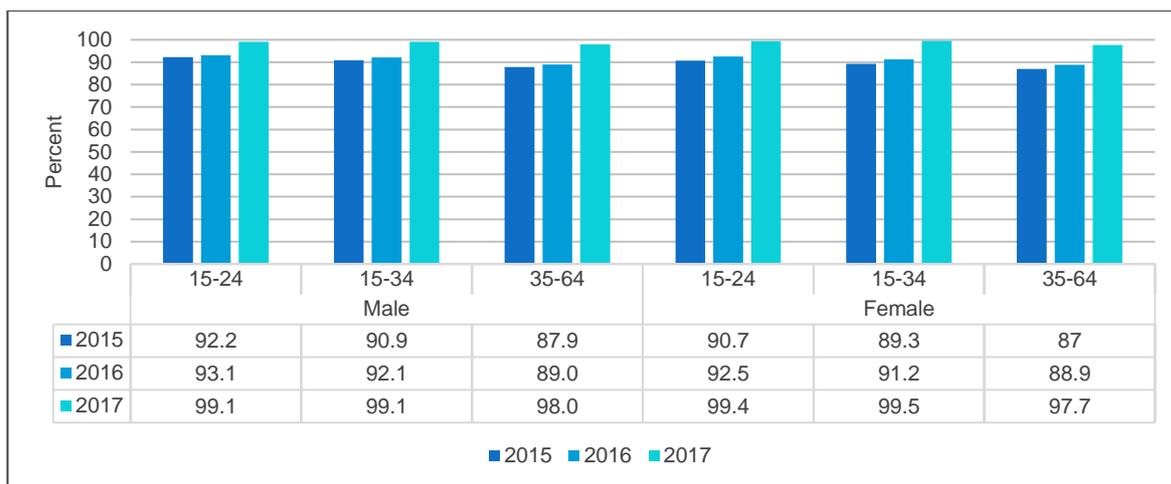


Figure 60: Percentage of population in a given age group achieving at least a fixed level of proficiency in functional numeracy skills, by sex, 2015–2017
Data source: GHS 2015–2017, Stats SA

4.a.1: Proportion of schools with access to (a) electricity; (b) the internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions)

This indicator measures schools' access to basic services. As shown in Figure 61, South Africa is able to report on all the dimensions of the indicator. Figure 61 indicates that in 2017 almost 99% of the country's schools had access to electricity, just under 20% to the internet for educational purposes, 33% to computers for pedagogical purposes, 99%-100% to basic drinking water and sanitation infrastructure. An indication of the progress made can be found in the first School Register of Needs (SRN) (HSRC, 1996). This showed that, in 1996, South Africa had 26 734 ordinary schools with an average learner classroom ratio of 43:1.

Of these, 11 000 schools were reportedly in good or excellent condition. Approximately 55% of learners (6.6 million) were in schools without toilet facilities and the learner toilet ratio was 41:1, while 35% of learners did not have access to water at school. Nationally, 42% of schools had access to electricity; 40% had access to telephones and 9% (2 330 schools) had access to computers for learning and teaching. The SRN also surveyed schools for learners with special education needs. Of the 270 schools surveyed, 20% were reportedly in good or excellent condition. Only 33% had wheelchair ramps; approximately 5% reported no access to water and 4% had no toilets.

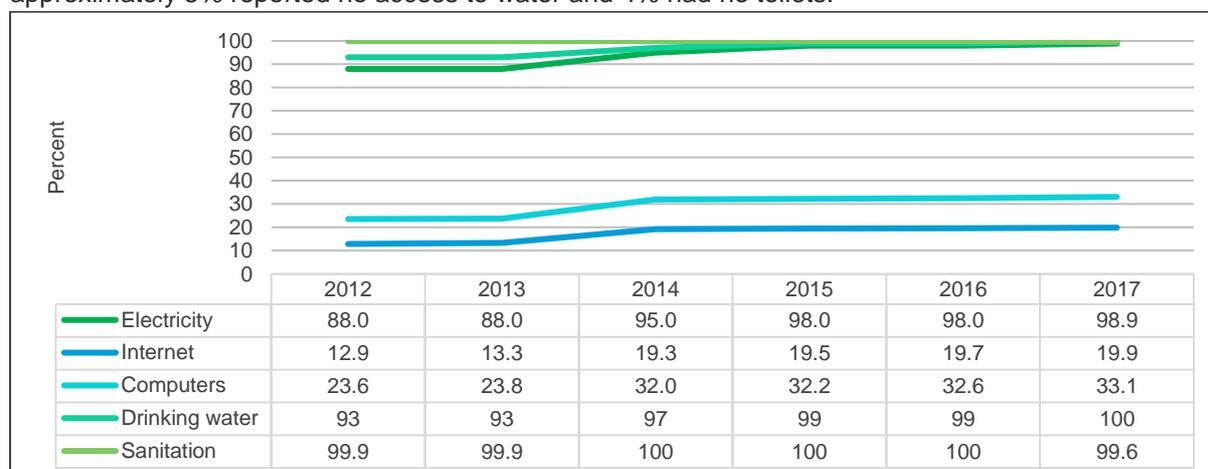


Figure 61: Percentage of schools with access to basic facilities, 2012–2017
Data Source: NEIMS 2012–2017, DBE



Clearly, the situation has much improved since then. However, according to DBE's 2011 School Monitoring Survey (Department of Basic Education, 2013), only 55 per cent of schools met the nationally determined minimum infrastructure needs in all respects. This figure increased marginally to 59 per cent in the 2017/2018 survey (Department of Basic Education, 2019). Levels of compliance in the 2017/2018 survey to the minimum physical infrastructure requirements were the highest in Gauteng (92%) and Western Cape (91%) and the lowest in Eastern Cape and KwaZulu-Natal (both at 42%).

Improving education facilities requires the ability to monitor progress. In its *Action Plan to 2019: Towards the Realisation of Schooling 2030*, the DBE states that although there are relatively good data on elements of school infrastructure such as toilets, science laboratories and classrooms (with standards for these published in 2013, to be reached by all schools by 2020), 'how exactly to monitor progress remains a matter of debate' and it has proven difficult to reduce the quality of school infrastructure to a single indicator value. However, it was estimated that by 2014 about half of schools complied with the minimum standards for availability of water, toilets, electricity and a minimum number of classrooms; and that if adequacy of classrooms is removed from the calculation, 84% of schools had complied with the remaining standards by 2011. Despite the difficulty of arriving at clear conclusions by means of composite indicator values, three provinces (Eastern Cape – much the weakest – KwaZulu-Natal and Mpumalanga) emerge as having the largest school infrastructure deficits (DBE, 2015a). DBE's draft Rural Education Policy identifies many of the challenges of resourcing, staffing and other issues that face rural schools, and proposes ways of addressing them (DBE, 2018).

The installation of electricity in rural areas and in townships has been one of the successes of democratic South Africa. Nonetheless, data relating to the percentage of schools with access to electricity may reflect only the fact that electricity was installed at a school; it does not guarantee that, for technical, financial or other reasons, the supply might not be sustained at all times.

In the case of the indicators dealing with the availability of the internet for pedagogical purposes and availability of computers for pedagogical purposes, further disaggregation is required to estimate the full significance of these figures.

They do, however, suggest a considerable advance on the situation reported in a 2005 study, which found that only 13% of South African schools had access to the internet for teaching purposes (Howie, Muller and Paterson, 2005), although it is the norm in predominantly urban quintile 4 and 5 schools to have computers and the internet access that this makes possible. While there is a move to introduce such resources in all schools, and some progress has been made in this, issues such as security, reliable access to electricity and teacher skills raise questions about such initiatives.

Figures from DBE for access to running water in schools somewhat qualify the data relating to Indicator 4.a.1(e) shown in the figure above. They reveal a range from 95.9% in Gauteng to 54.6% in KwaZulu-Natal. Thus, arriving at definitive and sustained knowledge of the availability of suitable water supplies at schools requires ongoing and detailed monitoring in all parts of the country. As with electricity, the figures in the table above refer to facilities at the point of installation, and will in some cases not represent the situation on the ground because of degradation of the system over time, vandalism or other reasons.

Whatever is indicated by the data, the situation with regard to school toilets remains one of great concern, and resolving this may be a litmus test of how far conditions for teaching and learning have really improved across the country.

The DBE has put in place various programmes to address infrastructural issues. The objectives of the Accelerated School Infrastructure Delivery Initiative (ASIDI) are to provide basic infrastructure services: water, sanitation and electricity; and to replace schools that are not fit for purpose (DBSA, 2017).



Illustrating progress in a single year, DBE's audited figures for 2017/18 indicate 425 schools newly-provided in 2017/18 with appropriate sanitation, 615 with access to water and 306 with access to electricity; 179 inappropriate structures were replaced. In the same financial year, work on 819 water, 659 sanitation and 208 electricity projects was reported and, among other resources, 89 laboratories were provided through the Provincial Schools Building Programme.

The National School Safety Framework provides guidance and assistance to provincial and district officials responsible for school safety and others, including principals, School Governing Body members, teachers and learners. The Framework deals not only with matters such as violence and conflict relating to schools, but also with organisational structures such as school safety committees; and with planning and implementation of infrastructure such as fencing and access controls. In ensuring that schools are safe and suitable environments, principals and others are required to liaise with counterparts in departments such as Social Development, Health and Justice, and with the police, to ensure services such as counselling (on matters which may include alcohol or drug abuse), medical issues and access to justice.

The DBE has put in place a Protocol to Deal with Incidences of Corporal Punishment in Schools and a Protocol for the Management and Reporting of Sexual Abuse and Harassment in Schools. The Department also participated in the 2018 High Global Conference on The Universal Prohibition of Corporal Punishment, signing a Declaration affirming South Africa's commitment to attaining SDG 16: Promote just, peaceful and inclusive societies, and particularly Target 16.2, which aims to end all forms of violence against children by 2030. The DBE also participates in the Multi-Disciplinary Social Crime Prevention Committee led by the Department of Social Development.

DBE's October 2018 National School Safety Summit with the theme 'Strengthening Safety Nets and Ensuring Safe School Environments for Teaching and Learning' was a continuation of previous summits in 2015 and 2016, with participants discussing learners' and educators' well-being and how surrounding communities can support schools in improving educational outcomes.

4.c.1D: Percentage of permanent educators that have minimum required teacher qualifications (REQV13)

This domesticated indicator reports on the percentage of permanent educators that have minimum required teacher qualifications. According to the DBE's Personnel and Salary System, 91% of South Africa's permanent educators in the public system had the minimum teaching qualifications in 2017.

4.2.6.3 Summary

South Africa's progress with regard to SDG 4's indicators with data is summarised in Table 10 below. South Africa is able to report on eight SDG 4 indicators, of which five are Tier I or Tier II SDG indicators, three are domesticated. Despite the challenge of addressing the legacy of apartheid, South Africa has made significant progress in some respects. Significant improvements in access to schooling have been achieved in South Africa over the past 25 years. The percentage of 5 year-olds enrolled in educational institutions has increased from about 40% in 2002 to nearly 85%. Primary school completion rates have improved from 85% in 2002 to about 95% in 2017, and secondary school completion rates have increased from about 40% to over 50%. South Africa achieves high rates of secondary school completion relative to most African countries but lags behind many countries in Asia, Eastern Europe and South America.

However, international and local assessments have demonstrated that the quality of learning remains a challenge in much of our school system. Weak learning foundations in early grade literacy and numeracy are the main root cause of dropout in later grades. There is at least some good news of improvements in both mathematics and literacy in all three of the main international assessments of



learning in which South Africa participates (TIMSS, PIRLS, SEACMEQ). Despite these improvements the level of learning is still a concern and remains the top government priority in education. It should also be noted that the measurement of learning through the Annual National Assessments (which are used in the table below) was somewhat problematic since these were not designed to be comparable across time or across grades.

Sustained efforts have been made and continue to be made to improve the physical conditions in which children learn (4.a.1). Virtually 100% of the country's schools have had electricity installed, with the data also showing that 100% have access to drinkable water. However, although around one-third of schools have computers for pedagogical purposes, just under 19% of schools have access to the internet for the same purposes.

ICT facilities and connectivity is still markedly lower than in many of the other countries with which South Africa needs to compete, as well as collaborate, on the world stage. Increasing this percentage is a key objective of government policy, although it should be noted that some studies have shown that highly extensive use of computers at school can reduce, rather than increase, overall performance. In this respect, as in many others relating to educational planning and implementation, finding the optimal balance between available resources, teacher and learner skills and needs, and many other factors remain a challenge. The data shows a steady increase in the number of graduates at public tertiary institutions (4.4.1A). Indicator 4.3.1 indicates that, in 2017, up to approximately 18% of people aged 15 to 24 participated in formal or non-formal training in the twelve months before the data was gathered (4.3.1).

However, this figure masks differences between population groups in terms of participation at this level. For example, in 2016, over 38% of white South Africans, 21% of Indian South Africans, 9% of black South Africans and 8% of coloured South Africans had a post-secondary school attainment.



SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Indicator	Key data points
4.1.1: Proportion of children and young people (a) in Grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	<i>Literacy</i> Grade 3: 31% (2011), 57% (2013), 66% (2014), 22% (2016)
	<i>Literacy</i> Grade 6: 15% (2011), 68% (2013), 77% (2014)
	<i>Literacy</i> Grade 9: 39% (2012), 37% (2013), 48% (2014)
	<i>Numeracy</i> Grade 3: 17% (2011), 59% (2013), 65% (2014)
	<i>Numeracy</i> Grade 6: 12% (2011), 27% (2013), 35% (2014)
	<i>Numeracy</i> Grade 9: 25% (2011), 2% (2013), 3% (2014)



<p>4.1.1A1: Percentage of children in the population who completed: a) Grade 7; b) Grade 9; c) Grade 12 (additional indicator)</p>	<p>Grade 7: 90.7% (2009), 93.4% (2012), 94.6 (2015), 94.3 (2016), 95.2% (2017)</p> <p>Male: 88.8 (2009) , 89.8(2010), 89.8 (2011), 91.6 (2012), 92.1 (2013), 92.6 (2014), 92.2 (2015), 92.2 (2016)</p> <p>Female: 92.6 (2009), 94.4 (2010), 94.4(2011), 95.2 (2012), 96.5 (2013), 96.3 (2014), 96.9 (2015), 96.3 (2016)</p> <p>Grade 9: 83.2% (2009), 85.7% (2012), 86.8 (2015), 88.6 (2016), 89.6% (2017)</p> <p>Male: 80.3 (2009), 83.4 (2010), 81.7 (2011), 83.1 (2012), 82.2 (2013), 83.1 (2014), 83.6 (2015), 86.7 (2016)</p> <p>Female: 86.0 (2009), 87.8 (2010), 88.2 (2011), 88.2 (2012), 89.1 (2013), 89.7 (2014), 89.8 (2015), 90.5 (2016)</p> <p>Grade 12: 44.9% (2009), 47.4% (2012), 50.1% (2015), 50.0 % (2016), 50.7% (2017)</p> <p>Male: 41.8 (2009), 43.7 (2010), 43.5 (2011), 45.6 (2012), 45.4 (2013), 47.7 (2014), 46.8 (2015), 46.8 (2016), 47.7 (2017)</p> <p>Female: 48.7 (2009), 48.0 (2010), 51.1(2011), 50.1(2012), 50.9 (2013), 55.5 (2014), 54.2 (2015), 54.0 (2016), 54.4 (2017)</p>
<p>4.1.1A2: Percentage of youth aged 15–24 and 15–34 years who dropped out of school without completing Grade 12 (additional indicator)</p>	<p><i>15–24-year-olds</i></p> <p>27.1% (2013), 25.9% (2015), 25.6 (2016), 25.1% (2017)</p> <p><i>Male</i> 28.6 (2013) 27.7(2015) 26.8 (2016) 26.4 (2017)</p> <p><i>Female</i> 25.5 (2013) 24.6 (2015) 25.0 (2016) 24.8 (2017)</p> <hr/> <p><i>15–34-year-olds</i></p> <p>37.6% (2013), 37.9% (2015), 37.2 (2016), 37.1% (2017)</p> <p><i>Male: 39.2 (2013) 38.9 (2015) 39.1 (2016) 38.6 (2017)</i></p> <p><i>Female: 36.1 (2013) 35.1 (2015) 36.8 (2016) 35.9 (2017)</i></p>
<p>4.2.2: Percentage of children attending Grade 1 in the current year, after attending Grade R/0 in the previous year</p>	<p>97.1% (2009), 94.9% (2013), 94.8% (2015), 93.9% (2016), 94.4% (2017)</p>
<p>4.2.2A: Number of children accessing registered ECD programmes (additional indicator)</p>	<p>452 015 (2016), 683 892 (2017), 704 064 (2018)</p>
<p>4.3.1: Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex</p>	<p><i>15–24 years</i></p> <p>Male: 10.9% (2015), 11.5% (2016), 12% (2017)</p> <p>Female: 14.1% (2015), 16% (2016), 15.2% (2017)</p>



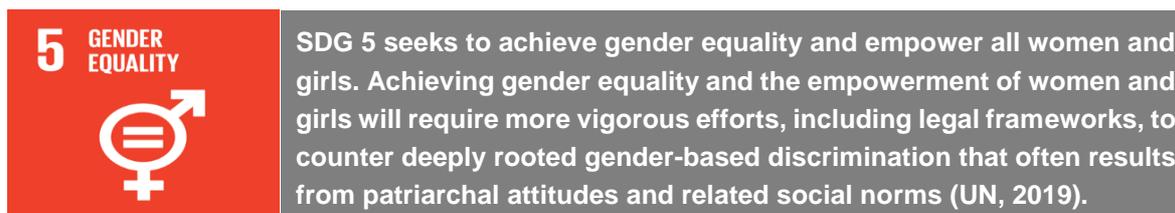
	<p>35–64 years</p> <p>Male: 7.2% (2015), 7.3% (2016), 7.3% (2017)</p> <p>Female: 8.6% (2015), 9.5% (2016), 8.7% (2017)</p>
4.4.1D: Percentage of youth and adult university graduates by field of study (domesticated indicator)	<p>15–34-year-olds (2016) (selection)</p> <p>Agriculture, Agricultural Operations & Related Sciences (2.5%)</p> <p>Business, Economics and Management Sciences (20.5%)</p> <p>Computer and Information Sciences (6.8%)</p> <p>Education (11.44%)</p> <p>Engineering (10.33%)</p> <p>Health Professions and Related Clinical Sciences (7.9%)</p> <p>Law (4.41%)</p> <p>Mathematics and Statistics (0.8%)</p> <p>Psychology (2.5%)</p> <p>Public Management and Services (4.1%)</p>
4.4.1A: Number of graduates in (a) public and (b) private higher institutions (additional indicator)	<p><i>Public institutions</i></p> <p>160 625 (2011), 185 373 (2014), 203 076 (2016) 210 931 (2017)</p>
	<p><i>Private institutions</i></p> <p>39 686 (2016), 35 922 (2017)</p>
4.5.1: Gender parity index (a) tertiary education (b) for enrolment in tertiary education by population group	<p>a) 1.257 (2007), 1.421 (2012), 1.393 (2016)</p>
	<p>(b) Black African: 1.395 (2016), Coloured: 1.636 (2016), Indian/Asian: 1.521 (2016), White: 1.314 (2016)</p>
4.5.1A: Percentage of 7–18-year-olds with disabilities who are attending educational institutions (additional indicator)	<p>71.7% (2007), 88.9% (2012), 87.8 (2015), 87.8 (2016), 89.1% (2017)</p>
	<p>Males: 70.2% (2007), 89.1% (2012), 89.6% (2015), 87.3% (2016), 89.1% (2017)</p>
	<p>Females: 73.5% (2007), 88.5% (2012), 86.0% (2015), 88.3% (2016), 89.0% (2017)</p>
4.6.1D: Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex (domesticated indicator)	<p>(a) 15–34-year-olds</p> <p>Males: 93% (2014), 92.6 (2015), 93.7% (2016), 93.8% (2017)</p>
	<p>15–34-year-olds</p> <p>Females: 96% (2014), 95.6 (2015), 95.9% (2016), 96.8% (2017)</p>



	(b) 15–34-year-olds Males: 89.6 (2014), 91% (2015), 90.8% (2016), 92% (2017)
	15–34-year-olds Females: 84.8 (2014), 89.7% (2015), 89.5% (2016), 91.1% (2017)
4.a.1: Proportion of schools with access to (a) electricity; (b) the internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (additional indicator)	<i>Electricity</i> 88% (2012), 98% (2015), 98.9% (2017)
	<i>Internet</i> 12.9% (2012), 19.5% (2015), 19.9% (2017)
	<i>Computers</i> 23.6% (2012), 32.2% (2015), 33.1% (2017)
	<i>Drinking water</i> 93% (2012), 99% (2015), 100% (2017)
	<i>Sanitation</i> 99.9% (2012), 100% (2015), 99.6% (2017)
4.c.1D: Percentage of permanent educators that have minimum required teacher qualifications (REQV13)	91% (2017)

Table 10: SDG 4 Indicator progress

4.2.7 SDG 5: Achieve gender equality and empower all women and girls



SDG 5 contains the following nine targets:

- 5.1: End all forms of discrimination against all women and girls everywhere
- 5.2: Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation
- 5.3: Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation
- 5.4: Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate
- 5.5: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life
- 5.6: Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences
- 5.a: Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws
- 5.b: Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women
- 5.c: Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels

4.2.7.1 Policy environment

To affirm gender equality and give effect to the Bill of Rights, the Constitution makes provision for the establishment of a *National Gender Machinery* (NGM), which consists of a number of Chapter 9 institutions. The Commission for Gender Equality Act (1996) makes provision for the establishment of one of the key institutions related to SDG 5 – the Commission for Gender Equality. This Commission ensures promotion of gender equality in the country and monitors compliance of South Africa to gender international policies. It works in close collaboration with the Department of Women – the key department coordinating the implementation of gender transformational frameworks by all entities and all spheres.

All institutions of the state and civil society constitute the NGM, with civil society organisations (CSOs) playing a pivotal role through their contributions, which have led to the achievement of many legislative, economic, political and other milestones in relation to gender equality in South Africa (Commission for Gender Equality, 2012).



The NGM consists of several structures that were strategically put in place to ensure gender was mainstreamed through government, the legislature, independent bodies and civil society, including the provinces (African Development Bank, 2009). Until May 2009 some of the institutions included in the NGM were:

- The Office of the Status of Women (OSW)
- The Commission for Gender Equality
- The Parliamentary Joint Monitoring Committee on the Improvement of the Quality of Life and Status of Women (JMC)
- SALGA Women's Commission

Established in 1997, the OSW was situated in the Office of the Presidency at national level and the Office of the Premiers at provincial level. The OSW's main responsibility was the facilitation, training, monitoring, implementation and liaising with civil society and international organisations to promote gender mainstreaming in government departments (African Development Bank, 2009). Furthermore, the OSW was tasked with the finalisation of South Africa's National Policy Framework for Women's Empowerment and Gender Equality (2000) (African Development Bank, 2009). The OSW also coordinated Gender Focal Units (GFUs) within various government departments at both national and provincial level (African Development Bank, 2009). The coordination of the GFUs was viewed as an important responsibility of the OSW, through which it worked with other ministries, departments and policies to ensure the mainstreaming of gender within their policies, practices and programmes (African Development Bank, 2009).

The Constitution also provides for the enactment of subsidiary legislation that aims to ensure that gender equality as outlined in the Constitution is fully realised. Two of the most noteworthy legislative acts, which section 9 makes provisions for, are the *Promotion of Equality and Prevention of Unfair Discrimination Act* (PEPUDA) No. 4 of 2000 and the *Employment Equity Act* (EEA) No. 55 of 1998.

PEPUDA fully embodies and expounds on the constitutional provisions of equality (South African Government, 2008). PEPUDA spans the broadest definition of discrimination, encompassing discrimination against women by any person, including the state, private entities and individuals. PEPUDA includes provisions that address inequality beyond employment matters, and as a result, provides a framework for the elimination of unfair discrimination in all forms (DoW, 2015). Section 8 of PEPUDA specifically prohibits discrimination on a number of grounds related to gender.

PEPUDA not only outlines the various forms of discrimination, but also provides for enforcement mechanisms such as Equality Courts and Alternative Forums (DoW, 2015). Through the provision of various mechanisms that educate and create awareness of these issues, PEPUDA further emphasises the importance of promoting equality and eradicating unfair discrimination (DoW, 2015).

In addition to PEPUDA, the EEA has the purpose of addressing unfair discrimination through the promotion of equal opportunity and fair treatment in employment, and eradication of barriers to equal participation and advancement in the workplace. The EEA further allows for affirmative action to address previous injustices against certain disadvantaged groups, one of which is women. The EEA ensures women are provided with protection from a variety of factors in employment, stipulating that no person may discriminate against an employee on several grounds, including sex, gender, family responsibility, pregnancy or HIV status. Furthermore, the EEA provides women with protection from sexual harassment, as it clearly identifies sexual harassment as a form of discrimination; this direct, legislated remedy for sexual harassment was a first in South Africa's legal history (DoW, 2015). Other key pieces of legislation that protect women from discrimination in the workplace include the Basic Conditions of Employment Act No. 75 of 1997 and the Labour Relations Act (LRA) No. 66 of 1995.



On a programmatic level, an Interministerial Committee developed the *South African Integrated Programme of Action (POA) Addressing Violence against Women and Children (2013–2018)*. The POA is coordinated by DSD. In addition to recognising the various forms of abuse women experience, the POA also recognises that certain groups of women are especially likely to experience abuse. These groups include, but are not limited to, women with disabilities; destitute women; women in institutions and in detention; older women; lesbians; bisexual and transgender women; women living with HIV and AIDS; and migrant and refugee women (DSD, 2013). Furthermore, the POA also recognises emerging issues, such as cyber-bullying; corrective rape; violence against elderly women; and albinism and exclusion (DSD, 2013).

Forms of sexual violence are addressed through the Sexual Offences and Related Matters Act (SOA), which provides victims of sexual offenses with adequate and effective protection through a broad and expansive definition of ‘sexual assault’, which includes a range of sexual acts (Mpani & Nsibandé, 2015). Previously, rape had been defined as a man having unlawful, intentional and non-consensual sexual intercourse with a woman (Stop Gender Violence Campaign, 2017). Following the enactment of the SOA, now inclusive in the definition of rape is any sexual act which involves the unlawful sexual penetration or attempt at unlawful penetration of any one person by another. As a result, the SOA ensures gender-based violence is covered in its entirety, as rape is no longer gender-specific (Stop Gender Violence Campaign, 2017).

Gender-based violence has also been targeted outside of the legal sphere, with government’s principal initiative taking form in the 16 Days of Activism against Gender Violence Campaign, an annual campaign which started around 2005. The campaign runs from the International Day Against Violence Against Women on the 25th of November to the International Human Rights Day on the 10th of December, thereby symbolically linking violence against women to violations of human rights (African Development Bank, 2009).

Recognising that much needs to be done in relation to the elimination of violence against women, South Africa further extended the 16 Days of Activism campaign to a year-long campaign in 2006 in the form of the 365 Days of Action to End Violence Against Women and Children. As a result, the 365 Day National Action Plan was launched in 2007, which included clearly defined goals with indicators with outputs and outcomes and clearly identified role players (African Development Bank, 2009).

4.2.7.2 Indicators

Indicator 5.2.1D: Percentage of ever partnered women and girls aged 18 years and older subjected to physical or sexual violence by any partner in the previous 12 months, by form of violence and by age

Women aged between 18 and 24 years old were more likely to have experienced physical violence than older women, with 10% of 18- to 24-year-olds having experiencing physical violence in the 12 months prior to the survey, compared to 1.6% of over-65-year-old women (Figure 62). The percentage of women who had experienced sexual violence exhibited a similar trend – sexual violence was most prevalent in the 18 to 24 age group at 3.2%, with the lowest incidence reported by the 65 and over age group at 0.4%. Physical violence was also found to be more prevalent in low-income households – 13.4% of women in the lowest wealth quintile reported having experienced physical violence by any partner in the preceding 12 months, in contrast to 3.3% of women in the highest wealth quintile.

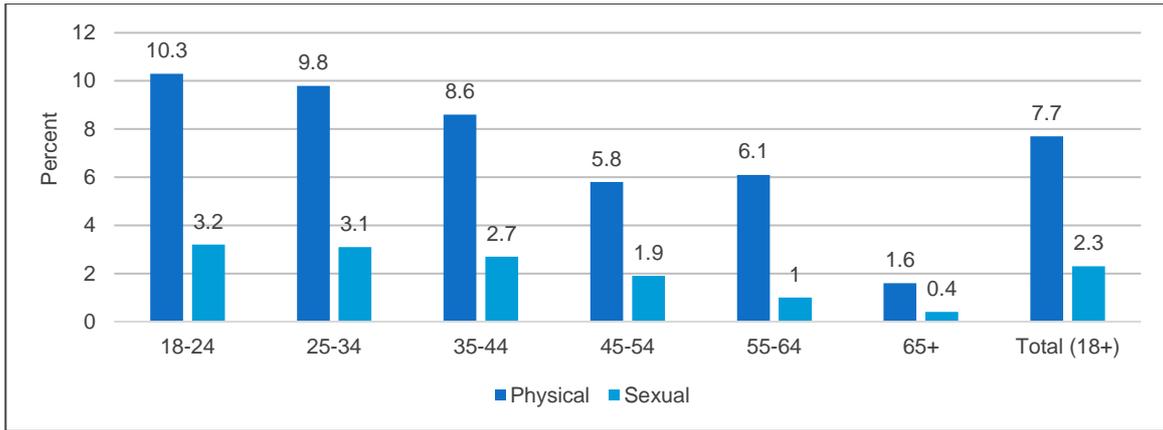


Figure 62: Percentage of ever-partnered women subjected to violence in the past 12 months, 2016
Data source: SADHS 2016, DoH, Stats SA, SAMRC and ICF

Indicator 5.2.2D: Number of women and girls aged 15-18 who have accessed victim empowerment centres in the previous 12 months by age and place of occurrence

Figure 63 provides an overview of the number of victims of crime and violence accessing services from funded Victim Empowerment Programme (VEP) service centres. All but one of the eight provinces managed to exceed its target. In most provinces, a positive trend can be observed, with a notable increase in Gauteng for the 2017/2018 period.

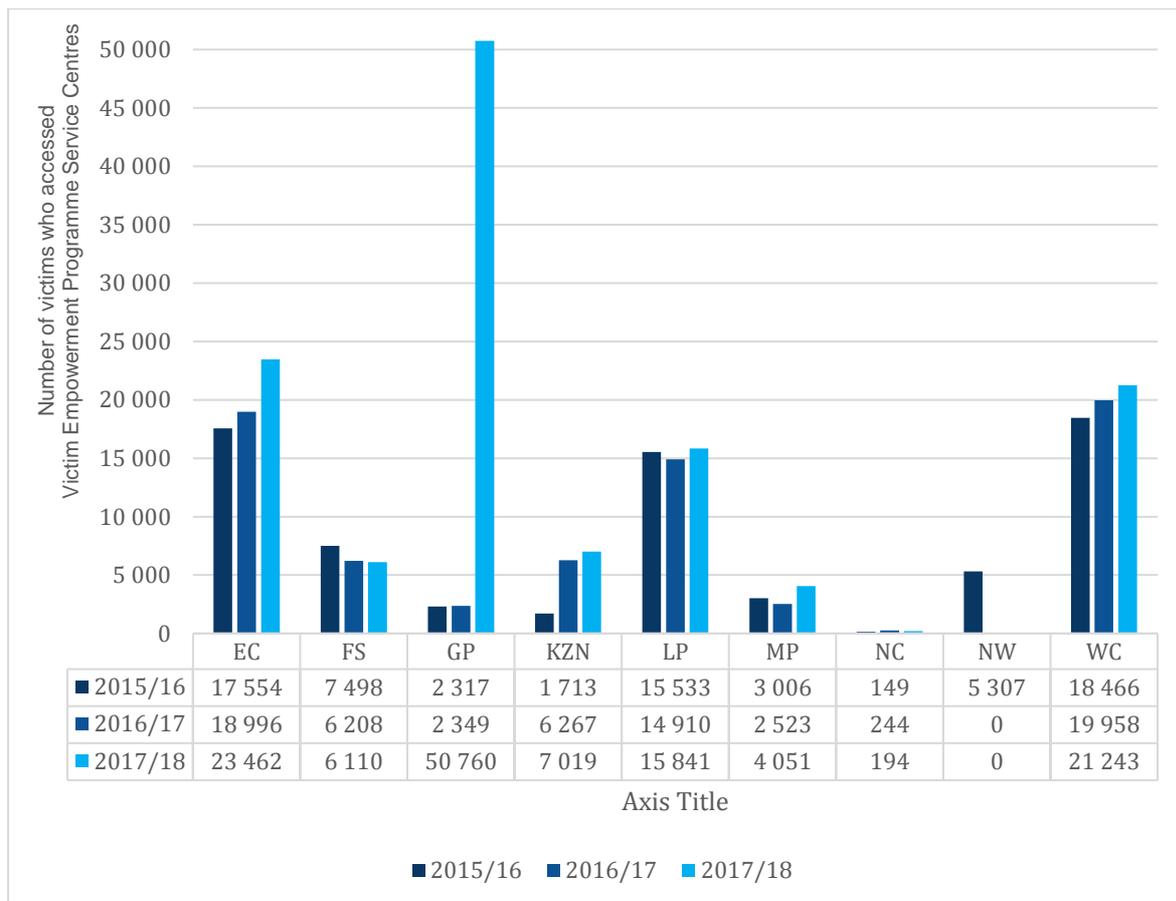


Figure 63: Number of women and girls aged 15–18 who have accessed victim empowerment centres in the previous 12 months by age and place of occurrence
Data source: Victim Empowerment Programme Service Centres 2015/2016–2017/2018, DSD

5.2.2A: Incidence of human trafficking for sexual purposes brought to police attention

Table 11 presents data for the indicator on the gradually decreasing incidence of human trafficking for sexual purposes brought to the police’s attention. As shown in the full indicator list, the incidence of human trafficking for sexual purposes is the highest in the Eastern Cape, Free State, and North West, at 0.03 per 100 000 persons (2018). This indicator is also reported on as Indicator 16.2.2D.

Indicator	2014	2015	2016	2017	2018
Incidence of human trafficking for sexual purposes brought to police attention (per 100 000 persons)	0.04	0.02	0.02	0.02	0.01

Table 11: Incidence of human trafficking
Data source: Crime Statistics 2013/14–2015/16, SAPS

Indicator 5.3.1: Proportion of women aged 20–24 years who were married or in a union before age 15 and before age 18

Indicator 5.3.1A: Percentage of early marriages experienced by girls before the age of 15 years

The prevalence of marriage by girls under 15 years decreased significantly between 2010 and 2014, with only 7 recorded early marriages during 2014. The incidence of child marriages in South Africa seems to be decreasing, which is a positive sign that Target 5.3 may be achieved by 2030.

It is important to note, however, that the data is based on civil and customary marriage registrations, of which some may not be reported because the one partner may be under-age. Thus, the decreasing trend may simply be a case of under-reporting, rather than actual progress. Under-age marriage is particularly associated with more rural areas, where marriages may be less likely to be reported. More appropriate reporting based on the unions within rural communities will need to be investigated in order to fully understand South Africa’s progress in terms of achieving Target 5.3.

South Africa has developed an additional indicator for SDG indicator 5.3.1, namely 5.3.1A1: Proportion of women aged 20–24 years who were married or in a union before 15. In this regard a significant decrease from 0.06 per 100 000 (2010) to 0.005 per 100 000 (2014) can be observed.

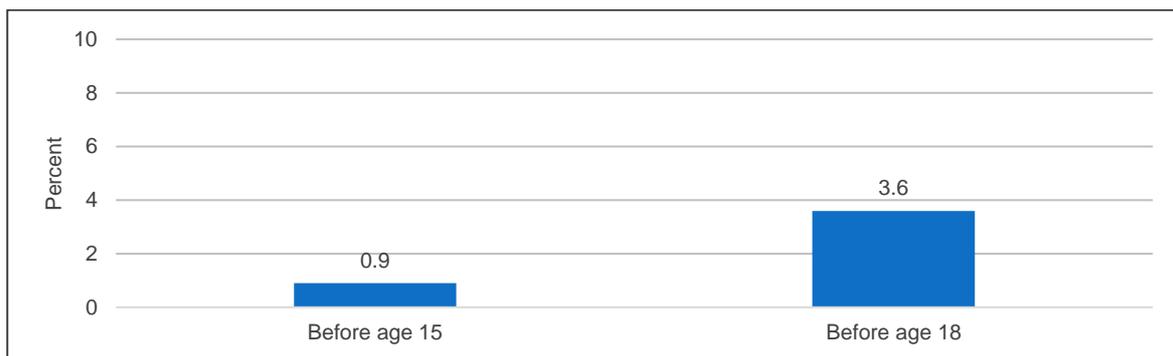


Figure 64: Percentage of women aged 20–24 years who were married or in a union before age 15 and before age 18 in 2016

Data source: SADHS 2016, DoH, Stats SA, SAMRC and ICF

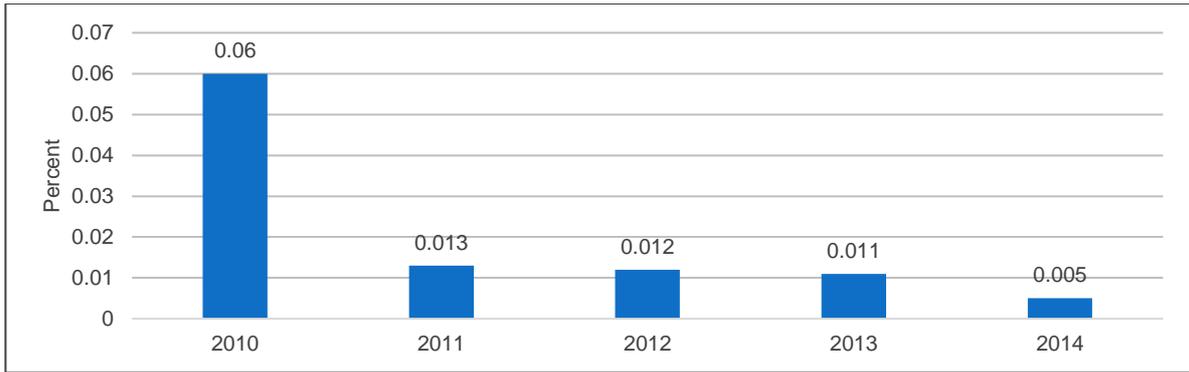


Figure 65: Percentage of early marriages experienced by girls before the age of 15 years
Data source: CRVS 2010–2014, Stats SA

Indicator 5.4.1D: Percentage of time spent on unpaid domestic and care work, by sex, age and location

According to the World Bank (2018b), the time spent on unpaid domestic and care work is referred to as the average time women and men spend on the household provision of services for their own consumption. Domestic and care work includes, but is not limited to, food preparation, dishwashing, cleaning and upkeep of a dwelling, laundry, ironing, gardening, caring for pets, shopping, installation, servicing and repairing of personal and household goods, childcare, and care of the sick, elderly or disabled household and family members (World Bank, 2018b).

The measurement of South Africa’s progress in achieving Target 5.4 makes use of the domesticated indicator 5.4.1D1: Percentage of time spent on unpaid domestic and care work, by sex. Figure 66 presents an overview of the proportion of time spent by both men and women on unpaid domestic work and unpaid care work for 2000 and 2010.

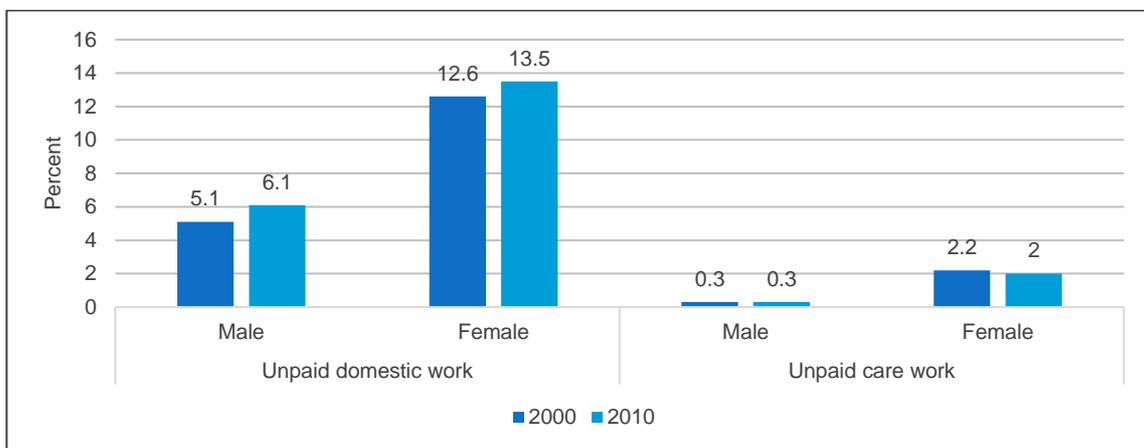


Figure 66: Percentage of time spent on unpaid domestic and care work, by sex
Data source: Time Use Survey 2000 and 2010, Stats SA

Indicator: 5.5.1: Proportion of seats held by women in (a) national parliaments and (b) local governments

South Africa’s proportion of women in the national assembly stood at 41.6% in 2016 (Stats SA, 2017). This was significantly higher than the global average of 23.4% of women in single or lower houses of national parliaments in 2017 (UN Women, 2017). Internationally, even though mechanisms have been put in place to promote women’s participation in decision-making, the representation of women in national parliaments has remained low.



South Africa is therefore one of the few countries that have reached near parity in terms of representation by women in the national parliament. Progress on the proportion of women in parliamentary structures has been exceptionally rapid.

Table 12 provides an overview of the proportion of women in provincial assemblies in South Africa. South African women made up on average 39.2% of provincial assemblies, with the highest representation of women being in the Limpopo (46.8%) and Free State (46.4%) assemblies. The North West provincial assembly had the lowest representation of women at 34.4%.

Indicator	Province	2016 (%)
5.5.1a Proportion of seats held by women in (a) provincial parliaments	Western Cape	37.5
	Eastern Cape	40.0
	Northern Cape	39.2
	KwaZulu-Natal	36.7
	Free State	46.4
	Gauteng	36.2
	North West	34.4
	Mpumalanga	39.2
	Limpopo	46.8

*Table 12: Women in provincial parliaments
Data source: Parliament of South Africa 2016*

Indicator 5.5.2: Proportion of women in managerial positions

Indicator 5.5.2 measures the proportion of females in the total number of persons employed in senior and middle management. Table 13 provides an overview of the proportion of women in managerial positions in South Africa. The proportion of managerial roles in South Africa occupied by women was 32.1% in 2017. This was an increase from the previous two years. Progress needs to be accelerated in order to attain parity.

Indicator	2014	2015	2016	2017
	Percent (%)			
Percentage of women in managerial positions	31.1	30.8	31.6	32.1

*Table 13: Women in managerial positions
Data source: QLFS 2014–2017, Stats SA*

Indicator 5.6.1D: Proportion of women aged 18–49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care

According to the 2016 South Africa Demographic and Health Survey of the DoH, 60.2% of South African women report making their own informed decisions regarding sexual relations, contraceptive use and reproductive health care.

Indicator 5.a.1: (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure

According to the Department of Rural Development and Land Reform Land Audit, 52% of South Africa's land is owned by men and 34% by women. The gender of the remaining 14% of owners is not given.



The highest rate of female land ownership is in Gauteng province (40%), and the lowest rate is in the Eastern Cape province (26%). Disaggregated data for 2017 can be found in the table below.

	EC	FS	GT	KZN	LP	MP	NW	NC	WC	Total
Male (%)	53.0	60.0	56.0	42.0	51.0	55.0	46.0	63.0	56.0	52.0
Female (%)	26.0	34.0	40.0	29.0	33.0	34.0	28.0	32.0	34.0	34.0
Others (%)	22.0	6.0	4.0	28.0	16.0	11.0	26.0	5.0	10.0	14.0
Total number	11 680	15 177	47 591	29 992	15 913	13 020	24 121	7 187	16 851	181 535

Table 14: Land ownership in South Africa, 2017
Data source: Land Audit Report 2017, DRDLR

Indicator 5.b.1: Proportion of individuals who own a mobile telephone, by sex

As shown in Figure 67, more South African women own mobile phones than South African men – even though mobile phone ownership remains relatively low.

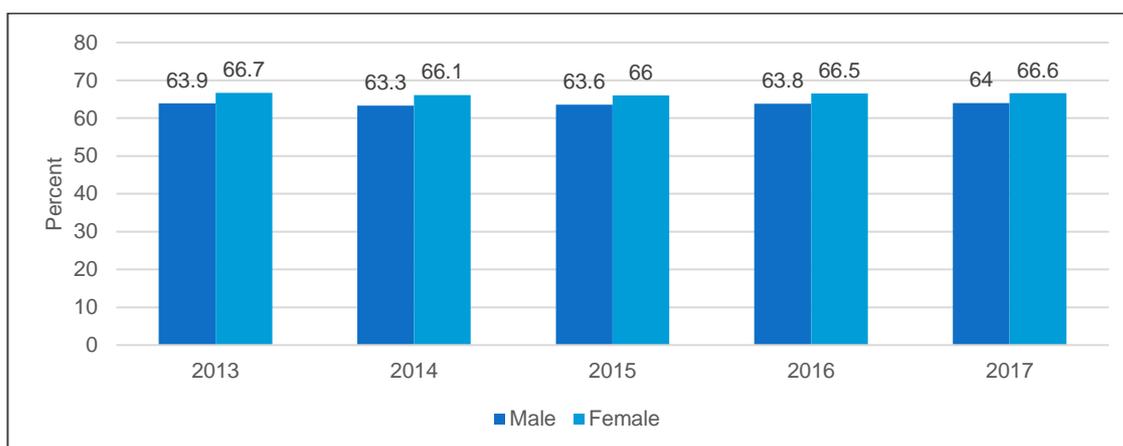


Figure 67: Percentage of individuals who own a mobile telephone, by sex
Data source: GHS 2013–2017, Stats SA

4.2.7.3 Summary

South Africa's progress with regard to SDG 5's indicators with data is summarised in Table 15 below. South Africa is able to report on eight SDG 5 indicators, of which four are Tier I or Tier II SDG indicators, five are domesticated and two are additional indicators. South Africa has committed to developing and enacting a host of legislative and policy frameworks aimed at promoting gender equality and eliminating gender-based discrimination and violence (5.2.1D).

South Africa's national and provincial parliaments are well on their way to reach the goal of 50% representation of women (5.5.1). However, more needs to be done to ensure women's fair representation in the private sector, particularly on managerial level (5.5.2).

The number of women and girls who accessed victim empowerment centres has seen a steady increase in most provinces. Yet, levels of reported physical and sexual violence against women remain high (5.2.1D). As seen in Indicator 5.4.1D, women still carry disproportionate responsibilities related to unpaid domestic and care work.



SDG 5: Achieve gender equality and empower all women and girls

Indicator	Key data points
5.2.1D: Percentage of ever-partnered women and girls aged 18 years and older subjected to physical or sexual violence by any partner in the previous 12 months, by form of violence and by age (domesticated indicator)	<i>25–34-year-olds (2016)</i> 9.8% (physical), 3.1% (sexual)
	<i>35–44-year-olds (2016)</i> 8.6% (physical), 2.7% (sexual)
	<i>45–54-year-olds (2016)</i> 5.8% (physical), 1.9% (sexual)
5.2.2D: Number of women and girls aged 15–18 who have accessed victim empowerment centres in the previous 12 months by age and place of occurrence (additional indicator)	<i>Eastern Cape</i> 17 554 (2015/16), 18 996 (2016/17), 23 462 (2017/18)
	<i>Free State</i> 7 498 (2015/16), 6 208 (2016/17), 6 110 (2017/18)
	<i>Gauteng</i> 2 317 (2015/16), 2 349 (2016/17), 50 760 (2017/18)
	<i>KwaZulu-Natal</i> 1 713 (2015/16), 6 267 (2016/17), 7 019 (2017/18)
	<i>Limpopo</i> 15 533 (2015/16), 14 910 (2016/17), 15 841 (2017/18)
	<i>Mpumalanga</i> 3 006 (2015/16), 2 523 (2016/17), 4 051 (2017/18)
	<i>Northern Cape</i> 149 (2015/16), 244 (2016/17), 194 (2017/18)
	<i>North West</i> 5 307 (2015/16)
	<i>Western Cape</i> 18 466 (2015/16), 19 958 (2016/17), 21 243 (2017/18)
5.2.2A: Incidence of human trafficking for sexual purposes brought to police attention (additional and duplicate indicator)	0.02 (2013), 0.02 (2015), 0.02 (2017), 0.01 (2018) (unit: incidence per 100 000)
5.3.1: Proportion of women aged 20–24 years who were married or in a union before age 15 and before age 18	Before age 15 (0.9%), before age 18 (3.6%) (2016)



5.3.1A: Percentage of early marriages experienced by girls before the age of 15 years (additional indicator)	0.06% (2010), 0.012 (2012), 0.005% (2014)
5.4.1D: Percentage of time spent on unpaid domestic and care work, by sex, age and location (domesticated indicator)	<i>Unpaid domestic work</i> Male: 5.1% (2000), 6.1% (2010)
	<i>Unpaid domestic work</i> Female: 12.6% (2000), 13.5% (2010)
	<i>Unpaid care work</i> Male: 0.3% (2000), 0.3% (2000)
	<i>Unpaid care work</i> Female: 2.2% (2000), 2% (2010)
5.5.1: Proportion of seats held by women in (a) national parliaments and (b) local governments	(a) Male: 60.8% (2016) Female: 39.2% (2016)
	(b) Western Cape: 37.5% (2016) Eastern Cape: 40% (2016) Northern Cape: 39.2% (2016) KwaZulu-Natal: 36.7% (2016) Free State: 46.4% (2016) Gauteng: 36.2% (2016) North West: 34.4% (2016) Mpumalanga: 39.2% (2016) Limpopo: 46.8% (2016)
5.5.2: Proportion of women in managerial positions	31.1% (2014), 30.5% (2015), 31.6% (2016), 32.1% (2017)
5.6.1D: Proportion of women aged 18–49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care (domesticated indicator)	60.2% (2016)
5.a.1D: (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure	Male: 52% (2017) Female: 34% (2017) Other: 14% (2017)
5.b.1: Proportion of individuals who own a mobile telephone, by sex	Male: 63.9% (2013), 63.6% (2015), 64 (2017)
	Female: 66.7% (2013), 66% (2015), 66.6% (2017)

Table 15: SDG 5 Indicator progress



4.3 Economic goals

4.3.1 Overview

The economic thematic section provides a synthesis of the five economic SDGs, namely:

- SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- SDG 10: Reduce inequality within and among countries
- SDG 12: Ensure sustainable consumption and production patterns
- SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

It is generally agreed that without robust and inclusive economic growth the attainment of the SDGs will be impossible. Understood in this sense, the challenges outlined in the sections below severely impact on South Africa's ability to realise sustainable development in all its dimensions.

4.3.2 Interlinkages between the economic goals, the NDP and MTSF (2014–2019)

The NDP continues South Africa's long-term focus, started by the RDP, on fighting the 'triple evils' of poverty, inequality and unemployment. The RDP had already stated that 'no political democracy can survive and flourish if the mass of our people remains in poverty, without land, without tangible prospects for a better life' (Government of South Africa, 1994). The NDP reiterates that it 'aims to eliminate poverty and reduce inequality by 2030' – and thereby reach the targets set by *SDG 10* (NPC, 2012).

A key pathway for eradicating poverty and reducing inequality is inclusive economic growth, as also expressed by SDG 8. According to the NDP, the following is required to achieve inclusive economic growth:

- improving education and skills development, starting with a more effective basic education and early childhood development sector;
- strengthening competition laws to address skewed ownership and control, which is a barrier to business entry and the expansion of key markets that are essential for job creation;
- increasing private-sector participation in sectors dominated by public enterprises, and ensuring that effective regulatory authorities curb the power of monopolies;
- providing support and incentives for labour-intensive sectors, including agriculture, agro-processing and tourism; and
- overcoming the spatial fragmentation of South Africa's cities, in order for people to have easier access to jobs and infrastructure.

Stemming from the NDP, the government has prioritised three actions to boost inclusive growth. The first is building productive partnerships. The second is enabling economic transformation. The third is financial governance and reform at state-owned companies. State-owned companies determine to a large extent the country's economic growth potential, as they are responsible for the supply of infrastructure resources required by the economy to operate and expand, e.g. electricity and transport.

The NDP sees small-, medium- and micro-sized enterprises (SMMEs) as an important future source of employment growth (NPC, 2012), and targets an increase in the relative economic share of the sector by 2030. In order to facilitate growth in SMMEs, the NDP makes recommendations in three areas:

- reduced cost of regulatory compliance, especially for small and medium-sized firms;
- support for small businesses through better coordination of relevant agencies, development finance institutions, and public and private incubators; and
- strengthened financial services to bring down their cost and improve access for small and medium-sized businesses.

In addition, the NDP highlights the need to make government procurement processes more accessible to small businesses, as well as the potential positive impact of interventions designed to address the entrepreneurial skills gap.

The MTSF includes a number of targets specific to the SMME sector. A number of targets focus on access to financial services, and goals include a 25% decrease in the cost of financial services as well as a 10% increase in the support offered by development finance institutes to township economies. In rural areas the MTSF introduces a number of measures to support small-scale agriculture, with a target of 300 000 new small-scale farmers producing for the market. Other planned measures include internships.

Turning to South Africa's infrastructure needs, as also expressed by the targets set by SDG 9, the NDP points out a number of problems with the current transportation system. These include outdated rail infrastructure, high ports costs, and a shift of freight from rail to road, which strains the road system. It then suggests that a focus on the following four policy areas will be required going forward:

- create workable urban transit solutions;
- strengthen and optimise freight corridors;
- provide long-distance passenger transport options; and
- address rural access and mobility.

Specific infrastructure investment proposals made by the NDP, and aimed at reducing carbon emissions, include investment in liquefied natural gas systems, research into methods of diversifying the energy mix and a greater focus on renewable energy sources, and decommissioning of high-emission older generation coal power stations

Outcome 6 of the MTSF also includes a number of goals that target increased investment in cleaner forms of technology. They include a target for installation of 1.32 million solar water heaters in low-income residential areas, the commissioning of 6 725 MW of renewable energy via the independent power producers programme, and the production of an additional 200 MW of solar and wind farm projects by Eskom itself. These generation targets both support a move to cleaner sources of power, and are aimed at addressing the sustained electricity generation supply shortfalls that have been associated with intermittent load shedding since 2008.

A large number of transport-specific indicators are included in the 2014–2019 MTSF, under Outcome 6, suboutcome 3 (maintenance, strategic expansion, operational efficiency, capacity and competitiveness of our logistics and transport infrastructure ensured). These range from wide strategic objectives to move some freight from road to rail, to specific interventions designed to improve designated local and regional transport corridors, public transport interventions in rail and metropolitan bus systems, port productivity measures, and road safety and planning concerns. A commitment is also expressed to implement the Single Transport Economic Regulator, covering the rail, road, aviation and maritime sectors.

The NDP also supports the need for a transformative industrial policy. The NDP suggests that where sectors are identified as focus areas for industrial policy, they should have substantial potential for either growth stimulation or employment, or both.



Outcome 4 of the MTSF then includes specific goals for a wide range of industrial policy objectives, including a direct reference to the Industrial Policy Action Plan (IPAP), which is a key instrument of industrial policy implementation.

SDG 12 is supported by Chapter 5 of the NDP and Outcome 10 of the MTSF. Specific objectives of the NDP include absolute reductions in the total volume of waste disposed to landfills each year (SDG 12.5), increased waste recycling (SDG 12.5), development of green products and services (SDG 12.2), and carbon-pricing to reduce carbon emissions (SDG 12.C). Outcome 10 of the Medium Term Strategic Framework 2014–2019 (MTSF) aims to protect and enhance the country’s environmental assets and natural resources. A phased approach is taken over three MTSF periods. The first phase (2014–2019) covers the development of a framework to support the transition to an environmentally sustainable and low-carbon economy (SDG 12.1). Data collection, establishment of baseline information and testing of indicators are the main focus areas in phase 1. The second phase (2019–2024) will focus on the implementation of sustainable development programmes. It is envisaged that greenhouse gas emissions for South Africa will peak during phase 2 (SDG 12.C). The third phase (2024–2029) will cover the final steps of the transition to sustainable development. It is envisaged that emissions will reach a plateau by 2030, and that poverty and unemployment will be at socially sustainable levels, not leaving anyone behind. The expected outcomes are: 1) compact and energy-efficient urban development, 2) increased public awareness of the consequences of unsustainable consumption and production, and of climate change.

DPME and UNDP assessed the convergence between the NDP and the SDGs. There are several linkages between the economic SDGs and a number of outcomes of the MTSF and the NDP chapters. These linkages, as adapted from DPME and UNDP (2018), are presented in Table 16.

NDP area	MTSF outcome	SDG target
Economy and employment (3)	Outcome 4: Decent employment through inclusive growth	<p>8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors</p> <p>8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services</p> <p>8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</p> <p>8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training</p>
		10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average
Economic infrastructure (4)	Outcome 6: An efficient, competitive and responsive economic infrastructure network	<p>9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all</p> <p>9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities</p>



NDP area	MTSF outcome	SDG target
		<p>9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities</p> <p>9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the internet in least developed countries by 2020</p>
Environmental sustainability and resilience (5)	Outcome 10: Protect and enhance our environmental assets and natural resources	<p>8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead</p>
		<p>12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment</p> <p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse</p> <p>12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities</p>
Inclusive rural economy (6)	Outcome 7: Vibrant, equitable, sustainable rural communities contributing towards food security for all	<p>8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</p> <p>8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training</p>
South Africa in the region and the world (7)	Outcome 11: Create a better South Africa and contribute to a better Africa and a better world	<p>17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism</p> <p>17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation</p> <p>17.10 Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda</p> <p>17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020</p> <p>17.12 Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access</p>



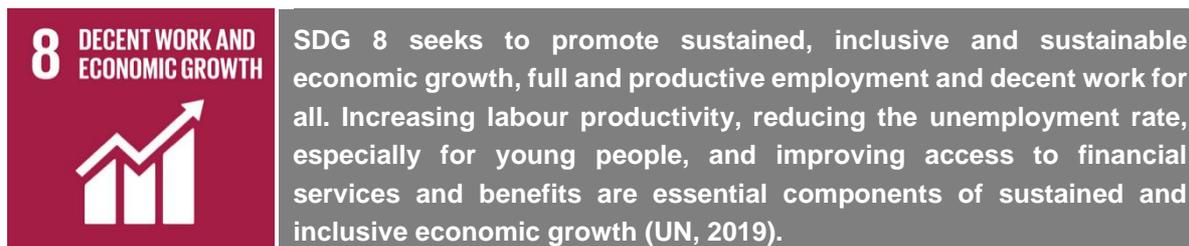
NDP area	MTSF outcome	SDG target
Improving education, training and innovation (9)	Outcome 1: Quality basic education and skills	8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
		9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
		9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities
		9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the internet in least developed countries by 2020
Social protection (11)	Outcome 13: A comprehensive, responsive and sustainable social protection system	10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average 10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality
Building safer communities (12)	Outcome 3: All people in South Africa are and feel safe	10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies
Nation building and social cohesion (15)	Outcome 14: A diverse, socially cohesive society with a common national identity (Nation Building)	10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status 10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard

Table 16: Interlinkages between the National Development Plan (NDP), the Medium-Term Strategic Framework (MTFS) and the economic SDGs

Source: Adapted from DPME & UNDP (2018)

Numbers in parenthesis refer to NDP chapters

4.3.3 SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



SDG 8 contains the following twelve targets:

- 8.1: Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7% gross domestic product growth per annum in the least developed countries.
- 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
- 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalisation and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 8.4: Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10- Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead
- 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
- 8.6: By 2020, substantially reduce the proportion of youth not in employment, education or training
- 8.7: Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms
- 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment
- 8.9: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products
- 8.10: Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all
- 8.a: Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries
- 8.b: By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization

4.3.3.1 Policy environment

Responding to the economic downturn from late 2008, the government launched the New Growth Path (NGP). The cornerstone of the NGP is job creation, with an ambition to create five million new jobs by 2020, of which 300 000 jobs should be in the green economy. The remaining jobs are expected to be created in agriculture, mining, manufacturing and tourism. The job creation focus of the NGP is aimed at reducing unemployment to 15% by 2020. The majority of these new jobs are expected to be created in the private sector, and specifically by investing in the green economy.

