South African Medical Research Council (SAMRC)

Annual Performance Plan

2023/24

Date of Tabling

March 2023

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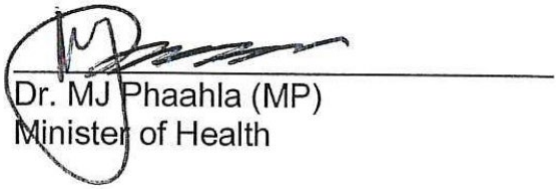
Executive Authority Statement

The South African Medical Research Council (SAMRC) 2023/24 Annual Performance Plan (APP) is drawn from the 2020/21 – 2024/25 Strategic Plan. This APP takes into account all the relevant policies, legislation and other mandates of for which the South African Medical Research Council is responsible.

The APP accurately reflects the strategic goals and objectives that the South African Medical Research Council will endeavour to achieve over the period 2023/2024.

I hereby endorse this South African Medical Research Council Annual Performance Plan (APP) developed by the Executive Management Committee of the South African Medical Research Council under the guidance of Professor Johnny Mahlangu of the SAMRC Board and the SAMRC CEO and President, Professor Glenda Gray



Dr. MJ Phaahla (MP)
Minister of Health

Accounting Authority Statement

Over the past three years, the world faced a greatest test of COVID-19 pandemic which claimed thousands of lives, including in South Africa. The South African Medical Research Council (SAMRC) was at the forefront in supporting the National Department of Health in its response to the pandemic by conducting and funding clinical research, laboratory research and public health studies. The SAMRC (funded) reserachers conducted a wide spectrum of studies, including the hospital-based disease surveillance for COVID-19 and its relation to other respiratory pathogens, community surveillance and understanding immune responses to COVID-19 in HIV-infected and -uninfected individuals, SARS-CoV-2 genome sequencing to support COVID-19 surveillance and identify and manage outbreak hotspots, health impacts of COVID-19 and the lockdown across research streams, COVID-19 and the Impact on Substance Use, to Prevalence, Prevalence, Clinical Characteristics, and Immunologic Responses and Outcomes of Children with Suspected or Confirmed COVID-19 Disease, and others. The seriousness of this pandemic has without a doubt forced South Africa and the rest of the world into action, with research becoming more vital than ever. Lessons learnt from the pandemic has certainly made us more vigilant in our concerted response to any future disease outbreaks, including making sure that the country invest more resources into research and innovation.

The SAMRC continues to be exemplary in many areas of its mandate including excellence in its fiscal discipline, effective organisational governance characterised by multiyear clean audits, more money directed towards research, aligning research effort and activities to the health priorities and needs of the country, disseminating its research, leading the transformation agenda in medical science research, including innovation and training a diverse cadre of the next generation of researchers, and translating research to inform policy and practice. These achievements were all in line with SAMRC 2020/21 – 2024/25 Strategic Plan, and were realised without lowering the high standard of locally impactful and globally competitive research conducted and supported by the SAMRC

The fast-tracking of transformation remains at the top of Professor Glenda Gray, the President and CEO of the SAMRC agenda to ensure that the medical and science graduates within the intramural programme and the staff in general reflect the demographic of the country in all positions in the organization. To this end, the SAMRC Board has designated a position of the Executive Director-Transformation on the Executive Management Committee. The purpose of this position is to reimagine transformation in the SAMRC in the broader context, to strengthen and expand the transformation forum and to make sure that while the organization transforms it remains relevant and ft for purpose The SAMRC continues with its research capacity development programme by investing in the development of PhD, post-doctoral fellows, early and mid-career scientists to ensure a robust pipeline of health researchers.

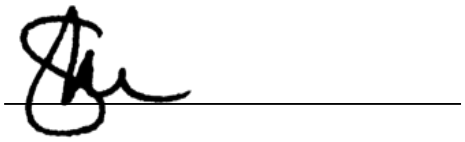
Transformation in science means responding to the national context, by looking at the science landscape and where interventions are needed to increase the small critical mass of African scientists. The SAMRC's Self-Initiated Research (SIR) grants, a competitive grant funding scheme, was re-engineered to address gender, racial, institutional and geographic parity. To enable health innovation, it is critical to fund and develop new human capacity in healthcare. SAMRC's research capacity development programmes are a crucial part of the transformation in science and capacitating the healthcare sector to shape a better healthcare system for all.

A publicly funded institution, the SAMRC will continue to ensure that most of the budget is allocated to research conducted and funded by the entity and less on administrative costs. This is in line with

its Strategic Objective of administering the organisation effectively and efficiently. With money invested in health research, strengthening the level of research output through outputs such as publications, citations, and policy briefs is imperative. Simultaneously, enhancing research translation activities forms a key part of the SAMRC's mission. To fund the type of research that would have an impact and at a scale that the SAMRC's research can influence policy and health guidelines, multiple streams of funding are required.

The SAMRC remains committed to decreasing the disease burden in South Africa through cutting edge innovations, the development of novel treatment regimens, especially vaccines, as well as improved diagnostic tools, while localising the production of new drugs and devices, to improve the health and lives of South Africans.

As the Chairperson of the SAMRC Board, I am confident that the SAMRC's 2023/24 Annual Performance Plan will support the SAMRC's agenda to lead relevant and responsive health research in South Africa and to fund research that has an impact in diseases affecting people in Africa and globally.



Professor Johnny Ndoni Mahlangu
Board Chairperson: South African Medical Research Council

Statement by the President of the SAMRC

When we celebrated 50 years of research and excellence in 2019, we also looked towards the SAMRC of the future, how the organisation would continue to influence science and policy, by making an impact and supporting the National Department of Health in its endeavour of creating a healthier and better quality of lives for all South Africans. The country's health is a significant part of economic development: healthy populations live longer; and are more productive. There are many factors that impact population health, with South Africa facing a quadruple burden of disease: ranging from stagnating mortality in pregnant women and infants to increasing morbidity and mortality associated with non-communicable diseases such as diabetes mellitus and hypertensive heart disease, as well as the epidemics of TB and HIV, violence and injury, that overwhelm our health system.

The South African Medical Research Council (SAMRC) conducts and funds impactful health research and develops pioneers in medical innovations to improve the quality of life of people in South Africa. Through research, development and technology transfer, we address South Africa's quadruple burden of disease through our intramural and extramural research units, with SAMRC intramural units prioritising research into the 10 most common causes of morbidity and mortality and associated risk factors in South Africa.The COVID-19 pandemic has also impacted on our ability to focus on these colliding epidemics.

As the country's Council conducting and funding health research, innovation and development, the SAMRC is poised to support research to decrease the disease burden in South Africa. The Strategic Plan 2020/21 – 2024/25 reinforces our research efforts across five strategic pillars: (1) The administration of health research in an effective and efficient manner; (2) The generation of new knowledge and its translation into policy and practice; (3) Supporting innovation and technology transfer to improve health; (4) Building sustainable health research capacity in South Africa; and (5) Research translation. With strategic direction from the SAMRC Board, the SAMRC is set to strengthen all components of our research endeavour. The strategic outcomes for the SAMRC are aligned to the National Development Plan 2030, the Mediaum-Term Strategic Framewrok 2019-2024 and the Sustainable Development Goals and to the targets set by the SAMRC in the 5 year plan and annual performance plans. Our 5 year strategic plan 2020/21 – 2024/25 also confirms our focus to fund research based on local development priorities, while ensuring that our research remains globally relevant. Driven by the five key strategic pillars, the SAMRC has pioneered cutting-edge medical innovations, the development of novel treatment regimens, vaccine development, diagnostic tools, new drugs and devices, aimed at the improvement of the health status of people in South Africa.

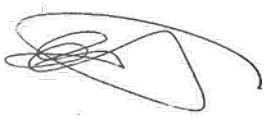
Transformation in general, and in science and science leadership, remains an integral part of our strategy. We are excited that the SAMRC Board designated Transformation Executive at the EMC level to drive our transformation plan for the years 2022 to 2025. Through Self- Initiated Research grants we aim to develop the scientific capacity and transform the pipeline of researchers. The aearly and mid-career scientist programmes objectives is to create new generation of science leaders. To this end, we have ensured that more women and black South Africans are the beneficiaries of our masters and doctoral programmes. We have developed a cohort of interns and clinicians through the Bongani Mayosi National Health Scholars Programme (BM-NHSP), an ambitious public-private partnership that has driven the clinician-doctoral initiative. BM-NHSP remains a flagship PhD development programme and a national initiative to advance the next generation of African health and clinician scientists. The Programme is funded by the Public Health Enhancement Fund (PHEF), the PHEF is a non-profit entity to leverage and contribute to strengthening the health sector, which will lead to a stronger relationship between public and private sectors to the benefit of all our people.

During the COVID-19 pandemic, we re-orientated our research funding to allocate resources to surveillance, the development of diagnostics, therapeutics, immunological research and vaccine development, demonstrating our ability to be responsive to the needs of a health response to the pandemic. Biovac, Afrigen and the SAMRC are collaborating on the establishment of the mRNA hub in South Africa in an endeavor to support vaccine development on the continent. Since the onset of the pandemic, the SAMRC has led significant studies and the Johnson & Johnson vaccine. Under South Africa's Sisonke programme, a real-world phase 3B implementation study, 496 424 South African health care workers received a first dose of the lifesaving vaccine. In late 2021, under the Sisonke Booster programme (Sisonke 2) 230 488 health care workers received a second dose of the vaccine. COVID has demonstrated the need for, and achieved a massive, globally collaborative scientific effort with rapid dissemination and sharing of research results and data, agility and rapid response. These lessons, capacity and new ways of working must be harnessed and perpetuated to capitalize on the gains made towards full localization of research and production.

In July 2021, the SAMRC and The Chan Soon-Shiong Family Foundation formed a first collaboration and together launched a Mobile COVID-19 Vaccine Project in Lusikisiki, Eastern Cape aimed at vaccinating the elderly citizens queuing at various social grant pay points as an effort to support the country in ramping up its COVID-19 vaccination drive. The SAMRC rehas recently formed another collaboration with the Chan Soon-Shiong Family Foundation and the two created a programme to build a vaccine R&D and Manufacturing Workforce for Africa. The Programme could not have come at a more appropriate time when the continent is in desperate need of a workforce that is ready to deliver on the much-needed vaccine manufacturing on the continent. The SAMRC is excited to be working with the Chan Soon-Shiong Foundation to achieve this important objective.

Despite the tight fiscal environment, the SAMRC has delivered on impactful science and will continue to do so effectively and efficiently, as guided by the Public Finance and Management Act. As we implement the new Strategic Plan, we will ensure that our budget is spent on funding science and innovation and less on administrative costs.

Our steadfast focus on key strategic pillars will continue to guide our teams of scientists and support staff to help us in enabling the National Department of Health, to deliver on their commitment and promise of a long and healthy life for all South Africans.



Professor Glenda E. Gray
President & Chief Executive Officer
South African Medical Research Council

Official Sign Off

It is hereby certified that the South African Medical Research Council Annual Performance Plan was developed by the management of the South African Medical Research Council under the guidance of Professor Johnny Mahlangu, Chairperson of the SAMRC Board and President Professor Glenda Gray.

The Annual Performance Plan takes into account all the relevant policies, legislation and other mandates for which the South African Medical Research Council is responsible.

The document accurately reflects the Impact, Outcomes and Outputs which the South African Medical Research Council will endeavour to achieve over the period 2023/2024.

Programme 1 - Administration

Mr Nick Buick
Chief Financial Officer

Signature: 

Programme 2 – Core Research

Prof Glenda Gray
President and Chief Executive Officer

Signature: 

Dr Mongezi Mdhluli
Chief Research Operations Officer

Signature: 

Programme 3 – Innovation and Technology

Dr Michelle Mulder
Executive Director:
Grants, Innovation and Product Development

Signature: 

Programme 4 – Capacity Development

Prof Glenda Gray
President and Chief Executive Officer

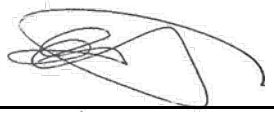
Signature: 

Dr Michelle Mulder
Executive Director:
Grants, Innovation and Product Development

Signature: 

Programme 5 – Research Translation

Prof Glenda Gray
President and Chief Executive Officer

Signature: 

Dr Mongezi Mdhluli
Chief Research Operations Officer

Signature: 

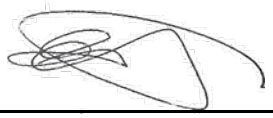
Mr Nick Buick
Chief Financial Officer

Signature: 

Dr Mongezi Mdhluli
Chief Research Operations Officer and
Head Official Responsible for Planning

Signature: 

Prof Glenda Gray
President and Chief Executive Officer

Signature: 

Prof Johnny Mahlangu
Chairperson of the Board

Signature: 

Approved:

Dr. MJ Phaahla (MP)
Minister of Health

Signature: 

PART A: SAMRC MANDATE

1 SAMRC Mandate

The mandate of the South African Medical Research Council is legislated in terms of the SAMRC Act 58, 1991 (hereafter "SAMRC Act"), which states 'the objects of the SAMRC are, through research, development and technology transfer, to promote the improvement of the health and quality of life of the population of the Republic, and to perform such functions as maybe assigned to the SAMRC by or under this Act'.

In line with this mandate, the SAMRC's Vision is to build a healthy nation through research, innovation and transformation, and the Mission is to advance the nation's health and quality of life and address inequity by conducting and funding relevant and responsive health research, capacity development, innovation and research translation.

2 Legislative and Other Policy Mandates

2.1 Constitutional mandate

The South African Constitutional base which supports the SAMRC's mandate are Chapter 2- Bill of Rights, Chapter 10 - Public Administration and Chapter 13 - Finance. The following sections of the Bill of Rights, without limitation, are particularly relevant for the SAMRC.

2.1.1 Chapter 2: Bill of Rights

Section 9: Equality

All the rights contained in this equality section

Section 10: Human Dignity

"Everyone has inherent dignity and the right to have their dignity respected and protected"

Section 12(2)(c): Freedom and Security of the person

"Everyone has the right to bodily and psychological integrity, which includes the right not to be subjected to medical or scientific experiments without their informed consent"

Section 14(a): Privacy

"Everyone has the right to privacy, which includes the right not to have the privacy of their communications infringed"

Section 16(1)(d): Freedom of Expression

"Everyone has the right to freedom of expression, which includes academic freedom and freedom of scientific research"

Section 23: Labour Relations

All the rights contained in this labour relations section

Section 24(a): Environment

"Everyone has the right to an environment that is not harmful to their health or wellbeing"

Section 27: Healthcare, food, water and social security

Everyone has a right to have access to (a) health care services, including reproductive health; (b) sufficient food and water; and social security, including if they are unable to support themselves and their dependants, appropriate social assistance

Section 28(2): Children

"A child's best interests are of paramount importance in every matter concerning the child"

Section 32: Access to Information
"Everyone has the right of access to any information held by the state"

Section 33(1): Just administrative action
"Everyone has the right to administrative action that is lawful, reasonable and procedurally fair"

Section 36(1): Limitation of rights
The rights in the Bill of Rights may be limited only in terms of law of general application to the extent that the limitation is reasonable and justifiable in an open ad democratic society based on human dignity, equality and freedom, taking into account all relevant factors……"

2.1.2 Chapter 10: Public Administration

Section 195: Public administration must be governed by the democratic values and principles enshrined in the Constitution, including the following principles:

(a) A high standard of professional ethics must be promoted and maintained.
(b) Efficient, economical and effective use of resources must be promoted.
(c) Services must be provided impartially, fairly, equitably and without bias.
(d) People's needs must be responded to, and the public must be encouraged to participate in policymaking.
(e) Public administration must be accountable.
(f) Transparency must be fostered by providing the public with timely, accessible and accurate information.
(g) Good human-resource management and career-development practices, to maximize human potential, must be cultivated.

2.1.3 Chapter 13: Finance

Section 217: Procurement

(1) When an organ of state in the national, provincial or local sphere of government, or any other institution identified in national legislation, contracts for goods or services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost-effective.
(2) Subsection (1) does not prevent the organs of state or institutions referred to in that subsection from implementing a procurement policy providing for—
  - categories of preference in the allocation of contracts; and
  - the protection or advancement of persons, or categories of persons, disadvantaged by unfair discrimination.

(3) National legislation must prescribe a framework within which the policy referred to in subsection (2) must be implemented.

2.2 Legislative mandate

2.2.1 The National Health Act, No 61 of 2003

The SAMRC is guided by this mandate to prioritize its research programmes and through the SAMRC Board interact with the NHRC and the NDoH and give effect to the mandate.

2.2.2 The SAMRC Act

The South African Medical Research Council was established in 1969 by section 2 of the South African Medical Research Council Act, No. 19 of 1969. The latter was repealed and replaced by the South African Medical Research Council Act, No. 58 of 1991. The SAMRC is a Schedule 3A Public Entity to the Public Finance Management Act, No. 1 of 1999 and reports to the National Ministry of Health.

The SAMRC is guided by South African Medical Research Council Act 1991 (Act 58 of 1991) to improve the health of the South African population, through research, development and technology transfer, for the people to enjoy a better quality of life.

