SDG 6 BIENNIAL PROGRESS REPORT 2024

WATER IS LIFE - SANITATION IS DIGNITY

water & sanitation
Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

DEFINITIONS

Basic access level refers to drinking water from an improved source provided collection time is not more than 30 minutes for a roundtrip including queuing.

Capex are Capital expenditures funds used by a company or organization to acquire, upgrade, and maintain physical assets such as property, plants, buildings, technology, or equipment.

Non-sewered sanitation refers to sanitation systems that are not connected to a networked sewer system.

Unimproved Sanitation includes a pit latrine without a slab, hanging toilets and bucket toilets.

Limited access level refers to drinking water from an improved source where collection time exceeds than 30 minutes for a roundtrip including queuing.

Safely managed refers drinking water from an improved source which is located on premises, available when needed and free of faecal and priority contamination

No Service refers to drinking water collected directly from a river, dam, lake pond, stream, canal or irrigation channel.

Water balance refers to the regulation or nationalization of human activity to match the sustainable local water supply, rather than base, or process of balancing water supply and demand to ensure that water use does not exceed supply.

Water Conservation refers to the minimization of loss or waste, the care and protection of water resources and the efficient and effective use of water.

Water Demand Management refers to the adaptation and implementation of a strategy or a programme by a water institution or consumer to influence the water demand and usage of water to meet any of the following objectives: economic efficiency, social development, social equity, and environmental protection, sustainability of water supply and services and political acceptability.

Water efficiency refers to getting any given results such as equity, gravity, and development with the smallest possible inputs, or getting the maximum possible output from given resources.

Water stress occurs when the demand for water exceeds the available amount during a certain period or when poor quality restricts its use.

OPEX is an operating expense is an expense that a business incurs through its normal business operations.

ORIO is a facility to help develop infrastructure in developing countries funded by the Dutch Ministry of Foreign Affairs and implemented by the Netherlands Enterprise Agency.

LIST OF ACRONYMS & ABBREVIATIONS

AMCOW	African Minister's Council on Water
BRICS	Brazil, Russia, India, China and South Africa
CMA	Catchment Management Agency
CMF	Catchment Management Forums
CoGTA	Cooperative Governance and Traditional Affairs
CSIR	Council for Scientific and Industrial Research
DBSA	Development Bank of South Africa
DFFE	Department of Fisheries, Forestry and Environmental Affairs
DHS	Department of Human Settlement
DIRCO	Department of International Relations and Cooperation
DMPE	Department of Monitoring, Planning and Evaluation
DMRE	Department of Mineral Resources and Energy
DSI	Department of Science and Innovation
DWS	Department of Water and Sanitation
EWR	Ecological Water Requirements
FAO	Food and Agriculture Organization
FSM	Faecal Sludge Management
GDP	Gross Domestic Product
GHS	General Household Survey
GLAAS	UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water
IDP	Integrated Development Planning
IHP	International Hydrological Programme
IWRM	Integrated Water Resource Management

JMP	Joint Monitoring Programme
MDG	Millenium Development Goals
NCMP	National Chemical Monitoring Programme
NDP	National Development Plan
NEMP	National Eutrophication Monitoring Programme
NSIP	National Sanitation Integrated Plan
NWSMP	National Water and Sanitation Master Plan
NWRS3	National Water Resource Strategy 3 (third edition
ODA	Official Donor Assistance
PPP	Private Public Partnerships
SALGA	South African Local Government Association
SANBI	South African National Biodiversity
SANS	South African National Standards
SDG	Sustainable Development Goal
UN	United Nations
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization
WRC	Water Research Commission
WSA	Water Service Authority
WSDP	Water Services Development Plan
WSLG	Water Sector Leadership Group
WSIP	Water Services Improvement Plan
WUE	Water Use Efficiency

EXECUTIVE SUMMARY

This Minister's Biennial Report is prepared every 2 years to provide the Minister and the senior management with the status of SDG 6 in South Africa, the progress being made and the challenges that are delaying South Africa in achieving the 2030 Goals as committed to the United Nations in 2015. This report is the 2024 edition which reflects data captured during the 2023 UN Data Gathering process (it must be made clear that South Africa is not going to achieve the SDG 6 Goal by 2030).

The SDG goals and targets came into effect on 1 January 2016 and will guide the decisions taken over the fifteen years of its existence and beyond. The SDG targets are valid and applicable to South Africa. They are also in line with the Vision 2030 of the National Development Plan and the current Medium-Term Strategic Framework (MTSF) Outcome targets.

At the current rate of delivery, South Africa is behind, and despite attempts to accelerate the process South Africa is scratching the surface in terms of delivery. South Africa is not alone, globally as all other Nations are behind with all 17 SDGs as stated by the United Nations at the High-Level Political Form which was held in New York in June 2023. The world is 'halfway there but no-where near. South Africa is positioned at 110 out of 166 participating countries in the world for the SDGs in their entirety. A similar global rating for SDG 6 specifically is not available.

SDG 6 for "Clean Water and Sanitation" seeks to ensure the availability and sustainable management of water and sanitation for all by 2030 since access to clean water and sanitation is a fundamental human right. The year 2023 marked the midway benchmark of the 14-year Programme. DWS marked this with a two-day Mid Term Review Session which took place on the 22 and 23 Feb 2023 informing the sector of the status of all SDG 6 targets, and the requirements from the sector to accelerate the process going forward, and consequently, turning the bad situation around.

Key findings: SDG 6 progress 2024

At present, South Africa is behind in three of the key Targets, namely 6.1 (Clean Water), 6.2 (Sanitation), 6.3 (Water Quality) in particular. These are of most concern and are unlikely to reach their targets without a robust financial investment in infrastructure development over the next 7 years. This is a critical challenge and a gap that must be bridged to ensure sufficient and sustainable infrastructure for our future generations.

Although the DWS is responsible for providing leadership, coordination and accountability to the UN, the various Water and Sanitation sector stakeholders are responsible for support in the SDG 6 targets. This can be attained through adherence to the requirements of the National Water and Sanitation Master Plan (NW&SMP) and the National Water Resource Strategy 3 (NWRS3), strong leadership, sufficient infrastructure

investment, reducing water losses whilst maximising the performance of Infrastructure Asset Management, more effective Water Service Authorities and strategic intrusions by all sector stakeholders. Utilizing the principles from within the SDG 6 Acceleration Framework will also catalyse our interventions to overcome any challenges that lie ahead.

The most recent UN Data Gathering process took place during 2023 and a summary of the results are highlighted in the table below. These are detailed and unpacked within the target progress reports for 2024 included in Section 2.

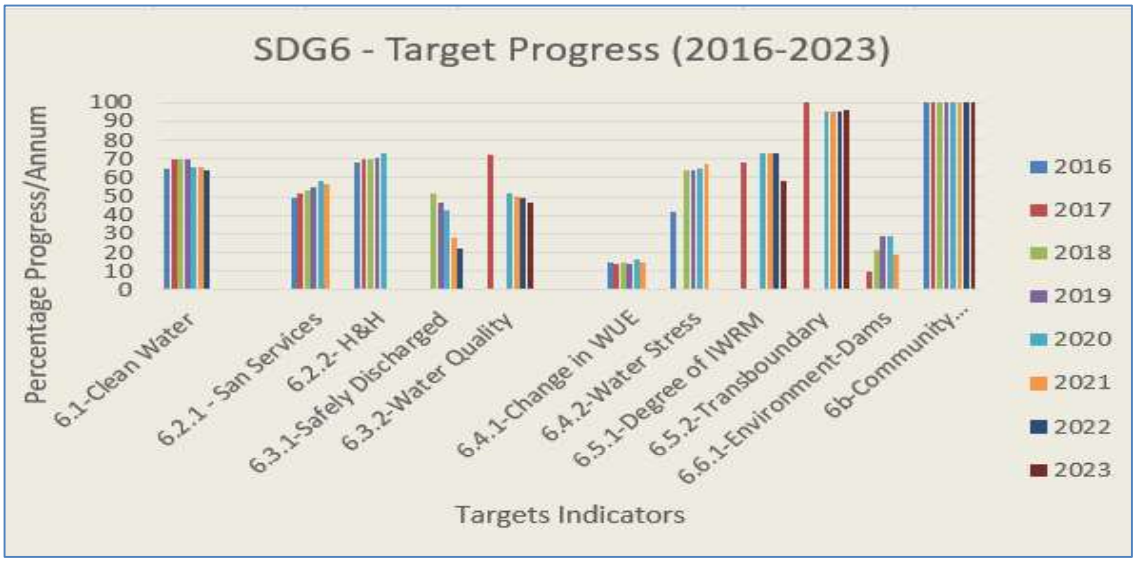


Figure 1:SDG 6 Target progress per indicator (2016-2023)

Table 1:SDG 6 Target Description

SDG 6 includes the following targets which are reported on, namely:

6.1. To achieve universal and equitable access to safe and affordable drinking water for all.

6.2. To 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. To 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. To substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

6.5. To implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.

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

6.a. To 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. To support and strengthen the participation of local communities in improving water and sanitation management.

SDG 6 Success Stories

a) South Africa has developed arguably the most effective operational structure for the implementation of SDG 6 on the African continent. It is a logical design that includes experts that cover all the different disciplines required to achieve target and indicator objectives and implemented with a systematic approach that identifies respective gaps and offers interventions to close those gaps. This is achieved through South Africa's National Water & Sanitation Master Plan (NW&SMP) and the National Water Resource Strategy 3 (NWRS3) in particular. In addition, the structure has brought in several cross-cutting task teams that include critical inclusion of issues such as Climate Change, Interlinkages (Synergies and Trade-Offs) with the other 16 SDGs in terms of their water and sanitation requirements and sector involvement, with the sector being critical for closure of the projects aligned with the NW&SMP. **Inclusivity is paramount**, not just within the SDG 6 programme but within the entire business of the water sector. The Department of Water and Sanitation seeks to maximise the awareness and involvement of Disability, Youth and Gender in particular, within all its operations and all that it stands for.

b) Through the process highlighted thus far, there has been many success stories to share, and outputs achieved, including but not limited to:

- ✓ Water Services Improvement Plan (WSIP): To date, national
- ✓ government support and interventions related to municipal water and sanitation services has not been sufficiently effective to deal

with the decline in these services. National government must therefore take responsibility and provide support on this. Therefore, in response to this, DWS has put in place a Water Services Improvement Plan to strengthen its support and intervention at municipal level. The aim of the programme is to ensure that DWS support and intervention is more consistent and systematic as opposed to the current ad-hoc approach.

- ✓ DWS has established a Water Partnerships Office in collaboration with the Development Bank of South Africa (DBSA) and the South African Local Government Association (SALGA), to support municipalities with financial structuring, feasibility studies and contracting with the private sector, to harness private sector skills, commercial and blended finance for Public Private Partnerships for water and sanitation services.
- ✓ The development of the National Sanitation Integrated Plan provides a 10-year roadmap for ensuring access to adequate sanitation services per province by 2030, providing solutions for addressing sanitation challenges in the sector including eradicating open defecation, and creating a pathway to generate economic opportunities.
- ✓ The development of the National Faecal Sludge Management Strategy is to guide the sector on safe management of faecal sludge to improve operation and maintenance of non-sewered sanitation systems, prevent contamination of water resources, safeguard public health, and protects the environment from pollution across the sanitation value chain.
- ✓ Establishment of a Sanitation Technology Technical Coordination Committee. The committee ensures a coordinated,

facilitated, and standardised process for sanitation technology uptake, which is fair, transparent, inclusive, and able to remove obstacles that delay uptake, adoption, and implementation of innovative sanitation systems. Furthermore, a draft Sanitation Technology Uptake Protocol has been developed to guide innovators and the sector on the standard process for assessment and validation of new technologies.

- ✓ A National Groundwater Monitoring Programme has been implemented which is the feeder to the assessment of SDG targets/ indicators as far as groundwater quality is concerned.
- ✓ Several initiatives have been institutionalised within the business to curb the challenges and address the requirements of SDG 6.4. DWS recognises the criticality of Water Conservation and Demand Management and its contribution towards water use efficiency. By minimising non-revenue water such as high- water leakages, it removes the burden and capital expenditure of new infrastructure requirements.
- ✓ SDG Interlinkage Task Team was initiated to identify the water and sanitation requirements of the other 16 SDGs and unpack the synergies and trade-offs of each. Tool has been developed to drive this process and requirements of other SDGs can then be incorporated within the NW&SMP to assist other SDGs in achieving their own Goals.
- ✓ The development of a Project Dashboard Development with the focus being to have an electronic system that reflects all information of projects in a Dashboard application format that everyone will have access to.
- ✓ Reviewing the Infrastructure Asset Management (IAM)

Framework & Strategy whilst rolling out support to all 144 Water Service Authorities in South Africa to enable them to develop their own 5 Year IAM Plans and implement each accordingly.

- ✓ The Department of Fisheries, Forestry and Environment has produced a 2018 National Biodiversity Assessment, (NBA) report that contains an updated wetland map used for reporting wetland and estuarine extent. The report provides the state of the country's biodiversity which assists in identifying where the problems are. This promotes the development of policy and strategies for the protection of the environment as well as water resources. Work is underway to review the 2018 NBA report.

SDG 6 Challenges

a) Poor Planning: SDG 6 is a sector programme, not a DWS programme, and without the commitment, investment, delivery, and performance of ALL sector role players, then South Africa will not achieve the SDG 6 Goal by 2030.

b) Lack of IAM: Entwined within the SDG 6 Programme and issues of sustainability is the fundamental science of Infrastructure Asset Management. Action is just a Dream' and therefore implementing such key issues by the Water Service Authorities through the SDG 6 Programme and delivery by the Sector to address the Gaps, is essential for South Africa's achievement in the SDG 6 Programme

c) Covid 19: The recent Covid 19 pandemic has had a devastating impact on South Africa's population and its economy over recent

years due to poor health & hygiene practices which have been a major contributing factor towards the spread of the virus. The achievements of SDG 6 and the objectives of this programme have however contributed significantly towards flattening the curve for Covid-19.

d) Power supply: The increase in load shedding throughout South Africa has also had a detrimental impact on the delivery of both water and sanitation services, which in turn has damaged the economy and health of our citizens and must be addressed urgently.

e) Non-alignment & compliance to strategic plans in addition to the specific interventions DWS is making towards the individual Targets described above, the success of the National Water and Sanitation Master Plan besides the National Water Resource Strategy 3, is imperative to the success of SDG 6. Operative and fully compliant Water Service Authorities, the development and implementation of effective municipal Water Services Development Plans (WSDPs) is critical in the effective management and compliance of all infrastructure, including Water and Wastewater Treatment Plants.

f) Governance, although DWS is responsible for providing leadership, coordination and accountability to the UN, the various Water and Sanitation sector stakeholders are responsible for achieving the SDG 6 Targets. This can be realized through adherence to the requirements of the NW&SMP, NWRS3, strong leadership from within the sector, sufficient infrastructure investment, more effective Water Service Authorities and strategic intrusions by all sector stakeholders.

Utilizing principles from within the SDG 6 Acceleration Framework will catalyze our interventions to overcome any challenges that lie ahead.

South Africa will not meet the 2030 Goal of SDG 6; however, DWS and the sector has taken the challenges 'Head On' and developed tools, systems, approaches, policies and legislation which will make a serious reduction in the hurdles that lay ahead before 2030. With the devoted professionals driving the process from within DWS they will not ease off and only strive harder to realize the SDG 6 Goal until the work is complete

Different Reporting Platforms Convey Different Statistics

It is essential to note SDG6 Targets, Indicators and Methods of Computation provided by the United Nations are prescribed so that they can monitor global countries 'like for like'. In the case of 6.1 'drinking water', SDG6 measures safely managed service (includes tap in household yards, with rural water quality monitored and no more than 2 weeks of 'no service provision' (accumulated over the year) - (75% in 2023). In contrast South Africa also considers data on Basic Services which considers the tap within 3 minutes return tri from yard, water quality not monitored. alone (98% in 2023). The statistic prove different. In the case of 6.2 'sanitation', SDG6 measures safely managed service (includes the toilet facility being in place, faecal sludge management and the provision of hand washing (70% in 2023). In contrast South Africa also considers data on Basic Services which considers the toilet facility alone (84.1% in 2023). The statistic of each prove different.

DWS also implements the Blue, Green and No Drop Reports, a Performance tool that Indicates the overall municipal drinking water, wastewater and efficient use of water status respectively, including the quality management business of each. The 'Drop' reports consider the water and sanitation 'systems' and includes their own criteria for measuring progress which include components of SDG6 such as water conservation for example – there is correlation where criteria is aligned. Access to water supply: According to Stats SA, average national access to RDP level of water service has increased from about 60% in 1994 to 98% in 2024. However, reliability has decreased sharply over the same period – so while many more people have access to a tap, water often doesn't come out of the tap and is not safe to drink. Out of a total population of approximately 63,9million; 3,1million do not have access to basic services and about 12,6million do not have access to a reliable service, which translates to 68,3% without a reliable service. The 2023 Blue Drop Report indicated that the percentage of water supply systems with poor or bad microbiological water quality compliance (water that is not safe to drink) increased from 5% in 2014 to 46% in 2023, resulting in increased risk of waterborne diseases. 277 of 958 (29%) of water supply systems in 62 Water Services Authorities were identified to be in a critical state of performance compared with 174 of 1036 (17%) in 33 Water Services Authorities in 2014.

The national average for municipal non-revenue water increased from 37% in 2014 to 47% in 2023. The implications of this are that money spent to develop dams and water treatment works is wasted if a large portion of the treated water is thrown away through leaks in municipal

water distribution systems; and municipalities with high non-revenue water are unable to pay water boards for treated water supplied by them and cannot afford to properly maintain and operate their water distribution infrastructure.

Access to Sanitation: Households with access to improved sanitation, increased from 49% in 1996 to 84,1% in 2023 based on the Stats SA 2022 data. However, the reliability of sanitation has decreased markedly. The 2022 Green Drop report shows that 334 out of 850 wastewater systems (40%) in 90 municipalities were in a critical state of performance (30% in 2013), and 66% of municipal wastewater infrastructure was in a poor or critically poor condition. This means that 72% of Water Services Authorities are regularly discharging untreated or partially sewage into oceans, streams, rivers, communities and the environment.

SDG6, 5 Year Reliability, the Blue, Green and No Drop are measuring different elements of the water and sanitation business. All these programmes paint a very bad picture in terms of our current status and the progress (or decline) South Africa is making. The challenges that need to be addressed, including the poor performance of Water Service Authorities, lack of skills and capacity and poor Infrastructure Asset Management, are common across each, which reinforces the priority areas to be addressed going forward.

The main causes of the reduced performance of Water Services Authorities are that their infrastructure is in a poor condition due to a lack of maintenance and that they do not adhere to standard operating processes for drinking water treatment and wastewater treatment.

Lack of skilled staff is a key issue. In terms of this, Gauteng has the highest percentage of drinking water systems with excellent or good performance and the lowest shortfall of qualified staff, whereas the Northern Cape has the highest percentage of drinking water systems with poor or critical performance and the highest shortfall of qualified staff.

1. BACKGROUND

In the year 2000 the South African Government, along with other members of the United Nations (UN), committed to a national and global plan of action to reduce poverty and ensure the development of its people. This sixth and final Millenium Development Goal (MDG) report provided an overview of the progress South Africa has made towards achieving the eight MDGs. It reflects not only the successes and challenges but also the lessons learned and how these should be integrated into the post-2015 development agenda and the associated Sustainable Development Goals (SDGs).

The SDG goals and targets came into effect on 1 January 2016 and would guide the decisions taken over the next fifteen years. The SDG targets are valid for and applicable to South Africa. They are also in line with the Vision 2030 of the National Development Plan as well as the current Medium Term Strategic Framework (MTSF) Outcome targets.

The Sustainable Development Goals (SDGs) are spearheaded by the United Nations through a deliberative process involving its 193 Member States. The SDGs are a set of 17 "Global Goals" with 169 targets between them, covering a broad range of sustainable development issues. These include ending poverty and hunger, improving health and education, making cities more sustainable, combating climate change, and protecting oceans and forests.

The African continent has defined its own Goals/Aspirations through Africa Agenda 2063. Agenda 2063, rooted in the Pan Africanism and African Renaissance, provides a robust framework for addressing past

injustices and the realization of the 21st Century as the African Century. Besides other development issues, these aspirations include the African people having access to affordable necessities of life including water and sanitation, hence the requirement for Agenda 2063 and the UN SDG 6 to be aligned respectively.

The 17 goals of the SDGs are to be attained by 2030. These goals reflect a flexible global vision, recognizing that each country faces specific challenges to achieve sustainable development. The SDGs include a dedicated water and sanitation goal, (Goal 6) with the objective to "ensure availability of, and sustainable management of water and sanitation for all". However, water is also reflected and implied in ALL other 16 SDGs. Water and Sanitation is Central to the SDG Programme of South Africa.

SDG Goal 6 contains 8 Targets, culminating in 11 indicators, all focusing directly on water, sanitation, and water resource management to be achieved by 2030. The UN requires progress reports on each Target indicator every 3 years as decided by the UN. Thus far, there have been three major data gathering processes, one in 2017 concluding with a South African County Report published by Statistics South Africa (Stats SA) in September 2019. A second data gathering process took place in 2020 and a third in 2023. The Department of Water and Sanitation submitted all the report requirements in full and on time for the three data gathering processes highlighted. STATS South Africa is responsible for coordinating the SDG Country Report with SDG 6 inputs from DWS. Participation and inputs from DWS towards the 2023 (and previously in 2019) Country Report was

addressed fully and with DWS playing a lead role within the Environmental cluster of the document.

Following the completion of the SDG Country Report (2019 and 2023), a Voluntary National Review (VNR) is then published. The primary focus of the VNR, coordinated by the Department of Planning Monitoring and Evaluation (DMPE) is to evaluate the impact of the country's policies and programmes in realizing the SDGs. The first VNR was published in 2019 whilst the second was due to be released in July 2024.

Participation in the United Nations SDG 6 Reporting allows countries to;

- ✓ Identify specific water and sanitation needs for countries.
- ✓ Determine how best to mobilize resources to support implementation activities, such as through capacity building and technical assistance.
- ✓ Determine a means by which to assess strategies and approaches to ensure availability and sustainable management of water and sanitation for all at national level.
- ✓ Develop a collective understanding of availability and sustainable management of water and sanitation, challenges and opportunities faced by a country.
- ✓ Assess the extent to which their current progress on ensuring availability and sustainable management of water and sanitation for all is consistent with the provisions of the United Nation's standards and norms.

The DWS has developed an SDG 6 website (linked to the main DWS website) which is easily accessible by the sector, providing progress reports and other relevant information pertaining to SDG 6. Documentation within the website includes:

- Target / Indicator descriptions and relevant Gap Reports.
- DWS Biennial Report 2019, 2021
- DWS prepared an additional Interim Biennial Report (Interim) 2022 as an additional document to inform the newly appointed Minister of the status on the SDG 6 programme.
- South Africa Country Report submitted in September 2019, September 2023.
- South Africa Voluntary National Review (VNR) Report submitted in September 2019.
- Global Acceleration Framework for SDG 6 2020.

This 2024 Biennial report aligned itself with the interim report described above will also be made available on the Website for public knowledge once received and approved by the Minister.

DWS has welcomed the UN SDG 6 Acceleration Framework launched in July 2020, to generate commitments for ambitious solutions on water and sanitation in support of the Decade of Action to deliver SDGs by 2030. The framework is driven by country demand and will align the international community to strengthen country planning, implementation and knowledge sharing for SDG 6 while supporting country response to the COVID-19 pandemic. DWS is working diligently toward its inclusion in the implementation of SDG 6, covering areas such as effective governance principles. This is being addressed through a well-executed operational structure that includes the SDG

Working Group, 13 task teams and sector support through the Water and Sanitation Sector Leadership Group.