The NGP is built on two strategies. Firstly, it seeks to deepen domestic and regional markets by 'growing employment, increasing incomes and other measures to improve equity and income distribution'. Secondly, it seeks to widen the market for South African goods and services through 'a stronger focus on exports to the region and other rapidly growing economies'. It identifies five jobs levers to drive these measures: infrastructure, the development of main economic sectors, seizing the potential of new economic opportunities, investing in social capital and public services, and spatial development. The NGP emphasises the necessity of skills development across the economy to complement the infrastructure investment.

Following on the NGP, a Nine-Point Plan to fast-track job creation and to accelerate economic growth was announced in 2015. Implementation of these reforms is managed and monitored through the employment and infrastructure development cluster, which reports directly to the Cabinet. The Nine-Point Plan focuses on the following issues.

1. *Resolving the energy challenge.* This includes the Renewable Energy Independent Power Producers Procurement Programme (REIPPP), the Solar Capital De Aar 3 photovoltaic plant, the Avon power plant in the Eastern Cape, new capacity from the Medupi Power Station, as well as the Ingula Power Station and the Sere Wind Farm, and the R2 billion Kouga Wind Farm.
2. *Revitalising agriculture and the agro-processing value chain.* This includes the roll-out of Agri-parks (a networked innovation system of agro-production, processing, logistics, marketing, training and extension services) in 44 municipal districts, and fast-tracking the implementation of the Strengthening Relative Rights of People Working the Land (50/50) Policy at ten pilot sites.
3. *Adding value to the development of mineral resources through beneficiation.* This includes amendments to the Mineral and Petroleum Resources Development Act, the development of the Mineral Beneficiation Action Plan by the Department of Trade and Industry (DTI) and significant industrial development opportunities relating to clean energy production and mineral beneficiation.
4. *Promoting greater efficiency with regard to the Industrial Action Policy Action Plan (IPAP).* IPAP is aimed at raising the impact of government interventions to support industrial development and re-industrialise the country. IPAP 2017/18–2019/20 was launched in May 2017. This includes greater attention to industries considered as prominent with regard to job creation (notably clothing and textiles, agro-processing, and component manufacturing), enhanced domestic demand for locally manufactured products through public and private sector procurement and local supplier development, strengthening industrial finance and incentives to support and secure higher levels of investment in the productive sectors of the economy, and repositioning the economy for the impending disruptive technological changes of the Fourth Industrial Revolution (4IR).
5. *Promoting private sector investment.* The specific actions include setting up of an investment-clearing house in the DTI to support local and international investments, setting up five industrial development zones to drive investment, setting up eight special economic zones, finalising the



Protection of Investment Bill, and the InvestSA initiative to remove the obstacles to doing business in South Africa.

6. *Moderating workplace conflict.* Key actions include a special dialogue between business and labour to improve labour relations and agreement on the national minimum wage.
7. *Unlocking the potential of SMMEs, cooperatives, townships and rural enterprises.* This includes support, through the Black Business Support Development Programme, for small businesses, the Co-operative Incentive Scheme, which supports co-operatives and small businesses, the Small Enterprise Finance Agency (SEFA), which provides financial support to small businesses and the Small Enterprise Development Agency (SEDA).
8. *Strengthening the provision of infrastructure and services by state-owned companies.* This includes fast-tracking broadband roll-out, implementing a technology localisation strategy and implementing the government's Five-Point Plan for water and sanitation. It also includes major infrastructure investments.
9. *Operation Phakisa.* The programme has since expanded to mining and agriculture, in particular aquaculture, and is regarded as a propellant to assist new projects or the development of new sectors or industries in the economy (Government of South Africa, 2018).

In recognition of the dire situation of many of its young people, South Africa adopted an *Integrated Youth Development Strategy* in 2017 (NYDA, 2018). Interventions are determined by this strategy and directed by the National Youth Development Agency (NYDA). Targeted interventions for youth job creation include:

- Work Readiness Programmes that aim to prepare individuals for the world of work by providing the knowledge, skills and attributes required to make the transition into the workplace;
- job placement interventions to ensure that young people move into contracted opportunities including learnerships and internships; and
- the provision of skills upgrading programmes that do not require long periods of study to obtain formal tertiary qualifications.

Moreover, key programmes administered by the NYDA aim to promote entrepreneurship among the youth and include their Entrepreneurship Development Programme, the Volunteer Business Mentorship Programme and the Business Consultancy Service Programme (NYDA, 2018).

As highlighted in SDG 8, tourism is viewed as an important accelerator of economic growth. The Department of Tourism intends to contribute towards eradicating poverty and reducing inequality by promoting globally competitive sustainable tourism. This should include enabling an equitable distribution amongst all South Africans with regard to the benefits generated by tourism. Their approach also includes empowering youth, women and those with disabilities by means of entrepreneurial participation.

4.3.3.2 Indicators

Indicator 8.1.1: Annual growth rate of real GDP per capita

Indicator 8.2.1: Annual growth rate of real GDP per employed person

Table 17 presents South Africa's economic growth rates from 2015 until 2017 (the latest available data), for annual growth rate of GDP per capita and per employed person (representing the indicators measuring Target 8.1 and Target 8.2).

The declining rates denoted the second recession of the South African economy since 1994, with deteriorations experienced in both the secondary and tertiary sector (Stats SA, 2017e).



Growth in a number of sectors (e.g. communications/information technology, agriculture and finance) will be required to invigorate the South African economy and consequently the GDP rates, which remain far from the targets set by both the NDP at 5.4% per annum and 7% annually as specified by SDG 8. Similar trends were observed for real GDP per employed person in the country. The descending trend started in 2012 and continued to 2017, which presented with a 1.11% decline compared to the previous year.

	2015	2016
Annual growth rate of real GDP per capita	-0.356	-1.037
Annual growth rate of real GDP per employed person	-2.55	0.31

Table 17: South Africa's economic growth rates
Data sources: GDP 2015-2017, Mid-year Population Estimates 2015-2017, Stats SA

Indicator 8.3.1: Share of informal employment in non-agriculture employment by sex

The progress made towards Target 8.3 is measured by the proportion of informal employment in non-agricultural services per gender group. The number of individuals who are informally employed in non-agricultural sectors as a percentage of the total of non-agricultural employees has been mostly stable. The most recent data (2017) showed a slight aggregated decline for the mentioned group of 0.11% when compared to that of 2016, with a slight upsurge in female representation of 0.72% and a minor decrease of 0.72% presented by males for the mentioned period (Table 18).

Share of informal employment in non-agriculture employment by gender	2015	2016	2017
	Percent (%)		
Males	29.0	29.0	28.8
Females	30.3	29.2	29.4
Total	29.6	29.1	29.1

Table 18: Informal employment in South Africa
Data source: QLFS 2015-2017, Stats SA

Indicator 8.4.2: Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP

This indicator is discussed in the section on SDG 12 as Indicator 12.2.2.

Indicator 8.5.1D: Average monthly earnings of female and male employees, by occupation, age and persons with disabilities

The SDG indicator displaying average hourly earnings of female and male employees (occupation, age and those with disabilities) has been substituted with a domesticated measure, which quantifies the median monthly earnings of both female and male employees per occupational group. The data revealed that even though progress was made in increased compensation for both gender groups in most instances, a discrepancy remains between the earnings of females and their male counterparts, with females in general receiving less remuneration for the various occupational designations specified (Table 19).



Occupation	2010		2017	
	Males	Females	Males	Females
Managers	R12 000	R9 000	R19 000	R17 000
Professionals	R12 000	R9 900	R20 000	R18 600
Technicians	R8 000	R7 500	R7 000	R6 000
Clerks	R5 000	R4 000	R6 000	R5 000
Sales	R2 800	R2 000	R3 900	R2 900
Skilled Agriculturers	R2 500	R1 560	R2 200	R1 200
Craft	R3 000	R2 067	R4 333	R3 100
Operators	R3 033	R1 950	R4 116	R3 250
Elementary	R1 700	R1 500	R2 700	R2 166
Domestic Workers	R1 000	R1 000	R1 700	R1 733

Table 19: Median monthly earnings of female and male employees by occupations¹ for the years 2010 and 2017 (rand values)

Data source: QLFS 2010 and 2017, Stats SA

Indicator 8.5.2: Unemployment rate, by sex, age and persons with disabilities

Unemployed individuals are defined as those of working age, who were not employed and were actively seeking job opportunities and available to pursue them (Figure 68). Female unemployment rose from 25.8% in 2008 to 29.4% in 2017, compared to 19.7% and 25.5% for males within the same period. As indicated in the full dataset, the unemployment rates rose significantly for those aged between 15 and 24 years, with rates of 45.6% in 2008 and a staggering 53.4% in 2017. The total unemployment figures rose from 22.4% in 2008 to 27.25% in 2017, representing an increase of 4.8% for the period.

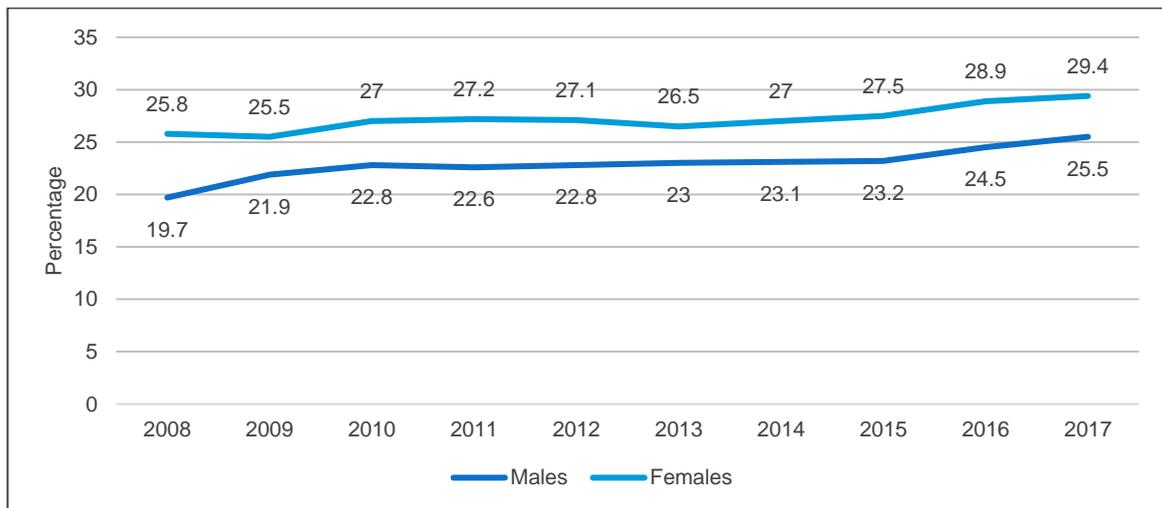


Figure 68: Unemployment rates by gender 2008–2017
Data source: QLFS 2008–2017, Stats SA

¹ Disaggregated data at occupation level is not available. This forms part of the data limitations stated earlier.



Indicator 8.5.2A: Youth (aged 15–34 years) unemployment rate
 Indicator 8.6.1: Percentage of youth (aged 15–24 years) not in education, employment or training (NEET)
 Indicator 8.6.1A Percentage of youth (15–34 years) not in education, employment or training

The unemployment rate of South Africa’s youth aged 15 to 34 years continues to increase, from 35.7% in 2010 to 38.7% in 2017 (Figure 69). The unemployment rate of South Africa’s youth aged 15 to 24 years is particularly high, with 53.4% recorded in 2017.

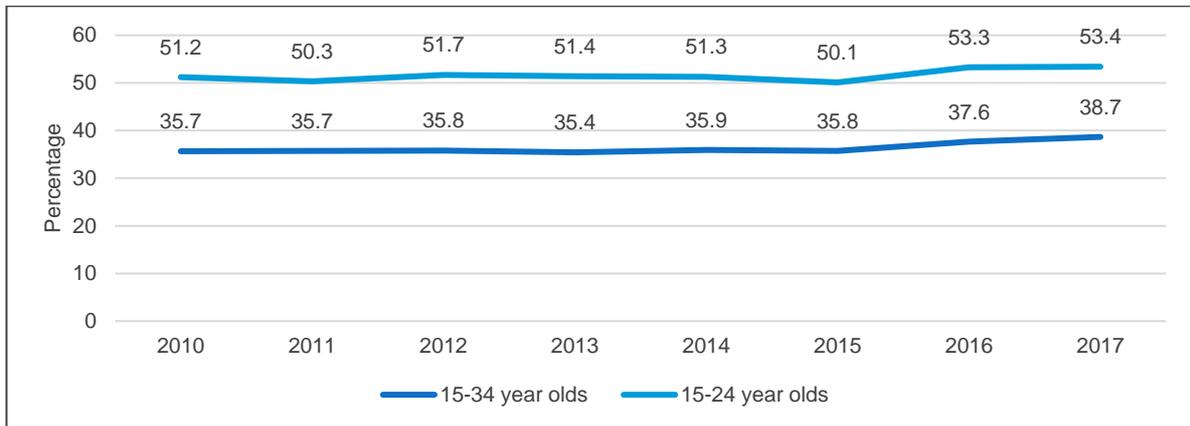


Figure 69: Unemployment rate amongst 15 to 34-year-olds
 Data source: QLFS 2010–2017, Stats SA

The percentage of youth (aged 15 to 24 years) not in education, employment or training, i.e. the NEET rate, is used to measure the advances made towards Target 8.6 as prescribed by SDG 8. This rate remained relatively constant from 2013 to 2017, starting at 31.97% and ending at 31.15%. An additional indicator was included for this particular target to illustrate the percentage of youth aged 15 to 34 years, rather than 24 years of age, who are not in education, employment or training. Likewise, these rates remained relatively stable, reflecting a NEET rate of 38.18% in 2013 and 38.60% in 2017.

Indicator 8.7.1D: Percentage of children aged 7–17 years engaged in child labour, by sex and age

The proportion and number of children aged 5 to 17 years, engaged in child labour by gender and age is recommended by the SDGs to measure Target 8.7; however, a domesticated indicator of 7 to 17 was used in this instance, and the data figures are presented in percentage points only. Bearing in mind that the frequency of this indicator is five-yearly, the particulars for the years 2010 and 2015 are presented in Figure 70.

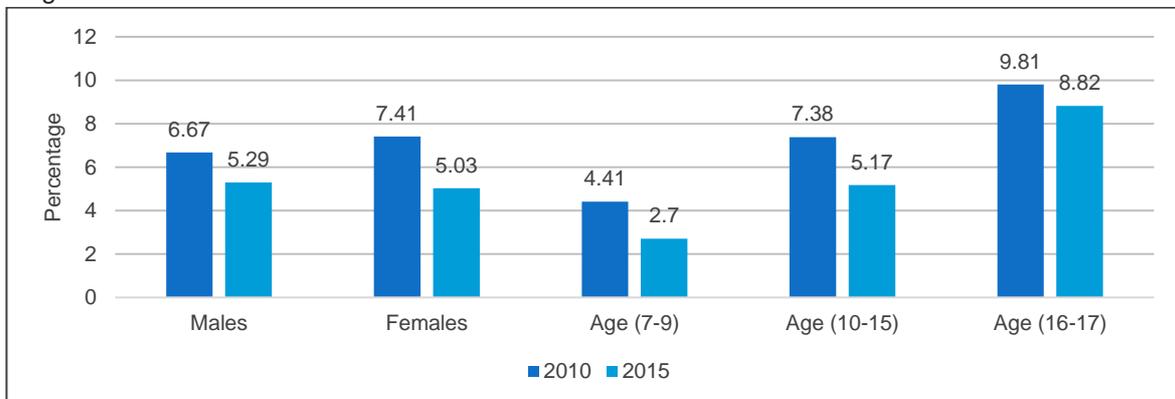


Figure 70: Percentage of children aged 7 to 17 years engaged in child labour, by gender and age for the years 2010 and 2015
 Data source: QLFS 2010 and 2015, Stats SA

Indicator 8.8.1: Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status

The two indicators for SDG 8 to measure the progression towards safe and secure working environments for all employees are (a) the frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status; and (b) the level of national compliance with labour rights (freedom of association and collective bargaining), based on the ILO's conventions and recommendations. Freedom of association and collective bargaining refers to the Freedom of Association and the Protection of the Right to Organize Convention No. 87 and the Right to Organize and Collective Bargaining Convention No. 98.

South Africa is currently able to report only on the first recommended indicator, with fatal and non-fatal occupational injuries aggregated. In addition, the status of migrant workers with regard to the attainment of a safe and secure working environment is not disaggregated from the figures shown. Figure 71 displays the number of cases of fatal occupational injuries between 2014 and 2018.

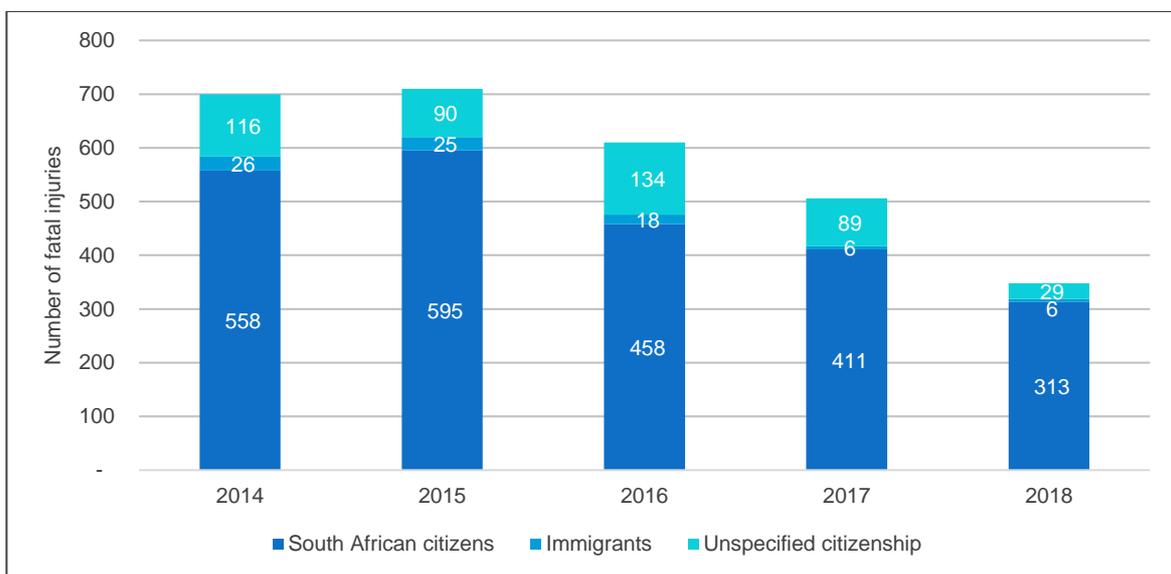


Figure 71: Number of fatal occupational injuries² for the years 2014 to 2018
Data source: Umehlolo System 2014–2018, DoL

Indicator 8.9.1: Tourism direct GDP as a proportion of total GDP and in growth rate

Two indicators are suggested in SDG 8 to measure the advances made in the tourism industry, which in turn create employment opportunities. These are (a) GDP generated by means of tourism as a proportion of the total GDP, and in growth rate; and (b) the share of jobs in sustainable tourism industries as a percentage of all tourism employments. Data values were only available for indicator (a) as mentioned Figure 72, and have shown a relatively constant trend for the years 2007 to 2016. The share of tourism value added presented on average 2.9% of the country's total GDP in 2016.

² Disaggregated data by sex is not available. This forms part of the data limitations stated earlier.

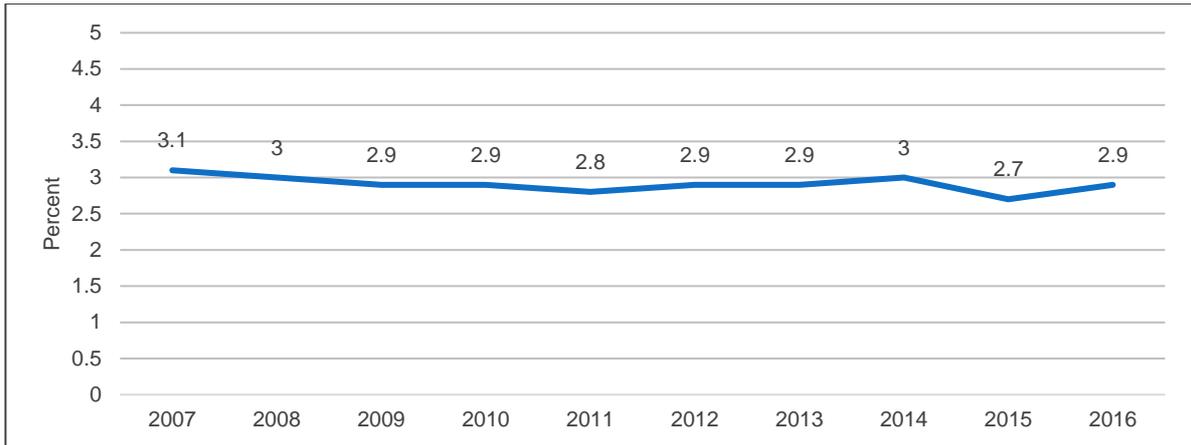


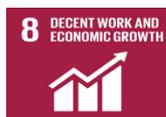
Figure 72: Percentage of GDP generated by means of tourism for the years 2007 to 2016
Data source: TSA 2007–2016, Stats SA

Indicator 8.10.1 (a) Number of commercial bank branches per 100 000 adults and (b) number of automated teller machines (ATMs) per 100 000 adults

The strength of financial institutions, as measured by the SDGs, is measured by two indicators, indicator one consisting of (a) the number of commercial bank branches per 100 000 adults and (b) the number of ATMs per 100 000 adults. The second indicator, for which no local data values were available, is the proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile money-service provider. The number of ATMs per 100 000 adults has seen a steady increase from 2012 (67.58) to 2017 (82.49), whilst the bank branches available per 100 000 adults have remained relatively constant, 10.94 to 10.87 for the same period (BIS 2012–2017).

4.3.3.3 Summary

South Africa's progress with regard to SDG 8's indicators with data is summarised in Table 20 below. South Africa is able to report on 11 SDG 8 indicators, of which nine are Tier I or Tier II SDG indicators, two are domesticated and two are additional indicators. Despite a slight acceleration, economic growth remains slow (8.1.1 and 8.2.1). This is at least partly also reflected in the decline in domestic material consumption (8.4.2). One of the gravest causes for concern is the continued high unemployment rate (8.5.2), especially amongst the youth (8.6.1 and 8.6.1A).



SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Indicator	Key data points
8.1.1: Annual growth rate of real GDP per capita	3.978% (2007), -0.356% (2015), -1.037% (2016), -0.268% (2017)
8.2.1: Annual growth rate of real GDP per employed person	1.2% (2009), -2.5% (2015), 0.3% (2016), -1.1% (2017)
8.3.1: Share of informal employment in non-agriculture employment by sex	Males: 29.1% (2008), 29% (2015), 29% (2016), 28.8 (2017)
	Females: 36.1% (2008), 30.3% (2015), 29.2% (2016), 29.4% (2017)
8.4.2: Domestic Material Consumption (DMC), domestic material consumption per capita, and domestic material consumption per GDP (duplicate indicator)	<i>DMC consumption</i> 689m tonnes (2007), 619m tonnes (2011), 637m tonnes (2015), 640m tonnes (2017)
	<i>DMC per capita</i> 13.9 tonnes (2007), 11.9 tonnes (2011), 11.7 tonnes (2015)
8.5.1D: Average monthly earnings of female and male employees, by occupation, age and persons with disabilities (domesticated indicator)	<i>Managers</i> Males: R12 000 (2010), R20 000 (2015), R19 000 (2016), R19 000 (2017)
	<i>Managers</i> Females: R9 000 (2010), R15 000 (2015), R17 000 (2016), R17 000 (2017)
	<i>Clerks</i> Males: R5 000 (2010), R4800 (2015), R5 430 (2016), R6 000 (2017)
	<i>Clerks</i> Females: R4 000 (2010), R4333 (2015), R4 500 (2016), R5 000 (2017)
	<i>Elementary</i> Males: R1 700 (2010), R2400 (2015), R2 600 (2016), R2 700 (2017)
	<i>Elementary</i> Females: R1 500 (2010), R2000 (2015), R2 080 (2016), R2 166 (2017)



8.5.2: Unemployment rate, by sex, age and persons with disabilities	Males: 19.7% (2008), 23% (2013), 23.2% (2015), 24.5% (2016), 25.5% (2017)
	Females: 25.8 (2008), 26.5% (2013), 27.5% (2015), 28.9% (2016), 29.4% (2017)
8.5.2A: Youth (15–34 years) unemployment rate (additional indicator)	35.7% (2010), 35.9% (2014), 35.8 % (2015), 37.6% (2016), 38.7% (2017)
8.6.1: Percentage of youth (15–24 years) not in education, employment or training (NEET)	32% (2013), 30.5 % (2015), 32.2% (2016), 31.2% (2017)
8.6.1A: Percentage of youth (15–34 years) not in education, employment or training (additional indicator)	38.2% (2013), 37.1% (2015) 38.1% (2016), 38.6% (2017)
8.7.1D: Percentage of children aged 7–17 years engaged in child labour, by sex and age (domesticated indicator)	Males: 6.7% (2010), 5.3% (2015)
	Females: 7.4% (2010), 5% (2015)
8.8.1: Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status	<i>Number of fatal injuries</i> South African citizens: 558 (2014), 595 (2015), 458 (2016), 313 (2018)
	<i>Number of fatal injuries</i> Immigrants: 26 (2014), 25 (2015) 18 (2016), 6 (2018)
8.9.1: Tourism direct GDP as a proportion of total GDP and in growth rate	<i>GDP generated by means of tourism</i> 3.1% (2007), 2.8% (2011), 2.7% (2015) 2.9% (2016)
8.10.1: (a) Number of commercial bank branches per 100 000 adults and (b) number of automated teller machines (ATMs) per 100 000 adults	<i>Commercial bank branches per 100 000</i> 10.9 (2012), 11.8 (2014) 11.3 (2015), 11.1 (2016) , 10.9 (2017)
	<i>ATMs per 100 000</i> 67.6 (2012), 80.5 (2015), 82.5 (2017)

Table 20: SDG 8 indicator progress

4.3.4 SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



SDG 9 contains the following eight targets:

- 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
- 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
- 9.3: Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
- 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
- 9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
- 9.a: Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing states
- 9.b: Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities
- 9.c: Significantly increase access to information and communications technology and strive to provide universal and affordable access to the internet in least developed countries by 2020

4.3.4.1 Policy environment

The *National Industrial Policy Framework* (NIPF) vision for South Africa's industrialisation trajectory is:

- To facilitate diversification beyond our current reliance on traditional commodities and non-tradable services. This requires the promotion of increased value-addition per capita characterised particularly by movement into non-traditional tradable goods and services that compete in export markets as well as against imports;

- The long-term intensification of South Africa's industrialisation process and movement towards a knowledge economy;
- The promotion of a more labour-absorbing industrialisation path with a particular emphasis on tradable labour-absorbing goods and services, and economic linkages that catalyse employment creation;
- The promotion of a broader-based industrialisation path characterised by greater levels of participation of historically disadvantaged people and marginalised regions in the mainstream of the industrial economy;
- Contributing to industrial development on the African continent with a strong emphasis on building its productive capabilities (DTI, 2007).

The NIFP identifies both priority sectors on which industrial policy should focus, as well as a range of strategic programmes designed to address transversal economic issues. The five sectoral groupings identified cover most of the economy and include 'natural resource-based sectors; medium technology sectors (including downstream mineral beneficiation); advanced manufacturing sectors; labour-intensive sectors; and tradable services sectors' (DTI, 2007). In addition to these priority sector strategies, a further twelve strategic programmes include Industrial Financing, Trade Policy, Skills and Education for Industrialisation, Competition Policy and Regulation, Leveraging Public Expenditure, Industrial Upgrading, Innovation and Technology, Spatial and Industrial Infrastructure, Finance and Services to Small Enterprises, Leveraging Empowerment for Growth and Employment, Regional and African Industrial and Trade Framework, and Coordination, Capacity and Organisation (DTI, 2007).

When turning to policies in the transport sector, the key role of the *Draft White Paper on Rail* should be noted. The White Paper summarises its mission as recognising and understanding 'rail's heritage of missed opportunities, strategic missteps and structural impediments' (DoT). Specific goals arising from this mission include an objective to increase the use of rail as a passenger transport alternative, in both long-distance and metropolitan areas; to reduce carbon emissions by shifting freight from road to rail; and more generally, to 'optimise the economic balance between rail, road and other transport modes' (DoT, 2017a).

In road transport, while much of the network is funded by the state, the policy is to implement a 'user pays' system where appropriate (DoT, 2017b). In practice, this has resulted in the implementation of toll road systems on a number of major corridors, with the tolls operated either by concessionaires or by Sanral. The most recent attempt to institute a toll road was the Gauteng Freeway Improvement Programme or GFIP, which has been the subject of massive and coordinated public resistance and non-payment. The implementation of the Single Transport Economic Regulator (STER) will improve oversight of toll tariffs, but the White Paper does not otherwise address this policy problem, for example, by imposing requirements as regards the functionality of alternative routes to toll roads.

The policy space for the promotion of advanced technology in manufacturing is shared by the Department of Science and Technology (DST) and DTI. The issue of how to ensure that the commercialisation of technological progress is facilitated is touched on in a number of policy documents. A key early policy document of relevance in this space was the 2002 *National Research and Development Strategy* (NRDS). The NRDS identifies sectors of the economy where knowledge intensity is high, such as the automotive sector, and where much of the development of new intellectual property is currently happening offshore. These areas are identified as focus points for policy initiatives in R&D (DST, 2002). Emphasis is also placed on improving the function of the Innovation Fund and other structures intended to boost high-tech entrepreneurial activity.



The DST's 2005 *National Advanced Manufacturing Technology Strategy* for South Africa recommends that new and existing centres and networks of innovation, for example, in the automotive industry and the advanced metals sector, should be utilised to improve the coordination and implementation of technological initiatives. In addition, the paper proposed that additional funding for innovation to the value of R650 million over three years should be put in place. This was followed by the release of the *Ten Year Innovation Plan* in 2008 (DST, 2008), steering South Africa towards a knowledge-based economy, where the production and spread of knowledge bring economic benefit to the country through innovation and entrepreneurship.

The 2019 *White Paper on Science and Technology* emphasises the need to facilitate funding for entrepreneurship, and proposes the establishment of a new sovereign innovation fund (DST, 2019). The White Paper also makes a commitment to develop guidelines facilitating the use of commercialised intellectual property from state-funded R&D for entrepreneurial activities, particularly as regards female and black entrepreneurs (DST, 2019). The White Paper confirms a commitment to a target for gross spending on R&D of 1.5% of GDP. It is envisaged that this funding will derive from both national, local and provincial government sources, as well as development finance institutions (DST, 2019). One of the sources of funding will be from expenditure on enabling pieces of research infrastructure. The South African Research Infrastructure Roadmap (SARIR) sets out a plan for identifying and investing in key components of the research system, which are likely to be prohibitively expensive for any single researcher (DST, 2016).

The primary policy document in the area of small business development is the *Integrated Strategy for the Promotion of Entrepreneurship and Small Enterprises* (ISPESE), which was produced in 2005 by the Department of Trade and Industry. One of its key focus areas is the need to move from uncoordinated sector support strategies to a more coordinated approach. Part of the approach to implementing this was the amalgamation of most existing government business development agencies into the Small Business Development Agency (SEDA). ISPESE is aimed at the full spectrum of small business activities.

Strategies such as ISPESE and the earlier 2003 *Integrated Small Business Development Strategy* in South Africa recognise the potential importance of the small business sector in South Africa, both as a tool for promoting economic growth and as a source of employment. However, much of the sector is comprised of survivalist micro-enterprises, and research suggests that the potential of such businesses to create employment and economic value is extremely limited (Ligthelm, 2013). In addition, there is evidence that the size of the informal sector in South Africa is decreasing rather than growing over time. For example, a series of surveys of informal business conducted by Stats SA found that the total estimated number of informal businesses dropped sharply from 2.3 million in 2001 to only 1.5 million in 2013 (Stats SA, 2014c). Similarly, research conducted for the DTI estimated the number of informal SMMEs at 2.3 million in 2001 (TIPS, 2004), and 1.5 million in 2015 (BER, 2016).

In order for formal SMMEs to scale up production, their ability to access product and service markets becomes crucial, both in terms of reaching their intended customers, and in terms of the accessibility of the inputs needed to stay in business. One of the most crucial of these inputs is access to finance. In ISPESE the discussion on access to finance for SMMEs concentrates on the role to be played by the state in providing such financing mechanisms, and specific mention is made of funding institutions such as the National Empowerment Fund (NEF) and the Industrial Development Corporation (IDC) (DTI, 2005).

4.3.4.2 Indicators

Indicator 9.1.2D: Passenger and freight volumes, by mode of transport

The indicator chosen for Target 9.1 encompasses measures of the provision of passenger and freight transportation services. As such, it touches on both the role that transport plays in facilitating economic activity as a whole, namely in relation to freight services, and on the social equity role of transportation in ensuring that all members of a community have adequate access to passenger transport. Table 21 shows that the number of passengers has decreased in all types of transport from 2015 to 2017, with the highest decrease observed in rail transport.

Rail freight has declined from 224 million tons in 2015 to 203 million tons in 2017, and road freight has seen a decrease from 595 million tons in 2015 to 573 million tons in 2017.

	2015	2016	2017	Percentage change 2015 – 2017
Rail passengers: millions	475	373	366	-23
Road passengers: millions	330	283	281	-15
Rail freight: million tons	224	200	203	-9
Road freight: million tons	595	567	574	-4

Table 21: Passenger and freight volumes
Data source: LTS 2015–2017, Stats SA

Indicator 9.2.1: Manufacturing value added as a proportion of GDP and per capita Indicator 9.2.2: Manufacturing employment as a proportion of total employment

For Target 9.2, success in moving towards the target is defined fairly simply as increases in the share of manufacturing in value added and employment. As can be seen from Figure 73 below, South Africa's manufacturing sector has instead been shrinking fairly rapidly. In the ten years to 2017, manufacturing value added has fallen from 14% of GDP to 12.3% of GDP. Manufacturing employment has declined slightly more rapidly than its contribution to GDP, from 14.3% of the total to 11.0%. This reflects decreasing levels of labour utilisation in the manufacturing sector over time, which is of concern given the policy objective of using this sector to create employment growth.

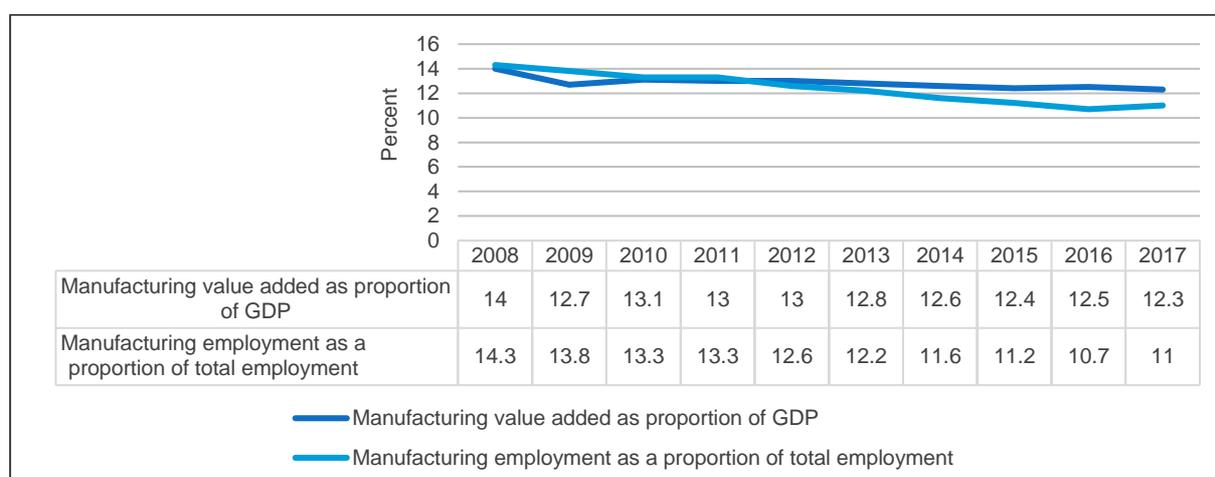


Figure 73: Manufacturing value added as proportion of GDP and employment as a proportion to total, 2008–2017
Data source: GDP 2008–2017, Stats SA

Indicator 9.5.1 Research and development expenditure as a proportion of GDP

The policy target of the South African government for gross expenditure on research and development as a percentage of GDP (GERD) is currently 1.5%. GERD covers all expenditures for R&D performed on national territory in a given year. It thus includes domestically performed R&D, which is financed from abroad, but excludes R&D funds paid abroad, notably to international agencies. GERD has shown some increases over recent years, from a low of 0.72% in 2013 to 0.8% in 2015, but is both far from achieving the target set by national policy and still has some way to go to recover to levels experienced as recently as 2008 (0.89%) (CSTII 2015, HSRC).

Indicator 9.5.1A: Business expenditure on R&D (BERD) as a percentage of gross domestic expenditure on R&D (GERD)

Indicator 9.5.1A splits out business sector research and development expenditure as a separate component of total R&D expenditure, which provides a measure of the share of the private sector in R&D spending. As shown in Figure 74 below, business expenditure on R&D (BERD) has been falling fairly steadily since 2008, and is currently well below its most recent peak of 58.6% in 2008.

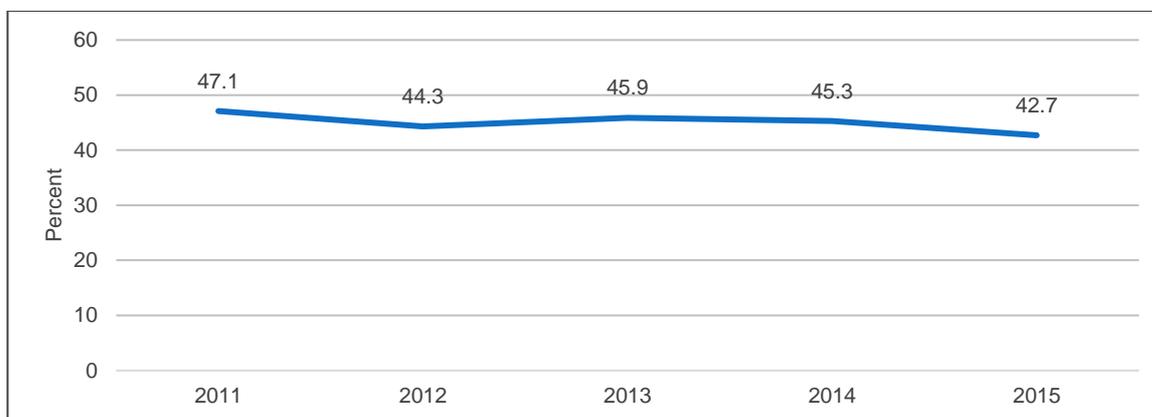


Figure 74: Business expenditure on R&D (BERD) as a percentage of GERD
Data source: CSTII 2011–2015 (survey conducted by DST)

Indicator 9.5.2: Researchers (in full-time equivalent) per million inhabitants

Indicator 9.5.2 examines the total number of full-time equivalent (FTE) researchers in the country per million inhabitants, as reported in the annual mid-year estimates. Full-time equivalent (FTE) refers to the number of hours (person-years of effort) spent on R&D activities. Researchers are R&D personnel engaged in the conception or creation of new knowledge, products, processes, methods and systems, and also in the management of the projects concerned.

Despite the decreasing expenditure on overall and business R&D revealed by the prior two indicators, as shown in Figure 75 below, the number of FTE researchers per million population has increased substantially over the 2010 to 2015 period from 369 to 475.1 per million. An examination of the underlying data suggests that the bulk of this 29% increase over the period has come from an increase in the number of active researchers in the higher education field. Over the period 2007/08 to 2016/17, the total number of FTE R&D personnel increased by approximately 11 179, while the same data series for just the higher education component of the sector shows an increased by 10 556 FTE positions (which almost doubled the number of FTE positions in higher education over that period).

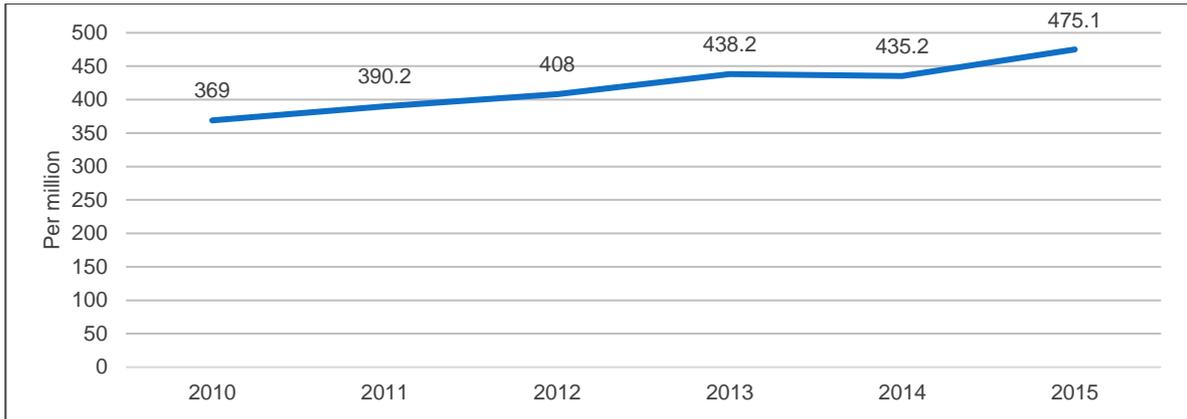


Figure 75: Full-time equivalent researchers per million inhabitants
Data sources: CSTI 2010–2015, HSRC and Mid-year Population Estimates 2010–2015, Stats SA

Indicator 9.b.1: Proportion of medium and high-tech industry value added in total value added

Indicator 9.b.1 measures the extent to which research and development activity is translating into more medium- and high-tech industrial activity, expressed as a percentage of total value added. For this measure, medium- and high-tech industry is defined as including the following International Standard Industrial Classification of All Economic Activities (ISIC) categories:

- Division 24 Manufacture of chemicals and chemical products
- Division 29 Manufacture of machinery and equipment n.e.c.
- Division 30 Manufacture of office, accounting and computing machinery
- Division 31 Manufacture of electrical machinery and apparatus n.e.c.
- Division 32 Manufacture of radio, television and communication equipment and apparatus
- Division 33 Manufacture of medical, precision and optical instruments, watches and clocks
- Division 34 Manufacture of motor vehicles, trailers and semi-trailers
- Division 35 Manufacture of other transport equipment (excluding 351 – Building and repairing of ships and boats)

As shown in the figure below, the indicator has remained at the same level between 2011 and 2015.

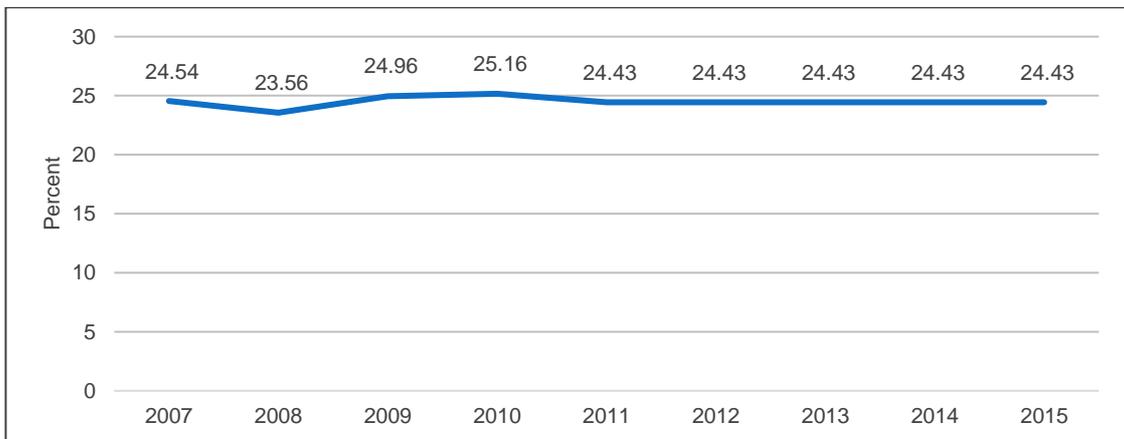


Figure 76: Proportion of medium- and high-tech industry value-added in total value-added
Data sources: Department of Trade Industry and World Bank

Indicator 9.c.1: Percentage of population covered by a mobile network, by 3G and LTE

The indicator chosen for Target 9.c comprises a complex measure of both mobile telephony coverage levels, and of the quality of the data services (and thus internet access) available on that network. 3G networks provide significantly lower data speed than LTE networks, and thus the extent of LTE coverage reflects the extent to which a network is equipped to provide quality access to data services. It should be noted that mobile telephony access is much wider in South Africa than fixed-line access, and thus that much of the population is more likely to be able to access the internet via a mobile device than with a fixed-line connection.

3G networks have achieved almost universal population coverage, and LTE networks now cover slightly more than three-quarters of the population (Figure 77). LTE network coverage growth rates are, however, starting to slow down. What the figure does not reflect is ongoing problems with the affordability of mobile data, which tends to reduce its true accessibility, and which means that many consumers sharply limit the amount of time they spend online. While limited progress has been made in rolling out 4G networks in South Africa, it should be noted that progress towards implementation of 5G networks will be dependent on the successful release of appropriate spectrum.

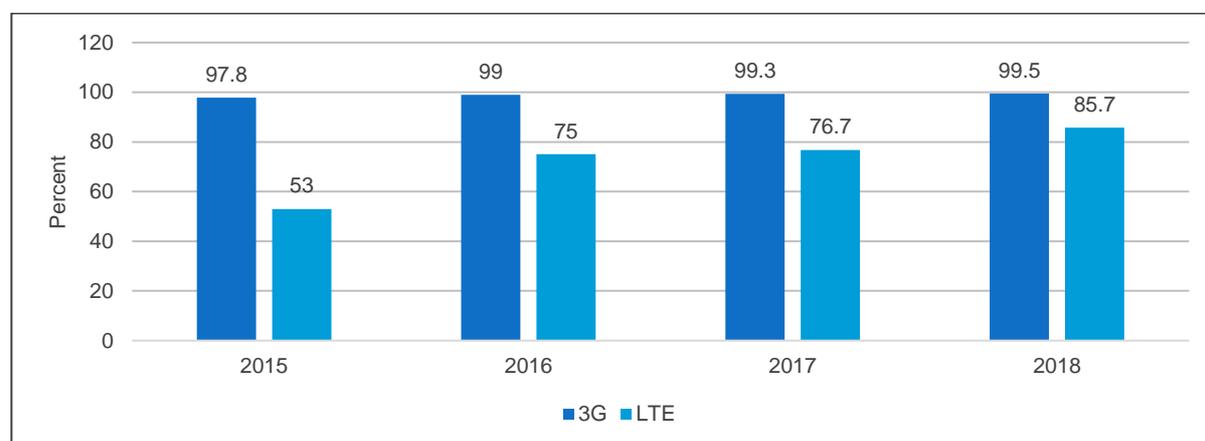


Figure 77: Population coverage by 3G and LTE mobile networks
Data source: ICASA 2015–2018

4.3.4.3 Summary

South Africa's progress with regard to SDG 9's indicators with data is summarised in Table 22 below. South Africa is able to report on seven of SDG 9 indicators, of which six are Tier I and/or Tier II SDG indicators, one is a domesticated indicator. The data shows a decline in the use of rail for both freight and passengers (9.1.2D). Another concern is that manufacturing employment (9.2.2) and its contribution to GDP (9.2.1) continues to decline. Despite lower research and development investments by the private sector (9.5.1A), a positive sign is the growth in the number of fulltime researchers (9.5.2) and total research and development expenditure as a percentage of GDP (9.5.1). The increase in 3G and LTE coverage (9.c.1) are also positive developments.

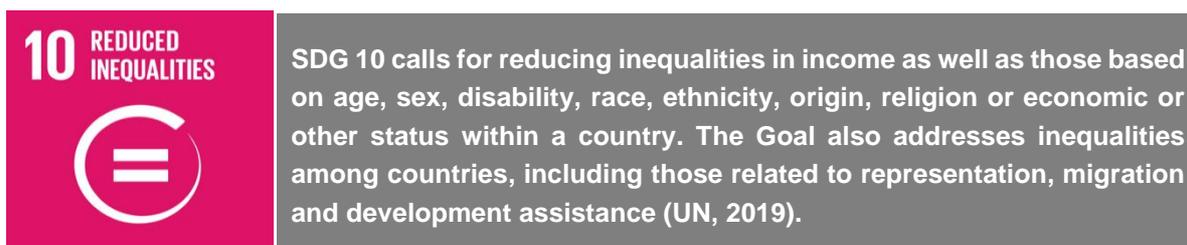


SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Indicator	Key data points
9.1.2D: Passenger and freight volumes, by mode of transport (domesticated indicator)	<i>Rail passengers</i> 558m (2008), 475m (2015), 373m (2016), 366m (2017)
	<i>Road passengers</i> 287m (2008), 330m (2015), 283m (2016), 281m (2017)
	<i>Rail freight</i> 182m tons (2008), 224m tons (2015), 200m tons (2016), 203m tons (2017)
	<i>Road freight</i> 556m tons (2008), 595m tons (2015), 567m tons (2016), 574m tons (2017)
9.2.1: Manufacturing value added as a proportion of GDP and per capita	<i>Manufacture value-added as proportion of GDP</i> 14% (2008), 12.8% (2013), 12.4% (2015), 12.5% (2016), 12.3% (2017)
9.2.2: Manufacturing employment as a proportion of total employment	14.3% (2008), 12.2% (2013), 11.2% (2015), 10.7% (2016), 11% (2017)
9.5.1: Research and development expenditure as a proportion of GDP	0.89% (2008), 0.72% (2013), 0.8% (2015)
9.5.1A: Business expenditure on R&D (BERD) as a percentage of gross domestic expenditure on R&D (GERD)	57.7% (2007), 47.1% (2011), 45.9% (2013), 42.7% (2015)
9.5.2: Researchers (in full-time equivalent) per million inhabitants	398.6 (2007), 369 (2010), 438.2 (2013), 475.1 (2015)
9.b.1: Proportion of medium and high- tech industry value added in total value added	25.54% (2007), 24.43% (2011), 24.43% (2015)
9.c.1: Percentage of population covered by a mobile network, by 3G and LTE	3G: 97.8% (2015), 99.3% (2017), 99.5% (2018)
	LTE: 53% (2015), 76.7% (2017), 85.7% (2018)

Table 22: SDG 9 indicator progress

4.3.5 SDG 10: Reduce inequality within and among countries



SDG 10 contains the following ten targets:

- 10.1: By 2030, progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average
- 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
- 10.3: Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard
- 10.4: Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality
- 10.5: Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations
- 10.6: Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions
- 10.7: Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies
- 10.a: Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements
- 10.b: Encourage official development assistance and financial flows, including foreign direct investment, to states where the need is greatest, in particular least developed countries, African countries, small island developing states and landlocked developing countries, in accordance with their national plans and programmes
- 10.c: By 2030, reduce to less than 3% the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5%

From the RDP, at the onset of South Africa's democracy in 1994, to the NDP, fighting the 'triple evils' – poverty, inequality and unemployment – has remained the overriding concern of South Africa's development policies and programmes. Specifically, the RDP posits that 'no political democracy can survive and flourish if the mass of our people remains in poverty, without land, without tangible prospects for a better life. Attacking poverty and deprivation must be the priority of a democratic government' (Government of South Africa, 1994). The NDP reiterates that it 'aims to eliminate poverty and reduce inequality by 2030' (NPC, 2012).

In her foreword to the World Bank (Overcoming poverty and inequality in South Africa, 2018a) report on *Overcoming Poverty and Inequality in South Africa*, the Minister in the Presidency: Planning,



Monitoring and Evaluation, Dr Nkosazana C. Dlamini-Zuma, conceded that, 'while the long-term trend indicates progress in reducing poverty, inequality has remained stubbornly high'. South Africa remains one of the most unequal societies in the world, where consumption and wealth inequality have remained high and have increased since 1994 (World Bank, 2018a). The situation has been worsened by the polarised labour market, characterised by high wage inequality (World Bank, 2018a).

As discussed in a previous section, addressing the root causes requires concerted efforts across sectors. Most of these efforts are discussed within the ambit of the remaining sixteen SDGs. Due to the cross-cutting nature of attempts at reducing extreme inequality, this subsection adopts a different approach to describing the policy environment than the approach adopted in the subsections above. An overview of a broad range of policies thought to contribute towards reducing inequality is given below.

Target	Relevant policy/programme	Objectives of the policy/programme
10.1 By 2030, progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average	SASSA Act (2004)	<ul style="list-style-type: none"> • Effective provision of social security services • Efficient, economic and effective use of the limited resources available to the state for social security • To prevent the proliferation of laws and policies relating to social security from prejudicing the beneficiaries of social security, prejudicing the economic interests of the republic or its provinces or impeding the implementation of such national social security economic policy
	NDP	<ul style="list-style-type: none"> • Increase the share of national income of the bottom 40% from 6% to 10%
	National Minimum Wage Bill (2017)	<ul style="list-style-type: none"> • The minimum wage is seen as one of the tools to close the wage gap, including between the genders, and thereby to overcome poverty
10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status	NDP: Chapter 15	<ul style="list-style-type: none"> • Build a more equitable society where opportunity is not defined by race, gender, class or religion
	MTFS: Social cohesion	<ul style="list-style-type: none"> • A diverse, socially cohesive society with a common national identity



<p>10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard.</p>	<p>Constitution of the Republic of South Africa, Act 108 of 1996</p>	<ul style="list-style-type: none"> • Provides the legal foundation for the existence of the republic, sets out the rights and duties of its citizens, and defines the structure of the government • Defines South Africa as 'one, sovereign, democratic state' and lists the country's founding values as human dignity, the achievement of equality and the advancement of human rights and freedoms. Non-racialism and non-sexism. Supremacy of the constitution and the rule of law • Bill of Rights' Equality: <ul style="list-style-type: none"> ○ Everyone is equal before the law and has the right to equal protection and benefit of the law ○ Equality includes the full and equal enjoyment of all rights and freedoms. To promote the achievement of equality, legislative and other measures designed to protect or advance persons, or categories of persons, disadvantaged by unfair discrimination may be taken ○ The state may not unfairly discriminate directly or indirectly against anyone on one or more grounds, including race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language and birth ○ No person may unfairly discriminate directly or indirectly against anyone on one or more grounds. National legislation must be enacted to prevent or prohibit unfair discrimination • Discrimination on one or more of the grounds is unfair unless it is established that the discrimination is fair
	<p>NDP</p>	<ul style="list-style-type: none"> • Entrench a social security system covering all working people, with social protection for the poor and other groups in need, such as children and people with disabilities
	<p>Broad-Based Black Economic Empowerment Act 53 of 2003 as amended by Act 46 of 2013</p>	<ul style="list-style-type: none"> • Advance economic transformation and enhance the economic participation of black people in the South African economy • Increase the number of black people that manage, own and control enterprises and productive assets • Facilitate ownership and management of enterprises and productive assets by communities, workers, co-operatives and other collective enterprises • Human resources and skills development • Achieve equitable representation in all occupational categories and levels in workforce • Preferential procurement from enterprises that are owned or managed by black people • Investment in enterprises that are owned or managed by black people
	<p>Amended Financial Sector Code 2017</p>	<ul style="list-style-type: none"> • Promote a transformed, vibrant, and globally competitive financial sector that reflects the demographics of South Africa, and contributes to the establishment of an equitable society by effectively providing accessible financial services to black people and by directing investment into targeted sectors of the economy • Aims to address the skills backlog, skewed participation, competitiveness, reduction of poverty and unemployment; and create a class of black people who have sufficient income to uplift their living standards and create long-term wealth in black hands • Access to financial services through inclusive banking, access to affordable and understandable long-term insurance risk cover; and access to affordable and understandable short-term insurance risk cover. Included the establishment of Mzansi accounts, which is a low-income transactional banking account



10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality	National Minimum Wage Bill	<ul style="list-style-type: none"> • Protection of low-earning workers and provides a platform for reducing inequality in society and decreasing huge disparities in income in the national labour market
	Labour Laws Amendment Bill	<ul style="list-style-type: none"> • Enables the implementation of the Unemployment Insurance Fund (UIF) Act and extends a variety of benefits to retrenched workers; as well as amendments to the Basic Conditions of Employment Act, which will introduce various changes, including parental and adoption leave
	South African Social Security Agency Act, 2004	<ul style="list-style-type: none"> • Effective provision of social security services • Efficient, economic and effective use of the limited resources available to the state for social security • To prevent the proliferation of laws and policies relating to social security from prejudicing the beneficiaries of social security, prejudicing the economic interests of the republic or its provinces or impeding the implementation of such national social security economic policy
	Expanded Public Works Programme	<ul style="list-style-type: none"> • Create short-term employment for the unskilled labour • Decent work & sustainable livelihoods, education, health; rural development; food security & land reform and the fight against crime & corruption
	Employment Tax Incentive	<ul style="list-style-type: none"> • Encouraging employers to hire young job seekers given that it reduces the cost of hiring young people by reducing the amount of PAYE owed by the employer to SARS without affecting the employees' wages
	Unemployment Insurance Contribution (UIF) Act and Amendments	<ul style="list-style-type: none"> • Provide short-term relief to workers when they become unemployed or are unable to work due to illness, maternity or adoption leave, and also to provide support to the dependants of a deceased contributor
	Pension Fund Act	<ul style="list-style-type: none"> • Provide for a retirement benefit, either as a lump sum or a regular monthly income (or both), to a member who reaches retirement age
10.5 Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations.	Financial Sector Regulation Act 9 of 2017	<ul style="list-style-type: none"> • Increase the robustness of the regulatory system, reinforce financial stability and integrity, and improve protection for customers from potential poor conduct by financial services firms • Financial Sector Conduct Authority: <ul style="list-style-type: none"> ○ Promoting the fair treatment of financial customers by financial institutions ○ Providing financial customers and potential financial customers with financial education programmes ○ Promoting financial literacy • Prudential Authority: <ul style="list-style-type: none"> ○ Promoting and enhancing the safety and soundness of financial institutions that provide financial products and securities services ○ Protecting financial customers against the risk that they may fail to meet their obligations ○ Assisting in maintaining financial stability
	National Credit Amendment Act 19 of 2014	<ul style="list-style-type: none"> • Provide debt interventions for low income consumers with the aim of addressing over-indebtedness • Provide for the evaluation and referral of debt intervention applications and the suspension of agreements considered to be reckless as part of the enforcement functions of the National Credit Regulator (NCR); and to include the consideration of a referral as a function of the Tribunal • Introduced affordability assessment regulations to assist credit providers assess the consumer's ability to repay credit and protect consumers from reckless spending



	Basel III Accord	<ul style="list-style-type: none"> ● Comprehensive set of reform measures developed by the Basel Committee on Banking Supervision, to strengthen the regulation, supervision and risk management of the banking sector. These measures aim to: <ul style="list-style-type: none"> ○ Improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source ○ Improve risk management and governance ○ Strengthen banks' transparency and disclosures
10.6 Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions	NDP: Chapter 7	<ul style="list-style-type: none"> ● SA's national priorities advanced in bilateral engagements ● An economically integrated Southern Africa ● Political cohesion within Southern Africa to ensure a peaceful, secure and stable Southern African region ● A peaceful, secure and stable Africa ● A sustainable, developed and economically integrating Africa ● An equitable and just System of Global Governance ● Strong, mutually beneficial South-South cooperation ● Beneficial relations with strategic formations of the North
	MTFS: Outcome 11	<ul style="list-style-type: none"> ● Create a better South Africa and contribute to a better Africa and a better world
	White Paper on Foreign Policy	<ul style="list-style-type: none"> ● Through bilateral and multilateral interactions, to protect and promote South African national interests and values ● Monitor international developments and advise government on foreign policy and related domestic matters ● Protect South Africa's sovereignty and territorial integrity ● Contribute to the formulation of international law and enhance respect for its provisions ● Promote multilateralism in order to secure a rules-based international system ● Provide consular services to South African nationals abroad ● Provide a world-class and uniquely South African State Protocol service
	BRICS	<ul style="list-style-type: none"> ● Assist African economies to play a greater role in international affairs ● Play a leading role in BRICS by helping to facilitate deeper integration of relations between African states and other BRICS members countries ● Strategic opportunity to advance the interests of Africa in global issues such as the reform of global governance, the work of the G20, international trade, development, energy and climate change
	Annual Meetings of the International Monetary Fund (IMF) and World Bank Group	<ul style="list-style-type: none"> ● Central bankers, ministers of finance and development, parliamentarians, private sector executives, representatives from CSOs and academics discuss issues of global concern, including the world economic outlook, poverty eradication, economic development, and aid effectiveness
10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.	White Paper on International Migration for SA (2017)	<ul style="list-style-type: none"> ● Ease of movement of sought-after international migrants, goods and conveyances to SA ● Reduce irregular migration from neighbouring and other countries ● Attraction and retention of skilled international migrants and business persons who contribute positively to the economy ● Attraction and return of South African repatriates to invest in the economy ● Provision of legal route for SADC nationals to work and trade across the region ● Effective provision of protection and basic services to asylum seekers and refugees in a humane and secure manner ● Integration of international migrants who are living in the country legally and have been issued with a residence visa

Table 23: Key policies aimed at reducing inequality

Source: DPME, 2019

4.3.5.1 Indicators

Indicator 10.1.1: Growth rates of household expenditure or income per capita among the bottom 40% of the population and the total population

Since SDG 10's main purpose is to reduce inequalities – primarily economic inequalities, progress can be measured by monitoring the income growth of the bottom 40% of the population of the country. Figure 78 shows that the growth rate of consumption in South Africa was high in the period up to 2011, but significantly reduced between 2011 and 2015. Analysis of the growth trends shows a fundamental shift: although national consumption declined between 2011 and 2015, consumption by the bottom 40% increased, albeit at the lower rate. This shows that there was a transfer of economic gains towards the bottom 40%, even when the economy was slowing down.