Based on the mandates given by the National Health Act, No. 61 of 2003) and the SAMRC Act, SAMRC has in the past 5 years been focusing on the top ten causes of death, disability and associated risk factors. We assess how healthcare systems function to strengthen health policy, to improve the impact and efficiency of health systems and services, and provide policy makers with the tools for informed healthcare decisions.

2.2.3 Intellectual Property, Rights from Publicly Financed Research and Development Act, 2008

The SAMRC is guided by this mandate of which its aim is to provide for more effective utilization of intellectual property emanating from publicly financed research and development, to establish the National Intellectual Property Management Office and the Intellectual Property Fund, to provide for the establishment of offices of technology transfer at institutions, and to provide for matters connected therewith.

2.2.4 Other legislations, without limitation, that are applied by the SAMRC in their day-to- day activities:

- Employment Equity Act, No. 55 of 1998
- Basic Conditions of Employment Act, No. 75 of 1997
- Public Finance Management Act, No. 1 of 1999 as amended
- The Patents Act, No. 57 of 1978
- Copyright Act no. 98 of 1978 Trade Marks Act, No. 194 of 1993
- Promotion of Access to Information Act, No 2 of 2000
- Protection of Personal Information Act, No 4 of 2013
- Relevant Treasury Regulations, Instruction Notes and Guidelines

2.3 Policy Mandates

2.3.1 National Development Plan-2030

The South African Government adopted the National Development Plan 2030 (NDP-2030) in September 2012. It provides a broad strategic framework to guide key choices and actions, and common focus for actions across all sectors and sections of South African society. The plan presents a long term strategy, where in some instances policy(ies) changes may be necessary and other instances just getting basics right, holding people accountable for their actions and finding innovative solutions to complex challenges such as providing affordable access to quality health care while promoting health and wellbeing, and introduction of national health insurance with a focus on upgrading public health facilities, producing more health professionals and reducing relative cost of (private) health care. The plan has identified and adopted the following set of objectives and actions, some of which the SAMRC plays a vital role in them:

(a) Policy making in a complex environment;
(b) Demographic trends;
(c) Economy and employment;
(d) Economy infrastructure;
(e) Environmental sustainability;
(f) Integrated and inclusive rural economy;
(g) Positioning South Africa in the world;

(h) Transforming human settlements;
(i) Improving education, training and innovation;
(j) Promoting health;
(k) Social protection;
(l) Building safer communities;
(m) Building a capable developmental state;
(n) Fighting corruption; and
(o) Transforming society and uniting the country.

2.3.2 National Health Insurance Policy of 2017 and National Health Insurance Bill of 2019

In 2017, the Minister of Health signed a policy document, a white paper on national health insurance. This policy lays the foundation for moving South Africa towards universal health coverage (UHC) through the implementation of National Health Insurance (NHI) and establishment of a unified health system. The move towards Universal Health Coverage (UHC) through implementation of NHI is derived from the Reconstruction and Development Programme; the Constitutional mandate based on the Section 27 of the Constitution; the1997 White Paper for the Transformation of the Health System; Vision 2030 of the National Development Plan Vision 2030; Goal 3 of the Sustainable Development Goal and the World Health Organization frameworks on moving towards UHC with health equity and the six pillars of the WHO's health systems strengthening framework.

The aims of the National Health Insurance Bill of 2019 are to achieve universal access to quality health care services in the Republic in accordance with section 27 of the Constitution; to establish a National Health Insurance Fund (NHIF) and to set out its powers, functions and governance structures; to provide a framework for the strategic purchasing of health care services by the NHIF on behalf of users; to create mechanisms for the equitable, effective and efficient utilization of the resources of the NHIF to meet the health needs of the population; to preclude or limit undesirable, unethical and unlawful practices in relation to the NHIF and its users; and to provide for matters connected herewith.

2.3.3 Sustainable Development Goals

The Sustainable Development Goals (SDGs) is a plan created in 2015 after leaders of about 193 countries met and agreed to a common understanding that there is enough food to feed the world, but that was not getting shared; that there were medicines for HIV and other diseases, but they cost a lot; that earthquakes and floods were inevitable, but that the high death tolls were not; and that billions of people worldwide share their hope for a better future. The SDGs build upon the work started under the eight Millennium Development Goals, and is an ambitious plan with a set of 17 goals aiming to address poverty and hunger, and effects of climate change by the year 2030. These SDGs are set out in table 1 below:

The work that the SAMRC undertakes respond to most of these goals as reflected in Part B of this APP.

2.3.4 Alignment to Medium-Term Strategic Framework (MTSF) 2019-2024

According to the South African President, President Matamela Cyril Ramaphosa, "the MTSF 2019-2024 is built on three foundational pillars: a strong and inclusive economy, capable South Africans and a capable developmental state". President Ramaphosa further states that "all state-owned enterprises, development finance institutions and other public entities need to align their work with the MTSF so that all the necessary public resources are harnessed and available for driving service provision. Government will work through social compacts with the private sector, labour and civil society to create an enabling environment for growth and job creation. To protect our resources, we must intensify the fight against corruption and create the foundations of a strong and inclusive economy". In line with President Ramaphosa's statement above, the SAMRC has aligned its Strategic Plan and Annual Performance Plan to six out of seven MTSF 2019-2024 priorities as in the table 2 below:

Table 2. Alignment of the SAMRC SP and APP to the MTSF

MTSF Priority	MTSF interventions	SAMRC Outcome	SAMRC Strategic Objective	SAMRC Contribution to MTSF Priority
Priority 1: A capable, ethical and developmental state	Strengthen governance system of public entities	Good governance, effective and efficient administration and compliance with government regulations	Programme 1: Administration. Output indicator 1.1.1:	Adhere to the PFMA requirements relating to compliance, governance and reporting Clean Audit
	Measures taken to eliminate wasteful, fruitless and	Good governance, effective and efficient	Programme 1: Administration. Output indicator 1.1.1:	Adhere to the PFMA requirements relating to compliance, governance.

	irregular expenditure in the public sector	administration and compliance with government regulations		Reduction/elimination of irregular, wasteful and fruitless expenditure. Clean audit
	Programme to prevent and fight corruption in government	Good governance, effective and efficient administration and compliance with government regulations	Programme 1: Administration. Output indicator 1.1.1:	Adhere to the PFMA requirements relating to compliance, governance and reporting. Address reported cases of corruption.
	Improve financial management capability in the public sector	Promote the organisation's administrative efficiency to maximise the funds available for research	Programme 1: Administration. Output indicator 1.2.1:	Monitor expenditure, and strengthened supply chain management and procurement system
Priority 2: Economic Transformation and Job Creation	Increased investment in gross expenditure on research and development	Promote the organisation's administrative efficiency to maximise the funds available for research	Programme 1: Administration. Output indicator 1.2.1:	80%/20% (research /administration) spend split of the government allocated SAMRC budget
		Provide funding for the conduct of health research	Program 2: Core Research Output indicators 2.3.1.	More expenditure to on research
	Expand government spend on women, youth and persons with disabilities through preferential procurement	Good governance, effective and efficient administration and compliance with government regulations	Output indicator 1.1.1: A clean audit opinion on the SAMRC from the Auditor-General	Adherence to B-BBEE Act and Treasury Regulations, Practice Notes and Circulars
Priority 3: Education, skills and Health	Implement capacity building programmes and interventions at universities	Enhancing the long-term sustainability of health research in South Africa by providing funding and supervision for the next generation of health researchers	Programme 4: Capacity Development. Output indicator 4.1.1.	Bursaries and/or scholarships and/or fellowships provided for MSc, PhD, Postdocs and Early Career Scientists
	Implement the New Generation	Enhancing the long-term	Programme 4: Capacity	Bursaries and/or scholarships and/or

	of Academics Programme (nGAP)	sustainability of health research in South Africa by providing funding and supervision for the next generation of health researchers	Development. Output indicator 4.1.1.	fellowships provided for MSc, PhD, Postdocs and Early Career Scientists
Priority 4: Consolidating the social wage through reliable and quality basic services	N/A	N/A	N/A	N/A
Priority 5: Spatial integration, human settlements and local government	Profile and support enterprise development in townships through financial incentives and other non-financial forms of support	Nonspecific, but embedded in Program 1	Nonspecific, but embedded in Program 1	Adherence to B-BBEE Act and Treasury Regulations, Practice Notes and Circulars
	Training staff on diversity (gender, race and disability)	Nonspecific, but embedded in our HR practices	Nonspecific, but embedded in our HR practices	Diversity and Transformation training
Priority 6: Social cohesion and safe communities	Improve representation of the designated groups across occupational levels.	Nonspecific, but embedded in our HR practices	Nonspecific, but embedded in our HR practices	• Compliance to labour legislations • Implementation of relevant HR policies and procedures • Transformation practices • Employment Equity reporting as required
Priority 7: A better Africa and world	Source investment (FDI) for the identified sectors in the South African economy	Support the development of new or improved innovations aimed at improving health and targeting priority health areas	Programme 3: Innovation and Technology	Leveraged funding for research and investment in technology development and innovation

2.3.5. Government to Government Collaborations

The National Department of Health (NDoH) has bilateral agreements with a number of countries forming South- South and North-South relations. This opportunity should be fully exploited by the SAMRC in the next five years.

2.3.6. South Africa - SADC and the Rest of Africa

South Africa is signatory to a number of conventions within the Southern African Development Community (SADC), African Union (AU) and WHO. Through these institutions, NDoH has certain obligations to fulfil some of them involved in health research. The SAMRC is best placed to be government's implementing arm and following up on these on behalf of the NDoH. Closer collaboration and cooperation could for example, result in SAMRC scientists working more closely with WHO-AFRO, AU and similar structures in this region.

2.3.7 South Africa and Global Collaboration

The inclusion of South Africa into the BRIC grouping of countries comprised of Brazil, Russia, India and China in late 2010 puts an African voice at the core of the world's most dynamic economies as they consider a range of pressing global issues. The implications were that a specific health agenda was developed, and health research became a significant part of the agenda. The SAMRC, as a national research body is already collaborating with BRICS in the area of TB, HIV, Child Obesity, NCDs, Genomic research and now COVID-19. The SAMRC has developed collaborations across BRICS, Africa, Europe and the USA.

2.3.8 Communities of Funders

To fulfil its mandate and increase access to health research funding, the SAMRC has developed partnerships with local and international funders, including the NRF, NIH, EDCTP, BMGF, Newton Fund, UK-MRC, and, more recently, the Solidarity Fund, ELMA Philanthropies, Michael and Susan Dell Foundation, and others. The SAMRC is also represented on the global research funders coalition Global Research Collaboration for Infectious Disease Preparedness (GloPID-R).

2.3.9 Other interventions

Other key interventions to improve health status include inter-sectoral collaboration with government departments responsible for key determinants of health, especially Department of Science and Innovation (DSI). Community participation and partnerships with civil society and the private sector are highly valued.

2.4 Planned policy initiatives

Policies and Governance

(a) Knowledge, Information and Data Management Policy
(b) Guidelines on Gene Editing
(c) Open Access Policy
(d) Data Transfer Agreement in conjunction with the Department of Science and Innovation

2.5 Relevant Court Rulings

None

PART B: SAMRC STRATEGIC FOCUS

3 Situational Analysis

3.1 Introduction

The SAMRC receives its core funding from the National Treasury through the NDoH. SAMRC is responsible for conducting and funding relevant and responsive health research in South Africa. The SAMRC has over the past five years positioned itself to set the medical research agenda for the country, become the most significant funder of medical research in South Africa and be the custodian of all the values that embody medical research excellence. The SAMRC also receives money from the Department of Science and Innovation in the area of product development, diagnostics and vaccine development.

Through research, the SAMRC will continue to facilitate and support the NDoH in implementing evidenced-based policies and programmes, and informing policy makers, health service providers and the public to make informed decisions about healthcare. The SAMRC research programmes have in the past provided research support to the NDoH programmes through task teams, commissioned research, national surveys and ministerial committees. These have significantly contributed towards assisting the NDoH in progressively realising its set goals. Of great significance is the work undertaken by the SAMRC's Burden of Disease Research Unit that has supported the understanding of morbidity and mortality in South Africa. This work has been of relevance during the COVID-19 pandemic in quantifying excess deaths that are suggestive of a larger disease burden than suggested by confirmed COVID-19 cases. At the height of COVID-19, the ministerial advisory sub-committees of clinicians, laboratory testing committee, public health committee, and research committee chaired by Professor Glenda Gray, the SAMRC President and CEO, brought together scientific evidence and experience to the Minister and the National Department of Health. The advice shared with the Minister took form of guidelines that the department will release or advice on specific topics to help the Minister to make the best decisions in our country's fight against the pandemic. This confims that SAMRC role and responsibilities in providing technical support to the NDoH through appropriate health research, public health and technology innovation is indispensable and contributes towards improving the health status of South Africans, in line with the SAMRC's mission.

Over three decades now following the birth of its democracy, South Africa is faced with unique and major challenges that threaten the health status of its citizens. One of these challenges is the quadruple burden of disease of which South Africa is still struggling with effective strategies to control these scourges. Chief amongst the quadruple burden of diseases is the communicable epidemics of HIV and TB. South Africa has the largest HIV epidemic accompanied by one of the highest burdens of tuberculosis world-wide. Added to this is the new COVID-19 pandemic which is now contributing substantially to the local and global disease burden. In addition, South Africa is faced with the growing threat of non-communicable diseases such as cancers, chronic respiratory diseases,obesity, diabetes and cardiovascular diseases including hypertension. Other huge threats to the nation include an epidemic of violence and injuries. Progress has been made in reducing maternal and infant mortality, but reducing neonatal mortality currently remains a challenge for the country. The growing disparity between the rich and the poor and the maldistribution of health care resources between the private and public sector poses challenges to achieving universal health coverage. In the next decade, with the implementation of the National Health Insurance, efforts to redress these inequalities will hopefully translate into quality health care for all who live in South Africa.

The SAMRC will continue to: 1) prioritise research that addresses the top 10 causes of mortality in South Africa; 2) invest in efforts to reduce morbidity and improve health outcomes; 3) fund and actively drive innovation; 4) ensure that capacity development in health research continues; and 5) renew its focus on research translation for health impact. The SAMRC will fund health research from discovery at the bench to implementation at the bedside. South Africa, with its wealth of scientists is uniquely positioned to respond on the continent to achieve solutions for the maladies that South Africans suffer from. The SAMRC will ensure, together with the scientists we fund, that the research conducted is responsive to the needs of the

country. The SAMRC will continue to strengthen relationships and collaborations with universities and institution such as the National Research Foundation, Human Science Research Council, Council for Scientific and Industrial Research, Technology Innovation Agency and others.

3.2 External Environmental Analysis

3.2.1 National Health Research Committee

The NDoH established the National Health Research Committee (NHRC) in terms of section 69(1) of the National Health Act, No. 61 of 2003 (hereafter "the NHA"). The functions and powers of the NHRC, as stated in the NHA include the determination of health research to be carried out by the public health authorities, to ensure that health research agendas and research resources focus on priority health problems; to develop and advise the Minister on the application and implementation of an integrated national strategy for health research; to coordinate the research activities of public health authorities; and to identify and advise the Minister on health research priorities.

NHRC hosted a National Health Summit in 2018 with the aim of moving South Africa beyond focusing only on lessening the burden of disease as a form of improving the health status of the nation, to focusing on the broader determinants of health. This summit made the following recommendations[1]:

a) Prioritisation of the social determinants of health, including the burden of disease, for funding.
b) Building capacity of health research human resources, along a pipeline, and in line with national transformation imperatives.
c) Improving health research funding flows and quantification.
d) Creating a national system of implementing health research with a national-provincial alignment of mandates, including funding.
e) Creating an evidence-based system of health research information management through collation, monitoring, evaluation and translation of health research.
f) Improving provision of and access to health research infrastructure, especially in academic health complexes.

The NHRC recently hosted their Summit in November 2022, and its rationale was to come up with a strategy on how the health system responds to future pandemic(s) by assessing: -

- Lessons learned from COVID-19 pandemic.
- Impact of COVID-19 on the healthcare.
- Impact of COVID-19 on the quadruple burden of disease- especially non-communicable diseases.
- Innovation in Health Research - COVID-19.
- Best practices in management of future pandemics.

Coordination and alignment of SAMRC research priority areas in the context of the NHRC is an instrumental area where the SAMRC can improve and capitalise on some of its Units' contributions and support to the NDoH. SAMRC researchers serve on strategic national, regional and international advisory committees and working groups and in doing so provide input that influences policy changes in areas affecting the health and quality of life of all living in South African. This participation culminates in the development of service delivery platforms, tools and guidelines for practice which ensure increased capacity of health workers as they benefit in training at all levels of the health system.

3.2.2 National Department of Health

The SAMRC's research mandate is guided by the SAMRC Act to conduct research that improves health systems, status, processes and health systems performance in terms of effectiveness, efficiency, equity, appropriateness and adequacy of health services. SAMRC health research aims to promote the

[1] Madela-Mntla EN, Ally MM, Hawkridge A, et al. 2018 National Health Research Summit Report: Research for Health. Pretoria: Department of Health

improvement of the health and quality of life of all living in South Africa.