DWS is applying more emphasis on innovation take-up to ensure maximum support to those with new ideas and promoting product diversity in the sector through its renovation of the DWS Technical Knowledge Centre. Implementation of the Acceleration Framework contributes significantly towards prioritizing the vulnerable, inclusivity, conflict sensitivity, unleashing female, and youth potential, planning for resilience and designing and implementing transformations based on scientific evidence.

1.1 Departmental Operational Structure to implement SDG 6

Statistics South Africa (Stats SA) has been given the mandate to coordinate all 17 SDGs in the country, including that of SDG 6. Each of the SDGs have been given a lead department to take ownership and deliver on their respective Goal, SDG 6, was given to the Department of Water and Sanitation to implement by 2030.

To facilitate the implementation of the SDG 6 programme the DWS SDG 6 Working Group (SDGWG) was established within the Branch Water and Sanitation Services Management. The SDGWG is an overarching forum that provides strategic direction to 8 Target Task Teams of the 8 different targets together with 5 Cross Cutting Task Teams in support and the 9 regional office representatives.

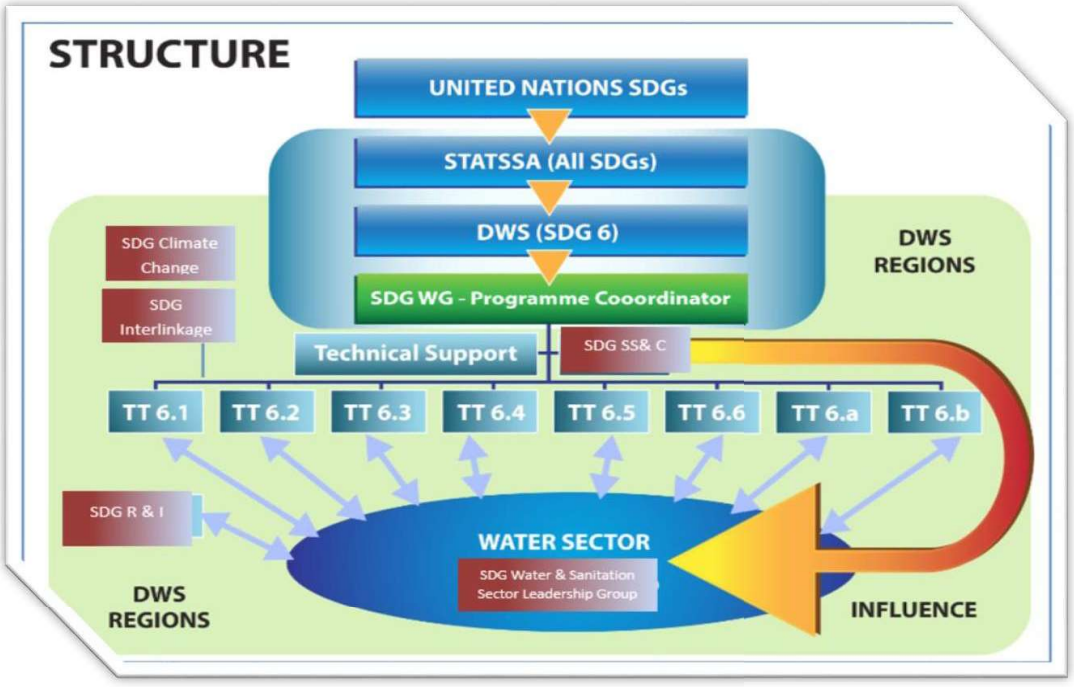


Figure 2:SDGWG Operational Structure

A task team for each of the eight (8) targets was established, i.e. 8 target task teams. There are an additional five (5) Cross-Cutting' task teams in place responsible for 'Research and Innovation' (R&I), 'Sector Support and Coordination' (SS&C), 'Water and Sanitation Sector Leadership Group' (WSSLG), SDG Interlinkage (SDGI) and Climate Change (CC). Therefore, there are 13 task teams in total with between five (5) to thirty (30) individuals within each. These individuals are specialists chosen because of their expertise towards the objective of each task team. Each task team is led by a Task Team Leader (TTLs) to drive issues pertaining to the mandate of each and to ensure that each task team meets and address issues towards closing their respective Gaps on a regular basis. Each regional office has an SDG 6 champion (9 in total) who are also represented at the SDGWG. The personal details of all TTLs are attached as **Annexure A**.

Each task team has developed their own terms of reference including an annual action plan on how data specific to its target is going to be collected, processed, analyzed, reported, etc. It is also the responsibilities of task teams to domesticate indicators and make them suitable in the South African context, including monitoring programmes to scrutinize the achievement of targets towards the 2030 SDG 6 Goal.

1.2 Key Stakeholder Engagements

1.2.3 SDG 6 2023 Mid Term Review

The SDG 6 Mid Term Review took place on the 22 to 23 February 2023 in Pretoria. The event planned was to take stock of where SDG 6 had progressed over the first 7 years since inception, whilst strongly

acknowledging areas where the sector had underperformed, and sharing ideas of how the process can be accelerated to maximize positive impact towards the 2030 Goals. As part of ensuring water security for all, and achievement of the SDG 6 agenda, the purpose of the SDG 6 Mid-Term Review was to have a working session with sector partners and various stakeholders to engage, debate and critically track how far the sector has come and what still needs to be achieved over the remaining 7 years.

Following the previous Minister Senzo Mchunu's address to the sector, Deputy Minister, Mr. David Mahlobo and previous Deputy Minister Ms. Dikeledi Magadzi led this event ahead of the United Nations (UN) Water Conference which took place immediately after in New York during March 2023.

Mid Term Review objectives included the following:

- To share the vision, principles and operational structure of the SDG 6 programme developed by the DWS.
- To understand the unique approach of DWS with its 5 Cross Cutting Task Teams in support and its integration with other SDG's.
- To provide a Mid Term Review and progress of the eight (8) SDG 6 Targets and 11 Indicators over the past 7 years.
- To unpack opportunities to overcome challenges and accelerate delivery within the Eight SDG 6 Targets towards 2030.
- To obtain commitment by the sector to improve delivery of the SDG 6 programme within South Africa.

- To inform the status of SDG 6 in South Africa in preparation for those who would attend the UN Water Conference in New York (22-24 March 2023).

A workshop report was prepared to capture detailed input and commitments from the different sector stakeholders as to what will be implemented going forward and this included:

- Improved sector alignment with the requirements of the National Water and Sanitation Resource Strategy 3.
- Improved sector alignment with the requirements of the National Water and Sanitation Master Plan.
- The management and access of data in the sector is crucial to assess status and progress to the desired destination.
- Water and sanitation Infrastructure Asset Management interventions, Improved Operation and Maintenance, Revenue Management and Water Use Efficiency as kingpins to improved sector performance in addressing the SDG 6 gaps.
- Involvement of Youth, Gender, Persons with Disability, and other vulnerable groups within the SDG 6 programme.
- Pursuing opportunities of integration with other SDG's whilst identifying the synergies and trade-offs of each.
- Deliberations on Municipality's performance, support and interventions critically required to tun this around and assist them to deliver on their responsibilities.

There was an SDG 6 Prize Giving at the Mid Term Review, to recognize some of the great work completed by colleagues in the sector over the past 7 years, and to motivate towards success in the remaining 7 years.

1.2.2 United Nations High Level Political Forum (HLPF):10-19 July 2023

The HLPF is the main United Nations platform on sustainable development, and it has a central role in the follow-up and review of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) globally.

The theme for the 2023 HLPF was: "Accelerating the recovery from the coronavirus disease (COVID-19) and the full implementation of the 2030 Agenda for Sustainable Development at all levels". Progress towards achieving the Sustainable Development Goals is badly off track. The world is grappling with severe financial, energy, food and humanitarian crises. The Forum assessed the impacts of these interlinked crises on the implementation of the 2030 Agenda and on all the Sustainable Development Goals.

South Africa participated under the leadership of the Department of Planning, Monitoring and Evaluation (DPME) and Department of International Relations and Cooperation (DIRCO) supported by the Department of Fisheries, Forestry and Environmental Affairs (DFFE), Department of Science and Innovation (DSI), The Department of Mineral Resources and Energy (DMRE), Department of Human Settlement (DHS), and Department of Water and Sanitation (DWS).

The Department of Water and Sanitation covered the topic on SDG 6 Goals: Clean Water and Sanitation. Minister Mchunu delivered his Statement for South Africa on the 17 July 2023.

Minister Mchunu also participated as a panelist at a side event regarding

the Africa Investment Programme for Africa (AIP) and the Special Event on SDG 6 convened by UN Water. With 2023 marking the mid-point of the implementation of the 2030 Agenda and the SDGs, the July 2023 HLPF and its preparations made a key contribution to prepare for the SDG Summit that was to be held in September 2023 during the high-level week of the General Assembly. The UN Summit (which is the HLPF convened under the auspices of the General Assembly) took place in September 2023 and saw all Heads of States and Government review the overall implementation of the 2030 Agenda since 2015 and provide political guidance and recommendations.

The 2023 HLPF drew from the experience of the 39 countries conducting Voluntary National Reviews and the European Union's voluntary review. It also heard from other countries and participants about the lessons learnt on pursuing the 2030 Agenda in these difficult times.

1.2.3 Main outcomes of the visit/engagement

The UN Secretary-General summarized the HLPF with the following conclusions/recommendations:

- A recommitment to accelerated, sustained, and transformative action.
- Pledges for concrete, integrated, and targeted policies and actions to eradicate poverty, reduce inequality, and "end the war on nature".
- Strengthened national and sub-national capacity, accountability, and delivery institutions.
- A recommitment to the Addis Ababa Action Agenda.
- Strengthening the UN development system; and

- Addressing SDG-related gaps and weaknesses in the international architecture that have emerged since 2015.
- Reform of the international financial architecture and the creation of an SDG Stimulus plan to unlock at least USD 500 billion annually for developing countries and called for forging a "new social contract" at the 2025 Social Summit.
- All countries were also urged to join the SDG Summit armed with concrete national plans and pledges, particularly ones that address poverty and inequality. This call was repeated during the HLPF Ministerial Segment, as did many ministers and other high-level officials who spoke during the general debate.
- The HLPF panel discussions raised suggestions for the Summit such as new intergovernmental bodies for water matters, energy, clean cooking, and an intergovernmental process to agree on new development indices that go beyond the limitations of GDP.

1.3 Subjects of interests

1.3.1 Data Management and the Integration with the NWRS3/ NW&SMP

Each task team has between 1 to 2 indicators to report on to the United Nations (UN) during each data gathering process (approximately every 3 years). For every UN report, the task teams members are trained by the UN through a web-based training system or workshop. They then collect data from within DWS (both National and Regional) and from the sector as required to populate the UN Report Templates for submission as a final product. Each time there is a data gathering drive through the United Nations (2017, 2020 and 2023), the DWS can monitor progress in closing the gaps towards full compliance with the SDGs by 2030.

There are three Tiers of indicators, with Tier 3 being the lowest and Tier 1 being the highest. Tier 3 is those indicators that countries have not yet developed methodologies and structures for to provide meaningful reporting. Tier 2 has some data available to populate the indicator and Tier 1 has all available data necessary for indicator reporting. South Africa sits mainly in the Tier 2 category with methodologies being developed to generate data for criteria such as hand washing practice (6.1), faecal sludge management (6.2) as an example. Other data available through the Stats SA General Household Survey (GHS) has Tier 1 data available. However, the GHS was recently compromised by the Covid pandemic in 2020.

One of the challenges in compiling these reports and reporting to the UN on the SDG 6 targets is the issue of accessibility and quality of the data. The availability and quality of data used in computing some targets for the reports is often unreliable or unavailable. For example, regarding target 6.4 pertaining to Water Use Efficiency, in computing the water use value, the allocated volumes of water use from the Water Administration and Registration Management System (WARMS) were utilized instead of the actual volume water use as prescribed by the UN, as this was the most reliable data available at the time. Since Water Service Authorities (WSAs) are often non-compliant with the submission of Water Service Development Plans (WSDPs), the level and quality of data made available in support of SDG 6 targets is minimal.

The task teams are working hard to improve both the collection and quality of data used for all SDG reporting to align with UN requirements. The collation of effective and reliable data, culminating the implementation of an exceptional data management system is a key requirement for

achieving the SDG 2030 Goal. This requires resources and investment by DWS to help achieve through its Information Technology (IT) service provider.

SDGWG and the respective task teams are established, operational and meet on a regular basis, both in their task teams and as part of the SDGWG. Each task team has developed its own annual action plan to adhere to this request. However, they do not have a specific budget and utilize the DWS operational budget within their branches. A specific budget for SDG 6 would assist to run workshops, produce documentation, and influence change in the different sector components, including running workshops, developing advocacy material, roadshows, improving data acquisition for specific targets, and engaging the other 16 SDGs. Continuing with support at an international level, an estimated value of R1 million per annum over the remaining 6 years would greatly assist with improved operational costs, purchasing of relevant software, systems and equipment to improve delivery on SDG 6.

At the end of each calendar year, each of the 8 task teams develops a gap report for their specific targets, which then informs progress from the previous year towards 2030. Each gap report proposes high level actions, responsibilities and timeframes to be implemented by sector stakeholders, including DWS. The gaps are therefore translated into potential projects and programs which will be presented to the NW&SMP and the NWRS 3 team for adoption and inclusion where applicable. The figure below demonstrates interface between the SDG 6 targets and the National Water and Sanitation Master Plan.

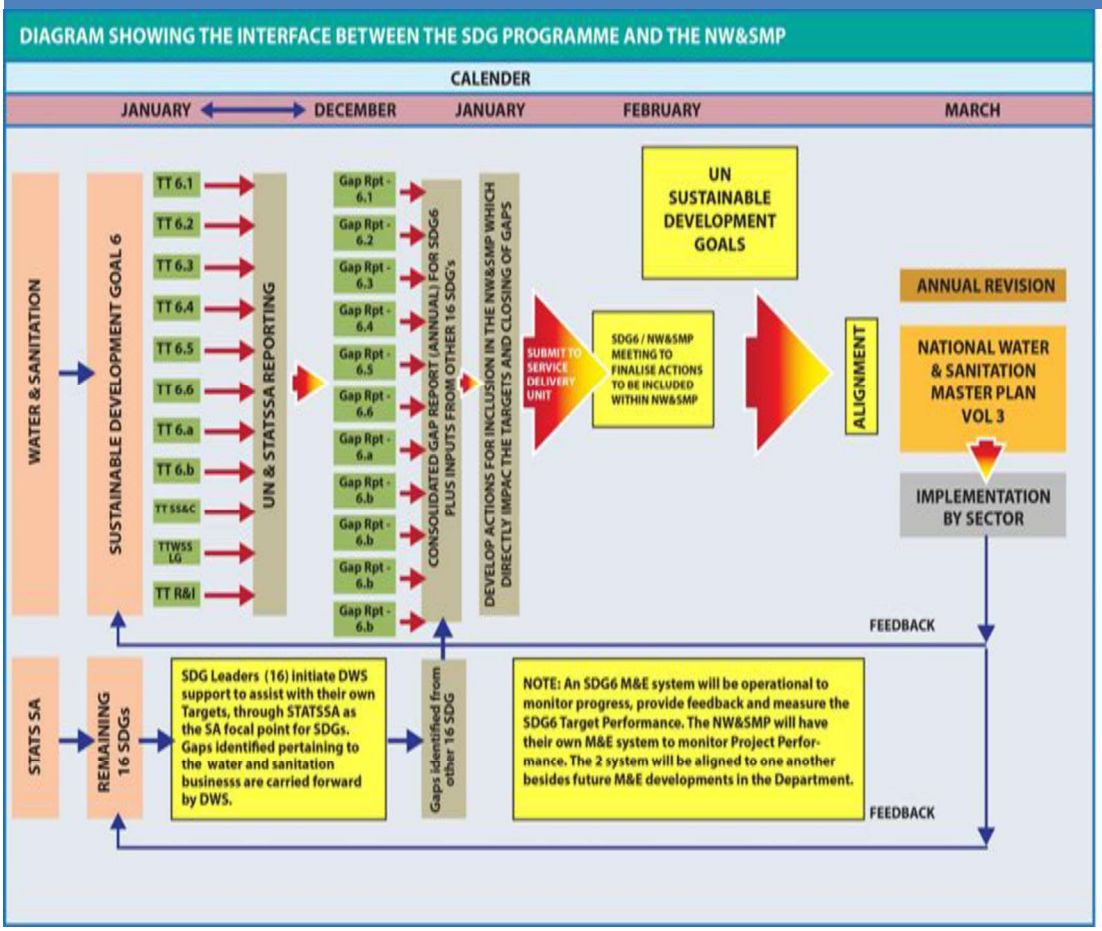


Figure 3:Interface with the National Water &Sanitation Master Plan

The SDG 6 programme is NOT a programme that implements projects to address the gaps towards the 2030 goal. It is rather a programme that measures the gaps that exist and informs other vehicles such as the National Water & Sanitation Master Plan (NW&SMP) to implement projects and programs on the ground, designed to close the gaps identified once implemented. Since its launch in 2019 the NW&SMP has not enjoyed the impact that was hoped for. As a main driver of both the NW&SMP and the NWRS3 greater cohesion is required between the three spheres of government to ensure greater momentum in the implementation of each programme towards 2030.

The NW&SMP was launched in 2019 and failed to maintain the alignment and the impact in the sector for several reasons, including the bosberaad that never materialized, and lack of accountability by the sector to align and deliver on their own plans. The SDG 6 Working Group has submitted their gap reports and intervention requirements to the NW&SMP team every year since the programme began. The intention being to inform change within the NW&SMP for each annual revision planned, however that did not happen. The NW&SMP the is currently being reviewed and recommended SDG 6 proposed interventions will be included to ensure alignment. This is imperative for SDG 6 achievement by 2030.

1.3.2 UNESCO IHP

UNESCO IHP-IX refers to the 9th phase of the International Hydrological Programme (IHP) of UNESCO (2022-2029). IHP IX aims to address global water challenges, promote sustainable water management and support the UN's SDGs particularly SDG 6. DWS is supporting the UNESCO IHP-IX Implementation and Reporting programme through the Branch: National Water Resource Management. A process is currently underway to align the IHP- IX Strategic Plan with the SDG 6 targets.
The IHP-IX Strategic Plan has the following:

- ✓ 5 Priority Areas,
- ✓ 34 expected outcomes and
- ✓ 150 activities which will be implemented through their Operational Implementation Plan/Strategy.
- ✓ A quarterly report must be maintained by the DWS IHP-IX Implementation team through 2029.

- ✓ Most data to be populated in the quarterly report will emanate from the SDGWG and will be coordinated accordingly.

1.3.3 Additional SDG 6.a. indicator: Water Education

UNESCO has also requested the SDG 6 Working Group, target 6.a, to implement a new Indicator within their target. This indicator relates to Water Education. Presently, there is no global tool to evaluate the human capacities of the water sector at the national level. To assess water education at the tertiary level of the formal education systems in South Africa, the indicator will measure and enable the monitoring over time of the number of graduates in water-related diplomas, degrees, expressed as a percentage of the total number of graduates in higher education and as a percentage of the total population of the country. Sufficient installed national capacities, both at the institutional and human levels, constitute a prerequisite to give sustainability to the achievements of Sustainable Development Goal 6 to ensure availability and sustainable management of water and sanitation for all, with water related targets of the 2030 Agenda.

DWS is awaiting clarity regarding a Method of Computation from UNESCO, which is a requirement of every new Indicator and will ensure continuity globally. Once available, task team 6.a will resume implementation from 2024 and beyond 2029. If not available, then the SDGWG, through its Research & Innovation Cross Cutting task team led by the Water Research Commission, is ready to develop a Method of Computation to suit. This is currently moving slowly and requires additional resources within the 6.a task team to drive this initiative.

1.3.4 Monitoring and Evaluation (M&E) Tool/System

In January 2019, the SDGWG resolved that a dedicated SDG 6 Monitoring and Evaluation (M&E) system is urgently required to monitor progress of each of the 8 targets and 11 indicators of SDG 6, and also coordinate with other programs such as the African Agenda 63, the African Ministers Council on Water (AMCOW), Water and Sanitation Management Organisation WASMO, WHO/UNICEF, Joint Monitoring Programme (JMP), UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS). All these programmes have overlaps in data requirements which if managed effectively through an appropriate reporting system could reduce the time in population of each report templates whilst ensuring accuracy and continuity of data management to all forums.

No system currently exists in the Department pertaining to SDG 6 and it has not progressed since the initial Business Case that was submitted in February 2019 due to funding availability. R5 million is required for the 3 proposed phases of the M&E tool/system development and is key to the success of the management of data going forward. The proposed M&E system will monitor progress of the SDG 6 Programme towards the achievement of the 2030 Goals and will inform on-the-ground activities through the implementation of the projects identified by the NW&SMP. The identified gaps that need to be closed within each Target will also be monitored. All projects/ programmes identified by the NW&SMP are linked to the specific SDG 6 indicators and the M&E system and project dashboard will be able to monitor project implementation progress and their impacts of each towards closing the gaps.

The SDGWG initiated the SDG Interlinkage Cross cutting task team which developed an affluent tool that identifies 'synergies and tradeoffs' between SDG 6 and all 247 indicators of the 17 SDGs. This initiative generated great curiosity from the United Nations, and they have expressed interest in replicating it to other African countries because of its potential positive impact it has monitoring progress of all 17 SDGs on the Continent. The lack of funding and support has prevented this initiative from taking off the ground.

A further R7 million is estimated to implement a programme over the coming 3 years, however nothing has been secured. Resources are also required to be implemented within DWS.

This is an opportunity for South Africa to take the lead with this initiative and support others on the African continent to other SDGs in respect to their own goals to be achieved. Water and sanitation are central to all 17 SDGs and DWS must pursue the opportunities and provide support to each.

The proposed M&E system will be implemented in 3 phases:

- Phase 1 is the development of the M&E tool for the 8 Targets and 11 indicators within SDG 6.
- Phase 2 is the enhancement of the M&E tool for the water and sanitation component across the other 16 SDGs pertaining to health, housing, education, poverty etc., so that the Department can determine the extent and scope of support required within each of the other SDGs and the impact DWS is making towards achieving their 2030 Goals.

- Phase 3 is the enhancement of the M&E tool (internationally), which is linked with the United Nations M&E processes and on the African continent via AMCOW to benchmark South Africa's performance globally.

Objectives of the M&E system:

- Identify the data requirements and gaps from different sources.
- Enabling task team Members to update on progress against their respective indicators with supporting documentation.
- Enabling task team Members to administrate, monitor and evaluate their respective indicators.
- Present outputs in any reporting formats required.
- Provide regular feedback reports on SDG progress to the public.
- Provided selected high-level progress information to the National Integrated Water Information System NIWIS.

Additional development Phases of the system could include the incorporation of SDG 11, with regards to the Department of Human Settlements' mandate, if required, making cities and human settlements inclusive, safe, resilient and sustainable. Currently a cost of R5 million has been identified to develop the 3 phases of the M&E Tool over 18 months.

An M&E system is also required for the NW&SMP and the NWRS3 to be implemented effectively, and there is currently none planned. Another opportunity would be to develop an M&E system / dashboard with a combined effort to cover NW&SMP, SDG 6, AMCOW, Agenda 63 etc. If DWS could integrate SDG 6, the NW&SMP 3 as proposed in the executive summary, then perhaps one system can be developed to cover

all three. Additional resources would assist in making this a reality.

1.3.5 DWS Regional involvement

It is imperative to have regional representation of the task teams, but impractical to have 9 provinces represented on each of the 8 task teams. A suitable individual for each regional office was therefore nominated as the "SDG 6 regional champion" and is the point of contact for all 13 task teams in the region. The individuals form part of the SDGWG to ensure full participation. The names of regional SDG 6 champions are captured in **Annexure A.**

The regional offices play a critical role in the success of the SDG 6 programme. This year there was improved participation by the regions besides their completion of Regional Biennial progress reports (see attached **Annexure C**). Some provinces are not so proactive in the programme, which is compromised as a result. Additional support to the regional office, training, sector workshops to encourage inclusion could make a difference to regional performance.