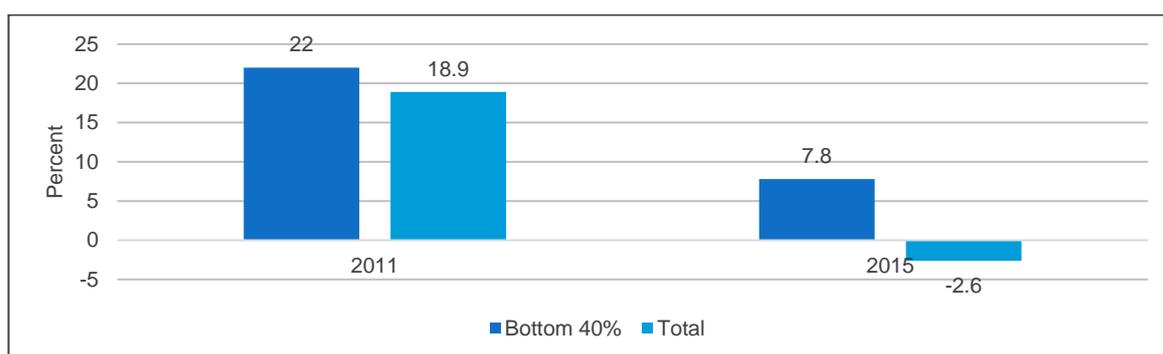


Figure 78: Income growth of bottom 40% vs total
Data sources: IES 2011 and LCS 2015, Stats SA

To measure and monitor social inclusion, the share of the population living below 50% of median national income is presented (Figure 79). In this regard, the higher this proportion, the more unequal a society is. When comparing two or more categories, those with a higher percentage suggest that they are more excluded from enjoying the benefits of economic prosperity.

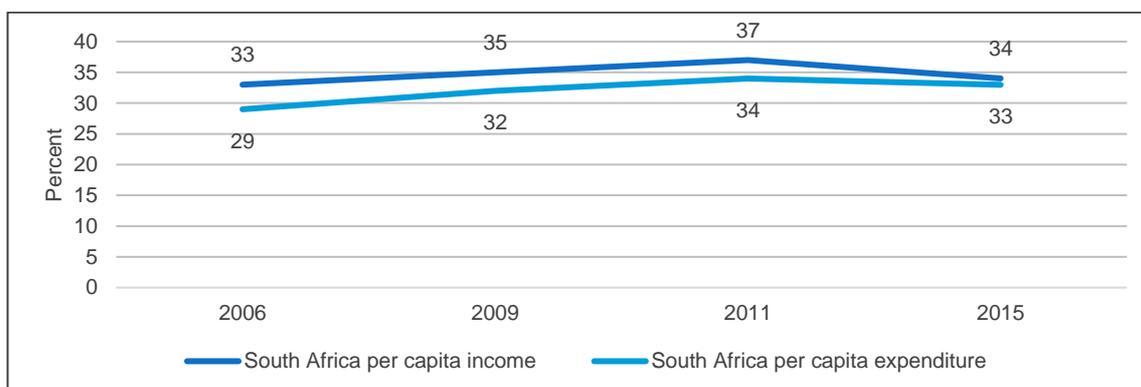


Figure 79: Comparison of the proportion of those living below the 50% median income or expenditure
Data sources: IES 2006, LCS 2009, IES 2011, LCS 2015, Stats SA

Indicator 10.2.1: Proportion of people living below 50% of median income, by sex, age and persons with disabilities

Figure 80 shows that there are certain age groups that may be relatively more vulnerable, thereby requiring specific interventions by the relevant authorities. Children in the 0–17 years age group are likely to survive on less than half the median income or expenditure, followed by the youth. On the other extreme, those aged above 65 years are more likely to survive on income that is more than the median income.

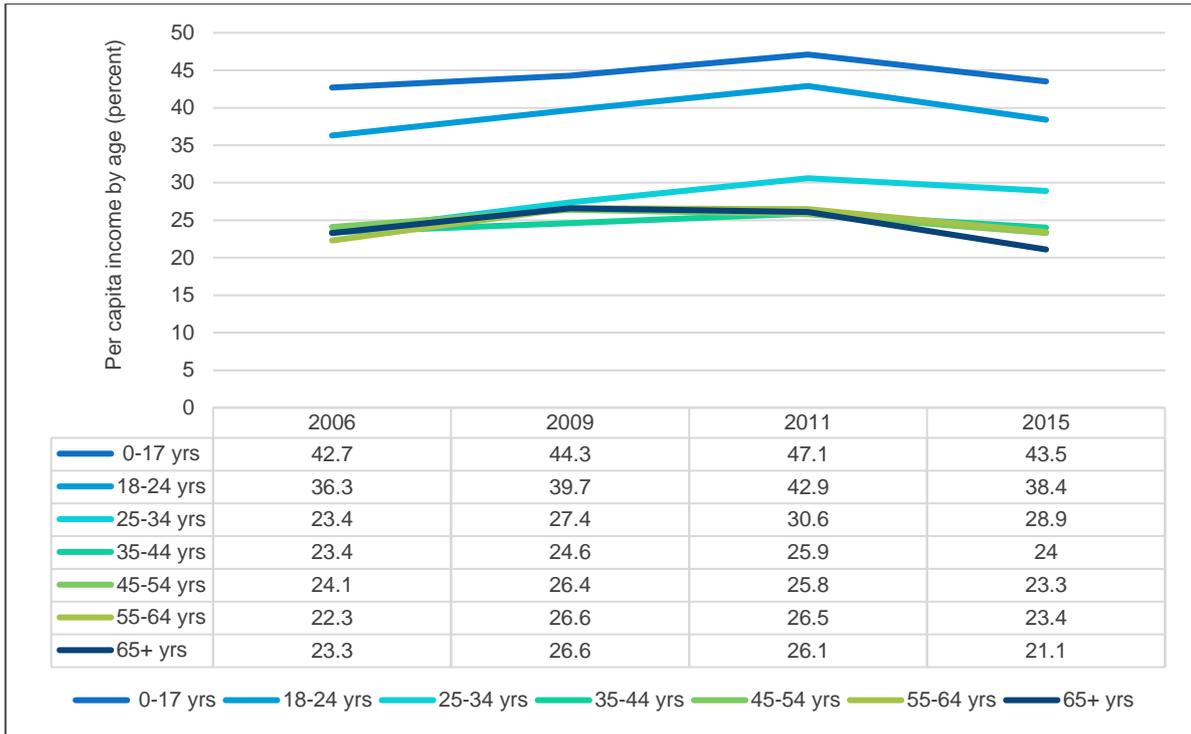


Figure 80: Proportion of those living below the 50% median income by age
Data sources: IES 2006, LCS 2009, IES 2011, LCS 2015, Stats SA

Indicator 10.4.1: Labour share of GDP, comprising wages and social protection transfers

This indicator measures the relative share of GDP, which accrues to employees compared to the share (profits) which accrues to capital. If labour income falls at a greater rate than profits, the wage share will be expected to fall, depending on the distribution of real income and public policy. The labour share of GDP can fall because of falling wage employment, falling wages or a combination of both. As discussed earlier, labour market income is an important determinant of inequality, and thus an increased labour share of GDP is expected to drive inequality in South Africa downwards. Figure 81 shows that the labour share of GDP has been on a steady upward trajectory, at an average annual rate of 1.2%.

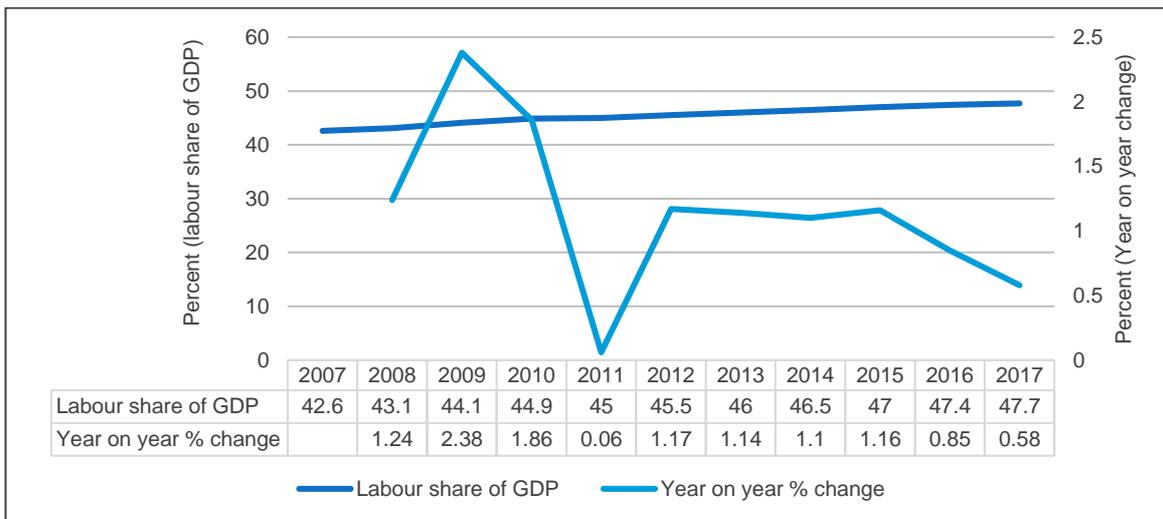


Figure 81: Labour share to GDP 2007–2017
Data sources: GDP 2007–2017, QLFS 2007–2017, Stats SA

Indicator 10.6.1D: The number of international organisations in which South Africa has membership and voting rights (domesticated indicator)

According to the UN's charter, SDG 10.1.6 is based on a principle of sovereign equality of all its member states and assesses the extent to which member states are equally represented in various international organisations. South Africa has membership and voting rights in 8 out of 11 major international organisations. This indicator is also reported on as Indicator 16.8.1D.

Indicator 10.c.1: Remittance costs as a proportion of the amount remitted

The SDG target is to reduce the cost of a US\$200 remittance to less than 3% of the value of the amount sent. As shown in Figure 82 below, South Africa is relatively far from achieving this target. The cost of sending money from South Africa is particularly high, which may reflect the disproportionate burden that South African exchange control regulations place on competitive entry into the formal remittance market. While there was some improvement in the cost of sending money from South Africa in 2014, little progress has been seen since, and the cost of sending money to South Africa has remained stable over the period.

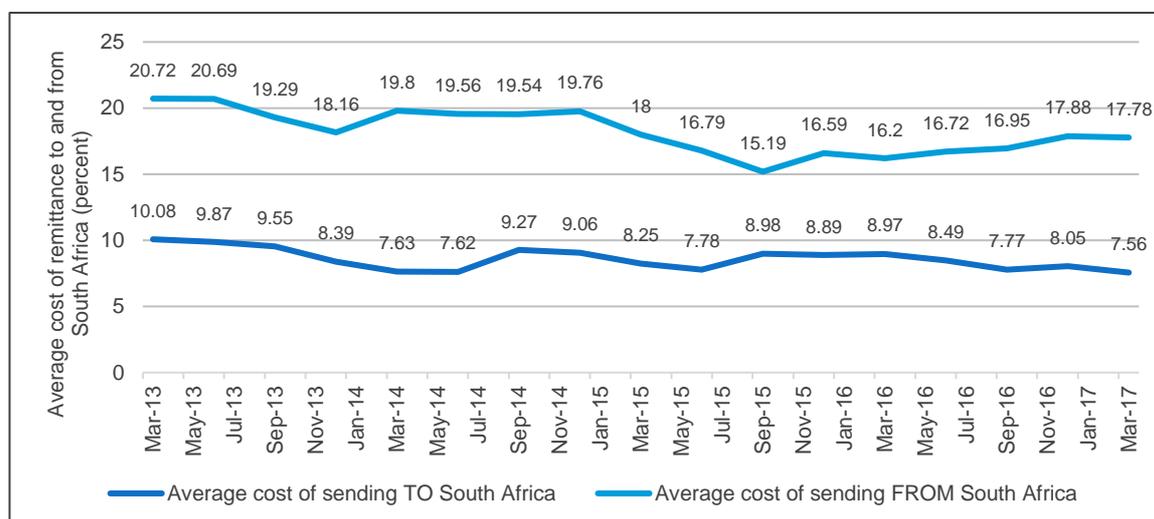


Figure 82: Remittance costs as a proportion of the amount sent, \$200 transaction
Data source: World Bank

4.3.5.2 Summary

South Africa's progress with regard to SDG 10's indicators with data is summarised in Table 24 below. South Africa is able to report on five SDG 10 indicators, of which four are Tier I or Tier II SDG indicators and one is a domesticated indicator. Growth rate of household expenditure among the bottom 40% of the population remain above those for the rest of the population, but have slowed down (10.1.1). The proportion of South Africans who live below 50% of the median income is increasing (10.2.1). With regard to reducing inequality between countries, it is notable that the cost of sending remittances from South Africa is decreasing (10.c.1).



SDG 10: Reduce inequality within and among countries

Indicator	Key data points
10.1.1: Growth rates of household expenditure or income per capita among the bottom 40% of the population and the total population	Bottom 40%: 22% (2011), 7.8% (2015)
	Total population: 18.9% (2011), -2.6% (2015)
10.2.1: Proportion of people living below 50% of median income, by sex, age and persons with disabilities	Men: 30.5% (2006), 35% (2011), 31.8% (2015)
	Women: 34.6% (2006), 38.8% (2011), 35.2% (2015)
10.4.1: Labour share of GDP, comprising wages and social protection transfers	42.6% (2007), 45% (2011), 46.5% (2014), 47.4% (2016), 47.7% (2017)
10.6.1D: The number of international organisations in which South Africa has membership and voting rights (domesticated and duplicate indicator)	8/11
10.c.1: Remittance costs as a proportion of the amount remitted	<i>Average cost of sending from South Africa</i> 20.72% (March 2013), 19.8% (March 2014), 18% (March 2015), 16.2% (March 2016), 17.78% (March 2017)

Table 24: SDG 10 indicator progress

4.3.6 SDG 12: Ensure sustainable consumption and production patterns



SDG 12 contains the following eleven targets:

- 12.1: Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries
- 12.2: By 2030, achieve the sustainable management and efficient use of natural resources
- 12.3: By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses
- 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
- 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
- 12.6: Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
- 12.7: Promote public procurement practices that are sustainable, in accordance with national policies and priorities
- 12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
- 12.a: Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production
- 12.b: Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products
- 12.c: Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities

4.3.6.1 Policy environment

SDG 12 is supported by Chapter 5 of the NDP, as well as Outcome 10 of the MTSF (2014–2019). Specific objectives of the NDP include absolute reductions in the total volume of waste disposed to landfills each year (SDG 12.5), increased waste recycling (SDG 12.5), development of green products



and services (SDG 12.2), and carbon-pricing to reduce carbon emissions (SDG 12.c) (NPC, 2011). Outcome 10 of the MTSF aims to protect and enhance the country's environmental assets and natural resources. A phased approach is taken over three MTSF periods. The first phase (2014–2019) covers the development of a framework to support the transition to an environmentally sustainable and low carbon economy (SDG 12.1). Data collection, establishment of baseline information and testing of indicators are the main focus areas in phase 1.

The second phase (2019–2024) will focus on the implementation of sustainable development programmes. It is envisaged that greenhouse gas emissions for South Africa will peak during phase 2 (SDG 12.c). The third phase (2024–2029) will cover the final steps of the transition to sustainable development. It is envisaged that emissions will reach a plateau by 2030, and that poverty and unemployment will be at socially sustainable levels, not leaving anyone behind. The expected outcomes are 1) compact and energy-efficient urban development, and 2) increased public awareness of the consequences of unsustainable consumption and production and of climate change.

Similarly, the National Framework for Sustainable Development (NFSD) and the NSSD support resource efficiency and growing the green economy (ASSAF, 2014). The NFSD established a broad framework to guide sustainable development in South Africa. It outlines the country's vision for sustainable development and identifies five strategic priorities (see below).

The NSFD is a broad framework that provides and enables policy for investment in green technologies; which was followed up by the National Strategy for Sustainable Development and Action Plan (NSSD). The five priorities of the NFSD were updated in the NSSD as follows:

1. Enhancing systems for integrated planning and implementation
2. Sustaining our ecosystems and using natural resources efficiently
3. Towards a green economy
4. Building sustainable communities
5. Responding effectively to climate change

In addition, 113 interventions and 20 indicators have been established to monitor and evaluate progress. Lessons from NSSD1 (2011–2014) are expected to inform NSSD2 (2015–2020) (ASSAF, 2014).

The Johannesburg Summit (2002) recommended the development of a *10-Year Framework Programme* (10YFP) on SCP, outlining a number of actions (Clark 2007), including:

- Identifying activities, tools, policies, and monitoring and assessment mechanisms, including life-cycle analysis;
- Adopting and implementing policies and measures;
- Developing awareness-raising programmes, particularly for the youth through education, consumer information and advertising;
- Developing and adopting consumer information tools; and
- Increasing eco-efficiency for capacity building and technology transfer.

DEA, through their Directorate: International Sustainable Development, serves as the national focal point for the 10YFP SCP Programmes. DEA coordinates the 10YFP Secretariat's interface with the country and handles the governance aspects related to the 10YFP programmes. The DEA also represents South Africa at the African Roundtable for Sustainable Consumption and Production (ARSCP) meetings, which is the regional body reporting to the 10YFP Secretariat.



The African Regional Roadmap for the 10YFP was developed by the ARSCP to increase support (technical and financial) to African governments to mainstream SCP objectives into the design and implementation of policies (10YFP, 2014).

South Africa, together with Switzerland, the World Wildlife Fund (WWF) and Hivos, is one of the co-leads for the *10YFP Sustainable Food Systems Programme* (SFS). The Department of Trade and Industry's Agro-processing Directorate took on this role.

The SFS programme is one of six programme areas that were developed (EPA, 2017). The other programmes are:

1. Sustainable public procurement
2. Consumer information
3. Sustainable lifestyles and education
4. Sustainable buildings and construction
5. Sustainable tourism.

Various South African national imperatives directly or indirectly support SCP and the 2030 Agenda for Sustainable Development. These include the Constitution, the NDP (Chapter 5), and the National Strategy for Sustainable Development, amongst others. The environmental right contained in section 24 of the Constitution of the Republic of South Africa provides for environmental protection for the benefit of present and future generations, which includes prevention of pollution and ecological degradation, while allowing ecologically sustainable development through the efficient use of natural resources and the promotion of justifiable economic and social development.

South Africa established a Researchers Forum to strengthen the research-policy interface such that national priorities influence research undertaken, and research influences policy development. DEA in partnership with the Water Research Commission (WRC) initiated a process of identifying, influencing funding for, and prioritising research on national emerging environmental pollutants for ultimate policy action, to reduce negative impacts of chemicals. Furthermore, it hosts the Africa Institute on the management of hazardous chemicals and waste. The Africa Institute facilitates the implementation of the chemicals, waste MEAs, builds capacity, undertakes, and supports research, facilitates technology transfer from developed countries, for Africa.

DEA serves as the Focal Point for all Chemicals and Waste MEAs:

- Basel Convention on the Transboundary Movements of Hazardous Wastes and their Disposal
- Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
- Stockholm Convention on Persistent Organic Pollutants (POPs)
- Vienna Convention for the Protection of the Ozone Layer
- Montreal Protocol of the Vienna Convention on Ozone Depleting Substances (ODS)
- International Conference on Chemicals Management (ICCM)
- Strategic Approach to International Chemicals Management (SAICM)
- Minamata Convention on Mercury

The department also serves for the period from 2018-2021, as an African expert and Chair of the Chemical Review Committee (CRC) of the Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.



The CRC, as the subsidiary scientific committee, recommends to the Rotterdam Convention Conference of the Parties, chemicals to be listed on Annex III due to their hazardous nature so that countries can now make informed decisions on whether to accept these chemicals into their countries or not. The Chair of the CRC also serves as a Bureau member of the Rotterdam Convention. DEA serves from the period of 2019-2021, as an African expert and the Deputy-President of the Stockholm Convention and thus as a Bureau member of the Stockholm Convention. As the Bureau member of the conventions, DEA advances globally, Africa interests on chemicals and waste management; contributes to managing governance issues of the Rotterdam, and Stockholm conventions and works in partnership with the Secretariat of the Basel, Rotterdam, and Stockholm conventions.

4.3.6.2 Indicators

Indicator 12.2.2: Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP

South Africa's domestic material consumption (DMC) peaked in 2008 just before the global economic crisis hit, and dropped significantly as a result. Consumption started increasing again in 2011, but dropped again in 2014 with the economic meltdown experienced at the time. This is therefore a clear indication that material consumption in South Africa has a direct link to the economic climate at any given time. It is clear from Figure 83 that DMC increased steadily between 2015 and 2017. This indicator is also reported on as Indicator 8.4.2.

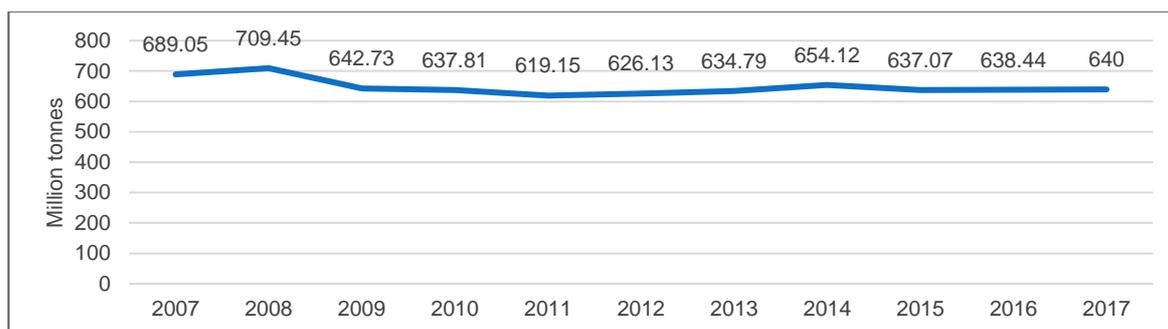


Figure 83: South African domestic material consumption in tonnes per year 2007–2017
Data source: UN IRP 2007–2017

When considering the DMC per capita (Figure 84), the impact of the economic crises in 2008 and 2014 can be seen, although consumption remained fairly stable over time from 2011 onwards. The strong link between the economic climate and overall DMC is a clear indication that little progress has been made towards more sustainable and efficient use of natural resources at a national level. However, it is encouraging that per capita DMC has remained fairly stable. It is too early, however, to draw conclusions on the longer-term sustainability of per capita DMC based on the evidence provided, particularly since the data in question pertains to a period characterised by generally sluggish economic growth.

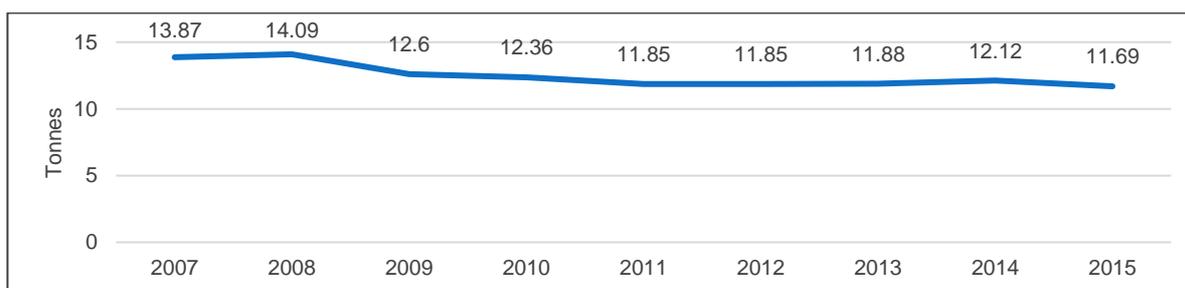


Figure 84: DMC tonnes per capita
Data source: UN IRP 2007–2017



Indicator 12.4.1D: Percentage of international multilateral environmental agreements on hazardous waste, and other chemicals that South Africa has committed to.

The definition for the domesticated indicator is as follows: Percentage of the following multilateral environmental agreements that South Africa is either party to or has committed to:

- Basel Convention on the Transboundary Movements of Hazardous Wastes and their Disposal
- Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
- Stockholm Convention on Persistent Organic Pollutants (POPs)
- Montreal Protocol of the Vienna Convention
- Minamata Convention on Mercury (signed the text, but yet to ratify the Convention).

South Africa has committed to all the listed international conventions relating to hazardous waste and other chemicals.

4.3.6.3 Summary

South Africa’s progress with regard to SDG 12’s indicators with data is summarised in Table 25 below. South Africa is able to report on two SDG 12 indicators, of which one is an official SDG indicator and one is a domesticated indicator. The main limitation faced by South Africa in reporting progress on SDG 12 is a general lack of indicator-specific reliable and verifiable data at national level. Domestic material consumption (12.2.2) is showing a decrease in both the total tonnage consumed and the consumption per capita. South Africa obtained an overall score of 100% for Indicator 12.4.1D.



SDG 12: Ensure sustainable consumption and production patterns

Indicator	Key data points
12.2.2: Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP (duplicate indicator)	<i>DMC consumption</i> 689m tonnes (2007), 619m tonnes (2011), 637m tonnes (2015), 638m tonnes (2016), 640m tonnes (2017)
	<i>DMC per capita</i> 13.9 tonnes (2007), 11.9 tonnes (2011), 11.7 tonnes (2015)
12.4.1D: Percentage of international multilateral environmental agreements on hazardous waste, and other chemicals that South Africa has committed to	100%(2015), 100%(2016), 100%(2017)

Table 25: SDG 12 indicator progress

4.3.7 SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development



SDG 17 contains the following nineteen indicators:

- 17.1: Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection
- 17.2: Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7% of ODA/GNI to developing countries and 0.15 to 0.2% of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.2% of ODA/GNI to least developed countries
- 17.3: Mobilize additional financial resources for developing countries from multiple sources
- 17.4: Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress
- 17.5: Adopt and implement investment promotion regimes for least developed countries
- 17.6: Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism
- 17.7: Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed
- 17.8: Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology
- 17.9: Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation
- 17.10: Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda
- 17.11: Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020
- 17.12: Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions,



including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access

- 17.13: Enhance global macroeconomic stability, including through policy coordination and policy coherence
- 17.14: Enhance policy coherence for sustainable development
- 17.15: Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development
- 17.16: Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries
- 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships
- 17.18: By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing states, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts
- 17.19: By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries

4.3.7.1 Policy environment

SDG 17 essentially represents the means of implementation of the 2030 Agenda and as such, its targets and indicators focus on finance; technology; capacity building; trade and systemic issues. In line with national development priorities, South Africa is making strides on most of the targets of SDG 17. The objective of SDG 17 is to strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development. SDG 17 consists solely of 'means of implementation' targets, focused on ensuring commitment to the means required to achieve the overall SDGs. This Agenda focused on aiming to ensure that clear and concrete responsibilities for the achievement of the SDGs were included in the 2030 Agenda. The final set of targets under SDG 17 is seen by some as a weaker version of the desired implementation targets, with limited concrete responsibilities for developed countries. Nevertheless, SDG 17 is a substantive expansion and elaboration of similar targets under the Millennium Development Goals (MDGs), and particularly in terms of MDG 8.

Some of the overall targets for SDG 17 focus primarily on the contributions of developed countries to supporting the achievement of the SDGs by developing and least developed countries. In this sense, South Africa, as a middle-income developing country, can be considered a recipient of global support, and some of the SDG 17 indicators are intended to reflect the support provided by developed countries in ensuring that South Africa achieves the SDGs. The fact that SDG 17 is ultimately a 'means of implementation' goal also suggests that, as a developing country, some responsibility for South Africa's achievement of SDG 17 falls on its developed country and multilateral organisation partners.

In relation to the above-mentioned, the 2030 Agenda stresses the importance of 'improved coordination, and better and focused support of the UN development system, the international financial institutions, regional organisations and other stakeholders' for middle-income countries.



As one of the largest economies on the African continent, South Africa both receives and provides official development assistance. It engages in multiple global platforms that allows it to play a meaningful role in promoting the voice of developing countries and the African region in particular. At the same time, South Africa continues to face significant challenges related to overcoming inequality and poverty.

Because of this dichotomous position, reflecting on South Africa's progress in SDG 17 requires a balanced perspective on South Africa's responsibilities in supporting other developing countries to achieve the SDGs and the obligations that the international community (and developed countries in particular) has in supporting South Africa's achievement of the SDGs.

SDG 17 is the only one of the SDGs that is regularly included for annual in-depth review under the UN's HLPF review process for the first four-year cycle. The most recent HLPF SDG report, for 2018, reveals a number of global trends for indicators under SDG 17, summarised in Table 26.

In recognition of STI as one of the means of implementation of the 2030 Agenda, the Technology Facilitation Mechanism (TFM) was established. In line with the TFM and the call of the Addis Ababa Action Agenda for member states to 'adopt science, technology and innovation strategies as integral elements of our national sustainable development strategies to help to strengthen knowledge-sharing and collaboration', South Africa is currently working on its first STI for SDG Roadmap. The Roadmap has prioritised international cooperation that builds on existing STI cooperation agreements and programmes with a commitment to strengthen and expand such in line with South-South, North-South and triangular cooperation. In acknowledging that Vision 2030 of the National Development Plan and the 2019 STI White Paper recognise the cross-cutting role of STI in development, consideration is being given to the development of indicators that will enable South Africa to assess and evaluate the contribution of STI in realising the development agenda. To illustrate, considerable investment has been made in developing and diffusing innovative environmentally friendly technology solutions to contribute towards the attainment of the targets of SDGs 6, 7 and 11.

SDG 17 themes (selection)	Indicator trends
Finance	<ul style="list-style-type: none"> While increasing consistently between 2012 and 2016, the real net official development assistance from the OECD's Development Assistance Committee (DAC) member countries fell by 0.6% between 2016 and 2017. In addition, the UN's benchmark of ODA contributions of 0.7% of a country's gross national income was met by only five DAC countries, with aggregate ODA contributions well below this benchmark, at 0.31% The combined volume of FDI, ODA and remittance flows to low-income and lower-middle-income countries has fallen between 2014 and 2016. Notably remittances have been a more dependable source of finance, particularly for lower-middle-income countries, compared to the other sources of finance
Technology	<ul style="list-style-type: none"> Global access to high-speed fixed broadband internet has increased between 2015 and 2016, though accessibility remains significantly different across regions. On average, only 6% of the population in developing countries had access to high-speed fixed broadband internet, compared to 24% in developed countries in 2016
Trade	<ul style="list-style-type: none"> The global share of both service and merchandise exports from least developed countries has largely stagnated, after increasing significantly between 2001 and 2013 Positively, tariff protection on global trade has been on a downward trend up to 2016, for imports by developed, developing and least developed countries
Systemic issues	<ul style="list-style-type: none"> Most countries in sub-Saharan Africa have national statistical plans; however, relatively few are fully funded. While 80% of sub-Saharan African countries have conducted at least one census between 2008 and 2017, less than 20% of these countries have birth or death registration data



SDG 17 themes (selection)	Indicator trends
	that is at least 75% complete. Positively, ODA funding dedicated to statistical capacity building initiatives has grown more than threefold between 2010 and 2015

Table 26: Global SDG 17 trends on selected themes

4.3.7.2 Indicators

Indicator 17.1.1: Total government revenue as a proportion of GDP, by source and indicator
 Indicator 17.1.2: Proportion of domestic budget funded by domestic taxes

SDG 17.1's progress can be measured with two different indicators: a) Total government revenue as a proportion of GDP; and b) Proportion of domestic budget funded by domestic taxes. Figure 85 suggests that South Africa managed to increase revenue collections (as a percentage of GDP) between 2008 and 2016. The proportion of South Africa's domestic budget funded by taxes also remains comparatively high (Figure 86). In its commitment to an inclusive, sustainable and transformative development agenda, the total government revenue as a proportion of GDP has been steadily increasing over time (Figure 85).

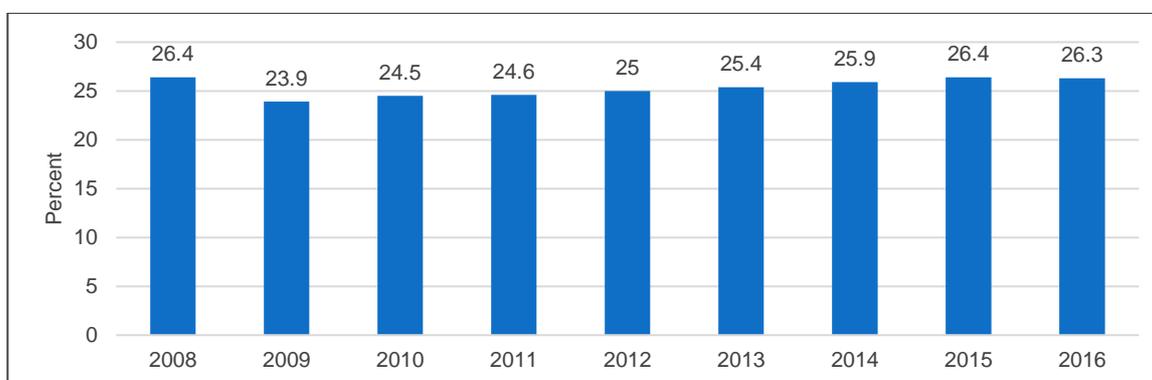


Figure 85: Total government revenue as a proportion of GDP

Data sources: Financial Statistics of National Government 2008–2016 and GDP 2008–2016, Stats SA

Notwithstanding that South Africa continues to fund its domestic budget by domestic taxes (Figure 86), as a developing country it is still eligible for development assistance.

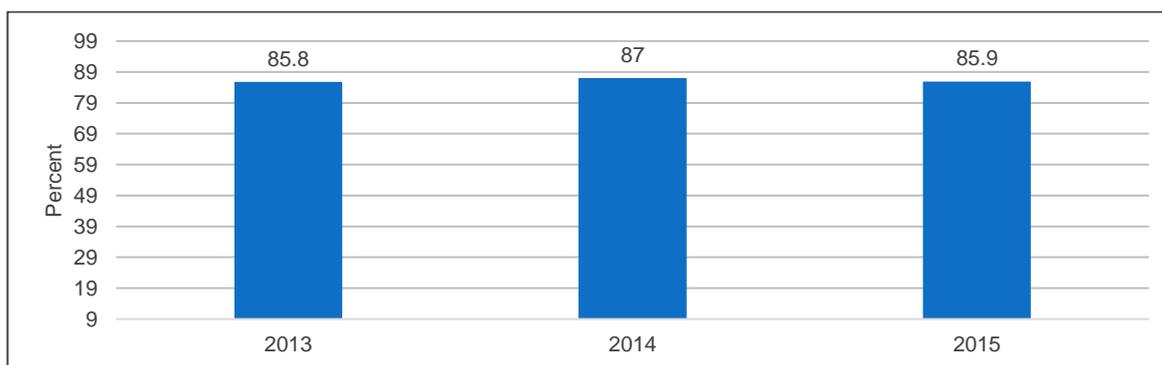


Figure 86: Proportion of domestic budget funded by domestic taxes

Data sources: Financial Statistics of National Government 2013–2015, Stats SA and National Treasury Estimates of National Expenditure 2013–2015



Indicator 17.6.2: Fixed internet broadband subscriptions per 100 inhabitants, by speed
 Indicator 17.8.1D: The percentage of households using the internet

To the extent that international partnerships foster the transfer and diffusion of technologies, particularly information and communication technologies, Figure 87 and Figure 88 provide a summary of how access to these technologies has changed in South Africa.

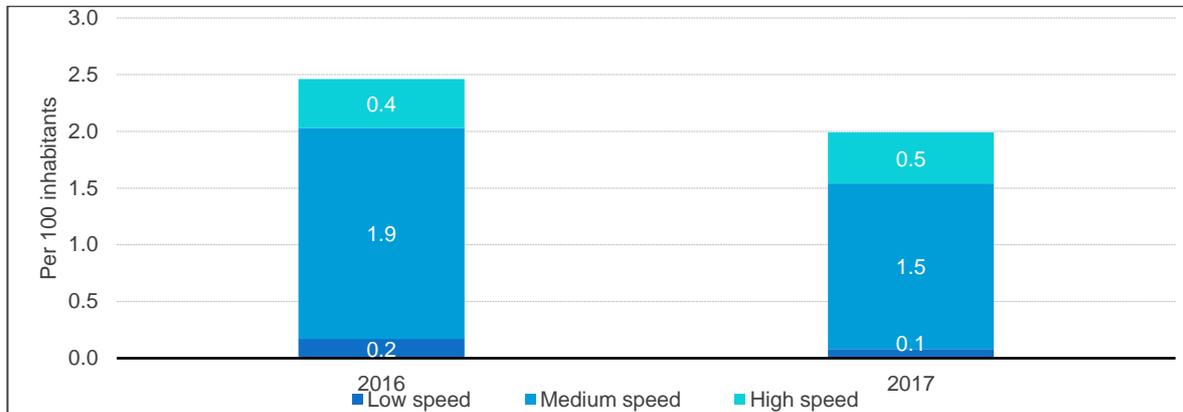


Figure 87: Fixed internet broadband subscriptions per 100 inhabitants, by speed
 Data sources: DTSPS and ICASA

Albeit the complexity and interconnectedness of the SDGs, much progress has been made in policy coherence between the science, technology and innovation (STI) policy with social, economic and environmental policies. For example, the 2019 White Paper on STI clearly demonstrates South Africa’s commitment in this regard. The White Paper recognises the need to exploit the information and communication technologies to meet the societal and business needs and in this regard, there is an upward trend in the percentage of households using or with access to the internet (Figure 88).

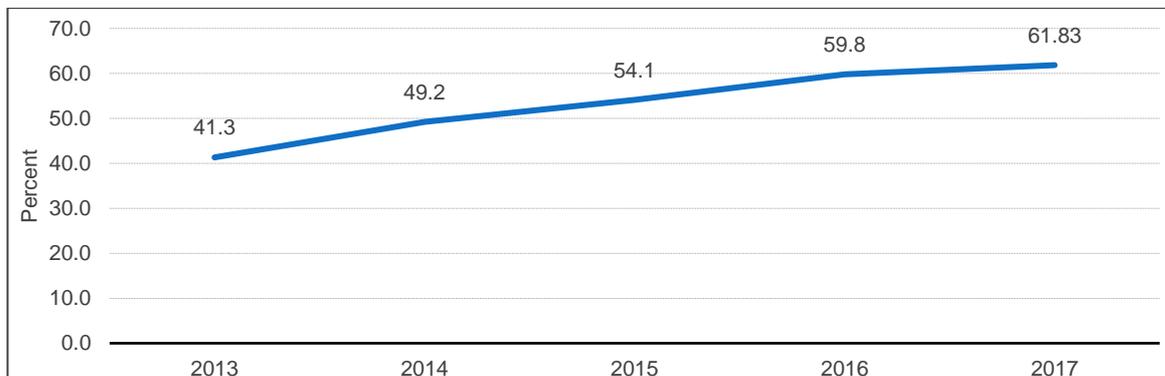


Figure 88: Percentage of households using or with access to the internet
 Data source: GHS 2013–2017, Stats SA

Indicator 17.10.1: Worldwide weighted tariff-average
 Indicator 17.12.1: Average tariffs faced by developing countries, least developed countries and small island developing states

South Africa’s average weighted tariff on imports declined steadily between 2010 and 2014, falling from 4.6% to under 4%. However, since 2014, average tariffs have increased, reaching 4.5% in 2016 (Figure 89).

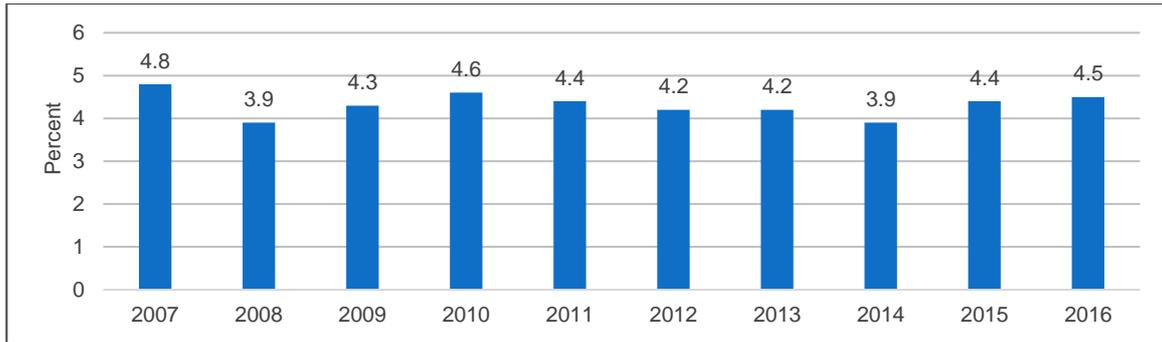


Figure 89: Worldwide weighted tariff-average, South Africa
Data source: World Bank

When one turns to the broader issue of average tariffs faced by developing countries and least developed countries, a decline can be observed, with LDC, on average, facing higher tariffs than developing country members of the World Trade Organization (Figure 90).

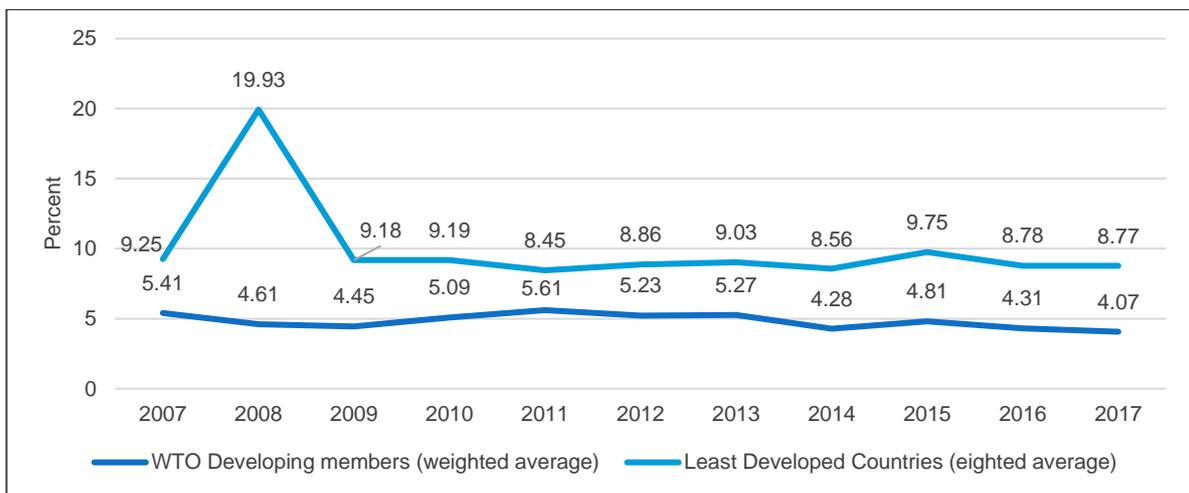


Figure 90: Average tariffs faced by developing countries and least developed countries
Data source: WITS 2007–2017, SARS

Indicator 17.11.1: Developing countries' and least developed countries' share of global exports

From a South African perspective, its share of imports from least developed countries has been relatively stagnant between 2010 and 2017. South African imports from least developed countries (as a share of its total imports) increased from just over 4% in 2010 to roughly 5% in 2012, before declining to below 4% by 2015 (Figure 91).

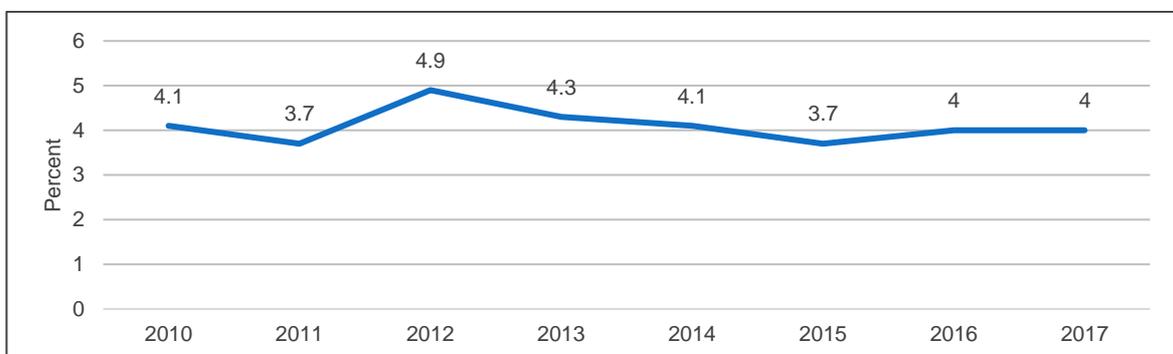


Figure 91: South African merchandise imports from least developed countries (as percentage of total imports)
Data source: WITS 2010–2017, SARS



Indicator 17.18.3: Number of countries with a national statistical plan that is fully funded and under implementation, by source of funding
 Indicator 17.19.2: Proportion of countries that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100% birth registration and 80% death registration

As seen in Table 27, South Africa has consistently had a fully-funded national statistical plan and has undertaken a regular population census, the most recent one having been completed in 2011.

	2013	2014	2015
	Percent (%)		
Existence of national plan	Yes (2013/14)	Yes (2014/15)	Yes (2015/16)
Funding allocation for national plan	100	100	100

Table 27: National statistical plan
 Data source: National Treasury Budget Review 2013–2015, National Treasury

South Africa has achieved over 95% death registrations in 2016 and has conducted a census in 2011. According to Stats SA CRVS data, registration of births in South Africa has declined from 84.6% of all births in 2011 to 80.6% in 2014. Indicator 17.19.2(b) is also reported on as Indicator 16.9.1.

4.3.7.3 Summary

South Africa’s progress with regard to SDG 17’s indicators with data is summarised in Table 28 below. South Africa is able to report on nine SDG 17 indicators, of which eight are Tier I or Tier II SDG indicators and one is a domesticated indicator. Total government revenue as a proportion of GDP remains high (17.1.1) and based on the available data, the proportion of the domestic budget funded by domestic taxes has increased between 2013 and 2015, despite a decrease after 2014 (17.1.2). Internet access is improving (17.6.2 and 17.8.1D). South Africa is also registering relatively high numbers of births and deaths (17.19.2).



SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

Indicator	Key data points
17.1.1: Total government revenue as a proportion of GDP, by source	24.8% (2013), 25.5% (2014), 26.2% (2015)
17.1.2: Proportion of domestic budget funded by domestic taxes	85.8% (2013), 87% (2014), 85.9% (2015),
17.6.2: Fixed internet broadband subscriptions per 100 inhabitants, by speed	High speed: 0.4 (2016), 0.5 (2017)
	Medium speed: 1.9 (2016), 1.5 (2017)
	Low speed: 0.2 (2016), 0.1 (2017)
17.8.1D: The percentage of households using the internet (domesticated indicator)	41.3% (2013), 54.1% (2015), 59.8 (2016), 61.83% (2017)



17.10.1: Worldwide weighted tariff-average	4.8% (2007), 4.4% (2011), 3.9% (2014), 4.4 (2015), 4.5% (2016)
17.11.1: Developing countries' and least developed countries' share of global exports	<i>South Africa's imports from LDCs</i> 0.5% (2007), 0.7% (2012), 0.8% (2015), 0.7 (2016), 0.7% (2017)
	<i>South Africa's imports from developing countries</i> 24.2% (2007), 29.2% (2012), 29.8 (2015), 29.5 (2016), 29.5% (2017)
17.12.1: Average tariffs faced by developing countries, least developed countries and small island developing states	<i>WTO developing members (weighted average)</i> 5.41% (2007), 5.23% (2012), 4.28% (2014), 4.31% (2016), 4.07% (2017)
	<i>LDCs (weighted average)</i> 9.25% (2007), 8.86% (2012), 8.56% (2014), 8.78% (2016), 8.77% (2017)
17.18.3: Number of countries with a national statistical plan that is fully funded and under implementation, by source of funding	
17.19.2: Proportion of countries that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100% birth registration and 80% death registration (duplicate indicator)	(a) Census conducted in 2011
	(b) <i>Total registered births</i> 84.6% (2011), 81.8% (2013), 80.6% (2014), 89.2 (2016)
	(b) <i>Death registration</i> 96% (2016)

Table 28: SDG 17 indicator progress



4.4 Environmental goals

4.4.1 Overview

The environmental thematic section presents a synthesis of the progress of the environmental SDGs, which includes:

- SDG 6 (Clean water and sanitation): Ensure availability and sustainable management of water and sanitation for all.
- SDG 7 (Affordable and clean energy): Ensure access to affordable, reliable, sustainable and modern energy for all.
- SDG 11 (Sustainable cities and communities): Make cities and human settlements inclusive, safe, resilient and sustainable.
- SDG 13 (Climate action): Take urgent action to combat climate change and its impact.
- SDG 14 (Life below water): Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- SDG 15 (Life on land): Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

The overarching challenge that cuts across all the environmental goals is ensuring environmental sustainability, which implies that considerations of environmental sustainability in resource management can have a positive spillover to drive the achievement of the other environmental goals. In order to ensure environmental sustainability, the global challenges that arise from climate change cannot be ignored. In view of these multiple challenges, the South African government has taken various initiatives through policies, strategies and programmes, with the NDP as the overarching policy. The NDP prioritises South Africa's transition to a low-carbon economy as one of the most urgent actions to address climate change, while ensuring access to sustainable energy.

4.4.2 Interlinkages between the environmental goals, the NDP and MTSF (2014–2019)

The NDP prioritises South Africa's transition to a low-carbon economy as one of the most urgent challenges faced by the country.

The provision of a clean and reliable supply of energy, as also prioritised by SDG 7, is arguably one of the most important enablers of this transition. Accordingly, the NDP speaks directly to all SDG 7 focus areas around access to electricity (and other clean forms of energy), the increased utilisation of renewable energy, and the promotion of energy efficiency. The following are some of the more explicit NDP targets that relate to SDG 7:

- Contracting at least 20 GW of renewable energy by 2030;
- Decommissioning 11 GW of ageing coal-fired power stations and stepping up investments in energy efficiency;
- At least 90% of South Africans to have access to grid electricity by 2030, and the remainder to utilise alternative off-grid solutions;
- A 15% energy efficiency improvement in the mining and mineral processing sector by 2030; and
- Hybrid and electric vehicles to be widely used by 2030.

The NDP is also explicit on the need for electricity pricing and access to be accommodative of the needs of the poor. The NDP goes beyond advocating only for access to electricity, but also factors in the need



for the provision of affordable electricity. The NDP supports the use of targeted pro-poor electricity tariffs that include all qualifying electricity customers.

With respect to energy intensity-related discussions, the NDP calls for increased investment towards the promotion of energy efficiency. The need to adopt energy-efficient technologies in the building, mining and transport sectors is emphasised. The use of regulations and standards as a means of promoting energy efficiency is also articulated.

Building on the direction provided by the NDP, the MTSF (2014–2019) prioritises the expansion of electricity supply in South Africa by means of pursuing the government's commitment towards diversifying energy sources through a mix including coal, nuclear, shale gas, off-shore oil and gas, and renewables. The inclusion of renewables in the energy mix to be pursued is in alignment with the SDG 7 focus on the promotion of renewable energy. The government's plans to stabilise and reduce carbon dioxide emissions, as articulated in the MTSF, also relate to sustainability, something that all the SDGs are premised on. As part of that plan, the government commits to its 42% carbon dioxide emission reduction target by 2025. According to the MTSF, the government will be implementing climate change responses, including the introduction of carbon taxes and carbon budgets and supporting low-carbon technologies.

In addition to reducing South Africa's carbon footprint, the NDP also recommends steps to prepare South Africa for the effects of climate change. A strong emphasis on adaptation to climate change can therefore be found in the MTSF (2014–2019). Outcome 10 of the MTSF, for example, includes having an effective climate change mitigation and adaptation response, which is closely aligned with SDG 13. Actions linked to achieving this include the incorporation of climate change risks in disaster management plans and sectoral adaptation plans, and conducting research in climate services.

One of the sectors most vulnerable to the effects of climate change is South Africa's water sector. The NDP shows significant overlaps with SDG 6. The NDP demonstrates alignment to the SDG 6 Targets in that by 2030 it envisages that:

- All main urban and industrial centres will have a reliable water supply to meet their needs, while increasingly efficient agricultural water use will support productive rural communities;
- Natural water sources will be protected to prevent excessive extraction and pollution. Water will be recognised as a foundation for activities such as tourism and recreation, reinforcing the importance of its protection;
- Where rivers are shared with other countries, South Africa will ensure that it continues to respect its obligations;
- Before 2030, all South Africans will have affordable, reliable access to sufficient safe water and sanitation. Service provision arrangements will vary in different parts of the country, with different approaches adopted for densely built-up urban areas and scattered rural settlements;
- Water demand will be reduced by 15 percent below baseline levels in urban areas by 2030.

The *MTSF* (2014–2019) is the national strategic plan developed every five years. Of its 14 priority outcomes, the MTSF has three linkages to SDG 6 targets. Outcome 6 (An efficient, competitive and responsive economic infrastructure network) demonstrates support for the delivery of SDG Targets 6.1, 6.2, 6.4, and 6.5. Under Sub-outcome 4 (Maintenance and supply availability of our bulk water resources infrastructure ensured), Strategic Integrated Projects (SIP) 18 (Water and sanitation infrastructure) has been implemented.



SIP 18 aims to address water supply and sanitation backlogs to a targeted number of households by 2019 as well as ensure a sustainable supply of water to support economic growth.

The NDP also makes provision for protecting life under water and on land, as expressed by SDG 14 and SDG 15. In fact, ecosystem protection is one of the guiding principles of the NDP. The NDP foresees the adoption of adaptation strategies in conjunction with development strategies that conserve and rehabilitate ecosystems and biodiversity assets. In doing so, the NDP provides a planning imperative for biodiversity and ecosystem services. Embedded in its vision is that ecosystem services are also inextricably linked to other key national goals, and indeed SDGs, such as clean water and food, climate regulation and health, and wider social and economic objectives.

The NDP acknowledges that the ocean environment is strongly interlinked with the process of climate change and broader issues of ecological degradation. The NDP makes specific mention of ocean acidification and depleting fish stocks, demonstrating alignment to the SDG framework through Target 14.3 (Minimise and address the impacts of ocean acidification) and Target 14.4 (By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing), respectively.

Marine and coastal resources are further identified as important to the development of an integrated and inclusive rural economy. Recommendations within the NDP relating to the development of non-agricultural activities look to oceans and coasts to support livelihoods through small-scale fisheries and tourism opportunities (NPC, 2012). The NDP suggests that special consideration be given to the marine space within the national system of innovation.

The NDP recognises oceans and coastal resources as foundational economic resources. For example, the oceans and ports are strategically important for the transport of key commodities. 'South Africa is also a maritime nation with a 3 000 km coastline straddling a major strategic shipping route. Close to 80% of trade is by sea, but the country has a weak maritime industry that does not adequately complement its land and aviation national infrastructure and services. South Africa needs to reappraise the maritime sector in light of its geopolitical positioning and ask what contribution it could make to employment and regional trade' (NPC, 2012).

The NDP also highlights the importance of maritime security capacity in the face of transnational crime through maritime piracy. A commitment to increase the patrol efforts, monitoring and security presence within the exclusive economic zone could be combined with efforts to reduce illegal, unreported and unregulated fishing.

In the MTSF (2014–2019) the ocean economy is recognised as a productive sector in which employment opportunities can be created as part of the New Growth Path and through the Industrial Policy Action Plan and investment in research and technology development. Outcome 4 targets related to SDG 14 can also be found in Outcome 10, including a target for the amount of land and oceans under protection, namely, 'increasing the percentage of the coastline with at least partial protection from 22.5% in 2013 to 27% in 2019'. Presently about 7.9 million hectares of land, 848 km of coastline and 4 172 km² of ocean are protected.

The MTSF also shows strong resonance with SDG 15's targets. Outcome 10 has close parallels to the first five targets of SDG 15. This is specifically through Sub-outcome 1, ensuring ecosystems are sustained and natural resource are used efficiently. Although the other sub-outcomes are less directly linked to SDG 15, there are implicit links through the various actions and indicators.

There are implicit links to SDG 15 from Outcome 7. This is through Output 1: Sustainable agrarian reform with a thriving farming sector, and Output 2: Improved access to affordable and diverse food links.