Over the years, the SAMRC has conducted a number of studies and surveys that provide information that were used by the Department and Government in general for planning and assessing progress towards realising Government's objectives. Some of these studies have to be conducted at regular intervals as they form part of internationally accepted surveillance systems such as the demographic and health survey. These surveys include:

- Burden of Disease (BOD).
- National Injury & Mortality Surveillance (NIMS).
- Comparative Risk Assessment (CRA).
- the Perinatal Problem Identification Programme (PPIP).
- the Child Healthcare Problem Identification Programme (Child PIP).
- the South African Community Epidemiology Network on Drug Use (SACENDU).
- the South African Demographic Health Survey (SADHS).
- The TB Prevalence Survey.
- HIV seroprevalence surveys.

The SADHS allows for comparative analysis of health systems by the World Health Organization (WHO) and other multilateral agencies. Most importantly, it provides information that feeds into the National Planning Commission and similar entities. Statistics South Africa conducts the survey in partnership with the SAMRC, which provides scientific input. Inconsistent funding has resulted in South Africa not being able to conduct the SADHS with consequent inability to monitor trends in priority areas and interventions such as smoking rates, and obesity rates amongst others.

The PPIP and the Child Healthcare Problem Identification Programme are at the core of the Negotiated Service Delivery Agreement (NSDA) and relate directly to decreasing child mortality and increasing life expectancy. The district clinical specialist teams that are being deployed have to among other things contribute towards the reduction of neonatal, infant and child mortality. This intervention amongst others is a great investment for the health sector.

With the emergence of the COVID-19 pandemic, the SAMRC has led the research and innovation response, working closely with the NDoH to identify research and innovation priority areas and to provide the necessary information and tools to respond on all fronts, including surveillance, epidemiology, diagnosis, treatment and prevention.

The SAMRC's 2020/21 – 2024/25 Strategic Plan is aligned to support the NDoH and South Africa's changing health research needs. This will position the SAMRC to respond to the Sustainable Development Goals (SDGs), the National Development Plan (NDP): Vision 2030. The SAMRC aims to conduct research and implement initiatives into the following SDGs:

(a) SDG 2, by conducting research into the nutritional needs of pregnant women, infants and children;
(b) SDG 3 by conducting research:
    - that reduces:
        - maternal deaths and preventable deaths of new-borns and children under 5,
        - HIV, TB and other communicable diseases,
        - non-communicable diseases like hypertension, cardiovascular disease and stroke,
        - alcohol and other drug abuse,
        - violence and injury, and
        - sexual and reproductive health issues,
    - in the area of:
        - universal health coverage,
        - environmental health,

- vaccine and affordable medicine for non-communicable and communicable diseases,
- capacity development, and
- climate change

(c) SDGs 4 and 10 by addressing the SAMRCs fourth goal of developing capacity in health research;

(d) SDG 5 by focusing on research into gender-based violence and developing interventions to address violence against women and children;

(e) SDG 6 through collaboration with our extramural unit at the University of Fort Hare on water quality;

(f) SDG 7,11 and 13 through ongoing research done by our intramural unit that looks at environmental research;

(g) SDG 8 and 9 by focusing on Goal 3 which is to conduct research into innovation and product development; and

(h) SDG 17 through research done by our intramural units and in collaboratoin with global research partners.

3.2.3 4th Industrial Revolution

"The Fourth Industrial Revolution (4IR) has been defined as technological developments that blur the lines between the physical, digital and biological spheres. It integrates cyber-physical systems and the Internet of Things, big data and cloud computing, robotics, artificial intelligence (AI)-based systems and additive manufacturing. Compared to previous industrial revolutions, this one is evolving at an exponential rather than a linear pace, with potentially significant impacts on work, services, education and leisure"[2].

SAMRC will in the next 5 years adapt its business activities to address the challenges and opportunities of the 4th Industrial revolution. One of the areas identified is digital health. According to the assembly of the World Health Organization, "the transfer of technology and knowledge on mutually agreed terms, as well as technical cooperation, aligned with Sustainable Development Goal 17 (Strengthen the means of implementation and revitalize the global partnership for sustainable development), are important in promoting digital health"[3]. Among other things, the assembly urged member states to (1) assess their use of digital technologies for health, including in health information systems at the national and subnational levels, in order to identify areas of improvement, and to prioritize, as appropriate, the development, evaluation, implementation, scale-up and greater utilization of digital technologies, as a means of promoting equitable, affordable and universal access to health for all, including the special needs of groups that are vulnerable in the context of digital health; (2) consider, as appropriate, how digital technologies could be integrated into existing health systems infrastructures and regulation, to reinforce national and global health priorities by optimizing existing platforms and services, for the promotion of people-centred health and disease prevention and in order to reduce the burden on health systems; and (3) to identify priority areas where normative guidance and technical assistance and advice on digital health would be beneficial, including, but not limited to, gaps in research, evidence-based standards, support to implementation and scale-up, financing and business models, content, evaluation, cost–effectiveness and sustainability, data security, ethical and legal issues, re-use and adaptation of existing digital health and other relevant tools.

3.2.4 mRNA Technology Transfer Hub

In April 2021, the WHO announced a Call for Applications for entities to host mRNA-based vaccine training and manufacture centres in Africa – as the first step to establish several regional hubs to which technologies

[2] Department of Science and Technology 2019. White Paper on Science, Technology and Innovation - March 2019. Available at https://www.dst.gov.za/images/2019/White_paper_web_copyv1.pdf. Accessed 3 September 2019

[3] The Seventy-first World Health Assembly, 26 May 2018. Available at http://apps.who.int/gb/ebwha/pdf_files/WHA71/A71_R7- en.pdf . Accessed 11 July 2019

will be transferred and subsequently passed on to neighbouring countries. This was to build on the successful influenza program where these vaccines are now manufactured in Senegal at the Pasteur Institute in Dakar.

The call was focused on private companies linking with academia and contained a significant training component for scientists from across Africa. The same WHO team involved in the Influenza program were leading the program with the support of the Medicines Patent Pool (MPP) who would conduct the due diligence and overall budget oversight. The Boston Consulting Group have been enlisted to develop the working plan.

Afrigen, Biovac and the SAMRC, with the approval of the Department of Science and Innovation (DSI), submitted a proposal to the WHO for this call. It had 3 components:
Objective 1: Afrigen- Technology Transfer of an mRNA technology Platform to Afrigen and the development of GMP clinical trial batches – ideally within 12 months: This Objective is also to start a training program for Africa. It includes regulatory training as well as this will be the first mRNA SAHPRA approved facility in (South) Africa.
Objective 2: BIOVAC- Transfer of the mRNA platform from Afrigen to Biovac for scaling manufacture of vaccine candidates. mRNA manufacture is modular, so once established, it is a case of duplicating the footprint.
Objective 3: SAMRC- The national research consortium to leverage off the SAMRC's current COVID research programs (Tulio d Oliviera, Penny Moore, Patrick Arbuthnot etc) national research expertise to develop a portfolio of vaccine candidates by Africa for Africa. The lead will be the SAMRC who are also positioned to lead the clinical development.

More than 50 applications were received and included groups seeking to host the Hubs in Africa as well as pharma/biotech companies willing to tech transfer their mRNA-based platforms to Africa. The South African bid was the successful application. Afrigen, Biovac and the SAMRC were awarded the hosting of the first mRNA hub on the on 21st of June 2021 in a televised event with the DG of the WHO, Dr Tedros Adhanom Ghebreyesus, the South African and French Presidents. The WHO will be supporting the South African consortium by providing technical and regulatory support to South Africa by establishing expert panels and hiring industry experts. The first meeting between all parties was held on 19 July 2021. After the announcement, a Letter of Intent (LOI) was signed on 30 July 2021 between all parties of the hub and followed by a televised announcement by Dr Ghebreyesus and a formal Press Release.

3.2.5 COVID-19 and Cancer Vaccine Initiative

In 2021, Dr. Patrick Soon-Shiong and NANTAFRICA announced the launch of COVID-19 and Cancer vaccine initiative in South Africa in partnership with the SAMRC and Council for Scientific and Industrial Research (CSIR). The aim of this collaboration agreement is to initiate the transfer of biologic manufacturing technology for COVID-19 and cancer vaccines and next-generation cell-based immunotherapies. Professor Glenda E. Gray, President and Chief Executive Officer of SAMRC said, "The SAMRC's mission is to fund and conduct research that impacts on the lives of South Africans. SAMRC has partnered with Dr. Soon-Shiong in launching COVID-19 clinical trials in South Africa and look forward to the development of next-generation vaccines and centres of excellence for patients with infectious diseases and cancer. This collaboration will increase resources and opportunities to do just that. Cancer and Infectious Disease contribute substantially to the burden of disease in our country. Finding innovative ways to curb mortality is critical to the health of our nation".

3.2.6 International Partnership for Building a Vaccine R&D and Manufacturing Workforce for Africa the CSSFF-SAMRC Capacity Development Programme

The Chan Soon-Shiong Family Foundation (CSSFF) and the South African Medical Research Council (SAMRC) have announced a five-year collaboration to initiate a skills development programme that aims to train a cohort of young African candidates to build a skilled workforce to manufacture vaccines on the African continent. This Programme will be achieved through a mixture of virtual, online, in-person lectures and, most importantly, hands-on lab-based training by awarding Studentships, Scholarships and Fellowships in vaccine-related disciplines in the health, life and allied sciences. A call for CSSFF-SAMRC Studentships and Scholarships was launched in August 2022 with a call for postdoctoral Fellowships in early 2023. The Studentship awardees will enroll in an intensive 3-month laboratory based-training Programme at the SAMRC and key partner institutions. There is the potential for promising candidates to be offered an industry internship, with the best candidates equipped for employability in the industry. We seek to make 50 studentship awards in two cohorts during 2023, with the first cohort starting in February 2023.

The CSSFF-SAMRC capacity development Programme will grow the next generation of vaccine professionals, researchers, and technical experts, build much needed capacity and infrastructure and establish a network through which vaccine R&D and innovation can be nurtured and thrive. Ultimately, the next generation of vaccine scientists, technicians and professionals will help to grow and drive the industry and contribute to the economy.

3.3 Internal Environmental Analysis

3.3.1 Introduction

Since its inception in 1969, the Medical Research Council (SAMRC) has had many laudable achievements and has had a significant impact on public health in South Africa. A review of the organisation by an independent panel of local and international experts in 2017 (the SETI 2017 review) stated that the "SAMRC deserves praise for the revitalisation effort that has been effective in many ways and is currently still underway. The history of the organisation, and its recent focus on scientific excellence and transformation, has assured its continuation as one of South Africa's most valuable national assets and, seen as a whole, a recognised global leader in health research, defined by competence and integrity, and trusted as a partner by some of the most demanding co-funding research organisations in the world. Thisresurgence of value is also due to the innovative nature of the modern SAMRC (clearly shown in the success of SHIP), the scientific productivity of the extramural research units and some of the intramural research units receiving enabling funding from the Council. The prestige of the organisation is also enhanced by its leadership, and by the directors and senior staff of the productive intramural units, which play important national (and often international) roles in the biomedical and behavioural research enterprise".

The SETI Report further reveal that the "SAMRC has undoubtedly assisted in the re-focusing of the national research effort on the three inter-related areas identified as the nation's foremost health priorities: increasing the longevity of the population, addressing maternal and child mortality and morbidity, and fighting the pandemics of HIV and tuberculosis infection. While the favourable outcomes of these campaigns are reflected in all surveillance data, some of these are due to background improvements in the social determinants of health. Even so, we are nowhere close to where South Africa should be in terms of these key priorities."[4]

In line with health being defined as both a national economic and development goal, SAMRC has reassessed its priorities and will focus on the following areas over the next 5 years:

1. Research Translation

[4] SAMRC SETI Report 2017

2. Innovation
3. Transformation in broader context,
4. Diversity Management
5. Capacity Development
6. Open Science/Source
7. Data security and sharing
8. Environmental health,
9. Maternal and child health
10. Mental health
11. NHI and UHC: Focus on key areas to support roll out of NHI
12. Continue a search for efficacious HIV and TB vaccines
13. Ensure strategic investments in NCDs research
14. New,emerging and continuing threats such as COVID-19, monkey-pox, etc.
15. Responding to emerging national health needs and global trends
16. Foster ethical research conduct and integrity
17. Explore the possibility of establishing a SAMRC Foundation
18. Continue to invest in infrastructure development

The Department of Science and InnovationTechnology in partnership with the SAMRC established Strategic Health Innovation Partnerships (SHIP), based at the SAMRC, in 2013. SHIP funds and manages innovation projects focused on the development of new drugs, treatments, vaccines, medical devices and prevention strategies. SHIP forms part of the Grants, Innovation and Product Development (GIPD) directorate and is the key driver of innovation through the SAMRC-DSI partnership. SHIP funds projects in infectious and non-communicable diseases, preventative medicine, maternal and child health, antimicrobial resistance, digital health and medical devices. In 2021, the SHIP programme was extended by the DSI for another 2 years through a new funding contract and based on the SHIP Strategic Plan 2021-2024.

GIPD incorporates a number of additional SAMRC-specific and strategic partnership grant programmes. The former includes the Self-initiated Research grants and a selection of SAMRC-funded strategic projects, while the latter includes Grand Challenges South Africa, a number of joint funding programmes with the Newton Fund and the Healthy Life Trajectories Initiatives, a partnership with the CIHR and leading funding agencies in China and India. In 2020, the SAMRC established a substantial COVID-19 research and innovation programme funded both from the SAMRC and the DSI and managed by GIPD and Strategic Research Initiatives. GIPD is also responsible for the management and facilitation of innovation at the SAMRC and beyond. This includes some of the above-mentioned grant programmes which fund new preventions, diagnostics, therapies and devices for priority diseases/health problems, such as HIV, TB, Malaria, and Non-communicable diseases as well as the SAMRC Technology Transfer Office, the Global Health Innovation Accelerator, the Medical Devices and Diagnostics Innovation Cluster Programme, and the SAMRC-Jembi Collaborating Centre for Digital Health Innovation. SAMRC Offices for HIV, TB and Malaria research have been established to stimulate extramural research in these three areas.

3.3.2 Open Science

Open Science refers to an approach to research based on greater access to public research data enabled by information and communications technology tools (ICT) and platforms, broader collaboration in science – including the participation of non-scientists – and the use of alternative copyright tools for diffusing research results[5].

SAMRC supports resolutions in the draft national declaration on open access, which states that the

[5] Department of Science and Technology 2019. White Paper on Science, Technology and Innovation - March 2019. Available at https://www.dst.gov.za/images/2019/White_paper_web_copyv1.pdf. Accessed 3 September 2019

Universities and Science Councils resolve to:

1. Work as a national collective involving government, universities, science councils and other knowledge-intensive institutions to achieve the development of open access as a default for all research produced with public funding;
2. Actively strengthen existing and develop new affordable open access models that bolster the quality of scholarly publishing and the research enterprise in South Africa;
3. Take into account the importance of high quality, peer-reviewed journals and to work constructively with other university and science systems around the world to produce new approaches to open access to these journals, in the first instance through a 'pay to publish model' rather than a 'pay to read' model;
4. Insist that the ownership of copyright remain with the authors and not be transferred to the publishing houses;
5. Strengthen existing and if necessary, develop new fully accessible national open access platforms and repositories that will provide for all information and knowledge produced through South African public funding to be freely available; and
6. Engage with high quality South African journal publishers to develop open access business models that will allow them to remain viable.

SAMRC joined cOAlition S, a platform created for accelerating the transition to full and immediate Open Access to scientific publications. A guiding document of cOAlition S is Plan S and aims for full and immediate Open Access to peer-reviewed scholarly publications from research funded by public and private grants. In addition to the scholarly publications, cOAlition S encourages that research data and other research outputs should be immediately made open.

3.3.3 Communication

Timely communication is integral to the strategic and effective functioning of the SAMRC. SAMRC, as an organisation deeply committed to improving the health and quality of life of all South Africans, values open and transparent communication in order to develop and sustain positive relationships with various stakheolders. Our key stakeholders, include internal staff, public, media, government, universities, Funders and others, ,. SAMRC's communication channels with our stakeholders includes research outputs, research reports, policy briefs, website, social media, press releases, presentations, electronic and print formats and interviews. Our online platforms contain real time information that can be can be accessed as and when required by anyone. SAMRC has appointed deputy information officers to address POPIA and PAIA related issues.

3.3.4 Research Integrity and Ethics

The SAMRC researchers are required to conduct research in a professional, ethical, safe, responsible, accurate, accountable manner, and contribute to uphold the integrity, credibility and reputation/dignity of the SAMRC and its stakeholders. Respect for persons, fairness, competence, integrity, sensitivity, confidentiality and communication are values on which scientific research in the SAMRC is grounded on. The SAMRC research ethics committees will continue to review and monitor research to ensure that (1) it adheres to the, in case of humans, the broad ethical principles of beneficence and non-maleficence, distributive justice (equality) and respect for persons (dignity, autonomy and informed consent); and (2) in cases of research involving animals, it protects their welfare and interest, and adheres to the principles of reduction, refinement and replacement.