1.3.6 SDG 6 Data Drive 2023

To date the DWS has successfully completed all the UN Reports for the 2017, 2020 and 2023 Data Drives (results of which can be found in the respective SDG 6 DWS Biennial Reports and the Stats SA SDG 6 and Country Report 2019, 2023 respectively). These documents are also available on the SDG 6 website for download.

DWS has recently completed the 2023 Data Gathering process as

required by the UN. The status of SDG 6.1 and 6.2 targets rely on the Stats SA annual General Household Survey results. 2022 data was delayed due to the Covid 19 pandemic however data was received by December 2023. The GHS data and that of 2021 census was seriously compromised from the Covid pandemic with only 30% of the sample data collected. This is reflected in the latest 6.1 and 6.2 data. The information received and has fed into the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS). The remaining targets such as 6.a and 6.b will submit progress reports as and when requested by the UN. Since 1990, the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation, and Hygiene (JMP) has been tracking and reporting on the incredible progress made in increasing access to drinking water, sanitation, and hygiene (WASH) globally. Their reports highlight the achievements made at country, regional, and global levels, showcasing the collective efforts towards a healthier and more sustainable future for all. The table below demonstrates the definitions of the water access (service level) ladder by the JMP.

Table 2: JMP Water Access Ladder Definitions.

Service level	Definition
Safely managed	Drinking water from an improved water source which is located on premises, available when needed and free of faecal and priority contamination
Basic	Drinking water from an improved source provided collection time is not more than 30 minutes for a roundtrip including queuing
Limited	Drinking water from an improved source where collection time exceeds over 30 minutes for a roundtrip to collect water, including queuing
Unimproved	Drinking water from an unprotected dug well or unprotected spring
No service	Drinking water collected directly from a river, dam, lake, pond, stream, canal or irrigation channel

Table 3: SDG 6 Target progress summary per indicator (2016-2023).

CURRENT STATUS OF SDG 6 IN SOUTH AFRICA (2023 DATA DRIVE): UPDATE

1 **SDG 6.1 Access to Clean Drinking Water**

Target 100% provision

Safely managed water is drinking water from an improved water source which is located on premises, available when needed and free of faecal and priority contamination.

Basic Level means drinking water from an improved source provided collection time is not more than 30 minutes for a roundtrip including queuing.

2022 Status: 64% Safely Managed

89% JMP Basic Level of Service

2 **SDG 6.2 Access to Safely Managed Sanitation**

Target 100% provision

***Safely managed* sanitation** means the use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or transported off site.

Basic Level sanitation means the use of improved facilities that are shared with other households.

2023 Status: 70% Safely Managed

84% JMP Basic Level of Service

3 **SDG 6.3 Water Quality**

SDG Target 6.3 sets out to improve ambient water quality, which is essential to protecting both ecosystem and human health, by eliminating, minimizing and significantly reducing different streams of pollution into water bodies.

SDG 6.3.1: Proportion of water containing waste lawfully discharged.

Target: Halve the proportion of wastewater that is NOT lawfully discharged by 2030 (i.e. using 2017 as the baseline, this means 76% of Municipal discharges must be lawful).

2023 Status: 22% of municipal WWTWs submitted data and 31% of our municipal WWTWs complied with the required standards.

SDG 6.3.2: Proportion of bodies of water that comply with the water quality objectives.

Target: 100% of bodies of water comply with the water quality objectives.

Target **Groundwater**: 72% of the **groundwater bodies** complied with set target.

In 2023 data gathering drive, 78% of **groundwater** complied with a set of national water quality objectives.

Target **Surface water**: In 2023, 70% of **rivers** complied with a set of national water quality objectives.

In 2023 data gathering drive,47% of **dams** complied with a set of national water quality objectives.

4 **SDG 6.4 Water Use Efficiency**

South Africa losses are exceptionally high: Non-Revenue Water (NRW) is currently at about 45%, which equates to more than R9.9 billion. Per capita consumption is at 237 l/c/d as compared with the world average consumption of approximately 173 l/c/d.

It has been estimated that irrigation schemes experience water losses of between 35% to 45%.

SDG 6.4.1 WUE (USD/m^3) is currently at 16 USD/m^3 (2020). In 2015 it was 14.9 USD/m^3

SDG 6.4.2 Water Stress is currently at 66.89%. In 2015 it was at 41.38%

Note: Water stress occurs when the demand for water exceeds the available amount during a certain period or when poor quality restricts its use.

USD/m^3: Refers to United States Dollar per cubic meter, which is a unit of measure, this is a unit of currency per unit volume i.e. Water: 1.20 USD /m^3.

5 **SDG 6.5 Integrated Water Resource Management**

6.5.1 Target: Degree of Integrated Water Resource Management

This currently stands at 58% in 2023 compared with 67.5% in 2017.

6.5.2 Target: Proportion of transboundary Basin area with an operational arrangement for water

This currently stands at 96% in 2023 compared with 100% in 2017.

6 **SDG 6.6 Environment**

This target is the measure of change only in the environment and therefore the criteria for the target and the indicators have been met. When global data is submitted for review the surface water dynamics dataset (representing both permanent and seasonal water) does not disaggregate surface waters into water resource types (i.e., reservoirs, estuaries, lakes, rivers).

During the 2020 SDG reporting cycle, South Africa was able to conclude:

- Number of wetlands presented in the global dataset were under-represented by around 87%,
- The number of dams with high trophic status was under-represented.
- The spatial extent of rivers mapped is about 10% of the country's main rivers. Since RSA cannot produce trend data for change in spatial extent of seasonal and permanent water-related ecosystems from 2000-2020, global datasets were accepted for this round of reporting,

BUT, with an agreement for DWS and its partners to work with UNEP in future to improve these datasets.

7 **SDG 6.a International Cooperation**

Target 6.a as a means of implementation is aimed at creating an enabling environment for the flow of external funding. Determining the full extent of the contribution required from all donors operating within a given sector, such as water and sanitation in South Africa to reach the target by 2030 is impossible to accurately determine. There is no limit and therefore the criteria for the Target and indicator have been met.

8. **SDG 6.b Community Participation**

2030 Target 100%

2023 status 100%

In terms of the criteria provided by the UN, South Africa meets the target by 100%, however, the target does not measure performance of community involvement which is why a new indicator has been domesticated by South Africa to address.

2 SDG 6 TARGET PROGRESS (2017-2023)

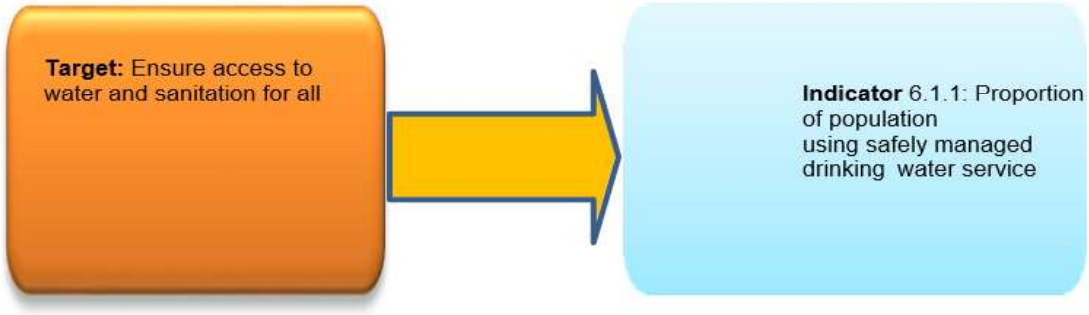
It is essential to understand the background and the process involved in the implementation of the SDG 6 programme before getting into the specific progress details for each target. The section below provides detailed target progress with graphs and other supporting information, between the 2017 and the 2023 Data Gathering Process with a high-level summary at the beginning of each annexure.

SDG 6 Target Task Teams

- ✓ SDG 6.1: Safe drinking water for all

- ✓ SDG 6.2: Equitable sanitation for all
- ✓ SDG 6.3: Water Quality
- ✓ SDG 6.4: Water Use Efficiency
- ✓ SDG 6.5: Integrated Water Resource Management
- ✓ SDG 6.6: Protecting the Ecosystem
- ✓ DG 6.a: International Cooperation
- ✓ SDG 6.b: Community Participation

2.1.SDG 6.1 Safe Drinking Water for All



Summary:

Statistical data from Stats SA's General Household Survey (GHS) is utilized to monitor SDG 6.1 and 6.2 each having their unique UNICEF JMP access ladder for water and sanitation. However, the Department is utilizing their Norms Standards relating to water access to RDP Basic Water Supply (access to a tap within 200 meters), and limited access (i.e. underserved) to a tap greater than 200 meters away. The Departmental data aligns with Stats SA, censuses, community survey (municipality data) and uses Stats SA mid-year data to track national and provincial population from the Water Services Knowledge System (WSKS).

The 2030 Agenda for Sustainable Development called for 'ensuring availability and sustainable management of water & sanitation for all' under SDG 6 and established ambitious indicators for WASH services under targets 6.1 and 6.2.

While the number of countries with estimates available for the new SDG global indicators has increased with each United Nations Joint Monitoring Programme (JMP) progress update, many still only have a small number of data points making it difficult to assess trends.

However, DWS has enough data to begin to assess the prospects for achieving the SDG targets. This report extrapolates estimates based on

existing trends to illustrate current trajectories and the acceleration required to achieve universal coverage by 2030.

2.1.1 SDG 6.1 Overall progress (2016 to 2023)

The target is 100% provision of safely managed water supply to its people by 2030, this means to achieve universal and equitable access to safe and affordable drinking water for all.

UNICEF in conjunction with Joint Monitoring Programme (JMP) have developed access ladders for the wash industry to monitor progress. Figure 4 below shows the number of households with basic water supply and reliability of supply. The Department has modelled the General Household Survey (GHS) of Stats SA since the base year of 2016 which represents the commencement year of the Sustainable Development Goals (i.e. SDG 6.1). In the base year of 2016, the Basic Water Supply was at 85% with Safely Managed at 65% and JMP Basic Water Supply at 20%. Over the six-year period, the Basic Water Supply grew by 4%. In 2022 the Basic Water Supply was sitting at 89%, which is the sum of "Safely Managed Water Supply at (64%)" and "JMP Basic Water Supply at (25%)". The interruptions of water supply dominate the Safely Managed indicator because of aged water supply infrastructure requiring infrastructure replacement, renewal repairs, supported with maintenance programs.

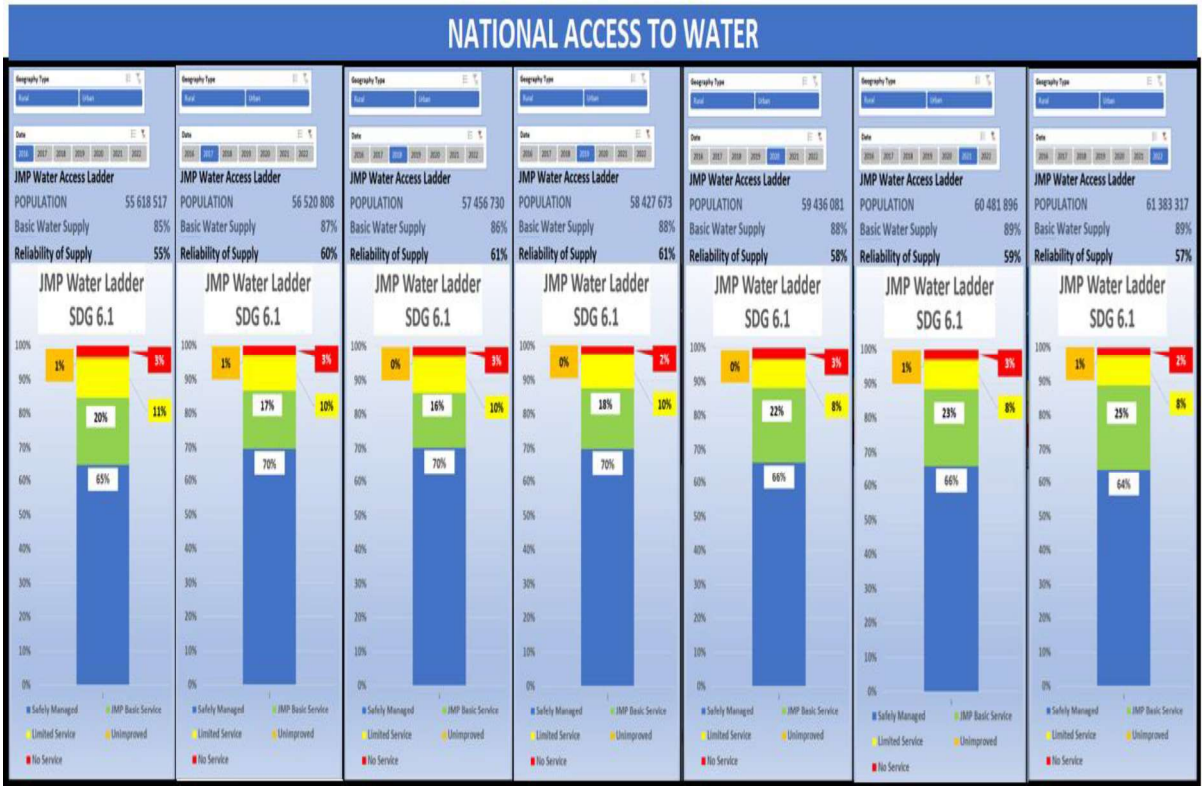


Figure 4:National access to water (2016-2022) modelled GHS data.

The drop in Safely Managed Water Supply during 2020 and 2021 was related to the Covid 19 pandemic. The General Household Survey (GHS) publications has shown that the sample size in previous years was in the order of the upper 30 000 which during the Covid 19 pandemic in 2019 dropped to below 10 000 sample size.

The Basic Water Supply has catered for the natural population growth rate. However, the ladders of Limited, Unimproved and No Service have not delivered on making an impact on substantially reducing the backlogs. In 2016 there was a backlog of 8.5 million people not having access to Basic Water Supply, and over a period of five years, the recorded backlog in 2021 was 7.0 million people without access to basic water. The Safely Managed Water Supply trend dropped down to 64% from the two previous

years of 70%. The census data is currently being interrogated and will enable the Department to update the Water Services Knowledge System data.

2.1.2 Challenges over the last 7 years (2016-2023)

a) The backlog eradication has shown a gradual pace considering only 1 614 957 households served over 7 years. The domestic and external economic environment also has an impact on achieving SDG 6, with limited funding and investment in water and sanitation infrastructure which have contributed to this slow progress.

b) External factors such as the COVID-19 pandemic have also had an impact on the country's ability to achieve SDG 6 goals.

c) The challenges of water scarcity and water stress are exacerbated by high levels of poverty and inequality, which make it difficult for many people/households to access safe and sustainable water and sanitation services. Significant challenges remain, particularly in rural areas and informal settlements, where access to water and sanitation services is often limited or non- existent.

d) Data management requires rigorous data analysis to determine alignment with projects. There was no internal process within the department that monitored the status internally and that aligns with projects implemented. There are gaps in the data that affect reporting on SDG 6.1 e.g. a lack of rural water quality monitoring & reliability (interruptions).

e) The urban and rural areas are sitting with an ageing infrastructure requiring major CAPEX investment in new infrastructure, replacement, refurbishment and upgrading of existing infrastructure.

f) OPEX is also required to deal with proper Operations & Maintenance of the current infrastructure.

g) Increased population, increased urbanization resulting in increased informal settlements.

h) Loadshedding causes power interruptions resulting in services interruptions.

i) The lack of Water Use Efficiency (WUE) plays a major role on water security. South Africa currently uses on average 253 l/c/day for each household (H/H), and for effective WUE, this should be reduced to international standards of 176l/c/day.

j) The funding shortfall is primarily due to the accumulated backlog in infrastructure refurbishment, renewal of ageing infrastructure and new water resource with regional bulk water distribution requirements to serve both the social and economic water needs.

k) In South Africa water and sanitation services are a municipal function in terms of the constitution. Municipal water supply is supposed to be run as a self-sustaining business, with maintenance, operations and refurbishment costs covered by revenue collected from the sale of water. Municipalities only obtain grants from national government to cover the cost of

supplying free basic water to the indigents, and for capital projects to address historical backlogs.

l) In many municipalities, water and sanitation services are in a poor state and deteriorating. The percentage of the population with access to reliable and safe water and sanitation services is declining. There is a major challenge of poor governance; poor billing and revenue collection; poor asset management, poor operations management, poor maintenance; and a lack of recruitment of people with the required technical qualifications and experience.

2.1.3 Successes over the last 7 years (2016-2023)

a) Access to water and sanitation has improved significantly since 1994 with 89% of households having access to basic water services.

b) The launch of the National Water and Sanitation Master Plan in 2019, currently being updated, is a promising development that sets out a clear roadmap for universal access to safe water and sanitation by 2030.

c) The private sector and civil society have also played crucial roles in promoting water conservation, sustainable farming practices, and raising awareness about the importance of water and sanitation, especially in marginalized communities.

d) The Department of Water and Sanitation has developed a Groundwater Strategy with Standard Operating Procedure (SOP) for Groundwater Resource Development for community water supply projects.

e) Integrated planning, the Department is developing Five-Year Water and Sanitation Reliability Implementation Plans for all the 144 Water Service Authorities within all District Municipalities. This is to ensure integrated planning and project implementation for provision of reliable water supply and sanitation services.

f) Development of Project Dashboard

g) Resuscitation of Drop Regulation Framework

h) Water Services Improvement Plan

i) Legislative Review

j) New Policy Development

k) Water Partnership Office

Reliability refers to an uninterrupted supply for 90% of the time through a fully functional infrastructure system which is operated and maintained to set standards supported by an effective governance institution that provides an acceptable quality of water supply that is based on sustainable water security principles. These implementation plans consist of situational assessment per Local Municipality and pipeline of projects with a funding model developed to close the gaps identified during this process.

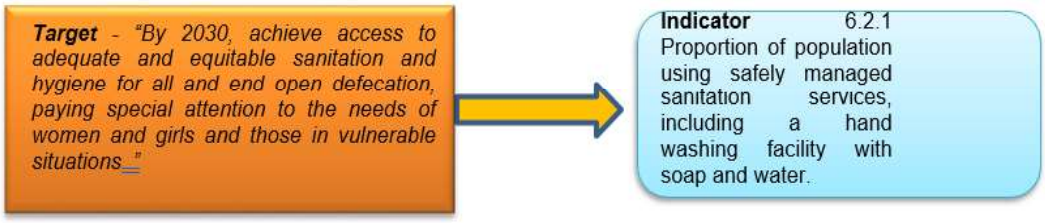
The implementation of these interventions will address challenges that hinder the water supply provision. These will require more vigorous innovation from the sector, the interventions will not only address the gaps for SDG 6.1 but other targets as well, thus ensuring robust and accurate monitoring of SDG 6, acceleration of all projects and programmes that will close the water services gaps to achieving the SDG 6.1 target of 2030.

2.1.4 Can South Africa Meet its 2030 SDG 6.1 Target?

Municipalities with high levels of indigent households are dependent on national grants to provide reliable and affordable water and sanitation services. In rural and/or smaller municipalities, the proportion of indigent households' averages at 77%. It is consequently difficult for municipalities with a low revenue base to address their backlogs and to allocate sufficient funds for maintaining and operating existing works. In some areas, major water infrastructure runs through rural areas without any take-offs for supplying them, and this needs to be addressed as a matter of urgency.

Although major investments are being made annually through grant funding to alleviate reliable service delivery, there is still a lot to be done towards water service delivery supply to achieve set targets. A collaborative effort is required between CoGTA and SALGA to deal with poor performing municipalities as revealed by the Blue and Green Drop reports. The DWS, SALGA and DBSA partnership in the establishment of the Private Partnership Office to look at funding issues for fast tracking service delivery is another tool that will assist, and support attempts made.

2.2 SDG 6.2 Equitable Sanitation for all



Summary:

The target is to achieve 100% coverage by 2030. Data is obtained through the annual Stats SA General Household Survey (GHS). 2020 data is delayed due to the consequences of Covid-19.

Basic Level is use of improved facilities that are shared with other households.

2023 Status: 70% Safely Managed

84% JMP Basic Level of Service

The SDG 6.2 has significantly changed the approach to how sanitation services are managed from access to a household sanitation facility as previously prioritized under the Millennium Development Goals, to ensuring "safely managed sanitation." This calls for radical change as it is no longer about simply constructing a toilet, but an integrated approach to sanitation management across the entire sanitation service chain. The sanitation service chain refers to containment, emptying, transportation / conveyance, treatment, disposal, or re-use.

The provision of sanitation services in South Africa varies from on-site to off-site sanitation systems depending on settlement conditions. Approximately 61.5% of households make use of flushing toilets which are connected to centralized wastewater treatment works. About seven million households use various forms of on-site sanitation systems. Therefore,

Faecal Sludge Management should be integral part of the sanitation services to ensure safe management of human excreta throughout the sanitation service chain.

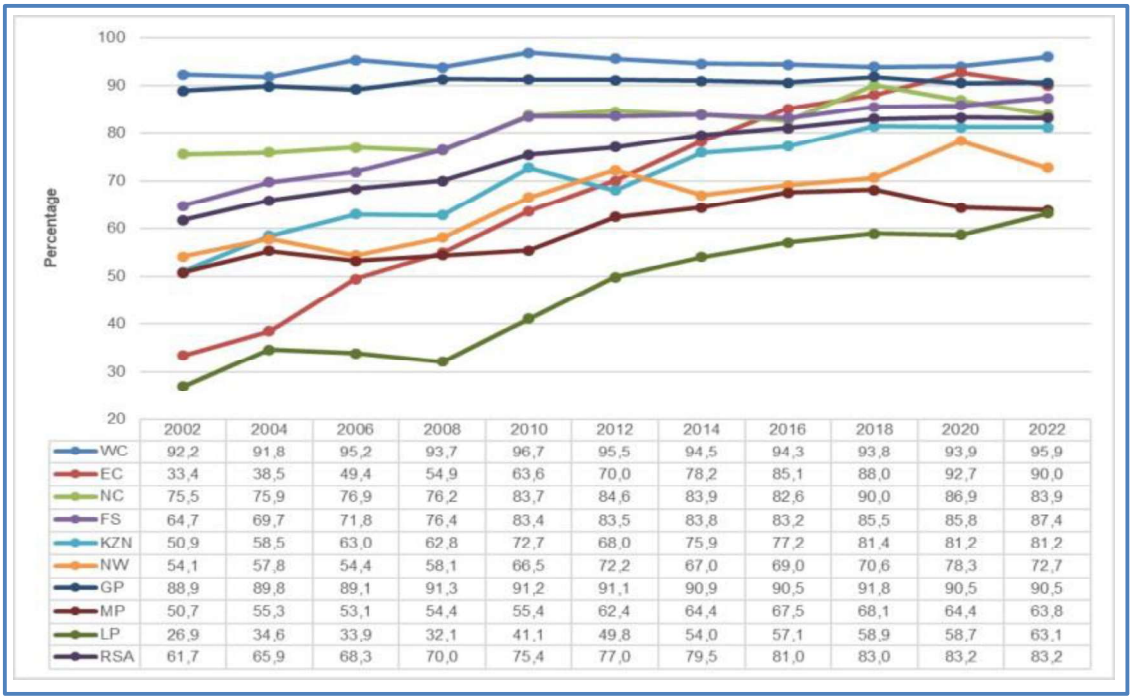
In 2015, South Africa adopted a revolutionary approach under the theme "It is not all about flushing", recognising that South Africa is a water scarce country, with a projected 17% deficit in availability of water and the projected demand by 2030 if the same rate of water consumption is maintained. The projected water deficit will have significant impact on the historic way of providing waterborne sanitation and requires the sector to reconsider sanitation provision approaches, with more investment in non-sewered, low water and waterless sanitation solutions to increase the rate of sanitation service delivery within the 6 years left until 2030.