These outputs reflect the principles of SDG Targets 15.1, 15.2 and 15.3, while Output 3: Improved rural services to support sustainable livelihoods and Output 5: Enabling institutional environment for sustainable and inclusive growth are associated with SDG Targets 15.8, 15.a and 15.b.

The NDP also resonates strongly with SDG 11, albeit within the context of the continuing rural and urban legacies of apartheid. Altering the spatial context of human settlements is emphasised in the NDP, with specific reference to upgrading informal settlements and closing supply gaps in the housing market. The goal is to improve standards of living through low-income housing delivery in good urban locations, partnered with service delivery (NPC, 2012). According to the NDP, the goal is to ensure that public transport is accessible to all and affordable enough for all income groups to be able to make use of the public transport systems in the country (NPC, 2012). Faced with fragmented urban centres characterised by isolated human settlements and increasing urbanisation that exacerbates informality in housing provision, the NDP promotes integrated human settlement development on a local level based on ‘participatory and empowering’ principles, referencing the prominent role of local communities in the planning and management of human settlements. The NDP references the need for improved and increased human settlement development to alleviate challenges of housing shortages and informality.

Considerable alignment between SDG 11’s targets and the MTSF (2014–2019) can also be found. SDG Target 11.1, for example, seeks to ensure access for all to adequate, safe and affordable housing and basic services, and to upgrade slums. The related targets focused on providing adequate housing and improved quality living environments, with 1,495 million more households living in new or improved housing conditions by 2019, fostering a functional and equitable residential property market with a target of 110 000 new housing units delivered in the affordable gap market by 2019; there is also a focus on enhancing institutional capabilities for effective coordination of spatial investment decisions.

DPME and UNDP assessed the convergence between the NDP and the SDGs. There are several linkages between the environmental SDGs and a number of outcomes of the MTSF and the NDP chapters. These linkages, as adapted from DPME and UNDP (2018), are presented in Table 29 below.

NDP area	MTSF outcome	SDG target
Economic infrastructure (4)*	Outcome 6: An efficient, competitive and responsive economic infrastructure network	<ul style="list-style-type: none"> - 6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all - 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity - 6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
		<ul style="list-style-type: none"> - 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services - 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix - 7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing states and landlocked developing countries, in accordance with their respective programmes of support
		<ul style="list-style-type: none"> - 11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons



NDP area	MTSF outcome	SDG target
Environmental sustainability and resilience (5)	Outcome 10: Protect and enhance our environmental assets and natural resources	<ul style="list-style-type: none"> - 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally - 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
		<ul style="list-style-type: none"> - 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services - 7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology - 7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing states and landlocked developing countries, in accordance with their respective programmes of support
		<ul style="list-style-type: none"> - 11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations - 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
		<ul style="list-style-type: none"> - 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries - 13.2 Integrate climate change measures into national policies, strategies and planning - 13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning - 13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing states, including focusing on women, youth and local and marginalized communities
		<ul style="list-style-type: none"> - 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans - 14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels - 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.



NDP area	MTSF outcome	SDG target
		<ul style="list-style-type: none"> - 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements - 15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally - 15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world - 15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development - 15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species
Transforming human settlements (8)	Outcome 8: Sustainable human settlements and improved quality of household life	<ul style="list-style-type: none"> - 11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums - 11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons - 11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries - 11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities - 11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels
Building a capable and developmental state (13)	Outcome 12: An efficient, effective and development-oriented public service	<ul style="list-style-type: none"> - 11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning

Table 29: Interlinkages between the National Development Plan (NDP), the Medium-Term Strategic Framework (MTFS) and the environmental SDGs

Source: Adapted from DPME & UNDP (2018).

Numbers in parenthesis refer to NDP chapters

4.4.3 SDG 6: Ensure availability and sustainable management of water and sanitation for all



SDG 6 seeks to ensure availability and sustainable management of water and sanitation for all. Access to safe water and sanitation and sound management of freshwater ecosystems are essential to human health and to environmental sustainability and economic prosperity (UN, 2019).

SDG 6 contains the following eight targets:

- 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- 6.2: By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
- 6.5: By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
- 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
- 6.a: By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
- 6.b: Support and strengthen the participation of local communities in improving water and sanitation management

4.4.3.1 Policy environment

The management, development, use and protection of South Africa's water is governed by a sound legislative environment. Sections 24 and 27.1 of the Constitution provide for the right of every citizen to a healthy life, access to food and water and to have the environment protected. This constitutional imperative cascades to and is crystallised in South Africa's water and sanitation policies and legislation.

The *National Water Policy* (NWP) (DWA, 1997) has formed the basis of the country's water legislative framework since 1994. The Policy sets out integrated policy positions for protection, use, development, conservation, management and control of South Africa's water resources.

Promulgated in 1998, the *National Water Act, 1998 (Act No. 36 of 1998)* (NWA) expands on the NWP and provides a legal framework for sustainable water resource management. The NWA contains comprehensive provisions for the protection, use, development, conservation, management and control



of South African water resources (Republic of South Africa, 1998:9). The *Water Services Act, 1997 (Act No. 108 of 1997)* (WSA) provides a legal framework for the provision of water services or potable (drinkable) water and sanitation services. Chapter 1 of the WSA prescribes that *Everyone has a right of access to basic water supply and basic sanitation* [according to national standards and norms] (Republic of South Africa, 1997: 10). In addition, the WSA requires that ‘every water services authority must, in its water services development plan, provide for measures to realise these rights’ (Republic of South Africa, 1997).

Together, the NWA and the WSA form the overarching legal framework for water and sanitation. These legislative pieces create an enabling environment for achieving SDG 6 targets. The WSA supports SDG 6 Targets 6.1 and 6.2. The WSA safeguards the right of access to basic water supply and the right to basic sanitation necessary to secure sufficient water and an environment not harmful to human health or well-being.

The NWA responds directly to SDG 6 Targets 6.3, 6.4, 6.5, 6.6. In this respect, the NWA specifies a series of measures which together are intended to ensure the comprehensive protection of water resources. Consequently, the NWA creates conditions for integrated water resource management (IWRM) mainstreamed through the establishment of catchment management agencies (CMAs) and water user associations (WUAs). In addition, the NWA provides for the establishment of bodies to implement international agreements for the management and development of water resources that are shared with neighbouring countries. The NWA recognises various measures for controlling water use in order to manage the water sources in sustainable and equitable manner.

The *National Water Resources Strategy* (NWRS) is the planning instrument for implementing the NWA and provides strategic guidance to the broader water sector as to the range of activities required over a five-year period to realise identified water resource management goals. Hence, it provides the framework for managing water resources across all sectors. The NWRS gives effect to the achievement of various SDG Targets, i.e. 6.3, 6.4, 6.5, 6.6. Through NWRS the setting of water quality targets for different water resources is prioritised, demonstrating support for Indicator 6.3. The NWRS stipulates the principles for water conservation and water use, and determines how much water is available in each water management area. This mandate directly aligns with the tenets of SDG 6.4. Moreover, the NWRS provides for the delivery of SDG 6.5 through the establishment of water resource management institutions and the interrelationships between these institutions, including international obligations.

Since the promulgation of the NWA, two editions of the NWRS have been published. The third edition, *National Water and Sanitation Resources and Services Strategy*, is currently under development. NWRS 2 builds on the progress that was made with the implementation of the NWRS 1 and is tasked to ensure that national water resources are managed towards achieving South Africa’s growth, development and socio-economic priorities in an equitable and sustainable manner over the next five to ten years.

The *Strategic Framework on Water Services* (SFWS) (2003) expands on the WSA and provides a comprehensive summary of policy with respect to the water service sector in South Africa. It also sets out a strategic framework for its implementation. In light of this, the SFWS has direct links to indicators of Targets 6.1 and 6.2 of Goal 6. As a result, it addresses the full spectrum of water supply and sanitation services and all relevant institutions. However, there is recognition that elements of the SFWS are dated, and as such, there could be a need to amend and strengthen this policy framework to incorporate more recent experiences and requirements.



Aligned to the WSA and SFWS is the *National Sanitation Policy (NSP)* (2016). The *NSP* provides policy positions to address the identified policy gaps and challenges, as well as to address the country's new national and international development imperatives regarding sanitation. Of the 33 policy positions, the following are directly aligned with SDG Target 6.2:

- Position 1: Universal access to sanitation in human settlements
- Position 2: Free basic sanitation
- Position 14: Hygiene education
- Position 15: End-user education
- Position 17: Gender, youth and disabled in sanitation services

4.4.3.2 Indicators

Indicator 6.1.1: Proportion of population using safely managed drinking water services

Indicator 6.1.1 measures the percentage of the population with access to a safe water supply. Water supply service levels for the indicator are determined by the Joint Monitoring Programme (JMP) services ladder. The ladder identifies five water service levels, namely safely managed, basic, limited, unimproved and surface water. Safely managed refers to 'the portion of basic services provision which is available when needed and free from faecal and chemical contamination' (UNICEF, n.d.). Basic services provision is classified as such when drinking water is from an improved source and a round trip to collect is less than 30 minutes, while limited services is classified as such when drinking water is from an improved source, but a roundtrip collection exceeds 30 minutes (UNICEF, n.d.). Unimproved refers to a situation when drinking water is drawn from an unprotected source, while surface (no access) is classified as such when drinking water is drawn directly from a river or lake (UNICEF, n.d.). However, South Africa is unable to report on the safely managed component of the indicator due to limited data on how dry faecal sludge from pit latrines is managed therefore for the 2019 reporting South Africa is only reporting on basic services. South Africa measures two components of 'safely managed' (DWS, 2018:24). These are:

- i) 'as and when required': the component takes into account interruptions to water supply, which are measured through Stats SA survey instruments, using the indicator 'stability of supply';
- ii) water quality which is measured through the Blue Drop regulatory process and is used to define what portion of the basic service provision is safely managed.

Figure 92 indicates the progress that has been made in the provision of safely managed drinking-water services between 2015 and 2017. The figure below also indicates that South Africa has significant water supply infrastructure coverage. Nationally, 95% of the population had access to water supply infrastructure in 2017. However, infrastructure coverage is not translating into safely managed water supply, as witnessed in the relatively lower figures of safely managed water in relation to water supply infrastructure coverage.

A key element of a safely managed water supply is ensuring that the infrastructure of the improved water source is operated and maintained in a manner that ensures a water supply is available as and when needed, thus offering sustainable services. Between 2015 and 2017, the percentage of the national population that had safely managed water services increased from 77% to 80% by 2017. An analysis of the same component in rural areas between 2015 and 2017 reflects a 5% increase, whereas for urban areas there is a 1% increase between 2015 and 2017.



The progress reflected in rural areas regarding the delivery of safely managed water services is attributed to the roll-out of key government programmes targeted at rural areas, such as the establishment of a project management office (PMO) and the 27 Priority District Municipality (DM) programmes. A common core element of these programmes is to address water-supply backlogs and improve reliable water supply.

Despite the improvements that have been made in rural and urban areas over the last three years, Figure 92 illustrates that there are disparities in provision of safely managed water between these two areas. Over the last three years (2015 to 2017), the urban areas have maintained higher levels of safely managed water supply than rural areas. Mothetha et al. (2013) suggest that the disparities exist because rural municipalities often lack capacity and skills required to support sustainable water services provision. Rural municipalities are often unable to attract the required technical skills because of the lower remuneration grades as a result of their municipal category classification.

These capacity constraints impact negatively on the municipalities' ability to conduct operation and maintenance (O&M) of infrastructure. Consequently, the deficiencies in O&M lead to dysfunctional water services infrastructure (Van der Mescht & van Jaarsveld, 2012). Rural municipalities also struggle to finance O&M activities because of a low revenue base. The municipalities are unable to recover funds that can be redirected to O&M costs, as the majority of residents are indigent. In rural and/or smaller municipalities, the proportion of indigent households averages 77%. Moreover, grants allocated for equitable share and operation expenditure are limited and as a result do not fully cover the required O&M costs. Therefore, the allocation of these grants needs to be reconsidered as they impact on the sustainable supply of water.

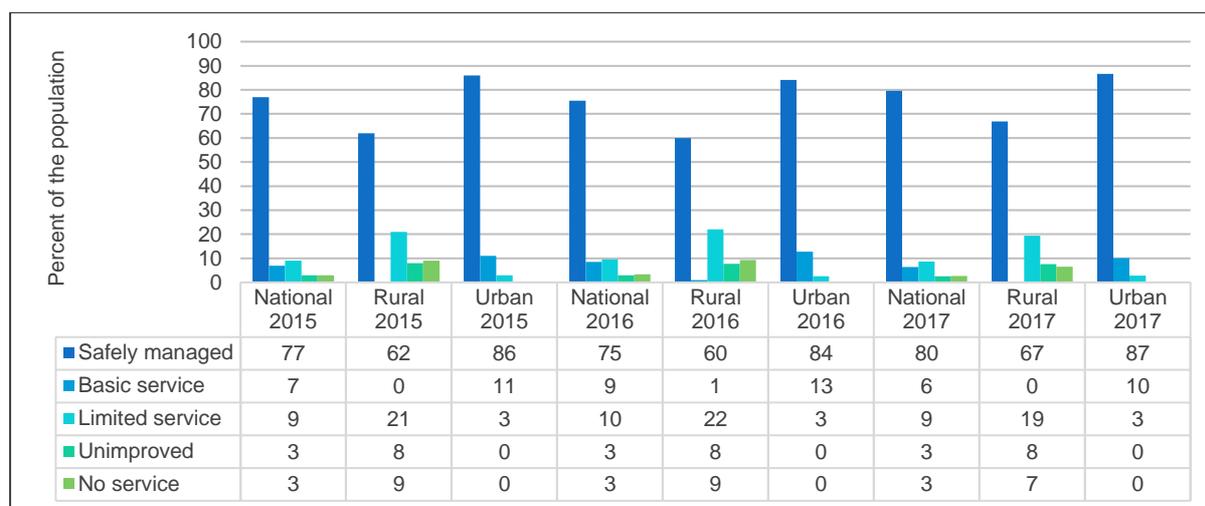


Figure 92: Access to safe drinking water services
Data source: GHS 2015–2017, Stats SA

Indicator 6.2.1: Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water

Indicator 6.2.1 measures the percentage of the population using safely managed sanitation services, including a hand-washing facility with soap and water; this is currently being measured by the proportion of the population using an improved basic sanitation facility at the household level, which is not shared with other households and where excreta are safely disposed in situ or treated off-site. 'Improved' sanitation facilities include flush or pour flush toilets to sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, pit latrines with a slab, and composting toilets.



South Africa’s definition of safely managed sanitation services is aligned to the globally recognised Joint Monitoring Programme (JMP) standards. Therefore, the country considers safely managed sanitation as the ‘use of improved facilities which are not shared with other households where excreta are safely disposed in situ or transported and treated off-site’ (UNICEF, n.d.).

‘Basic’ refers to the use of improved facilities by a single household, while ‘limited’ is the use of improved sanitation facilities, but they are shared between two or more households. Unimproved sanitation services is reflected as the use of pit latrines without coverage or the bucket system. Open defecation is classified as such when open spaces such as fields, forests and bushes are used for disposal of human faeces.

In 2017, 83% of the national population had access to improved sanitation facilities as compared to the 80% of the population in 2015. As depicted in Figure 93, of the 83% of the population that had access to improved sanitation facilities, 75% had access to basic service, while 13% had access to limited service. A rural and urban disaggregation for 2017 indicates that access to limited services is higher in urban areas than rural areas. This is probably the result of the prevalence of shared sanitation facilities and backyard dwellers in urban areas.

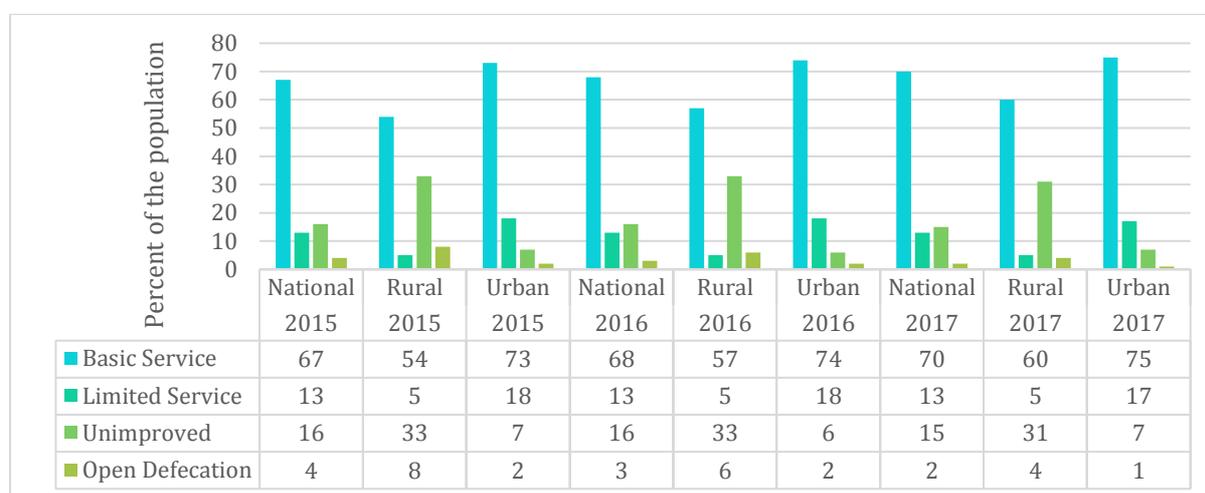


Figure 93: Access to basic sanitation services
Data source: GHS 2015–2017, Stats SA

Population and social dynamics are hampering the delivery of Indicator 6.2.1. South Africa’s population experienced substantial population growth between 1994 and 2016, increasing from 40 million to 56,6 million people; this has led to a greater number of households that need to be serviced. Compounding this is the fact that South African households are becoming smaller and so more households need to be serviced (DWS, 2018).

Access to sanitation services, particularly for rural areas, is also hampered by issues of terrain. In some areas the topography and terrain are so challenging that it becomes impossible to provide the basic sanitation facilities. A key challenge impacting on the delivery of safe sanitation services to urban areas – especially informal settlements – is the location of settlements. The majority of informal settlements are usually situated on the outskirts of urban areas, and as a result cannot connect to existing bulk and sewer services, while the cost of building new connections and sewer systems to service informal settlements most probably makes that not feasible.

The eradication of open defecation remains a challenge, although the country has recognised the right to basic sanitation services for all since 1997, with the promulgation of the WSA. In 2017, 2% of the national population practised open defecation. A rural and urban disaggregation reveals that 4% of the population in rural areas practised open defecation compared to 1% of the urban population.



There are distinct reasons as to why open defecation continues in rural and urban areas. In rural areas, open defecation likely persists because:

- there is no sanitation facility provided;
- existing sanitation facilities are beyond their functional capacity (DWS, 2018); and
- the possibility that rural populations are uninformed about the dangers of open defecation, and as a result some people might continue to use fields and bushes despite the availability of an improved sanitation facility.

South Africa has started tracking the level of hygiene as of 2019, so the country can only report on the baseline data. The JMP hand-washing ladder guides reporting on hygiene. The ladder defines access to a basic hygiene service as a facility where hand washing with soap and water are available on the premises. Access to a limited hygiene service are premises with a hand-washing facility but without soap and water, whilst no hygiene service is the absence of a hand-washing facility on site.

Figure 94 illustrates that nationally, 65% of the population had access to hand-washing facilities on the premises with soap and water in 2017. A rural disaggregation reflects that 18% of the population does not have access to hand-washing facilities on the premises nor to soap and water. This figure is more than double the percentage of households with no services in urban areas. This reinforces the disparities between rural and urban areas regarding the provision of basic services.

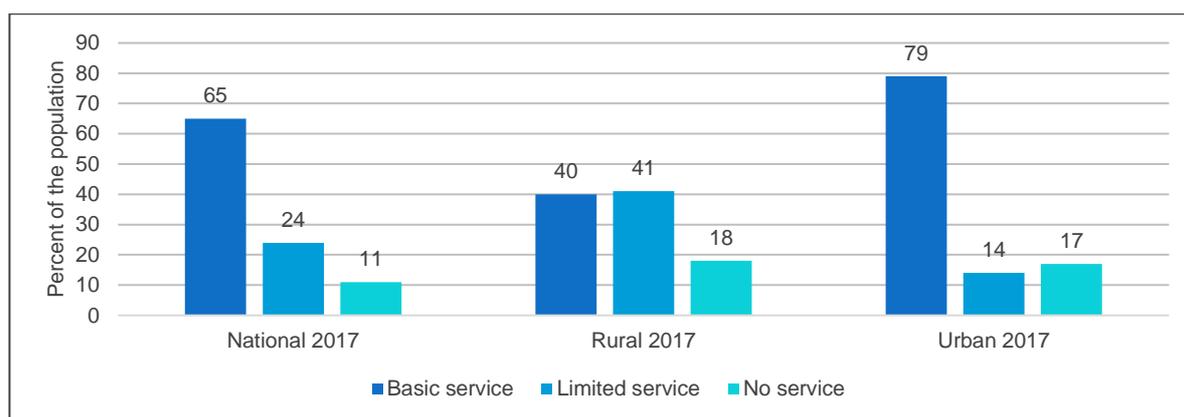


Figure 94: Access to hygiene facilities
Source: GHS 2017, Stats SA

Indicator 6.3.1D: Proportion of water containing waste safely treated and lawfully discharged

Indicator 6.3.1D provides information on the proportion of wastewater safely treated and lawfully discharged. This is a domesticated indicator because it allows for the use of local terminology that aligns with the country's legislation, regulatory tools, mandate, and management imperatives.

In 2017, 52% of wastewater was safely treated and lawfully discharged. It should be noted that this 52% is limited only to wastewater treatment works. The limited availability of data to support effective reporting on the discharge of wastewater results in sectors, such as mines, not being represented.

Lack of data is the principal challenge that affects effective reporting for the indicator. Data challenges exist because government departments and municipalities are not conducting the necessary monitoring or they do not have sufficient monitoring network density to enable adequate reporting. Additionally, municipalities are guilty of non-submission of water-quality data to the Integrated Regulatory Information System (IRIS).



There is limited data on the volumes or water qualities of effluent that are being discharged into municipal wastewater treatment works (WWTWs) by the various economic activities (abattoirs, light industries, etc.) that are connected to urban sewage systems. Additionally, there is no clear view of how many municipalities have appropriate bylaws in place to manage and regulate these inputs to their sewage systems. Moreover, there is a lack or absence of data from mines on volumes of effluent being discharged into water sources.

The increasingly diffuse nature of pollution presents a very significant challenge for regulatory authorities and a new strategic approach for the management of diffuse source pollution is needed.

To improve reporting on the indicator, the DWS has developed a gap analysis tool aimed at detailing all the gaps that have a likelihood of preventing the country from having the required information necessary for reporting on progress to the UN. The gap analysis tool also works as a risk-monitoring tool, because it outlines what management actions need to be taken to fill the gaps and it includes cost estimates. This also enables the identification of additional indicators that are required, focusing on waste and recycling in order to comprehensively report on Target 6.3.

Indicator 6.3.2D: Proportion of bodies of water that comply to South African water quality objectives

Indicator 6.3.2 aims to measure whether the water quality in South Africa's dams, rivers and aquifers is complying with a set of water-quality objectives, where such objectives consider the fitness-for-use requirements of selected receiving water users, and in the case of groundwater, the background water-quality conditions. In 2016, 58% of South Africa's water bodies complied with resource water-quality objectives. This implies that approximately 40% of water bodies in South Africa had poor water quality resulting from pollution and the destruction of river catchments (DWS, 2018).

Major sources of pollution for surface water sources include the agricultural sector (pesticides, irrigation return flows, fertilisers), the industrial sector with the discharge of effluent containing chemical substances, the mining sector (acids, salts, metals), and urban areas where runoff and effluent return flows contain bacteriological contamination, salts and nutrients (DWS, 2018). Ineffective sanitation services such as WWTW contribute microbial contamination to water resources. Groundwater sources are impacted by seepage from mining activities, leachate from landfills and stockpiles, human settlements and the intrusion of seawater (DWS, 2018).

South Africa's reporting ability on this indicator has been reduced by the lack of data, limited monitoring because of lack of funding and resource mobilisation, and to a certain degree the inability to coordinate monitoring across various sectors, government departments and public sector institutions. Data on in-stream and in-aquifer water-quality monitoring across South Africa has been steadily declining since 2015. This is largely as a result of the financial constraints that have affected both the collection of water-quality samples as well as the analysis of the samples by the laboratories at DWS: Resource Quality Information Services. According to the DWS, 58% of water bodies complied with the South African water-quality objectives in 2017 (DWS, 2019³).

There is a need for improved alignment between the various entities that undertake water-quality monitoring on data programmes, platforms and collection approaches. This suggest that current water-quality data is not as comprehensive as required, and as a result does not provide full information on water-quality levels in South Africa's rivers and groundwater. The challenges illustrated above indicate that reporting on the indicator has not been easy; hence, significant shifts will be needed in order to improve reporting for the next reporting cycle. Although some groundwater data was available for

³ The information is provided by DWS through the updated list of indicators from StatsSA for inclusion in the final goal and country reports.



baseline reporting, there is no readily available method for measuring the indicator for groundwater quality (i.e. where compliance against an objective or baseline is measured).

Indicator 6.4.1: Change in water-use efficiency over time

Indicator 6.4.1 provides information on the relationship between water use and actual water withdrawal. This indicator value is currently calculated at 3,439 USD/m³ (2018). The Aquastat computation on water-use efficiency (calculated in USD/m³) indicates that irrigated water-use efficiency for the irrigated agricultural sector was determined to be 0,097 USD/m³ of water supplied. The industrial water-use efficiency was determined to be 16,960 USD per m³. The efficiency of the energy sector was included in the Total Industrial Water Efficiency calculation. The water-use efficiency for water services was determined to be 1,041 USD/m³ of water supplied.

South Africa has a semi-arid climate with highly variable seasonal rainfall (DWS, 2018). Moreover, the country has an average annual rainfall of 465 mm compared to the world average of 860 mm (DWS, 2018). As a consequence, the country's water resources are scarce and unevenly distributed spatially and temporally. Therefore, there is a need to improve on the water-use efficiency levels illustrated above for all of the water-use sectors.

The municipal services sector is the second largest water-use sector, with a total water use of 27%. However, the sector has extremely high non-revenue water levels at 41%, of which 35% is estimated to be physical losses. Despite the high levels of non-revenue water, progress has been made in improving water-use efficiency in the services sector. Through the 8 large water supply system (WSS) programme, water conservation and demand management initiatives have been implemented in all of the 8 WSS and an average actual water saving of 8.6% has been attained (DWS, 2018).

The industrial water-use sector (inclusive of mining, manufacturing and energy) accounts for 7% of the country's total water use. Although it has the lowest water-use allocation, the National Water & Sanitation Master Plan (NW&SMP) suggests that the use of innovative technologies and implementation of water conservation and demand management strategies can help reduce demand and improve water-use efficiency in the sector.

The progress made with the development of tools such as guidelines and strategies to assist the industrial sector improve water-use efficiency indicates commitment to move towards optimising water, thereby reducing freshwater abstractions. However, the empirical progress has yet to translate into improved reporting for the indicator; during this reporting period there have been challenges with reporting on water-use efficiency for industries.

Indicator 6.4.2: Level of water stress: freshwater withdrawal as a proportion of available freshwater resources

Indicator 6.4.2 measures the level of water stress: freshwater withdrawal as a proportion of available freshwater resources. South Africa is reporting on the indicator using the Aquastat computation on level of water stress. The level of water stress in 2018 is calculated at 41.38%.

Water stress is identified when the demand for water surpasses the available amount during a period, or when water quality restricts its use (European Environment Agency, 2019). The Aquastat computation on water stress shows South Africa's water stress level at 41%. This is extremely high for a semi-arid country that is highly dependent on freshwater sources. Water stress leads to a deterioration of freshwater resources in terms of quantity (depletion of aquifers from over-use, drying-up of rivers and streams) and quality (nutrient enrichment, saline intrusion, pesticides, organic matter pollution (European Environment Agency, 2019).



Although South Africa has not made specific progress aimed at addressing water stress, it should be noted that an increase in water-use efficiency will trigger a decrease in water stress. As a result, water-use efficiency efforts and programmes are being used as conduits for reducing water stress. Going forward, there might be a need to drive specific programmes on water stress in order to improve reporting as well as address challenges to reporting on the indicator.

Reporting on Indicator 6.4.2 is challenging as the latest water-balance information at a provincial and catchment level and for small systems is not available. The lack of data results in lack of understanding regarding water availability and demand levels. Moreover, there is no proper conduit for data sharing on transboundary water sources as some commissions are not yet fully established.

Because of the interrelated nature of Indicator 6.4.1 and Indicator 6.4.2, there are some cross-cutting challenges that affect effective reporting. Data information-sharing systems are not integrated across entities, making it difficult to determine actual water volumes. Furthermore, existing hydrological data is reliable only to a certain extent. The validation and verification process in some catchments has not been completed and as a result there is no clear way of knowing the 'water uses that take place during the qualifying period and the lawfulness of the volume of water used, stored or abstracted by existing water users' (Breede-Gouritz CMA, n.d.). There have been ongoing projects across South Africa to complete these verification and validation studies; however, these are both time consuming and technically challenging. As a result, these assessments have taken a significant amount of time to complete.

Reporting on the indicators is also constrained by lack of funding to implement programmes that improve delivery on the indicators. There is no structured plan or training tools, and interpretation of the technical meaning of definitions in the SDG reporting framework is unclear. With respect to data, water-use data is not easily accessible from stakeholders because of the confidentiality and sensitivity of the data. Furthermore, when and where the data is made available, its accuracy and credibility require verification.

South Africa needs to reduce demand and increase supply if a reliable water supply is to be attained for the country's growing population and economic activities. Therefore, the current water losses in water-use sectors need to be drastically reduced, whilst levels of water stress need to be minimised by improving the water-quality levels of freshwater resources. Water supply needs to be increased by optimising the water mix to include desalinated water and treated acid mine drainage. The adoption of new technologies to help support water-use efficiency will be instrumental in moving water-use sectors to waterless operations.

Indicator 6.5.1: Degree of integrated water resources management implementation (0–100)

Indicator 6.5.1 measures the degree of integrated water resources management implementation. South Africa is reporting on the indicator using the Country Questionnaire from the UN. The degree to which IWRM is implemented can be assessed by the four key components of IWRM: enabling environment, institutions and participation, management instruments, and financing. This takes into account the various users and uses of water with the aim of promoting positive social, economic and environmental impacts at all levels, including the transboundary level, where appropriate.

GWP (2000) identified integrated water resource management as a 'holistic approach which promotes the coordinated development and management of water, land and related resources in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of ecosystems'. The IWRM country questionnaire indicates that South Africa attained a scoring of 70% on the degree of IWRM. This scoring suggests that IWRM objectives of plans and programmes are generally being met, and geographic coverage and stakeholder engagement are generally good.



The enabling environment had an average score of 80. This is because most of the policies, laws and plans are in place at national level and are being implemented. The NWA embodies and mainstreams IWRM promoting sustainability, equity, protection and conservation of water resources. The National Water Resource Strategy (NWRS) is a legislative mandate developed and updated every five years to guide the management of water resources in the country. At a transboundary level there are agreements and IWRM plans governing shared water courses in place between the four basins that South Africa shares.

A rather lower score (average score 60) was attained for the institutions and participation thematic area because coordination between national government and other sectors is not yet fully embedded, while the gender-specific objectives for IWRM are not highlighted. However, progress has been made through the initiation of the Women in Water Programme, which aims to strengthen the active participation of rural women in water-resource management. Women identify water-related challenges in their communities and conceptualise ideas to address them. At a transboundary level, Gender Focal Points have been identified for each of the commissions. The Gender Focal Point is institutionalised in the water Ministry.

A score of 70 was awarded for management instruments; this is attributed to the fact that South Africa has most of the decision and management tools in place; however, the implementation of the tools has taken time. This is largely because of a lack of enforcement and compliance. Whilst data-sharing platforms exist and data sharing occurs between riparian states, there is a challenge regarding the regular collection of data.

The degree of implementation of IWRM is high, although there are notable challenges impacting on the realisation of Indicator 6. With regard to the enabling environment, challenges that constrain reporting on the indicator include limited cooperative governance between actors, and shortage of human capacity to track and enforce legislation.

Challenges impacting on the reporting with regard to institutions and participation relate to issues pertaining to finalisation of institutional establishment. Local water resources management institutions such as catchment management areas (CMAs) have not been fully established and the restructuring of irrigation boards into water-user associations has not been finalised. Despite the fact that transboundary institutions have been established, integrated management of groundwater resources at river basin level is still lacking, because the mandate and functions of basin commissions have not been fully operationalised because of a lack of funds.

The management instruments exist to guide IWRM; however, compliance and monitoring are not being undertaken uniformly. This requires the strengthening of enforcement mechanisms. There is lack of funding to operationalise management instruments. This is also a need for political goodwill to allocate financial resources to support IWRM. Finance is a key catalyst for ensuring that IWRM is effectively mainstreamed across all actors.

Indicator 6.5.2: Proportion of transboundary basin area with an operational arrangement for water cooperation

South Africa reports on Indicator 6.5.2 utilising the UN methodology. The indicator measures the percentage of transboundary basin area within a country that has an operational arrangement for water cooperation. This indicator is reported at the national level by adding up the areas of transboundary basins that are covered by an operational arrangement and dividing the result by the total area of all transboundary basins within the country.



Approximately 60% of South Africa's land area falls within transboundary surface-water basins (DWA, 2013). Table 30 indicates the proportion of shared surface water that is covered by an operational arrangement. Noting that South Africa is upstream in the Orange-Senqu river basin, Limpopo and Inco-Maputo systems, it has had a long history of engagement with partner states in these shared watercourses. These have included the membership of multi-party River Basin Commissions such as ORASECOM and LIMCOM, as well as a range of bilateral and trilateral arrangements to support specific agreements and resource development initiatives.

Name of the transboundary basin/subbasin	Countries shared with	Surface area of the basin/subbasin (in km ²) within the territory of the country	Surface area of the basin/subbasin (in km ²) covered by an operational arrangement within the territory of the country
IncoMaputo River Basin TPTC	Republic of South Africa (RSA), Mozambique and Swaziland	58 105 km ²	58 105 km ²
Orange Senqu-River Basin (ORASECOM)	Republic of South Africa (RSA), Botswana, Lesotho, Namibia	642 000 km ²	1 million km ²
Limpopo River Basin (LIMCOM)	Republic of South Africa (RSA), Mozambique, Botswana and Zimbabwe	412 938 km ²	412 938 km ²
Total surface area of transboundary basins/subbasins of rivers and lakes covered by operational arrangements within the territory of the country (in km²) [A](do not double-count subbasins)			58 105 km ² 1 million km ² 412 938 km ² TOTAL = 1 471 043 km ²
Total surface area of transboundary basins of rivers and lakes within the territory of the country (in km²) [B] (do not double-count subbasins)		58 105 km ² 642 000 km ² 412 938 km ² TOTAL = 1 113 043 km ²	

Table 30: Proportion of shared surface water that is covered by an operational arrangement

The Revised SADC Protocol on Shared Watercourses defines watercourses as being both surface and ground water systems as part of a unitary hydrological cycle. Groundwater resources are increasingly being recognised as a viable source for supporting economic activities such as farming and supplying urban centres, and as a result are moving away from the initial perception of their being used only for domestic purposes (Braune & Xu, 2008:701). Table 31 indicates the proportion of shared aquifers that are covered by an operational arrangement.



Name of the transboundary aquifer	Countries shared with	Surface area (in km ²) ⁴ within the territory of the country	Surface area (in km ²) covered by an operational arrangement within the territory of the country
Coastal Sedimentary	Mozambique, RSA	10 230 km ²	10 230 km ²
Rhyolite-Breccia	Mozambique, Swaziland, RSA	4 916 km ²	4 916 km ²
Karoo aquifer	Lesotho, RSA	No yet known	No yet known
Stampriet Aquifer	Botswana, Namibia, RSA	6 932 km ²	642 000 km ²
Ramotswa Aquifer	Botswana, RSA	No yet known	No yet known
Total surface area of transboundary aquifers covered by operational arrangements within the territory of the country (in km²) [C]			657 146 km ² of known areas
Total surface area of transboundary aquifers within the territory of the country (in km²) [D]		15 146 km ² of known areas	

Table 31: Proportion of shared aquifers covered by an operational arrangement

The sustainable management of groundwater sources encompass between basin commissions and local water management institutions such as water-user associations. The basin commissions are responsible for the management of groundwater sources, whereas local water management institutions focus on the management of and operational arrangements for transboundary aquifers. Regional institutions such as the SADC Groundwater Management Institute are playing a significant role in supporting improvements in the management of these aquifers, both technically and operationally.

Indicator 6.6.1D1: The spatial extent of water related ecosystems at a point in time, including wetlands, reservoirs, lakes and estuaries as a percentage of total land area

Indicator 6.6.1D1 measures the trends in the spatial extent (km²) of wetlands (vegetated and ephemeral), inland lakes, estuaries as well as artificial bodies (dams) at a national scale. Excluded from the analysis are rivers since South Africa does not have rivers that noticeably change in their extent. However, rivers are a key ecosystem type and in the future, an indicator that measures the trends in river ecosystem integrity will have to be included.

Figure 95 shows that dams and estuaries account for 0.17% and 0.23% of the land area respectively, while wetlands account for 2.7% and lakes account for only 0.1% of the country's total surface area. The low land coverage of estuaries and wetlands is a result of poor protection and severe pressure from, for example, intensive agriculture, mining and urban sprawl (DWS, 2017). The NW&SMP states that 'only 11% of wetland ecosystems are well protected while 71% is not protected, reflecting the fact that wetland ecosystems have not been systematically considered in the establishment and expansion of land-based protected areas' (DWS, 2018). Estuarine ecosystem protection is also poor, as only 33% of estuary ecosystem types are well protected, while 59% are not protected. The lack of protection indicates that there is scope for the protected area network to play a bigger role in protecting ecological infrastructure.

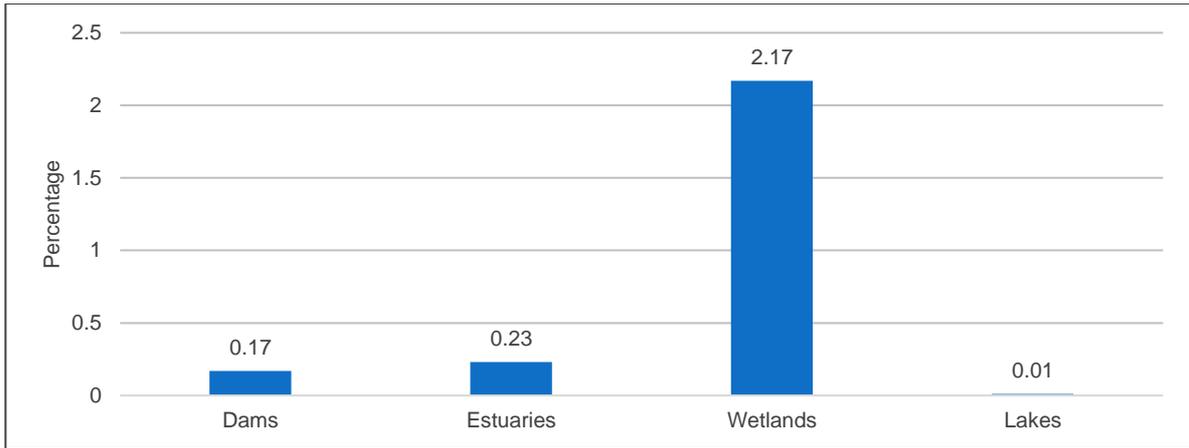


Figure 95: Extent of freshwater ecosystems as a percentage of total land area
Data source: HYDSTRA Database, SANBI and CSIR

Indicator 6.6.1D2: Change in the national discharge of rivers and estuaries over time

Indicator 6.6.1D2 measures the change in water quantity of different water resources types. Figure 96 shows a 33% reduction from natural flows (nMAR) for estuaries in 2016/17. This is probably the result of two factors: (i) change in rainfall patterns that result in insufficient rainfall, thus a decrease in inflows to estuaries; (ii) increase in evaporation rates.

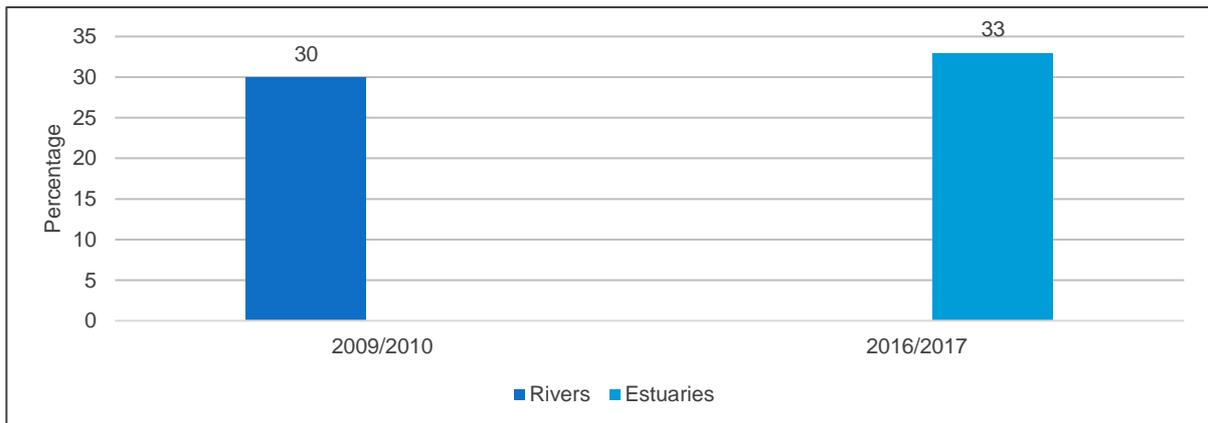


Figure 96: Percentage change (reduction) in national discharge of rivers and estuaries
Data sources: CSIR (Estuaries), DWS and Water Research Commission (Rivers)

In 2009/10, a 30% reduction from nMAR was recorded for South Africa's rivers. The reduction in flows was likely caused by climate variability. Notably, there has been an upward trend in South African temperatures. Higher temperatures contribute to faster evaporation rates. A mean annual temperature anomaly of approximately 0.7 degrees Celsius was recorded in 2009/10 against a projected anomaly of just over 0.4 degrees Celsius (DWA, 2013).

The amount of water available in rivers varies from year to year. As a result, upstream users with a lot of farm dams and the expansion of large-scale plantation and overland flows could have a significant impact on catchment yields (DWA, 2013). Therefore, priority should be given to ensuring that adequate monitoring is conducted to ensure that there is flow and availability of water for existing and future downstream users and the environment.



Monitoring the change in water quantity in rivers requires hydraulic modelling skills that are not readily available within government and have to be outsourced. A key challenge affecting reporting on the change in water quantity in rivers is the decline in the number of gauging weirs that are able to provide accurate monitoring data. The decline in gauging also affects monitoring freshwater inflows to the estuaries from the upstream river. Only 10% of South Africa's estuaries have reliable flow data from gauging weirs. Flows in estuaries should be modelled once every five years by a hydrologist based on water use (legal and illegal), MAR and rainfall. This will provide a good indication of in-flow changes into estuaries.

Indicator 6.a.1: Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan

Indicator 6.a.1 measures the amount of official development assistance (ODA) received for water and sanitation-related activities through the National Treasury. South Africa is the recipient of ODA funding for water programmes aligned to the mandate of the DWS. In 2016 the amount of ODA received from the National Treasury amounted to R2 million from the Belgium government. Over a period of 2 years from starting in 2016 the amount was disbursed to contributed towards the delivery of Target 6.2 through the Tirelo Boshha Programme.

Declining ODA disbursements to the water sector result from South Africa classified as an upper-middle-income country by the OECD and as a result, the country is eligible for lower levels of donor funding. Despite this challenge, and as an interim measure, the DWS has managed to leverage on bilateral cooperation and agreements with other countries to receive concessional loans and grants in-kind (technical assistance and capacity building) in order to strengthen the implementation of water and sanitation programmes. Thus far, the DWS has received R11 949 225.34 in technical assistance from Denmark to support programmes and development of tools aimed at achieving Target 6.4. The DWS has also received a concessional loan from Netherlands to the value of R458 590 364 and technical assistance from Japan to the value of R55 million. The purpose of the loan is to support programmes that contribute to the delivery of Target 6.1, while the technical assistance from Japan is to support programmes that promote the delivery of Target 6.4.

Indicator 6.b.1: Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management

Indicator 6.b.1 reports on the level at which local communities are included in water and sanitation activities. Water service authorities are the first line of contact with local communities and they need to nurture a collaborative relationship with communities through ward committees. Reporting on Indicator 6.b.1 reflects that there are legislated planning tools in place such as IDPs and Water Services Development Plans (WSDPs), to support the participation of local communities in water and sanitation planning. Water service authorities have a legislative mandate through the Water Services Act, to develop WSDPs that comprise part of IDP. However, not all water service authorities have WSDPs resulting in the implementation, by default, of the IDP, which includes community participation as a mandatory requirement. Therefore, in the absence of a WSDP, the required community participation will be satisfied through the IDP processes.



4.4.3.3 Summary

South Africa's progress with regard to SDG 6 is summarised in Table 32 below. The table indicates a mixed bag of success on development outcomes. In particular, progress cannot be determined for indicators with a single data point.

As shown in Table 32, South Africa is able to report on 11 SDG 6 indicators, of which eight are Tier I or Tier II SDG indicators and four our domesticated indicators. South Africa has made progress in the provision of safely managed drinking water services (6.1.1) and sanitation services (6.2.1), even though South Africa cannot yet report on the 'safe management' component of sanitation services. Yet, only 58% of South Africa's bodies of water comply with South African resource water quality objectives (6.3.2D) and only 52% of water containing waste is safely treated and lawfully discharged (6.3.1D).



SDG 6: Ensure availability and sustainable management of water and sanitation for all

Indicator	Key data points
6.1.1: Percentage of population using safely managed drinking water services (percentage of population)	<i>National</i> Safely managed: 77% (2015), 75% (2016), 80% (2017)
	<i>National</i> Basic service: 7% (2015), 9% (2016), 6% (2017)
	<i>National</i> Limited service: 9% (2015), 10% (2016), 9% (2017)
	<i>National</i> Unimproved: 3% (2015), 3% (2016), 3% (2017)
	<i>National</i> No service: 3% (2015), 3% (2016), 3% (2017)
6.2.1: Percentage of population using safely managed sanitation services, including a hand-washing facility with soap and water	<i>National</i> Basic service: 67% (2015), 68% (2016), 70% (2017)
	<i>National</i> Limited service: 13% (2015), 13% (2016), 13% (2017)
	<i>National</i> Unimproved: 16% (2015), 16% (2016), 15% (2017)
	<i>National</i> Open defecation: 4% (2015), 3% (2016), 2% (2017)
6.3.1D: Proportion of water containing waste safely treated and lawfully discharged (domesticated indicator)	52% (2017)



6.3.2D: Proportion of bodies of water that comply to South African water quality objectives (domesticated indicator)	58% (2017)
6.4.1: Change in water-use efficiency over time	3,439 USD/ m ³ (2018)
6.4.2: Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	41.38% (2016)
6.5.1: Degree of integrated water resources management implementation (0–100)	70
6.5.2: Proportion of transboundary basin area with an operational arrangement for water cooperation	Basin institutions with active agreements have been established
6.6.1D1: Extent in the spatial extent of water related ecosystems at a point in time, including wetlands, reservoirs, lakes and estuaries as a percentage of total land area	Dams: 0.17%
	Estuaries: 0.23%
	Wetlands: 2.17%
	Lakes: 0.01%
6.6.1D2: Change in the national discharge of rivers and estuaries over time	Rivers: 30% (2010)
	Estuaries: 33% (2017)
6.a.1: Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan	R2 000 000 (2018)
6.b.1: Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management	The IDP process provides for the participation of local administrative units for water resource management in the form of CMAs, which are yet to be established

Table 32: SDG 6 indicator progress

4.4.4 SDG 7: Affordable and clean energy



SDG 7 contains five targets:

- 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services
- 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix
- 7.3: By 2030, double the global rate of improvement in energy efficiency
- 7.a: By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
- 7.b: By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing states, and land-locked developing countries, in accordance with their respective programmes of support

4.4.4.1 Policy environment

The *National Climate Change Response Policy White Paper* identifies energy efficiency as one of the key flagship programmes forming part of the short-term climate change mitigation measures to be followed in South Africa.

The National Climate Change Response Policy White Paper was published and adopted prior to the Conference of the Parties (COP17) to the UN Framework Convention on Climate Change (UNFCCC) held in Durban in 2011 (DoE, 2015a). The White Paper articulates the South African government's overarching policy stance pertaining to an effective climate change response and the long-term transition to a climate-resilient and lower-carbon economy and society. The White Paper identifies a suite of priority sectors for both climate change mitigation and adaptation actions. The water, agriculture and forestry, health, biodiversity and human settlement sectors are prioritised for national adaptation efforts, whereas the energy, transport, mining and industrial sectors are prioritised for mitigation-related action.

The White Paper is referred to as the third influential policy paper to have supported South Africa's renewable energy aspirations after the country's White Paper on Energy Policy and the White Paper on Renewable Energy (DoE, 2015a). The White Paper proposes a *Renewable Energy Flagship Programme* to be used as a driver to enhance the use of locally produced renewable technologies. Increased investments in renewable energy are stipulated as imperative short-term climate change mitigation measures. Increased support to the country's solar water-heater programme is also advocated.

Through the proposed *Energy Efficiency and Energy Demand Management Flagship Programme*, the White Paper identifies energy efficiency and demand-side management as other most important short-term climate change mitigation measures also to be considered in South Africa.



The importance of scaling up energy efficiency in areas such as the industrial, building and transport sectors is emphasised. The White Paper stipulates the use of incentives and other regulatory tools such as energy efficiency standards to enable the adoption of energy efficiency. An energy efficiency regulating programme for green buildings in the commercial and residential building sectors is recommended, while an energy efficiency programme for government buildings led by the Department of Public Works is proposed to cater for the public buildings sector.

Energy efficiency within the transport sector is emphasised in a different programme, that is, the *Transport Flagship Programme*. As part of this programme, the White Paper calls for the development of an enhanced public transport system that promotes lower carbon mobility in five metros and ten smaller cities. This is aimed at creating an efficient vehicles programme resulting in measurable improvements in average efficiency of the vehicle fleet by 2020.

Also relating to SDG 7 focus around the promotion of clean energy, is the use of biofuels, which the White Paper also identifies as another useful short-term mitigation measure.

Taking into consideration the context of the White Paper, it can be concluded that the focus of the White Paper relates only to the clean energy and energy efficiency aspects of SDG 7. These relate particularly to:

- Target 7.1.2D: Percentage of the population that uses solar energy as their main source of energy
- Target 7.2.1 Renewable energy share in the total final energy consumption
- Target 7.2.1A1: Amount of renewable energy at annual operating capacity
- Target 7.2.1A2: Annual amount of electricity produced from renewable sources
- Target 7.3.1 Energy intensity measured in terms of primary energy and GDP
- Target 7.b.1 Investments in energy efficiency as a proportion of GDP and the amount of foreign direct investment in financial transfer for infrastructure and technology to sustainable development services.

Regarding the cross-cutting energy-specific policies and strategies, it is imperative to note that the *White Paper on the Energy Policy* is the first policy document detailing energy development in the post-apartheid era (Mukonza & Nhamo, 2018). The White Paper clarifies the government's position regarding the supply and consumption of energy in South Africa.

Although the White Paper is more than twenty years old, it is still relevant and in line with all SDG 7 focus areas. It is recognised as the first official South African strategic document to acknowledge the need to secure energy supply through the diversification of energy sources (WWF-SA, 2017). The White Paper recognises renewable energy, both grid and off-grid, as one of the key energy sources to constitute the South African energy mix. While the White Paper was developed when adoption of renewable energy was still in its infancy, it still could envision the rapid development and imminence of the roll-out of renewable energy technologies and even foresaw that the technologies will become cost-competitive and cost-effective.

Pertaining to energy efficiency, the White Paper identifies the need for demand-side management and the development and promotion of energy efficiency in South Africa. Overall, access to affordable energy services is identified as the first (priority) energy policy objective. The government commits to promoting access to basic energy services for poor and disadvantaged segments of the South African society. Electrification programmes, for example, rural and farm-dweller houses electrification, are covered in greater detail.



The White Paper provides a solid energy policy framework that, to some extent, aligns with SDG 7 objectives. However, the timeliness of the White Paper in such a highly dynamic energy sector can be a concern for some. It is understood that the scheduled review of the White Paper, which was due by 2008, is still outstanding (Covary & Aversch, 2013) – a development that could hamper the successful implementation of some of the recommended initiatives. Moreover, other recent energy programmes or initiatives falling outside of the White Paper could also encounter a similar fate.

The government's commitment to support the development and implementation of renewable energy projects made in the White Paper on Energy Policy (1998) is supplemented by the White Paper on Renewable Energy developed in 2003. This White Paper on Renewable Energy relates to all the SDG 7 focus areas. It is premised on fostering the uptake of renewable energy in South Africa, having set a 10 000 GWh target for renewable energy contribution towards the final energy consumption in the country by 2013. It is also recognised as the first official document to refer to the procurement of renewable energy from Independent Power Producers (IPPs) to contribute towards the diversification of the local energy mix (WWF-SA, 2017).

Regarding energy efficiency, issues raised include the potential large-scale roll-out of solar water-heaters, the incorporation of thermally efficient house designs, and the development and enforcement of energy-efficient standards and labelling for electrical appliances.

Linked to the SDG 7 focus area around access to affordable energy is the White Paper's Energisation Initiative, where the government seeks to bring energy services (fuels and appliances) to poor/rural communities and to address health, environmental, economic and other needs. This involves the government establishing energy centres and 'one-stop' energy shops, responsible for offering the energy services.

Notwithstanding the above contribution of the White Paper on Renewable Energy towards the achievement of SDG 7, it is notable that the renewable energy target of 10 000 GWh by 2013 is now expired and no longer relevant. It is no longer in line with other pronouncements related to renewable energy procurement targets articulated in other official documents such as the NDP and the IRP.

4.4.4.2 Indicators

Indicator 7.1.1: Percentage of population with access to electricity

Figure 97 shows the percentage of people living in South Africa with access to electricity through both grid and off-grid connections. Based on the information presented, it can be established that South Africa is making headway towards achieving universal access to electricity. While there was a slight decline in the percentage of the population with access to electricity in 2015 relative to the year 2014, the succeeding 2016–17 period saw a marginal growth in electrification. The percentage of the population with access to electricity grew past the levels recorded in 2014. Between the years 2014 and 2017, the percentage of the population with access to electricity increased from 93.12% to 95.27%.

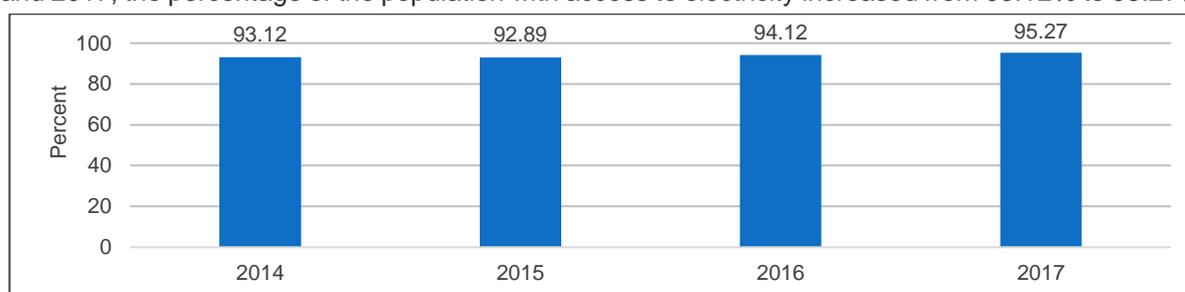


Figure 97: Percentage of South African population with access to electricity, 2014–2017
Data source: GHS 2014–2017, Stats SA



Indicator 7.1.2D: Percentage of the population that uses solar energy as their main source of energy

Figure 98 shows the percentage of the population in South Africa that uses solar energy as their main source of energy. The figure disaggregates the information based on the different solar energy uses including for cooking, lighting, space heating, and water-heating purposes.

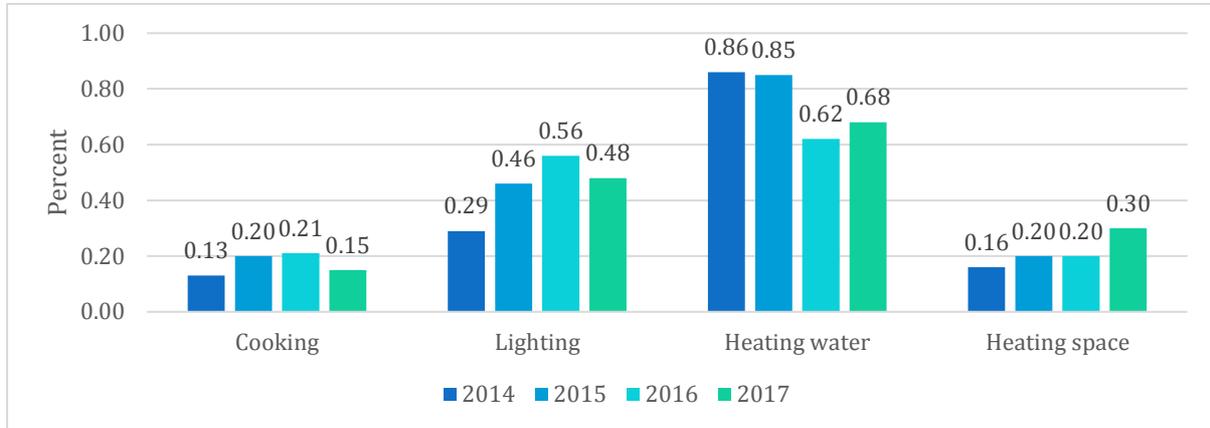


Figure 98: Percentage of population using solar energy in South Africa, 2014–2017
Data source: GHS 2014–2017, Stats SA

Indicator 7.2.1: Renewable energy share in the total final energy consumption

The share of renewable energy in the total final energy consumption in South Africa has increased substantially during the past few years. Based on the information presented in Figure 99, the share of renewable energy in total final energy consumption increased from 14.6% in 2013 to 26.2% in 2015. Put differently, the share of energy consumed in South Africa originating from renewable sources has been growing significantly, with an almost 80% growth witnessed between the years 2013 and 2015.

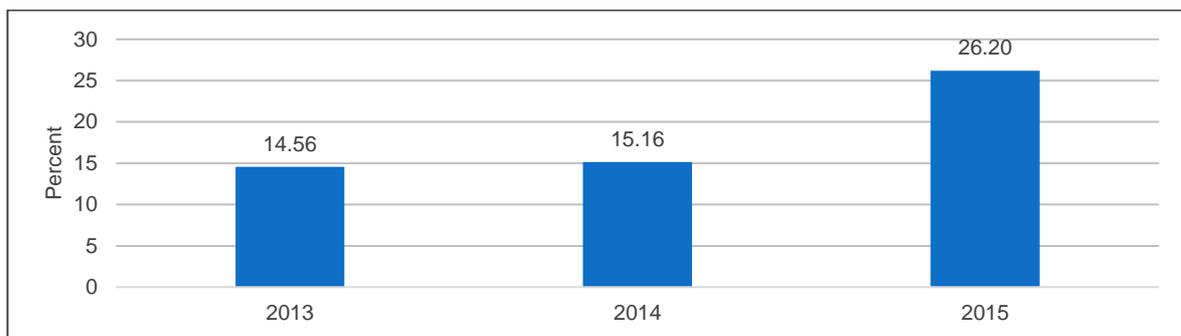


Figure 99: Share of renewable energy in total final energy consumption, 2013–2015
Data source: Energy Balances 2013–2015, DoE

Indicator 7.2.1A1: Amount of renewable energy at annual operating capacity

An assessment of the local renewable energy-generation capacity still reveals and supports the notion that renewable energy is growing rapidly in South Africa. This aligns with the narrative that the growth of the renewable energy share in total final energy consumption for South Africa is as a result of the large-scale renewable energy programmes. Figure 100 shows that large-scale renewable energy projects had contributed an additional 3.9 GW to the country's generation capacity during the 2012–2018 period.