As a way of promoting the responsible conduct of research, the SAMRC encourages all the staff members who have knowledge of occurrence of a breach of research norms and standards or research misconduct or have good reason to suspect that a breach of research norms and standards or research misconduct has occurred to promptly report any reasonable suspicions to the Research Integrity Office of the SAMRC.

SAMRC subscribes to the following principles on ethical research and scholarly publishing practices: (1)

responsibility, (2) ethics and integrity, (3) methodology and data, (4) authorship, (5) acknowledgement of contributions, (6) peer review, (7) social awareness, (8) conflicts of interest, (9) editorial, (10) research publishing environment, (11) predatory journals and unethical editorial practices, and (12) quality over quantity[6].

The SAMRC entrenches the culture of promotion of human rights as a core value in health research and elevates the critical role of the regulatory, legal and ethical framework plays in the conduct of research. The regulatory, legal and ethical processes underpin and form an integral part of every research project be it human or animal. These processes are vital for assuring the quality and standard of research, i.e. responsible scientific enquiry. Scientific integrity is achieved through training and support for research and by ensuring that research is conducted within an appropriate regulatory, legal and ethical framework. The SAMRC has two ethics committees, namely Human Research Ethics Committee (HREC) and Ethics Committee for Research on Animals (ECRA) and they are tasked to provide competent and timely prospectived review for SAMRC's intramural research proposals involving humans and animals respectively.

The SAMRC is committed to the conduct of research that is highly professional, ethical, safe, responsible, accountable, and contribute to uphold the integrity, credibility, and reputation of the SAMRC. As part of its commitment to foster research integrity, the SAMRC-Research Integrity Office developed a programme in Applied Ethics for researchers and research ethics committee members. This programme is accredited, and awards continuous professional development points to the delegates who complete the training. It was initially developed as an inhouse programme, but this knowledge sharing programe was extended to external interested parties as part of SAMRC's value of citizenship. Furthermore, the SAMRC Research Integrity Office (RIO) exploring setting up other research ethics modules/programmes.

Through the office of the President and CEO of the SAMRC, the SAMRC Bioethics Advisory Panel (BAP) was established with the intention of enhancing ethical and human rights in all its undertakings. The BAP functions are guided by the SAMRC's values of Pioneering, Partnering, Excellence, Respect, Integrity and Citizenship. The SAMRC Bioethics Advisory Panel is established in terms of section 3.3.1 of the SAMRC Delegation of Authority Framework Policy. The SAMRC BAP functions as an advisory panel to the SAMRC President and CEO and has no decision-making powers. Upon instruction from the SAMRC President & CEO, the SAMRC BAP will develop recommendations, statements, training, and education programs for SAMRC as well as guidelines for research and research translation based on ethics and human rights. The SAMRC BAP comprises of members who collectively have the qualifications, expertise and experience in ethics, human rights, the law, health research and health care, and at least one member from the public. The SAMRC BAP is balanced in terms of demographic distribution. Ex-officio members are nominated from within the SAMRC. The SAMRC BAP has established a working group for drafting of national guidelines on genomics research.

SAMRC will, in the reporting period, embed the research integrity and ethics culture by increasing the offering of applied ethics training workshops, awareness sessions, amending and/or introducing policies and procedures on research ethics and integrity. In line with the Department of Science and Technology's White Paper on Science, Technology and Innovation 2019, SAMRC will produce "ethically acceptable, sustainable and socially desirable research and innovations outcomes which are responsive to a wide range of stakeholders and societal grand challenges, and be sensitive to the values, needs and expectations of South Africans".

[6] Statement on Ethical Research and Scholarly Publishing Practices jointly issued by Academy of Science of South Africa (ASSAF), Council on Higher Education (CHE), Department of Higher Education and Training (DHET), Department of Science and Technology of South Africa (DST), National Research Foundation (NRF) and Universities South Africa (USAf). 31 July 2019

3.3.5 SAMRC BOARD

The SAMRC Act No. 58 of 1991, states "the affairs of the MRC shall be managed and controlled by a Board, which shall, subject to the provisions of this Act, determine the policy and objectives of the MRC and exercise control generally over the performance of its functions, the exercise of its powers and the execution of its duties" (sections 6(1)), and "the Board shall consist of- (a) (i) a chairman; (ii) not less than 12 but not more than 14 other members who have distinguished themselves in any branch of the medical or related science; and (iii) not more than two other members, appointed by the Minister; and (b) the president, who shall serve on the Board by virtue of his office" (section 6(2)).

The new SAMRC's Board term of office is starting on 1st November 2022 and will end on 31st October 2025.The Board is committed to ensuring that the organisation executes its mandate through its 5-year strategic plan and the related Annual Performance Plans. In the reporting period of this Annual Performance Plan, the agenda of the SAMRC will be to address the quadruple burden of diseases in terms of promoting innovative and cutting-edge science that addresses basic science, clinical research, public health research and ethics in health care research.

3.3.6 SAMRC PRESIDENT

The Board appointed Professor Glenda Gray as the first female President and CEO of the SAMRC. During her first term in office, Professor Gray led the organisation to great strengths in scientific achievements, strong organisational governance and capacity development to build the next generation of scientists in Africa, including the following:

(a) Excellence in scientific output through an increase in National Research Foundation-rated scientists in the intra-mural units.
(b) SAMRC partnering with HIV Vaccine Trials Network (HVTN) to conduct vaccine trials in Sub-Saharan Africa.
(c) Funding the procurement of the national license for Cochrane Library, making South Africa the first licensed country on the continent that has allowed 60 000 people to access these publications.
(d) Developed key collaborations leading to the first Genomics institute in Africa, Cochrane African Network and the BRICS TB Research Network.
(e) Attended to the SAMRC's transformation agenda and invested in increasing the number of masters and doctoral students supported through SAMRC programmes.
(f) Transformed grant funding initiatives that significantly improved funding for young scientists, black African scientists and women.
(g) Adhered to strict corporate governance strategies in administering scientific research and received five consecutive clean audits.

3.3.7 THE EXECUTIVE MANAGEMENT COMMITTEE

The SAMRC Act No. 58 of 1991, sections 7, states "the Board shall designate an executive management committee, which shall consist of the president and so many other members, who shall be employees of the MRC, as the Board may deem necessary, and who shall, subject to the directives and control of the Board, be responsible for the management of the affairs of the MRC in accordance with the objects and policy of the MRC". The current designated members of the Executive Management Committee (EMC) are indicated in the section below. As contemplated in the Act, the composition of the EMC may change from time-to-time as deemed necessary by the Board.

3.3.8 SAMRC LEADERSHIP STRUCTURE

Below is the current high level SAMRC leadership structure, including the Board as appointed by the National Minister of Health in terms of the SAMRC Act No. 58 of 1991, section 6(2), and the Executive Management Committee as designated/appointed by the SAMRC Board in terms of the SAMRC Act No. 58 of 1991, sections 7 and 9(1).

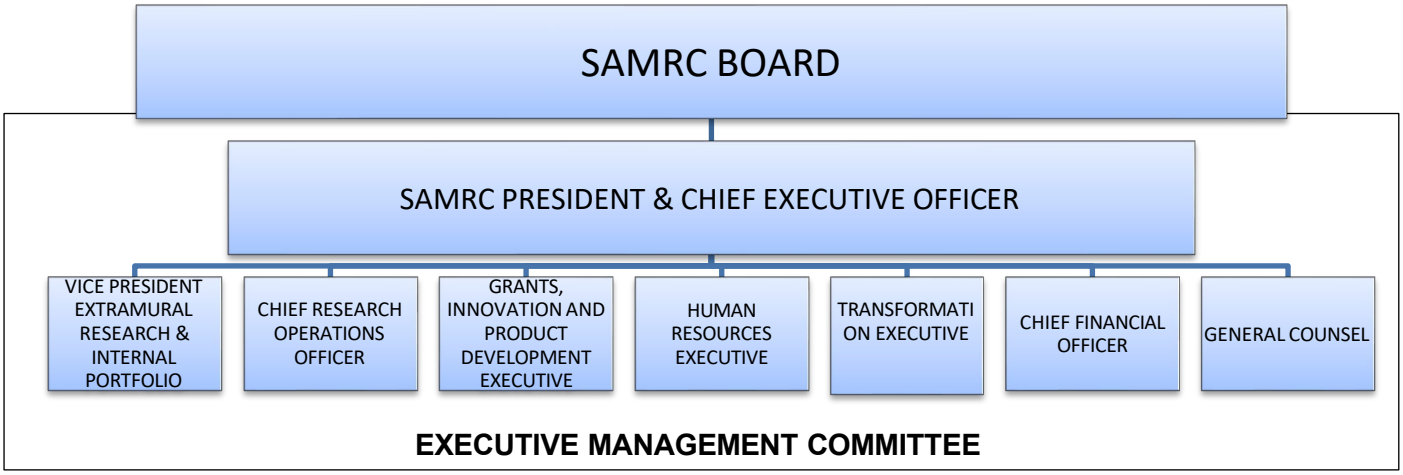


Figure 1. High Level SAMRC Leadership

3.3.9 Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

Table 3: SWOT Analysis

Strengths	• Solid corporate governance and strong financial management • Partnership programs with different stakeholders • Proven ability to raise and manage substantial funding for health Research & Innovation • Professional staff and high competency (NRF ratings, Publications, Supervision, International meetings/conferences) • Respect academic freedom/freedom of research • Strong research outputs • Capacity development • Collaborations • Excellent working relationship between the Board and EMC, NDoH and Portfolio Committee on Health
Weaknesses	• Diversity Management • Succession planning and transformation at senior levels • Lack of Biostatisticians • Lack of synergy between intramural researchers • Bureaucratic environment hampers progress • Lack of knowledge sharing
Opportunities	• Align research with the 4IR • Focus on key areas to support NHI and UHC • Set new succession planning and transformation strategy • Continued support to NdoH and other relevant stakeholders/partners to meet their objectives • Implement strategies to grow funding • Grow numbers of African and women-led Extramural Research Units • Grow numbers of PhDs in the organization • Implement the re-orientation of the intramural research units and platforms • Collaboration with national entities to enhance health research • Expand organizational move towards open access publishing • Strengthen Research Translation
Threats	• Diminishing funding for research • Research classified as low priority on the political agenda • Growing trends of predatory journals • Data Security • Scientific misconduct

	• Cyber security • Overlap in funders of health research - delineation of mandates needed • Compliance to POPIA

3.3.10 B-BBEE Compliance Performance Information

In terms of Section 13G of the B-BBEE Act No 53 of 2003, read with regulation 12 of the B-BBEE Regulations, all spheres of government, public entities and organs of state must report on their compliance with broad-based black economic empowerment in their audited annual financial statements and annual reports

As contained in the annual report guide for Schedule 3A and 3C public entities, the SAMRC applies the relevant code of Good Practice in the manner described in the table below, and the same was included in the audited SAMRC annual report of 2020/21:

Table 4: SAMRC's B-BBEE Compliance Code of Good Practice

Criteria	Response (Yes/No)	Discussion
Determining qualification criteria for the issuing of licences, concessions or other authorisations in respect of economic activity in terms of any law?	No	Not applicable
Developing and implementing a preferential procurement policy?	Yes	SAMRC complies with the Preferential Procurement Regulations of 2017
Determining qualification criteria for the sale of state-owned enterprises?	No	Not applicable
Developing criteria for entering into partnerships with the private sector?	No	Any public private partnerships (PPP) that SAMRC may enter into will be in line with the Treasury Regulations. However, SAMRC receives some funding from the private sector, and these funds do not constitute PPP
Determining criteria for the awarding of incentives, grants and investment schemes in support of Broad Based Black Economic Empowerment?	No	However, two of the indicators of Program 4 address the issue of capacitating black/historically disadvantaged individuals

The SAMRC is committed to comply with the B-BBEE Act and transformational agenda, and has thus set aside funding to improve the organization scorecard.

4 Human Resource Management

On 31 March 2022, the SAMRC had 681 employees, with the spread according to the following race and gender profiles:

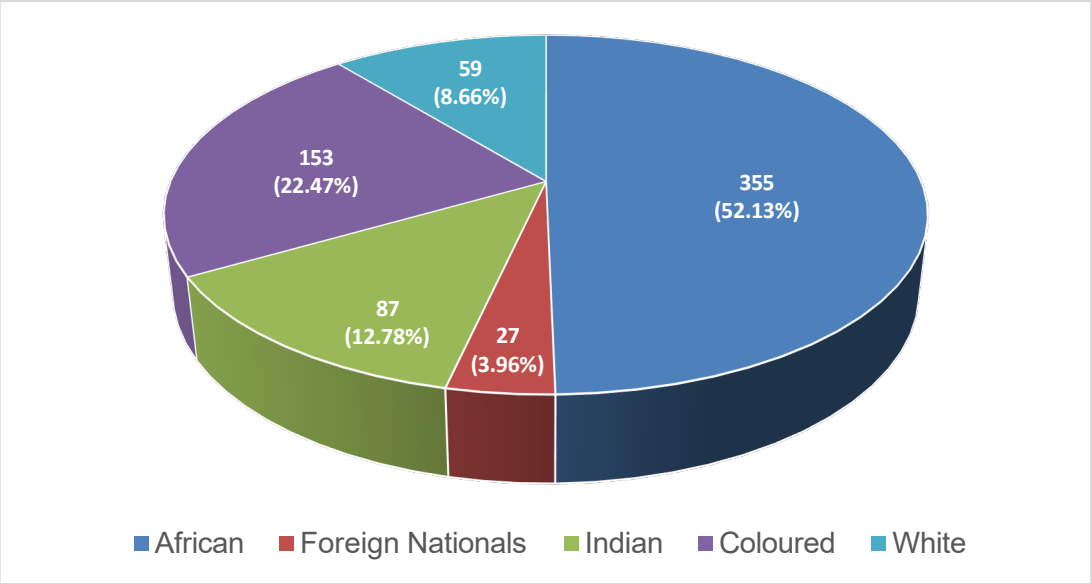


Figure 2. Employees profile by race

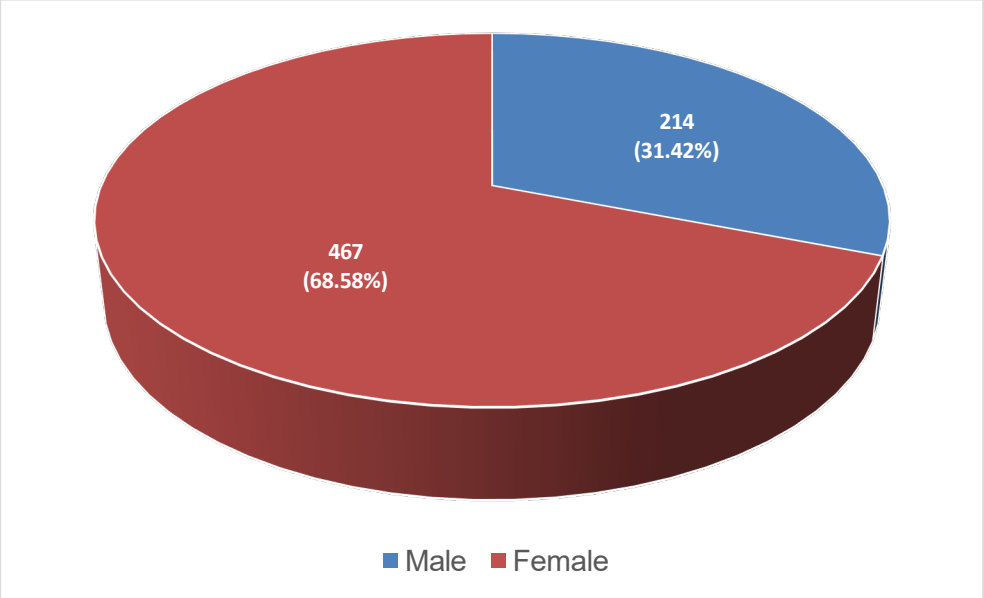


Figure 3. Employees profile by gender

The numbers above exclude postdocs, interns, post retirement contracts and EDCTP on the main payroll.