South Africa must, therefore, accept the reality that the country no longer has the luxury of flushing 9 to12 liters of portable water while some parts of the country do not have access to drinking water. Although the flush toilet system is everybody's aspiration, it comes at a big cost which at times is not viable as it does not justify economies of scale and population density. The adoption of alternative sanitation systems can be a driver for water security in South Africa. Therefore, there is an urgent need to embrace non-sewered sanitation technologies which require little, or no water or recycled water to lower water requirements.

2.2.1 SDG 6.2 Overall Progress (2016-2023)

The country has made considerable progress in providing access to improved sanitation. Nationally, a) The percentage of households with access to improved sanitation increased from 81.0% in 2016 to 83,2% in 2022 (Statistics SA, 2022).

However, there are still approximately 2.8 million households in South Africa that have unimproved sanitation. These backlogs are mostly in rural areas and informal settlements. Figure 5 below, shows the percentage of households per province with access to improved sanitation (the highest being the Western Cape (95,9%) Gauteng (90,5%) and Eastern Cape (90,0%), with the most limited in Limpopo (63,1%) and Mpumalanga (63,8%).



	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
WC	92,2	91,8	95,2	93,7	96,7	95,5	94,5	94,3	93,8	93,9	95,9
EC	33,4	38,5	49,4	54,9	63,6	70,0	78,2	85,1	88,0	92,7	90,0
NC	75,5	75,9	76,9	76,2	83,7	84,6	83,9	82,6	90,0	86,9	83,9
FS	64,7	69,7	71,8	76,4	83,4	83,5	83,8	83,2	85,5	85,8	87,4
KZN	50,9	58,5	63,0	62,8	72,7	68,0	75,9	77,2	81,4	81,2	81,2
NW	54,1	57,8	54,4	58,1	66,5	72,2	67,0	69,0	70,6	78,3	72,7
GP	88,9	89,8	89,1	91,3	91,2	91,1	90,9	90,5	91,8	90,5	90,5
MP	50,7	55,3	53,1	54,4	55,4	62,4	64,4	67,5	68,1	64,4	63,8
LP	26,9	34,6	33,9	32,1	41,1	49,8	54,0	57,1	58,9	58,7	63,1
RSA	61,7	65,9	68,3	70,0	75,4	77,0	79,5	81,0	83,0	83,2	83,2

Figure 5:Percentage distribution of households with improved sanitation per province (2002-2022).

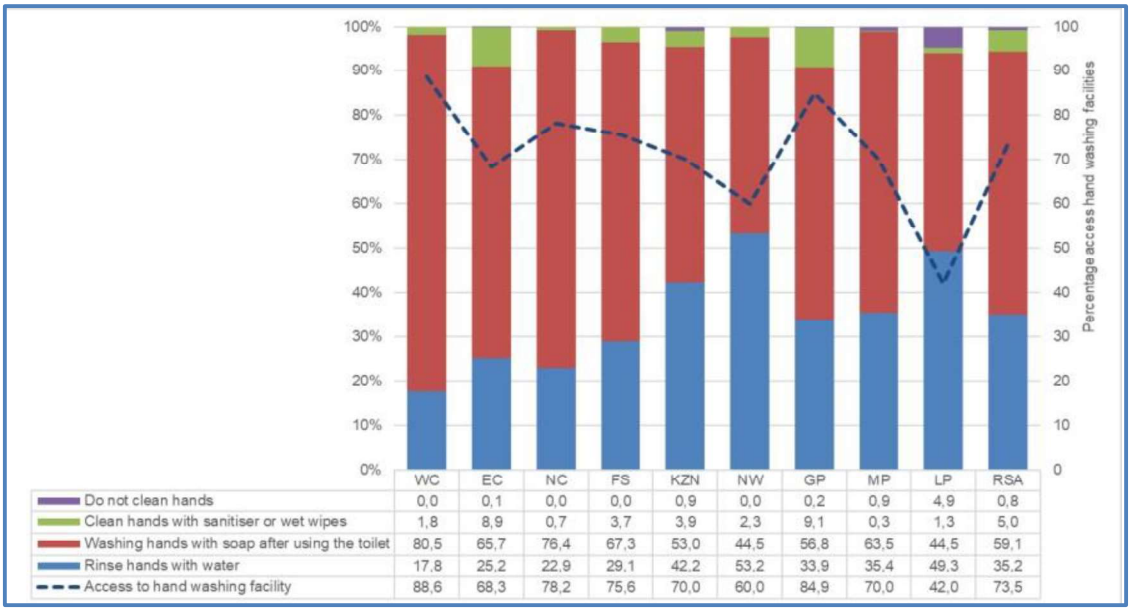
Status of Hand Hygiene in South Africa

According to General Household Survey 2022, households that have access to a handwashing facility including a functioning tippy tap is 73,3%. The percentage of households with access to an improved source of water required for effective handwashing increased from 84,4% to 88,7% between 2002 and 2021.

It is notable that the percentage of households whose members usually wash hands with soap and water increased notably between 2019 and 2021 from 43,6% to 59,1%, while the percentage of households whose members only rinsed their hands with water decreased from 50,8% to 35,2% over the same period. Almost three-quarters (73,5%) of households reported that they had access to hand washing facilities. The use of soap and water to wash hands was the highest in Western Cape (80,5%) and Northern Cape (78,4%) and the lowest in Limpopo and North-West (both 44,5%). In Limpopo (4,9%) and KwaZulu-Natal (0,9%) it was reported that household members usually did not clean their hands

Households that had access to hand washing facilities such as basins, bowls or functioning tippy taps were most common in the Western Cape (88,6%) and Gauteng (84,9%) and most uncommon in Limpopo (40,0%) and North-West (60%). This implies that hand hygiene awareness and education should be strengthened in provinces such as Limpopo, North-West, Mpumalanga and KwaZulu Natal.

Figure 6 below illustration the percentage of households by the methods usually used by household members to clean their hands after using the toilet by province and the percentage of households with access to hand washing facilities in 2021 (STATS SA 2022).



	WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
Do not clean hands	0,0	0,1	0,0	0,0	0,9	0,0	0,2	0,9	4,9	0,8
Clean hands with sanitiser or wet wipes	1,8	8,9	0,7	3,7	3,9	2,3	9,1	0,3	1,3	5,0
Washing hands with soap after using the toilet	80,5	65,7	76,4	67,3	53,0	44,5	56,8	63,5	44,5	59,1
Rinse hands with water	17,8	25,2	22,9	29,1	42,2	53,2	33,9	35,4	49,3	35,2
Access to hand washing facility	88,6	68,3	78,2	75,6	70,0	60,0	84,9	70,0	42,0	73,5

Figure 6:Percentage of households by method, Source Stats SA 2022.

2.2.2 Challenges over the last 7 years (2016-2023)

a) The poor performance of municipalities in meeting the global development goal of universal access to adequate sanitation by 2030 is evident in the continual rollout of bucket toilets.

b) Inadequate maintenance of sanitation systems and as a result the occurrence of raw sewerage in streets. These issues pose health risks, contribute to the spread of diseases, and undermine the dignity of communities.

c) About 15.9% of the population which is 2.8 million households remain with unimproved sanitation services.

d) Compounding the problems at hand is the fact that South Africa is experiencing the mushrooming of informal settlements due to urbanization – people's aspiration to live closer to their places of work are compromised when infrastructure in urban centers can no longer support the provision of basic services. Geographic and

topographic locations of these settlements are further compromising the ability of households to be served with services. Therefore, a lot more work and efforts to respond to the challenges and providing a dignified service to each resident of South Africa and leaving no one behind is required.

e) The operation and maintenance of on-site sanitation systems have not been given much attention when compared to off-site sanitation systems. This resulted in challenges of full containments which pose risks of households reverting to open defecation or using unimproved sanitation systems.

f) There are no plans to safely empty containments / pits, with long distance to hazardous landfill sites as they are few in the country, lack of appropriate places and approaches to dispose of faecal sludge and stockpiling of sludge, lllegal dumping of untreated faecal sludge into the environment. The wastewater treatment works that accept faecal sludge are performing poorly as they were not designed to receive faecal sludge. Over the years the focus has been on reducing huge sanitation backlogs by providing onsite sanitation systems in households and public institutions mostly in rural and peri urban settlements.

g) The unregulated onsite sanitation systems have led to unfortunate consequences of children falling into dilapidated latrines in schools.

2.2.3 Successes over the last 7 years (2016-2023)

a) DWS has collaborated with the water sector to develop **the National Sanitation Integrated Plan (NSIP)**. This plan provides a 10-year roadmap to eradicate open defecation, ensuring

access to adequate sanitation services per province, and creating a pathway to generate sanitation economic opportunities.

The NSIP seeks to prioritise and accelerate sanitation provision aligned to commitments of the National Development Plan (NDP) 2030, National Water and Sanitation Master Plan (NWSMP), and the Sustainable Development Goals (SDGs) and sets targets for the short, medium, and long term per province to inform national targets. To strengthen governance, support and eventually implementation of the NSIP, **Provincial Sanitation Task Teams (PSTTs)** are set up to work as a vehicle to drive integrated planning, monitoring, reporting and implementation of sanitation programmes and projects in a coordinated manner. PSTTs will monitor the delivery of sanitation services and ensure compliance to norms and standards, including all the relevant policies and strategies. PSTTs will also share best practice/ lessons learnt amongst sector stakeholders and municipalities. The National Sanitation Policy (2016) encourages the reuse of treated wastewater for non-potable applications wherever possible. It also encourages reuse and beneficiation of faecal sludge from on-site sanitation systems and wastewater sludge.

b) In response to the National Sanitation Policy (2016), DWS, in collaboration with the sector has developed **the National Faecal Sludge Management Strategy**. The Strategy recognises the need to pursue sanitation resource recovery, recycling and reuse and is currently exploring approaches of expanding sanitation economic opportunities throughout the entire sanitation service chain.

The development of the FSM Strategy has highlighted that implementation of Faecal Sludge Management is complex and involves various stakeholders that have different roles in the sanitation service chain. The Strategy encourages diverting waste from landfill sites and treating faecal sludge for beneficial use, which facilitates the transition to circular economy. Moreover, wastewater sludge and faecal sludge presents an opportunity to recover resources such as phosphates and nitrates to produce fertilizers for agricultural use, production of biogas which can be used for energy generation, construction materials such as bio-bricks, biochar which can be used as soil conditioner, and many more possibilities. By shifting the paradigm of wastewater management from 'treatment and disposal' towards 'reuse, recycle and resource recovery', wastewater will no longer be seen as a problem in need of a solution, but rather as part of the solution to challenges that.

c) The Department of Water and Sanitation (DWS) has developed **the National Sanitation Framework (NSF)** as an implementation framework that will assist government to provide equitable and safe sanitation in all settlement types and guides towards ensuring appropriate support to Water Services Authorities (WSA's)in cases of service delivery lapses, non-compliance to regulator prescripts leading to a deterioration in the provision of sanitation services.

The NSF reinforces the importance of (a) prohibiting the provision of bucket toilets by municipalities as a sanitation solution; (b) ending open defecation and eradicate sanitation backlogs by rolling out a range of support measures to poor

performing municipalities. In so doing, the future choice of sanitation technology options for the provision of sanitation services must be based on technical considerations and include population density, groundwater pollution risks and economies of scale and.

d) Amongst other endeavors, DWS has established a **Water Partnerships Office** in collaboration with the Development Bank of South Africa (DBSA) and the South African Local Government Association (SALGA), to support municipalities with standard programmes which will include harnessing private sector skills and blended finance models for various projects in the form of Private Public Partnerships (PPP) for water and sanitation services Infrastructure projects.

e) **South African Sanitation Technology Enterprise Programme (SASTEP**) is a national system of innovation platform that seeks to fast track the adoption of innovative and emerging sanitation technologies in South Africa, through fostering local manufacturing and commercialisation. SA adopted SANS 30500 for non-sewered sanitation.

Development of the Shit Flow Diagrams

The Shit Flow Diagram (SFD) is a high-level technical diagram used to display how excreta flows through a municipality or city area. SFD has been identified as a useful tool to better understand the sanitation situation within South Africa. To promote the use of SFD and improve the understanding of the sanitation situation in South Africa, DWS is aiming to roll-out SFDs in a phased capacity building approach starting with 36

Water Services Authorities (WSAs) out of 144 WSAs across the country. It is considered a long- term plan (usually 7years or more) to develop SFDs for 144 WSAs.

Development of a Regulatory Framework for Non-Sewered Sanitation Services

Given these inevitable challenges there is an urgent need to move towards adoption and implementation of appropriate non-sewered sanitation systems across the sanitation service value chain, aligned with national policies (e.g. National Sanitation Policy), strategies (e.g. Faecal Sludge Management Strategy) and plans (e.g. National Water and Sanitation Master Plan).

DWS has advanced in the regulation of wastewater treatment works and needs to position itself to regulate onsite sanitation servdistrict,be able to report locally and internationally on safely managed sanitation and DWS regulates water and sanitation services provision for the 144 Water Services Authorities (WSAs) (i.e. local government – metro, district and local municipalities) via the Blue and Green Drop Certification Regulatory System or processes.

The Green Drop Certification process, however, focuses on sewered sanitation systems and there is no existing regulatory mechanism for non-sewered sanitation facilities. Therefore, while sewered systems are guided by formal regulations, bylaws and legislation ensuring that public and environment health is preserved, no such guidance is provided for non-sewered systems. Consequently, non-sewered systems are often ignored in planning, budgeting, operations, maintenance, and management activities.

While sewered systems are guided by formal regulations, bylaws and legislation ensuring that public and environment health is preserved, little or no such guidance is provided for non-sewered systems. Consequently, non-sewered systems are often ignored in planning, budgeting, operations, maintenance, and management activities. Therefore, developing regulatory mechanisms for non-sewered sanitation across the sanitation service chain and intensify the implementation and compliance monitoring is required.

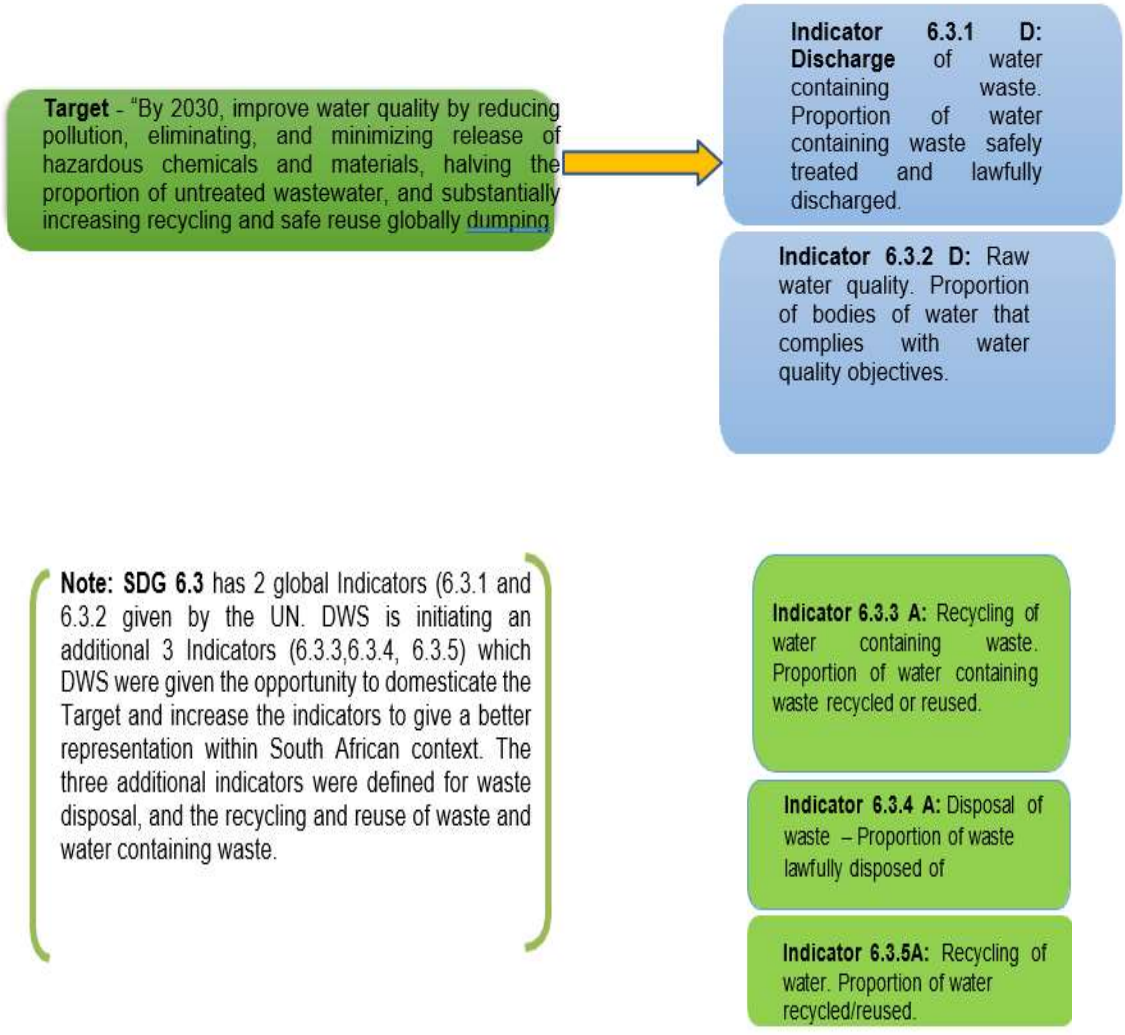
2.1.4 Can South Africa Meet its 2030 SDG 6.2 Target?

South Africa will not achieve the 6.2 target by 2030, achieving the Sustainable Development Goal 6.2 will require cross-sectoral partnerships and collaboration between government, private sector, academic institutions, research institutions, civil society organisations, communities, and other sector partners at all levels. Public Private Partnerships and investments including Financial & Technical support from Developmental Partners and Agencies are requested to form part of the solution to challenges that the country is facing today and fostering partnerships in the following areas.

Construction of Faecal Sludge Treatment Plants (FSTPs) due to long distance to hazardous landfill sites as they are few in the country, incidents of illegal dumping and stockpiling of faecal sludge are more prevalent. FSTP's will allow for the effective treatment and recovery of the resource for beneficial use. Promotion and adoption of alternative and non-sewered sanitation systems can be a driver for water security in South Africa. The vision is that in future all new settlements and private sector driven developments should use water efficient sanitation solutions regardless of class, race or creed.

Transitioning the country from a linear economy towards building a circular economy, by re- thinking waste and shifting the paradigm of wastewater management from 'treatment and disposal' towards 'reuse, recycle and resource recovery.' Commercialisation of next generation sanitation solutions and developing reuse opportunities using feacal sludge and driving new jobs in the waste management space is the way forward.

2.3 SDG 6.3 Water Quality



Summary

SDG 6.3.1 Target: To halve the proportion of wastewater that is NOT safely or lawfully discharged by 2030.

- ✓ The Green Drop Assessments (GDA) project commenced in August 2021.
- ✓ GDA will assist the DWS in reporting levels of compliance against WUL or any authorizations.
- ✓ DWS has established an Anti-Pollution task team.

SDG 6.3.2: Target: By 2030 the aim is to reach 100% compliance.

Surface Water:

- ✓ Revitalization and implementation of programmes for water resource status monitoring.
- ✓ The development or expansion of existing information.
- ✓ Additional monitoring sites were reactivated in some provinces.
- ✓ DWS has established National Water Quality Management Strategy Steering Committee

Groundwater:

- ✓ Analysing the new data received
- ✓ Additional boreholes have been added for monitoring.

SDG target 6.3 sets out to improve resource water quality, which is essential to protect human and ecosystem health by avoiding, minimizing, and significantly reducing different streams of waste into water resources. target 6.3 has two global I\indicators, 6.3.1 (Proportion of water safely treated) and 6.3.2 (Proportion of bodies of water with good ambient water quality). The global indicators 6.3.1 & 6.3.2 were domesticated to cater to country-specific circumstances.

The SDG 6.3 task team consists of four specialist sub-groups focusing on groundwater, water quality, and wastewater in municipalities and non-municipalities, and planning to add teams for waste and reuse. The action

plan with deliverables timelines and gap analysis report was compiled. In 2019/20 methods for domesticated Indicators were developed and these methods have since been peer-reviewed by the Academy of Science of South Africa (ASSAf), as well as through a WRC funded project to review the SDG 6.3 methodology and to develop methodology for additional indicators. Currently, the SDG target 6.3 task team is working on addressing the comments received from the review process and finalizing the methods.

In 2017 a baseline report that covered surface water ambient water quality for 2014-2016 was submitted as part of the first UN data drive to measure South Africa's progress with achieving target 6.3 requires effective instream surface and groundwater monitoring programs as well as data on the volumes and quality of waste and water containing waste that is disposed of, discharged, and recycled or reused from the municipal, industrial, mining, and agricultural sectors.

2.3.1 SDG 6.3 Overall Progress (2016-2023)

Wastewater

The aim is to halve the proportion of wastewater that is NOT safely or lawfully discharged by 2030. In the year 2017, 52% of the wastewater discharged into water resources complied with the required standards and only 45% of municipal Wastewater Treatment Works (WWTWs) submitted data.

The baseline data 2022 figures show a further decrease to 22% of municipal WWTWs that submitted data, and 31% of municipal WWTWs complied with the required standards.

- There are fewer municipalities that are submitting data for

WWTWs.

- There is less compliance with the discharge standards.

Previously it was indicated that the assessment of Wastewater Treatment Works (WWTW) through the Green Drop Assessments (GDA) will be an enabler to report on the SDG target. The GDA project commenced in August 2021 after the program came to a halt based on lack of finances after the 2014 report was published. This lack of assessment led to the Department experiencing challenges from the municipalities submitting effluent compliance data on Integrated Regulatory Information System (IRIS). However, since the assessment commenced, there have been slight improvements in data submission by WSAs.

Green Drop Assessments will assist the Department of Water and Sanitation (DWS) in reporting levels of compliance against the Water Use Licenses (WUL) or any authorizations issued to ensure that shortcomings identified in the GDA report are addressed as the sector works towards improved effluent compliance.

Effluent compliance constitutes 30% of the assessment criteria, which means if a WWTW is not authorized and does not comply with the effluent limits will not comply with the GDA. Based on the above statement, this therefore allows the WSAs to correct and plan against these requirements which ultimately will lead to improved effluent compliance when supported by all the other Green Drop requirements.

Over and above GDA projects, the DWS has established an Anti-Pollution task team to address all pollution incidents in the country and monitor problematic WWTWs that result in pollution of the country's water

resources and dysfunctional wastewater infrastructure such as pump stations.

SDG 6.3.2 Target

Surface water: Surface water has two levels.

Level 1:

Overall water quality for Lakes (i.e. Dams), Rivers, and Aquifers is estimated based on an index, which incorporates data on five core parameter groups, which inform on major water quality impairments present in many parts of the world:

- oxygen (surface water)
- salinity (surface water and groundwater)
- nitrogen (surface water and groundwater)
- phosphorus (surface water)
- pH (surface water and groundwater)

The methodology calls for *in-situ* measurements of these water quality parameter groups. The measured values are compared to national target levels for the different parameters if values meet targets at 80 percent or more of the time, the water body is classified as good.

Level 2:

- Countries are invited voluntarily to provide more detailed reporting on their ambient water quality, incorporating any data on any water quality parameter that they consider relevant.
- Examples: citizen science data, additional variables from national monitoring programmes, or earth observation information.

Level 2 reporting is important to properly address all aspects of SDG target 6.3 at the national level.

The 2017 data showed that 72% of dams and 70% of groundwater complied with a set of national water quality objectives, however only 47% of the water quality in rivers complied. Baseline data in comparison during the 2023 data gathering drive indicated that 70% of rivers and 78% of groundwater complied with a set of national water quality objectives, however only 47% of the water quality in dams complied. By 2030 the aim is to reach 100% compliance.