Since 2013, when the first utility-scale renewable energy projects came online, renewable energy-generation capacity was growing rapidly until 2017. In 2018, though, the addition of renewable energy capacities slowed down, which was attributed to the delay in government signing PPAs for projects approved under the latest bid windows. This halted the momentum developed during the preceding years and led to no notable change in renewable energy-generation capacity in the country. However, the PPAs for new 27 projects were eventually signed in November 2018, meaning that they will add at least 2.3 GW more renewable energy-generation capacity once they are completed and come online.

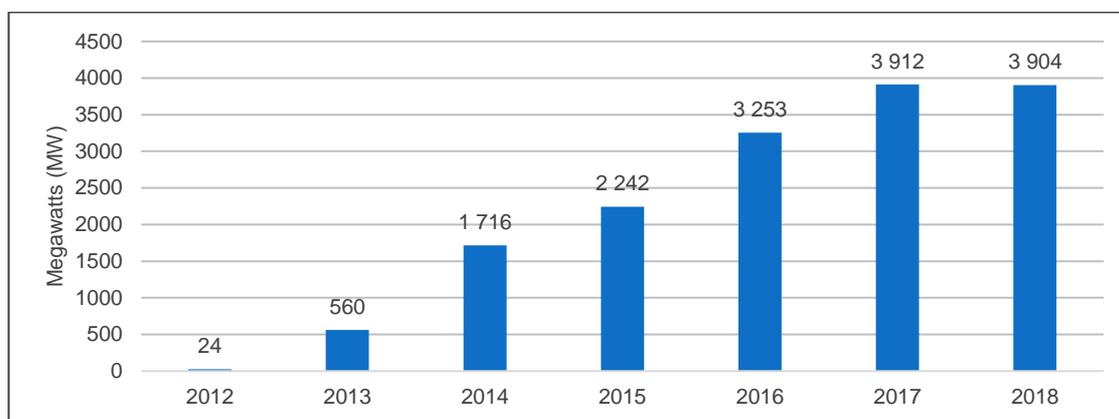


Figure 100: Annual renewable energy produced in South Africa
Data source: REDIS 2012–2018, DoE

Indicator 7.2.1A2: Annual amount of electricity produced from renewable sources

Similar to the renewable energy share in total final energy consumption and renewable energy-generation capacity discussions, the amount of electricity generated from renewable sources in South Africa has increased significantly over the past few years. Large-scale renewable energy projects have been feeding electricity into the national grid and the amount of electricity supplied to the grid has grown rapidly over time.

As shown in Figure 101, the annual GWh of electricity produced from renewable energy sources rose from 16 GWh in 2012 to just under 8 800 GWh in 2018. This clearly shows that South Africa is progressing quite well with regard to clean energy. The country is showing enormous progress in making available electricity from clean and modern sources such as solar and wind. This goes a long way in complementing the country's electrification efforts whereby people are not just going to access electricity, but electricity from clean and modern sources.

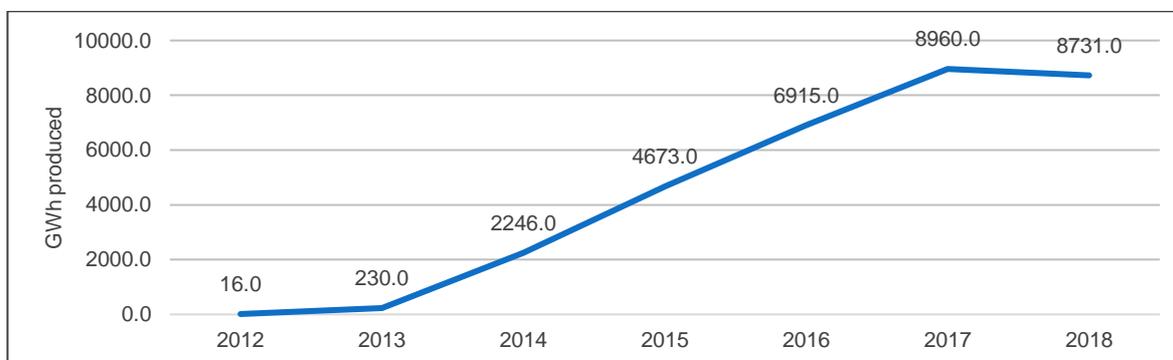


Figure 101: Annual GWh of electricity produced from renewable energy sources
Data source: REDIS 2012–2018, DoE

Indicator 7.3.1: Energy intensity measured in terms of primary energy and GDP

In the context of this report, energy intensity is defined as the energy supplied to the economy per unit value of economic output. The indicator is computed as total energy supply divided by GDP. Considering that energy intensity shows the energy inefficiency of an economy, a lower ratio would imply less energy being utilised to produce a unit of output, while a higher ratio is typical of an energy inefficient economy where more energy is utilised to produce an equivalent unit of output.

A historical trend analysis of energy intensity in South Africa shows that South Africa energy improved in energy efficiency between the years 2011 and 2015 (Figure 102). The ratio of energy intensity has been decreasing annually over the years 2011 to 2013. In 2014, the energy intensity ratio increased back to the 2011 level, but decreased to its lowest record in 2015. Accordingly, energy intensity decreased from 2.07 TJ per million rands of GDP to 1.89 TJ per million rands of GDP. In other words, the South African economy was more energy efficient in 2015 relative to a 2011 baseline.

The improvement in energy efficiency over the 2011–2015 period could be as a result of different interventions, including the different energy efficiency programmes stipulated in the National Energy Efficiency Strategy (NEES) as well as contributions from other key industry programmes such as the Industrial Energy Efficiency Project, Integrated Demand Management, Private Sector Energy Efficiency Programme (PSEE) and the section 12L incentive. Nonetheless, the fluctuation in energy intensity witnessed between the years 2013 and 2014 shows the need to sustain the different energy efficiency efforts to avoid fluctuations. Addressing the issues resulting in fluctuations in the energy intensity as well as continuing with the trend to lower energy intensity will put South Africa on the right path regarding the realisation of SDG 7.3.1 around energy efficiency.

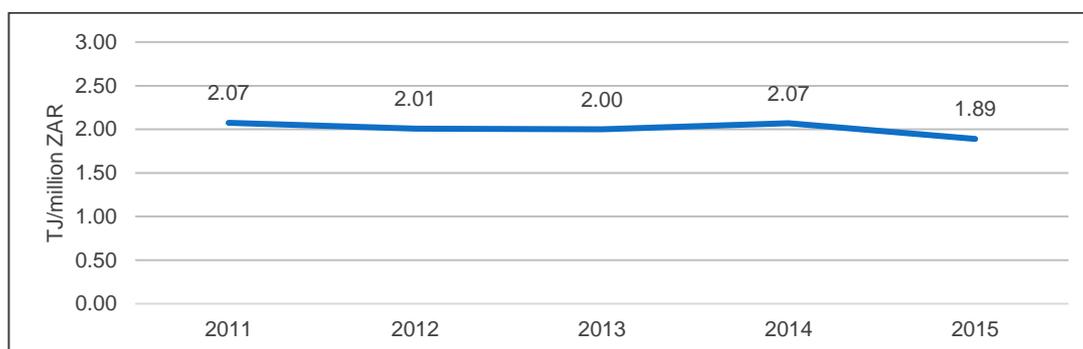


Figure 102: Energy intensity

Data sources: National Energy Balances 2011–2015, DoE; Financial Statistics of National Government 2011–2015, Stats SA

4.4.4.3 Summary

South Africa's progress with regard to SDG 7's indicators with data is summarised in Table 33 below. South Africa is able to report on four SDG 7 indicators of which three are Tier I or Tier II SDG indicators, one is domesticated. South Africa's provision of electricity has seen a steady increase between 2014 and 2017 (7.1.1), even though universal electrification has not yet been achieved. South Africa has made some notable progress in developing policies around the diversification of the energy mix through the incorporation of renewables (7.2.1, 7.2.1A1, 7.2.1A2). Such progress has mainly been within the large-scale renewable energy market. The small-scale renewable energy programmes still lag in terms of progress due to the lack of universalised rules on feeding back renewable energy to the grid. Regarding the large-scale renewable energy programmes, these have been making headway, but the threat of the single-seller model within the electricity market remains a challenge.



SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Indicator	Key data points
7.1.1: Proportion of population with access to electricity	93.12% (2014), 92.89% (2015), 94.12% (2016), 95.27% (2017)
7.1.2D: Percentage of the population that uses solar energy as their main source of energy (domesticated indicator)	Cooking: 0.1% (2014), 0.1% (2016)
	Lighting: 0.3% (2014), 0.5% (2016)
	Heating water: 0.8% (2014), 0.6% (2017)
	Heating space: 0.2% (2014), 0.1% (2017)
7.2.1: Renewable energy share in the total final energy consumption	14.56% (2013), 15.16% (2014), 26.2% (2015)
7.2.1A1: Amount of renewable energy at annual operating capacity (additional indicator)	24 MW (2012), 3 253 MW (2016), 3 904 (2018)
7.2.1A2: Annual amount of electricity produced from renewable sources (additional indicator)	16 GWh (2012), 4 673 GWh (2015), 8 731 GWh (2018)
7.3.1: Energy intensity measured in terms of primary energy and GDP	2.07 TJ/million rand (2011), 1.89 TJ/million rand (2015)

Table 33: SDG 7 indicator progress

4.4.5 SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable

 <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>Many cities around the world are facing acute challenges in managing rapid urbanization— from ensuring adequate housing and infrastructure to support growing populations, to confronting the environmental impact of urban sprawl, to reducing vulnerability to disasters. SDG 11 seeks to make cities and human settlements inclusive, safe, resilient and sustainable (UN, 2019).</p>
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SDG 11 contains ten targets:

- 11.1: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
- 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
- 11.3: By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
- 11.4: Strengthen efforts to protect and safeguard the world’s cultural and natural heritage
- 11.5: By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations
- 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
- 11.7: By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities
- 11.a: Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning
- 11.b: By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels
- 11.c: Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials

4.4.5.1 Policy environment

South African towns and cities are of a unique nature characterised by historically distorted settlement patterns. This is largely attributed to the effects of segregation according to race, class and pre-1994 planning policies. Before 1994, more than 80% of South Africans were denied land and housing rights – laws controlled where people could live, and resulted in large numbers of people having to live in unacceptable conditions in informal settlements, backyard shacks, and hostels. Mounting poverty, unemployment and income inequality have amplified these problems.



Post 1994, a democratic South Africa underwent fundamental provincial and local government reform – new laws, new configurations of provinces and local governments and many new Acts, policies, and strategies, heralding a complete paradigm shift in government.

Accelerating transformative urban land development for inclusive growth is a priority for South Africa. The objectives of spatial transformation demand the restructuring of our spatial form, which requires not only much faster land release and access, but supportive legislation and appropriate governance and decision-making by intergovernmental role players and partners. In this respect, the transformative Spatial Planning and Land Use Management Act (SPLUMA) was enacted in 2013. Focusing on local municipalities, its implementing aims to strengthen how land is managed, governed and allocated by providing for an effective and efficient framework for spatial planning and land use management in both urban and rural contexts, and across each sphere of government. Gradually, spatial planning is becoming more institutionalised, and is now more closely identified with how land is assigned and developed for integrated settlements and a liveable, well-serviced and safe environment.

Development planning in the past 25 years has focused on various planning tools and mechanisms for integrated planning aimed at ensuring that intergovernmental priority setting, resource allocation and implementation take place in an integrated, effective, efficient and sustainable way. Thus, planning systems have become democratised and more inclusive of civil society. Integrated Development Plans (IDPs) are the legislated obligatory primary instruments for local development planning. IDPs include a specific focus on the identification of land for housing, and budgets sectorally aligned and costed for service delivery and infrastructure needs. Multidisciplinary plans are key to achieving integration with budgets and timeframes for the proactive development of, for example, sustainable human settlements and well-located public transport corridors.

IDPs are required to have various Sector Plans that guide municipalities on different programmes that they implement, e.g. Human Settlements Chapter (Plan), Disaster Management Plan, Transport Plan, and Water Services Plan.

However, the convergence of spatially informed and intergovernmental development plans of multiple entities, for a given space, remains a challenge in South Africa. Planning reform discussions are currently underway, with a major focus on how spatial plans can become the guiding framework for transformative development.

The South African government has prioritised upgrading informal settlements and has also embarked on various policy shifts and programmes that call for a more responsive state-assisted approach to housing development. The Housing Policy and Strategy developed after 1994 focused on stabilising the environment to transform the extremely fragmented, complex and racially-based financial and institutional framework inherited from before 1994, whilst simultaneously establishing new systems to ensure delivery to address the housing backlog.

Housing in South Africa is a basic human right, enshrined in the country's Constitution. The State is obligated to ensure everyone has access to adequate housing, and must take reasonable legislative and other measures to achieve the realisation of this right. The Housing vision strives for the establishment of viable, socially and economically integrated communities, situated in areas allowing convenient access to economic opportunities as well as health, educational and social amenities, within which all South Africa's people will have access on a progressive basis, to:

- A permanent residential structure with secure tenure; and
- Potable water, adequate sanitary facilities including waste disposal and domestic electricity supply.



Over 4.8 million housing opportunities have been provided with government support in South Africa since 1994, including 3.28 million subsidised houses, and more housing options and choices are continually being developed to meet the needs of a rapidly urbanising country. It is however acknowledged that government cannot keep pace with demand, and that there is a need to create more partnerships to respond to the needs of nearly 1.5 million households living in informal settlements across South Africa.

Table 34 provides an overview of relevant national housing policies and legislation.

Policy/strategic document	Champion	Policy enabling achievement of the target
Housing Act (No. 107 of 1997)	Department of Human Settlements	<ul style="list-style-type: none"> – Legislative facilitation of sustainable cities and human settlement development with the focus on housing – Delineates the core principles of housing provision to permeate national, provincial, and local governance and policy levels – Lays the foundation for the delineating financial resources toward the implementation of national housing programmes
Water Services Act (No. 108 of 1997)	Department of Water and Sanitation	<ul style="list-style-type: none"> – Legislates the provision of water services and basic sanitation in human settlements – Constitutes the foundation of the inclusion of water services in human settlement development plans
National Environmental Management: Waste Act (No. 59 of 2008)	Department of Environmental Affairs	<ul style="list-style-type: none"> – Legislates the provision of basic waste management services in human settlements – Related objectives include waste management to sustain local health conditions and the prevention of environmental degradation
Municipal Systems Act (No. 32 of 2000)	Department of Cooperative Governance and Traditional Affairs	<ul style="list-style-type: none"> – Legislates the provision of basic services in local municipalities for human settlements
Breaking New Ground, 2004	Department of Human Settlements	<ul style="list-style-type: none"> – Stipulates a 'Comprehensive Plan for the Development of Sustainable Human Settlements' – Incorporates housing frameworks, policies, and legislation – Inclusive, integrated human settlements in response to environmental and social factors – Business plans to support sustainable human settlement provision – Emphasises enough supply of housing units in safe and economically viable areas – Informal settlement upgrading, i.e. <i>in situ</i> upgrading supported by the policy
National Housing Code, 2009	Department of Human Settlements	<ul style="list-style-type: none"> – Streamlines housing project implementation by simplifying guidelines – Delineates the guiding principles and norms and standards of national housing policies – Interventions (financial, incremental, rural, and social and rental) that support safe and adequate housing delivery, decent service delivery, and upgrading of informal settlements

Table 34: An overview of key national policies and legislation related to sustainable human settlements

It is well known that the public transport system in developing countries is not always up to scratch. There are many instances in South Africa where this is evident. Although South Africa has made many advances in the public transport realm, there are still issues that need to be resolved. The National Department of Transport champions the National Land Transport Act (No. 5 of 2009).



The main principle of the Act is to integrate land transport planning with the development and land-use planning processes. The transport plans required are designed ‘to give structure to the function of municipal planning and must be accommodated in and form an essential part of government, and its integrated transport plan must form the transport component of the integrated development plan of the municipality’. The main policy behind the National Land Transport Act (2009) is the Public Transport Strategy and Action Plan, 2007.

South Africa has compiled the *National Transport Master Plan 2050*, with the national Department of Transport as the champion, to ensure that the transport systems in the country are implemented in a manner that will ensure they are accessible to all and that the spatial divisions of the past are eradicated. This will be achieved through the introduction of alternative modes of transport to persons who do not own cars. One of the main goals is to ensure that a system that focuses on a non-motorised system is developed (Morapedi & Makhari, 2016). Once again it is evident that rural development through the introduction of various public transport systems is a priority (Morapedi & Makhari, 2016). The current realities of transport in South Africa are:

- Public transport – ‘Non-integrated transport planning across various modes has resulted in modes that are not sufficiently customer-focused and that are inefficient and have poor levels of reliability, predictability, comfort and safety’ (Morapedi & Makhari, 2016). This is preventing South Africa from competing in the global market and is blocking potential international investment to support the economic growth (Morapedi & Makhari, 2016);
- Infrastructure – the road infrastructure in rural areas has been neglected for a number of decades; this is possibly a result of the funding issues evident for the transport sector and having to compete with various other sectors (Morapedi & Makhari, 2016);
- Urban migration – The apartheid legacy of South Africa also plays a large role in the spatial problems currently evident in South Africa. The spatial divides are a large contributor to the poor state of the road infrastructure in rural areas (Morapedi & Makhari, 2016).

The country has also made progress in introducing more ‘green’ policies to ensure the planet is protected, while providing the South African citizens with various modes of public transport. It is important to keep in mind that South Africa is vulnerable to the scarcity of non-renewable resources and thus ‘identifying alternative sources of energy is a matter of urgency’ (Greben et al., 2009). Green transport will assist in improving various challenges faced in South Africa. This includes air quality, which links with Target 11.6, and congestion (Suleman et al., 2015).

The objectives of the *Green Transport Strategy* (2016–2021) are to encourage citizens to make use of public transport rather than private transport, and to encourage the usage of non-motorised transport, where the infrastructure allows it. Changing freight transport from road to rail will ensure that large goods are transported on railways, rather than making use of trucks. It is evident that large plans will be implemented over the next few years to ensure that South Africa is doing whatever it can to provide the public with affordable modes of transport and keeping it green at the same time. Providing adequate public transport and improving the transport to cater for women, children, persons with disabilities and older persons will ensure that South Africa will move towards achieving SDG 11.

4.4.5.2 Indicators

Indicator 11.1.1D1: Percentage of urban population living in informal dwellings

Indicator 11.1.1D1 measures the percentage of South Africans (urban population) who are residing in informal dwellings. From Figure 103 a general increase in the proportion of South Africa's urban population who live in informal dwellings can be observed. A significant increase is evident from 2014 (11.3%) to 2015 (12.7%), but since 2015 the size of the urban population who reside in informal dwellings decreased to 12.2% in 2017.

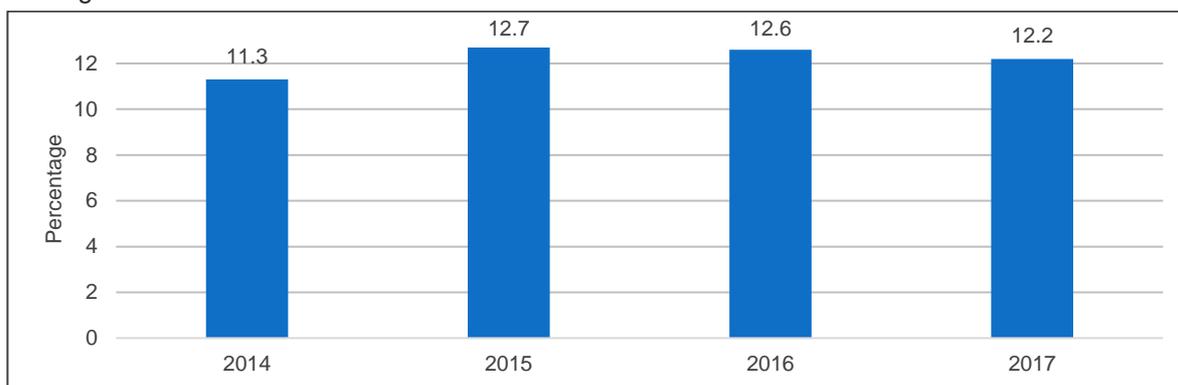


Figure 103: Urban Population Living in informal dwelling units
Data source: GHS 2014–2017, Stats SA

Indicator 11.1.1D2: Percentage of urban residents having access to basic services within informal dwellings

Indicator 11.1.1D2 looks at the percentage of South Africans (urban population) who have access to basic services in informal dwellings. The majority of the urban population residing in informal dwellings have access to an improved water supply, even though a decrease was evident between 2014 (95.8%) and 2017 (92.7%). In the year 2014, approximately 64% of the urban population residing in informal dwellings had access to improved sanitation. The access to improved sanitation has decreased to 59.3% in the year 2017. It is evident that South Africa has made progress in the provision of basic services to the population living in informal dwellings.

The information presented in Figure 104 illustrates trends from 2014 to 2017.

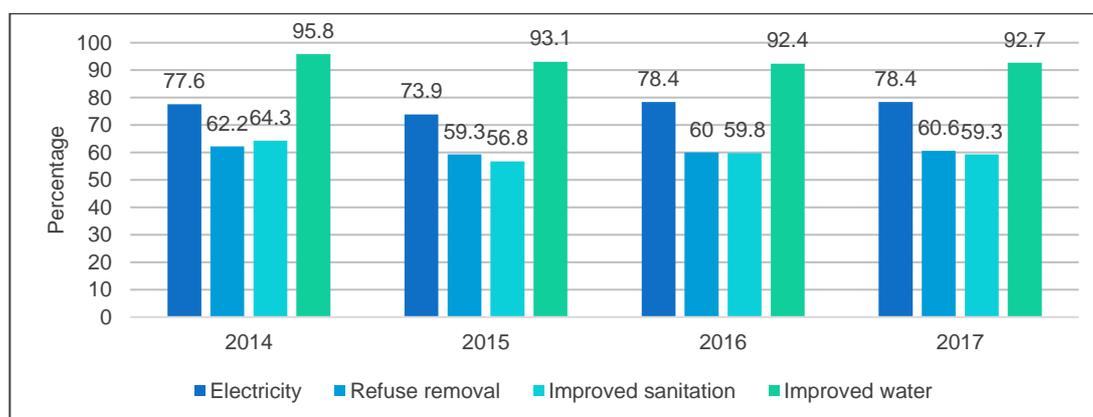


Figure 104: Urban residents who have access to basic services within informal dwellings
Data source: GHS 2014–2017, Stats SA

Indicator 11.1.1A Number of home loans granted by development finance institutions (DFIs) to households in the affordable housing market

Indicator 11.1.1A looks at the number of home loans granted by DFIs. According to the DHS, 51 669 home loans were granted by DFIs in 2015. The DFIs are made up of the Rural Housing Loan Fund (RHLF), the National Urban Reconstruction and Housing Agency (NURCHA), and the National Housing Finance Corporation (NHFC). Each DFI plays a role in advancing the provision and accessibility of housing. They play an important role in assisting prospective homeowners with a lower income and developers needing assistance on a financial level. It is not possible to comment on the progress in terms of the indicator, as information has been provided for only one year. It is recommended that information on the number of home loans provided by DFIs be gathered for the years following 2015; this will allow an opportunity to analyse the trend and provide an informed conclusion as to the achievement of the indicators as a whole.

Indicator 11.3.1: Ratio of land consumption rate to population growth rate

The information presented in Figure 105 illustrates that 31 urban areas, including eight metropolitan cities, secondary cities and small towns, were assessed to compute the national ratio of LCRPGR.

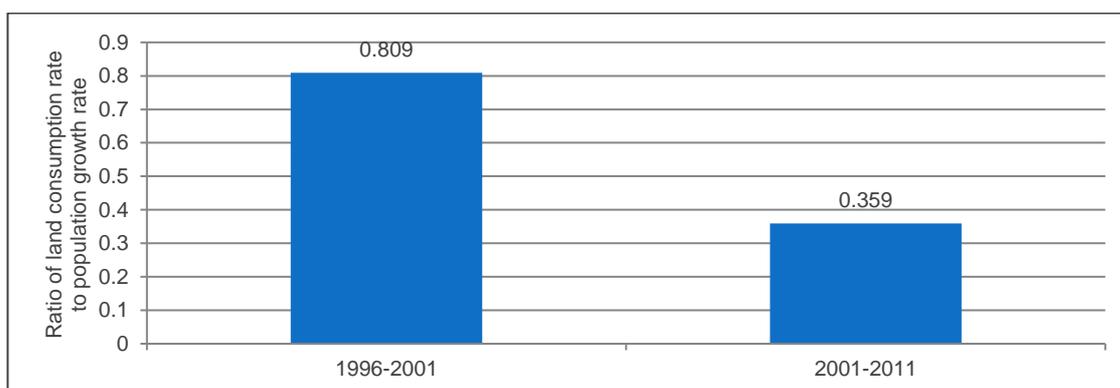


Figure 105: Ratio of land consumption rate to population growth rate for 1996–2001 & 2001 & 2011
Data source: LCRPGR 1996–2001, LCRPGR 2001–2011, SANSA

The national ratio of LCRPGR was higher between 1996 and 2001 (0.809) than between 2001 and 2011 (0.359). The disaggregation of these figures can be found in Table 35.

Urban areas	1996–2001	2001–2011
1 000 000 and more people	0.020	0.011
Between 250 000 and 999 999 people	0.066	0.035
Between 100 000 and 249 999 people	0.038	0.037
Less than 100 000 people	0.685	0.275

Table 35: LCRPGR comparison
Data source: LCRPGR 1996–2001, LCRPGR 2001–2011, SANSA

Indicator 11.6.1D: Percentage of municipal waste generated and recycled

Indicator 11.6.1D looks at the percentage of municipal waste that has been generated and recycled. According to the figure below, a very small percentage of municipal waste was being recycled in 2015 (1.3%) and 2016 (1.6%), but increased to 7.5% in 2017, indicating a significant improvement.



Even though it is evident that slow progress was made between 2015 and 2016, South Africa has made great progress between 2016 and 2017. The information presented in Figure 106 illustrates the trend from 2015 to 2017.

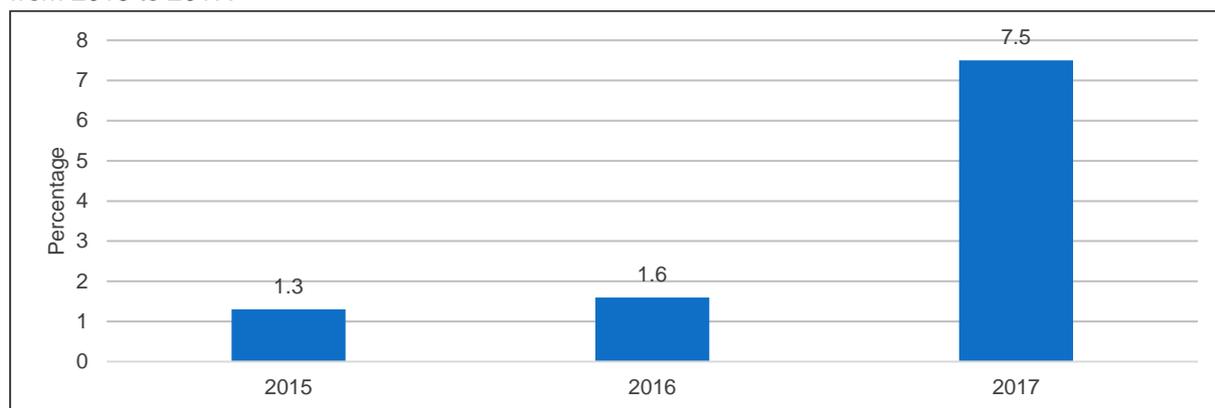


Figure 106: Municipal waste generated and recycled
Data source: SAWIS 2015–2017, DEA

Indicator 11.6.2 Annual mean levels of fine particulate matter (e.g. PM_{2.5} and PM₁₀) in cities (population weighted)

Indicator 11.6.2 looks at the national annual average PM₁₀ levels versus National Ambient Air Quality Standards (NAAQS). The information presented in Figure 107 illustrates the trend from 2013 to 2015.

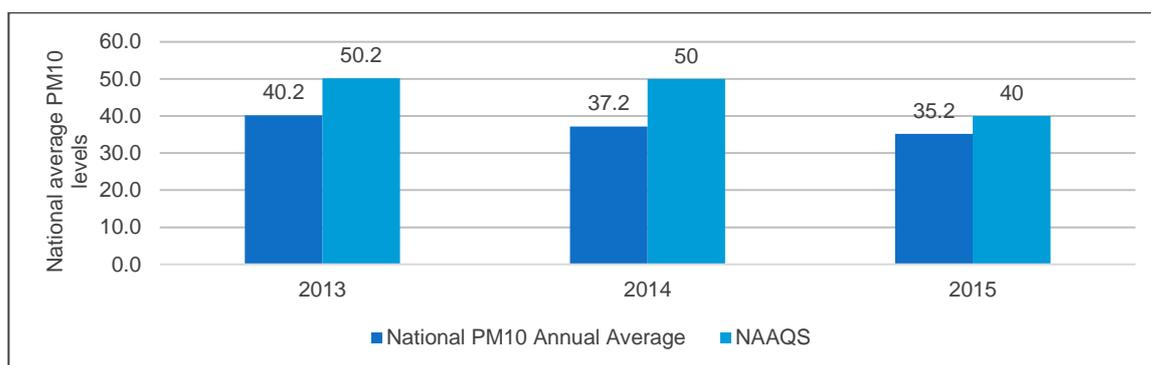


Figure 107: National annual average PM₁₀ levels versus NAAQS
Data source: SAAQIS 2013–2015, DEA

Between 2013 and 2015, there has been a decrease in the fine particulate matter (PM₁₀ levels) in the air of cities. Moreover, the 2013 to 2015 data indicates an improvement in the NAAQS standard.

Indicator 11.b.2D Number of national and local disaster risk reduction strategies adopted by South Africa

This indicator is discussed in the section on SDG 13 as Indicator 13.1.2D. This indicator is also reported on as Indicator 1.5.3.

4.4.5.3 Summary

South Africa's progress with regard to SDG 11's indicators with data is summarised in Table 36 below. South Africa is able to report on five of SDG 11 indicators, of which two are Tier I or Tier II SDG indicators and three are domesticated indicators.

The percentage of urban population living in informal dwellings increased from 11.3% in 2014 to 12.2% in 2017 (11.1.1D1). A cause for concern is stagnation and in some cases regress in the provision of



basic services to urban residents who reside in informal dwellings (11.1.1D2). It is encouraging to note an improvement in the air quality of South African cities (11.6.2) as well as an increase in the proportion of municipal waste that is recycled (11.6.1D).



SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable

Indicator	Key data points
11.1.1D1: Percentage of urban population living in informal dwellings (domesticated indicator)	11.3% (2014), 12.7% (2016), 12.2% (2017)
11.1.1D2: Percentage of urban residents having access to basic services within informal dwellings (domesticated indicator)	<i>Electricity</i> 77.6% (2014), 78.4% (2016), 78.4% (2017)
	<i>Refuse removal</i> 62.2% (2014), 60% (2016), 60.6% 2017)
	<i>Improved sanitation</i> 64.3% (2014), 59.8% (2016), 59.3% (2017)
	<i>Improved water</i> 95.8% (2014), 92.4% (2016), 92.7% (2017)
11.1.1A: Number of home-loans granted by development finance institutions (DFIs) to households in the affordable housing market (additional indicator)	51 669 (2015)
11.3.1: Ratio of land consumption rate to population growth rate	0.809 (1996–2001), 0.359 (2001–2011)
11.6.1D: Percentage of municipal waste generated and recycled (domesticated indicator)	1.3% (2015), 1.6% (2016), 7.5% (2017)
11.6.2: Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)	<i>National PM10 annual average</i> 40.2 (2013), 37.2 (2014), 35.2 (2015)
	<i>NAAQS</i> 50.2 (2013), 50 (2014), 40 (2015)
11.b.2D: Number of national and local disaster risk reduction strategies adopted by South Africa (domesticated indicator and duplicate indicator)	13 (2019)

Table 36: SDG 11 indicator progress

4.4.6 SDG 13: Take urgent action to combat climate change and its impacts



SDG 13 seeks to enable urgent action to combat climate change and its impacts. Climate change presents the single biggest threat to development, and its widespread, unprecedented impacts disproportionately burden the poorest and most vulnerable (UN, 2019).

SDG 13 contains the following five targets:

- 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- 13.2: Integrate climate change measures into national policies, strategies and planning
- 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- 13.a: Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible
- 13.b: Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing states, including focusing on women, youth and local and marginalized communities

Climate change broadly describes the process whereby there is an increase in the frequency and intensity of extreme weather events such as heat waves, droughts, floods. These changes are linked to increasing levels of greenhouse gases (GHG) that intensify the greenhouse effect. Internationally there are numerous processes, mainly convened through the United Nations Framework Convention on Climate Change (UNFCCC), that seek to reduce the level of GHG in the atmosphere and thus reduce potential climate change impacts. It is, however, accepted that irrespective of the amount of mitigation of emissions that occurs in the future, some level of impact is unavoidable and adaptation to climate change is still needed. Climate change poses significant social, economic and environmental risks and challenges globally, and is thus likely to increase existing vulnerabilities to disaster risk. South Africa has made substantial progress towards becoming a low-carbon and climate-resilient society. As a signatory to the United Nations Framework Convention on Climate Change (UNFCCC), the South African government, in partnership with climate change stakeholders and role players, continue to strengthen their efforts of achieving and stabilising GHG concentrations in the atmosphere, hence reducing carbon footprints and preventing harmful human activity interference in the climate system.

South Africa has one of the most advanced research, observation and climate modelling programmes on the African continent. The expertise is situated across a number of universities and science councils and covers most aspects of earth system science (including atmosphere, oceans, land, biogeochemistry and water). All its public universities, and 11 research organisations, are involved in promoting climate change research and systematic observations throughout South Africa, with contributions from some municipalities and provincial government departments (DEA, 2018a). Research covers climate systems, variability and land interactions; GHG inventory support; climate change impacts and adaptation; energy and mitigation research (DEA, 2018a).



South Africa, like many other developing countries, is vulnerable to the effects of climate change, and has the task of balancing accelerating economic growth and transformation with sustainable use of environmental resources and responding to climate change (DEA, 2017). South Africa is vulnerable to natural disasters such as drought, flooding, extreme storms and fires, and has faced a number of devastating climate-related disasters over the last few decades, the impacts of which have varied. The country is projected to face a higher frequency of climate-related disasters that are increasing in intensity, and these events are likely to be associated with impacts that are on par with, if not worse than, those already experienced (DEA, 2018). The impact of climate-related disasters is wide-ranging and affects multiple sectors, including damage to infrastructure, damage to ecosystems, and contributing to water shortages, rising food insecurity and potentially declining public health.

Observed trends in the country's climate have been reported in the Third National Communication (TNC) on Climate Change to the UNFCCC (DEA, 2018a).

- South Africa has been warming significantly over the period 1913–2015. The observed rate of warming has been 2°C per century, or even higher over the western parts of the country, including much of the Western and Northern Cape, and also in the east over Gauteng, Limpopo and the east coast of KwaZulu-Natal; this is in the order of twice the global rate of temperature increase.
- Associated increases in the annual number of hot days, with decreases in the number of cold nights have occurred over most of the country.
- Over the period 1921–2015 there is strong evidence of statistically significant increases in rainfall over the southern interior regions, extending from the western interior of the Eastern Cape and eastern interior of the Western Cape northwards into the central interior region of the Northern Cape. Extreme daily rainfall events have increased in these areas, extending northwards into North West, the Free State and Gauteng. Decreases in annual rainfall totals over Limpopo were also observed.

The National Disaster Management Centre (NDMC) has been developed, as mandated by the Disaster Management Act of 2002, to address the country's vulnerability to natural disasters with the objective to promote an integrated and coordinated system of disaster management with special emphasis on prevention and mitigation across national, provincial and municipal organs of state (Government of South Africa, 2002). The Disaster Management Act Amendment Bill (Government of South Africa, 2015) requires disaster management plans to be developed at national, provincial and municipal levels; they need to include expected climate change impacts and risks, and measures for disaster risk reduction and climate change adaptation measures. The disaster risk responses, and related infrastructure and systems that are implemented now to respond to climate-related disasters, will help to strengthen the capacity of the country to respond to future climate risks.

The focus of SDG 13 for South Africa is on the need to take urgent action, such that there is strengthened resilience and improved adaptive capacity to climate-related hazards. The progress that South Africa has made in responding to the objective of this goal is discussed through an overview of the country's commitment to responding to climate change in terms of policies, strategies and programmes.

4.4.6.1 Policy environment

South Africa has taken numerous steps to respond to the climate change challenges, as the country is a signatory of numerous global climate change responses, including the UN Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol and the Paris Agreement. As an agreed outcome of the Bali Action Plan, South Africa gazetted its *National Climate Change Response Policy* (NCCRP)



White Paper (2011). The main aim of the Paris Agreement, adopted at the twenty-first session of the Conference of the Parties (COP21) of the UNFCCC, is to keep a global temperature rise this century well below 2°C and to drive efforts to limit the temperature increase even further to 1.5°C above pre-industrial levels (UN, 2015). Central to the implementation of the Paris Agreement are countries' Nationally Determined Contributions (NDCs).

The NCCRP provides a policy framework for the country's response to both climate change mitigation and adaptation. From an adaptation perspective, the goal of the NCCRP is to ensure that the country is able to manage the impending climate change impacts through interventions that build and sustain South Africa's social, economic and environmental resilience and emergency response capacity. However, to mainstream climate-resilient development, all government sectors have to ensure that all policies, strategies, legislation, regulations and plans are in alignment with the NCCRP. All national departments are thus further mandated to develop sector-specific climate change adaptation plans. In addition to the development of climate change adaptation sectoral plans, the country also recognises the need to prepare for climate-related disasters. Specifically, the NDP highlighted the need to improved disaster preparedness in the light of extreme climate events. The NCCRP is therefore in alignment with the intentions of SDG13, through mandating a policy landscape where all spheres of government need to take climate action.

Key developments since the inception of the NCCRP include the finalisation of the country's *Nationally Determined Contributions* (NDC) (DEA, 2018a) and the *National Adaptation Strategy* (NAS) which has been drafted (DEA, 2018b). The *Carbon Tax Bill*, *Greenhouse Gas Emissions Reporting Regulations*, *Climate Change Bill* and *Pollution Prevention Plan* are substantial policy steps undertaken by the country to curb GHG emissions.

This has been achieved by government in collaboration with the private sector through extensive engagements since 2011 to meet the country's climate change commitments to the Paris Agreement.

South Africa's national policy for disaster management includes the *National Disaster Management Act* (Act No. 57 of 2002) and the related National Disaster Management Framework (NDMF). However, the NCCRP recognises that climate change-related impacts on the frequency and severity of extreme weather events will require more effective disaster risk management, thus indicating that the sectoral adaptation plans should consider disaster risk management.

The *Climate Change Bill, 2018* was published for public comment on 8 June 2018 (DEA, 2018). The intention of this Bill is to build an effective climate change response and a long-term just transition to a climate-resilient and lower-carbon economy and society. The Bill specifically provides for a coordinated and integrated response to climate change that seeks to effectively manage climate change impacts, enhance adaptive capacity and build resilience.

The *National Framework for Sustainable Development* (NFSD) established a broad framework to guide sustainable development in South Africa. It outlines the country's vision for sustainable development and identifies five strategic priorities (see below).

The NSFD is a broad policy that provides and enables policy for investment in green technologies, which was followed up by the National Strategy for Sustainable development and Action plan (NSSD). The five priorities of NFSD were updated in the NSSD as follows:

1. Enhancing systems for integrated planning and implementation
2. Sustaining our ecosystems and using natural resources efficiently
3. Planning towards a green economy
4. Building sustainable communities
5. Responding effectively to climate change.



In addition, 113 interventions and 20 indicators have been established to monitor and evaluate progress. Lessons from NSSD1 (2011–2014) are expected to inform NSSD2 (2015–2020) (ASSAF, 2014).

4.4.6.2 Indicators

South Africa has made significant progress in terms of developing overarching policies and frameworks to support climate change responses in the country. These responses are aligned with the goals of the NDP and thus support sustainable development. Disaster risk management is also viewed by the country as being a key area where action is needed to ensure that lives are protected.

Currently no data is available for Indicator 13.1.1 (Number of deaths, missing persons and directly affected persons attributed to disasters per 100 000 population). Natural-climate related hazards are the primary driver behind disaster events that are indexed for South Africa, with flooding, wind, hail, snow and heavy rain being the most frequently occurring hazards. The South African Risk and Vulnerability Atlas (SARVA) presents an index of different types of disaster events that occur in South Africa, which is a composite of sudden onset events and slower onset events such as droughts (SARVA, 2017). Events like drought can lead to significant losses over time and have far-reaching impacts due to the extent, duration and intensity

South Africa is also not able to report formally on Indicator 13.1.3 (Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies). From the work through initiatives such as the LTAS, SARVA (South African Risk and Vulnerability Atlas), the Green Book and the Third National Communication (TNC), progress has been made with understanding and communicating climate risks, such that stakeholders have access to information on potential future climate risks and have a starting point to develop response plans. The TNC (DEA, 2018) highlights that understanding climate risks and identifying key areas of concern is critical for developing appropriate adaptation policies and scenarios. Specifically, the possibility of increased disaster risk is considered to be one of the most concerning and potentially costly impacts of future climate change in South Africa and globally (DEA, 2018).

Indicator 13.1.2D: Number of national and local disaster risk reduction strategies adopted by South Africa

Disasters, whether natural or man-made, lead to substantial economic and social losses for the country. Indicator 13.1.2D is a domesticated indicator that is calculated by using the sum total of all disaster risk reduction strategies at national and local level. According to the National Disaster Management Centre of the Department of Cooperative Governance and Traditional Affairs, South Africa has developed 13 plans in order to improve disaster management in the country. This indicator is also reported on as Indicator 1.5.3 and Indicator 11.b.2D.

4.4.6.3 Summary

As shown in Table 37, South Africa is able to report on one domesticated SDG 13 indicator. South Africa has adopted 13 national and local disaster risk-reduction strategies.



SDG 13: Take urgent action to combat climate change and its impacts

Indicator	Key data points
13.1.2D: Number of national and local disaster risk-reduction strategies adopted by South Africa (domesticated indicator)	13 strategies (2019)

Table 37: SDG 13 indicator progress

4.4.7 SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development



Increasingly adverse impacts of climate change (including ocean acidification), overfishing and marine pollution are jeopardizing recent gains in protecting portions of the world's oceans. SDG 14 seeks to conserve and sustainably use the oceans, seas and marine resources for sustainable development (UN, 2019).

SDG 14 contains the following ten targets:

- 14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
- 14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
- 14.3: Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
- 14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics
- 14.5: By 2020, conserve at least 10% of coastal and marine areas, consistent with national and international law and based on the best available scientific information
- 14.6: By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation
- 14.7: By 2030, increase the economic benefits to small island developing states and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
- 14.a: Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing states and least developed countries
- 14.b: Provide access for small-scale artisanal fishers to marine resources and markets
- 14.c: Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of 'The future we want'

4.4.7.1 Policy environment

The *National Environmental Management Act (NEMA) (Act 107 of 1998)* lays the foundation for sectoral legislation, policies and strategies. NEMA creates the legal platform for decision-making related to some SDG 14 targets around conservation of protected areas, land degradation, biodiversity support, and sustainable and equitable resource use.

Under the umbrella framework of NEMA, the recognition of integrated coastal management for effective coastal governance was signified by the proclamation of the *Integrated Coastal Management Act, Act 24 of 2008 (ICM Act)* in 2009. The ICM Act mandates the three tiers of government with certain responsibilities and attempts to embed ICM principles into the governance of South Africa's coastal environment (Colenbrander and Sowman, 2015). The ICM Act provides the legal framework for achieving particular SDG 14 targets alongside creating an enabling environment for progress toward other SDG 14 targets and indicators more generally. The ICM Act has particular relevance for Target 14.1 and Target 14.2 relating to the management of land-based activities in the coastal zone, and the application of ecosystems-based approaches respectively.

South Africa is one of the few countries in the world to have a national biodiversity act. An extension of NEMA, the *National Environmental Management: Biodiversity Act (NEMBA) (Act 10 of 2004)* implements the 1997 White Paper and South Africa's commitment to the Convention on Biological Diversity (CBD). NEMBA also led to the establishment of the *South African National Biodiversity Institute (SANBI)*. SANBI is mandated to champion terrestrial and marine biodiversity and advise on the declaration and management of protected areas. Through NEMBA, South Africa adopted the *National Biodiversity Strategy and Action Plan (NBSAP) 2015–2025*. A requirement of the CBD, the NBSAP undergoes revisions in line with the Aichi Biodiversity targets, which are the collective flexible framework CBD parties follow to integrate biodiversity priorities into national targets (CBD and UNEP, 2011; DEA and UNDP, 2015). In addition to the Aichi alignments, the NBSAP revisions, particularly the 2015–2025 iteration, have enabled South Africa to map its biodiversity targets in relation SDG timelines. The strong biodiversity focus in South Africa's legal framework incorporates estuarine and marine ecosystems in all assessments, meaning the NBSAP enables progress, particularly in achieving SDG Target 14.2 and Target 14.5.

Another NEMA extension is the *National Environmental Management Protected Areas Act (NEMPA) (No. 57 of 2003)*, which supports conservation of soil, water and biodiversity. Importantly, and directly aligned to SDG Target 14.5, Marine Protected Areas (MPAs) are proclaimed and administered through the Protected Areas Act. Prior to this declaration, there was no strategic direction in South Africa that guided the conservation of ecosystems. The Act provides for the proclamation of protected areas to facilitate the conservation of both biological resources and cultural values. This reflects South Africa's rights-based legal framework to overcoming exclusion and the principle of leaving no one behind (Paterson, 2009).

NEMPA is supported by national strategies that correspond to the specific components of SDG 14. For example, the *National Integrated Strategy to Combat Wildlife Trafficking (NISCWT)* enables the implementation of measures to address illegal and unreported fishing or harvesting of marine resources (especially abalone), which corresponds to SDG Target 14.6 and the effectiveness of ecosystem protection under SDG Target 14.5 .

The incorporation of MPAs under the PAA is a recent transition from their prior housing under the *Marine Living Resources Act (MLRA) (1998)*. This act provides for the conservation and management of the marine ecosystem, the long-term sustainable utilisation of marine living resources and equitable access to exploitation, utilisation and protection of certain marine living resources.



SDG Targets 14.4 and 14.7 are directly informed by the MLRA, which provides for all fisheries management in South Africa. Initially, a large number of traditional and small-scale fishers were marginalised by the MLRA because of its narrow interpretation of what constituted subsistence fishers. In May 2014, the *Marine Living Resources Amendment Act, Act No. 5 of 2014*, was passed to allow for the implementation of the *Small-Scale Fisheries Policy (SSFP)*.

The SSFP seeks to address the imbalances of the past and ensure that small-scale fishers are accommodated and properly managed. Fishing rights are allocated on a group rather than an individual basis. The policy further supports investment in community entities to take joint responsibility for sustainably managing the fisheries resources and to address the depletion of critical fisheries stocks. The MLRA and the SSFP are directly influential in South Africa's progress toward achieving SDG Target 14b in terms of enabling access for small-scale and artisanal fishers to marine resources and markets. Key principles in the policy include community-oriented management, co-management of resources and an allocation of the basket of species. The policy goes further to recognise that the marine sector has not been adequately acknowledged in the past and requires a stronger approach to legally establish the rights of small-scale fisheries. When dissecting the policy, new ways to introduce the small-scale fisheries sector are featured which specifically focus on human rights, gender and development. Moreover, the policy moves away from an individual allocation of rights towards a collective, commercial approach with a developmental focus.

The *Operation Phakisa: Oceans Economy* programme is a multi-sectoral effort to unlock the value of South Africa's oceans and their marine and coastal resources. This is done through the identification and support of catalytic projects in various marine and coastal sectors. The programme is driven by the recognition that the ocean's economy has the potential to contribute up to R177 billion to Gross Domestic Product (GDP) by 2033 and create approximately 1 million jobs (Operation Phakisa, 2017). The programme has been active for five years, having commenced with operational work after the October 2014 launch. Overall the government has unlocked investments amounting to approximately R24 billion in the Oceans Economy and over 6 517 jobs have been created in the various sectors (Operation Phakisa, 2017). The Operation Phakisa programme is structured in six workstreams or 'labs' that are located across government directorates, ensuring a wide representation of national government within the labs' responsible agencies. According to the Oceans Economy 2017 Summary Report (Operation Phakisa, 2017):

- The *Marine Transport and Manufacturing Lab* is housed in DOT and aims to enable South Africa to leverage its strategic location and infrastructure to accelerate the growth of the marine transport and manufacturing (MTM) sector;
- The *Offshore Oil and Gas Lab*, housed in DMR, promotes and enables the exploration and exploitation of mineral resources offshore. As of 2017, the lab had made progress toward initiatives to establish critical infrastructure for the sector, ensure environmental responsiveness, enable institutional efficiency and collaboration, and develop capability for subsurface research and data gathering;
- The *Aquaculture Lab*, housed in DAFF, has implemented 36 aquaculture projects around the country. The aquaculture lab also enabled the advancement of the Aquaculture Development Bill and the Saldanha Bay Aquaculture development zone. This lab directly enables progress toward SDG Target 14.7 relating to increasing the contribution of aquaculture and sustainable fisheries to GDP;
- The *Marine Protection Services and Ocean Governance Lab*, housed in DEA, has enabled progress relating to integrating ocean governance between respective stakeholders, ensuring ocean protection (Targets 14.4, 14.5) and initiating the formalisation of managing the many



opposing marine activities through driving the Marine Spatial Planning Bill. This directly impacts on all targets under SDG 14;

- The *Coastal and Marine Tourism Lab*, housed in NDT, is directly linked to Target 14.6 and seeks to enable the contribution of sustainable tourism to South Africa's economic development. The Coastal and Marine Tourism Implementation Plan was approved by Cabinet in August 2017. This plan contains integrated projects on tourism with creative industries and cultural heritage. Opportunities include enterprise development such as local supplier development (arts and craft and beachfront business), access to markets, skills development, improved infrastructure, and training facilities.

The *Small Harbours and Coastal Development Lab*, housed in DPW, has undertaken pre-Lab efforts to ensure public consultation on development plans. Initial development projects have been identified in all relevant municipalities and efforts are underway to match them to investors. A total of 70 coastal projects have been identified across the four coastal provinces with the number continuously increasing as new projects are identified. This lab may contribute to enabling better access to small-scale fishers to marine resources and markets (Target 14B); however, it will be necessary that an ecosystems-based and integrated coastal management approach (Target 14.2) is followed during development.

South Africa is able to report on three indicators under SDG 14 of which two are domesticated and one is an Additional indicator. The proportion of marine and coastal ecosystems that are well-represented in protected areas remain stable (Indicator 14.5.1D), and a positive trend in government funding for and gross domestic expenditure on marine sciences can be observed (Indicator 14.a.1D).

Data collection efforts that specifically target SDG reporting will be key to fast-tracking SDG indicator development and enhancing South Africa's reporting capability for SDG 14. However, despite the data challenges that limit South Africa's ability to report formally on the majority of SDG 14 targets, the country is engaged in various activities that create an enabling environment to support progress against the unreported targets and ultimately SDG 14 itself.

4.4.7.2 Indicators

Indicator 14.5.1D: Proportion of marine and coastal ecosystem types that are well-represented in protected areas

This indicator is defined as the percentage of marine (benthic and pelagic) and coastal (including estuaries) ecosystem types which are *Well Protected* (defined as those ecosystem types for which the full biodiversity target falls within a protected area). This indicator is computed using the number of well-protected ecosystem types divided by the total number of ecosystem types multiplied by 100. Targets are set at 20% for marine and coastal ecosystem types (SANBI, n.d.).

The percentage of coastal ecosystems that are well protected increased by one percentage point between 2010 and 2018 (Figure 108). South Africa has a comprehensive and systematic classification and mapping of ecosystem types, including in the marine environment, which provides a strong basis for this indicator.

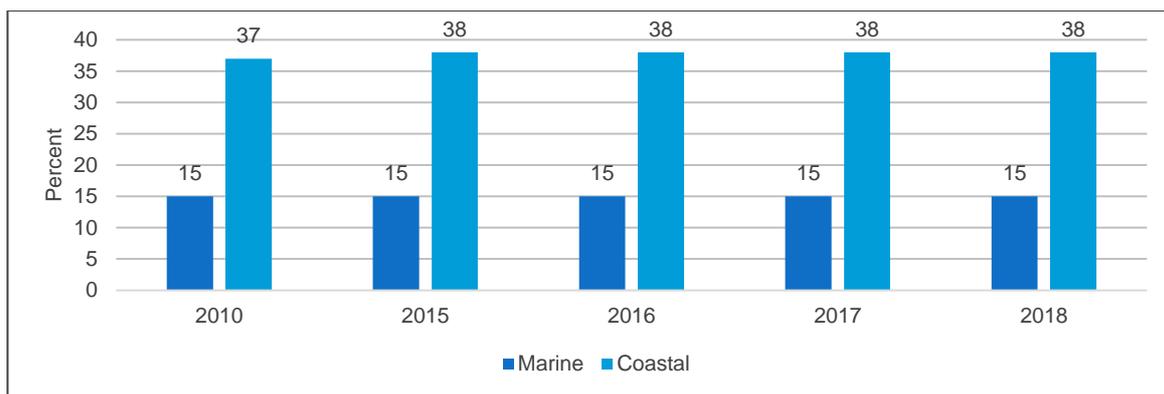


Figure 108: Percentage of marine and coastal ecosystem types well protected
Data sources: SAPAD, DEA and SANBI

South Africa’s protected areas are legally declared and recognised in terms of the Protected Areas Act and provide long-term secure protection for ecosystems. An ecosystem type is considered well represented in the protected area network if at least a certain proportion of that ecosystem type falls within one or more protected areas. The proportion is determined by the biodiversity target for each ecosystem type, which is a science-based measure of how much (by area or length) constitutes a viable representative sample of that ecosystem type. It is critical to ensure that areas of biodiversity importance are well protected, within the broader area-based conservation effort. Therefore, the domesticated indicator provides a meaningful measure of marine protected area progress, given the focus on biodiversity importance.

Indicator 14.5.1A: South African Marine Protected Areas (MPA) as a percentage of the Exclusive Economic Zone

South Africa reports on this indicator using GIS-based data (Table 38).

	Area of MPAs km ²	Area of EEZ km ²	Percentage in MPA
PEI	180 000	466 879	38.55
Mainland	4 540	1 068 659	0.42
Combined	184 540	1 535 538	12.03

Table 38: South African Marine Protected Areas (MPA) as a percentage of the Exclusive Economic Zone
Data source: SANBI

Both the domesticated and additional indicator under Target 14.5 align strongly with the global rationale for this target, albeit in different dimensions. Indicator 14.5.1A allows some insight into the commitment to area-based marine conservation in South Africa. The vastness of the Prince Edward Islands MPA enables the country to declare considerable progress and surpassing of SDG Target 14.5 as 12.03% of marine area is declared protected in this scenario. However, the Prince Edward Islands are a considerable distance from mainland South Africa, meaning there is very little threat to its biodiversity from human activities. While the 2020 SDG target will not be met, South Africa is on track to expand its effective and representative marine protected area network to the 10% SDG target by the conclusion of the SDGs in 2030.

In 2018 the South African government announced that a further 20 MPAs will be added into the protected areas network. As of 2019, these MPAs are still in the process of being gazetted and hence are not included in the data reported for Indicator 14.5.1D. This declaration was under the Operation Phakisa MPA representative network. This will increase protection of the mainland continental ocean around South Africa from 0.4% to 5%, and the new areas will advance ocean protection by



approximately 50 000 km² (SANBI, 2018). Given that South Africa manages an exclusive economic zone that is larger and far less accessible than the land territory (the total area of the exclusive economic zone is 1.5 million km² while the land territory is 1.2 million km²), the recent success in expansion of the country's MPA network suggests improved coordination and mobilisation of resources toward protecting biodiversity and the basis of the country's ocean economy.

The expansion of the protected area network by 4.6% in a single concerted effort is a notable success. While the additional proportion is insufficient to meet the 2020 target of 10% marine area conserved, the network is highly efficient and representative of our marine biodiversity (the NBA 2018 analyses show that 87% of the different ecosystem types are represented in only 5% of the area). The initial MPA expansion under the first phase of Phakisa was aimed at 5% coverage of our mainland waters (with DEA and SANBI carefully designing it to ensure that it was representative of all South Africa's marine ecosystems). As part of the Operation Phakisa MPA initiative under the next phase of the operation, there is a secondary commitment to identify a further 5% by the end of 2019.

Indicator 14.a.1D: Marine sciences funding as a proportion of total government funding and GERD

While the latest allocation is not the highest over the period 2007–2017 (Figure 109), the positive trends since 2010 show progress toward achieving Target 14.a to increase scientific knowledge, develop research capacity and transfer marine technology in order to improve ocean health and to enhance the contribution of marine biodiversity to South Africa's socio-economic development.

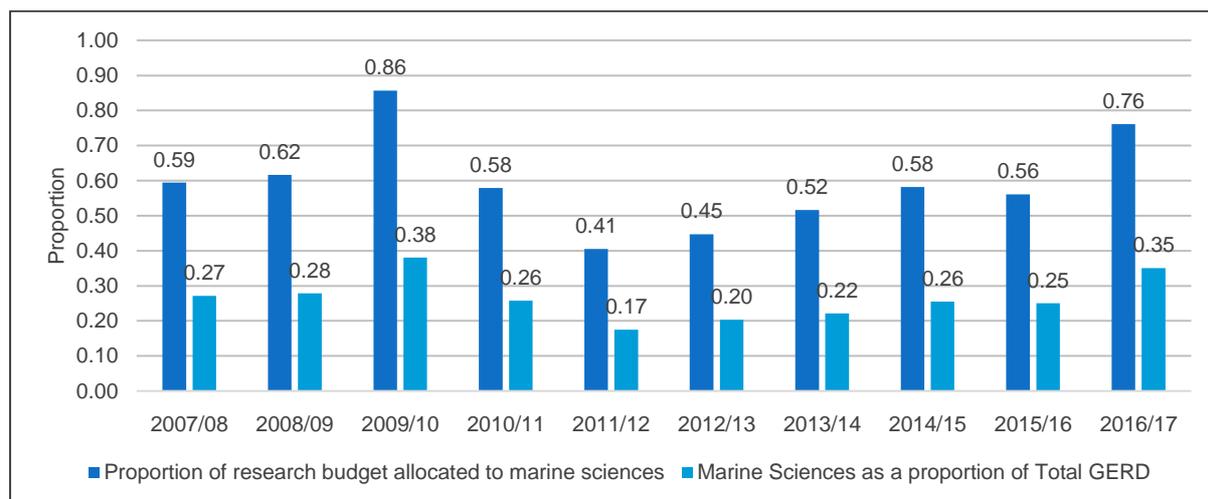


Figure 109: Marine sciences funding in South Africa
Data source: CSTI 2016/2017, HSRC

4.4.7.3 Summary

South Africa's progress with regard to SDG 14's indicators with data is summarised in Table 39 below. South Africa is able to report on two SDG 14 indicators. South Africa is unable to report on Tier I or Tier II SDG indicators, but does report on two domesticated indicators. The proportion of marine and coastal ecosystems that are well represented in protected areas remains stable (14.5.1D), and a positive trend in government funding for and gross domestic expenditure on marine sciences can be observed (14.a.1D).