Table 5: SAMRC Employees

RACE	GENDER	March 2016– TOP MANAGEMENT	March 2022– TOP MANAGEMENT	March 2016 SENIOR MANAGEMENT	March 2022 SENIOR MANAGEMENT	March 2016 PROFESSIONALLY QUALIFIED & SPECIALISTS	March 2022 PROFESSIONALLY QUALIFIED & SPECIALISTS	March 2016 SKILLED TECHNICAL & ACADEMICALLY QUALIFIED	March 2022 SKILLED TECHNICAL & ACADEMICALLY QUALIFIED	March 2016 SEMI-SKILLED & DISCRETION DECISION MAKING	March 2022 SEMI-SKILLED & DISCRETION DECISION MAKING	March 2016 UNSKILLED ANDDEFINED DECISION MAKING	March 2022 UNSKILLED AND DEFINED DECISION MAKING	March 2016 TOTAL BY GENDER	March 2022 TOTAL BY GENDER	March 2016 TOTAL BY RACE	March 2022 TOTAL BY RACE
African	Male	1	2	2	2	5	19	16	40	13	41	15	9	**52**	**113**	**191**	**355**
	Female	0	1	3	4	20	51	74	123	35	49	7	14	**139**	**242**		
Foreign Nationals	Male	0	0	3	2	6	6	0	1	0	0	0	0	**9**	**10**	**15**	**18**
	Female	0	0	0	0	4	7	2	1	0	0	0	0	**6**	**8**		
Indian	Male	0	0	4	4	8	6	9	10	1	2	0	0	**22**	**22**	**85**	**87**
	Female	0	0	4	6	25	24	29	33	5	2	0	0	**63**	**65**		
Foreign Nationals	Male	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**2**	**1**
	Female	0	0	0	0	1	1	1	0	0	0	0	0	**2**	**1**		
Coloured	Male	0	0	4	5	7	10	19	25	7	10	5	3	**42**	**53**	**138**	**153**
	Female	0	2	4	5	27	31	47	45	12	7	6	10	**96**	**100**		
Foreign Nationals	Male	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**1**	**2**
	Female	0	0	0	0	1	2	0	0	0	0	0	0	**1**	**2**		
White	Male	0	1	15	9	3	3	2	2	0	0	1	0	**21**	**15**	**77**	**59**
	Female	2	2	14	10	24	28	14	3	2	1	0	0	**56**	**44**		
Foreign Nationals	Male	0	0	0	2	0	0	0	0	0	0	0	0	**0**	**1**	**3**	**6**
	Female	0	0	1	2	2	3	0	0	0	0	0	0	**3**	**5**		
TOTAL BY LEVEL		**3**	**8**	**54**	**51**	**133**	**191**	**213**	**283**	**75**	**112**	**34**	**36**	**512**	**681**	**512**	**681**

As of 31 March 2022, there were 8 EMC members who constituted Top Management, and were spread according to the following race and gender profiles

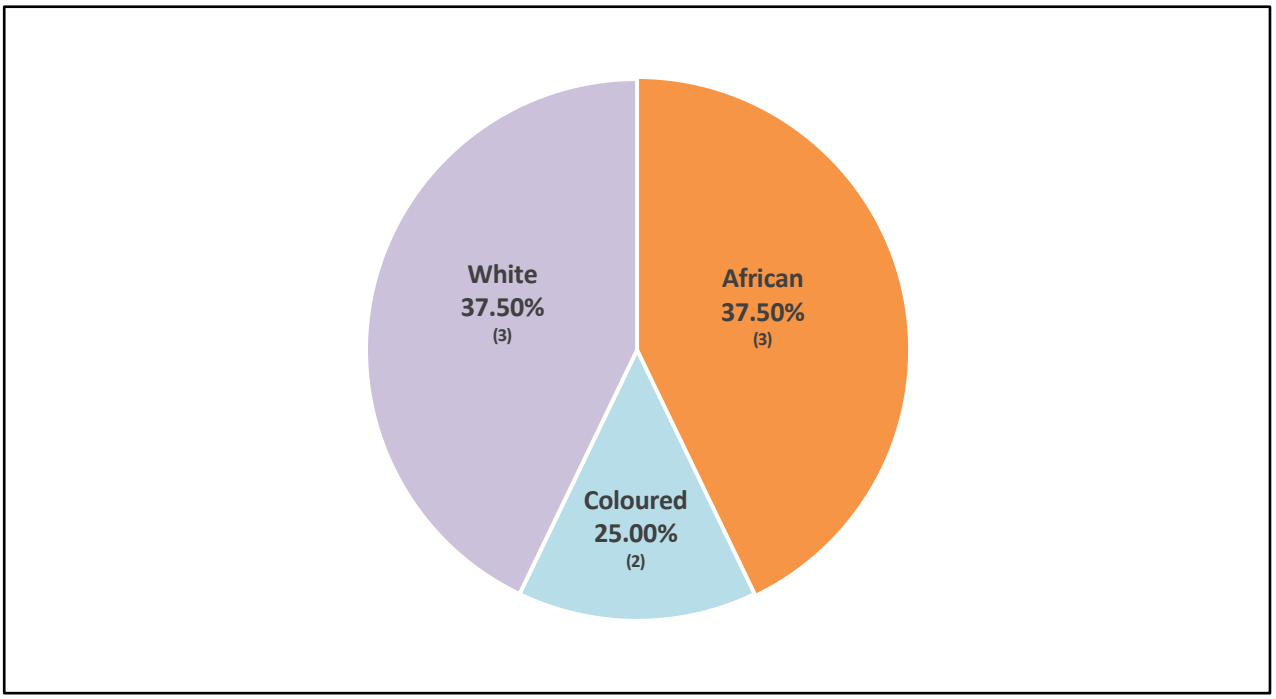


Figure 4. Top management profile by race

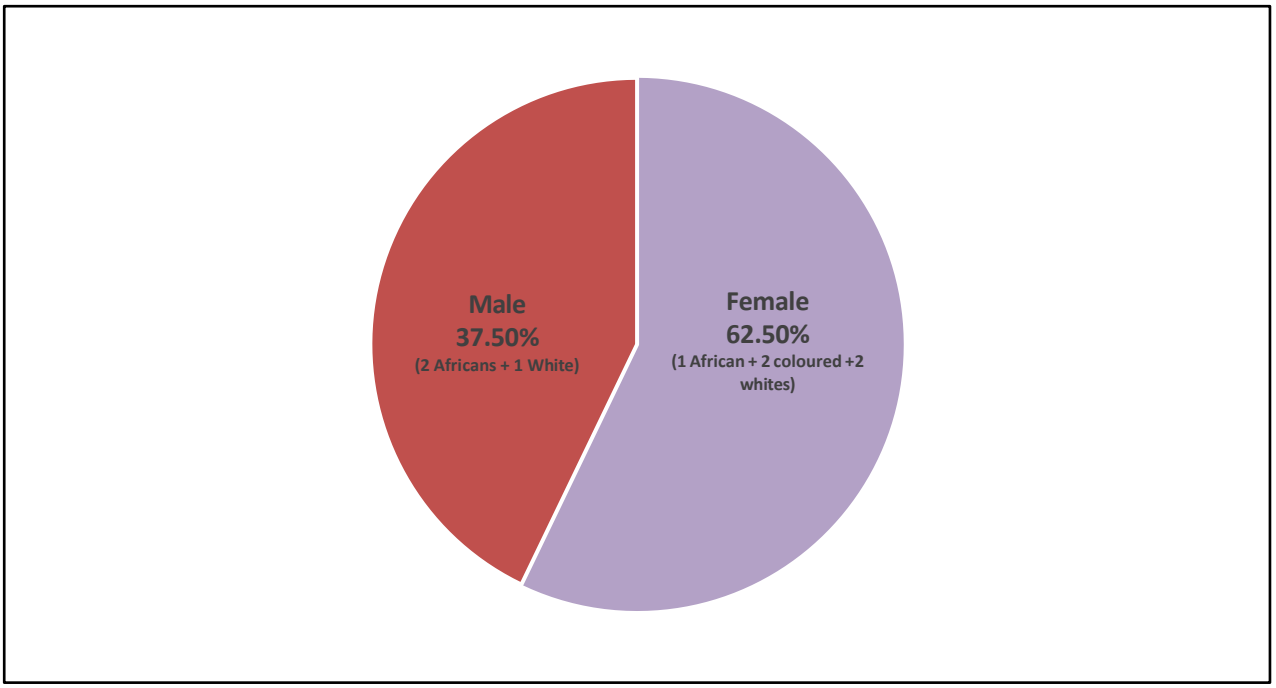


Figure 5. Top management profile by race

On 31 March 2022, senior management level, excluding the 8 EMC members who constitute Top Management, was 7.49% (51/681) of the total number of employees. The 51 members of senior management were spread according to the following race and gender profiles:

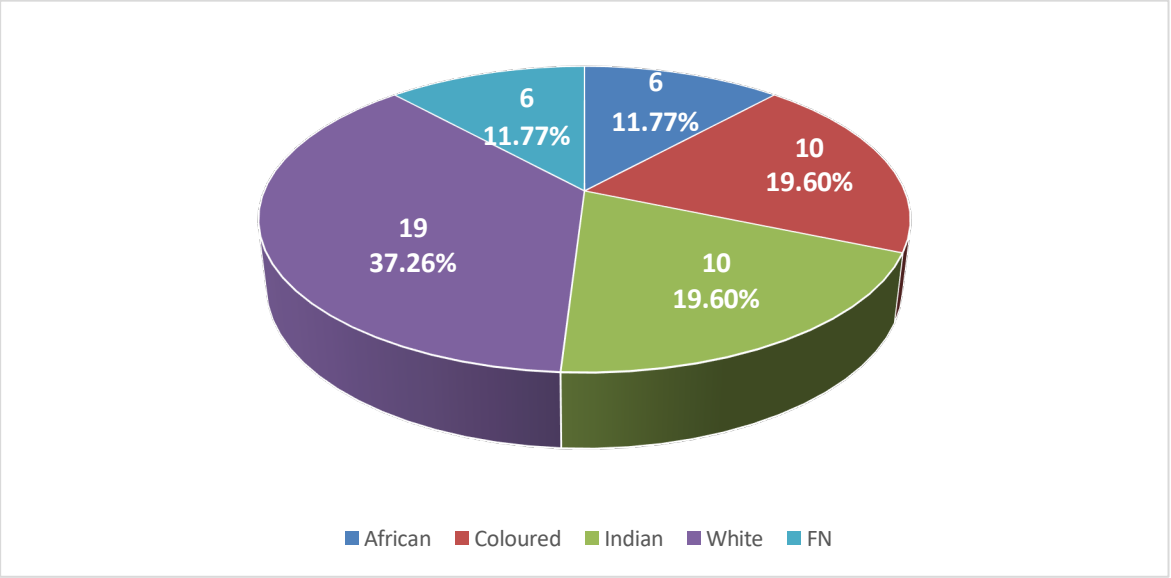


Figure 6. Senior management profile by race

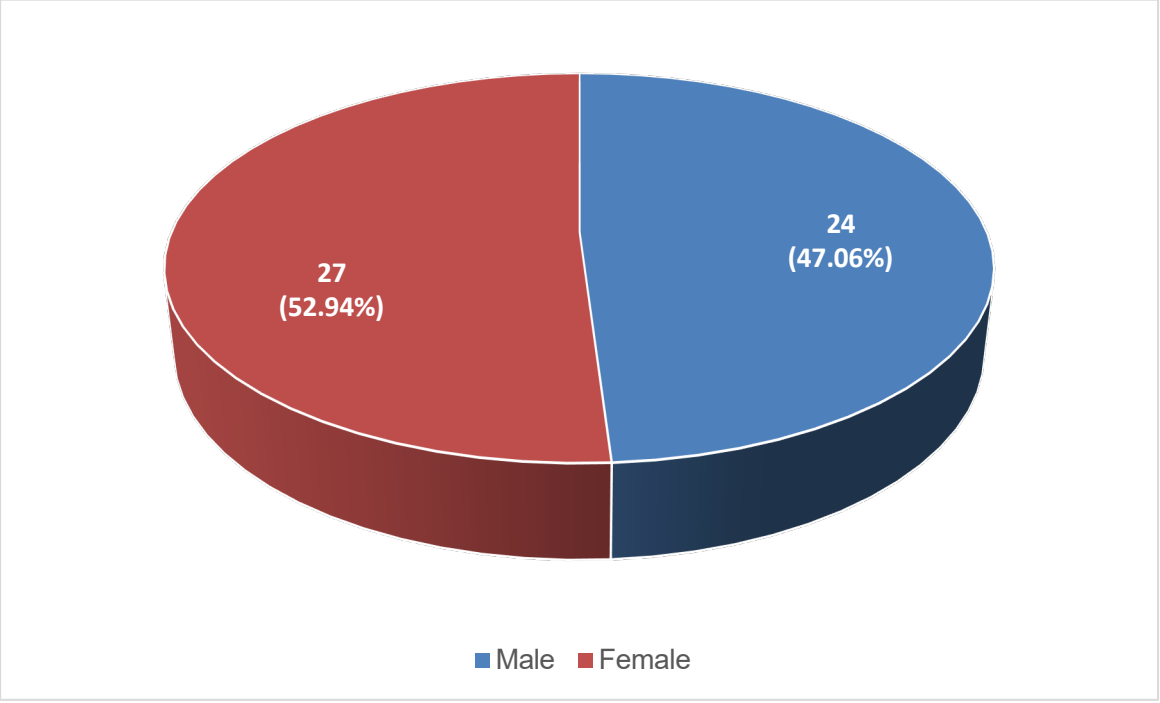


Figure 7. Senior management profile by gender

Table 6: Senior Management Demographics

2016		2022		2016		2022		2016		2022		2016		2022		2016		2022	
African		African		Indian		Indian		Coloured		Coloured		White		White		Foreign National			
5		6		8		10		8		10		29		19		4		6	
9.26%		11.77%		14.81 %		19.60%		14.81%		19.60%		53.70%		37.26%		7.41%		11.77%	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
2	3	2	4	4	4	4	6	4	4	5	5	15	14	9	10	3	1	4	2
3.70%	5.56%	3.92%	7.84%	7.41%	7.41%	7.84%	11.77%	7.41%	7.41%	9.80%	9.80%	27.78%	25.92%	17.65%	19.61%	5.56%	1.85%	7.84%	3.92

The table above excludes Top Management

The SAMRC strives towards an inclusive culture that will make all employees, managers, visitors, associates and stakeholders feel welcome, irrespective of origin, ethnicity, language, gender, religious and political conviction, social class, disability or sexual orientation.

Transformation remains an integral part of progressing towards a more inclusive and economically vibrant society. The SAMRC will continue to pursue transformation and development initiatives in order to change the demographics of the organisation, particularly at the Senior Management and Executive levels. One of the organisation's strategic goals is the transformation in science. This initiative will be achieved by supporting diversity in our new generation of a scientific cadre, particularly at the Specialist Scientist level and above.

The development of management and leadership skills will be prioritised as the SAMRC develops the pipeline of the next generation of Black Scientists. This will be achieved through the continuation of the Deputy Director programme, Accelerated Development Programmes, post-doctoral and studentships, amongstothers.

The promotion of diversity is an important aspect of transformation at the SAMRC, but transformation also extends far deeper and wider than the demographics of the SAMRC community. Digital transformation has become prominent since the advent of COVID-19 pandemic. Transformation in gender equality and leadership development will continue to be an important focus area of the transformation plan. Diversity workshops and leadership training and coaching will continue during the next 5 years to change attitudes and embrace diversity in the workplace and ensure understanding of the value of diversity to create an inclusive, non-racist and gender sensitive organisational culture.

5 Investing in Human Capital Development and Capacity in Health Care: Bongani Mayosi National Health Scholars Programme

The NDoH and twenty-two (22) private companies, which include pharmaceutical, hospital diagnostic, corporate, healthcare supply chain, and medical scheme administration disciplines, established a vehicle called a Public Health Enhancement Fund (PHEF) to fund different programmes. The National Health Scholars Program (NHSP) is one such program funded by PHEF to leverage and contribute to strengthening the health sector that will lead to a stronger relationship between public and private sectors to the benefit of all the people of South Africa. NHSP is a partnership between the NDoH and PHEF and is a flagship PhD development program and a national asset to advance the next generation of African Health and clinical scientist, and is administered by the SAMRC. In honour of one of major contributions towards health transformation, Professor Mayosi was honoured for his immense contributions and lasting legacy by renaming the NHSP "Bongani Mayosi National Health Scholars Programme".Between 2013 and 2022, the BM-NHSP issued 157 awards (70% black, and 78% females) and produced 80 graduates (68 PhDs and 12 MSc) in various health professions.

6 SAMRC Intramural and Extramural research units, and Platforms

SAMRC intramural units are largely based at SAMRC campuses and comprise scientists directly employed by the organisation. The scope of these intramural research unit projects includes tuberculosis, HIV/AIDS, cardiovascular and non-communicable diseases, gender and health, and alcohol and other drug abuse. SAMRC extramural research units are established within research institutions (mainly universities in South Africa) with the primary goal of generating new knowledge but also to build research capacity in the discipline of health sciences. The extramural units are built on scientific excellence and leadership of an internationally recognised researcher and his/her

research team and must contribute to developing the next generation of research leaders for the country. The funding for SAMRC extramural research units represents a secure, discretionary, financial incentive which is approved in 5-year cycles up to a maximum of fifteen (15) years. Research Centres comprise scientists based at tertiary institutions who primarily conduct research on behalf of the SAMRC.

Table 7: SAMRC Health Priorities

SAMRC HEALTH PRIORITIES	
Research Programmes	**Strategic Focus**
Health promotion and disease prevention	To conduct research using a life course approach to healthy lifestyles, early diagnosis, and cost-effective prevention and management of diseases through health promotion.
Maternal, child and women's health	To improve the health status and quality of life of women and children through high-quality scientific research that informs policy and practice, improves health services, and promotes health.
HIV, AIDS, TB, and other communicable diseases	To conduct research on preventing HIV and related co-morbidities including TB and other infectious (communicable) diseases, such as COVID-19 and malaria. In partnership with our funders and regional counterparts, this programme seeks to contribute to the national and international science system by testing TB drugs and malaria insecticides, carrying out the AIDS Vaccine project through coordinating development and testing HIV vaccines in South Africa and providing the information and tools to address the COVID-19 epidemic.
Health systems strengthening	To contribute to health systems strengthening by undertaking systematic reviews, health policy and health systems research to provide evidence for policymakers, stakeholders and researchers seeking to address today's most pressing health challenges. The programme aims to take advantage of information and technology by exploring and expanding the role of eHealth (health informatics, digital health, tile health, telemedicine, eLearning, and mobile health) in strengthening health systems.
Public health innovation	To promote the improvement of health and quality of life (impact prevention of ill health and improvement of public health and treatment) in the Republic of South Africa through innovation, technology development and transfer.
Biomedical research	To conduct basic research, applied research, and transactional research to determine predisposition to disease. This understanding is important for planning effective intervention and disease control.