During the financial year 2018-2019, surface water quality monitoring was not completed due to DWS budget constraints that prevented laboratories from operating as they were required. However, DWS has been revitalizing and implementing programmes for water resource status monitoring (National Eutrophication Monitoring Programme (NEMP) and National Chemical Monitoring Programme (NCMP). The development or expansion of existing information systems to enable reporting of SDG 6.3 indicators is also ongoing. Collection of water quality data for the dams and river sites continued and additional monitoring sites were reactivated in Limpopo and Mpumalanga provinces. Hydro in some regional offices does not have sufficient budget to assist with water quality monitoring. The infrastructure personnel at the dams do not have freezers for preservation and courier services from the outlying areas.

SDG 6.3.2 Target: Groundwater

In 2021, 79.6% of groundwater bodies in hydrogeological regions

complied with the set target. In 2022, 72% of the groundwater bodies complied with the set target. In 2022, more groundwater samples were collected, non-monitoring data was also used. An **increasing trend of nitrate in groundwater is being noticed in South Africa. By 2030 the aim is to reach 100% compliance.**

The Groundwater target depends on data available. Over the past financial year, the team has received a lot of groundwater quality data from the regions as part of the National Groundwater Monitoring Programme which is the feeder to the assessment of SDG targets/indicators as far as groundwater quality is concerned. The team is also in constant engagement with regions to have the network optimization implementation plan and costing fully developed for implementation on the ground. Additional boreholes have been added for monitoring in terms of data for the Gauteng Province, especially in areas where Acid Mine Drainage (AMD) was monitored to improve the conclusion on the targets.

The challenges that have been experienced indicate that previous data analysis was based on a collection of two samples collected once a year per monitoring site for the National Groundwater Quality Monitoring before 2018.In the period 2018 to 2020, no samples were collected due to challenges with DWS laboratories and finances. However, a lot of work has been done in 2021 to ensure that sampling is conducted as part of the National Groundwater Quality Monitoring programme. The aim is to continue with the analysis and collection of data where possible.

2.3.2 Challenges over the last 7 years (2016-2023)

Wastewater

The challenge is a lack of information from industries discharging into municipal wastewater systems.

Surface Water

In terms of monitoring and reporting on the SDG 6.3.2 objectives, the biggest challenge is related to the conceptual understanding of how to report in a sensible and representative manner with very limited data. The delayed setting and monitoring for Resource Quality Objectives (RQO) and specifically Water Quality Objectives by CMAs/Proto CMAs has led to initial assessments being performed using all the data available for the National Chemical Monitoring Programme (NCMP) and National Microbiological Monitoring Programme (NMMP) which potentially led to a spatially unrepresentative national picture. This was mostly due to the lack of data in large areas of the country due to sampling and laboratory capacity constraints.

This has been the case over the first 5 years with a subsequent significant improvement in SDG 6.3.2 sampling and reporting approach over the last 2 years of the reporting period.

Groundwater

The challenges experienced in the last 7 years are mainly on the spatial distribution of groundwater quality monitoring geosites. In some of the regions, there are few monitoring geosites compared to the area or size of the reporting water body (Hydrogeological region). The other

challenge is data analysis as sometimes there are delays in the DWS laboratory. There is also a lack of groundwater quality monitoring equipment such as pumps and field monitoring systems in most of the regions.

2.3.3 Successes over the last 7 years (2016-2023)

The Green Drop Program was revitalized; therefore, updated information is available for SDG reporting. From Stats SA GHS data, it appears that there is a steady growth in the number of households connected to flushed toilets.

Surface Water

Improvement in both the sampling compliance, laboratory analyses, and reporting methodology over the past 2 years. With the monitoring of RQO by CMAs in its infant stage, the reporting relies mostly on the NCMP and NEMP.

The NCMP and NEMP as the main data contributors, implemented a robust approach to communication, sampling compliance reporting, and highlighting sampling resource problems. A dedicated grid of spatially representative SDG 6.3.2 sampling points was developed and integrated as priority sites within the NCMP and NEMP. The RQIS laboratories completed their accreditation process and analysis has been ongoing over the later part of the reporting period. The above resulted in a successful SDG 6.3.2 reporting campaign during the 2023 UN data drive.

Groundwater

- The development and implementation of reporting methodology on groundwater-related targets.

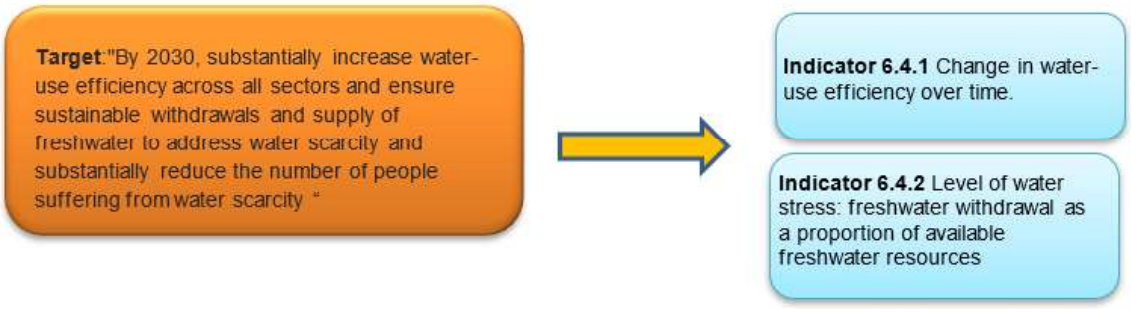
- The development of groundwater monitoring baselines and targets based on geological aligned hydrogeological regions (Vegter regions) and assessment methodology was one of the main successes in the last 6 years.
- The developed baselines, targets, and methodology assisted in successful reporting on groundwater quality status in South Africa.
- The developed methodology and approach were presented at local and international water conferences and symposiums.

2.3.4 Can South Africa Meet its 2030 SDG 6.3 Target?

South Africa will not achieve the 6.3 Target by 2030

2.4 SDG 6.4 Water Use Efficiency

SDG 6.4 addresses water scarcity aiming to ensure sufficient water for people and the economy, as well as for the environment, by increasing water use efficiency across all sectors of society.



SDG includes the following indicators:

SDG 6.4.1 **Change in water-use efficiency over time**: The indicator is an economic indicator that determines the extent to which a country's economic growth is dependent on the use of water resources.

SDG 6.4.2 **Level of water stress**: The indicator tracks how much freshwater is being withdrawn by all economic activities, compared to the total renewable freshwater resources available. It also considers environmental flow requirements and measures a country's pressure on its water resources and the challenge on the sustainability of its water use.

Summary:

6.4.1

- ✓ 2015: 14.9 USD /m^3 value added per unit of water used
- ✓ 2021:16 USD/m^3 value added per unit of water used

6.4.2

- ✓ 2015: 41.38% the water stress indicator
- ✓ 2021: 66.89% the water stress indicator

Water stress occurs when the demand for water exceeds the available amount during a certain period or when poor quality restricts its use.

Note: The Target Value is not UN stipulated it is a World Average which provides a benchmark for change

USD/m^3: Refers to United States Dollar per cubic meter, which is a unit of measure, this is a unit of currency per unit volume i.e Water: 1.20 USD /m^3

2.4.1 SDG 6.4 Overall Progress (2016-2023)

The target is by 2030 to substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals, supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

Table 4: SDG 6.4 progress (2016-2023)

Year	6.4.1 WUE (USD/m^3)	Water Stress (%)
2015	14.9	41.48
2017	14.32	63.56
2019	15.11	64.04
2020	13.77	65.03
2021	16.00	66.89

Indicator 6.4.1

South Africa is a developing country with the primary economic activities based on exploiting the natural resources such as water. For instance, agriculture consumes 60% of water with only 2.57% contribution to the country's GDP.

The current Water Use Efficiency is 16 USD/m3 for 2021 and it has increased from 14.9 USD/M3 in 2015, which is a slight improvement. The slight decline in 2020 is attributed to the Covid19 pandemic, which resulted in less economic activity and increase in water use for hygiene purposes.

Indicator 6.4.2

The country's water stress was at 66.89% as of 2021, which according to the freshwater withdrawal as a proportion of available freshwater resources scale, indicates a level of medium stress. The increase in stress from the baseline of 41% in 2015 to the current level is because of the change in calculation method of ecological water requirements (EWR). SA adopted the FAO methodology which is consistent with South African methodology of determining EWR. The country is diversifying the water mix as per the NWRS3 to mitigate the pressure on the water resources, by paying attention to unconventional water sources such as desalination and water reuse.

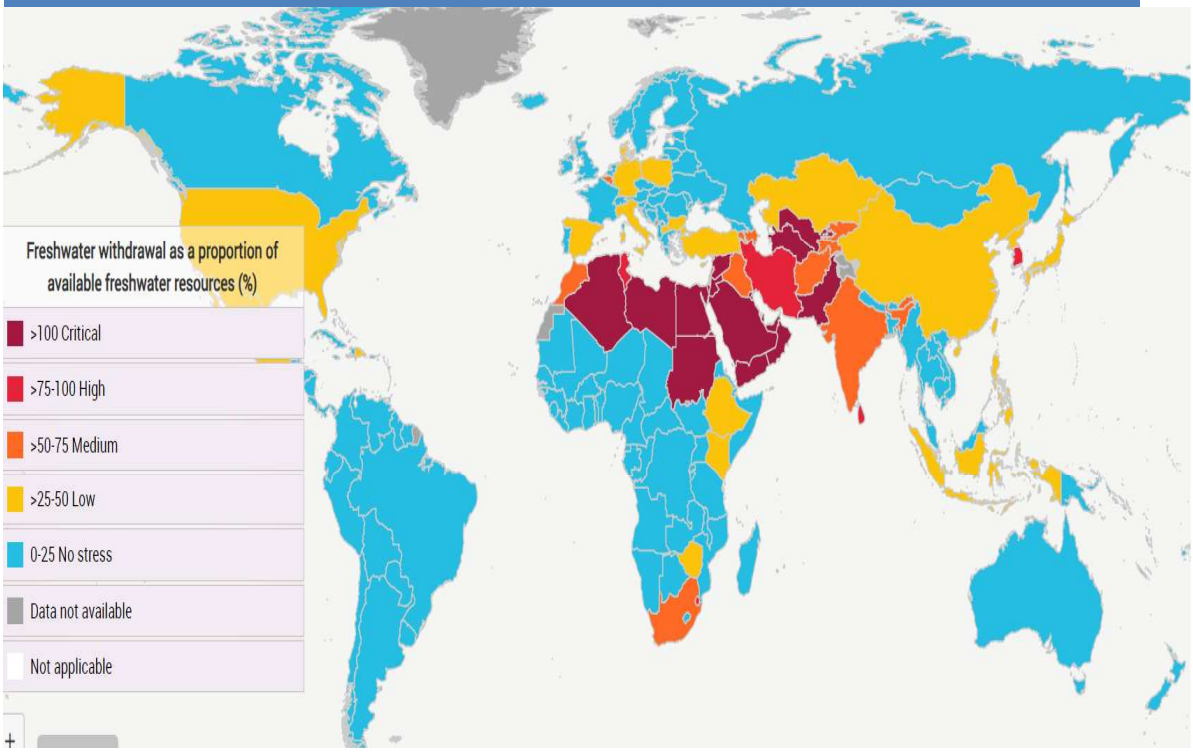


Figure 7:Global status of indicator 6.4.2 level of water stress, freshwater withdrawal as a proportion of available freshwater resources (FAO,2020).

2.4.2 Challenges over the last 7 years (2016-2023)

- Lack of consistent and accurate actual water use and water loss data in all major water use sectors which hinders accurate water use efficiency monitoring. The department is currently using the registered volumes instead of actual water use volumes to report to FAO. WARMS must be enhanced to accommodate the web-based reporting system of the actual water use. This will also support the Pricing Strategy of the department.
- Lack of metering and measuring devises at critical points in distribution networks to support the completion of water balances, and dilapidating infrastructure condition especially in government water schemes resulting in high water losses.

2.4.3 Successes over the last 7 years (2016-2023)

- South Africa through the department has initiated studies to update the water resource balances nationally.
- Improvement in the collection of water use and loss data for the major irrigation schemes for the agricultural sector.
- The development of Irri-Drop framework and further development into a regulatory assessment programme.
- Resuscitation of No Drop Programme for the Local Government Sector and publishing of the annual national status of water losses and non-revenue water reports
- Updating of Water Conservation and Water Demand Management Strategies
- The establishment of the non-revenue water programme within the Water Partnership Office initiated through the DBSA / DWS.
- The establishment of non-revenue water training program with 15 municipalities trained in non-revenue water management skills.
- Updating and development of reconciliation strategies for major water supply systems and all towns' studies for balancing water availability and water requirements for current and future supplies.

2.4.4 Gaps and Interventions

- Improvement of data collection systems for agricultural uses such as powered irrigated areas, irrigation production, drainage and impacts of irrigation, and nonconventional water uses as required by FAO. The department is engaging all relevant stakeholders for better coordination and consolidation of the required information.

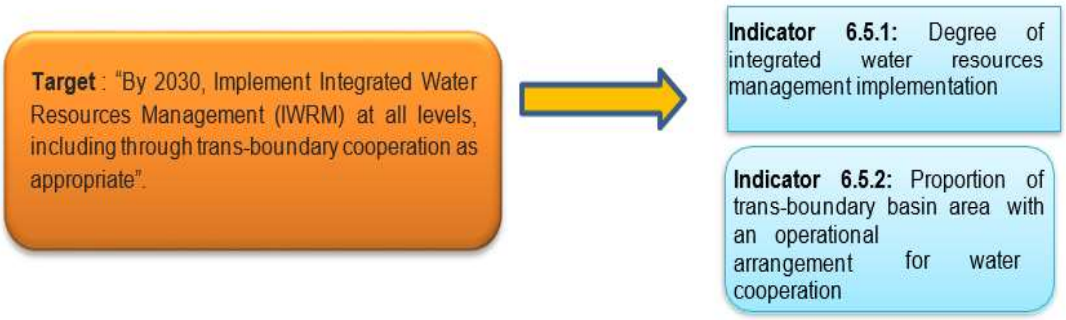
- There has been no comprehensive national water balance at Water Management Area level since the NWRS 1 in 2004 issued balances which directly impact 6.4.2 calculation disaggregation.
- Carry out the national water resource balance studies at a Water Management Area level as a matter of priority.
- There is lack of consistent and accurate water use and water loss data in all major water use sectors (Agriculture, Industry and Municipalities)
- Develop tools and web-based systems that will enable data collection and verification of such data.
- Continue to use best available system (Water Authorisation Regulation Management System: WARMS)
- Local Government water balance (No Drop) data will be incorporated into Integrated Regulatory Information System (IRIS) of the DWS.
- It is important for the department to strengthen the implementation of the metering regulations in the agricultural sector, and furthermore support the development and implementation of the Irri- Drop system, which is like the No Drop Programme for irrigation schemes.
- Finalize and pilot Irri-Drop for Agriculture water use data.
- Strengthening enforcement of agricultural water metering regulations.
- Update the baseline critical information as per the requirements (agriculture, nonconventional water, e.g. desalination & municipal wastewater) of FAO.
- Continuous engagement of stakeholders and the collection of the necessary information as per FAO Questionnaire.

- Disaggregation of some variables of the indicator 6.4.2.
- Disaggregation of Indicator 6.4.2 to catchment level by 2026.
- Updated Water Resource 2012 national hydrology study.
- Updating the WR2012 national hydrology study through Water Research Commission to assess the climate change impacts.

2.4.5 Can South Africa Meet its 2030 SDG 6.4 Target?

Timeous implementation of identified interventions and programmes will ensure improvement in water use efficiency and sustainable use of water resources. This includes but is not limited to Strategic actions identified in the reviewed National Water Resource Strategy 3 and updated National Water and Sanitation Masterplan as implementing tool of NWRS 3. Actions set out timelines, responsibilities, costs, and prioritization to ensure water security in the immediate to the long-term.

2.5 SDG 6.5 Integrated Water Resource Management



Summary:

Target 100% Degree of integrated water resources management implementation.

2017 67.5% achieved.

2020 72.5% achieved.

2023 58% achieved, target of 75% will be progressively achieved by 2030.

Target 100% Proportion of trans-boundary basin area with an operational arrangement for water cooperation.

2017 100% achieved.

2020 95% achieved.

2023 96% achieved, target of 100% progressively achieved by 2030.

The indicators have United Nations (UN) support structures to assist countries with the monitoring and reporting of the indicator which include but not limited to UNECE.

Sustainable Development Goal (SDG) 6.5 target states that "By 2030, to implement Integrated Water Resources Management (IWRM) at all levels, including through trans-boundary cooperation as appropriate." IWRM was officially established in 1992 and is defined as "a process which promotes the coordinated development and management of water, land and related resources in order to maximize economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems," (GWP, 2010).

The SDG 6.5 target reports are compiled every three (3) years. Each reporting cycle has two (2) Country reports for each indicator and two (2) Gap analysis reports for each indicator. All reports include stakeholder consultations and are approved by the Department of Water and Sanitation. SDG Indicators SDG 6.5.1 and SDG 6.5.2 are classified as tier 1 by the UN as they both have method of data gathering recommended to assist countries with the reporting. Several international workshops have been held both contact and virtual.

2.5.1 SDG 6.5 Overall Progress (2016-2023)

The SDG 6.5.1 indicator is still being monitored in percentage and currently being measured in terms of different stages of development and implementation of IWRM. Within the 0-100%, there are six (6) levels of implementation thresholds (see figure 8 below) to explain the implication of each number chosen by the country. A questionnaire divided into four (4) thematic areas include Enabling Environment, Institutions and participation, Management Instruments and Financing. The questionnaire was completed for 2017, 2020 and 2023 reporting years.

The indicator SDG 6.5.2 is the proportion of trans-boundary basin area with an operational arrangement for water cooperation UNECE recommended a template to complete the indicator. The template has four sections which must be completed for each share basin with other countries. The monitored elements are depicted below for both indicators.

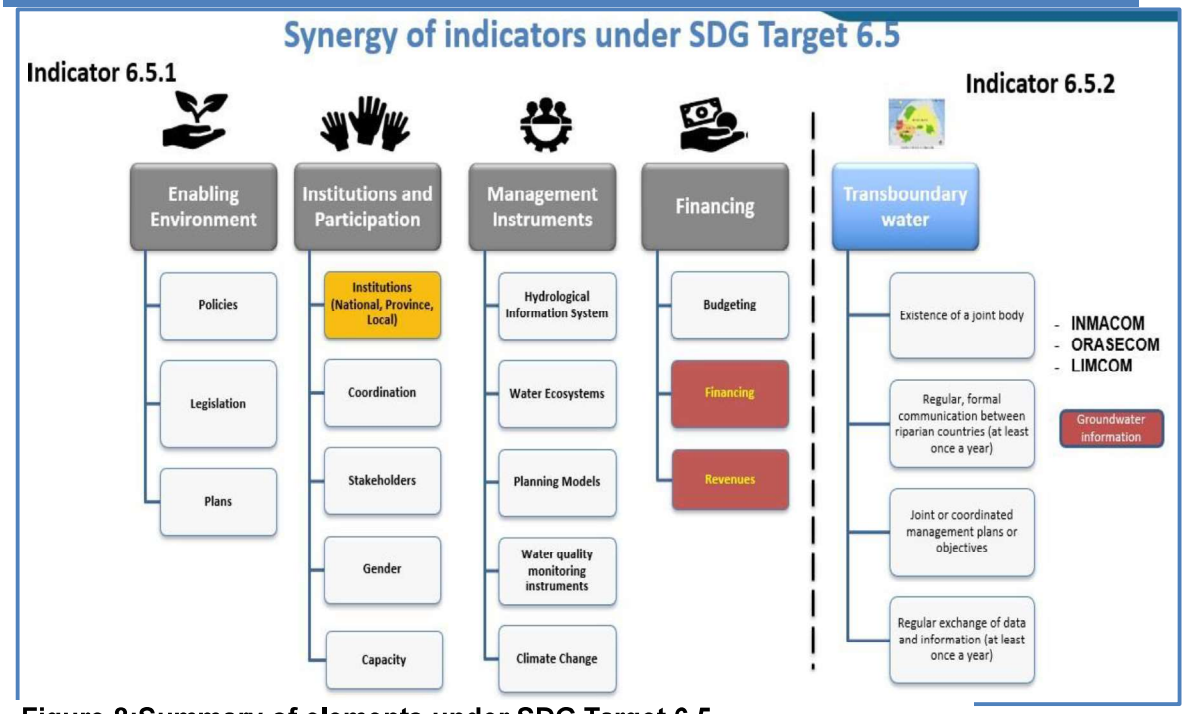


Figure 8:Summary of elements under SDG Target 6.5

The result of the SDG 6.5.1 indicator shows a decline in the overall scoring of the country. The 2023 indicator score of 58% was determined based on extensive stakeholder consultation. The proposed target is 75% by 2030 if actions in the gaps report are addressed.

Table 5: The Six Sequential Thresholds

Score range	Meaning
0 – <=10	Very low: development of elements of IWRM has generally not begun, or development has stalled
>10 – <=30	Low: implementation of elements of IWRM has generally begun, but with limited uptake across the country and potentially low engagement of stakeholder groups.
>30 – <=50	Medium-low: elements of IWRM are generally institutionalized and implementation is underway
>50 – <=70	Medium-high: capacity to implement elements of IWRM is generally adequate and elements are generally being implemented under long-term programs
>70 – <=90	High: IWRM objectives, plans and programmes are generally being met, and geographic coverage and stakeholder engagement is generally good.
>90 – <=100	Very high: many of the elements of IWRM are fully implemented, with objectives consistently achieved, and plans and programmes periodically assessed and revised.

Table 6: The Four Thematic Areas

Enabling Environment	This was mainly looking at creating the conditions that help to support the implementation of IWRM, which includes the most typical policy, legal and strategic planning tools for IWRM.
Institutions and participation	This dealt with issues across the roles of political, social, economic, and administrative institutions and other stakeholder groups that help to support the implementation of IWRM.
Management Instruments	This focused on the tools and activities that enable decision-makers and users to make rational and informed choices between alternative actions.
Financing	This focused on budgeting and financing made available and used for water resources development and management from various sources.

Table 7: SDG 6.5.1 Degree of IWRM implementation in 2017, 2020

and 2023

Thematic Area	2017 Average Score 2017	2020 Average Score 2020	2023 Average Score 2023
Section 1 Enabling Environment	80	80	68
Section 2 Institutions and Participation	60	80	67
Section 3 Management Instruments	70	70	60
Section 4 Financing	60	60	38
Indicator 6.5.1 score = Degree of IWRM implementation (0-100)	**(67.5) 70**	**(72.5) 70**	**58 (60)**

Table 8: Proportion of trans-boundary basin area with an operational arrangement for water cooperation

Section	2017	2020	2023
Existence of a joint body	yes	yes	yes
Regular, formal communication between riparian countries (at least once a year)	yes	yes	yes
Joint or coordinated management plans or objectives	Yes	yes	yes
Regular exchange of data and information (at least once a year)	Yes	yes	yes
Score	**100**	**95**	**97**

2.5.2 Gaps and Interventions

Table 9: Summary of Gaps and Interventions for SDG 6.5 Target

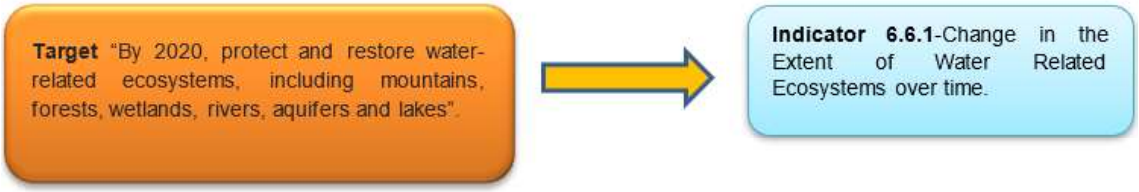
	Gap	Intervention
1	Financing of projects, including transboundary institutions	Addressed in the National Water and Sanitation Master Plan as part of Financing of the water sector
2	Revenue collection	Empowerment of local authorities (capacity building of staff)
3	Transformation of institutions (i.e. Irrigation Boards to WUA, establishment of CMAs, etc)	More commitment from relevant authorities
4	Lack of cooperative governance	The National Water and Sanitation Strategy can be a vehicle for sharing information with other state organs.
5	Knowledge on IWRM	Mainstream IWRM in all institutions

2.5.3 Can South Africa Meet its 2030 SDG 6.5 Target?

SDG 6.5.1: There has been a decrease of 10% over the last 3 years and there is still a deficit of 15% to address in the next 6 years. There is potential for achieving the target, but progress acceleration is required.