Data collection efforts that specifically target SDG reporting will be key to fast-tracking SDG indicator development and enhancing South Africa's reporting capability for SDG 14. However, despite the data challenges that limit South Africa's ability to report formally on the majority of SDG 14 targets, the country is engaged in various activities that create an enabling environment to support progress against the unreported targets and ultimately SDG 14 itself.



SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Indicator	Key data points
14.5.1D: Proportion of marine and coastal ecosystem types that are well represented in protected areas (domesticated indicator)	<i>Marine</i> 15% (2010), 15% (2016), 15% (2018)
	<i>Coastal</i> 37% (2010), 38% (2016), 38% (2018)
14.5.1A: South African Marine Protected Areas (MPAs) as a percentage of the Exclusive Economic Zone (additional indicator)	12.03% (2018)
14.a.1D: Marine sciences funding as a proportion of total government funding and GERD (domesticated indicator)	<i>Proportion of research budget allocated to marine sciences</i> 0.58% (2010/11), 0.52% (2013/14), 0.76% (2016/17)
	<i>Marine sciences as a proportion of total GERD</i> 0.26% (2010/2011), 0.2% (2013/2014), 0.35% (2016/2017)

Table 39: SDG 14 indicator progress

4.4.8 SDG 15: *Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss*



Preserving diverse forms of life on land requires targeted efforts to protect, restore and promote the conservation and sustainable use of terrestrial and other ecosystems. SDG 15 focuses specifically on managing forests sustainably, restoring degraded lands and successfully combating desertification, reducing degraded natural habitats and ending biodiversity loss (UN, 2019).

SDG 15 contains twelve targets:

- 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
- 15.2: By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally
- 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world
- 15.4: By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development
- 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species
- 15.6: Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed
- 15.7: Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products
- 15.8: By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species
- 15.9: By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts
- 15.a: Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems
- 15.b: Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation
- 15.c: Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities

4.4.8.1 Policy environment

Following the *National Framework for Sustainable Development (NFSD)*, South Africa approved the *2012–2014 National Strategy for Sustainable Development and Action Plan (NSSD 1)*. The strategic priority put forward by NSSD1 around enhancing monitoring and reporting systems for improved environmental performance shows the South African government has recognised the importance of indicator evaluation (Montmasson-Clair and Plooy, 2012).

NSSD1 also emphasises elements of SDG 15 in terms of the plan's priority to value, protect and enhance environmental assets and natural resources. However, a key challenge faced by the NSSD was assigning value to natural resources and to support biodiversity conservation over the medium term.

In addition to national development planning, South Africa has adopted several legislative, planning and strategic tools aimed at ensuring sustainability and equitable access to resources (DEA, 2004). Many of these tools reflect South Africa's implementation of multilateral agreements focused on the conservation and sustainability ecosystems and biodiversity.

South Africa's *White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity* (1997) is guided by the aims of the CBD, namely conservation of biodiversity, sustainable use of biological resources and equity (DEA, 2004). The 1997 White Paper is supported by the *National Environmental Management Act (NEMA) (Act 107 of 1998)*, which laid the basis for sectoral legislation, policies and strategies.

NEMA created the legal platform for decision-making relating to biodiversity and conservation in South Africa. There are direct links between NEMA and SDG Targets 15.4 (conservation of protected areas), 15.5 (land degradation and biodiversity support), 15.6 (sustainable and equitable resource use), 15.7 (poaching and trafficking of protected species) and 15.8 (alien and invasive species eradication).

South Africa is also one of the few countries in the world to have a national biodiversity act. An extension of NEMA, the *National Environmental Management: Biodiversity Act (NEMBA) (Act 10 of 2004)* implements the 1997 White Paper and South Africa's commitment to the CBD. NEMBA also led to the establishment of the *South African National Biodiversity Institute (SANBI)*, one of world's few legally established and supported national biodiversity institutes. South Africa was thus a forerunner in establishing the enabling context for SDG 15.a. Several SDG 15 indicators reported on by South Africa are products of SANBI's mandate in working with DEA to provide knowledge and information, as well as policy and programme support (DEA, 2019b).

Through NEMBA, South Africa adopted the *National Biodiversity Strategy and Action Plan (NBSAP) 2015–2025*. A requirement of the CBD, the NBSAP undergoes revisions in line with the Aichi Biodiversity targets, which are the collective flexible framework CBD parties follow to integrate biodiversity priorities in national targets (CBD and UNEP, 2011: 1; DEA and UNDP, 2015). In addition to the Aichi alignments, the NBSAP revisions, particularly the 2015-2025 iteration, have enabled South Africa to map its biodiversity targets in relation SDG timelines and other global conventions such as the Cartagena Protocol on Biosafety (DEA and UNDP, 2015).

Although the NBSAP priorities are not always aligned with global targets and indicators, it is significant that South Africa has set short-term tasks and longer-term development programmes to implement its national biodiversity targets (Reyers and McGeoch, 2010: 295). Of these, the *National Biodiversity Assessment (NBA)* is the overarching tool for monitoring and reporting on South Africa's biodiversity to understand trends over time and inform policy-making and strategic decisions (SANBI, 2017). The NBA is updated every five years and is led by SANBI in collaboration with the DEA and several other partner organisations.



Another NEMA extension statute is the *National Environmental Management: Protected Areas Act (NEMPA) (No. 57 of 2003)*, which supports conservation of soil, water and biodiversity through a network of protected areas. The Act provides for the proclamation of protected areas to facilitate the conservation of both biological resources and cultural values. This close alignment to SDG 15.6 represents South Africa's rights-based legal framework to overcoming exclusion and the principle of leaving no one behind (Paterson, 2009). The National Protected Area Expansion Strategy guides the way in which South Africa can be more strategic in allocating protected areas.

The broad scope of the NEMPA features a range of SDG 15 elements and, importantly, provides a range of management categories and options for South Africa's protected areas. Together with national and provincial conservation stewardship programmes, NEMPA has equipped South Africa with tangible options and benefits for conservation (Paterson, 2009). The nature of these processes has also afforded authorities and landowners in South Africa the opportunity to tailor conservation strategies to specific contexts (Paterson, 2009). This empowerment through inclusive conservation legislation is a key platform for achieving the medium-term targets envisioned by the SDGs, in the context of South Africa's history of land and resource challenges.

The *National Protected Areas Expansion Strategy (NPAES)*, first published in 2008, presents South Africa's 20-year strategy for the expansion of protected areas. The NPAES is reviewed every 5 years, the most recent of which is updated for the period 2016–2020, as part of a rolling 20-year period. The NPAES aims for cost-effective protected areas expansion targeted around achieving ecological sustainability and climate change resilience.

To achieve these ends, the NPAES adopts a priority-based approach of allocating resources and the setting of targets, including spatial priorities and mechanisms for implementation.

The NPAES 2016 protected area expansion priorities are collated from provincial and national agencies and existing strategies. The identified priority areas cover a total of 184 190 km², in addition to 72 584 km² under negotiation (pending declaration). These areas will expand on the current network of 282 479 km². The NPEAS 2016 includes provincial-level information about how priority areas were identified, including existing conservation plans and biodiversity targets, geographic descriptions, main biodiversity features such as ecological corridors, and key pressures including development, land degradations, amongst others. The spatial emphasis adopted by the NPEAS 2016 is part of a wider planning shift to ensure alignment between national and provincial protected area management. This implies periodic reviews, such as if progress is made in a region that requires updates of the national NPEAS. An important foundation, particularly for the marine priorities, has also been set by Operation Phakisa, which calls for a review of existing priorities and alignment with provincial agencies.

Buttressing the NEMPA are other national strategies that correspond to the specific components of SDG 15 dealing with invasive species, illegal species trafficking and poaching (Targets 15.7, 15.8 and 15.c). These are notoriously challenging elements because of the contentious economic role illegal trade plays in many communities and informal markets (Traffic, 2019; Wildtrust, 2019).

The draft *National Strategy for Dealing with Biological Invasions in South Africa* couples poverty alleviation and job creation to the management of alien plant invasions in South Africa (Van Wilgen, 2019), while the *National Integrated Strategy to Combat Wildlife Trafficking (NISCWT)* and *Integrated Strategic Management of Rhinoceros* are examples of South Africa's efforts to combat the trafficking of endangered species using a whole-systems approach to law enforcement. These strategic endeavours provide existing channels for achieving Targets 15.6 and 15.7, and enhancing South Africa's involvement in the *Convention on International Trade in Endangered Species of Wild Fauna and Flora*.



Other international agreements to which South Africa is party include the UN Convention to Combat Desertification (UNCCD) and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits. Through the UNCCD, South Africa has embarked on the country-level initiatives to achieve Land Degradation Neutrality (LDN). As a signatory to the Nagoya Protocol, South Africa has a regulatory framework on the sharing of biological resources for users and regulators (DEA, 2008).

In terms of the SDG targets and indicators focused on forests, South Africa has key pieces of legislation that offer channels for SDG 15 progress and reporting. In terms of Targets 15.1 and 15.2, the *National Forests Act (NFA)* (No 84. of 1998) supports sustainable forest management, the restructuring of the forestry sector and protection of indigenous trees in general.

The *National Forests Amendment Bill (NFA)* put to Parliament in 2018 is especially relevant for the ongoing voluntary SDG reporting processes. The Amendment Bill deals with sections 3(3) and 5 of the NFA, raising issues around the current provisions of the NFA that do not provide clarity to what constitutes a natural forest and woodlands (Parliamentary Monitoring Group, 2018). As Section 5 of this report reflects, national ecosystem definitions such as 'natural forests' have a significant bearing on the extent to which a country can report on SDG Target 15.1. Since section 3(3) of the NFA is the channel for legal action against the destruction of natural forests, the amendment will influence South Africa's share of forest ecosystems. Further, the NFA also provides the aforementioned legal action except in exceptional circumstances where new land use is preferable in terms of economic, social and environment benefits. The NFA also stands as an important legal platform for managing the trade-offs that South Africa faces in determining the use of land resources.

Many DEA programmes and projects bridge the ecosystem protection, biodiversity and conservation targets of SDG 15. These initiatives are generally overseen by two branches, Biodiversity and Conservation (BC), and Environmental Programmes (EP). The former oversees planning and policy, while implementation and programmatic elements are managed by the EP branch. The planning directive of BC is to establish, develop and manage a comprehensive, ecologically representative and effectively managed regional network of trans-frontier conservation areas. This mandate arose to give effect to South Africa's involvement in the CBD and extend the outcomes of the MDG process (DEA, 2019a).

While a full institutional review is beyond the scope of this report, it is important to recognise the coupling of ecosystem, infrastructure and job creation mandates within DEA. Across its initiatives, DEA embeds principles of benefit sharing, access to resources and job creation. The 'Working on/for' programmes are perhaps the most recognised examples of this, although there are several initiatives that demonstrate that South Africa links ecosystem protection, biodiversity and conservation to the principle of leaving no one behind.

As the review shows, the principle of benefit sharing as indicated by Target 15.6 is therefore evident across many DEA programmes and projects. Additionally, many of these initiatives are less directly focused on ecosystem management, but instead are oriented as implementing targets of SDG 15 (Targets 15.a, b and c). The future of these support programmes are critical for achieving SDG 15 and monitoring South Africa's progress towards 2030 more generally.

DAFF also manages programmes generally related to the components of SDG 15 that focus on natural resource management, together with specific initiatives on supporting sustainable land and forest management. These programmes tend to be oriented towards agriculture, forestry and fisheries as economic sectors, and thus often couple economic development objectives with sustainable resource use as well as production (DAFF, 2019).



LandCare is a community-based government-supported initiative to support sustainable management and optimisation of natural resources. Focusing on agricultural resources, LandCare has links to food security, job creation and overall quality of life outcomes. It follows the expanded public works programme (EPWP) model and targets beneficiaries for its outcomes across six impact areas. These areas are strategically connected to the targets underlying SDG 15, particularly land degradation, deforestation, alien and invasive species, freshwater conservation, inclusive benefits and conservation (DAFF, 2017).

Woodlands and Indigenous Forest Management sets out to create an enabling framework for the sustainable management of woodlands and indigenous forests in South Africa. This framework entails establishing the norms and standards for indigenous forest and woodland management. Key components include rehabilitation programmes for woodlands and indigenous forests as well as their conservation to ensure compliance with national biodiversity management frameworks. The programme importantly provides frameworks for trees outside of forests (DAFF, 2019).

4.4.8.2 Indicators

Indicator 15.1.1: Forest area as a proportion of total land area (including forest, savanna and thicket biomes)

Indicator 15.1.1 reports on the area of South Africa's three forest and woodland biomes, which include natural forest, Savanna and Albany Thicket, measured as a proportion of the total land area of the country. Although both the global indicator for 15.1.1 and the domesticated indicator measure forest area as a proportion of total land area, the method of computation used by the Food and Agriculture Organization (FAO) uses a definition of forest that includes commercial plantations of exotic trees, and the South African definition excludes these. Additionally, using the FAO definition, stands of alien trees are likely to be included in the measurement of 15.1.1.

The broad definitions of forest used by FAO and DAFF include all wooded vegetation types with over 10% canopy cover. This gauge of forest cover does not align with the definition of forest in the South African national vegetation map, which separates wooded vegetation into (true) forest (tall and with a closed canopy), savanna (grassy landscape with trees) and thicket (low dense woody vegetation). To address this, South Africa therefore reports on Indicator 15.1.1 as a global SDG indicator with extra disaggregation. The results are presented in Figure 110, which shows the extent of natural forest, Albany Thicket and Savanna ecosystems in South Africa.

Forests as a total proportion of total land area depend on a range of factors in the South African context, where indigenous forests are naturally a small biome that makes up a small proportion of the country and expansion of exotic invasive trees is a major challenge. Simply reporting on the proportion of forest area is not a meaningful indication of achieving Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements. To assess progress towards Target 15.1, Indicator 15.1.2D is much more meaningful. We are reporting on Indicator 15.1.1 because we have data available to do so, but it is not useful for assessing progress in South Africa's national context.

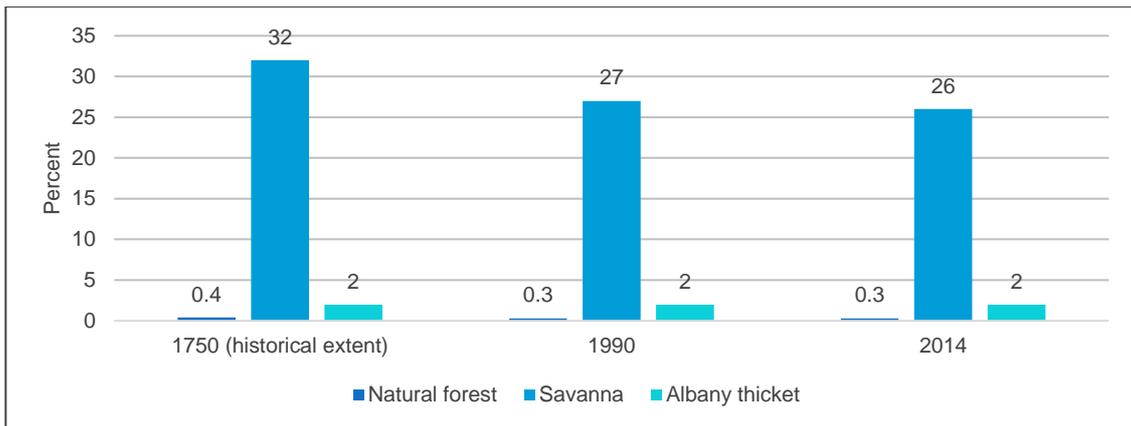


Figure 110: Natural forest and woodland area as a percentage of total land area
Data source: SANBI

The reported indicator needs to be understood in the light of natural forests being the most fragmented and smallest of all South Africa's biomes (DAFF, 2009), covering less than 1% of the country's land area. Although these three biomes fall within the broad DAFF and FAO forest definitions, they have different pressures on them in terms of land clearing. Because they are so rare, natural (indigenous) forest has been historically well protected. In contrast, Albany Thicket and savanna generally do not share this special protection and are thus subjected to far greater pressure from anthropogenic activities.

Relative to Albany Thicket biomes and savanna biomes, natural forests are therefore less likely to experience further declines as a result of their legislative protection. As a result, both Albany Thicket and savanna biomes experience higher rates of habitat loss compared to natural forest, and clearing for cropland, human settlement expansion and afforestation.

Indicator 15.1.2D: Percentage of terrestrial and freshwater ecosystem types that are well protected

The results presented in Figure 111 show that between 2010 and 2018 the extent to which terrestrial and freshwater ecosystems are protected in South Africa has increased by 3%. The difference between the shares of terrestrial ecosystems and freshwater ecosystems that are protected is a function of the PA designation process. In South Africa, many freshwater ecosystems gain protection status as a consequence of terrestrial protected area expansion, rather than targeted freshwater protection efforts. The use of focused freshwater systematic biodiversity plans (e.g. National Freshwater Ecosystem Priority Areas (NFEPAs)) in protected area expansion strategies will potentially contribute to improving representation of freshwater ecosystems in the PA network in future.

Although there is a shift towards spatially-informed systemic freshwater conservation, the challenge is translating this into tangible and widespread benefits. The findings from the 2011 NBA, namely that 55% and 65% of South Africa's river and wetland ecosystem types are threatened, highlight the extent of this challenge (Nel and Driver, 2012).

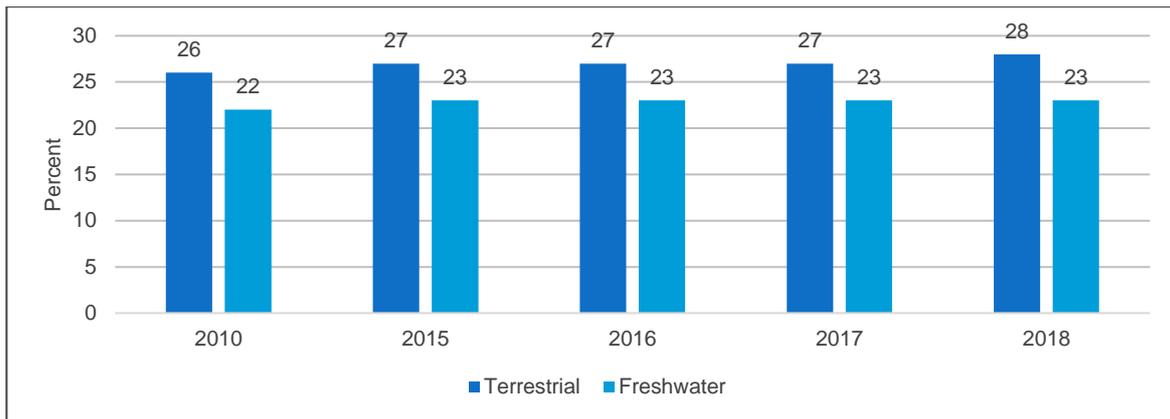


Figure 111: Percentage of terrestrial and freshwater ecosystem types that are well protected
Data source: SAPAD 2010–2018, DEA and SANBI

In terms of terrestrial ecosystems that are protected, the increase since 2010 is important for assessing South Africa’s progress towards achieving SDG Target 15.1. Some preliminary insights can be drawn from South Africa’s reporting on MDG 7, *Ensuring Environmental Sustainability*. Terrestrial area protection was covered by MDG Indicator 7.6.1, the proportion of terrestrial areas under formal protection that measured formal protection of components of biodiversity. The MDG results found that terrestrial ecosystems increased by over 50% between 1994 and 2014. Importantly, much of this increase (26.61%) occurred between 2010 and 2014. This was attributed to the increased efforts in implementing and enforcing environmental regulations focused on protecting terrestrial areas. These efforts include the World Heritage Convention Act (WHCA), 1999 (Act No. 49 of 1999), the National Forests Act (NFA), 1998 (Act No. 84 of 1998), the National Environmental Management Protected Areas Act (NEMPA) (Act No. 57 of 2003) and the National Protected Area Expansion Strategy (NPAES) (2008).

Indicator 15.2.1D Percentage of forest within formally proclaimed protected areas

South Africa has approached Indicator 15.2.1 as a domesticated indicator to enable reporting of its progress in relation to the country’s forest, woodland and thicket biomes. The indicator thus shows South Africa’s percentage of natural forest biome, Savanna biome and Albany Thicket biome, within formally proclaimed protected areas.

Figure 112 presents South Africa’s progress, using the domesticated measure of the percentage of the forest ecosystem extent. As of 2018, South Africa had 36% of its natural forest biome, 13% of its savanna biome and 2% of its Albany Thicket biome under formal protection. Natural forest has enjoyed a 4 percentage point increase in protection and there has been a slight increase of 1 percentage point for Albany Thicket under protection since 2010.

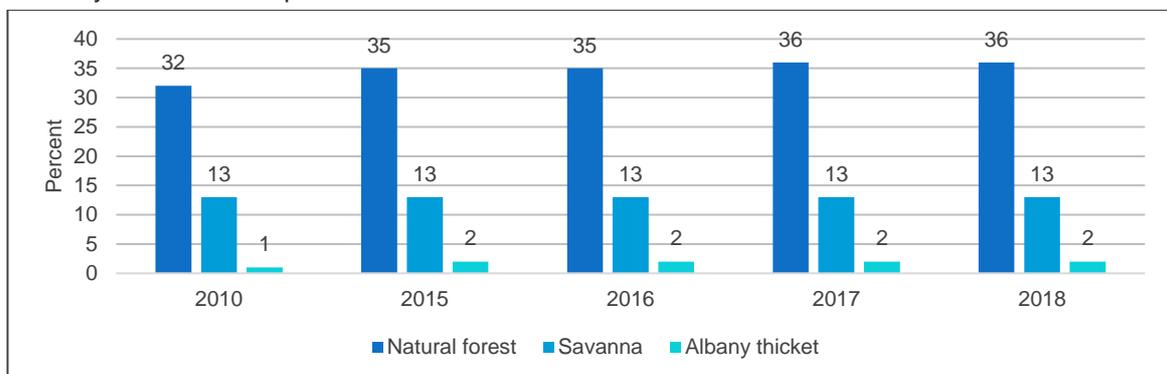


Figure 112: Percentage of forest ecosystem extent protected
Data sources: SAPAD, DEA; SANBI and DAFF

15.3.1: Proportion of land that is degraded over total land area

According to South Africa's seventh report to the United Nations Convention to Combat Desertification Performance Review and Assessment of Implementation System, presented in 2014, 10.71% of South Africa's land area is classified as degraded.

15.4.1D Percentage of mountain ecosystem types that are well-represented in protected areas

South Africa reports on Target 15.4 using a domesticated indicator, which measures the percentage of mountain ecosystem types that are well represented in protected areas, within formally proclaimed protected areas. The global Indicator 15.4.1 measures coverage by protected areas of important sites for mountain biodiversity. This measure is based on the number of mountainous Key Biodiversity Areas (KBAs) that fall entirely within protected areas. South Africa has a comprehensive and systematic process of classifying and mapping ecosystem types. This provides a strong basis for the domestication of Indicator 15.4.1. The domesticated indicator thus denotes the proportion of mountain ecosystem types that are well represented in South Africa's protected area network.

As of 2018, 42% of South Africa's mountain ecosystem types are well protected, showing a 1 percentage point increase since 2010 (Figure 113). The remaining 58% of the mountain ecosystem types have varying degrees of protection. The overall progress towards protecting mountain ecosystems is positive. Historically, many protected areas were established in inaccessible and rugged mountain landscapes where few other land uses are viable. Although there is still scope for increasing the protection of mountain ecosystems through additional protected area proclamations, the poorly protected lowlands remain a higher priority in terms of PA expansion.

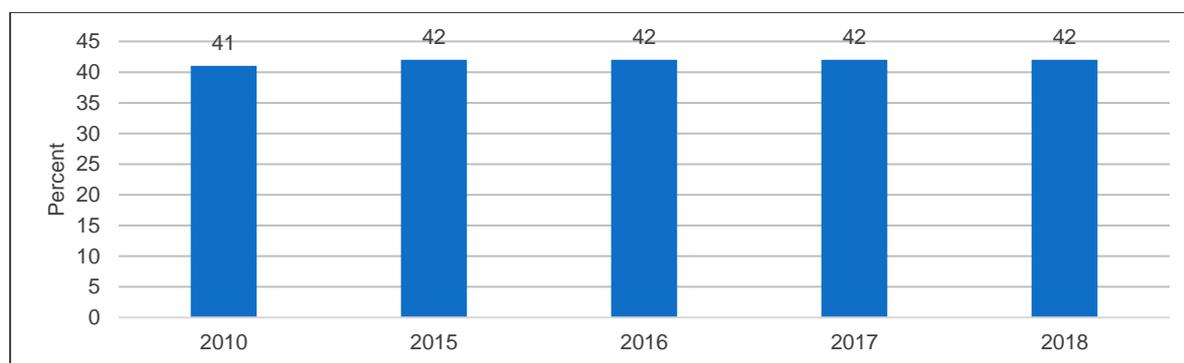


Figure 113: Percentage of mountain ecosystem types well protected
Data sources: SAPAD, DEA and SANBI

Indicator 15.5.1: Red List Index

The Red List Index (RLI) measures change in aggregate extinction risk across groups of species. It is based on genuine changes in the number of species in each category of extinction risk measured using the IUCN Red List Categories and Criteria. The RLI is also an indicator for the CBD's Strategic Plan for Biodiversity, including the Aichi Biodiversity targets, for the 2011–2020 period (CBD and UNEP, 2011).

The RLI is expressed as changes in an index ranging from 0 to 1. The lower the value, the faster the group of species is heading toward extinction. If the value is 1, species are of Least Concern, and if the value is 0, all species are extinct. Aggregated Red List Indices are calculated as the arithmetic mean of the Red List Indices for each taxon group (UN Statistical Commission, 2018).

South Africa's RLI is based on multiple assessments of mammals, reptiles, amphibians, birds, freshwater fish, butterflies, dragonflies and a sample of 900 randomly sampled plants. It is computed



using South African Red List data, in line with the global reporting methodology. Figure 114 shows South Africa's aggregated RLI for eight taxonomic groups as a single multi-taxon index. The results show a decline in the index from 0.905 to 0.894 over a sixteen-year period (2002–2018). This downward trend indicates declining aggregate survival probability of the species assessed in South Africa's RLI (IBAT for Research and Conservation Planning, 2018).

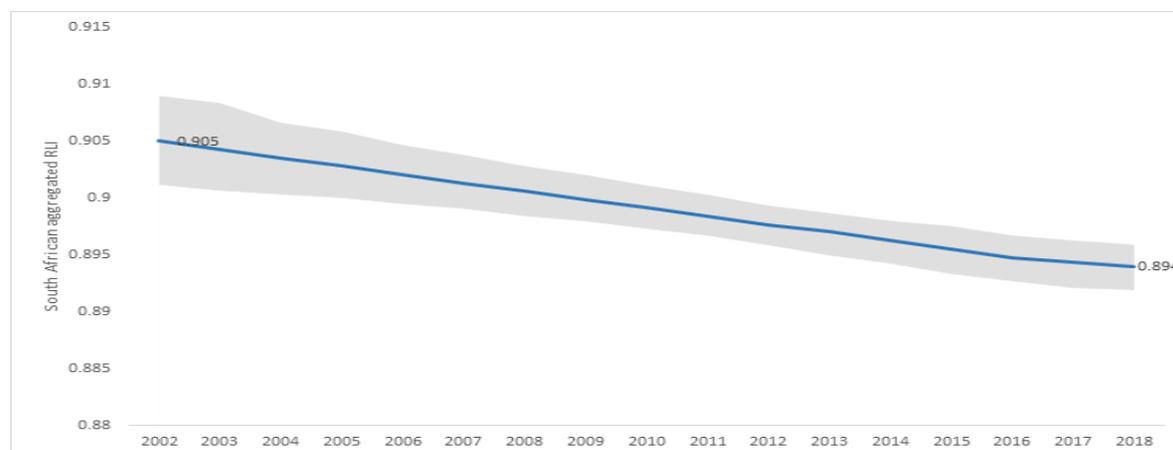


Figure 114: South Africa's aggregated National Red List Index
Data sources: SANBI Threatened Species Unit 2002–2018

The declining RLI is largely attributed to the sharp declines of freshwater species and invertebrates. In contrast, terrestrial vertebrates, including birds, mammals, reptiles and amphibians have remained relatively stable (Raimondo, 2019). However, in terms of the Global IUCN Red List, South Africa's RLI value of 0.894 for 2018 is higher (showing that fewer taxa are threatened) and has lower uncertainty (Raimondo, 2019) than the Global RLI disaggregated for South Africa, which was 0.776374 in 2018.

With the Global Red List Index based on only five taxonomic groups it is considered insufficient to accurately reflect species trends at the country level. South Africa's Red List Index based on assessments for eight taxonomic groups presented here is considered a more accurate reflection of the status of South Africa's species.

4.4.8.3 Summary

South Africa's progress with regard to SDG 15's indicators with data is summarised as shown in Table 40 below. South Africa is able to report on six SDG 15 indicators, of which three are Tier I or Tier II SDG indicators and three are domesticated indicators. Indicator 15.1.1 shows that, although the results for the available intervals represent a general trend of declining forest extent in South Africa, South Africa's forests are relatively well managed and well protected. The decline in savanna, however, is cause for concern. Taken together, South Africa's protection of terrestrial and freshwater ecosystems have improved (15.1.2D), as has the protection of forest ecosystems (15.2.1D). South Africa's score on the Red List Index (15.5.1) is based on multiple assessments of mammals, reptiles, amphibians, birds, freshwater fish, butterflies, dragonflies and a sample of 900 randomly sampled plants. The results show a decline in the index from 0.902 to 0.893 over a sixteen-year period (2002–2018). This downward trend indicates declining aggregate survival probability of the species assessed in South Africa's Red List Index.



SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Indicator	Key data points
15.1.1: Natural forest and woodland area as a percentage of total land area	<i>Natural forest</i> 0.3% (1990), 0.3% (2014)
	<i>Savanna</i> 27% (1990), 26% (2014)
	<i>Albany Thicket</i> 2% (1990), 2% (2014)
15.1.2D: Percentage of terrestrial and freshwater ecosystem types that are well protected (domesticated indicator)	<i>Terrestrial</i> 26% (2010), 27% (2015), 28% (2018)
	<i>Freshwater</i> 22% (2010), 23% (2015), 23% (2018)
15.2.1D: Percentage of forest within formally proclaimed protected areas (domesticated indicator)	<i>Natural forest</i> 32% (2010), 35% (2016), 36% (2018)
	<i>Savanna</i> 13% (2010), 13% (2016), 13% (2018)
	<i>Albany Thicket</i> 1% (2010), 2% (2016), 2% (2018)
15.3.1: Proportion of land that is degraded over total land area	10.71% (2014)
15.4.1D: Percentage of mountain ecosystem types that are well represented in protected areas (domesticated indicator)	41% (2010), 42% (2016), 42% (2018)
15.5.1: Red List Index	0.905 (2002), 0.894 (2018)

Table 40: SDG 15 indicator progress



4.5 Governance, peace, justice and security goal

4.5.1 Overview

SDG 16 resonates with several outcomes of the NDP and MTSF (2014–2019). The relationship between the NDP and MTSF can usefully be discussed by using three clusters of themes, namely safe communities, a just society and effective governance.

Peace and security, as used in SDG 16, are taken together to contribute in a South African context to the issue of safety highlighted in the NDP. The targets and indicators grouped under the rubric *safe communities* resonate with Chapter 12 of the NDP, focused on achieving a South Africa in which all people are and feel safe. This objective further states that, 'In 2030 people living in South Africa feel safe and have no fear of crime. They feel safe at home, at school and at work, and they enjoy an active community life free of fear. Women can walk freely in the street and the children can play safely outside. The police service is a well-resourced professional institution staffed by highly skilled officers who value their works, serve the community, safeguard lives and property without discrimination, protect the peaceful against violence, and respect the rights of all to equality and justice'.

The SDG targets and indicators related to *a just society* resonate most significantly with Chapter 15 of the NDP, along with Outcomes 4, 7 and 8 of the MTSF. Outcome 4 aims at decent employment through inclusive economic growth, and speaks to equitable employment opportunities. Outcome 7 speaks of South Africa's rural communities being able to fully participate in the country's economic, social and political life, and further states that, 'They enjoy good-quality education, health care, transport and other basic services. Successful land reform, job creation and rising agricultural production have created an inclusive rural economy'. Outcome 8 states that, 'In 2030, the terrible spatial legacy of apartheid has finally been broken. South Africans have humane and environmentally sustainable living and working conditions. Their homes have all the basic services they need and are closer to their workplaces, to which they travel in safe public transport'.

These objectives also resonate with MTSF Outcome 13, envisioning an inclusive and responsive social protection system, and Outcome 14: A diverse, socially cohesive society with a common national identity in which, in 2030, 'South Africa will be a society where opportunity is not determined by race or birthright, and where citizens accept they have both rights and responsibilities. We will be a united, prosperous, non-racial, non-sexist and democratic South Africa'.

The SDG 16 targets and indicators related to *effective governance* resonate with Outcome 9: A responsive, accountable, effective and efficient developmental local government system, which further states that, 'In 2030, local government in South Africa has the trust of the people, being committed to working with communities to find sustainable ways to meet their social, economic and material needs, and improve the quality of their lives'. They also resonate with Outcome 12: An efficient, effective and development-oriented public service, which describes that, in 2030, 'state institutions are well-run and effectively coordinated, run by professionals committed to the public good and capable of delivering consistently high-quality services, and working for economic growth and reduced poverty and inequality'. Meanwhile the vision of Chapter 14 of the NDP describes a corruption-free South Africa 'in which citizens do not offer bribes and have the confidence and knowledge to hold public and private officials to account'.

4.5.2 Interlinkages between the NDP, MTSF (2014–2019) and the governance, peace, justice and security goal

DPME, together with the UNDP, assessed the convergence between the NDP and the SDGs. There are several linkages between the governance, peace, justice and security SDG and a number of outcomes of the MTSF and the NDP chapters. These linkages, as adapted from DPME and UNDP (2018), are presented in Table 41 below.

NDP area	MTSF outcome	SDG target
Building safer communities (12)	Outcome 3: All people in South Africa are and feel safe	16.1 Significantly reduce all forms of violence and related death rates everywhere 16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children 16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all 16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime 16.5 Substantially reduce corruption and bribery in all their forms 16.6 Develop effective, accountable and transparent institutions at all levels 16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels 16.8 Broaden and strengthen the participation of developing countries in the institutions of global governance 16.9 By 2030, provide legal identity for all, including birth registration 16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements 16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime 16.b Promote and enforce non-discriminatory laws and policies for sustainable development
Building a capable and developmental state (13)	Outcome 12: An efficient, effective and development-oriented public service	16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all 16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime 16.5 Substantially reduce corruption and bribery in all their forms 16.6 Develop effective, accountable and transparent institutions at all levels 16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels 16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements 16.b Promote and enforce non-discriminatory laws and policies for sustainable development
Fighting corruption (14)	Outcome 12: An efficient, effective and development-oriented public service	16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all 16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime 16.5 Substantially reduce corruption and bribery in all their forms



NDP area	MTSF outcome	SDG target
		16.6 Develop effective, accountable and transparent institutions at all levels 16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels 16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements 16.b Promote and enforce non-discriminatory laws and policies for sustainable development
Nation building and social cohesion (15)	Outcome 14: A diverse, socially cohesive society with a common national identity (nation building)	16.1 Significantly reduce all forms of violence and related death rates everywhere 16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children 16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all 16.5 Substantially reduce corruption and bribery in all their forms 16.6 Develop effective, accountable and transparent institutions at all levels 16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels 16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements 16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime 16.b Promote and enforce non-discriminatory laws and policies for sustainable development

Table 41: Interlinkages between the National Development Plan (NDP), the Medium-Term Strategic Framework (MTSF) and the Governance, peace, justice and security goal

*Source: Adapted from DPME & UNDP (2018)
Numbers in parenthesis refer to NDP chapters*

4.5.3 SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



SDG 16 contains twelve targets:

- 16.1: Significantly reduce all forms of violence and related death rates everywhere
- 16.2: End abuse, exploitation, trafficking and all forms of violence against and torture of children
- 16.3: Promote the rule of law at the national and international levels and ensure equal access to justice for all
- 16.4: By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime
- 16.5: Substantially reduce corruption and bribery in all their forms
- 16.6: Develop effective, accountable and transparent institutions at all levels
- 16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels
- 16.8: Broaden and strengthen the participation of developing countries in the institutions of global governance
- 16.9: By 2030, provide legal identity for all, including birth registration
- 16.10: Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
- 16.a: Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime
- 16.b: Promote and enforce non-discriminatory laws and policies for sustainable development

4.5.3.1 Policy environment

When viewed from the perspective of the *Intergovernmental Relations Framework Act* of 2005, most of SDG 16's targets are covered by the Justice, Crime Prevention and Security (JCPS) cluster. However, because of the cross-cutting nature of this SDG, involvement of actors from beyond this cluster is essential to realising its targets.

The overarching aim of creating *safer communities* is governed by the *White Paper on Safety and Security* (2016). The White Paper attempts to be preventative rather than reactive in its approach to crime and violence. It underlines that in addition to addressing those who have already been victimised, or started perpetrating violence (the 'tertiary level'), a successful plan for safe communities must address those who are at risk of succumbing to violence – either as an offender or as a victim – at the secondary level.



Moreover, a long-term plan to address the broader drivers of violence, not necessarily focused at particular individuals but rather aiming to transform communities or even societies as a whole (so-called 'primary-level' interventions), is the most likely to have far-reaching and sustainable impacts. Examples of interventions at the primary level can include parenting programmes aimed at strengthening relationships between mothers and infants, programmes addressing the relations between parents and teenagers, and between educators and learners. They can also include individual or peer group-based programmes that engage men and women on gender norms and positive relationships, or that promote livelihood-strengthening skills (Shai & Sikweyiya, 2015).

Community policing is often suggested as a grassroots alternative to address high levels of violence and crime in South Africa. As will be discussed below, the data on crime in South Africa illustrate that, as in so many other places, the dynamics of crime are deeply local, and policing responses need to be tailored accordingly. The idea of community policing is to achieve more effective crime control, reduced fear of crime, and improved police services through proactive partnerships between the police and the community to solve problems. This can be achieved by building up working relationships through consistent allocation of the same officers, but its centrepiece is the Community Policing Forum.

A key requirement for creating safe communities is addressing sexual violence. At the Presidential Gender Based Violence and Femicide Summit (2018), a declaration was developed that is the embodiment of priority actions setting a roadmap to a South Africa free from gender-based violence and femicide as envisioned in the NDP. It was agreed that an immediate interim structure be set up, which it has been, with the objective of establishing a national multi-stakeholder council. Secondly, a national strategy plan on GBV was to be developed within six months of the Summit. Adequate resourcing must be provided for the Thuthuzela Care Centre (TCCs) as well as sexual offences courts and shelters that provide assistance to victims of GBV. There are 84 Sexual Offences Courts (SOCS) and 55 Thuthuzela Care Centres (TCCS). A targeted social behaviour change programme to address patriarchal values and structural drivers of GBV must be developed and implemented. Current education policies regarding gender equality must be prioritised and strengthened.

To respond to the scourge of sexual violence in the country, the Government of South Africa enacted the Criminal Law (Sexual Offences and Related Matters) Amendment Act 32 in 2007, and established operational and institutional mechanisms for its implementation. The Family Violence, Child Abuse and Sexual Offences Units (FCSU) of the SAPS, which as specialist detective units, are an effective mechanism for addressing GBV. There are 175 FCSUs. TCCs and SOCs are seen as a combined, holistic strategy with shelters.

Eliminating violence against children is another important requirement for creating safe communities, not least because it is often argued that young people who are exposed to violence in their community are more likely to become violent later in their lives. South Africa has comprehensive legislation aimed at child sex abuse. The *Sexual Offences Act* and the *Children's Act* provide clear guidelines for how to approach child sexual abuse. Parallel to this, there have been two *National Plans of Action for Children*, the second one running from 2012 to 2017, and a *South African Integrated National Programme of Action Addressing Violence against Women and Children* (2013–2018). However, implementation has remained weak, with a lack of comprehensive policy and programmes aimed at enforcing these laws (Harrison, 2017; Edberg et al., 2017; Meyer & Chetty, 2017).

Preventing trafficking in persons is an equally important requirement for safer communities. In 2013, South Africa enacted the *Prevention and Combating of Trafficking in Persons Act*, which criminalises human trafficking in South Africa. Furthermore, there is a National Action Plan that attempts to coordinate efforts around trafficking. South Africa serves as a hub for trafficking, and it is perceived as a country of origin, transit and destination (Jeffery, 2018; Deane, 2017; Bello, 2018).



The second cluster of SDG 16 targets contributes to creating *just societies*.

Although the Constitution provides for equal access to justice, this does not always have practical effect. Communities with a lower socio-economic status tend to face difficulties accessing the justice system, and experience bias and prejudice in the system. As a legacy of apartheid, this socio-economic inequality overlaps with race, with poor black South Africans having the greatest difficulty accessing justice. Legal Aid South Africa, an independent statutory body established by the *Legal Aid South Africa Act* of 2014, is a key national facility aimed at broadening access to justice. Its object is broadly threefold: to render or make available legal aid and legal advice, to provide legal representation to persons at state expense, and to provide education and information concerning legal rights and obligations.

In addition to taking into account access to justice, it is also important that progress toward a just society is measured where it is less visible. For this reason, SDG 16 singles out the issue of pre-trial detention. The basic rights of all arrested and detained persons in South Africa are primarily based on four sections in the Constitution, namely sections 10, 11, 12 and 35. These include the right to dignity, life, freedom from arbitrary arrest and detention, not to be detained without trial, among others. Section 35, which specifically deals with the rights of arrested, detained and accused persons, further stipulates that 'everyone who is arrested for allegedly committing an offence has the right to be brought before a court as soon as reasonably possible'. This should happen within 48 hours, or on the first ordinary court day following the expiration of 48 hours. At this point, if the court determines to remand the detained person, they are passed over to the Department of Correction Services (DCS) as a remand detainee. Legal aid is available to all persons who fall under section 35 and who cannot afford legal representation.

While it has declined from its high levels of twenty years ago, South Africa still has the largest prison population on the African continent (Walmsley, 2018). Overcrowding has put pressure on both the prison infrastructure and human resources in correctional services, raising concerns both about the extent to which prisons act as a breeding ground for future crime, and about adverse health consequences (Benatar, 2014). The most recent Annual Report of the Judicial Inspectorate of Correctional Services (JICS) reveals that the number of unnatural deaths occurring in custody has increased over the last five years, from 46 cases in both 2013/14 and 2014/15 to 82 cases in 2017/18, of which 27, or 38%, were suicides (JICS, 2018:52). The *White Paper on Remand Detention* requires the use of protocols to manage the provisions that require cooperation between DCS and various other elements of the criminal justice system.

With regard to the representivity of institutions and perceptions of inclusive decision-making, it is noteworthy that the *Local Government: Municipal Structures Act* of 1998 provides that, for councillors elected by proportional representation from party lists, 'Every party must seek to ensure that 50% of the candidates on the party list are women and that women and men candidates are evenly distributed through the list'. Regarding representation in public institutions, the Department of Public Service and Administration (DPSA) and the Public Service Commission (PSC) have focused on the transformation of the public service to be representative of the country's population. This transformation is guided by South Africa's White Paper on the Transformation of the Public Service, 1995, which (among other provisions) sets out affirmative action as a policy for this transformation (DPSA, 1995).

Transformation of the judiciary has been a key concern for the South African government, not only to ensure that it is representative of the population, but also to ensure fairness given the legacies of apartheid.

When turning to the third cluster of targets, broadly covering *effective governance*, initiatives aimed at combating corruption and bribery often attract the most attention. In terms of the 2004 *Prevention and Combatting of Corrupt Activities Act*, corruption represents the abuse of a position of authority, a breach



of trust and a violation of a legal duty and of the rule of law. The Act provided for the strengthening of prevention measures as well as establishing investigative measures. The *National Anti-Corruption Strategy*, elaborated between 2015 and 2017, defines corruption as acts that involve an improper or corrupt exchange by an individual or between individuals (DPME, 2016).

South Africa follows a multi-agency approach to combating corruption. However, the Independent Police Investigative Directorate (IPID) and the Directorate for Priority Crime Investigation (DPCI) are the most prominent institutions. IPID is mandated to conduct independent, impartial and quality investigations of identified criminal offences allegedly committed by members of the SAPS and MPS, and to make appropriate recommendations in line with the IPID Act. The Hawks, on the other hand, are responsible for the combating, investigation and prevention of national priority crimes such as serious organised crime, serious commercial crime and serious corruption.

Closely linked to combating corruption is ensuring budget accountability. In this regard, relevant primary legislation includes the *Public Finance Management Act* of 1999, *Division of Revenue Act*, the *Intergovernmental Fiscal Relations Act* of 1997, and the *Money Bills Amendment Act*, 2009.

One dimension of National Treasury's ability to determine and monitor national budgetary policy is through the *Public Sector Supply Chain Management Framework*. The Auditor-General has made adherence to this framework a particular area of focus (Nombembe, 2011). The Auditor-General (AG) is the only institution that is legally mandated to report on and audit how government spends South African taxpayers' contributions. The AG produces annual reports on all government departments, local municipalities, provincial state departments, public institutions and public entities. The AG thus enables the legislature to hold the executive to account for the way it allocates and spends tax income and is financially, legally and operationally independent from government.

From the perspective of the citizenry, access to information is an important requirement for holding public officials accountable. The right of access to information is guaranteed in the *Promotion of Access to Information Act* of 2000 (PAIA), which states everyone has the right of access any information held by the state as well as any information held by an individual that is required for the protection or exercise of any rights. When the Bill became operational in 2000, it was considered one of the most progressive of its kind because it granted access to privately- as well as publicly-held information, expanding this right far beyond international norms.

The *Protection of Personal Information Act* (2013) has added a further level of protection: the Information Regulator was created as an independent body with a dual mandate that includes promoting access to information in line with the PAIA, and taking on the responsibilities outlined in Part 4 and Part 5 of that earlier Act. This has not yet been fully implemented and in the meantime, the South African Human Rights Commission (SAHRC) is continuing its monitoring responsibilities.

A last element of effective governance that merits attention is the structures put in place to safeguard the human rights guaranteed by South Africa's Bill of Rights. The SAHRC is the primary institution in South Africa that fulfils the requirement of being an internationally recognised, independent national human rights institution conforming to the International Coordinating Committee of National Institutions' Principles relating to the Status of National Institutions (the Paris Principles). The SAHRC's mandate is outlined in section 184 of the Constitution. This states that the SAHRC must promote respect for human rights and foster a culture of respect for human rights, promote the protection, development and attainment of human rights, as well as monitor and assess the observance of human rights in South Africa. The SAHRC is also constitutionally awarded the power to investigate and report on instances of human rights violations as well as take necessary actions to redress instances of violations of human rights while also being tasked with education and research into human rights.



The SAHRC is only one of the state institutions supporting constitutional democracy; the other Chapter 9 institutions relevant to this indicator include the Public Protector and the Auditor-General (as discussed above). Likewise, the Public Protector is constitutionally mandated to investigate any state or public administration conduct in any sphere of government thought to be ‘improper’ or the result of prejudice, and to report on such instances. The office is also endowed with the power to take remedial action if deemed appropriate.

4.5.3.2 Indicators

Indicator 16.1.1D: Number of murder victims per 100 000 population

South Africa has domesticated this indicator as ‘Number of murder victims per 100 000 population (16.1.1D)’. The focus on murder reflects not only the crime’s extreme gravity and its universal proscription, but also (and perhaps more importantly in terms of its use as an indicator) the fact that it is one of the more reliable reported crime statistics available around the world. The number of murder victims per 100 000 population has been increasing every year since the 2011/2012 cycle (Figure 115). The latest statistics illustrate that in 2018 there were more than 20 000 murders in South Africa, with murder occurring at a rate of 35.8 per 100 000 population.

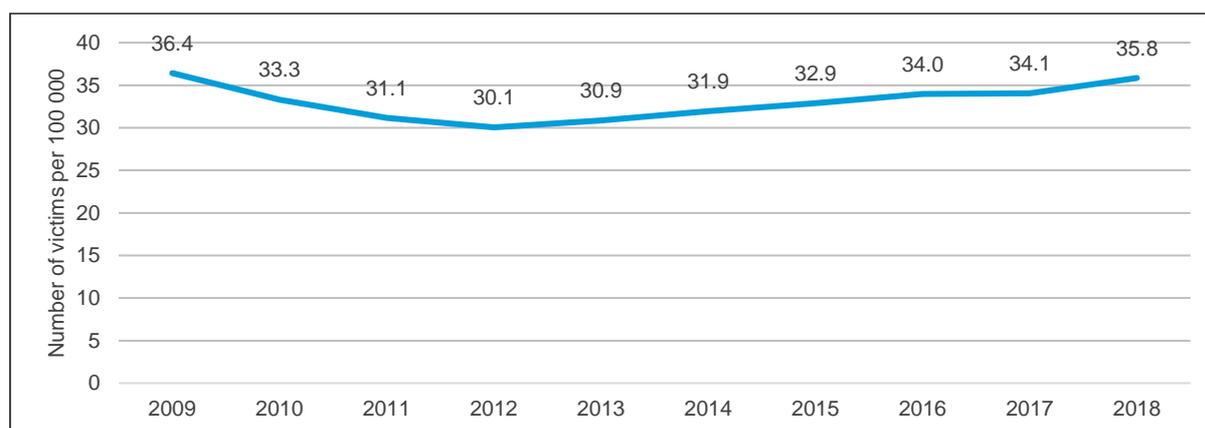


Figure 115: Number of murder victims per 100 000 population
Data source: Crime Statistics 2008/2009–2017/2018, SAPS

Indicator 16.1.3(a)D: Proportion of population aged 16 and above who experienced at least one incident of assault in the previous 12 months

In 2018, Stats SA’s VOCS estimated that 0.72% of South Africans aged 16 and above experienced at least one incident of assault in the preceding 12 months, as shown in Figure 116. This is a slight decline from 0.74% of the population that experienced assault in 2016.

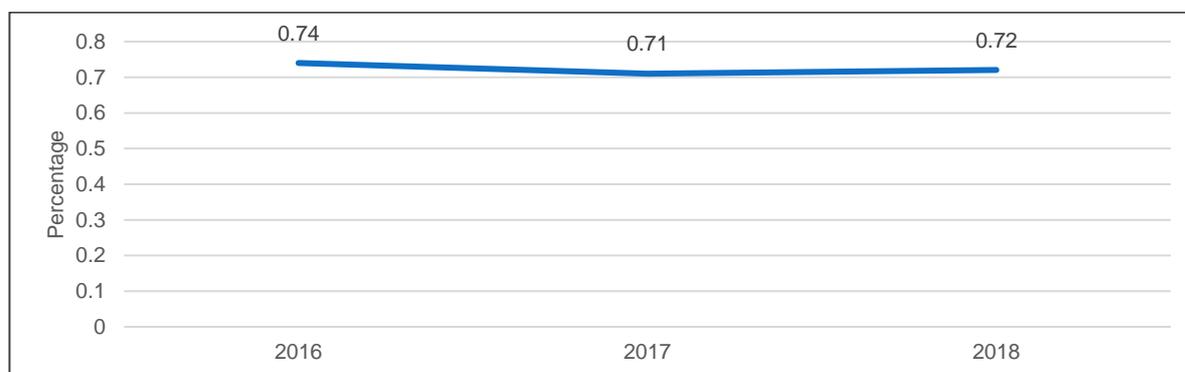


Figure 116: Proportion of population who experienced at least one incident of assault in the previous 12 months
Date source: VOCS 2015/2016–2017/2018, Stats SA



Indicator 16.1.3(a)A1: Proportion of households that experience at least one case of home robbery
Indicator 16.1.3(a)A2: Proportion of population aged 16 and above who experienced at least one case of robbery outside the home

Figure 117 shows that both the level of home robbery and robberies outside the home have decreased between 2016 and 2018. In 2018, 0.8% of the population experienced at least one robbery outside the home, which is significantly less than 1.1% of the population that experienced robberies outside the home in 2016. Home robberies decreased from 0.72% to 0.67% in the same period.

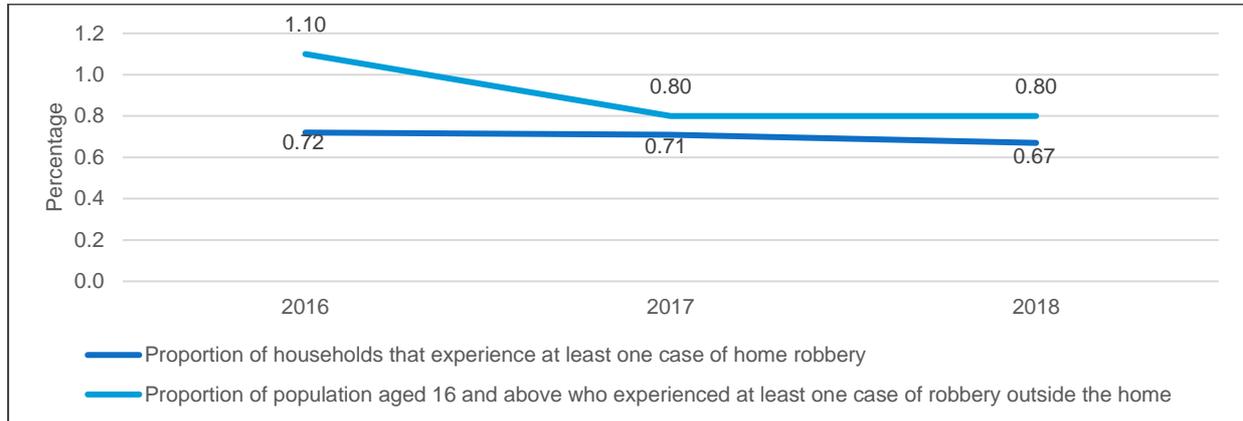


Figure 117: Proportion of households that have experienced at least one case of home robbery and proportion of population who experienced at least one case of robbery outside the home
Data source: VOCS 2015/2016–2017/2018, Stats SA

Indicator 16.1.3(c)A1: Incidence of rape brought to the attention of police per 100 000 population
Indicator 16.1.3(c)A2: Incidence of sexual assault brought to the attention of police, per 100 000 population

The most recent rape statistics at national level reflect a significant decline from the high of 95.9 per 100 000 in 2010 to 70.5 per 100 000 in 2018. Similar rates of decline can be observed in certain provinces, notably Gauteng and perhaps most dramatically in the Free State, where the rate dropped from 145/100 000 to 90/100 000 over the five years from 2013 to 2018 (Figure 118 and Figure 119). In South Africa the Victims of Crime Survey (VOCS) questionnaire, which has been in use for the past seven years, does not go into much detail on sexual offences. This limitation has to some extent been addressed by the new survey called the Governance, Public Safety and Justice Survey (GPSJS), which has more details on sexual offences (Stats SA, 2018c). As such, it may well be possible to provide at least one data point for the proportion of the population subjected to sexual violence in the past 12 months (i.e. the global level indicator), after the results of the GPSJS have been reviewed. In 2018, the VOCS estimated sexual assault at 12 per 100 000, a decline from the high of 13.9 per 100 000 in 2012 (Figure 119).

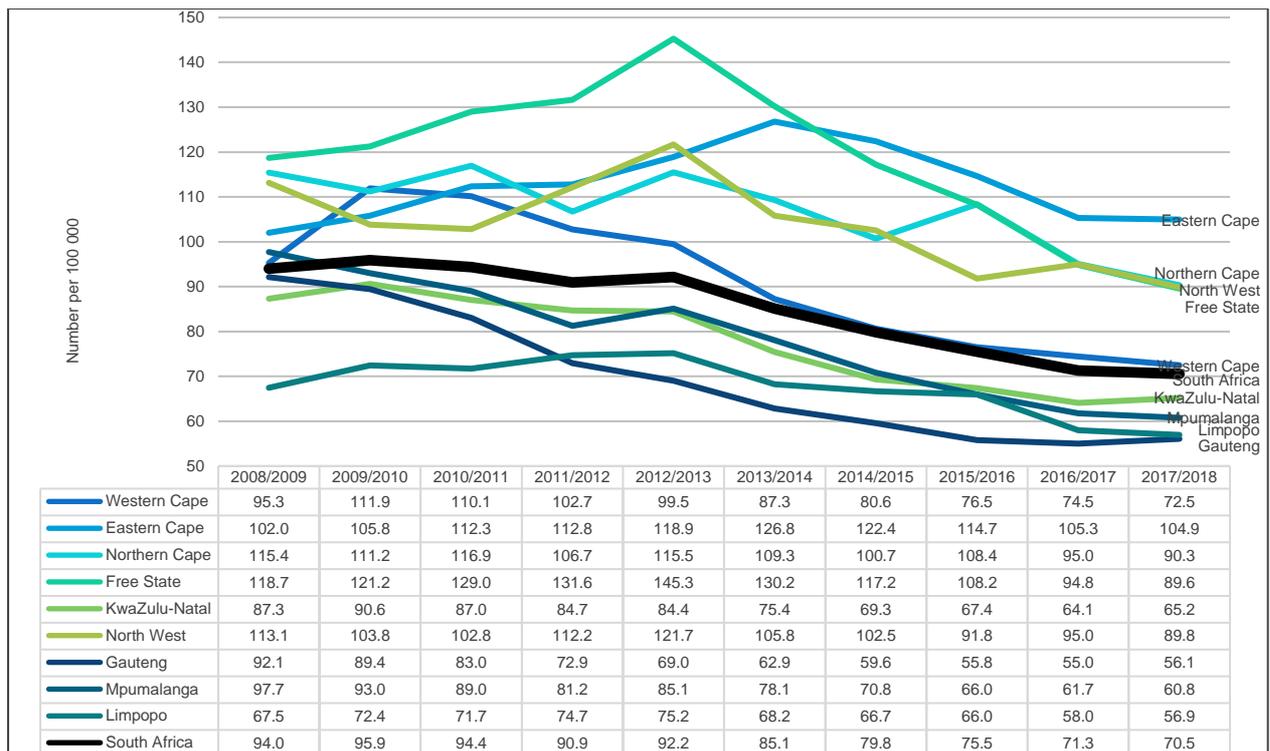


Figure 118: Incidence of rape brought to the attention of the police, per 100 000 population
Data source: Crime Statistics 2008/2009–2017/2018, SAPS

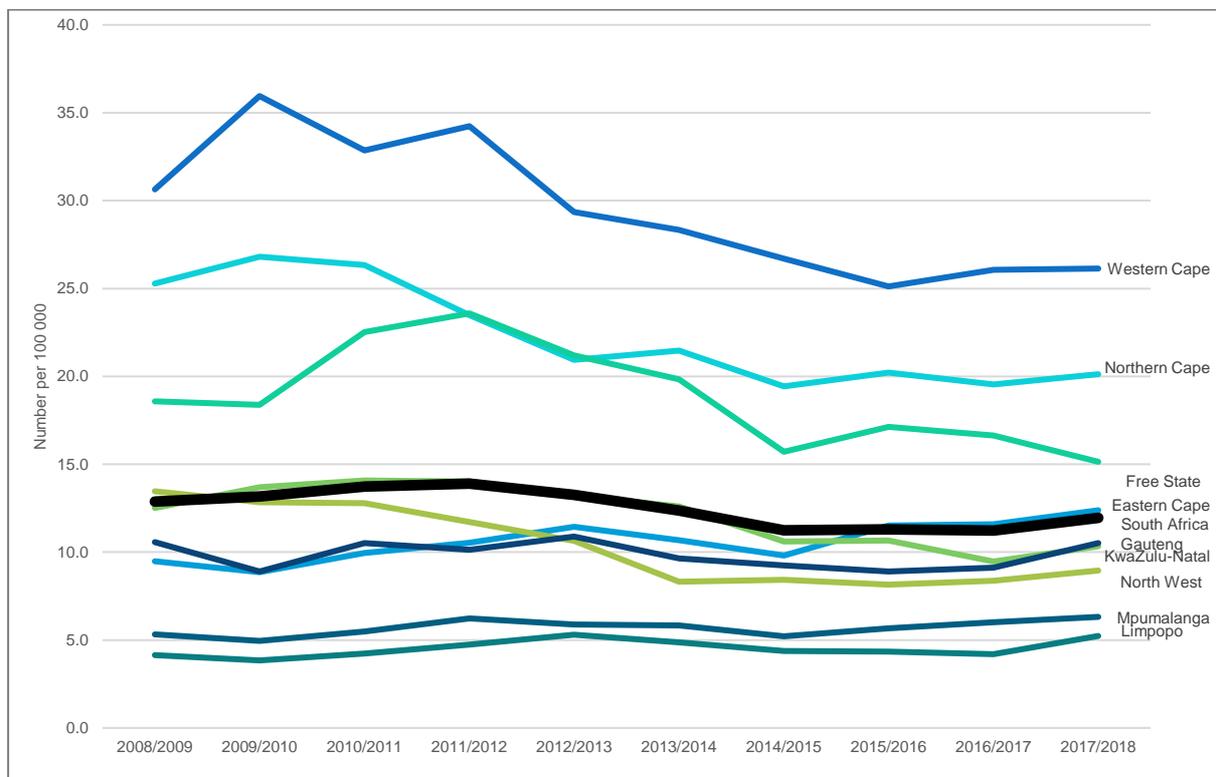


Figure 119: Incidence of sexual assault brought to the attention of the police, per 100 000 population
Data source: Crime Statistics 2008/2009–2017/2018, SAPS



Indicator 16.1.4D: Percentage of household heads who feel safe walking alone in the dark
Indicator 16.1.4.A: Percentage of household heads' perceptions on trends of crime

South Africa uses a domesticated indicator under this target, reflecting 'Percentage of household heads who feel safe walking alone in the dark' and have, further, supplied data for an additional indicator, 'Percentage of household heads' perceptions on trends of crime'.