Table 8: SAMRC intramural and extramural research units to the research programmes

SAMRC Research Sub- programmes	SAMRC Research Units/Platforms/Offices/Centres	Unit/Platform/Office/Centre Director	Institution
Health promotion and disease prevention	Alcohol, Tobacco and Other Drugs Research Unit	C Parry	Intramural Research Unit
	Non-Communicable Diseases Research Unit	A Kengne	Intramural Research Unit
	Environment and Health Research Unit	R Street (Interim)	Intramural Research Unit
	Rural Public Health and Health Transition Research Unit	S Tollman	University of Witwatersrand
	Masculinity and Health Research Unit (formerly Violence, Injury and Peace Research Unit)	A van Niekerk (Interim)	University of South Africa
	Hypertension and Cardiovascular Disease Research Unit	M Pieters	Northwest University
	Microbial Water Quality Monitoring Research Unit	A Okoh	University of Fort Hare
	Risk and Resilience in Mental Disorders Research Unit	D Stein	University of Cape Town
	Centre for Health Economics and Decision Science - PRICELESS SA	K Hofman	University of the Witwatersrand

	Antimicrobial Resistance and Global Health Research	P Bessong	University of Venda
Maternal, child and women's health	Gender and Health Research Unit	N Abrahams	Intramural Research Unit
	Maternal and Infant Health Care Strategies Research Unit	R Pattison	University of Pretoria
	Development Pathways for Health Research Unit	S Norris	University of Witwatersrand
	Child and Adolescent Lung Health Unit	H Zar	University of Cape Town
HIV, AIDS, TB and other communicable diseases	Centre for the Study of Antimicrobial Resistance Research Unit	K Dheda	University of Cape Town
	Centre for Tuberculosis Research Unit	R Warren	Intramural Research Unit
	HIV and other infectious Diseases	C Wiysonge	Intramural Research Unit
	HIV-TB Pathogenesis and Treatment Research Unit	S Abdool-Karim	Centre for the AIDS Programme of Research in South Africa (CAPRISA)
	Vaccine and Infectious Diseases Analytics Research Unit	S Madhi	University of Witwatersrand
	Office of AIDS & TB Research	F Abdullah	Intramural Office
	Office of Malaria Research	R Maharaj	Intramural Platform
	TB Platform	M van der Walt	Intramural Platform
	Antibody Immunity Research Unit	L Morris	National Institute of Communicable Diseases
	Intersection of Communicable Disease and Infectious Disease Research	N Ntusi	University of Cape Town
	Molecular Mycobacteriology Research	V Mizrahi	University of Cape Town
Health systems strengthening	Biostatistics Research Unit	T Reddy	Intramural Research Unit
	Burden of Disease Research Unit	R Matzopoulus	Intramural Research Unit
	Health Services to Systems Research Unit	H Schneider	University of the Western Cape
	Health Systems Research Unit	C Mathews	Intramural Research Unit
	South African Cochrane Centre	C Wiysonge	Intramural Research Unit
Public health innovation	Drug Discovery and Development Research Unit	K Chibale	University of Cape Town
	Herbal Drugs Research Unit	A Viljoen	Tshwane University of Technology
	Primate Unit and Delft Animal Center Platform	C Chauke	Intramural Platform
	The Biomedical Research and Innovation Platform	R Johson and C Pheiffer (Interim)	Intramural Platform
	Pan African Center for Epidemics Research	R Phaswana-Mafuya	University of Johannesburg
	Genomics Platform	C Kinnear	Intramural Platform
Biomedical research	Antiviral Gene Therapy Research Unit	P Arbuthnot	University of the Witwatersrand
	Bioinformatics Capacity Development Research Unit	A Christoffels	University of Western Cape
	Precision and Genomic Medicine Research Unit	R Ramesar	University of Cape Town
	Stem Cell Research and Therapy Research Unit	M Pepper	University of Pretoria
	Wound and Keloid Scarring Translational Research Unit	N Khumalo	University of Cape Town
	Genomics of Brain Disorders Research unit	S Seedat	Stellenbosch University
	Precision Oncology Research Unit	Z Dlamini	University of Pretoria
	Cardiometabolic Health Research Unit	T Matsha	Cape Peninsula University of Technology
	Platform for Pharmacogenomics Research and Translation Research Unit	C Dandara	University of Cape Town

Table 9: SAMRC intramural research units' purpose

INTRAMURAL RESEARCH UNITS	
Unit	**Strategic Focus**
Alcohol, Tobacco and Other Drugs	To generate knowledge and propose policy and other interventions that will lead to a reduction in alcohol, tobacco and other drug use and the associated burden experienced by individuals and society.
Biostatistics	To advance the health of the nation through the application, development and promotion of statistical methods in the clinical and health research conducted by the SAMRC and its stakeholders.
Burden of Disease	To assess and monitor the country's health status and determinants of disease as well as to project the future burden of disease, in order to provide planning information to improve the health of the nation and to evaluate health information systems.
Centre for TB Research	To run a portfolio of world class TB research ranging from basic to applied where projects are either laboratory and/or clinic based, using selected individuals or local populations as a source of data. In collaboration with national and international collaborators, areas of interest include bacteriology, immunology, genetics, bioinformatics, and clinical trials.
Cochrane South Africa	To prepare and maintain Cochrane Reviews of the effects of healthcare interventions, and to promote access to and the use of best evidence in healthcare decision making
Environment and Health	To conduct population-based research on environmental risks to health, with special emphasis on those living in poverty.
Gender and Health	To improve the health status and quality of life of women through high quality scientific research on gender and health that informs the development of policy, health services and health promotion.
Health Systems	To conduct health systems research to develop health systems, improve the organisation, efficiency, effectiveness of health systems, and increase the impact of health systems on population health and well-being. It is also to understand and evaluate how health systems function and how they can be strengthened, including how to develop and implement policies and programmes in ways that strengthen rather than undermine health systems.
HIV and other infectious Diseases	To address the challenges of the South African HIV epidemic and associated co-morbidities through a combination of biomedical, epidemiological and behavioural prevention, therapeutic and implementation science research agenda.
Non-communicable Diseases	To formulate and apply an integrated programme of research and capacity development to improve the prevention, understanding, detection and management of NCDs, with a major focus on cardiovascular disease and metabolic disorders in South Africa.

Table 10. SAMRC extramural research units' purpose

EXTRAMURAL RESEARCH UNITS	
Unit	**Strategic Focus**
Antibody Immunity	To conduct research on the development of new vaccines and new approaches to controlling infectious diseases. The Unit's research seeks to establish a deeper understanding of antibody responses to infection in order to design better vaccines for the African region which bears the largest burden of infectious disease. Key focus areas are identifying antibody correlates of vaccine protection, uncovering the genetic diversity in the African antibody repertoire and isolating and engineering antibodies for passive immunity.
Antimicrobial Resistance and Global Health Research	To conduct research on microbial, human, and environmental determinants of the acquisition and transmission of antimicrobial resistance. The Unit collaborates with community and policy makers to enhance our understanding of the dynamics of antimicrobial resistance for improved antimicrobial resistance stewardship.
Antiviral Gene Therapy	To challenge the emergence of viral infections that cause serious health problems in Sub-Saharan Africa. The long-term objectives of the unit are to advance gene therapy for treatment of viral infections, develop human capacity in the field through the training of young scientists, and to translate the unit's technologies into products.
Bioinformatics Capacity Development	To build bioinformatics capacity in South Africa and across the African continent through research and innovation.
Cardiometabolic Health	To provide a platform from which a team of researchers collaborate to provide an integrated research programme focusing on cardiometabolic traits (obesity, diabetes, hypertension, metabolic syndrome, and chronic kidney diseases); all with respect to inflammation, genetics, epigenetics, microbiome and oxidative mechanisms. The aim

EXTRAMURAL RESEARCH UNITS	
Unit	**Strategic Focus**
	of the unit is to employ a holistic approach to investigate the context specific factors associated with diabetes and related cardiometabolic traits.
Centre for Health Economics and Decision Science	To undertake rigorous and comprehensive analytical work in order to provide evidence to guide priority setting for health in South Africa. By applying innovative priority setting approaches, the Unit aims to support evidence-based resource allocation decisions in a fair and equitable way under the proposed National Health Insurance (NHI).
Centre for the Study of Antimicrobial Resistance	To address specific aspects of bacterial multi-drug resistant pathogens, including tuberculosis. The unit's key focus areas are to better understand the pathogenesis of drug resistance by studying pharmacokinetic mismatches, conduct preliminary studies to determine the levels and efficacy of adjunct inhaled antibiotics at the disease site in TB and MDR bacterial pneumonia, and to develop and test inhaled formulations for future animal and human studies.
Child and Adolescent Lung Health	To focus on key health concerns affecting children and adolescents in South Africa and in Africa. The Unit's primary focus is on child lung health and the intersection of infection with emergence of chronic non-communicable diseases, addressing lung health from birth through adolescence. Studies focus on the epidemiology, aetiology and risk factors for acute and chronic lung disease and the impact of acute disease on child health and on development of chronic disease.
Developmental Pathways for Health	To investigate genetic, physiological, psychosocial and lifestyle determinants of growth and development, risk of disease, and healthy ageing across the life course.
Drug Discovery and Development	To establish a scientific infrastructure as well as capacity for drug discovery and development in the broad sense. Develop infrastructural and operational systems for new drug discovery and development. Attract young South African and African scientists thereby contributing to transformation and capacity building. Provide career development opportunities for independent academic and/or research careers.
Genomics of Brain Disorders Research Unit	To identify genomic biomarkers, using a systems biology approach, for a host of brain disorders (e.g., posttraumatic stress disorder, HIV associated neurocognitive disorders, foetal alcohol spectrum disorders, schizophrenia and psychosis spectrum disorders, and Parkinson's Disease) across the lifespans.
Health Services to Systems	To focus on the mechanisms and processes through which health interventions become integrated into routine institutional environment ("real world settings") and achieve sustainable coverage and impacts at scale.
Herbal Drugs	To conduct technologically advanced scientific research, and to make basic knowledge readily available to stakeholders, in order to promote the quality, safety and efficacy (QSE) of herbal medicines.
HIV/TB Pathogenesis and Treatment	To undertake research to reduce morbidity and mortality from HIV-TB co-infection. This Unit addresses the leading cause of death in HIV infected patients, in a setting where HIV infection is the largest single contributor to South Africa's mortality burden.
Hypertension and Cardiovascular Disease	To contribute to new clinical and epidemiological knowledge within the field of hypertension development in black populations, in order to facilitate more effective awareness, treatment and prevention programs in the future
Intersection of Noncommunicable Disease and Infectious Diseases	To enhance the understanding and management of the interaction between endemic infections (SARS-CoV-2, HIV, tuberculosis) and NCDs (heart failure, hypertension, diabetes mellitus, obesity, cancer, mental health).
Masculinity and Health Research Unit	Cognisant of the gender asymmetries in health, with a historical interest in the disproportionate involvement of men in injury and violence, the SAMRC Masculinity and Health Research Unit (MaHRU) undertakes, hosts and supports evidence-based research on men, boys, masculinity and health. In addition to research, community-mobilising interventions, research-based advocacy, and public dissemination will form a strong triangulated core of the work of MaHRU
Maternal and Infant Health Care Strategies	To develop health strategies to improve the quality of care at primary and secondary care levels for mothers and infants by seeking saleable and sustainable solutions; thereby reducing maternal, perinatal and infant deaths
Microbial Water Quality Monitoring	To address the myriad of challenges in the Eastern Cape Province water sector within the overarching aim that seeks to evaluate some of the key emerging challenges in microbial water quality and safety, as a vehicle for skills and capacity development in water science especially amongst the previously disadvantages demographic groups in the Eastern Cape Province
Pan African Centre for Epidemics	To improve the understanding of current pandemics through cutting-edge Pan African and global research epidemiological, and public health studies among marginalized populations in diverse low-resource settings in South Africa, Sub-Saharan Africa and globally.
Platform for	To identify inherited genetic variations, epigenetic changes and microbial profiles

EXTRAMURAL RESEARCH UNITS	
Unit	**Strategic Focus**
Pharmacogenomics Research and Translation	that are associated with interindividual differences in the ways patients respond to therapeutic treatment including herbal medicine, a field commonly referred to as Pharmacogenomics.
Precision and Genomic Medicine	To use the exciting developments in the field of genomic sciences to investigate human biodiversity, and to contribute to a more proactive and preventive approach to health. Tied closely to this quest is the expansion of research to cover genome-wide investigations pertaining to the burden of disease in Southern Africa and to assess the impact of genomic variants on the health of the indigenous populations of Africa.
Precision Oncology Research Unit	To map the landscape of cervical and oesophageal cancer in order to understand the underlying causes of these cancers and to discover targets for the development of novel and more effective targeted therapeutics. Key focus areas are to identify and comprehensively characterise the potential common and country-specific risk factors underlying high cervical and oesophageal cancer incidences and mortality rates in South Africa, Tanzania and BRICS countries.
Risk and Resilience in Mental Disorders	To undertake research that encompasses the promotion of clinical research and the translation of basic science into clinical research, to improve diagnosis, prevention and management of mental disorders in South Africa with a focus on risk and resilience factors as they apply to key conditions in the local context, as well as the translation of clinical evidence into population-level interventions to improve mental health through primary health care and community initiatives that can be applied in diverse settings across the country and the continent, with a focus on priority illnesses given the local burden of disease.
Rural Public Health and Health Transitions	To better understand the dynamics of health, population and social transitions in rural South Africa and southern Africa to mount a more effective public health, public sector and social response.
Stem Cell Research and Therapy	To better understand hematopoietic stem cells (HSCs) and mesenchymal stem cells as a means to lowering the South African infection rate of both communicable and non-communicable diseases, and to use this project to initiate a gene therapy platform, from which gene therapy projects for other diseases will follow.
Vaccine and Infectious Diseases Analytics (formerly Respiratory and Meningeal Pathogens Research Unit)	To study the causes, management and prevention of pneumonia and meningitis infections with expanded initial focus on pneumococcal disease, to other common bacterial and viral causes of childhood morbidity and mortality (Group B streptococcus (GBS), rotavirus, Respiratory Syncytial Virus (RSV), pertussis, and influenza virus) as well as to integrate clinical, epidemiological and basic science research to improve the health of Africans through vaccines.
Wound and Keloid Scarring Translational	To optimise tissue culture models for dermal wound healing after injury with particular focus to skin scarring and dermal fibrosis.

Table 11: SAMRC Platform and specialist scientific services purpose

PLATFORM and SPECIALIST SCIENTIFIC SERVICES	
Unit	**Strategic Focus**
Biomedical Research and Innovation Platform (BRIP)	The Biomedical Research and Innovation Platform (BRIP) is the leading biomedical innovation platform with state-of- the-art equipment and more than 20 years of experience in the field of histology, image analysis, immunocytochemistry, molecular biology and tissue/cell culture systems. BRIP has been leading research into medical innovations for the screening, prevention and treatment of diabetes, cardiovascular disease and obesity. BRIP's capacity development programme trains the next generation of scientists in the field of Biotechnology with an emphasis on young black scientists from historically under resourced institutions.
Primate Unit and Delft Animal Centre	PUDAC is a research support platform that provides the infrastructure to conduct pre-clinical research; scientific and technological research support; the capacity to maintain and utilise animal models (nonhuman primates, horses and rodents) and biomedical research (collaborative and contract). The platform also contributes to research by generating new in-house research to define and validate animal models; laboratory animal science and technology; providing skilled laboratory scientific and technological support.

Genomics Platform	It was established in 2019 in partnership with the Beijing Genomics Institute. The goal and vision for the SAMRC Genomics Centre is to grow South Africa's capacity for whole human genome sequencing and engage in an Afrocentric approach to reducing South Africa's burden of disease. The Centre has now being recognized as a Platfom and conducts an in-house and collaborative genomics research program and offers whole genome, exome and transcriptome sequencing services.
SAMRC Office of AIDS & TB Research	The Office of AIDS &TB funds and co-ordinates research in HIV/TB with the aim of optimising research funding in these areas, including the TB Report Consortium.
SAMRC Office of Malaria Research	The Office of Malaria Research, funds and facilitates research to understand the social and biological impact of the disease as well as to develop malaria control programmes.
TB Platform	The TB Platform oversees the execution of the National TB prevalence survey.

7 SAMRC Research Centres

The SAMRC's Research Centres, based at universities and institutions across the country, identify and gather information on leading health concerns in South Africa like Cancer, HIV, Tuberculosis (TB) and Malaria. Each Centre is staffed with experts in the same field as the projects they direct. Many of these experts also work with external specialists on the research and funding of international projects. Over the years, the SAMRC's research has provided vital information that is used by the Department of Health and Government for health planning and assessing progress towards realising Government'sobjectives.