SDG 6.5.2: Yes, it is achievable, however, improvements within water sector are required in terms of funding of projects, improved cost recovery mechanism and willingness to transform institutions. Groundwater information and management remains a challenge, but more effort can be put into policies, agreements, and plans regarding sustainable groundwater management in transboundary aquifers. Some transboundary aquifers still need to be sufficiently delineated.

2.6 SDG 6.6 Protecting the Ecosystem



This indicator has 4 sub-indicators which measure spatial extent, water quality and water quantity. There is also an additional voluntary sub indicator that has been identified and added namely: Change in Ecological Condition of Water-Related Ecosystems

Table 10:Change in Ecological Condition of Water elated Ecosystems.

Indicator Category 6.6.1D(1):	Spatial Extent	Change in The Spatial Extent of Water Related Ecosystems, Including Rivers, Wetlands, Reservoirs, And Estuaries
Indicator Category 6.6.1D(2):	Water Quality	Change in The Number of Lakes and Reservoirs with High Turbidity and Trophic Status
Indicator Category 6.6.1D(3):	Surface Water Quantity	Change in The Quantity of Water (Discharge) In Rivers and Estuaries
Indicator Category 6.6.1D(4):	Groundwater Levels	Change in Groundwater Levels
Indicator Category 6.6.1A(1):	Ecological Condition	Change in The Ecological Condition of Rivers, Estuaries, And Wetlands

SDG 6.6 task team consists of three specialist sub-groups focusing on Groundwater levels, Surface water hydrology and Spatial extent of artificial water bodies, Estuaries, Wetlands & Lakes, River's condition, and surface water quality (lakes and dams).

In 2019/20 methods for domesticated indicators were developed. The developed methods were submitted to International Water Management Institution (IWMI) for peer review and the comments received were addressed. The Water Research Commission, (WRC) initiated and funded a project to review the draft methodology.

In 2017 a baseline data report was submitted as part of the first UN data drive. South African National Biodiversity (SANBI) and Council for Scientific and Industrial Research (CSIR) contributed immensely to the information provided to UN as part of the baseline report. The Task team has bimonthly meetings to discuss the progress on Action Plans.

By 2025 the SDG 6.6 task team strives to have well developed domesticated and additional national targets, indicators and methods that provide a true measure of South Africa's progress towards achieving SDG 6.6. This will also include developed and efficient procedures and systems that allow data to be captured and reports to be easily generated to influence decision making towards a water secure and sustainable South Africa.

2.6.1 SDG 6.6 Overall Progress (2016-2023)

In 2017 South Africa's data was submitted to the UN as part of the 2017 data drive. This data was used as the baseline for the identified indicators.

Surface area is determined based on data from various databases and inventories which have collected data between 2006-2016.

The year 2016 is set as the baseline to monitor change in:

- Wetlands represent the largest proportion of water related ecosystems in South Africa (at 2.2% of the total land area). It is estimated that the extent of wetlands has decreased by 50% since the early 1900's.
- The spatial extent of reservoirs was determined based on monitored areas for 198 Reservoirs during 2014, 2015 and 2016. This represents 4% of the 5300 dams in South Africa that have a storage capacity of more than 50 000 cubic meters (m^3) and a wall height of more than five (5) meters.
- Natural lakes (limnetic depressions with a depth of greater than 2 M) are rare in South Africa. Eight lakes have been identified to date, making up less than one percent of South Africa's land area.
- Flow in 2016/17 for estuaries represents a 33% reduction from natural flows (nMAR). The latest available data for present day flows (pdMAR) in South Africa's Rivers is for 2010 at 34 430 million m^3/a and represents a 30% reduction from nMAR.
- There should be no further decrease in MAR. In April 2020 RSA (DWS) received a request from UNEP to:
- Review the national 6.6.1 statistics on spatial extent, as well as the Water Quality and Quantity
- Report in-situ measurements of groundwater levels.
- Submit data to UN as part of the 2020 data drive.
- Update baseline data for some of the indicators because:

The methodology used in the 2017 data drive vs 2020 data drive was not the same as such, trends could not be established. For the wetlands, lakes and estuaries, the NBA 2018 report had a different method as compared to the 2011 NBA report. Largely under-represented the extent of dams, wetlands, rivers, estuaries and the eutrophication problems in South Africa. Over-represented the extent of mangroves in the country.

Table 11: SDG 6.6 Data Drive (2017-2020) results

Indicator	Results/ Trends available	Comments
Wetland Extent	2.1 Mil ha: 2017 2.6 Mil ha: 2020	**Could not use this to establish trends.** Different methods were used in the different years: Only 7% of wetlands have been mapped to high confidence **(NBA Report 2011 vs 2018)**
Estuary Extent	171 046 ha: 2017 200 730 ha: 2020	**Cannot establish trends yet**. Different methods were used in the different years, but will be able to determine trends in the next NBA (2023) **(NBA Report 2011 vs 2018)**
Artificial Systems	0,17%: 2017 No report: 2020	**Cannot establish Trends yet.** Busy consolidating Dams Spatial Layers
River Quantity	30% reduction in flows from Natural lakes No report: 2020	**Cannot establish Trends yet.** Busy selecting gauges with high confidence data

Estuary Water Quantity	33% reduction in flows from Natural: 2017 No Report: 2020	**Cannot establish trends yet**. Need updated hydrology assessment – in preparation for next NBA-2023
Groundwater Status	Trends available for 2015- 2019 using data from 1800 boreholes	**Can determine trends**

In many cases South Africa does have more accurate national datasets which could be used to improve the global datasets. There are, however, numerous challenges and gaps with the National datasets, specifically in terms of trends (where the same dataset over multiple different time periods are needed to establish trends this requires consistent monitoring)

Recommendations for improved reporting

Since South Africa cannot produce trend data for change in spatial extent of seasonal and permanent water-related ecosystems from 2000-2020, South Africa accepted the global datasets for this round of reporting, but with the agreement for DWS and its partners to work with UNEP in future to improve these datasets.

Table 12: Recommendations and progress for SDG 6.6 Target

Recommendation	Progress
The Implementation of the National Wetland Monitoring Programme should be prioritized	In Progress
DWS has a long-standing initiative to monitor the condition of river and estuarine systems. To track changes and determine the countries performance an updated National Survey of Rivers is required.	In Progress
Optimization of national monitoring network initiative needs to be implemented to acquire the necessary data on Estuarine, and River Surface water discharge (Gauges) and GW Levels (Boreholes).	In Progress

Target Summary

- This indicator has no target but a measurement of change against time.
- Many of the challenges that have been highlighted through the SDG process, have been mainstreamed into the relevant policies and strategies of the DWS.
- Future development for SDG 6.6.1 reporting by SA should ensure that there is alignment and integration of efforts between the authorities that are responsible for reporting on freshwater ecosystems, both for national reports as well as the many, various international conventions.

In May 2023 DWS received a request from UNEP to:

- **Review the national 6.6.1 statistics on spatial extent, as well as the Water Quality**
    - South Africa was requested to review the national 6.6.1 statistics that have been produced, as documented on the SDG 661 data portal.
    - UNEP planned to report these national statistics to the United Nations Statistical Office on 31 July 2023.
- **Report in-situ measurements of groundwater and river flow data.**
    - In-situ measurements of river flow and groundwater can be submitted by countries to UNEP upon request, to complement the Earth Observation and modelling based on 6.6.1 statistics.
    - For the 2023 data drive South Africa was able to report on change in groundwater levels, the change in the quantity of water (discharge) in rivers. Estuaries were not reported on as it was not required by UNEP.

Table 13: SDG 6.6 Data Drive (2023) results

Category	Sub-category	Time period	Change over time	
Lakes & Rivers	Permanent water dynamics	2000 – 2020	-4.55 %	-71.66 Km^2
	Seasonal water dynamics	2000 – 2020	66.28 %	937.7 Km^2
Reservoirs	Minimum water extent	2000 – 2020	-3.93 %	-78.71 Km^2
	Maximum water extent	2000 – 2020	-1.08 %	-24.53 Km^2
Wetlands		2016 – 2020		6164.3 Km^2
Mangroves		1996 – 2020	3 %	0.77 Km^2
Water Quality	Turbidity State	2017 – 2020	4 out of 22 lakes affected	18.2 %
	Trophic State	2017 – 2020	1 out of 22 lakes affected	4.6 %

Wetland Extent

In SA natural wetlands are divided into palustrine, inundated, and arid systems. The total areal extent of wetlands mapped to date based on data accumulated between 2006-2018 is 46 000km², with 70% of the extent country showing a low confidence that all wetlands are represented. Palustrine wetlands made up an estimated 15579.32 km^2 or 55% of the extent of South Africa. Inundated wetlands made up

2787.19 km², or 11% of. Arid systems made up a total of 9091.57 km², or 34%. No trends in a change in extent are available at this stage. The improvement of the National Wetland Map 5 to Version 6 is currently underway.

Estuaries

South Africa has 290 estuaries and 42 micro-estuaries which have been classified into 22 estuarine ecosystem types. In South Africa, Estuarine mapping is undertaken for the Estuarine Functional Zone (EFZ) defined as the area that not only encapsulates the estuary waterbody, but also supporting physical and biological processes necessary for estuarine function and health. The total extent of the mapped estuarine functional zone in South Africa in 2018 was 2007.3 km², compared to (1710.5 km²) the extent in 2011, this represents a 17.35% increase.

Lakes and Rivers

There are 8 Permanent Freshwater Lakes identified and mapped in SA as part of the South African National Wetland Inventory (NWI) initiative. The extent of these 8 lakes as mapped in 2012 was 133.76 km^2. The Estuarine Lakes are included in the estuaries' ecosystem datasets. No trend results on change in extent exists at this stage. DWS is in the process of planning for the development of the SA Lakes Inventory.

Artificial Waterbodies (Dams)

There are some challenges in the dataset for River Basins and Administrative boundaries which were provided by the UNEP. These datasets are not the same as what the Department of Water and Sanitation has. The Department of Water and Sanitation is using the Tertiary Catchment Boundaries to disaggregate the data for Artificial

Water Bodies. It is recommended to continue to use the Tertiary Catchment Boundaries as opposed to the shapefiles provided by the UNEP.

The UNEP geo-tiffs show all the water surface, not only the artificial ones. The water bodies are not separated according to surface water types. Some of the features that are included in the layers for Geo-Tiffs are Irrigated agricultural fields, and not necessarily water bodies. Another challenge with the Geo-tiffs is that they are not regularly updated, and the geo-tiffs made available during the 2020 Data drive.

- It is recommended that the UNEP data for artificial systems should be made available so that it can be compared to the national data set. Currently there is no layer which is separated from the other water bodies, they are all combined in one layer.
- It is recommended that the UNEP should update the geo-tiffs to the recent datasets, i.e., from 2019 to 2023.

Groundwater Levels

Although data on groundwater levels may be useful for global comparisons between countries, for the purposes of managing groundwater, the DWS has domesticated the indicator to represent a "groundwater level status" (groundwater levels as a percentage) per calendar year (January to December) and per Hydrogeological Region based on the groundwater level record. The groundwater level status is not an indication of the groundwater availability or the storage levels within an aquifer (volume) but only indicates the water level in comparison to historical monitoring water levels.

Between 2011 to 2015, 8 regions showed a constant decline and 5 regions a constant increase in water levels from the reference periods. The regions with the increased water levels are in the eastern, southwestern, and central areas of South Africa. The southern, western, and northern areas still show a decline in water levels.

However, recent data has shown improvement in groundwater levels. The water levels recover overall to the same levels as pre-2016. An increase of water levels over the last year (2022) resulted in 47% of the regions having higher water levels than the reference period from a value of 27% in 2021.

2.6.2 Challenges and Interventions (2016-2023)

For Change in Spatial Extent of Wetlands, including lakes, vegetated wetlands, and ephemeral wetlands the challenges were:

Challenges	**Interventions**
Lack of trends for the spatial extent of wetlands and lakes including water quality data.	The DWS forms part of the NWM Technical Working Group engagements coordinated. by SANBI to actively participate in various activities for the update of the NWM 5 to NWM 6. The NWMP implementation is currently underway and Ramsar sites are targeted for water quality monitoring including Ramsar sites within strategic water source areas. The NWMP will be expanded to also include priority wetlands with Resource Quality Objectives, priority wetlands in terms of ecological status (Reserve Determination status) and wetlands forming part of the Agreement on the conservation of African –Eurasian Migratory Waterbirds (AEWA).

Change in Spatial Extent of Estuaries

- Challenges: There is misalignment between the UN Reporting and the release of the NBA report. Thus, the ESE-DMS is there to bridge that gap so that the estuaries team will be able to report as per UN timeframes.
- Intervention measures: As part of the action plan the estuaries team is embarking on a project called "Estuaries Spatial Extent Data Management Strategy (ESE-DMS)".

On validation of spatial Extent and Earth Observation data

- A key challenge that therefore exists when global data is submitted for review is that the surface water dynamics dataset (representing both permanent and seasonal water) does not disaggregate surface waters into water resource types (i.e. reservoirs, estuaries, lakes, rivers).
- Due to differences in methodologies direct comparisons between national and global datasets was not possible, however, the South African specialists were able to conclude that the global datasets:

2.7 SDG 6.a International Cooperation and Capacity Building

Target 6.a as a means of implementation, is aimed at creating an enabling environment for the flow of external funding.

Indicator 6.a.1 tracks the amount of official development assistance (ODA) that is included in a government-coordinated spending plan with a primary objective of promoting economic development and welfare in developing countries.

It is essential to be able to assess ODA in proportion to how much of it is included in the government budget to gain a better understanding of whether donors are aligned with national governments while highlighting total water and sanitation ODA disbursements to developing countries over time.

Monitoring results in transparency and better understanding of financial flows in the water sector, which in turn can increase efficiency and stimulate further internal and external funding.

The outcome will depend on a case-to-case basis and on the country's political standing at the time.

2.7.1 SDG 6.a Overall Progress (2016-2023)

Official resources flow from the international donor community to South Africa in the form of grants, technical cooperation, and financial cooperation, where the South African Government is held at least partially responsible or accountable for the management of such resources.

In 2016, the benchmark amount of ODA received from the National Treasury amounted to R 2 million from the Belgian government. This amount was dispersed over 2 years as a portion of water and sanitation ODA to support and to strengthen sector systems/ capacity. Since then, disbursements of official donor resources to the water and sanitation sector have not increased, and future investments are uncertain. Holding up the interests of the global south amid two ongoing wars and a slowing global economy makes projections of funds needed to close the gaps difficult to estimate.

While the need for ODA is growing and diversifying with changes occurring in the community of nations, a tendency of so-called "aid fatigue" is spreading among many donor countries reflecting economic stagnation and fiscal constraints affecting African countries which they have been aiding. The key question to consider is how African governments will maintain their relationships with diverse set of external partners and with one another as the geopolitical shifts.

Currently international donors have committed to assisting the South African (SA) government through support mainly in the form of additional and reprioritized funds from existing programmes. Therefore. the status on ODA for water and sanitation projects remains the same for target 6.a:

Table 14: DWS programmes benefitting from cooperation with partners & donors.

Types of cooperation	DWS Programmes benefitting from cooperation with partners and donors
Bilateral	❑ Netherlands has supported the development of the National Water and Sanitation Master Plan and programmes such as the Blue Deal ❑ Denmark has supported the development of the DWS Groundwater Strategy and is currently working on programmes in Water Use Efficiency in Industries as well as Urban Water Management. ❑ The Dutch Government provided scholarships to deserving water sector officials and continued to support infrastructure development through the ORIO programme in KZN and Lundin, Joe Gqabi District.
Multilaterals	❑ The EU through the SA-EU Dialogue Facility, funded research on the effects of COVID-19 on the water sector in the SADC region ❑ JICA "funded Strengthening the Training Capacity on Non-Revenue Water." ❑ GIZ is supporting water sector dialogue through the SWPN and Lower Carbon and Climate Resilience (LCCR) project. ❑ The Water Resource Group 2030 is supporting

Intergovernmental engagements	water sector dialogue between the public and private sector partners. ❑ The BRICS Water Forum discussed the use of sustainable water resources and advanced solutions in the BRICS countries. ❑ South Africa's engagement in the UN 2023 Water Conference ❑ High-Level Political Forum (HLPF) 2023 also supported Continental priorities to achieve sustainable development in Africa as envisaged in the African Union "Agenda 2063: The Africa we want" (AU Agenda 2063) and the Southern African Development Community's Regional Indicative Development Plan (SADC RISDP). ❑ South Africa is part of the International High-Level Panel on Water Investments for Africa (AIP) ❑ The SDG Summit followed up and reviewed the implementation of the 2030 Agenda for sustainable development and 17 Sustainable Development Goals.

2.7.2 Challenges over the last 7 years (2016-2023)

Global economic uncertainty, development partner budget constraints, and increasing pressure to channel funds to least developed countries all continue to place pressure on the level of support provided to South Africa.

Furthermore, South Africa's three largest Development Partners (USAID, the European Union and Germany) all face some degree of political and economic uncertainty because of the ongoing war between Russia and Ukraine as well as the crisis in Gaza.

The nature of challenges encountered are the following:

Political:

The building of steadfast relationships with donors and signing agreements as per a country's foreign policy involves an ever-changing environment. Official Donor Assistance (ODA) to South Africa is on the decline. South Africa is classified as an upper middle-income country by the OECD and thus not perceived as eligible for ODA.

Operational:

The current trend for South Africa is to use bilateral agreements to strengthen activities in the sector. This might account for the low number of disbursements the water sector has received. The data available from the National Treasury reflects official donor funding received from the government of Belgium as the only source of ODA since 2016.

Social:

The COVID19 pandemic has altered the flow of ODA to developing countries with shifts from programmes that support economic development (pre-pandemic) to programmes that are aimed at strengthening health systems manage the outbreak of the pandemic for recovery and building back better (post pandemic) in developing nations.

Scientific:

Currently, data is only available on the amount of ODA disbursed.

2.7.3 Successes over the last 7 years (2016-2023)

The Department of Water and Sanitation has recognized the need to

ensure that effective platforms are created with key development partners active in the water sector and aligned according to the strategic vision of water resource management in South Africa.

- The establishment of the Development Partners platform
- The Study by the National Treasury on International Best Practices and Innovative approaches for financing Water and Sanitation. The study was conducted by the National Treasury and funded by USAID.
- South Africa becoming a member of the International High-Level Panel on Water Investments for Africa (AIP)
- Workshops held as a platform to delve into the developments that shape the management of development cooperation in South Africa.

2.7.4 Gaps and Interventions for SDG 6.a Target

Table 15: Gaps and Interventions for SDG 6a Target

	TARGET SPECIFIC (6.1) DESCRIPTION		VEHICLES OF CHANGE		
No.	**GAP**	**ACTION**	**NW&SMP – Is it covered already?**	**OTHER (NWSRS, Legislation etc**	**Comments**
1.	Enhancing existing and new cooperation	Conduct benchmarking and comparison assessments	Yes	IWC programmes of work Strategic plan of the dept.	Enhanced cooperation to create awareness on the content of targets for goal 6.
2.	ODA decline in the South African water sector	Identify developing partners and engagements to be targeted	Yes	Foreign policy of SA NWSRS	This is an existing action that can contribute to attracting external

						investment.
3.	Finding innovative ways to attract ODA	Intensify efforts to place water on the global agenda, by placing emphasis on cooperation with the developing AU and UN member states	Yes	Foreign policy of SA NWSRS		Intensify existing programmes
4.	Finding ways to close the gap on dispersed ODA taking. into account	Strengthen existing Partnerships within the region	Yes	NT ODA policy NWSRS		Motivate all water use sectors to embrace water stewardship, strengthen
	the international response strategies in place after the pandemic					their collaboration, and participate in integrated water resource management.
5.	ODA utilised to assist Africa to achieve SDG6	Support regional agenda and scope of work in both bilateral and multilateral fora	Yes	No	NT ODA policy NWSRS	Intensify existing programmes

2.7.5 Can South Africa meet its 2030 SDG 6.a Target?

It is difficult to extrapolate with confidence and state with any certainty what the likely figures for ODA will be in the medium to long term given the variables at play.

Based on the information at hand, there are no indications of changes in the flow of ODA in any direction, and no basis for suggesting a significant upward trend of ODA to SA over the next five years. To ensure that an enabling environment is created to achieve this target by 2030, South Africa should continue to (i) support the global call for developed countries to fulfil their promise and (ii) implement and support initiatives that will create investments for water and sanitation projects.

2.8 SDG 6.b Community participation overview target

Target 6b supports the implementation of all SDG 6 targets (targets 6.1, 6.6 and 6.a) by promoting the meaningful involvement of local communities, which is also a central component of IWRM.

The indicator given by the UN is intended to show the degree of participation of local communities in water and sanitation planning and management, which is essential for ensuring that the needs of all people are met.

The indicator also assesses the percentage of local administrative units (as defined by the national government) that have an established and operational mechanism by which individuals and communities can contribute to decisions and directions about water and sanitation management.

2.8.1 SDG 6.b Overall Progress (2016-2023)

Summary:

SDG 6.b.1 Target by 2030: 100% degree of participation of local communities in water and sanitation planning and management.

2017: 100% achieved

2020: 100% achieved

2021: 100% achieved

2023: 100% achieved

The criteria provided by the UN requires that structures such as the Water Services Authorities have policies in place to encourage community participation. All South African organisations involved in water services delivery have these policies in place by default as it is a requirement to gain access to funding. As such South Africa has already achieved its target at 100%.

This existing indicator remains as given by the United Nations & no domestication is taking place for this indicator as it addresses a particular criterion for which South Africa complies.

The Department in collaboration with the Water Research Commission has developed an additional new indicator and a method of computation which will assist in measuring performance linked to the 6.b. indicator. The Department is in the process of piloting the additional indicator and the method of computation before presenting to Statistics South Africa for approval inclusion into the national report. However, South Africa has taken this target a step further, and with great interest from the UN, by developing a new indicator which will measure whether the policies are being applied in the sector and what is the performance of community participation impact on projects being implemented.