The domesticated indicator is a variant of one of the most commonly used questions about fear of crime asked of individuals. It is said to capture 'formless' fears that address a vague threat to personal security, and can be distinguished from measures aimed at identifying 'concrete' fears that refer to a particular crime – such as a type of property crime or individual crime (Ferraro & Grange, 1987).

After a noticeable decline in confidence between 2014 and 2015, the confidence of household heads to walk alone at night has slightly recovered (Figure 120). Interestingly this coincided with a slight increase in the proportion of household heads who felt that levels of crime are rising, and a more significant reduction in the proportion who felt levels of crime are falling.

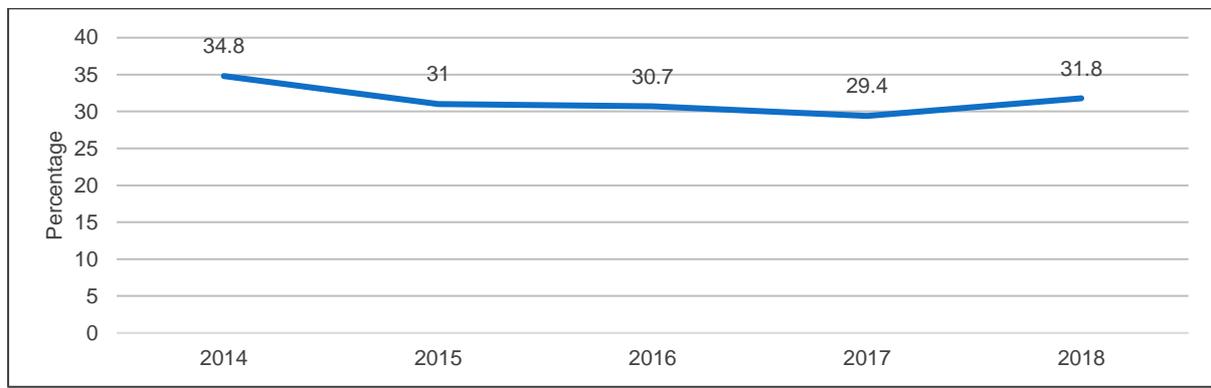


Figure 120: Proportion of household heads who feel safe walking alone in their area when it is dark
Data source: VOCS 2013/2014–2017/2018, Stats SA

The slight disconnect between respondents feeling safe to walk alone at night, and the perceptions that crime is increasing (Figure 121) could be explained by crime and violence being normalised. When crime and violence have been normalised in a community, it is unlikely that individuals would characterise their communities as unsafe regardless of the actual rate of violence (De Wet et al., 2018).

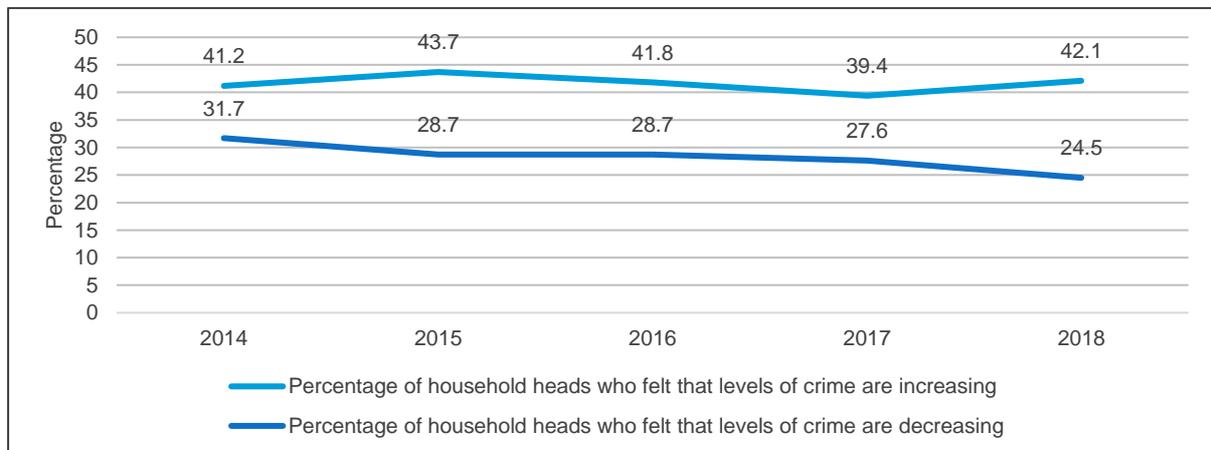
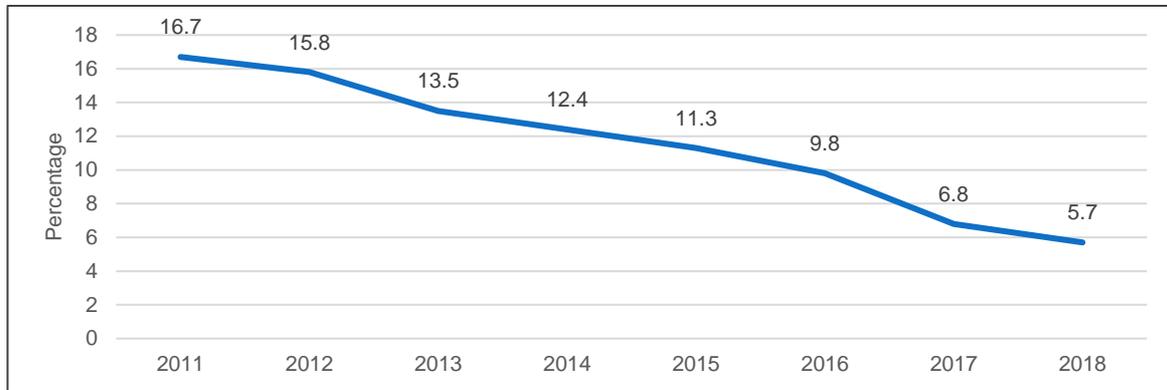


Figure 121: Proportion of household heads who feel crime is increasing and decreasing
Data source: VOCS 2013/2014–2017/2018, Stats SA

Indicator 16.2.1D: Proportion of children who experienced corporal punishment at school in the last twelve months

The data on corporal punishment at school shows a significant decline from 16.7% in 2011 to 5.7% in 2018 (Figure 122). Much of this decline can be ascribed to the development of policies and legislation aimed at eliminating violence against children at school and at home.



*Figure 122: Children who experienced corporal punishment at school
Data source: GHS 2011–2018, Stats SA*

Indicator 16.2.1A: Percentage of learners in grades 8–11 who had been threatened or injured by someone with a weapon on school property during the preceding six months

During 2011, 12% of learners in grades 8 to 11 were either threatened or injured by someone with a weapon on school property. The data on Table 42 shows a decline of 3.7 percentage points from 2008 to 2011.

Indicator	2002	2008	2011
	Percent (%)		
Percentage of learners in grades 8–11 who had been threatened or injured by someone with a weapon on school property during the preceding six months	14.9	15.7	12.0

Table 42: Data source: The South African Youth Risk Behaviour Survey 2002; 2008, South African Medical Research Council; The South African Youth Risk Behaviour Survey 2011, HSRC

Indicator 16.2.2D: Incidence of human trafficking for sexual purposes brought to police attention

Even though human trafficking for sexual purposes is difficult to measure statistically, administrative records based on reported crime kept by the SAPS provide some insights into what is happening in this regard. According to this source, the incidence of human trafficking has been stable at 0,02 per 100 000 persons in the population between 2013 and 2017. This declined to 0,01 victims per 100 000 individuals in 2018. Incidence of human trafficking for sexual purposes brought to police attention decreased significantly between 2014 and 2018 from 0.04 to 0.01 (see Table 43 below).

Indicator	2014	2015	2016	2017	2018
Incidence of human trafficking for sexual purposes brought to police attention (per 100 000 persons)	0.04	0.02	0.02	0.02	0.01

*Table 43: Incidence of human trafficking
Data source: Crime Statistics 2013/14–2015/16, SAPS*

Indicator 16.2.3D: Proportion of learners in grades 8–11 who self-reported to having ever been forced to have sex

The South African Youth Risk Behaviour Survey, conducted in 2002, 2008 and 2011 as depicted on Table 44 shows relatively consistent levels of reported victimisation (9,8%, 10% and 8,8% respectively).

Indicator	2002	2008	2011
Proportion of learners in grades 8–11 who self-reported to having ever been forced to have sex	0.098	0.100	0.088

Table 44: Data source: South African Youth Risk Behaviour Survey 2002; 2008, South African Medical Research Council; The South African Youth Risk Behaviour Survey 2011, HSRC

Indicator 16.3.1D: Proportion of victims of assault (aged over 16 years) who indicated having reported their victimization to the police

The proportion of assault victims who have reported their victimisation to the police shows a decline from 48.6% in 2016 to 47% in 2018 (Figure 123). This decline can be ascribed to numerous factors, including a decline in the trust in the police to adequately investigate and prosecute perpetrators of assault.

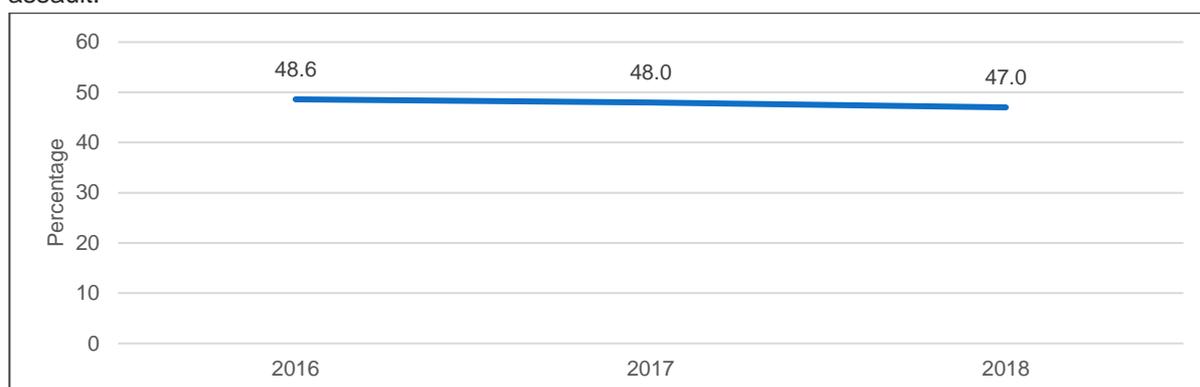


Figure 123: Victims of assault who have reported their victimisation to the police
Data source: VOCS 2015/2016–2017/2018, Stats SA

Indicator 16.3.2: Unsentenced detainees as a proportion of overall prison population
Indicator 16.3.2A: Proportion of unsentenced detainees remanded for longer than one year

Indicator 16.3.2 focuses on the efficiency of the justice system and specifically interrogates compliance with the principle that persons awaiting trial shall not be incarcerated in custody needlessly. ‘Sentenced’ refers to persons subject to criminal proceedings who have received a decision from a competent authority regarding their conviction or acquittal. For the purposes of the indicator, persons who have received a ‘non-final’ decision (such as where a conviction is subject to appeal) are considered to have been ‘sentenced’. Competent authorities in this case refer to officers of the law, a magistrate or judge (UNSTATS [Metadata-16.3.2]).

For the sake of international (and especially continental) comparison, it is important to highlight that ‘pre-trial detention’ in South Africa exclusively takes the form of remand detention in facilities managed by the DCS. Other than when individuals are awaiting their first appearance before a court (within 48 hours of arrest), SAPS does not detain individuals awaiting trial. Individuals remain ‘remand detainees’ even after trial and conviction, up until the point that they are sentenced.

In 2017/18, more than 42 700 people were detained in South African prisons without having been sentenced. After a gradual decline over the past ten years, this figure has increased in each of the previous two years (Figure 124).



Closely related to Indicator 16.3.2 is the additional Indicator 16.3.2A: Proportion of unsentenced detainees remanded for longer than one year. In line with a decline in the proportion of unsentenced detainees, the number of unsentenced detainees remanded for longer than a year has decreased from 13.5% of the prison population in 2015 to 11.7% in 2018.

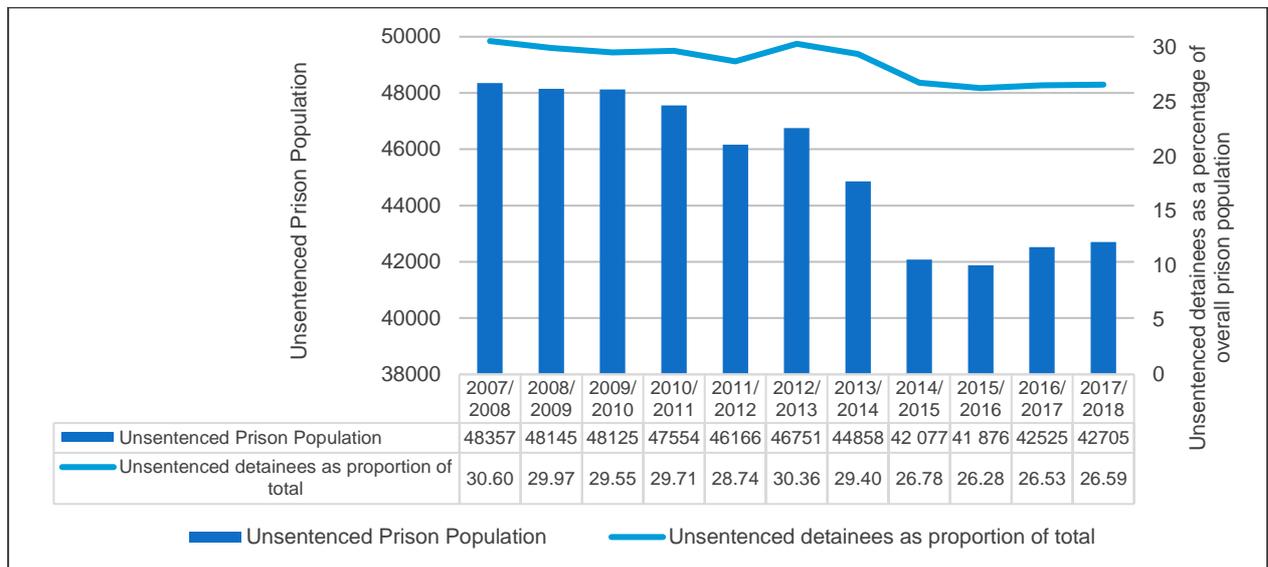


Figure 124: Unsentenced detainees as a proportion of the overall prison population
Data source: Annual Reports 2007/2008–2017/2018, DCS

Indicator 16.4.2D: Number of stolen/lost and illegal firearms recovered and inventoried prior to return or destruction

At a global level the indicator is geared toward measuring the extent to which seized weapons have been ‘traced’, that is the systematic tracking of weapons and, where possible, their parts and components, and ammunition, at the national and/or international level for the purpose of assisting the competent authorities of states in detecting, investigating and analysing illicit manufacturing and illicit trafficking.

The SAPS data shows a significant increase in the number of firearms recovered and inventoried – from 8 465 in 2016 to 18 592 in 2017 (Figure 125). Yet, it is not possible to infer from this data whether this is related to a greater perpetration of the offence or a greater capacity or inclination on the part of the police to detect it.

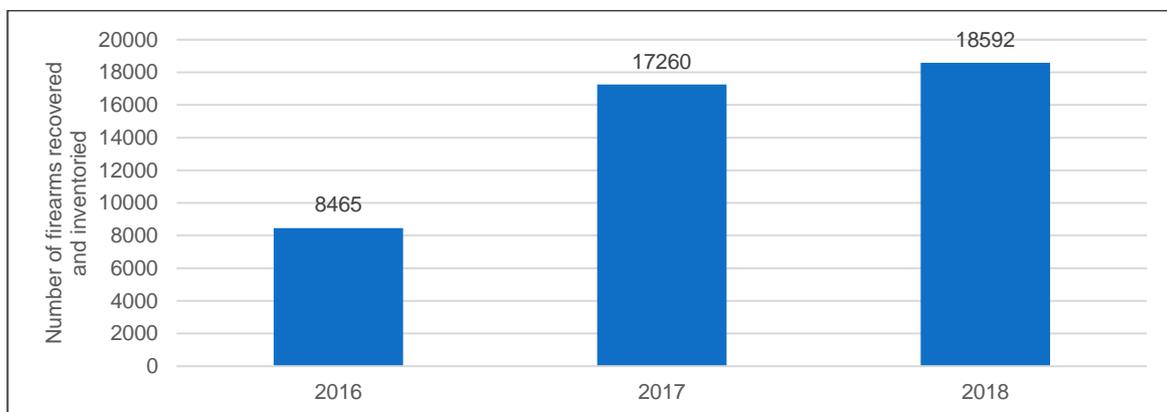


Figure 125: Number of firearms recovered and inventoried prior to return or destruction
Source: Annual Reports 2015/2016–2017/2018, SAPS



Indicator 16.5.1D: Proportion of population aged 16 and above who were asked for a bribe by a public official in the previous 12 months

The proportion of the population who reported having been asked for a bribe has increased significantly from 0.09% in 2016 to 0.31% in 2018 (Figure 126), after a gradual decline was reported between 2013 and 2015.

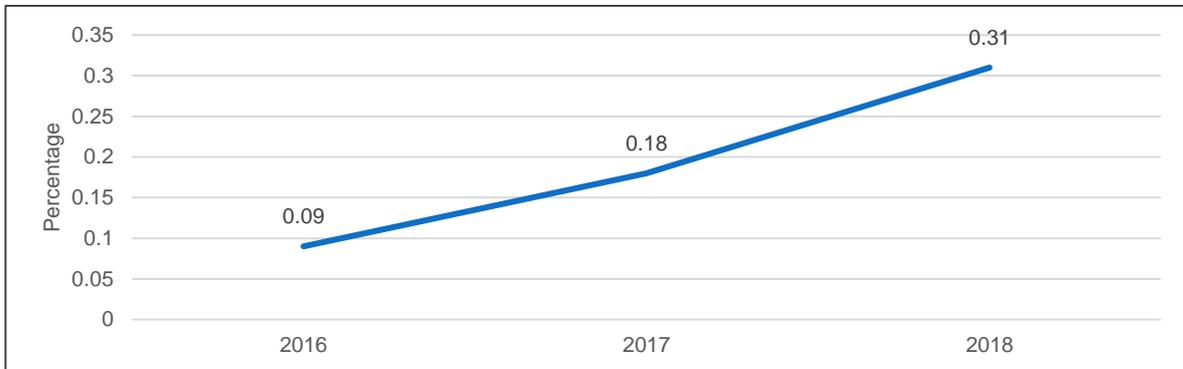


Figure 126: Proportion of the population who were asked for a bribe by a public official
Data source: VOCS 2015/2016–2017/2018, Stats SA

Indicator 16.7.1: Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions

According to the Office of the Chief Justice, the proportion of South African judges from African descent has increased from 40% in 2012 to 47% in 2017 (Figure 127). At the same time, the proportion of Indian and coloured judges has remained static at around 10%. Disaggregated data shows that the proportion of female judges for the same period has increased from 28% to 37%.

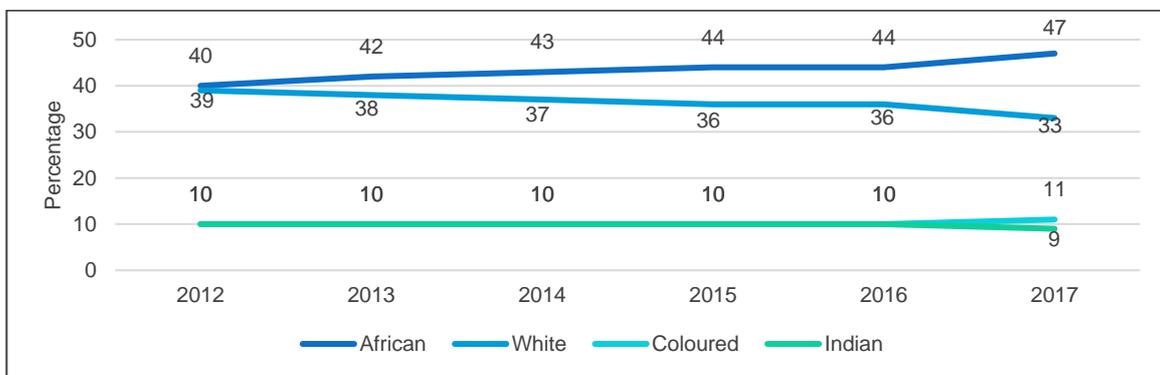


Figure 127: South African judges, by population group
Data source: Office of the Chief Justice, 2012–2017

Indicator 16.8.1D: Number of international organizations in which South Africa has membership and voting rights

According to the UN's charter, SDG 16.8.1D is based on a principle of sovereign equality of all its member states and assesses the extent to which member states are equally represented in various international organisations. South Africa has membership and voting rights in 8 out of 11 major international organisations. *This indicator is discussed in the section on SDG 10 as Indicator 10.6.1D.*



Indicator 16.9.1: Proportion of children under 5 years of age whose births have been registered with a civil authority, by age

Indicator 16.9.1A: Proportion of registered births that are being registered within one year of the birth

Indicator 16.9.1 is discussed in the section on SDG 17 as Indicator 17.19.2(b). With regard to the closely related Indicator 16.9.1A, Figure 128 shows a gradual increase in the number of births registered within one year of the birth – from 84.9% in 2013 to 92.9% in 2017.

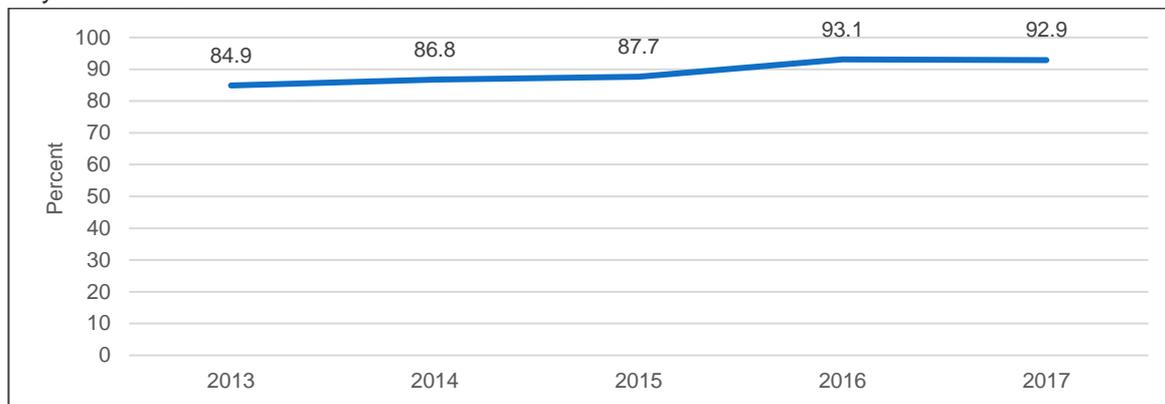


Figure 128: Proportion of registered births that are being registered within one year of the birth
Data source: Recorded Live Births 2013–2017, Stats SA (based on data from the Department of Home Affairs)

Indicator 16.10.2D: Number of constitutional, statutory and/or policy guarantees for public access to information that South Africa has adopted and implemented

South Africa developed a domesticated indicator under this target, namely ‘Number of constitutional, statutory and/or policy guarantees for public access to information that South Africa has adopted and implemented (16.10.2D)’. An example of such guarantee the Promotion of Access to Information Act (PAIA). PAIA, in particular section 83, should be read with the SAHRC’s protective mandate. This requires the SAHRC to provide assistance to individuals who are attempting to exercise their right of access to information through the use of PAIA.

Indicator 16.a.1: Existence of independent national human rights institutions in compliance with the Paris Principles

South Africa established the SAHRC, which enjoys an ‘A’-rated compliance level with the Paris Principles. The SAHRC was inaugurated in 1995 and established under the Human Rights Commission Act 54 of 1994, which was provided for by the Constitution of the Republic of South Africa Act 200 of 1993. In accordance with the Bill of Rights, adopted to heal the past divisions in the nation and to establish a democratic society based on human rights and social justice, the SAHRC’s mandate is outlined in section 184 of the Constitution. This states that the SAHRC must promote the respect for human rights and foster a culture of respect for human rights, promote the protection, development and attainment of human rights as well as monitor and assess the observance of human rights in South Africa.

4.5.3.3 Summary

South Africa's progress with regard to SDG 16's indicators with data is summarised in Table 45 below. South Africa is able to report on 15 SDG 16 indicators, of which four are Tier I or Tier II SDG indicators, and 11 are domesticated indicators. South Africa continues to experience high levels of violence. The murder rate has increased since the time the SDGs were adopted (16.1.1D). This is confirmed by the perception among household heads that crime is increasing (16.1.4A) and a decrease in the number of household heads who feel safe walking alone in the dark (16.1.4D). There does, however, seem to be a decrease in violent crimes perpetrated against women (16.1.3 (c)A1 and 16.1.3(c)A2).



SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Indicator	Key data points
16.1.1D: Number of murder victims per 100 000 population (domesticated indicator)	36.4 (2009), 31.4 (2011), 30.9 (2013), 32.9 (2015), 34.0 (2016), 34.1 (2017) 35.8 (2018) (unit: murders per 100 000)
16.1.3(a)D: Proportion of population aged 16 and above who experienced at least one incident of assault in the previous 12 months (domesticated indicator)	0.74% (2016), 0.71% (2017), 0.72% (2018)
16.1.3(a)A1: Proportion of households that experienced at least one case of home robbery (additional indicator)	1.1% (2016), 0.8% (2017), 0.8% (2018)
16.1.3(a)A2: Proportion of population aged 16 and above who experienced at least one case of robbery outside the home (additional indicator)	0.72% (2016), 0.71% (2017), 0.67% (2018)
16.1.3(c)A1: Incidence of rape brought to the attention of police per 100 000 population (additional indicator)	94 (2009), 90.0 (2012), 85.1 (2014), 75.5 (2016), 70.5 (2018) (unit: per 100 000)
16.1.3(c)A2: Incidence of sexual assault brought to the attention of police per 100 000 population (additional indicator)	12.9 (2009), 11.2 (2015), 11.2 (2016), 12 (2016) (unit: per 100 000)
16.1.4D: Percentage of household heads who feel safe walking alone in the dark (domesticated indicator)	34.8 (2014), 31.0 (2015), 30.7 (2016), 29.4 (2017), 31.8 (2018) (unit: percentage)
16.1.4A: Percentage of household heads' perceptions on trends of crime (additional indicator)	<i>Percentage of household heads that feel crime is increasing</i> 41.2% (2014), 43.7 (2015), 41.8% (2016), 39.4 (2017), 42.1% (2018)
16.2.1D: Proportion of children who experienced corporal punishment at school in the last twelve months (domesticated indicator)	16.7% (2011), 11.3% (2015), 5.7% (2018)
16.2.1A: Percentage of learners in grades 8–11 who had been threatened or injured by someone with a weapon on school property during the preceding six months	14.9 (2002), 15.7 (2008), 12.0 (2011)



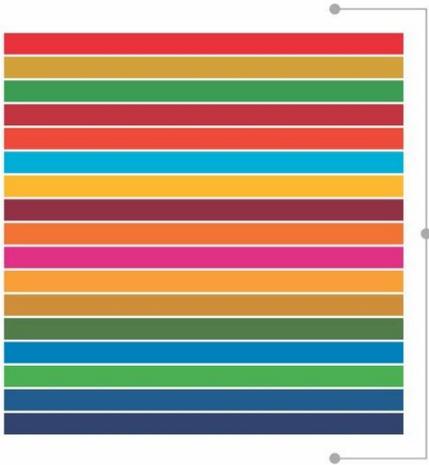
16.2.2D: Incidence of human trafficking for sexual purposes brought to police attention (domesticated and duplicate indicator)	0.02 (2013), 0.02 (2015), 0.02 (2016), 0.02 (2017), 0.01 (2018) (unit: incidence per 100 000)
16.2.3D: Proportion of learners in grades 8–11 who self-reported to having ever been forced to have sex	National 0.098 (2002), 0.100 (2008), 0.088 (2011)
	Male: 0.081 (2002), 0.119 (2008), 0.091 (2011)
	Female: 0.111 (2002), 0.082 (2008), 0.084 (2011)
16.3.1D: Proportion of victims of assault (aged over 16 years) who indicated having reported their victimisation to the police (domesticated indicator)	48.6% (2016), 48% (2017), 47% (2018)
16.3.2: Unsentenced detainees as a proportion of overall prison population	30.6% (2008), 30.36% (2013), 26.78% (2015), 26.28 (2016), 26.53% (2017), 26.59% (2018)
16.3.2A: Proportion of unsentenced detainees remanded for longer than one year (additional indicator)	13.5% (2015), 13.4% (2016), 13.7% (2017), 11.7% (2018)
16.4.2D: Number of stolen/lost and illegal firearms recovered and inventoried prior to return or destruction (domesticated indicator)	8 465 (2016), 17 260 (2017), 18 592 (2018) (unit: number of firearms)
16.5.1D: Proportion of population aged 16 and above who were asked for a bribe by a public official in the previous 12 months (domesticated indicator)	0.09% (2016), 0.18% (2017), 0.31% (2018)
16.7.1: Proportion of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions	<i>Female judges</i> 24% (2010), 34% (2015), 37% (2017) (unit: percentage of judges that belong to respective gender)
	<i>African judges</i> 39% (2010), 44% (2015), 47% (2017) (unit: percentage of judges that belong to respective population group)
	<i>Coloured judges</i> 10% (2010), 10% (2015), 11% (2017) (unit: percentage of judges that belong to respective population group)



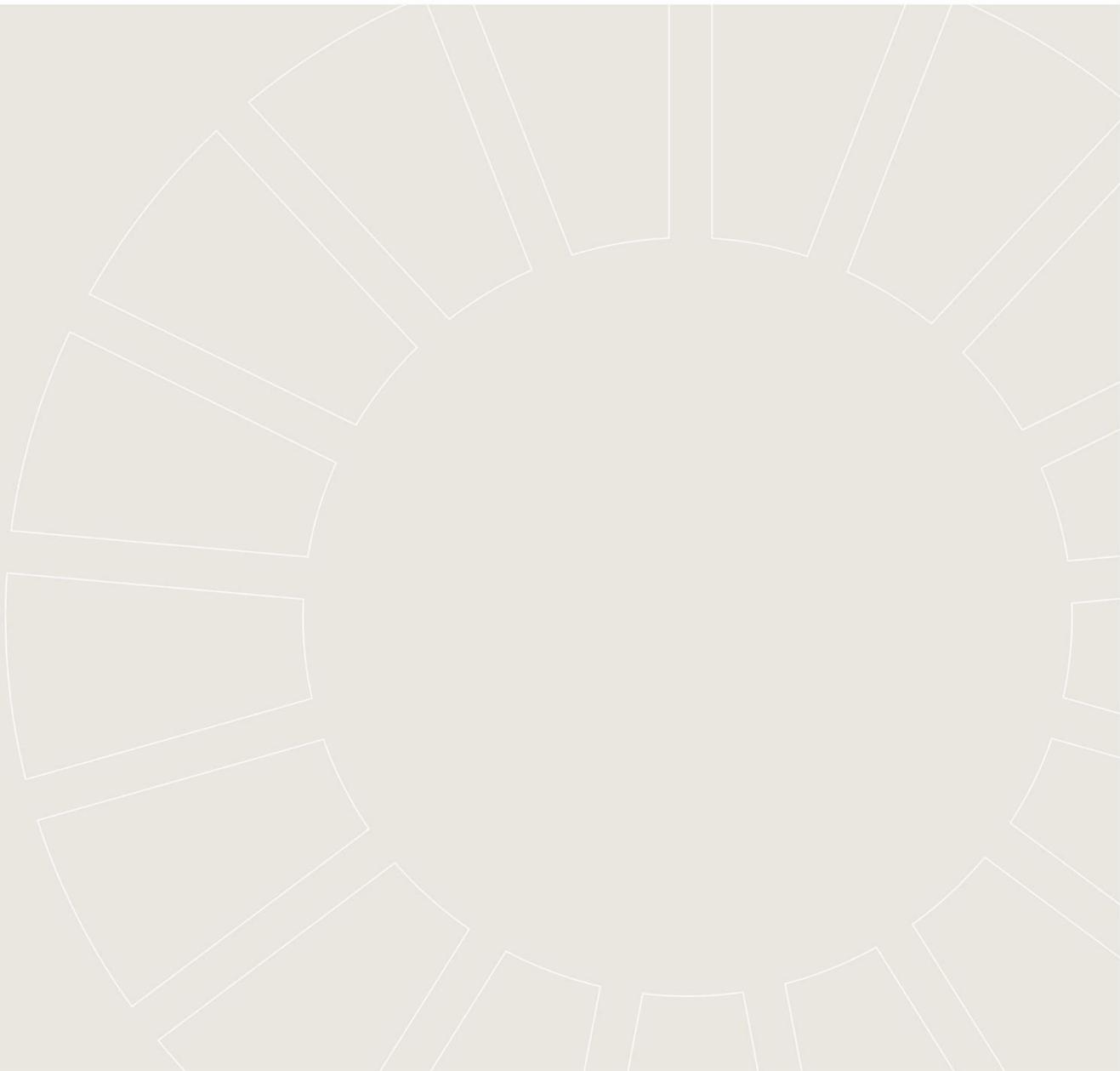
	<i>Indian judges</i> 9% (2010), 10% (2015), 9% (2017) (unit: percentage of judges that belong to respective population group)
16.8.1D: The number of international organisations in which South Africa has membership and voting rights (domesticated and duplicate indicator)	8/11
16.9.1: Proportion of children under 5 years of age whose births have been registered with a civil authority, by age (duplicate indicator)	<i>Total registered births</i> 84.6% (2011), 81.8% (2013), 80.6% (2014)
16.9.1A: Proportion of registered births that are being registered within one year of the birth (domesticated indicator)	84.9% (2013), 87.7% (2015), 92.9% (2017)
16.10.2D: Number of constitutional, statutory and/or policy guarantees for public access to information that South Africa has adopted and implemented (domesticated indicator)	Promotion of Access to Information Act, SAHRC
16.a.1: Existence of independent national human rights institutions in compliance with the Paris Principles	Yes

Table 45: SDG 16 indicator progress



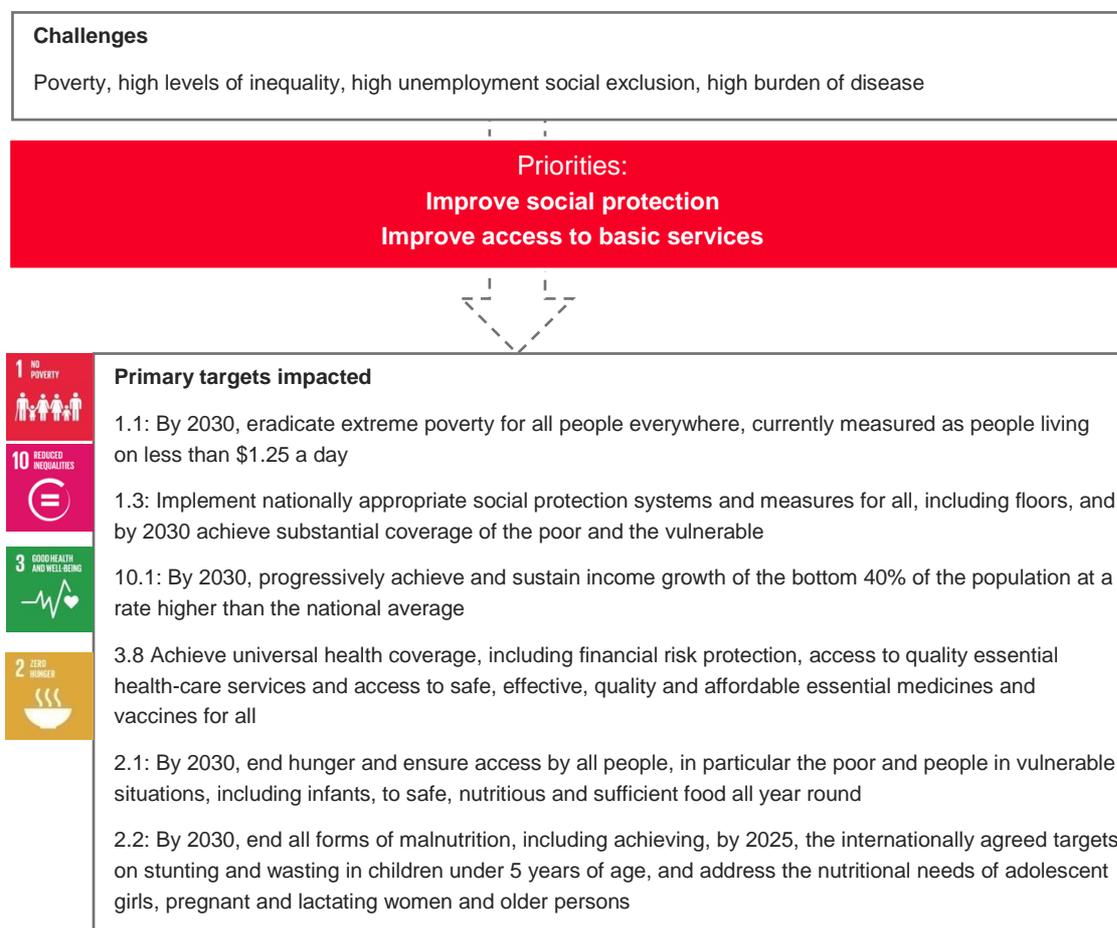


5. PRIORITIES



South Africa has made progress in realising the SDGs, but continues to face significant challenges. In order to accelerate its realisation of the SDGs, the following priorities are recommended. It should be noted that some priorities are cross-cutting, even though they are located in a specific cluster of SDGs.

5.1 Social goals



Improved social protection and broadened access to basic services will ensure that more South Africans live dignified lives. Social protection is one of the most recent, yet fastest-growing focus areas in social policy in low- and middle-income countries. Numerous countries in Africa have non-contributory social protection programmes targeting poor and vulnerable households and individuals. Evidence of the successful impacts of social protection programmes has encouraged a growing number of governments to develop, strengthen and allocate larger financial resources to social protection systems. Governments introduce social protection policies to meet social, economic and political objectives. These objectives include addressing poverty and inequality, the promotion of economic growth and social stability, and political legitimacy.

In South Africa, the expansion of social protection has been correlated with a decrease in poverty amongst its most vulnerable populations. This observation has been confirmed by studies by the World Bank that have found that social protection is successful in reducing extreme poverty (World Bank, 2016). In addition, grant income was found to be the main trigger precipitating poverty exit for 23% of the sample members between 2008 and 2015.

Social protection can become more impactful through better targeting, better coverage, universal coverage or increased amount of the grants. A study by Sinyolo and Sinyolo (2018), conducted in KwaZulu-Natal concluded that social grants have a short-term positive impact on poverty reduction and



further highlighted that social grants can be more beneficial if they are channelled towards more entrepreneurial activities and assist in reducing the so-called ‘dependency syndrome’.

South Africans’ *access to basic services* remains comparatively high. Building on existing policies and taking good practices to scale will go a long way in improving access to basic services. A number of government policies are aimed at improving household access to basic services. For instance, the Indigent Policy aims to improve the lives of indigents and improve access to free basic services. The policy includes the individuals who are currently excluded from accessing basic services by providing them with a social safety net (DPLG, 2012).

As indicated by DPLG (2012), the policy seeks to facilitate the reform of the systems of local government in order to ensure that the poor are also included in a way that guarantees them access to affordable basic services. The services, as stipulated in the Indigent Policy, include sufficient water, basic sanitation, refuse removal in denser settlements, environmental health, basic energy, health care, housing, and food and clothing.



Better access to high-quality ECD programmes will significantly improve the prospects of South Africans who are left furthest behind. An extensive body of evidence shows that ECD can be a powerful investment in the future, both socially and economically. Well-developed children do not only benefit their families, but their communities and the economy at large as they become productive adults who can contribute to a society’s economy for the present and future generations. Evidence further shows substantial improvements in the lifelong outcomes for beneficiaries of effective ECD interventions. These improvements come across a range of areas, notably school, employment, social welfare and criminal justice outcomes.

Investments in early childhood education and care have a number of synergies with SDG 2, SDG 5 and SDG 8. It not only contributes directly towards enhancing the school readiness of children (4.2), but also has the potential to improve children’s health and nutritional status (2.2). Once children are enrolled on ECD programmes, the time that women spend on unpaid care (5.4) will be reduced, enabling them



to increase their access to employment (8.5). Investment in early childhood development and care will also stimulate the creation of decent jobs in the social services sector (8.3). Depending on how the programmes are implemented, it can also increase agricultural productivity in countries with predominantly agrarian economies where women are the primary food producers.

Despite this strong evidence, and the universal endorsement of the importance of ECD, a major challenge for directing funding towards ECD interventions is the long-term nature of the benefits of such interventions. Intuitively, democratic governments are incentivised to invest in benefits that are realised earlier, are more immediately visible or even just benefit current voters more directly. Consequently, the ECD sector in South Africa has suffered from low levels of investment, resulting in foregone benefits.

A positive sign is President Ramaphosa’s commitment, in the recent State of the Nation Address, that a process has been initiated to ensure that the first two years before Grade 1 are compulsory. The revised ECD programme will be implemented over the next six years starting with schools located in previously disadvantaged communities, mostly in poor, rural and farming areas.

Challenges
Lack of relevance and quality in certain post-school training programmes, imperatives of the Fourth Industrial Revolution, low levels of innovation and entrepreneurship

Priority:
Promote higher quality and industry-relevant education and training

Primary targets impacted

-  4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
-  9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry’s share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
-  8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

Better and more relevant post-school education and training will both address South African innovation and entrepreneurship deficits and will prepare its workforce for the requirements of the 4IR. South Africa has long struggled to cultivate Science, Technology, Engineering and Mathematics (STEM) skills, which are becoming more pertinent at the dawn of the 4IR. The current structure of the economy requires a new set of skills, which needs to be incorporated into our educational system.

The government is currently implementing free tertiary education programmes for qualifying first-year students. While this is commendable, the relevant departments need to strike a balance between quantity of learners and quality, especially in the science subjects. If the quality of secondary school education is right, this may go a long way in addressing challenges associated with innovation and entrepreneurship. The Presidential Commission on the 4IR provides an opportunity for marginalised groups to take advantage of the 4IR to support the growth and development of entrepreneurship and SMMEs. SMMEs have the potential to create sustainable jobs and alleviate poverty among low-income households. Thus, there is need to expedite the activities of the Commission as the country prepares to ride on the 4IR wave.



Challenges

Unequal burden of unpaid care and domestic work, gender inequalities in higher-paid positions, untapped potential of women's potential

Priority:

Address the unequal share of unpaid care and domestic work



Primary targets impacted

5.5: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life



5.4: Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate

10.3: Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard

South African women still carry an unequal burden of unpaid care and domestic work. This unequal burden exacerbates the under-representation of women in higher-paid positions. Data has shown that although women have had increased economic opportunities since 1994, they remain primarily responsible for unpaid domestic and care work.

As it stands, women spend a disproportionate amount of time on both unpaid domestic and care work relative to men. As a result, the achievement of Target 5.4 by South Africa does not seem possible at this point. It should be noted, however, that the most recent data for this indicator is from 2010. Given that the data is relatively old, there may have been an improvement in this level over the last nine years. However, considering the trend between 2000 and 2010, the realisation of an equal share of unpaid domestic and care work between 2010 and 2019 does not seem likely.

South Africa has developed a number of policies that intend to remove the barriers to the labour market that women have to overcome, such as the provision of childcare and eldercare services, and providing for parental leave and flexible time for parents. The factors that affect unpaid domestic and care work are also intrinsically linked to income status, as higher-income households are able to afford paid domestic and care work, which greatly reduces the amount of time spent on either by members of a household. Therefore, while there have been policies put in place which indirectly affect the amount of time spent on unpaid domestic and care work, the progress on Target 5.4 is heavily dependent on the progress of SDG 1: 'End poverty in all its forms everywhere'.

A further aspect related to improving the share of unpaid domestic and care work is the transformation of societal and traditional norms that had been put in place during the apartheid era. While there has been progress in terms of equal access to economic opportunities, the perpetuation of patriarchal attitudes have relegated women to the role main care providers. In order to transform these norms that have been instilled over decades, South Africa needs to focus on establishing programmes which emphasise the transformation of the attitudes of men with respect to women's roles in the household.

The percentage of time spent on unpaid care work by women seems to be steadily decreasing. However, data is available for only two years – 2000 and 2010 – and therefore no conclusive assessment may be based on this. In order to make an accurate assessment on the trend of unpaid



care work, more frequent and recent data is required. What has remained constant, however, is the proportion of time spent on unpaid care work by women relative to that of men: women spend approximately seven times more time on unpaid care work than men do. Again, more focus will be needed to transform the mindset that establishes certain gender roles for women, such as their role as primary care-givers.

Therefore, the following interventions could be considered:

- Establish a methodology to value the unpaid work of women, as the invisibility of the value of this work perpetuates its frequency (Ngomane, 2016)
- Increased frequency of reporting on the proportion of unpaid care and domestic work to effectively monitor South Africa’s progress in achieving Target 5.4
- Provision of community care services that may alleviate some of the responsibility placed on women (Hunter, 2010)
- Increased awareness on the societal norms that place women in a subordinated position (Ngomane, 2016).

Challenges
 Unequal access to quality health care, need for improved performance on key health care indicators

Priority:
Promote innovative and sustainable health financing

Primary targets impacted




3.c: Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing states

3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all

1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day

One of the recognised ways for making progress towards reaching the SDG 3 targets involves improving the various aspects of health financing – resource generation and mobilisation, allocation, and expenditure. In the South African context, there is a need to institute measures to support accelerated fiscal and financial management reforms at various levels of the health system to enable allocative efficiency. South Africa’s fiscal federal system means that constitutionally the provinces have a great deal of discretion in the way that they allocate the Equitable Share (ES) portion they receive from National Treasury.

The ES formula used to allocate funds for various government programmes, including health, has been in place for some time, but has not kept up with the health needs resulting from epidemiological and demographic changes. Health has to compete with other priorities of provinces. While the health service can and must improve the value obtained from its current allocation, funds allocated for health services are inadequate to meet aspirations. In order to improve the quality of health services, introduce and



escalate focused interventions for improving health outcomes; to accelerate progress in reaching the SDG targets, additional funding must be allocated to the health sector.

Improvements in allocation and utilisation of funds, and stamping out corruption, requires strengthening of health financing mechanisms and decisive implementation of the Public Finance Management Act (PFMA) at provincial, district and facility level. Allocative efficiency of funds to particular programmes and interventions to improve quality of services is vital in improving indicators relevant to the health targets. Better leveraging of donor funding in the health system can also play a vital role in the improvement of specific health programmes, but can also be used to strengthen the overall health system.

The opportunity must be leveraged to encourage research, collaboration and joint learning on health financing models by engaging with the private sector, multilateral organisations and NGOs that have expertise in financing.

<p>Challenges</p> <p>Unequal access to quality health care, frontline infrastructure challenges, shortage of medical equipment and medicine</p>

Priority:
Improve frontline health care services

 	<p>Primary targets impacted</p> <p>3.c: Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing states</p> <p>3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all</p> <p>1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day</p>
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Primary Health Care (PHC) services are key to the attainment of the goal of Universal Health Coverage (UHC). South Africa has also identified PHC as an anchor to its UHC programme through the National Health Insurance (NHI). It is estimated that strengthening ‘frontline’ PHC services could potentially prevent many deaths among women and children.

Strengthening PHC services includes addressing challenges with infrastructure; shortage of medical equipment, pharmaceutical drugs, vaccines and supplies; inadequate human resources for health care; and improving the information management system. The early results from the Ideal Clinic programme are encouraging in this regard, but more is needed. Systematic and targeted efforts to address these challenges will result in improved access and quality of health services with resultant improvement in health outcomes.

Health financing is required that will include funds directed towards interventions and services that are cost effective and produce the most impact. South Africa could direct resources towards training health workers with appropriate skills to address its health challenges.

In order to realise improved frontline health-care services, the country should take bold steps in the reconfiguration of the health-care delivery landscape. There is a need to add integration of health system between public and private section, as well as cost containment in private sector. The



reconfiguration could include decentralisation of authority within a strengthened District Health System. The decentralisation should include improving health-care delivery infrastructure; improving supply chain management processes and frameworks for medical equipment, pharmaceutical drugs, vaccines and supplies; and strengthening human resources for health and information management systems.

<p>Challenges</p> <p>Unequal access to quality health care, need for improved performance on key health care indicators</p>

Priority:
Prioritise social determinants of health

 	<p>Primary targets impacted</p> <p>3.c: Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing states</p> <p>3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all</p> <p>1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day</p>
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Health is impacted upon by factors that lie outside the health system such as housing, water and sanitation, energy, poverty, food security, employment, education, low levels of physical activity and environmental factors such as water, sanitation and energy. These are referred to as the social determinants of health (SDH). South Africa’s ability to attain the health SDG targets is dependent upon addressing the SDH, which can be achieved through a coordinated multi-sectoral response.

The NDP offers the basis for the SDH actions needed. The SDH are cross-cutting and require collaborations with stakeholders outside the health system. South Africa has come up with important legislative, policy and regulatory interventions to address unhealthy behaviours such as smoking and excessive sugar, salt and alcohol intake. These interventions, such as the Tobacco and Related Products Control Act, the Salt Regulations, and the recently implemented Sugar Sweetened Beverages (SSB) Tax need to be strengthened as a way of addressing the burden of non-communicable diseases. This includes tackling saturated fats and refined carbohydrates in diets.



Challenges
Legislative gaps with regard to the empowerment of women, the continued exclusion of women

Priority:
Correct gaps in legislation and policy which address discrimination



Primary targets impacted

5.1: End all forms of discrimination against all women and girls everywhere
5.2: Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation

5.5: Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

Despite progress since 1994, South Africa has not yet eliminated all forms of discrimination against women. South Africa has provided a substantial basis for achieving Target 5.1 through the development of legal frameworks that promote, enforce and monitor equality and non-discrimination on the basis of sex. However, South Africa could further improve its efforts by developing legislation that addresses the gaps identified in other targets, such as the Women’s Empowerment and Equality Bill, which has specific provisions that pertain to the meeting of South Africa’s regional and international commitments and the achievement of Target 5.1.

The Constitution, which prohibits discrimination on various grounds, including sex, gender, marital status and other areas that affect women and girls, provides a solid basis for such an endeavour. Further notable laws that prohibit discrimination include the Promotion of Equity and Prevention of Unfair Discrimination Act, the Employment Equity Act, the Labour Relations Act, the Basic Conditions of Employment Act, as well as many other acts and policies that are addressed in the other targets.

Considering the above, a rigorous review of existing legislation to identify gaps and weaknesses that will inform the amendment of such legislation in line with the achievement of the targets set out by SDG 5 could be considered. This could include the following:

- Amending legislation to mandate quotas for women representation in the national parliament and on political party candidate lists;
- Developing means to enforce quotas regarding women’s representation in the national parliament and on political party candidate lists;
- Amending legislation to explicitly criminalise marital rape and rape on the basis of lack of consent;
- Amending legislation to ensure equal remuneration for work of equal value; and
- Removal of exceptions for marriage under the age of 18.

5.2 Economic goals

Challenge

Institutional weakness, declining trust in government, perceived lack of leadership

Priority:

Promote effective governance, robust leadership and participative citizenry



Primary targets impacted

- 8.1: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 16.6: Develop effective, accountable and transparent institutions at all levels
- 16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels

Fundamental to the achievement of inclusive and sustainable economic development is an effective government, capable of delivering the necessary infrastructure, and providing the necessary services and coordination. This will go a long way towards rebuilding a perceived decline in trust in government.

The NDP recognises that reform is required within the public services sector and emphasised the importance of government intervention with regard to the enhancement of economic and social structures. Central to the reform required, as noted by the authors of the NDP, is the active participation and support of the country's citizens, as well as collaboration between the private and public sectors.

This notion is confirmed by Glasbergen (2011), who described partnerships between the private sector, government and civil society as a practice in which these stakeholders work supportively towards a reformed administrative system, while constructing collective social relationships towards more sustainable and inclusive managerial practices. Accordingly, these partnerships are seen as catalysts towards producing positive societal reforms, with the inherent multiple viewpoints assumed, contributing to an enhanced shared vision to allow for the recognition of mutual challenges and potential synergies (Broman & Robert, 2015).

Related to this is the three-dimensional approach advocated by Kurucz, Colbert, Lüdeke-Freund, Upward and Willard (2017), described as 'transdisciplinary approaches' that include (a) a multi-sector approach, encompassing the public sector, business and members of society; (b) a multi-level approach which includes both national and international considerations; and (c) a multi-disciplinary approach which involves the incorporation of scientific knowledge into social practices and understandings.

In addition to the suggested collaborative effort among multiple stakeholders is the requirement to enhance transformational and robust leadership (NPC, 2012), which prioritises the long-term interests of all in a sustainable manner. The fundamental challenge, however, is designated as the ability of leadership to enable alignment between the various role players with the aim of identifying and addressing challenges, leveraging synergies and ultimately building towards realising a collective vision.



Challenges
 Inadequate foreign investment, low economic growth, perceived policy uncertainty

Priority:
Build an effective policy environment



Primary targets impacted

- 8.1: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 16.6: Develop effective, accountable and transparent institutions at all levels
- 16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels

South Africa’s continued low rate of economic growth is severely impacting on its ability to improve the lives of its most vulnerable people. Perceived policy uncertainty and the lack of policy coordination are hampering government’s ability to delivery effectively as well as contributing to lower than required levels of foreign investment.

Ideally, the system of government should be evidence-based and rigorous, with continuous learning-by-doing through monitoring and evaluation, and with national departments endowed with rich sets of technical skills. Where policy goals require action by several components of government, it should also be possible to coordinate interventions. While section 41(1)(h) of South Africa’s Constitution requires all spheres of government to ‘co-operate with one another in mutual trust and good faith’, in practice this has often not been the case.

Policy coordination issues have been particularly intractable. In part this is attributable to the three spheres of responsibility set out by the Constitution, which devolves many powers to the provincial and municipal level, empowering these stakeholders to forge their own path if they so choose. However, there have also been issues with policy coordination at national level.

South Africa arguably had stronger implementation mechanisms for national policy in the past. In the period 1994–1996 the implementation of the Reconstruction and Development Programme (RDP) was meant to be championed by Jay Naidoo as Minister without Portfolio. While this initiative was largely unsuccessful, in later years National Treasury was able to actively champion the adoption of the Growth, Employment and Redistribution (GEAR) policy, which replaced the RDP. With control over funding mechanisms, National Treasury had much more ability to constrain departmental actions and effectively coordinate policy than the Minister without Portfolio had been able to. However, Treasury’s coordinating role was reduced with the introduction of AsgiSA.

The lack of a strong central coordination function has been problematic – not just because it has resulted in policy being formed in departmental silos, but also because of the effect it has had on attempts to implement government-wide initiatives to improve the quality of policy formation. For example, an attempted implementation of a regulatory impact assessment system, designed to ensure that the evidence base had been thoroughly examined during the policy formation process, ran into problems partly because there was no central agency responsible for checking the quality of analysis, and with the power to block legislation if the work had not been done properly. The DPME now plays the quality assurance role for the revised socio-economic impact assessment system (SEIAS), but still has limited power to send policy and legislation back for further analysis.



Setting up a first-class economic infrastructure system, encouraging innovation and spurring industrialisation all require substantial levels of interdepartmental cooperation, in order to create an enabling environment for growth, regulate natural monopolies that may be present, and balance economic and social policy objectives which may display marked trade-offs. To date, the structure of South African national government has struggled with coordination, which has had marked effects on the quality of economic policy outputs.

An effective policy environment is not only essential to conduct business operations, but also adds value to communities from a social perspective. According to the NPC (2012), these policies aim to assist individuals to engage in meaningful activities, generate income and accrue an asset base. Furthermore, the South African regulatory environment may enable improved healthcare delivery by means of strengthened regulatory controls and quality control mechanisms to address the high mortality rates among both infants and adults. A policy environment that promotes effective health institutions is regarded as a catalyst to advance economic performance by means of more advantageous human capital investments, augmented population growth and greater labour force productivity (Strittmatter & Sunde, 2013).

Challenges
 Low levels of economic growth, high levels of unemployment, comparatively low levels of ease of doing business, comparatively low levels of innovation and entrepreneurship

Priority:
Encourage innovation and entrepreneurship



Primary targets impacted

- 8.1: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry’s share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
- 9.b: Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities

Home-grown innovators and entrepreneurs have the potential to spur inclusive economic growth. Technological disruption, unstable economies and demographic fluctuations created both unique opportunities and pressures. Innovative forms of entrepreneurship have the potential to harness these realities as opportunities and catalyse economic activity. This notion was endorsed by Bjørnskov and Foss (2016), who regarded entrepreneurship as embedded in economic prosperity – apparent in its noteworthy contribution to resource distribution, economic progress and social transformation. Accordingly, entrepreneurs are known as key actors in creating employment opportunities and stimulating per capita income growth (Du & O’Connor, 2018).