Table 12: SAMRC Research Centres

SAMRC Research Centres		
Centre	**Strategic Focus**	**Unit**
Cancer Centres	The explicit aim of CRCs will be to integrate cancer-related research programmes in fields such as basic laboratory and clinical sciences, prevention and control methodologies, and population-based studies, into a transdisciplinary cancer research centre that may straddle departmental and institutional boundaries	Common Epithelial Cancer Research Centre
		Gynaecological Cancer Research Centre
Digital Health Centre	The SAMRC established this Collaborating Centre to incorporate the important and emerging area of digital health in the SAMRC's ambit. The centre's role is to build capacity in digital health, to coordinate digital health efforts nationally, to develop and implement a national research agenda for digital health and to develop and implement new innovations in this arena in partnership with the NDoH for improved health service delivery.	Jembi Collaborating Centre for Digital Health Innovation

PART C – MEASURING SAMRC PERFORMANCE

8 Institutional Programme Performance Information

8.1 Programme 1: Administration

Purpose: Administer health research effectively and efficiently

Table13. Programme 1 - Outcomes, Outputs, Performance Indicators and Targets

Outcome	Outputs	Output Indicator	Audited/Actual Performance			Estimated performance	MTEF Period		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
1.1. To ensure good governance, effective administration and compliance with government regulations	Clean audit opinion	1.1.1 A clean audit opinion on the SAMRC from the Auditor-General	Clean Audit	Clean Audit	Clean Audit	Clean Audit	Clean Audit	Clean Audit	Not applicable: outside SP period
1.2 To promote the organisation's administrative efficiency to maximise the funds available for research	Efficient expenditure of government allocated budget	1.2.1 Percentage of the SAMRC total budget spent on administration	19%	16%	16%	20%	20%	20%	

Table 14. Programme 1 - Indicators and Targets

Output indicators	Reporting Frequency	Annual Target	Quarterly targets 2023/24			
			1st	2nd	3rd	4th
1.1.1 A clean audit opinion on the SAMRC from the Auditor-General	Annually	Clean Audit	Not applicable			Clean Audit
1.2.1 Percentage of the SAMRC budget spent on administration	Quarterly	20%	20%	20%	20%	20%

Programme Resource Considerations

Table 15. Budget Allocation for Programme 1 (R'000)

Economic Classification of Budget	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
	Actual Outcome	Actual Outcome	Actual Outcome	Actual Outcome	Budget Estimates	Budget Estimates	Budget Estimates
Compensation of Employees	101 749	91 674	104 484	103 491	110 220	117 384	124 427
Goods and Services	126 715	105 623	183 974	121 440	121 540	140 939	154 464
Total	**228 464**	**197 297**	**288 458**	**224 931**	**231 760**	**258 323**	**278 891**

8.2 Programme 2: Core Research

Purpose: Lead the generation of new knowledge

Table 16. Programme 2 – Outcomes, Outputs, Performance Indicators and Targets

Outcome	Outputs	Output Indicator	Audited/Actual Performance			Estimated Performance	MTEF Period		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
2.1. To produce and promote scientific excellence and the reputation of South African health research	Published journal articles, book chapters and books	2.1.1 Number of accepted and published journal articles, book chapters and books by SAMRC affiliated and funded authors	1187	1261	1169	700	700	600	Not applicable: outside SP period
	Published journal articles by SAMRC grant-holders	2.1.2 Number of accepted and published journal articles by SAMRC grant-holders with acknowledgement of the SAMRC	322	281	265	180	180	170	Not applicable: outside SP period

2.2 To provide leadership in the generation of new knowledge in health	Published journal articles with the first or last author	2.2.1. Number of accepted and published journal articles where the first and/or last author is affiliated to the SAMRC	672	718	637	420	300	255	
2.3 To provide funding for the conduct of health research	Research grants awarded	2.3.1 Number of research grants awarded by the SAMRC	247	190	152	150	160	170	

Table 17. Programme 2 – Indicators and Quarterly Targets

Output indicators	Reporting Frequency	Annual Target	Quarterly targets 2022/23			
			1st	2nd	3rd	4th
2.1.1 Number of accepted and published journal articles, book chapters and books by SAMRC affiliated and funded authors	Quarterly	700	140	185	170	205
2.1.2 Number of accepted and published journal articles by SAMRC grant-holders with acknowledgement of the SAMRC	Quarterly	180	45	54	36	45
2.2.1 Number of accepted and published journal articles where the first and/or last author is affiliated to the SAMRC	Quarterly	300	66	81	72	81
2.3.1 Number of research grants awarded by the SAMRC	Annually	160				160

Programme Resource Considerations

Table 18. Budget Allocation for Programme 2 (R'000)

Economic Classification of Budget	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
	Actual Outcome	Actual Outcome	Actual Outcome	Actual Outcome	Budget Estimates	Budget Estimates	Budget Estimates
Compensation of Employees	251 131	244 944	281 347	276 525	294 550	313 696	332 518
Goods and Services	347 069	560 263	445 572	444 520	413 354	359 817	393 860
Total	**598 200**	**805 207**	**726 919**	**721 045**	**707 904**	**673 513**	**726 378**

8.3 Programme 3: Innovation and Technology

Purpose: Support, through funding and other mechanisms, technology development and implementation, and innovations in health and technology delivery to improve health

Table 19. Programme 3 – Outcomes, Outputs, Performance Indicators and Targets

Outcome	Outputs	Output Indicator	Audited/Actual Performance			Estimated Performance	MTEF Period		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
3.1 To support the development of new or improved innovations aimed at improving health and targeting priority health areas	Innovation projects and platforms funded by the SAMRC	3.1.1 Number of new innovation and technology projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions	NEW	29	18	4	4	4	Not applicable: outside SP period
		3.1.2 Number of ongoing innovation and technology projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions	NEW	41	40	30	30	30	
3.2 To develop new or improved innovations aimed at improving health in key priority areas	Innovation disclosures made by SAMRC researchers	3.2.1 Number of innovation disclosures made by the SAMRC intramural research and innovation units and platforms	NEW	1	3	1	1	1	

Table 20. Programme 3 – Indicators and Quarterly Targets

Output indicators	Reporting Frequency	Annual Target	Quarterly targets			
			1st	2nd	3rd	4th
3.1.1 Number of new innovation and technology projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions	Annually	4	Not applicable			4
3.1.2 Number of ongoing innovation and technology projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions	Annually	30	Not applicable			30
3.2.1 Number of innovation disclosures made by the SAMRC intramural research and innovation units and platforms	Annually	1	Not applicable			1

Programme Resource Considerations

Table 21. Budget Allocation for Programme 3 (R'000)

Economic Classification of Budget	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
	Actual Outcome	Actual Outcome	Actual Outcome	Actual Outcome	Budget Estimates	Budget Estimates	Budget Estimates
Compensation of Employees	45 387	44 722	49 231	50 255	53 522	57 013	60 434
Goods and Services	244 909	124 854	277 442	255 937	261 554	281 974	297 366
Total	**290 296**	**169 576**	**326 673**	**306 192**	**315 076**	**338 987**	**357 800**

8.4 Programme 4: Capacity Development

Purpose: Build human capacity for the long-term sustainability of the South African health research

Table 22. Programme 4 – Outcomes, Outputs, Performance Indicators and Targets

Outcome	Outputs	Output Indicator	Audited/Actual Performance			Estimated Performance	MTEF Period		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
4.1 To enhance the long-term sustainability of health research in South Africa by providing funding for the next generation of health researchers	SAMRC bursaries and/or scholarships and/or fellowships provided for MSc, PhD, Postdocs and Early Career Scientists	4.1.1 Number of awards (scholarships, fellowships and grants) by the SAMRC for MSc, PhD, Postdocs and Early Career Scientists	157	144	167	140	150	130	Not applicable: outside SP period
	Female students and/or Early Career Scientists receiving SAMRC funding	4.1.2 Number of awards by the SAMRC to female MSc, PhD, Postdocs and Early Career Scientists	New	106	122	100	110	108	
	African South African citizens and/or permanent residents students receiving SAMRC funding	4.1.3 Number of awards by the SAMRC to Black South African citizens and permanent resident MSc, PhD, Postdocs and Early Career Scientists classified as African	New	86	108	105	110	90	
	SAMRC scholarships/ fellowships provided for MSc, PhD, Postdocs and Early Career Scientists at HDIs	4.1.4 Number of awards by the SAMRC to MSc, PhD, Postdocs and Early Career Scientists from historically disadvantaged institutions (HDIs)	New	38	52	75	80	83	
	MSc and PhD students graduated or completed	4.1.5 Number of MSc and PhD students graduated or completed	71	72	81	80	85	50	

Table 23. Programme 4 - Indicators and Quarterly Targets

Output indicators	Reporting Frequency	Annual Target	Quarterly targets 2023/24			
			1st	2nd	3rd	4th
4.1.1 Number of awards (scholarships, fellowships and grants) by the SAMRC for MSc, PhD, Postdocs and Early Career Scientists	Annually	150				150
4.1.2 Number of awards by the SAMRC to female MSc, PhD, Postdocs and Early Career Scientists	Annually	110				110
4.1.3 Number of awards by the SAMRC to Black South African citizens and permanent resident MSc, PhD, Postdocs and Early Career Scientists classified as African	Annually	110				110
4.1.4 Number of awards by the SAMRC to MSc, PhD, Postdocs and Early Career Scientists from historically disadvantaged institutions (HDIs)	Annually	80				80
4.1.5 Number of MSc and PhD students graduated or completed	Annually	85				85

Programme Resource Considerations

Table 24. Budget Allocation for Programme 4 (R'000)

Economic Classification of Budget	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
	Actual Outcome	Actual Outcome	Actual Outcome	Actual Outcome	Budget Estimates	Budget Estimates	Budget Estimates
Compensation of Employees	4 480	5 050	4 677	5 706	6 077	6 475	6 865
Goods and Services	73 091	62 535	70 685	82 440	85 509	88 705	91 606
Total	**77 571**	**67 585**	**75 362**	**88 146**	**91 586**	**95 180**	**98 471**

8.5 Programme 5: Research Translation

Purpose: Translate new knowledge into policies and practices to improve health

Table 25. Programme 5 - Outcomes, Outputs, Performance Indicators and Targets

Outcome	Outputs	Output Indicator	Audited/Actual Performance			Estimated Performance	MTEF Period		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
5.1 To facilitate the translation of SAMRC research findings into public understanding, policy and practice	Local or international policies, reports and guidelines that reference SAMRC research	5.1.1 Number of local or international policies, reports and guidelines that reference SAMRC research	7	44	58	5	6	6	Not applicable: outside SP period
	Reports and guidelines produced by SAMRC intramural authors	5.1.2 Number of reports and guidelines (co)produced by the SAMRC intramural researchers	NEW	58	64	5	7	9	
	SAMRC researchers invited/serving on national and international bodies/committees	5.1.3 Number of national or international bodies/committees SAMRC employees serve on	NEW	90	96	50	50	50	
	SAMRC supported conferences, seminars and CPD workshops	5.1.4 Number of conferences, seminars and continuing development points workshops supported by the SAMRC	NEW	26	72	10	10	10	

Table 26. Programme 5 - Indicators and Quarterly Targets

Output indicators	Reporting Frequency	Annual Target	Quarterly targets			
			1st	2nd	3rd	4th
5.1.1 Number of local or international policies, reports and guidelines that reference SAMRC research	Bi-annually	6		2		4
5.1.2 Number of reports and guidelines produced by the SAMRC intramural researchers	Bi-annually	7		3		4
5.1.3 Number of national or international bodies/committees SAMRC employees serve on	Annually	50				50
5.1.4 Number of conferences, seminars and continuing development points workshops supported by the SAMRC	Annually	10				10

Programme Resource Considerations

Table 27. Budget Allocation for Programme 5 (R'000)

Economic Classification of Budget	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
	Actual Outcome	Actual Outcome	Actual Outcome	Actual Outcome	Budget Estimates	Budget Estimates	Budget Estimates
Compensation of Employees	–	–	–	–	–	–	–
Goods and Services	–	–	–	3 246	4 332	4 343	4 560
Total	**–**	**–**	**–**	**3 246**	**4 332**	**4 343**	**4 560**

9 Planned performance over the five-year planning period

9.1 Biomanufacturing capacity development

Capacity Development grant to build a skilled workforce for the biomanufacturing sector R100M from Chan Soon-Shiong Foundation – over 3-5 year. Program in development with various academic institutions and other organizations

- The goal of the program is to upskill the African workforce, starting with South Africa and Botswana and expanding into Africa
- It is a stated goal that successful candidates from the program will be absorbed by the industry.
- There is no direct link between the funding sourced and the successful candidates' future direction of employment
- The estimated timescale for the program will be 4 years with a goal of extending if successful.
- The goal is to promote and synergise programs (such as the Pan African Vaccine Manufacturing forum of the African CDC, Kofi Annan Scholarship program, World Health Organisation Academy etc) where possible and avoid duplication.
- There is an expressed desire to expand this program to African based scholars and scientists

9.2 Doctoral scholarships

Between 5-10 South Africans will be awarded scholarships to embark on their studies at Hasselt University. There are two possible alternatives: 1) *Sandwich or Joint PhDs with a local co-promoter and main promoter at Hasselt University:* The scholarship will include a daily allowance and operational funds for a maximum period of twelve months in total (split over four years) in Hasselt University, Belgium. 2) *Full time study at Hasselt University:* The scholarship will cover living expenses, operational costs and tuition fees for a maximum period of four years in Belgium.

9.3 Extramural Research Units

The SAMRC has grown the diversity of the extramural research units (EMU). In the next five years, the SAMRC to increase numbers of EMUs, particularly black and female led EMUs.

9.4 Collaborating Centres for Cancer

Two collaborating centres for cancer have been funded for 3 years. Progress has been made and the 5-year strategic plan should take into account the value of further investment. Discussions with CANSSA should be considered to leverage limited funds.

9.5 TB/HIV Collaborating Centres

These collaborating centres have been very productive and have formed the basis of the TB report programme and demonstrate the value to a clinical network around diseases. The centres have now been grouped into a TB Report Consortium.

9.6 Collaborating Centre for Digital Health Innovation

The digital health innovation collaborating centre completed its first for 3-year term in 2020. An assessment of the outputs and impact of the centre should be conducted and utilized to determine the merits of additional investment for a second term.

9.7 Request for Application (RFAs) for research priorities identified through the strategic planning process and National Priorities.

The SAMRC will continue to expand its portfolio of funded projects (both research and innovation

grants) through the Request for Applications process, which allows for open competition for SAMRC grants. RFAs are designed based on identified research priorities and the availability of funding; and are often linked to partnership agreements signed with strategic funding partners. The RFA for Self-initiated Research grants is run annually for 3-year investigator-initiated projects in research priority areas that are determined annually. RFAs are also utilized, as necessary to identify additional extra-mural research units. The RFA process includes independent peer review and decision making based on scientific merit and other important imperatives such as transformation and equitable distribution of funding by priority area and institution.

9.8 Driving Transformation and Capacity Development.

Both in intramural domain and extramural domain drive processes for achieving this with strategic partners like National Research Foundation (NRF), Public Health Enhancement Fund (PHEF), Department of Higher Education (DHE).

9.9 Funding and Budget Related Issue in key areas of savings and reprioritisation

Support and Administration processes are consistently being reviewed to improve their efficiency and cost effectiveness. Annual operational increases for Support and Administration are also below inflation to ensure maximum funding is allocated to the core business, research. The main aim is to ensure that the SAMRC has divisions that can adequately render professional, cost effective, administrative support to the core business (research) of the SAMRC.

Key areas of reprioritisation over the MTEF include R10m per annum over the MTEF to assist with COVID-19 mRNA vaccine development as well as other COVID-19 research of R13m in 2022/23, R13m in 2023/24 and R19m in 2024/25.

Funds amount to R13.5m per annum over the MTEF have been earmarked to fund projects to generate leverage funding of at least the equivalent amount from collaboration partners and funders.

In early 2013, the SAMRC and National Institutes of Health, USA (NIH) entered into a Memorandum of Understanding (MOU) with the intent to:

- Establish or expand long-term relations between scientists from South Africa and the United States, in order to perform high-quality biomedical and behavioural health research;
- Build long-term collaborations in biomedical and behavioural health science between the NIH Institutes and South African universities and other institutions; and
- Explore and support consultation, collaboration and research projects and activities in specific fields of mutual interest.