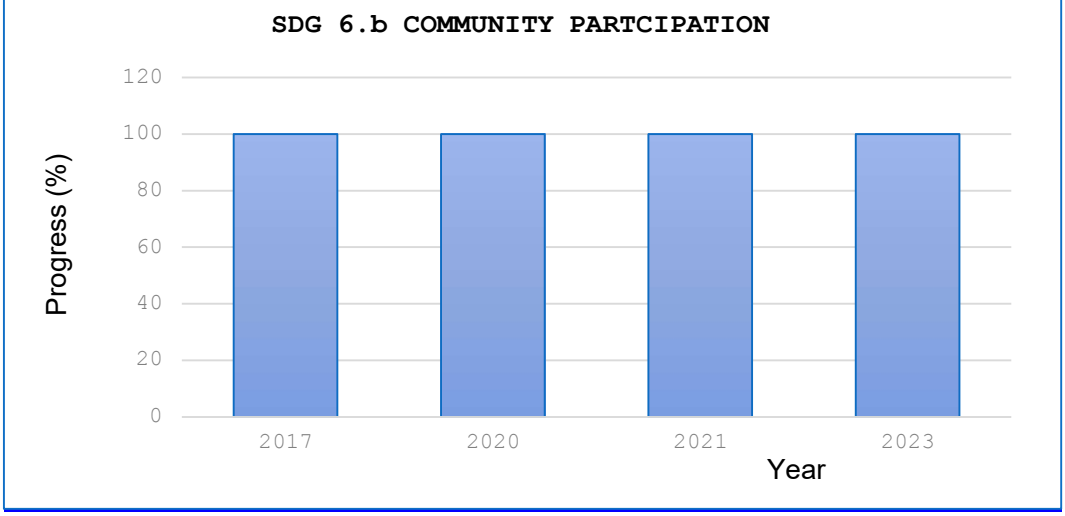


Figure 9:SDG 6.b Community Participation

2.8.2 Challenges over the last 7 years (2016-2023)

All irrigation boards were to be transformed to Water User Associations (WUA) to enable meaningful community participation as required by the National legislations. This process is taking longer than expected.

The Catchment Management Agency establishment process took longer than expected to enable meaningful community participation as required by the National legislations. The main challenge with both processes is institutional alignment and political reform programmes that need to be funded.

2.8.3 Successes over the last 7 years (2016-2023)

In line with the constitutional provision for democratic and participatory planning governance and administration, all water and sanitation projects and programmes incorporate local community participation through Integrated Development Planning (IDP) and Water Services Development Plan (WSDP) processes.

Table 16: Gaps and Interventions for SDG 6.b Target

	TARGET SPECIFIC (6.b) DESCRIPTION		VEHICLES OF CHANGE		
No.	**GAP**	**ACTION**	**NW&SMP: Is it covered already?**	**OTHER (NWSRS, Legislation etc**	**Comments**
1	Establishment of CMA (6 CMA)	Fast track the establishment of the remaining 4 CMA	Yes	NWA NWRS 2	This action is already covered on NW&SMP
2	Transformation of Irrigation board into Water User Association (278 irrigation board)	Fast track the transformation of remaining 179 irrigation boards	Yes	NWA NWRS 2	This action is already covered on NW&SMP

The transformation of Irrigation Boards will enable better participation by the historically disadvantaged communities for improved and integrated local management of water resources. The core of these transformation requirements includes, amongst others, access to water for the previously disadvantaged communities and representation of gender, race, youth, and people with disabilities.

The Catchment Management Strategy requires the establishment of Catchment Management Forums (CMF) established to democratize participation in water resource management to support Catchment Management Agencies. CMFs provide a potentially efficient and effective way to facilitate the coherent participation of stakeholders with diverse

interests in decision making about water resources management. In this way, buy-in to water management strategies and their implementation, particularly in line with the intergovernmental relations and cooperative governance on environment and water issues will be realized. The National Environmental Management Act also provides for Environmental Community Forums in every municipality for advancing meaningful community participation on environmental issues that includes water and sanitation.

2.8.4 Can South Africa meet its 2030 SDG 6.b Target?

Yes, the criteria for this target have been met. Water Sector has policies and procedure that enable meaningful community participation as required by the National legislations.

3 CROSS-CUTTING TASK TEAMS

3.1. Sector Support and Coordination

Summary

Overall Target

Sector Support and Coordination Task Team (SSCTT) to 100% achieved all its targets by 2030.

Core responsibility:

SSCTT will support and communicate with the sector regarding progress and developments of the SDG 6 and (SSCTT) to 100% achieved all its targets by

Note (background):

The Chief Director: Water Services Planning & Information is the Focal Point of SDG 6 in South Africa on behalf of the Department of Water & Sanitation in collaboration with Statistics South Africa (Stats SA).

The Sector Support and Co-ordination is one 5 Cross-Cutting task teams supporting the 8 target task teams.

FUNCTIONS OF SECTOR SUPPORT AND COORDINATION TASK TEAM

There are 4 key functional areas for which this task team is responsible for these include:

1. Communication with the Sector

- To communicate with the water sector regarding progress of SDG 6.
- Provide a linkage to other similar work in both the national sector and international representative.

2. Supporting the Sector

- The support broadly, involves providing strategic guidance and identifying and implementing special projects contributing to the SGD 6.
- Provide strategic support and recommendations to the sector in terms of how they can close the gaps identified within their respective sub goals.
- Coordinate support activities where possible.

3. Reporting progress towards achieving SDG 6 by 2030

- Develop a reporting framework, implement systems and processes required to report progress regarding achievement of this task team SDG 6 target.
- Report on progress of this task team annually.

4. General Operations

- To coordinate monthly/quarterly meeting as required with each of the task team members to assess progress, challenges, and other

points of discussion. Minutes must be maintained accordingly and copied to the programme coordinator for information.

- The task team leader to participate on the quarterly SDG 6 Working Group meetings.
- To provide quarterly progress reports to the SDG 6 Working Group relating to the task team functions.
- To consider other areas of importance relating to the target as they arise and assess the level of support, if any.
- To review the ToR every year in line with the action plan.
- Implementing the action plan of the task team.

This Cross-Cutting task team reports to the SDGWG led by the SDG 6 coordinator.

3.1.1 Sector Support & Coordination Progress (2016-2023)

Mid Term Review

A media statement and advisory were issued to profile the two-day workshop to assess progress the of Sustainable Development Goals on water and sanitation which was held in February 2023. Timeous social media updates and Twitter Live stream of closing remarks by Deputy Minister David Mahlobo were done to highlight key takeaways from the workshop.

Knowledge Management progress report on SDG 6

The Knowledge Management Directorate has developed and published 8 Information Brochures on SDG 6 as planned for all SDG 6 targets. The

Knowledge Management Directorate maintains and regularly updates the SDG 6 Website with the most up-to-date information.

- Synthesis report prepared by United Nations (UN) Water
- Summary of the 2023 UN Water Conference
- UN's Secretary Generals Plan: Water Action Plan for the period 2018 to 2028 Inclusive activities.

There are many activities being implemented within DWS that promote inclusivity regarding Gender, Disability and Youth. Such activities are reported on at their respective Task Team meetings to assess what is happening and how.

UNESCO IHP IX Strategy

The SANC for UNESCO IHP Internal Secretariat (SD: C&L) has initiated a process of aligning the IHP IX strategy activities with eh SDG 6 activities. Engagements and collaboration processes will kick-start in Jan 2024.

3.1.2 Challenges over the last 7 years (2016-2023)

A Business Analysis/Business Case stage (Need and Desirability is required and under discussions under the new IT contract.

In 2021/ 2022 financial year, the SS&CTT regular meetings could not be held due to the Covid 19 pandemic and internet connectivity challenges, however some of the activities on the action plan were achieved.

3.1.3 Can South Africa Meet its 2030 SS&C Targets?

As a Cross Cutting task team, they set their own targets annually and in support of the indicator targets set by the United Nations.

The SS&CTT has achieved the following to date:

- Communication Directorate committed to initiating content or brainstorming sessions with relevant line function managers.
- Knowledge Management to continuously source content from content owners and developing materials.
- Intergovernmental Relations to continue to engage the sector and include as many stakeholders as possible in the programmes of the department.
- Gender and Disability to continue to advocate for mainstreaming gender and disability in all the programmes and projects of the Department.
- Youth Development will implement the Learnership programme on Water and Wastewater Process Control and Landscaping Irrigation, and implementation of the National Youth Indaba in June 2024 in Limpopo.

3.2 Research and Innovation

The Research and Innovation Cross-cutting task team was established with the intention of providing support to all the target task teams. It focuses on research and innovation matters that are directly relevant to the achievement of the SDG 6 targets, and to reporting on progress towards these targets. This includes supporting the systematic identification of key knowledge gaps, exploring options for filling these gaps, and packaging existing knowledge in formats suitable for the SDG process. The task team is led by the Water Research Commission (WRC), at the request of DWS in providing sustainable and appropriate solutions.

3.2.1 Research & Innovation Progress (2016-2023)

Since its conception, the task team has been implementing three relevant research projects, namely:

- Framework on Mapping Water and Sanitation (SDG 6) Interlinkages Across all 17 SDGs essential for giving support to other SDGs and vice versa. The UN is interested in the outcome of this project as it could benefit other global partners.
- Co-development of a linked-up monitoring and reporting framework for the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change.

The development of new South African domesticated indicators and their Methods of Computation relating to SDG 6.3, 6.6 and 6b.

The work of the Task Team in 2023 involved two WRC-funded projects that have direct relevance to South Africa's ability to monitor and report accurately on progress towards achievement of targets under SDG 6. One reviewed and further developed selected current South African targets, indicators, and methodologies for SDG 6. The second examined how to improve the quality of data on access to water and sanitation generated by the census and general household surveys.

Indicators project

DWS is responsible for monitoring and reporting of the correct SDG 6 indicators at the correct scales, in a manner that effects real change through informing policy formulation and decision- making. Global methodologies exist for measuring against these indicators, but countries are encouraged to domesticate methods and set targets that are relevant

to their context and resources, while maintaining consistency with the aspirational targets determined in the SDGs.

This project evaluated the management targets and indicators that have been set for target 6.3 (water quality) and developed methodologies for proposed additional indicators under this target. Methodologies that have been developed for selected indicators under target 6.6 (water-related ecosystems) were reviewed. The list of domesticated and proposed additional targets and indicators for SDG 6.6 were also reviewed. Recommendations were made for meaningful country level targets and indicators. The existing indicator under 6.b (community participation) was reviewed and compliance by DWS with the method of computation and indicator requirements assessed. A new indicator and method of computation were also developed, to allow more accurate measurement of community involvement in the management of water.

Improving the quality of data on access to water and sanitation.

In view of the challenges of getting accurate data from Water Services Authorities, DWS is heavily reliant on data generated by Statistics South Africa to be able to monitor progress towards universal access to safe and reliable water and sanitation services. Mechanisms like the census and general household surveys are vital for DWS to be able to report on progress towards achieving targets under SDG 6.1 (access to water) and 6.2 (access to sanitation).

The study set out to test if South African consumers understand current census and general household survey questions on water and sanitation and revise the questions as necessary to maximise understanding and minimise inappropriate responses. The research confirmed that

inappropriate answering is a major issue for the key water and sanitation questions.

The outcome of the study was a set of water and sanitation questions that respondents found easier to understand and answer. Census and survey questions that are easy to understand and answer will increase appropriate answering and hence improve the integrity of data that is critical for the water sector. Accurate data will ensure that the money spent on water and sanitation infrastructure and services meet the actual needs of consumers in those areas where improvement will make the biggest impact.

3.2.2 Successes and challenges (2016-2023)

An analysis conducted by the WRC shows that the national water and sanitation research agenda is already well aligned to support SDG implementation. As an example, WRC key focus areas for research funding were mapped onto SDG 6 targets and showed strong alignment, as the figure below demonstrates. A further success is the extent of integration of research and innovation into the work of the SDG Working Group.

Challenges experienced include the constant difficulty of bridging the science-policy- implementation divide, to ensure that new knowledge and innovation are translated into policy and practice. Experience with the indicators project also showed that there is a limited pool of research expertise available to advise government on technical aspects of the SDGs in South Africa. This experience confirmed that the largest pool of capacity on SDG 6 is within DWS.

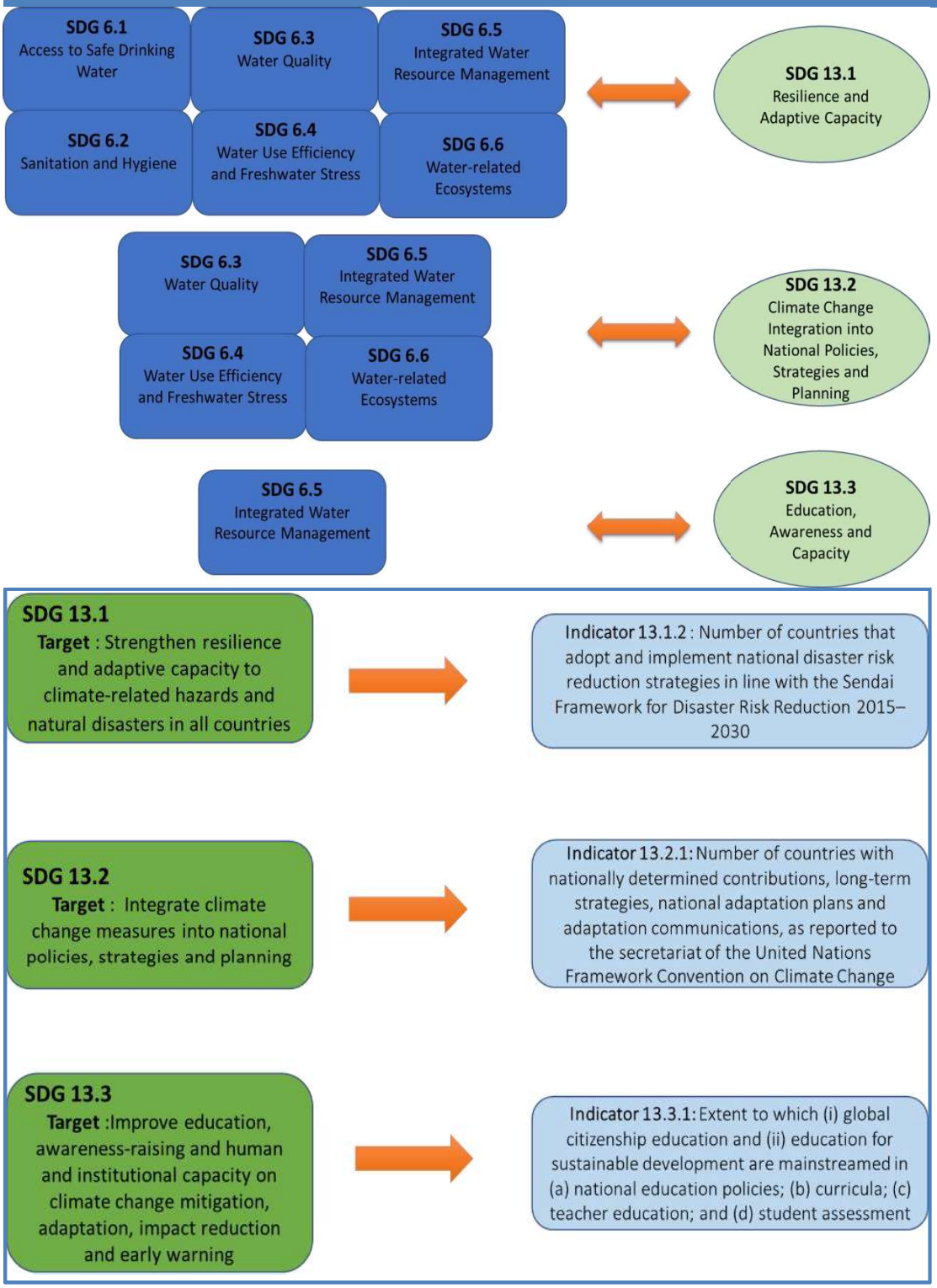
Key plans for 2024 include:

- Mobilising nexus thinking: How DWS can utilize what has been learned through work on the water-energy-food (WEF) nexus to better understand the interlinkages between SDG 6 and the other SDGs in a journey towards achieving all the SDG targets by 2030
- Addressing new priority research needs identified by the SDG 6 Working Group:
- Piloting the SDG interlinkages tool developed by DWS, with an initial focus on SDG 6.3
- In support of SDG 6.4 (water use efficiency), analysing available leak detection systems.
- Identification of mechanisms for filling identified knowledge gaps, including the incorporation (where possible) of priorities for filling gaps into annual WRC open and directed calls for proposals, and identifying other potential partners to resource the gaps.

3.3 Climate Change

The United Nations (UN) classified Climate Change under Sustainable Development of Goal (SDG) 13, called Climate Action. However, for the Southern African region where impacts of climate change have already been experienced, according to observations and confirmed projections by the Intergovernmental Panel on Climate Change, requires an interacted approach with the SDG 6 on Water to ensure the achievement. The recognition of climate change as a part of challenges affecting SDG 6 will impact the likelihood of realizing its 100 % implementation.

Climate change is projected to increase variability in the water cycle. These changes in the water cycle will induce extreme weather events, reducing the predictability of water availability, decreasing water quality, and threatening sustainable development, biodiversity and enjoyment of the human rights to safe drinking water and sanitation services. The following outlines the interfaces between the SDG 6 and 13:


SDG 6.1
Access to Safe Drinking Water
SDG 6.3
Water Quality
SDG 6.5
Integrated Water Resource Management
SDG 6.2
Sanitation and Hygiene
SDG 6.4
Water Use Efficiency and Freshwater Stress
SDG 6.6
Water-related Ecosystems
SDG 13.1
Resilience and Adaptive Capacity
SDG 6.3
Water Quality
SDG 6.5
Integrated Water Resource Management
SDG 6.4
Water Use Efficiency and Freshwater Stress
SDG 6.6
Water-related Ecosystems
SDG 13.2
Climate Change Integration into National Policies, Strategies and Planning
SDG 6.5
Integrated Water Resource Management
SDG 13.3
Education, Awareness and Capacity
SDG 13.1
Target : Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
Indicator 13.1.2 : Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030
SDG 13.2
Target : Integrate climate change measures into national policies, strategies and planning
Indicator 13.2.1: Number of countries with nationally determined contributions, long-term strategies, national adaptation plans and adaptation communications, as reported to the secretariat of the United Nations Framework Convention on Climate Change
SDG 13.3
Target :Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
Indicator 13.3.1: Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment

Summary:

The core of the work will be on production of climate change impact assessments, including their related mitigation and adaptation options, across the identified SDG 6 (i.e. SDG 6.1 to 6.6) targets.

3.3.1 Climate Change Progress (2016-2023)

This task team was created in October 2022 in support the 8 x target task teams to ensure that they are fully coherent of climate change issues through which ideas will be absorbed within their own operational activities. In addition, it will provide cooperative support with SDG 13 (Climate Change), aligned with SDG Interlinkage to maximize combined interest to make a bigger impact for change.

Similarly, to the Interlinkage task team, the Climate Change task team was initiated through another WRC research project which considered the alignment of the Paris Agreement on Climate Change with SDG 6. The findings of this research project will be taken up by this task team to drive its recommendations where applicable.

3.3.2 Successes and challenges (2016-2023)

Climate-related Hazards and National Disaster Risk Reduction Strategies

There is significant work and ongoing projects with foci on the risk and vulnerability of the water and sanitation sector. Moreover, the following project has recently commenced:

- Review and update the Climate Change Status Quo for the Water and Sanitation Sector and development of the Climate Change Strategy for the Water and Sanitation Sector.

The following projects were planned for the 2022/23 financial year:

- Assessment of climate change vulnerability and adaptation options on water systems to changes in specific indicators.
- Developing and use of early warning systems (EWS) and tools for managing floods and cyclones, given projected extreme rainfall events.

Climate Change Policies, Strategies and Planning

The proposed Climate Change Bill and National Climate Change Adaptation Strategy gives a framework for different sectorial Departments to develop own Adaptation Strategies. The Department has thus far developed a 2017 Water and Sanitation Sector Policy on Climate Change, which was subsequently reviewed in 2019, with a Second Draft of the Climate Change Response Strategy for the Water and Sanitation Sector. The Department has initiated the process towards developing the Water and Sanitation Climate Change Adaptation Policy (with mitigation offset) through the production of scientific evidence by commissioning numerous research projects that will form the basis for the policy development. Further, scientific evidence is used or forms basis in development and contribution towards strategies and planning in the sector.

Awareness on Climate Change Adaptation, Mitigation / Early Warning

The findings on climate change impact, adaptation, mitigation, and early warning across the water and sanitation sector are shared with both

internal and external stakeholders through reports, publications, presentations, awareness events, etc. This is done continuously when knowledge is developed. For the Southern African region where impacts of climate change have already been experienced (the floods in KZN), according to observations and confirmed projections by the Intergovernmental Panel on Climate Change, requires an interacted approach with the SDG 6 on Water to ensure the achievement. The recognition of climate change as part of challenges affecting SDG 6 will impact the likelihood of realizing its 100 % implementation.

3.4 Water and Sanitation Sector Leadership Group (WSSLG)

3.4.1 WSSLG Progress (2016-2023)

Sector involvement is critical to ensure integration and participation of the Sector components (Government, Private sector, Utilities, Civil Society, Research, Mining, Agriculture etc.). It is only through the Sector's delivery on actions given to them as guided by the NW&SMP and the NWRS3 that progress in closing the gaps will be made. This SDG 6 WSSLG was conceived by the Director General's WSSLG in 2018 a since been meeting twice per year since July 2021. ESKOM chairs the Leadership Group, with an internal task team Leader from DWS.

Leadership Group meets every quarter immediately following the quarterly SDGWG to inform the sector on progress and give inputs to each of the Targets in terms of existing Gaps and proposed interventions.

The WSSLG is the highest non-statutory strategic sector partnership forum for the South African water sector. It serves as a thinking tank for the water sector and prepares an overarching national action agenda for implementing the NW&SMP and the NWRS3, and ensures that sound policies, laws, strategies, programmes, and institutions are developed to achieve the goals outlined in the NWRS3.

The WSSLG plays of advisory role & actively facilitates dialogue between the Department of Water and Sanitation, government departments, civil society and the private sector for input, support, and contributions to joint strategic and coordinated actions to improve the implementation of water sector policies, strategies and programmes. The functions of the WSSLG

TT will be aligned to the functions of the Water and Sanitation Sector Leadership Group, and are as follows:

- To oversee the SDG 6 programme from a sector perspective, analyse the Gaps identified within the 8 targets identified through the SDGWG and strategize how best the sector can turn around shortfalls to meet the targets.
- To advise the Sector to take ownership of SDG6 Targets by including positive actions, projects, programmes within their own operational activities and plans, in closing the Gaps identified within the 8 Targets and report on progress, challenges and actions to address. To collaborate with other Task Team Leadership there is a 2-way interaction towards influencing the Target approach, methodologies and progress.
- To support information exchange and communications between sector role players and sharing of lessons, knowledge and ideas regarding SDG 6.
- To ensure sector alignment with the National Water & Sanitation Master Plan, National Water Resource Strategy, and the National Development Plan.
- To play an advocacy role, mobilise resources and facilitate coordination of funding opportunities to achieve the targets of the SDG 6.

3.4.2 Successes and challenges (2016-2023)

It has proved to be a vibrant and interactive session. Its challenge remains a lack of commitment by the sector to be accountable for specific activities on the ground. It has proven difficult to quantify the impact being made by the sector towards closing the SDG 6 gaps. The M&E system highlighted as a need earlier in this report would assist in this regard.

From an international perspective, the WSSLG has gained great interest from organisations such as United Nations Water (UNW), Sanitation and Water for All (SWA), World Wildlife Fund (WWF) and United Nations Children Fund (UNICEF). Interactions between these organisations have been positive. The SWA also requested the SDG 6 WSSLG to identify Sector Focal Points from within the WSSLG to assist in their international cooperation. Further feedback will be provided in the next report.

The UN Water initiated a focused Gender intervention, through which DWS identified 3 x DWS Gender experts to be involved within international co-operative activities and provide additional support to all the DWS Task Team through the Sector Support & Coordination task team. For 2024 and beyond, the SDG 6 SDGWG has been integrated with the WSSLG chaired by DG to minimise meetings throughout the year.

3.5 SDG Interlinkage (SDGI)

One of the innovative features of the 2030 Agenda for Sustainable Development involves the integration of its various goals. Sustainable Development Goal (SDG) 6 on "Clean Water and Sanitation" has a pivotal role to play, because of the centrality that water must each of the three

dimensions that cut across all SDGs, i.e. society, economy and environment.

As such, acknowledging and investing in stronger links between SDG 6 and the various other SDGs constitutes an efficient and effective strategy for achieving the 2030 Agenda. Improved knowledge on the interlinkages that exist between the individual SDG goals and targets is critical for policy coherence towards sustainable development. This helps to prioritize action with larger synergetic impact and prompts effective investments so that limited resources are utilized more efficiently and sustainably.