Innovation is regarded as a critical antecedent to entrepreneurial development. The ground-breaking work of Schumpeter (1934) emphasises the notion of new combinations or innovations – creating a disequilibrium in the market and thus resulting in economic advancement. Innovation, according to Damanpour (1992) is regarded as an item or element that is original to the espousing firm, whereas Schumpeter (1942) considered innovation as a practice of ‘creative destruction’ – with innovative

practices suggested to be inseparable from entrepreneurship and, as such, he regarded innovation and entrepreneurship to be ‘two sides of the same coin’.

Opportunity-driven entrepreneurs are at the forefront of this movement, with a favourable entrepreneurial ecosystem facilitating stable or increased entrepreneurial activity. It was, however, established that innovation-driven economies exhibited the most efficient and robust ecosystems, compared to those of both factor- and efficiency-driven economies, with the latter found to encompass several conditions considered to hinder entrepreneurial advance.

Challenges

Inadequate investment, low economic growth, perceived policy uncertainty

Priority:

Increase local and international investment



Primary targets impacted

- 8.1: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 8.10: Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all
- 17.11: Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020

South Africa needs higher levels of investment to address its inadequate economic growth. South Africa's GDP is predominantly driven by consumption and government spending rather than continued investment expenditure, which is regarded to be fundamental to employment creation and sustained economic growth (Investec, 2016). The NPC (2012) acknowledged the country's low savings rate, its dependence on external capital flows and consequently the elevated risk for the domestic economy. The lack of savings within the country was documented by Odhiambo (2009), who recommended that domestic policies should be focused on greater savings and economic advances in the short term. However, he suggested that in the long run South African policies should be geared towards the attainment of amplified economic progress in order to increase national savings and maintain a balanced influx of international investment.

The benefits of investment-led economies are noted internationally, especially in Asia, which has demonstrated that increased savings typically lead to reduced unemployment, augmented economic development and a lesser degree of cyclical economic instability. In accordance with this, the benefits of a savings-driven economy may be summarised as follows (Le Roux, 2010):

- Households will be better enabled to cover unforeseen expenditures and will have a greater ability to independently fund expenses during retirement, rather than being dependent on state funds;
- Sufficient savings will enable the private sector to fund replacement or further investment initiatives, enabling greater firm efficiency, increased growth and more employment opportunities;
- Savings will enable the South African government to invest in both social (e.g. low-cost housing, hospitals and schools) and physical infrastructures such as transportation, electricity and water networks.



Additionally, household, company and governmental savings are regarded to be intertwined, as deficient savings from a household perspective will mean lack of the financial means to support individuals, which in turn may increase the state’s obligation to provide social services rather than utilising funds for much needed infrastructure expenditure. It may be argued that government could potentially increase tax rates to compensate for the mentioned shortfall, but this in turn increases the burden on individuals, further delimiting a savings culture. On the other hand, should the taxation burden fall on the private sector, an adverse effect on company profits will be realised, with a reduced ability to invest further. In essence, deficient savings will mean lack of financial means for households as well as undersupplied social and physical infrastructure, necessary to fuel economic growth and extend employment opportunities.

Challenges
Absence of efficiency of network regulation authorities in key industries, inefficiencies in the government-led production and distribution of public goods

Priority:
Implement high-quality economic regulation of network industries



Primary targets impacted

9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

7.3: By 2030, double the global rate of improvement in energy efficiency

1.4: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

South Africa needs to improve its economic regulation of network industries. A big part of good regulatory design is independence, from both industry and political pressure. A large body of academic research highlights the importance of designing regulators well so that they can withstand these pressures. Care needs to be taken to ensure, for example, that the regulator’s funding sources are sufficiently independent, that they have the ability to hire the right kind of technical staff, that decisions cannot be easily overturned, that there is little or no exchange of staff between operators and regulators.

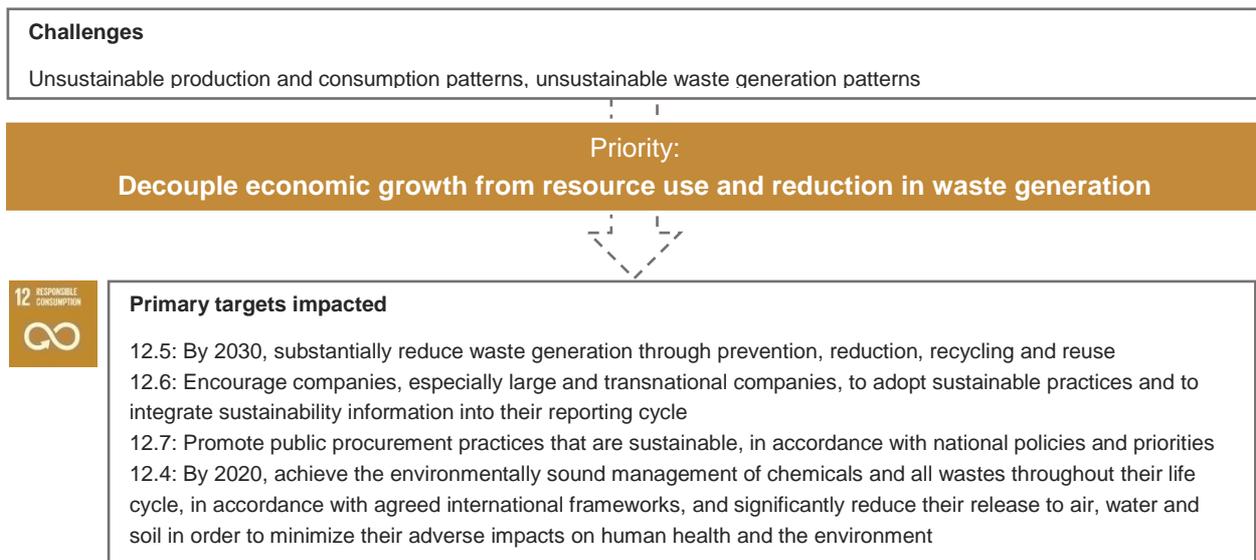
It should be noted, however, that instituting new regulatory frameworks and institutions, or improving existing frameworks and institutions, is a complex and highly contested political task. The stakes are extremely high on all sides: if the operators evade the regulator, they can make large amounts of money from the monopoly, while populist politicians may try to pressure the regulator to set prices unsustainably low to deliver vote-winning services. From the point of view of economic efficiency, however, it is important for the regulator to be technically skilled and precise, and set regulatory prices that are as close as possible to a competitively-equivalent outcome, so that monopoly profits are constrained while the incentive to invest remains intact.

There is some evidence that existing South African economic regulators have struggled to fulfil their role, and thus that improvements to the regulatory framework are needed. For example, the Ports Regulator at present only regulates the landlord function at Transnet, but has no ability to monitor prices in the rest of the vertically integrated entity. It is unsurprising that there are now allegations that prices in the rest of the ports value chain are increasing to counterbalance lower profits at the ports landlord. In ICT, it is worrying to see the policy department stopping the regulator to prevent it from acting – and



an in-depth diagnostic of the problems with the design of ICASA is warranted, as issues include its financing model, its internal governance structure and its appeals system. Furthermore, stop-gap measures like returning spectrum management functions to the DTSP are unlikely to resolve the wider issues. In electricity, while Nersa has been able to constrain the rate of electricity price increases from Eskom, it was not able to ward off the poor design decisions in generating plant investments, which arguably led to cost escalations. Better price controls might have been possible if the regulatory framework was better designed.

The investment decisions made by network industries are often extremely weighty, and can create a debt burden sufficient to threaten the national credit rating. At the same time, the efficiency of these sectors plays a large role in determining the cost of business. An evidence-based overhaul of existing regulatory structures would go some way towards improving outcomes in these sectors.



The South African government’s priorities regarding SCP are outlined in the NDP, IPAP, National Waste Management Strategy (NWMS), and Chemicals and Waste Phakisa. The effective implementation of these priorities, policies and programmes will make a significant contribution towards decoupling economic growth and resources use.

NDP priorities related to reaching this ambitious goal are the following:

Outcome 10.1 – ecosystems are sustained and natural resources are used efficiently

This will require emphasis on the following:

- implementing strategies for water conservation and demand management;
- implementing environmental regulations to mitigate negative environmental impacts in exploitation of mineral resources; and
- integrated environmental assessments for major infrastructure and provision of incentives for green economic activities.

Outcome 10.2 – an effective climate change mitigation and adaptation response

Emphasis should be placed on:

- strategic policy/regulatory programmes to promote a low carbon economy; and
- monitoring, reporting and verifying greenhouse gas emissions.



Outcome 10.3 – An environmentally sustainable, low-carbon economy resulting from a well-managed just transition

In this regard, focus areas are the following:

- promote a just transition to an environmentally sustainable economy;
- progressively develop, compile, and transparently and accessibly report on a set of sustainable development indicators and underlying natural resources and pollution/emission indicators;
- enhanced environmental education; empowerment and job creation (including skills development);
- implementation of the environment sector skills plan to address capacity requirements (gaps); and
- increase investment in research, development and innovation to support the transition to a green economy.

Outcome 10.4 – Enhanced governance systems and capacity

The following actions should be prioritised:

- enhance compliance monitoring and enforcement capacity within the sector;
- enhance global cooperation as it relates to chemicals and waste management and sustainable development;
- less waste that is better managed; and
- impacts of chemicals better managed.

Outcome 10.5 – Sustainable human communities

Key focus areas are:

- expand use of renewable energy through off-grid electrification; and
- local government support and engagement.

IPAP priorities include the procurement of locally manufactured products/commodities to support industrial development (SDG 12.7), resolving the energy challenge (SDG 12.2 and 12.C) and supporting green industries (SDG 12A).

The priorities in the NWMS specifically relate to Indicator 12.5.1, that is, to reduce waste generation through prevention, reduction, recycling and reuse. Increasing recycling rates in South Africa requires interventions on both the supply and demand sides of the recycling value chain; that is, interventions aimed at both securing an economically viable supply of recyclable materials, and at ensuring demand for recycled materials (the dti, 2014).

South Africa's position as co-lead for the sustainable food systems programme under the 10YFP, confirms that Target 12.3 (by 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses) is a priority for South Africa.

5.3 Environmental goals

Challenges

Transitioning to a low-carbon economy, honouring international climate change commitments

Priority:

Continue to strengthen the national climate change response environment



Primary targets impacted

- 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- 13.2: Integrate climate change measures into national policies, strategies and planning
- 13.b: Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing states, including focusing on women, youth and local and marginalized communities

Climate change poses significant challenges to South Africa's development trajectory. Strengthening the national climate change-response environment is central to South Africa's transition to a low-carbon economy. A strengthened national climate change response environment builds on South Africa's National Climate Change Response Policy (NCCRP), which called for the establishment of a National Climate Change Response Monitoring and Evaluation (M&E) System, which would 'evolve with international measuring, reporting and verification (MRV) requirements'. South Africa's Climate Change Response M&E Framework, published in 2015, explicitly includes evaluation, as basis for the analysis of the impact of mitigation and adaptation measures, while the monitoring component of South Africa's Climate Change Response M&E System encompasses MRV aspects. The M&E System enables the country to assess, analyse and understand progress made in achieving its climate change commitments and actions, thus tracking the transition to a climate-resilient and lower-carbon society.

South Africa's climate change response M&E System seeks to integrate the analysis of all aspects of climate change MRV at multiple scales and, also incorporates a national system for the compilation of GHG inventories; making the climate change response M&E System the national central depository and portal for climate change information in South Africa. A phased approach to the roll-out of the National Climate Change M&E System has been taken over the following four phases, with full implementation of this system envisaged in 2020 (DEA, 2019c):

- Phase 1 (2013–2016): System setting-up
- Phase 2 (2017–2018): Operationalisation
- Phase 3 (2019–2020): System refinement
- Phase 4: (2021–2025): Automation

A further element of a strengthened national climate-change response environment is effective disaster risk management plans. A number of factors are key to effective disaster risk management plans:

- Capacity building and awareness raising of stakeholders;
- More effective integration between disaster risk reduction and climate-change adaptation and development will require clear definitions of roles and responsibilities particularly at local municipality level;

- Building and strengthening existing partnerships between government departments and improving delineation of roles and responsibilities around disaster management;
- Improving collaboration and coordination between disaster management, government departments and climate-change adaptation line departments.

It could be argued that SDG 6 is a key enabler of the other sixteen SDGs. This is certainly the case in a water-scarce country such as South Africa, and even more so in the context of significant exposure to climate change-induced changes in rainfall patterns. Because of the scale of the water sector's impact and the challenges faced by the sector, five interlinked priorities will be highlighted.

Challenges

Water scarcity, climate change, population pressure, pressure on ecosystems, coordination challenges, revenue challenges, data management challenges

Priorities:

Revisit and Stabilise water sector institutional environment
 Improve water infrastructure asset management
 Stabilise water sector revenue environment
 Improve water sector information and data management



Primary targets impacted

- 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
- 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- 6.2: By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- 1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day
- 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

Revisit the water sector

There are significant challenges confronting the water sector. To effectively resolve these challenges, and thereby improve SDG 6 service delivery and reporting, it is necessary to implement a series of strategic and institution-strengthening interventions. There is a need to revisit water-sector planning processes. The integrated nature of development requires the integration of planning and implementation of programmes across sectors. In the future, it is critically important to ensure the effective coordination amongst water-sector players.

In this regard, the development of the first National Water and Sanitation Masterplan becomes a useful instrument for an improved sectoral approach to water resource management and development, and sanitation services. The Department of Water and Sanitation is moving towards a 'Phakisa' process. This is a results-driven approach that involves developing clear plans, setting clear targets, continuous monitoring of progress, and making the results public. The rigorous implementation, monitoring, and reporting of plans is to ensure that challenges are managed to ensure effective and efficient service delivery.



The Phakisa process will bring together key players in the water and sanitation sector, together with stakeholders from water-dependent sectors for this in-depth planning process. As such, the Phakisa process is an integrated accelerator for ensuring that all water-sector players strive towards the coordinated implementation of the national water and sanitation masterplan, the national water resource strategy, and the strategic framework for water services.

Stabilise water sector institutional environment

Institutional stability is a key lever for ensuring delivery of all SDG 6 Targets. The institutional arrangements for effective and efficient water resource management are yet to be fully established. In reality the water sector has been in a state of institutional flux for several years. The basis for implementing policy and strategy is a stable and functional institutional landscape. Therefore the need to accelerate the establishment of well-resourced water management institutions to support the creation of a stable institutional landscape.

From a water services perspective, the roles and mandates of water services authorities and water service providers are clearly laid out in the Constitution of South Africa (Act 108 of 1996), the Water Services Act (Act 108 of 1997) and the Municipal Structures Act (Act 117 of 1998). All this is drawn together through the Strategic Framework for Water Services (DWAF, 2003). However, there are significant capacity challenges within this institutional environment that hamper integrated planning and service delivery. An investment in human capacity, skills, and improved revenue management will add to the stability of such institutions.

Improve water infrastructure asset management

Effective infrastructure asset management (IAM) is a critical component towards ensuring the long-term sustainability and functionality of water and sanitation infrastructure. Historically, there have been challenges in terms of maintaining an asset management register for strategic national and regional infrastructure. Yet, in recent years, efforts have realised significant improvements in this regard. Whilst challenges remain, to effect improvements in infrastructure operations and maintenance requires effective asset management and developing technical and human capacity to maintain infrastructure registers at local government level. The acceleration of IAM therefore requires efforts to ensure that all municipalities implement an Infrastructure Asset Management Plan (IAMP). Updated annually, the IAMP is a key requirement for planning, ensuring effective O&M, to achieve the sustainable management of infrastructure. A key element to support IAM is the need to focus on ensuring the availability of skills, capacity and financial resources.

Stabilise water sector revenue environment

Whilst the water sector is funded from the national fiscus, the collection of revenue from water use and infrastructure charges, in alignment with the raw water pricing strategy, is important for those water resource management functions that underpin the provision of water. In the last two decades, there has been significant challenges in ensuring the effective revenue collection to support the operational functions. The water and sanitation sector is currently under very severe financial strain because of low levels of compliance with respect to revenue collection. The result is the insufficient funds to cover the costs (DWS, 2018:32) of water provisioning. Moreover, a significant funding gap exists between funding needs and available funding from both fiscal transfers and revenue (DWS, 2018:37). Therefore, the revenue environment needs to be stabilised through the implementation of mechanisms that improve revenue collection from water users, WSAs and WSPs as well as by utilising a range of innovative financing mechanisms.



Improve water sector information and data management

Reliable data and information are essential for: (1) monitoring hydrological trends, (2) understanding the status of water resources, (3) regulating water use, (4) analysing the operation of water infrastructure, and (5) the planning of new works (DWS, 2018:34). Whilst concerns exist that the monitoring networks are not sufficiently dense to fully monitor the impacts of anthropogenic activities and climate change, equally there are concerns about the manner in which data are managed, stored and shared. In recent years, there has been considerable effort to improve existing systems as well as develop new systems that support decision-making. In this regard, the development of the National Integrated Water Information System (NIWIS) has been useful in supporting management decision-making and making information more accessible to users.

Currently, data is dispersed across various platforms and between various actors. Accordingly, interventions such as NIWIS has helped to provide a singular portal and the DWS continues to develop and improve this system. However, going forward, to support improved reporting mechanisms there will be ongoing efforts to further integrate the current data repositories and information management systems, as well as support information exchange and between actors

Challenge
Pressure on ocean resources, developmental trade-offs, competing interests, coordination issues

Priority:
Actively manage marine development trade-offs



Primary targets impacted

- 14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
- 14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
- 14.3: Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
- 14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics
- 14.5: By 2020, conserve at least 10% of coastal and marine areas, consistent with national and international law and based on the best available scientific information
- 14.7: By 2030, increase the economic benefits to small island developing states and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

Given the diversity of resources and activities that the oceans and coasts support, there are inevitable conflicts and competing demands. These conflicts pose management challenges where government needs to assess the costs and benefits of competing options and ensure equitable benefit sharing, economic performance and ecological protection. For example, coastal development, although necessary as a conduit to harness the socio-economic potential of the coast to benefit local communities, stands to raise the coastal risk profile because of the emerging pressures of climate change and rises in sea level (Colenbrander and Sowman, 2015). Two key actions are proposed.



Firstly, expedite signing the Marine Spatial Planning Bill (MSPB) into law. The MSPB provides a now critical mandate to manage and optimise competing interests and activities in the marine context. Section 5 of the MSPB outlines the principles by which trade-offs and conflicts in marine activities must be managed. Maximum co-existence of uses or activities is preferred wherever possible, but where such co-existence is not possible, the MSPB aims to use these principles to determine optimal allocation. Developing the MSP regulations to provide the directive that will operationalise the above principles is a necessity. However, this is contingent on whether the Bill is signed into law.

Secondly, foster co-governance for marine spatial planning. There needs to be a platform that facilitates engagement between national government and local government around marine spatial planning, as there is currently limited intergovernmental collaboration and co-governance in marine spatial planning.

<p>Challenge</p> <p>Data availability and the impact on medium- and long-term planning processes</p>

<p style="text-align: center;">Priority:</p> <p style="text-align: center;">Overcome data challenges in the ocean economy</p>



	<p>Primary targets impacted</p> <p>14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution</p> <p>14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans</p> <p>14.3: Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels</p> <p>14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics</p> <p>14.6: By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation</p> <p>14.7: By 2030, increase the economic benefits to small island developing states and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism</p>
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South Africa’s ability to report formally on SDG 14’s indicators and targets is severely constrained. The factors that limit such reporting relate to data integration and quality management, rather than to a lack of data. Integrating data from various existing producers and undertaking the necessary analyses that align with the prescribed UN methodology should become a priority to South Africa. This will obviate the need to establish new data-collection efforts at the expense of the fiscus.

There are a number of factors that make identifying and presenting relevant datasets a challenge for South Africa. Firstly, there is significant diversity in the range of potential data providers among organs of state. Such responsible agencies are not easy to identify. Often, datasets are distributed across several agencies and jurisdictions. In turn, these are not necessarily aggregated at the national level. Secondly, data collected, and methodologies employed, are not consistent across agencies and jurisdictions, let alone aligned to the prescribed UN SDG methodology.



Data challenges remain a legacy from the MDG process and many countries realised that tracking progress toward the MDGs was data-intensive. Despite reports on MDGs indicating that monitoring and reporting (data) are indispensable elements of any development agenda (Sanga, 2011), South Africa has not yet been able to address significant data gaps. Reliable and timely data was essential, both nationally and internationally, for MDG reporting. Despite progress in many countries, there is still a huge gap in the nature of information needed to accurately monitor and report on SDGs (Sanga, 2011). Australia has established a practical approach to data identification and SDG publication. Therefore, South Africa can consider applying aspects of their approach to ensure that data and information are: (1) identified, and (2) channelled efficiently, for SDG reporting.

In relation to SDG 14, there are three possible priorities to assist with overcoming data constraints for SDG reporting. Firstly, the identification of existing database infrastructure should be used to integrate disparate ocean and marine datasets for use in governance of SDG reporting.

The National Oceans and Coastal Information Management System (OCIMS) is a South African government-funded data project, created for the effective governance of oceans and coasts through access to data-driven decision support. Through the OCIMS portal, OCIMS Core, and the Decision Support Tools (DeSTs), there is access to a variety of oceans and coastal-related data, documents and other related systems. The alignment of the OCIMS data work plan with the SDGs and classifying datasets as SDG relevant within the OCIMS metadata catalogue will be an important step for improving South Africa's reporting capability on a number of SDG 14 targets and indicators in the next reporting phase. If implemented, reporting on: (1) Target 14.1 relating to eutrophication in coastal waters; (2) Target 14.3 relating to ocean acidification; (3) Target 14.4 relating to fish stocks; and (4) Target 14.7 relating to the economic performance of markets based on marine resources and activities is enhanced.

Work toward this is already underway with data from the existing South African Data Centre for Oceanography (SADCO) soon to be integrated into the Marine Information Management System (MIMS), an internal data portal linked to the OCIMS. At the time of writing, the portal is still under development, and it is unclear which databases and decision-support information will be included. However, this exercise represents an important and useful opportunity in the management of marine data, and it will be necessary to engage with non-governmental stakeholders and datasets during this process.

Secondly, the adoption of the Risk-Based Framework for managing and certifying sustainable fisheries. The MSC has developed a process to enable data-constrained fisheries to be included in global certification standards for developing country fisheries.

Considering the current resource constraints at DAFF, there are several candidate fisheries for this form of sustainability certification. In this way, South Africa will ensure it actively manages fisheries sustainably and responds to the need to have fisheries certified with eco-labels to increase the value and economic benefits derived from them, as in SDG Target 14.7.

This also ensures that South Africa can manage its fisheries using a precautionary principle, despite data constraints, which will enable progress toward replenishing fish stocks in the face of uncertainty (Target 14.4). A risk-based approach grants the option to use a less-quantitative form of assessment that remains robust.

Thirdly, 'citizen science' should be used to assist with data collection, networking and integration. Public awareness and education campaigns through a 'citizen science' lens have proven valuable in this regard and may act as a social empowerment initiative in South Africa.



Challenges

Inadequate integration of ecosystem and biodiversity values into national planning, continued threats to biodiversity, challenging trade-offs between environmental and economic concerns

Priority: Mainstream ecosystems and biodiversity into national planning



Primary targets impacted

15.9: By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts

15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

14.5: By 2020, conserve at least 10% of coastal and marine areas, consistent with national and international law and based on the best available scientific information

The integration of ecosystem and biodiversity values into national development planning and strategies remains a challenge. South Africa’s policy, legislative and strategic environment demonstrates that ecosystems and biodiversity are being included in national planning. There are also important areas of alignment between national planning and global agendas that link to the SDGs.

Further, as South Africa’s domesticated indicators for SDG 15 show, efforts are underway that unpack targets and indicators in a way that is relevant in terms of national policies and in terms of the country’s terrestrial and freshwater context. It is important to note that reporting on Target 15.9 is difficult due to its complexity. It requires that parties place appropriate value on biodiversity. In this regard, countries are encouraged to use the concepts published in the SEEA. South Africa is in the process of valuing its ecosystem services through the National Capital Accounting and Valuation of Ecosystems (NCA&VES) project.

In 2011 the first national list of threatened terrestrial ecosystems was gazetted. The primary purpose of listing threatened ecosystems is to reduce the rate of ecosystem decline and species extinction.

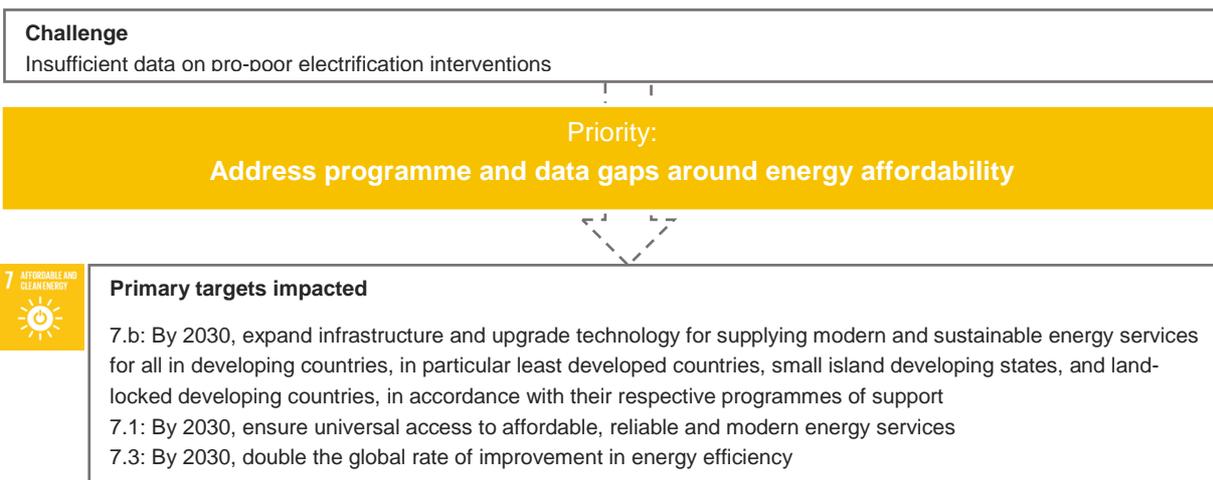
The status of national ecosystems are updated every five years via the National Biodiversity Assessment. The listed threatened ecosystems have implications for land use planning, which means that South Africa is making some strides with regards to integrating biodiversity values into national and local development. However, as the National Biodiversity Framework (NBF) has highlighted, there are existing communities of practice that play critical roles in advancing South Africa’s ecosystem and biodiversity research. Furthermore, the Sustainable Development Solutions Network website suggests that a possible indicator for this specific target is a ‘Country implementing and reporting on Systems of Environmental Economic Accounting (SEEA) accounts’. South Africa is in the process of developing the indicator.

South Africa needs to prioritise links between biodiversity and ecosystem-related planning with the next phase of medium-term planning. The next iteration of the MTSF and DPME’s national mandate in this regard is an important accelerator. Together with the next MTSF, South Africa has key tools at its disposal, including the POA, the biodiversity components of Operation Phakisa, and local and provincial performance plans



There are other existing processes that South Africa can leverage to mainstream ecosystem and biodiversity values into national strategic planning. Partnerships between government departments, SANBI, Birdlife South Africa, Stats SA and various other environmental stakeholders play a significant role in South Africa’s ability to report on SDG 15. Strengthening these communities of practice will accelerate national ecosystem and biodiversity reporting.

There are also specific initiatives that can contribute to progress on ecosystem and biodiversity reporting at a national level. The Natural Capital Accounting and Valuation of Ecosystem Services (NCA&VES) project focuses on developing natural capital accounts for ecosystems and priority species, including the development of indicators based on this accounts. The project’s recommendation for a national NCA strategy in South Africa is also useful, particularly if the process of developing natural capital accounts is linked to effective statistical systems, institutional mechanisms and other reporting efforts. It is also important that these ecosystem accounting initiatives be aligned with SANBI’s mandate to monitor and report on the state of biodiversity, including through the National Biodiversity Assessment. DEA’s IPBES initiative is another opportunity for alignment with the NCA&VES project and offers a platform for stimulating science-policy connections. One of the challenges facing the IPBES initiative is the limited availability of current primary biodiversity data, which could enable the quantification of ecosystem services. The IPBES focal point can greatly benefit from engaging the national Foundational Biodiversity Information Programme (FBIP) to prioritise relevant data-generation.



While there are pro-poor subsidy programmes such as the FBE and FBAE meant to afford everyone access to basic energy services, establishing the number of people benefiting as well as the effectiveness of such programmes remains a challenge (Sustainable Energy Africa, n.d.). There is a lack of information regarding the indigent households benefiting from such subsidies. The municipalities that are mandated to implement these pro-poor subsidy programmes are reported as implementing them differently, since there are no prescribed definitive implementation methods (Sustainable Energy Africa, n.d.). Some municipalities are also understood as having no or outdated indigent registers, thus making it difficult to establish the number of beneficiaries (DoE, 2014).

Furthermore, it is also understood that some municipalities may not afford and therefore cannot provide such pro-poor subsidy programmes. As a result, there are data gaps and inconsistencies with respect to the provision of subsidies meant to afford indigent households access to basic energy services. Such data gaps make it difficult to assess the status and progress made towards making clean energy accessible to all in South Africa, which in turn makes it extremely challenging to assess whether the



existing framework and programmes are sufficient to enable South Africa to achieve the target around access to affordable clean and reliable energy.

Improving the M&E programme aspects of the FBE and FBAE is thus recommended to address the above challenges. The Cooperative Governance and Traditional Affairs (CoGTA) department that oversees the implementation of the pro-poor subsidy programmes, together with the DoE, should capacitate and support poor municipalities to afford every indigent household the opportunity to benefit from pro-poor electricity subsidy programmes. As a minimum, all municipalities should be equipped with resources and systems to register new indigent households and update old indigent registers.

<p>Challenge Deceleration in the rate of off-grid electrification</p>

Priority:
Fast-track off-grid electrification



<p>Primary targets impacted</p> <p>7.1: By 2030, ensure universal access to affordable, reliable and modern energy services 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix 7.3: By 2030, double the global rate of improvement in energy efficiency</p>

South Africa’s off-grid concession programme is not functioning effectively. According to DEA and SANEDI (DEA & SANEDI, n.d.), the challenge around the poor implementation of alternative off-grid solutions does not require more policy, but it calls for the country to have a greater capacity to implement such off-grid programmes.

The policies on electrification in South Africa clearly elaborate the significant role that off-grid systems play towards the realisation of universal access to electricity. According to the NDP, 90% of the population will access electricity through grid connections, while the remainder will be catered for through alternative off-grid solutions. As a result, an effective off-grid subprogramme component of the INEP is required if the country is to achieve universal electrification.

A look into the off-grid concession programme that forms part of the INEP, however, shows much of the progress having been achieved in the past.

The first intervention is a governance type of intervention that would require the establishment of a dedicated off-grid management authority as a solution to the current gap in the value chain (DEA & SANEDI, n.d.). According to the DEA and SANEDI, the value chain currently lacks an entity/management authority that is mandated to manage the operations and activities of decentralised renewable energy technologies. The DoE’s role is believed to be quite limited, as it only provides relatively little support to the off-grid concession programme that remains restricted to the use of a single technology in the form of solar PV (DEA & SANEDI, n.d.).

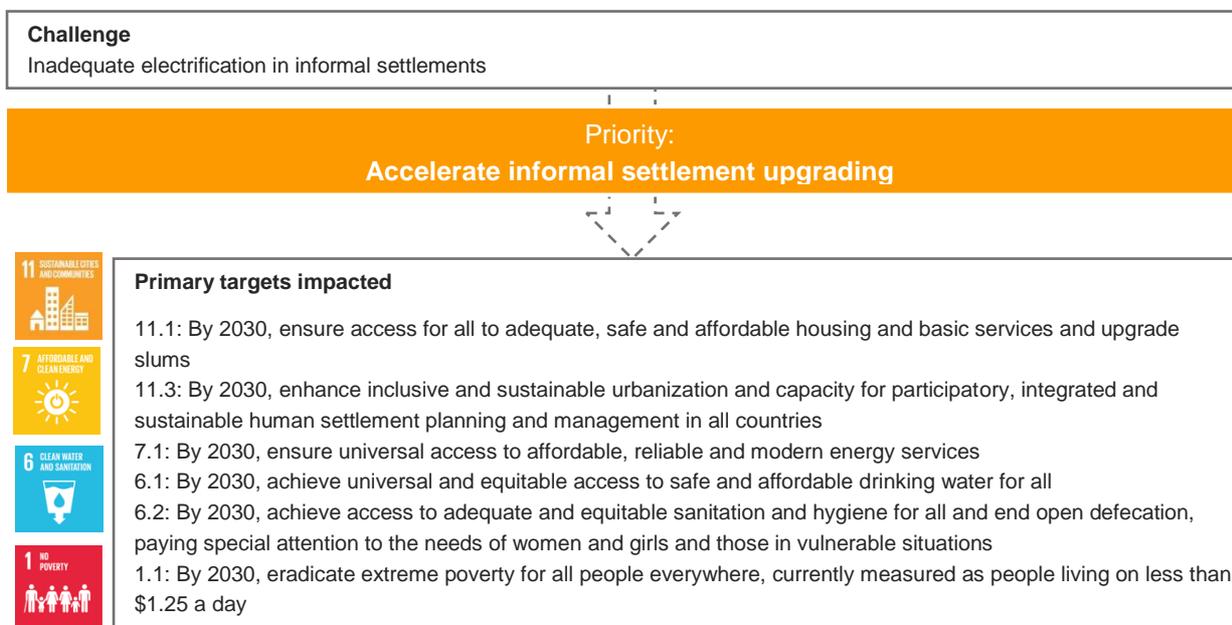
Consequently, the establishment of a dedicated management authority outside of the DoE would fill the current value chain gap, as there will be an entity with a mandate to facilitate, contract and manage decentralised renewable energy technology programmes and initiatives within the off-grid space. This entity would further assist in the following ways:

- Leveraging the use of different renewable energy technologies;
- Building and leveraging on relationships with multilateral and bilateral organisations;
- Being the reference point and ‘go to’ platform for government, donor and private sector investors interested in advancing the local off-grid space.



The second intervention entails the development of a grid network master plan that ‘determines the deep off-grid areas and manages the inevitable interface between an expanding grid and a shrinking off-grid environment’ (DEA & SANEDI, n.d.). The master plan will bring some certainty to planners, donors, investors, etc. as it will show the geographic areas which cannot be accessed by the grid as well as the key ‘spatial and temporal details of grid versus off-grid systems’ (DEA & SANEDI, n.d.). This would also harmonise the implementation of the grid and off-grid electrification projects that are sometimes executed as different programmes, for example INEP, municipal and residential projects.

The third and final intervention relates to the need to utilise different proven renewable energy technologies as part of the off-grid electrification programme. Currently, it appears the local off-grid electrification programmes are too focused on SHSs, resulting in the side-lining of other proven and mature renewable energy technologies such as wind, biogas, small hydro, etc. that can be pursued in South Africa. Also, in line with Target 7.a around the enhancement of international cooperation to facilitate access to clean energy research and technology, other innovative, nascent clean-energy technologies being supported by departments such as DST should also be considered. This could include, for example, the increased utilisation of new technologies such as the hydrogen fuel cell (HFCT).



In South Africa, nearly 1.5 million families live in informal settlements, half of which are in the eight metropolitan cities. It is now a national priority to respond systematically to the increasing rate of urbanisation. Thus, the upgrading of 2 200 informal settlements is a central objective of our urban management strategy.

Accelerating informal settlement upgrading will require a range of interventions, including addressing coordination challenges, expanding partnerships, promoting community involvement and working in an integrated manner.

The persisting challenge of coordinating intergovernmental support

In developing human settlements programmes that are consistent with intended outcomes, a key challenge is to define outcomes and to appropriately delineate roles and responsibilities within government, and more broadly among the various actors, in achieving them. The NDP emphasises that urban restructuring, development and management depend on a well-governed, capable and



developmental state. Furthermore, cooperative governance and coordination of resources amongst spheres of government, and between different departments, is key to service delivery. The political and administrative intergovernmental mechanisms exist, but a lack of consistency in policy application and performance accountability persists.

Building on key interventions

63% of South Africans already live in urban areas, and 72% of the population live in areas with densities of over 1 000 persons per square kilometre. By 2050, 8 in 10 South Africans will live in urban areas. These significant demographic changes place increasing demand on basic infrastructure requirements and service delivery (water, energy, housing, roads, clinics, schools, higher education). Sustained job creation and poverty reduction relies on the role of cities as engines of growth. These realities can be managed through the implementation of South Africa's national urban policy and the New Urban Agenda, amongst others. South Africa has thus adopted the Integrated Urban Development Framework in 2016 to address urban development, urban management and spatial transformation of urban areas through an 'all of government, all of society' approach.

On-site upgrading of informal settlements involves providing municipal services and security of tenure to households where they presently live. This will encourage residents to invest in the improvement of their own homes. Our public programmes and funding mechanisms must focus on allowing more flexible and differentiated improvements to settlements. One size does not fit all. Government has prioritised engagement and partnership with communities to ensure their inclusion in upgrading their settlements, for example through helping to build and maintain infrastructure.

Government has introduced new separate metropolitan and provincial grants to the value of nearly R6 billion for informal settlement upgrading and electrification. This includes funding for community-based settlement surveys, preparation of development plans and project proposals as well as capital grant funding for projects. The envisaged upgrading projects relate to planning, sanitation and water services, waste management, re-blocking and tenure consolidation.

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Municipalities and provinces can access the grant on the basis of clear and specific province/city-wide informal settlement upgrading strategies, individual informal settlements upgrading plans utilising the National Upgrading Support Programme (NUSP), explicit social compacts concluded with communities and/or community resource organisations outlining their role in the upgrading process.

All this is underlined by our 'all of government, all of society' approach to South Africa's urban agenda. Already, upgrading plans with project proposals have been prepared for over 900 informal settlements.

Furthermore, government has recently started implementing a programme of Rapid Land Release, which proactively aims to ensure that land for settlement development is surveyed, serviced and allocated to families in urban areas. This is at the core of our Land Reform Policy to ensure balanced and planned access to urban land. The land release programme is supported by further investment in infrastructure for public transport and mobility enhancing projects. It is our firm belief that the state invests in public infrastructure and land development that provides basis to enable families, private organisations and other partners to invest to meet their individual and collective interest.

Creating productive partnerships between government and the private sector



There is a need for an overarching policy framework to guide the intervention of public and private sectors in both the affordable housing rental and ownership markets, and which reflects consensus on parameters that define affordable housing physical and financial products. It should standardise conditions applicable to the market, with guidelines for risk-sharing and market participation. It should expand on the potential for participation of, and partnership with a range of stakeholders, including financial institutions, employers and non-traditional lenders such as development corporations and mining companies. Such partnerships are essential to develop mixed-income, mixed-use projects that will help to lever in additional resources and technical capabilities, cross-subsidise low income households, and create socially-inclusive and integrated communities. In informal settlements, on the other hand, different kinds of partnership are necessary to find pragmatic ways of regularising and upgrading conditions hand-in-hand with local communities and NGOs.

Promoting active community involvement

The NDP states that sustainable human settlements cannot be developed and maintained in a participatory way if communities are disorganised and fractured, and if they lack confidence in their municipalities. It emphasises the importance of promoting, through collaborative government and community action, a people-centred approach that helps communities and individuals to generate income, improve skills, increase safety, reduce food insecurity and enhance health through improved social and economic infrastructure. Community participation is critical in understanding demand.

Active engagement with communities throughout planning, development and maintenance of human settlements allows for interventions that are responsive to felt needs in communities, development of co-management models (such as Community Policing Forums and agreements for the operation and maintenance of municipal services), and opportunities for co-production at the settlement and city level. Therefore, the need for institutions and officials to align their work practices to align with policy and for communities to understand these issues of governance.

Approaching urban development and management in an integrated and inclusive manner

The Integrated Urban Development Framework (IUDF) supports and guides South African cities to achieve spatial transformation – in other words reversing the inefficient spatial patterns in a way that promotes both social and economic development, while protecting the environment. The IUDF provides an urban vision and policy for South Africa and presents practical interventions (referred to as policy levers) for implementing the policy. These nine levers provide entry points for planning and implementing optimal city environments. The key lever is for interdisciplinary spatial planning and land-use management practices that actively integrate infrastructure investments, public transport and human settlements as the baseline for the productive, inclusive, and liveable city. Building more inclusive urban economies, improving the way that cities are governed, strengthening the management of city finances, and empowering communities to participate in urban design and form can sustain these interventions. The IUDF also, critically, addresses crosscutting levers, namely the promotion of rural-urban interdependency, urban safety, and urban environmental resilience.

5.4 Governance, peace, justice and security goal

Challenges

Persistence of high levels of crime

Priority:

Focus on the developmental aspects of the White Paper on Safety and Security



Primary targets impacted

16.1: Significantly reduce all forms of violence and related death rates everywhere

16.2: Promote the rule of law at the national and international levels and ensure equal access to justice for all

5.2: Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation

By focusing on the developmental aspects of the White Paper on Safety and Security, South Africa can address the systemic reasons for insecurity. The paragraphs below highlight the most significant of the developmental aspects of the White Paper.

At the most fundamental level, this will require *addressing persistently high levels of inequality*, as this has been found to have a direct relationship with violence and crime in a society (Harris and Vermaak, 2015). This includes a focus on healthy family relationships, gender equality and addressing the normalisation of violence in communities. It highlights the importance of the SAPS working with the DBE and the DSD. It also includes the need to train police officers in the developmental aspects of the White Paper.

Since crime tends to happen at a local level, *community-level interventions* should be used to address it (Buthelezi & Mofokeng, 2015). Policy implementation needs to be integrated with surrounding structures, such as community safety forums, municipal councils and budget processes. An example of one such attempt is the Department of Community Safety in the Western Cape (Department of Community Safety, n.d.). The department has several initiatives such a community policing programme, social crime prevention programme, community safety forums, and has attempted to increase police oversight. A similar programme has been implemented in KwaZulu-Natal.

Crime prevention through environmental design is a third aspect that should be prioritised. Urban upgrading has been suggested as a measure to reduce violence and crime. Cape Town, for example, has experimented with this strategy by focusing on a few neighbourhoods in townships and it has had 'modest violence reduction impacts' (South African Cities Network, 2017). Programmes that involved community participation produced better results in, for example, Harare, Khayelitsha and Alexandra, Johannesburg. If urban upgrading policies are pursued, they need to be developed in conversation with the relevant community (Meth, 2017).

It is argued that young people who are exposed to violence in their community are more likely to become violent later in their lives, thus *addressing violence against children* is likely to result in a reduction of crime and violence in a society (Hinsberger et al., 2016). A study of more than 2 000 children in Soweto, Johannesburg, revealed that 99% of all children had witnessed or been victims of violence in their home, school or community, with 36% reporting that they had been victims of all the categories of violence studied (Richter et al., 2018). The study drew a direct correlation between violence experienced and becoming a perpetrator of violence, and stressed the personal and social costs of violence in South Africa, including intergenerationally. A further study focusing on 290 young men in Cape Town found that exposure to high levels of violence in childhood could lead to 'an attraction to cruelty'.



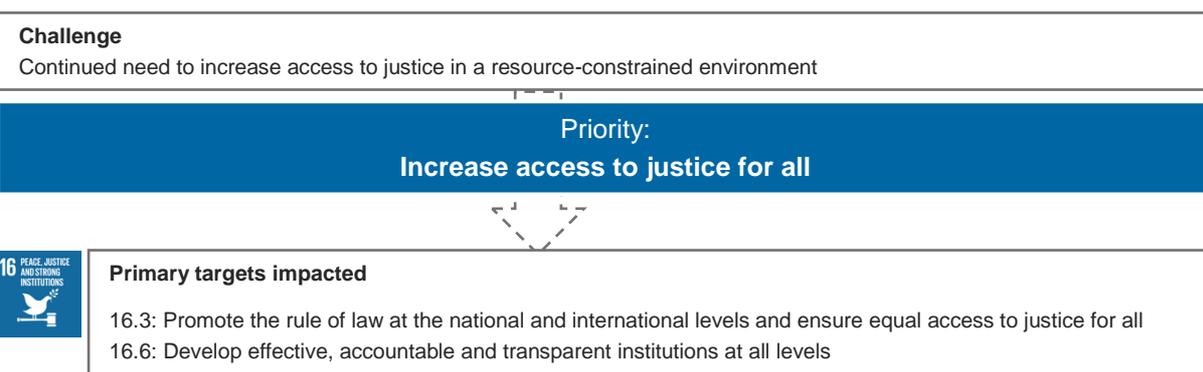
In relation to the above, children who have been exposed to sexual violence, and boy-children exposed to violence generally, are more likely to perpetrate or become victims of gender-based violence. Most studies emphasise the need to *address gender-based violence* not primarily through campaigns oriented towards girl-children and women, but rather those *oriented towards boy-children and men* (see, for example, Jewkes et al., 2015). Studies suggest multi-level interventions, through school-, community-, and parenting-based programmes (Lundgren and Amin, 2015).

School-based programmes are cited as the most effective way of accessing children, including those who are at risk or already victims of domestic, sexual and other forms of violence. Innovative interventions have been developed, such as the use of cell phones in participatory visual research that has reported a relative degree of success in KwaZulu-Natal (MacEntee 2015), and sport-for-development programmes (Burnett 2015). Thus far, such interventions have usually taken place outside the formal curriculum; the DBE should give consideration to a thorough-going reform of the Life Orientation syllabus to include meaningful and engaging inclusion of violence prevention.

South Africa has been recognised as having comprehensive legislation aimed at child sex abuse. *Enforcing and implementing legislation that protects victims and children* should be prioritised. The Sexual Offences Act and the Children’s Act provide comprehensive guidelines around how to approach child sexual abuse.

However, implementation has remained weak, with a lack of comprehensive policy and programmes aimed at enforcing these laws (Davis, 2019). As such, it is advisable that the national government focus on enforcing these laws and developing appropriate programmes, such as clinics like the Thuthuzela Care Centres that are aimed at children specifically.

A 2015 study of children in South African townships points to the fact that corporal punishment is an everyday experience for many South African children, and has negative emotional and behavioural consequences, particularly in relation to how conflicts are resolved (Breen et al., 2015). Although South Africa has a policy banning corporal punishment in the classroom, and as a result this is decreasing in schools, corporal punishment continues to be widely used in the home, including punishment with the use of objects (Breen et al., 2015). *Legislation banning corporal punishment at home* will go a long way in reducing violence against children, and thus reducing violence in society.



When considering priorities that will increase access to justice for all, five focus areas stand out. The interventions of *Legal Aid South Africa* represent a pocket of excellence in terms of increasing access to justice and, specifically in meeting Indicator 16.3.2 to reduce ‘unsentenced detainees as a proportion of overall prison population’. However, Legal Aid South Africa remains under-resourced and overwhelmed. More state support and funding need to be directed towards Legal Aid South Africa in



order to better meet this target. Increasing access to justice will require initiatives to improve access to civil law remedies as much as it does reforming the criminal justice system.

Restorative justice and mediation processes in the justice system should be strengthened. Specific attention needs to be given to making encounter, counselling and educative programmes available at prevention and early-intervention stages, at the pre-trial stage (as part of diversion practice), and at the sentencing stage (as part of non-custodial sentences).

The framework of the Child Justice Act of 2008 regarding diversion options should be used as the fundamental point of reference. Sections 52(2) and 52(3) on diversion and section 61 on sentencing are specifically relevant. Specific attention should be given to making encounter, counselling and educative programmes available in all domestic violence, harassment, maintenance and equality matters using the framework for court annexed mediation.

CSOs, supported by the state, can be used to make these options available. The Restorative Justice Centre is particularly well positioned to be a key partner here. *Traditional leaders and community courts should be integrated into the justice system.* The revised Traditional Courts Bill 2017 addresses a number of the challenges evident in earlier versions of this Bill. The revised Bill would significantly increase access to justice for many South Africans, particularly those at the intersection of oppression and marginalisation. The revised Bill limits the powers of traditional leaders, includes greater protection for women and vulnerable groups and facilitates a high level of community participation.

However, without funding to support the implementation of the Bill, including funding to educate communities on their rights within the framework of the Bill, there are concerns that it will either not be implemented at all, or implemented in such a way as to perpetuate injustices to the most vulnerable groups of society (Mnisi Weeks, 2017). In addition to this, state support can be channelled towards initiatives that involve community engagement and harness certain traditional practices, such as the mediation court of the Alexandra Traditional and Faith Healers' Forum.

Records management in the Criminal Justice System should be improved. In a study to investigate the cases of 'delayed and denied' justice that resulted from a lack of or poor record-keeping in the South African courts and police service, it was found that some criminal cases were withdrawn because of missing dockets or cases not properly registered. In some instances, records were reconstructed, potentially resulting in perversions of justice. 'Records provide the critical evidence that a particular action or transaction took place and can be used as evidence in a court of law. Without reliable and authentic records, government cannot administer justice and, as a result, offenders can be set free while the victims are denied justice' (Ngoepe & Makhubela, 2015).



South Africa has a unique opportunity to further its international relations agenda when chairing the AU Union in 2020. The last time South Africa fulfilled this role was in 2002. As the former Minister of

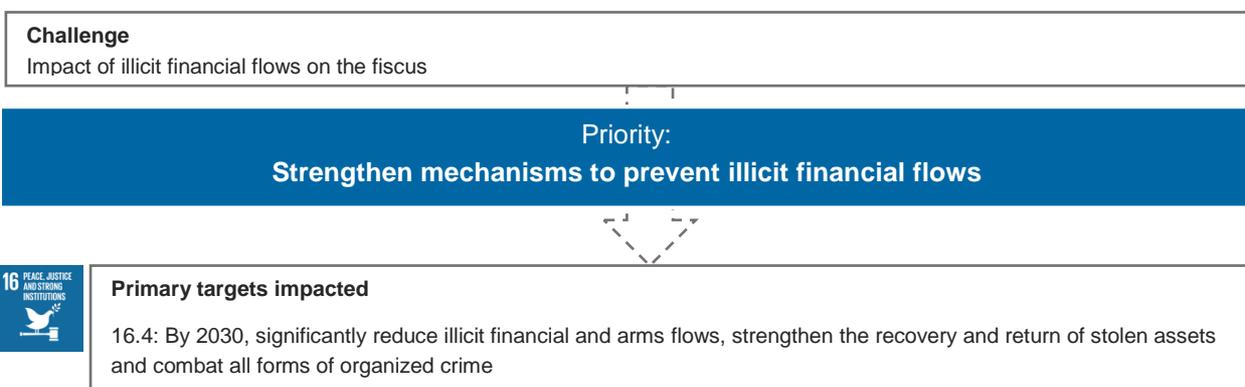


International Relations and Cooperation, Lindiwe Sisulu, has highlighted that this is an opportunity for ‘accelerating actions aimed at contributing to a conflict-free Africa’.

She further brings attention to the fact that this chairpersonship coincides with South Africa’s membership of the UN Security Council, with the hope that South Africa can use this to promote ‘cooperation between the AU and the UN’ (Sisulu, 2019).

South Africa has nearly brought itself up to date in terms of its reporting to international human rights mechanisms. It is up to date in relation to six core reports to treaty bodies, with overdue reports to the CEDAW Committee as well as to the optional protocol to the CRC on children in armed conflict.

Its CEDAW State Report has been overdue since 2015 and CRC-OP-AC has been overdue since 2011. South Africa currently has a high-level Inter-Departmental Committee on Compliance, which serves as a national mechanism for reporting and follow-up. All reports pass through the IDC prior to submission to the Forum of South African Directors-General (FOSAD) for approval. The structure and composition of this Committee could, however, be reconstituted to have permanent members representing departments in order to strengthen cooperation on reporting and on the implementation of recommendations.



IFFs can be better monitored through the implementation of a Special Unit or Task Force within the South African Revenue Services, working in close relation to the Auditor-General and Reserve Bank. What is of particular concern is trade misinvoicing or mispricing, which costs South Africa billions in tax revenues every year. Trade misinvoicing, which is of particular concern in the mining industry, needs to be addressed through bilateral accounting relationships.

CSOs can play a critical role in ‘naming and shaming’ perpetrators. An example of this is the 2010 campaign by international NGO, ActionAid, against SABMiller, which revealed that SABMiller’s operations in six African countries, including South Africa, were shifting millions of dollars of profits out of those countries into low-tax havens.



Challenges

Perceived high levels of corruption and bribery, weakened institutions, perceived lack of transparency in certain government departments

Priorities:

Combat corruption and bribery

Promote and protect the right of public access to information



Primary targets impacted

- 16.5: Substantially reduce corruption and bribery in all their forms
- 16.6: Develop effective, accountable and transparent institutions at all levels
- 16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels
- 16.10: Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements

Corruption and bribery remain among the greatest impediments to the growth of strong institutions and the resultant public trust. There are currently adequate legal mechanisms in place, but little enforcement of these mechanisms, little anti-corruption education, and none of the existing bodies are clearly constitutionally independent. The Special Investigating Unit is, however, primarily mandated to investigate and combat corruption, malpractice and maladministration with limited powers.

An independent anti-corruption commission, established by an Act of Parliament is necessary. Because this body would report to parliament, its independence would be more effectively protected than, for example, that of the Hawks. Such an institution, if properly funded and well staffed, would enable decisive and effective action to be taken (Nurmayani 2013). It should also be noted that the Special Investigating Unit requires more powers from parliament to enforce implementation of systemic recommendations resulting from its investigations and powers to conduct pre-proclamation investigations.

Promoting and protecting the right of public access to information is another way in which corruption can be addressed. It harbours the potential to improve accountability by empowering the citizenry with access to relevant information.

The SAHRC reports low levels of public institutional compliance with PAIA and low levels of knowledge among public officials about the procedures involved in processing a PAIA information request. This could be remedied with campaigns to raise awareness among public and private officials, as well as with mandated education for government, the public and the respective departments on how to deal with PAIA requests.

Since good legislation already exists, the main area of focus should be implementation and education to ensure the smooth functioning of policy, which could grant the public access to information in the exercise of fundamental rights enshrined in the Constitution.

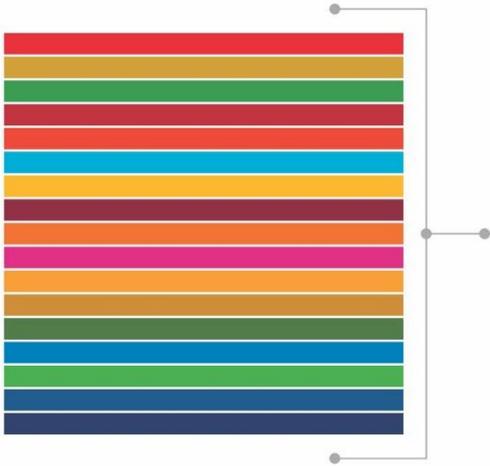
A threat to South Africa's progressive legislative framework exists in the form of the Protection of State Information Bill, introduced into Parliament in March 2010. The Bill passed in Parliament in 2013, despite protests against its unconstitutionality and under threat of legal action, as it risked criminalisation of the type of disclosures enshrined in PAIA and the Protected Disclosures Act. Despite approval in the National Assembly on 25 April 2013, sitting President Zuma refused to sign it and returned the Bill to Parliament for reconsideration and currently President Ramaphosa has not expressed any inclination to sign the Bill.



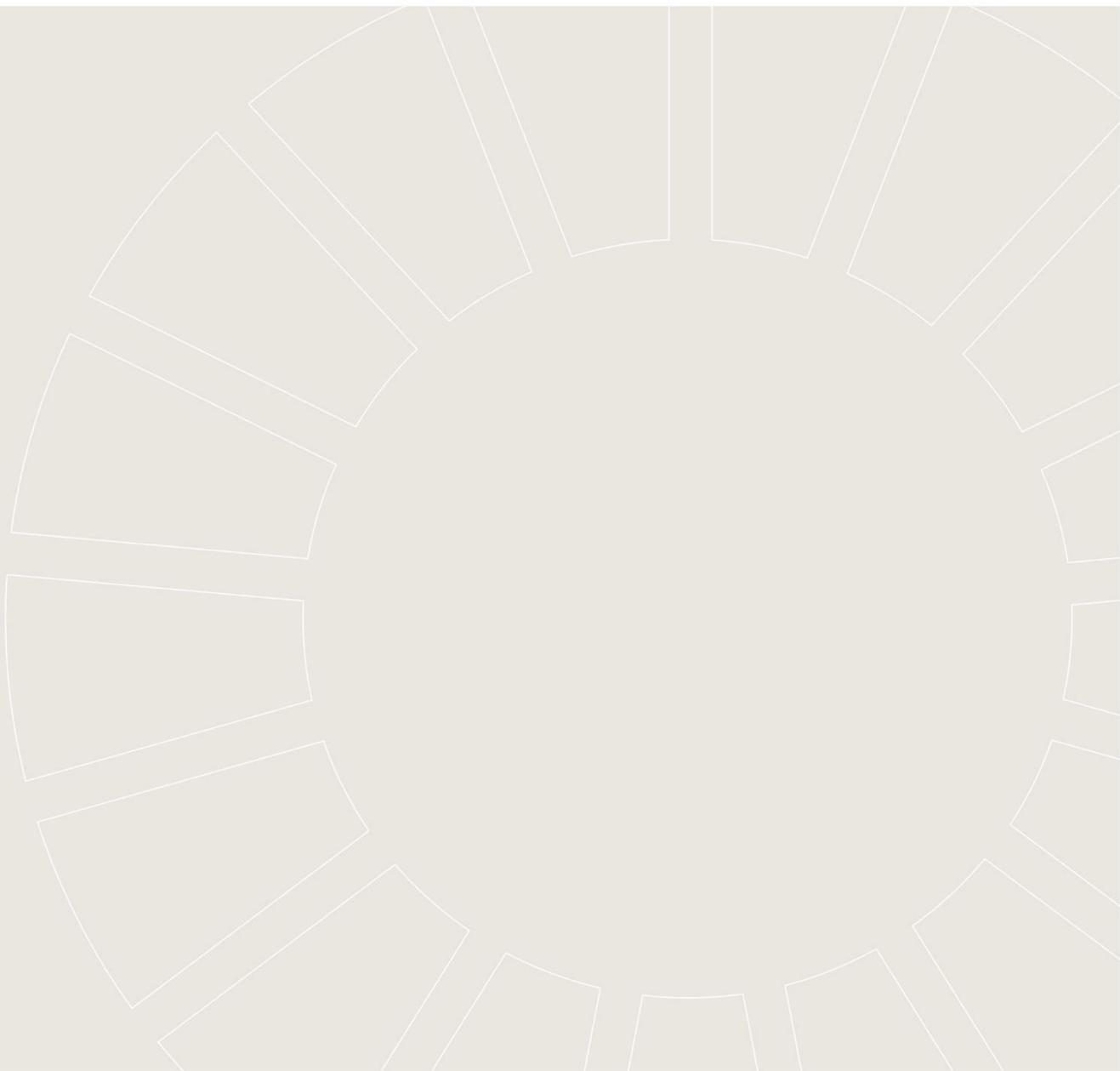
Furthermore, there is contemporary consensus that in its current form the unconstitutionality of the Bill would result in its being struck down under review by the Constitutional Court (Africa Freedom of Information Centre, 2017).

The Protection of Personal Information Act has envisaged that the Information Regulator will have a role to play in the promotion of public access to information, and this has the potential to function as a dedicated monitor (and enforcement mechanism) of PAIA. The SAHRC should share its experiences and develop good practices with the Information Regulator; these two institutions should collaborate to ensure both greater public awareness of PAIA and greater compliance with its provisions by government departments.





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