This task team is an initiative created within the DWS SDG 6 agenda to the admiration of the UN programme and other countries participating in the SDG 6 programme internationally. An Interlinkage Tool has been developed to assess the synergies between all SDG 6 Target and the other 16 SDGs to identify areas of cooperation and impact on both sides. This task team emanated from a Water Research Commission proposal that unpacked these interlinkages at an elevated level, and the findings of which proved too good to lose. SDG interlinkages refer to the complex network of interconnections existing across the SDGs, their targets, and indicators. These interconnections can be positive, negative or have a mixed nature. If linkages are not understood and managed, conflicts may arise if achieving one target has a negative impact on another.

More recently studies have been undertaken which aim to understand the linkages between indicators. Studies on interlinkages between SDG goals and targets aim to:

- Provide an understanding of the effects of decisions on other SDGs (and thus their suitability).

- Ensure policy coherence towards sustainable development,
- Enable prioritization of actions with larger synergetic impact,
- Inform effective investments so that limited resources are used more efficiently and sustainably.

Figure 10:Interlinkage Synergies & Trade-offs.

3.5.1 Prioritizing SDG Target 6.3 for piloting

Before DWS embarks on the full implementation of this tool with 3006 assessments, it is prudent that it begins with a Pilot that will test the Tool through a full cycle of data gathering, data assessment, data interpretation and establishing proposed tangible interventions that can be implemented through the National Water and Sanitation Master Plan. As such a decision was made by the SDG task team to first focus on the SDG 6.3 target

In doing so the Pilot would only include 992 assessments instead of the full 3006. The findings could significantly assist in addressing SDG 6.3 in South Africa which is indeed a critical target that South Africa is falling behind in.

The pilot would not only collect useful data that will contribute towards achieving the SDG 6.3 target but will also provide an opportunity to refine the tool and improve it before dealing with the remaining 7 SDG 6 targets and their interlinkage with all other 16 SDGs.

By comparing SDG 6.3 indicators with other SDG indicators, opportunities for highlighting implementation actions that complement or conflict with each other can be uncovered, e.g., improved provision of clean energy in rural areas (SDG 7) can be used to power and improve wastewater treatment (SDG 6.3). In addition, improved Water Quality will contribute towards health improvement and reduced sickness within our population. This kind of assessment can be an important investment in a crucial knowledge base for policymakers and planners wishing to move forward with effective implementation strategies. It can reveal sectors where indirect so-called knock-on effects can be expected and where coalitions of the willing are most likely to emerge.

Project goal and objectives for SDG Interlinkages:

The goal of this project is to:

- Develop a gaps report relating to the linkages between SDG target 6.3 and the other 17 SDGs that could feed into and support the work of the 8 technical SDG 6 teams and the National Water and Sanitation Master Plan, and which could support the other 17 SDGs from a water perspective.

The project objectives are to:

- Obtain further in-depth knowledge on the linkages that exist in terms of the SDG targets, Indicators, and data needs between SDG 6.3 and the other SDGS which have strong linkages with water quality management.
- To determine what data and or implementation actions the other SDGs require from the water sector so that they may achieve their goals and reporting requirements.
- To identify and communicate what the water sector requires from the other SDGs to achieve the SDG 6.3 target and how this may be integrated into their sector plans.
- To create awareness on SDG 6, and SDG 6.3 and on its governance approach (as a blueprint for other departments).

3.5.2 Successes and Challenges (2016-2023)

In the year 2020 the Water Research Commission (WRC) concluded a study which identified that there are linkages (synergies and trade-offs) between SDG 6 indicators and the other SDG indicators in a South African context. Further in-roads are now needed to establish exact needs and

opportunities for collaboration and alignment with those institutions who are responsible for leading and reporting on the other SDGs, such that water sector can support the 'water needs' of the other SDGs. Given the potential magnitude of understanding and unpacking each of the interlinkages, a single target needed to be selected for the purpose of piloting. When comparing Targets, a study by UN-Water (2017) found that Target 6.3 was the target with the most direct relationship with other targets:

- Has trade-offs and synergies.
- Will lead to improvements in many other Indicators.

To put the assessment scope into perspective, to review each interlinkage between all Indicators individually, requires 3006 assessments to consider both Synergies and Trade-offs between each.

The benefit of implementing this tool is massive as it informs the SDG 6 programme of the scope of water and sanitation interventions required to achieve all other respective SDG Goals. In addition, it will provide data that allows interventions to be prioritized by other SDGs that will significantly contribute towards SDG 6 being achieved.

Deliverables: Implementation of the Interlinkage Tool:

In 2021 The DWS Interlinkages task team was formed, and has and completed the following tasks:

Project Conceptualization Report

Details the project scope, approach and timelines based on existing knowledge.

- Includes a broad role-player assessment in terms of departments that should be engaged.

SDG 6.3 Interlinkages and Gaps Assessment Database

- This Interlinkage Tool has been developed to capture data that links the SDG 6 target indicators with those from the other 16 SDGs outside of SDG 6.
- The Framework captures the data and present it in a form that interprets scenarios that will inform gaps and potential interventions.

Interlinkage Pilot Report (SDG 6.3)

- Describes the Interlinkages between SDG Target 6.3 and the other SDGs.
- Confirm the links and determine the gaps and potential actions.
- Includes stakeholder identification of relevant representatives.
- Identify the gaps that need to be addressed by the water sector to achieve the other SDGs; or
- Identify gaps that need to be addressed by the other SDGs to achieve SDG 6.3 (through stakeholder consultation)
- Lessons learnt to be applied to refine the approach for tackling the other SDG 6 targets.
- Recommendations of key actions needed to implement the gaps report.

This tool requires funding to roll out a pilot, negotiations are currently in place with the Water Research Commission to assist in funding a pilot programme which will be implemented, that will generate data that can accelerate SDG 6 and the other 16 SDGs. Interlinkages between SDG 6: Clean Water and Sanitation and the other SDGs

Decisions and actions to advance any SDG will affect the achievement of the others and a better understanding of the interactions between SDGs is needed. This information is key to unlocking the full potential of the SDGs at any scale, as well as ensuring that progress made in some areas is not at the expense of progress in others (ICSU, 2017). To accelerate the SDG programme, the application of a holistic integrated approach is recognized as a strategy that may significantly speed up the achievement of 2030 Agenda objectives. Such an approach will require as a starting point an analysis of the synergies (strengthening) and conflicts (trade-offs) between targets, together with thorough stakeholder analysis and engagement (UN, 2017).

A pilot is proposed to be pursued at a cost of R3 million by the Interlinkage Task Team. with the requirement of roll out to other SDGs at an estimated cost of R4 million once funding is made available.

4 FINANCING THE SDG 6 PROGRAMME

At the High-Level Political Forum in New York, in June 2023, it was highlighted that the World is 'Halfway there but nowhere near" in terms of achievement of the SDG targets.

There are many reasons highlighted in this report which clarifies why South Africa has fallen short in terms of addressing the Gaps of SDG 6, which includes the poor performance of the Water Service Authorities, besides the lack of Infrastructure Asset Management, poor planning, lack of proper Operations and Maintenance of infrastructure and high levels of Non-Revenue Water, water leakages to name a few.

4.1 Going Beyond the Infrastructure Funding Gap

The World Bank together with the DBSA has developed a report that considers the infrastructure funding gap for the water and sanitation sector, transport and education termed "(Going Beyond the Infrastructure Funding Gap (Reference World Bank / DBSA 2023)".

The objectives of the report are to:

- Quantify the infrastructure funding needs on education, transport, water and sanitation under feasible pathways to achieve the SDGs by 2030.
- Highlight infrastructure cost drivers and the implications of different policy choices.

In summary, the graph below shows the extent of spending requirements by the different sectors with a maximum of R1427 billion required for the water sector which equates to 2.49% of GDP.

Closing the SDG gap will require significant spending until 2030

Transport		Water and Sanitation		Basic Education		TVET		Total
Minimum spending scenario: less ambitious goals, mostly lower efficiency								
R1000 billion 1.68% of GDP	+	R1125 billion 1.97% of GDP	+	R2485 billion 4.69% of GDP	+	R203 billion 0.38% of GDP	=	R4813 billion 8.72% of GDP
Preferred scenario: ambitious goals, high efficiency								
R1295 billion 2.26% of GDP	+	R1243 billion 2.17% of GDP	+	R2505 billion 4.73% of GDP	+	R411 billion 0.78% of GDP	=	R5454 billion 9.94% of GDP
Maximum spending scenario: more ambitious goals and/or lower efficiency								
R1456 billion 2.54% of GDP	+	R1427 billion 2.49% of GDP	+	R2569 billion 4.85% of GDP	+	R709 billion 1.34% of GDP	=	R6161 billion 11.22% of GDP

Figure 11:Spending requirements by different sectors.

This financial requirement can be further broken down between capital cost and operation maintenance and emphasizes the need to expedite the O&M component which costs half of the required budget over the infrastructure life cycle. The water sector is currently spending a fraction of what is required (less than 10% of the budget). The lack of attention to O&M issues compromises the life cycle of the infrastructure, the quality of the products (clean water and treated effluent) and increases the capital requirement due to reduced longevity of the water and sanitation systems.

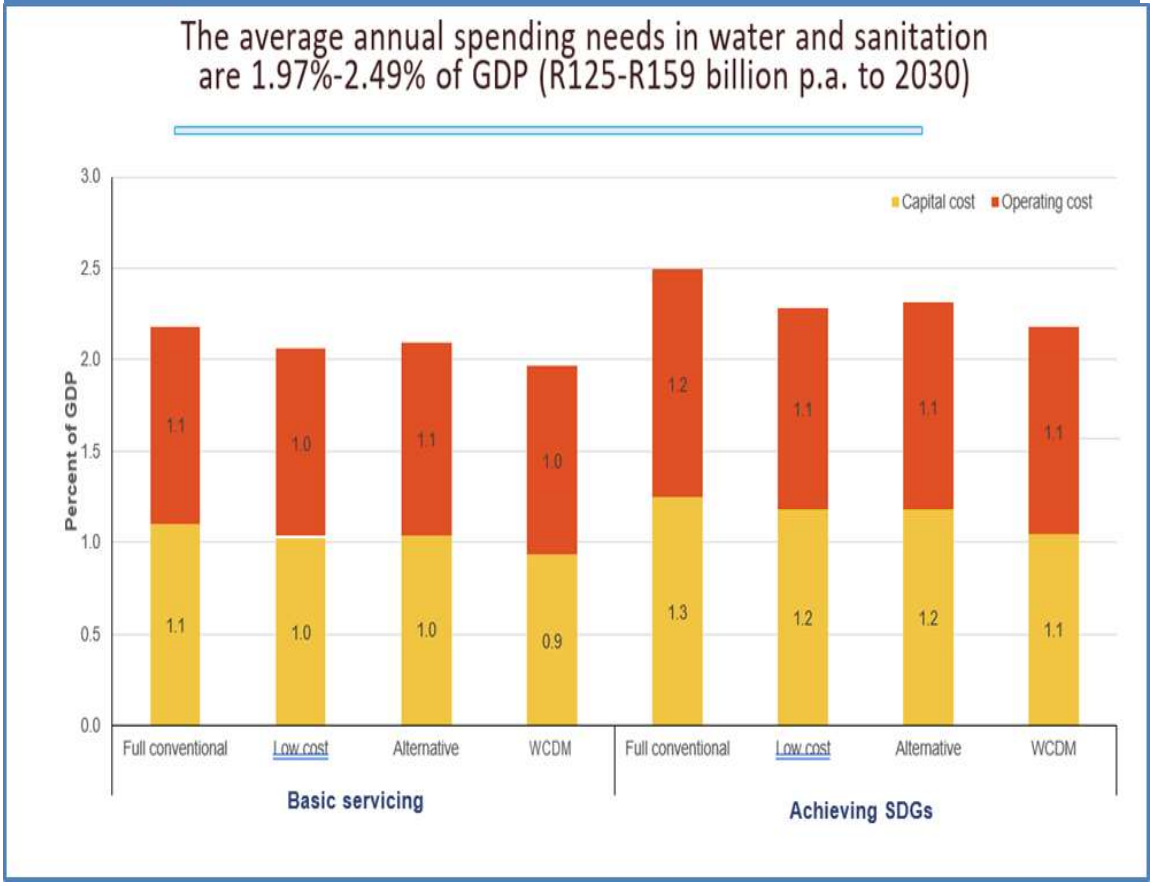


Figure 12:Average annual spending needs in water and sanitation.

Having established the funding requirements to address the infrastructure needs of SDG 6 by 2030, a comparison of what is available versus what is required was clearly identified which equates to a 27%-32% funding gap (R35 billion and R42 billion/annum).

This funding gap can be reduced by increased revenue collection, better allocations of unconditional grants by municipalities and increased development charges, but a 17% gap (R22 billion/annum) remains.

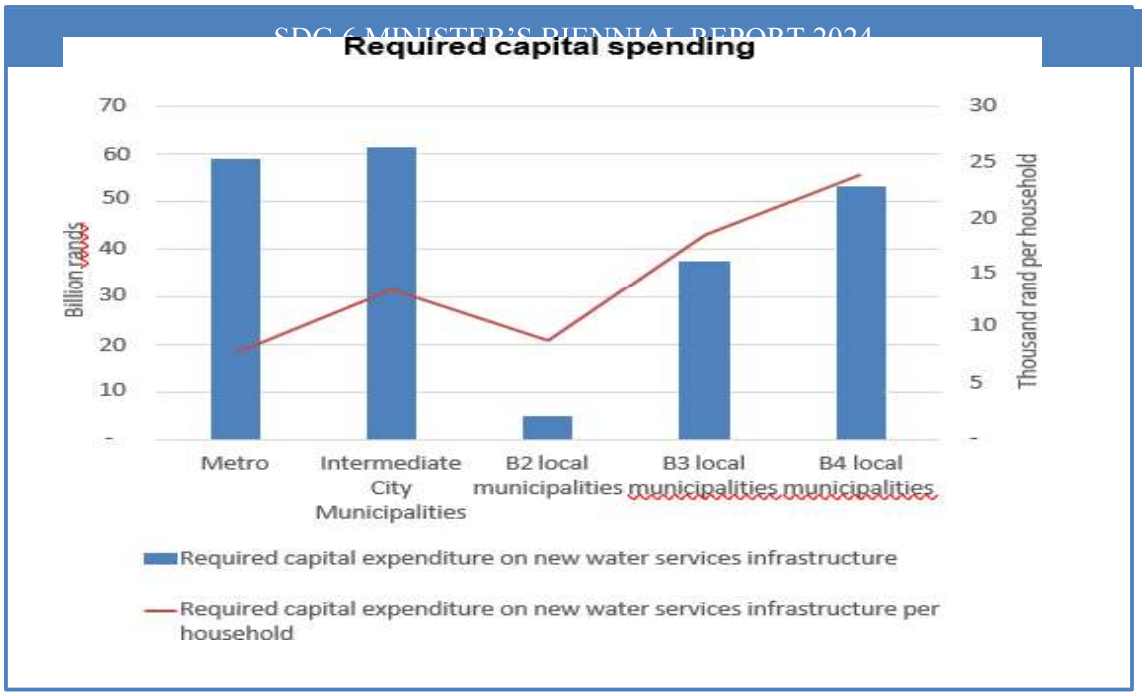


Figure 13:Required capital spending.

This will require more funding into the sector, either from users (through tariffs) or the national fiscus. The government has indicated that funds are available, and question remains on why there are still backlogs in infrastructure. An effective enabling environment to access this funding must is crucial.

Non-Revenue Water (NRW) is currently at about 45% which equates to more than R9.9 billion per capita consumption equates to approximately 237 l/c/d as compared with the world average consumption of approximately 173 l/c/d. Data estimates that irrigation schemes experience water losses of between 35% to 45%.

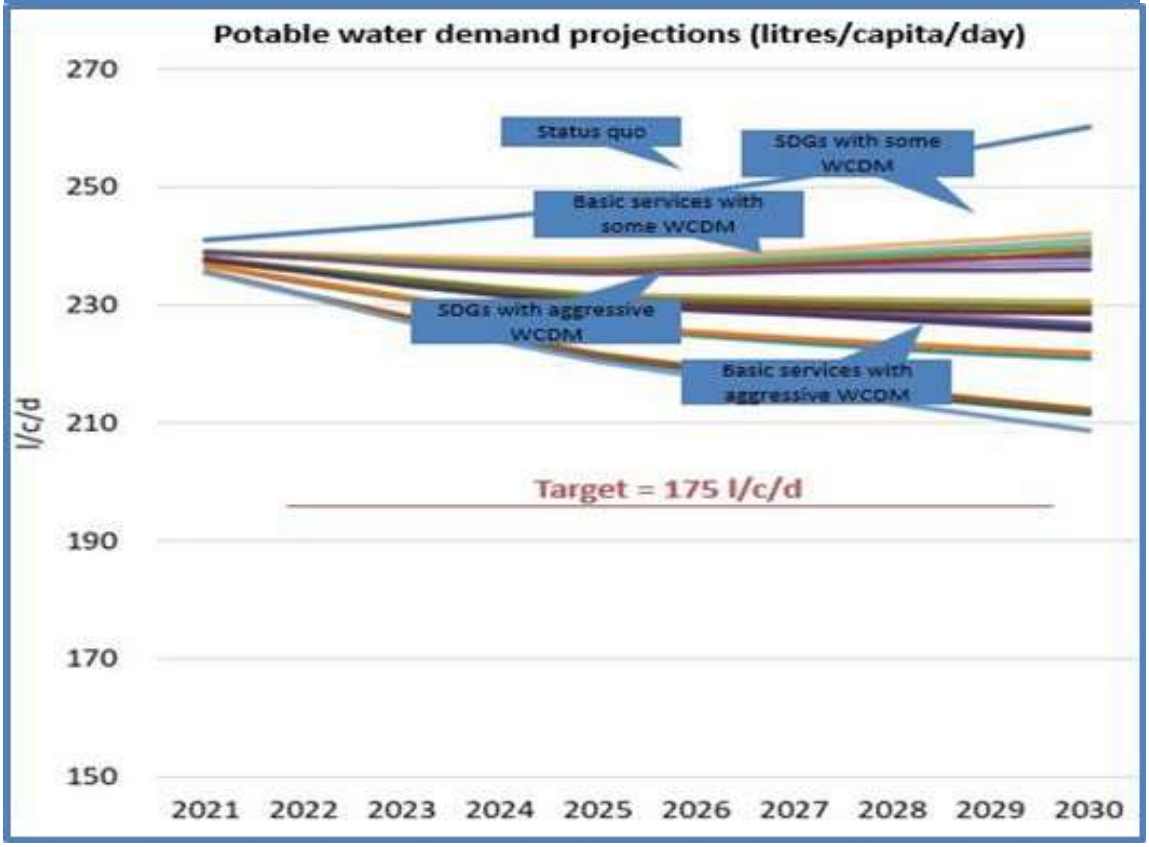


Figure 14:Potable water demand projections(l/c/d).

By reducing water leakages to 15% (some WSA's are experiencing more than 70% currently), then the demands for treated water will reduce and the capital investment needs for infrastructure will be less.

South Africa's priority areas to address the SDG 6 targets going forward must include reducing non-revenue water, turning around the performance of WSAs, the application of effective Infrastructure Asset Management (incl. O&M), increase revenue base and collection from the cost recovery systems and spend efficiently and sustainably within the infrastructure projects that are implemented.

Liberia is one of the top performing SDG 6 countries in Africa and they have a full-time dedicated office to ensure full time dedication to the process. South Africa can consider this approach to maximise impact and accelerate the process to 2030.

It is excellent credit to the SDGWG and their task teams that they have achieved so much in the last 5 years and with no budget at their disposal. At the same time, it has been demoralising for many that despite the elevated level of intervention, dedication, and commitment, the acceleration and progress on the ground is not being realised.

4.2 DWS Operational Budget Requirement to 2023

For success of SDG 6.a dedicated office is needed by DWS to ensure that SDG 6, NW&SMP and the NWRS3 are working concurrently towards a common objective, this approach will provide the focus, coherence and synergies required to maximise the impact of each. An M&E Dashboard will be developed and managed for all 3 components besides the implementation of SDG 6 Interlinkages with all 17 SDGs. The budget covers the next 7 financial years to include blending into the next phase that will follow the SDGs. This process will continue in a format to be defined by the United Nations moving forward.

Table 17:SDG 6 Estimated Operational Budget (2023-2031).

SDG6 - Operational Budget (2023-2031)		Estimated Budget Required (R million) (2024-2031)							
		2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031	TOTAL
Establishment of Dedicated SDG 6 / NW&SMP / NWRS Office	PLANNING & PROCUREMENT		1						1
Overheads (Resources, equipment, travel)			2	2	2	2	2	2	12
SDGWG Operations (TTL Resource)			1	1	1	1	1	1	6
M&E Tool									
SDG6 Ph 1,2 and 3			3	1	1				5
Integration with NW&SMP / NWRS3			1	0.5	0.5				2
SDG Interlinkage Intervention - Pilot			1	2					3
SDG Interlinkage Intervention - Remaining SDGs					2	1	1		4
Total Estimater / annum			9	6.5	6.5	4	4	3	
Total Estimate 7 years									33

5 REGIONAL PROGRESS

All regional progress reports are attached as **Annexure B.**

6 RECOMMENDATIONS

1. It is recommended that the Director General (DG) becomes the Focal Point of SDG 6 within DWS (currently within Branch: Water and Sanitation Services Management). Currently there is a lack of participation from top management and other branches within DWS and this proposal will broaden responsibility, buy-in and participation across the Department.

2. It is recommended that an office is created under the DG to coordinate the SDG 6 programme, the NWRS3 and the NW&SMP, complete with logistical support. These 3 components are critical for acceleration of the delivery of sustainable water and sanitation services within the sector. They are 3 legs of a tripod covering 3 different approaches which need each other to lean and integrate the activities of each in maximizing impact. A dedicated office with a budget estimated at R33 million over the next 7 years and dedicated resources will provide additional focus to achieving the SDG Goal 6. Currently the programme has no budget, no dedicated resources other than committed staff supporting the programme when possible as part of their daily responsibilities.

7 CONCLUSIONS

SDG 6 is being implemented in South Africa with the objective to "ensure availability of, and sustainable management of water and sanitation for all". SA is now at the halfway point of this 14-year programme towards its

completion by 2030, but like the rest of the World, its halfway there but nowhere near. Sustainability of South Africa's water and sanitation infrastructure is crucial for the continued and reliable provision of water and sanitation services to the people of the country.

South Africa will not be able to achieve the SDG 6 goal unless there is radical change in the way funding is secured, accessed, and implemented. South Africa must address these challenges and provide a conducive environment to deliver quality and quantity in the smallest timeframe, to spend on the highest impact solutions with the lowest cost.

There is also a need to improve economic regulation of water services to address chronic revenue shortages. The SDG 6 programme is not a DWS programme but a sector programme which requires a consolidated effort and a commitment of resources from all relevant stakeholders to achieve its success.

REFERENCE:

Other key documents to be aware of and which are available on the SDG 6 website include:

- ✓ SDG 6 website (incorporated within the DWS website) target descriptions and target individual gap reports and consolidated reports for 2019 and 2023.
- ✓ DWS Biennial Report 2019, 2021, 2022 (interim) next one due Feb 2026.
- ✓ South Africa Country Report Sept 2019 & 2023.
- ✓ South Africa Voluntary National Review (VNR) Report (Sept 2019).
- ✓ Global Acceleration

ANNEXURE A: LIST OF SDGWG MEMBERS

ANNEXURE B: REGIONAL PROGRESS

ANNEXURE C: CONSOLIDATED TARGET GAP REPORT 2024

ANNEXURE D: OPERATIONAL PERFORMANCE FEEDBACK