This SAMRC-NIH collaboration continues until 2023/2024 and the SAMRC's contribution to this joint initiative is 2023/2024: R45m

We plan to allocate funding to the following projects/areas

- South African Diabetes Prevention Programme
- Student consumables
- Intramural Flagship project(s)
- information databases
- Self Initiated Research
- Global Forum on Bioethics in Research

- Contribution to International AIDS conference
- TB Report
- Clinical Cancer Centres
- Research Chairs Mental Health and Biostats
- Global Alliance on Chronic Diseases
- Grand Challenges
- Strategic leverage projects
- mRNA Vaccine Hub (leverage funding)
- TIA seed funding (leverage)
- 5 country study
- Possible collaboration with LifeArc (leverage)
- Study support
- Transformation
- Others, as they emerge

10 Programme Resource Considerations

Table 28. Resource consideration

Statement of financial perfomance	Budget	Audited outcome	Budget	Audited outcome	Budget	Audited outcome	Budget estimate	Approved budget	Outcome/ Budget Average %	Average growth rate (%)	Expenditure total Average (%)	Medium-term estimate			Average growth rate (%)	Expenditure total Average (%)
R thousand	2019/20		2020/21		2021/22		2022/23		2019/20-2022/23			2023/24	2024/25	2025/26	2022/23 - 2025/26	
Revenue																
Non-tax revenue	**423 680**	**550 907**	**499 465**	**464 270**	**530 963**	**572 367**	**545 049**	**545 049**	106,7%	-0,4%	40,3%	**527 184**	**536 857**	**595 104**	3,0%	**40,2%**
Sale of goods and services other than capital assets	395 812	500 596	476 057	431 761	484 749	534 672	499 669	499 669	105,9%	-0,1%	37,1%	483 784	493 542	547 457	3,1%	36,9%
Other non-tax revenue	27 868	50 309	23 408	32 503	46 214	37 695	45 380	45 380	116,1%	-3,4%	3,2%	43 400	43 315	47 647	1,6%	3,3%
Transfers received	**687 247**	**686 666**	**705 285**	**854 613**	**851 714**	**851 066**	**779 523**	**779 523**	**104,9%**	**4,3%**	**59,7%**	**797 597**	**833 489**	**870 996**	**3,8%**	**59,8%**
Total revenue	**1 110 927**	**1 237 573**	**1 204 750**	**1 318 883**	**1 382 677**	**1 423 433**	**1 324 572**	**1 324 572**	105,6%	**2,3%**	**100,0%**	**1 324 781**	**1 370 346**	**1 466 100**	**3,4%**	**100,0%**
Expenses															–	
Current expenses	**1 042 330**	**1 104 966**	**1 149 108**	**1 128 190**	**1 396 277**	**1 306 405**	**1 241 833**	**1 241 833**	**99,0%**	**4,0%**	**92,0%**	**1 246 497**	**1 261 401**	**1 352 611**	**2,9%**	**92,3%**
Compensation of employees	396 022	402 747	409 795	386 390	409 577	439 829	435 977	435 977	100,8%	2,7%	32,1%	464 369	494 568	524 244	6,3%	34,7%
Goods and services	623 577	685 166	716 022	715 094	962 700	842 436	781 406	781 406	98,1%	4,5%	58,2%	755 233	737 083	797 232	0,7%	55,6%
Depreciation	22 731	16 855	23 291	26 583	24 000	23 936	24 450	24 450	97,2%	13,2%	1,8%	26 895	29 750	31 135	8,4%	2,0%
Interest, dividends and rent on land	–	198	–	123	–	204	–	–	–	-100,0%	0,0%	–	–	–	–	–
Transfers and subsidies	**90 426**	**89 565**	**91 993**	**111 475**	**108 924**	**111 007**	**101 727**	**101 727**	**105,3%**	**4,3%**	**8,0%**	**104 161**	**108 945**	**113 489**	**3,7%**	**7,7%**
Total expenses	**1 132 756**	**1 194 531**	**1 241 101**	**1 239 665**	**1 505 201**	**1 417 412**	**1 343 560**	**1 343 560**	**99,5%**	**4,0%**	**100,0%**	**1 350 658**	**1 370 346**	**1 466 100**	**3,0%**	**100,0%**
Surplus/(Deficit)	**(21 829)**	**43 042**	**(36 351)**	**79 218**	**(122 524)**	**6 021**	**(18 988)**	**(18 988)**		**-176,1%**		**(25 877)**	**–**	**(0)**	**-97,9%**	

The SAMRC has four major funding sources and 2 types of funding: (a) baseline funding from National Treasury through NDoH to fund the core business of the SAMRC in line with section 3, object of the MRC, of the SAMRC Act No 58 of 1991. (b) funding from DSI for health innovation and technology development, in terms of Programme 3 of our SP and APP. (c) Internal (NDoH and DSI) additional funding and externally leveraged (national and international funders to funding) to supplement funding needed to address research priorities. (d) external contract funding that SAMRC researchers secure from national and international funders for specific projects in line with the SAMRC mandate.

11 Key Risks which may affect achievement of the outcomes

Table 29. Key risks on outcomes

Key outcome	Key risk context	Key mitigation measures
Programme 1: Administer health research effectively and efficiently		
• To ensure good governance, effective administration and compliance with government regulations • To promote the organisation's administrative efficiency to maximise the funds available for research	Lack of a broader SAMRC business continuity programme	• Comprehensive IT Business Continuity Programme • High IT dependency and contingency plans of identified critical business processes
	The risks of delayed support / slow response times by support functions to assist research units in executing the SAMRC mandate	• Management oversight • Online helpdesk services and technology • Contracts for major procurement spends • Policies, processes, SOPs
	Infrastructure deterioration and aging buildings and research assets	• Asset management and verification • Capital project refurbishment • Preventative maintenance plans • Revamping office space
	Cyberthreats and loss of SAMRC research data / intellectual property	• Firewall protection • Management monitoring and oversight • Policies, processes, SOPs
Programme 2: Lead the generation of new knowledge		
• To produce and promote scientific excellence and the reputation of South African health research • To provide leadership in the generation of new knowledge in health • To provide funding for the conduct of health research	H&S exposures on premises and community-based research programmes, delays programmes / project and adverse impact on future funding	• COVID-19 preparedness plans • National and international COVID-19 research funding • Sisonke Clinical Research Trial
	The risk involves weak project scoping, poorly conducted research, application of inconsistent research methodology and inadequate mentorship	• Establish Research Integrity Office • Human and animal ethics committees • Policies, guidelines and SOPs
	Progression of staff transformation across the organisation at senior research level impacted by various factors, including limited pool of public health scientists, behavioural scientist and medical clinical research scientists	• EE Strategy and Plan • Appointment of Intra-Mural Unit Deputy Directors • Diversity intervention initiatives / programs • Succession planning
	Early migration of EMC members	• Policies and guidelines
	New emerging / re-emerging epidemics and pandemics. Effect of climate change on health and increased prevalence of NCDs	• Realigned research focus • Increase capacity development funding aligned to the 20/21-24/25 Strategic Plan

Key outcome	Key risk context	Key mitigation measures
	Failure to appropriately utilise available funding to generate future funding opportunities Uncertainty about the extent to which the SAMRC can develop funding opportunities in the private sector	• Dedicated on-going investigation for further international funding opportunities
	Loss of critical skilled staff and senior team members due to public sector salary freeze	• Staff remuneration strategies • Ongoing discussions with the Union on employment terms and conditions
Programme 3: Support, through funding and other mechanisms, technology development and implementation, translation of research into policy and practice, and innovations in health and technology delivery to improve health		
To support the development of new or improved innovations aimed at improving health and targeting priority health research areas of focus	Limited funding for / value proposition of the innovation reducing interest from industry to commercialize or target market to implement the innovation	• IP and Commercialization Policy, Strategy and Procedures • External partnering to pursue commercialization opportunities
Programme 4: Build human capacity for the long-term sustainability of the South African health research		
To enhance the long- term sustainability of health research in South Africa by providing funding for the next generation of health researchers	Inattention to the strategic development of research scientists thus failing to assist in growing the pool of South African HDI medical research scientist	• Capacity building strategy for supporting the development of HDI research scientist • Scholarship and bursary programs • Strategic relations with institutions for collaboration and accessing researchers to build clinical research capacity
	Risk of a poor scientific review and oversight, i.e., project owners not understanding the science	• Implemented a quality review process for all externally funded projects • Scientific advisory committees established
Programme 5: Translate new knowledge into policies and practices to improve health		
To facilitate the translation of SAMRC research findings into public understanding, policy and practice	The risk of researchers not understanding the policy and practice environment leading to poor funding decisions / sub-optimally designed studies not meeting key stakeholder requirements	• SAMRC strategic and business plans in place • Oversight and leadership support by executive team • Ongoing guidance and training on research translation

12 Public Entity Description:

Table 30. Entity description

Name of the Public Entity	Mandate	Outcomes	Current Annual Budget (R thousand)
South African Medical Research Council	To improve the health of the country's population, through research, development and technology transfer	Refer to sections 7.1 to 7.5 of the strategic plan	R693 562 000 (excl. VAT)

13 Infra-structure Projects

Table 31. Infrastructure projects

No.	Project name and description	Programme	Output	Project start date	Project completion date	Total Estimated cost	Current year Expenditure
1	Replace air-conditioning in all regions	Programme 1	Upgrading of air-conditioning	Apr-23	Mar-24	1 500 000	0.00
2	Internal renovations & Construction - Ridge Road	Programme 1	Well maintained buildings	Apr-23	Mar-24	18 000 000	0.00
3	New Office furniture-	Programme 1	Well maintained buildings	Apr-23	Mar-24	1 500 000	0.00
5	PUDAC- Building D	Programme 1	Well maintained buildings	Apr-23	Mar-24	2 900 000	0.00
6	Ridge Road-New Ventilation System	Programme 1	Well maintained buildings	Apr-23	Mar-24	2 000 000	0.00
7	Computer Firewalls	Programme 1	Well Well mainained IT Systems	Apr-23	Mar-24	1 500 000	0.00
8	Computer Switches	Programme 1	Well maintained buildings	Apr-23	Mar-24	3 778 500	0.00
9	Network Cabling Upgrade	Programme 1	Well Well mainained IT Systems	Apr-23	Mar-24	467 500	
10	Wireless Access Points	Programme 1	Well maintained buildings	Apr-23	Mar-24	528 00	
11	VoIP Phones	Programme 1	Well Well mainained IT Systems	Apr-23	Mar-24	1 100 000	
12	Video conferencing upgrade	Programme 1	Well maintained buildings	Apr-23	Mar-24	2 100 000	
13	SAN Storage and Servers	Programme 1	Well maintained buildings	Apr-23	Mar-24	9 850 000	

14 Public Private Partnerships

None

PART D – TECHNICAL INDICATOR DESCRIPTIONS

Table 32. Programme 1 - Administration

Indicator Title	1.1.1 A clean audit opinion on the SAMRC from the Auditor-General
Definition	Audit opinion expressed by auditor general
Source of Data	Documented Evidence: Annual Report; Auditor General's Report
Method of Calculation/Assessment	No calculation required
Means of Verification	Final audit report determines the validity of the performance
Assumptions	All records and evidence presented to the Auditors are reliable and valid
Calculation Type	Non-cumulative
Reporting Cycle	Annual
Desired Performance	To achieve a clean audit opinion from the Auditor General
Indicator Responsibility	CFO

Indicator Title	1.2.1 Percentage of the SAMRC budget spent on administration
Definition	Percentage of the SAMRC total budget spent on salaries and operations of all corporate administrative functions
Source of Data	Documented Evidence: Financial Records
Method of Calculation/Assessment	Count
Means of Verification	Management reports received from Finance
Assumptions	The financial records at the SAMRC are reliable and valid
Calculation Type	Non-cumulative
Reporting Cycle	Quarterly
Desired Performance	To achieve set targets for the reporting period
Indicator Responsibility	CFO

Table 33. Programme 2 - Core Research

Indicator Title	2.1.1 Number of accepted and published journal articles, book chapters and books by SAMRC affiliated and funded authors
Definition	Total number of accredited publications in which one of the authors has a listed affiliation as the SAMRC, usually because the author is an SAMRC intra- or extramural unit, funded through baseline or contract funds. Publications are full length papers, short communications, letters, editorials and commentaries.
Source of Data	Knowledge & Information Management (KIMS)
Method of Calculation/Assessment	Count the number of published journal articles, book chapters and books with an author declaring employment by, affiliation to an entity of, or funding support from SAMRC.

Means of Verification	• Submissions received by the due date will be included in the relevant quarter. • The earliest publication date on the publication is the date used for allocation of publication to a specific quarter of the financial year. • Each publication can only be counted once in this indicator, but may also be counted in other indicators of this progamme 2. • In cases where the article is published electronically, e.g. e-pub; published ahead of print, and there is a print version of the same article to follow, the earliest date of publication will be considered for counting. • In cases where the researcher is both the author/editor of the book but also published a chapter in a book, it can be counted either as a chapter or a book, and not both.
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Quarterly
Desired Performance	To achieve set targets for the reporting period
Indicator Responsibility	President & CEO and CROO

Indicator Title	2.1.2 Number of accepted and published journal articles by SAMRC grant-holders with acknowledgement of the SAMRC
Definition	Total number of accredited publications that mention SAMRC funding. Publications are full length papers, short communications, letters, editorials and commentaries. Publications are regarded as accredited when they are published in journals. These publications must mention the SAMRC by name in the acknowledgement section of the journal article. The authors may or may not be affiliated with the SAMRC
Source of Data	Knowledge & Information Management (KIMS)
Method of Calculation/Assessment	Count the number of published journal articles by SAMRC grant-holders during the reporting period, with an acknowledgement of SAMRC
Means of Verification	• Submissions received by the due date will be included in the relevant quarter. • The earliest publication date on the publication is the date used for allocation of publication to a specific quarter of the financial year. • Each publication can only be countedonce in this indicator, but may also be counted in other indicators of this progamme 2. • In cases where the article is published electronically, e.g. e-pub; published ahead of print, and there is a print version of the same article to follow, the earliest date of publication will be considered for counting. • In cases where the researcher is both the author/editor of the book but also published a chapter in a book, it can be counted either as a chapter or a book, and not both.
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Quarterly

Desired Performance	To achieve set targets for the reporting period
Indicator Responsibility	President & CEO and CROO

Indicator Title	2.2.1 Number of accepted and published journal articles where the first and/or last author is affiliated to the SAMRC
Definition	Total number of publications (original articles, editorials, commentaries or letters) where the first and/or last author has a listed affiliation as the SAMRC, usually because the author is in an SAMRC intra or extramural research unit, funded through baseline or contract funds.
Source of Data	Knowledge & Information Management (KIMS)
Method of Calculation/Assessment	Count the number of published journal articles with the first or last author declaring employment by, affiliation to an entity of, or funding support from SAMRC.
Means of Verification	• Submissions received by the due date will be included in the relevant quarter. • The earliest publication date on the publication is the date used for allocation of publication to a specific quarter ofthe financial year. • Each publication can only be counted once in this indicator, but may also be counted in other indicators of this progamme 2. • In cases where the article is published electronically, e.g. e-pub; published ahead of print, and there is a print version of the same article to follow, the earliest date of publication will be considered for counting. • In cases where the researcher is both the author/editor of the book but also published a chapter in a book, it can be counted either as a chapter or a book, and not both.
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Quarterly
Desired Performance	To achieve set targets for the reporting period
Indicator Responsibility	President & CEO and CROO

Indicator Title	2.3.1 Number of research grants awarded by the SAMRC
Definition	Total number of Research grants awarded to academic institutions by the SAMRC
Source of Data	Departmental records
Method of Calculation/Assessment	Count the number of research grants awarded by the SAMRC
Means of Verification	EMC submission and approval; Letter/signed contract of renewal/new award and spreadsheet from SIR, GIPD, Office for AIDS, TB and Malaria Research, SAAVI and Flagship. Team validate the source documents to check whether the new/renewal research grant falls within the reporting period
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Annual
Desired Performance	To achieve set target for the reporting period

Indicator Responsibility	Director: GIPD

Table 34. Programme 3 - Innovation and Technology

Indicator Title	3.1.1 Number of new innovation and technology projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions
Definition	Total number of new projects funded by the SAMRC that are aimed at developing, testing and/or implementing new or improved health solutions, such as, but not limited to, new diagnostics, vaccines, drugs, e-health interventions, medical devices and treatment regimens. This includes new/additional scopes of work on existing or previously funded projects (i.e. project extensions and expansions).
Source of Data	Unit records
Method of Calculation/Assessment	Count the number of new and/or extension/expansion projects approved for funding and contracted that meet the above definition
Means of Verification	• EMC approval (sign off) to fund new and/or extension/expansion projects that meet the above definition during the reporting period • Signed funding agreements with effective dates within the reporting period
Assumptions	Evidence presented to AGSA is valid and reliable
Calculation Type	Cumulative
Reporting Cycle	Annual
Desired Performance	To achieve set target for the reporting period
Indicator Responsibility	Exec Director: GIPD

Indicator Title	3.1.2 Number of ongoing innovation and technology projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions
Definition	Total number of projects funded by the SAMRC that are aimed at developing, testing and/or implementing new or improved health solutions that were still in progress within the reporting period. This includes projects that received a funding disbursement during the reporting period and those that did not receive a funding disbursement during the reporting period but continued to be executed using funding previously disbursed by the SAMRC for that purpose.
Source of Data	Departmental records
Method of Calculation/Assessment	Count of the number of active projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions
Means of Verification	• Active funding contracts in place • Project progress reports
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Annual

Desired Performance	To achieve set targets for the reporting period
Indicator Responsibility	Exec Director: GIPD

Indicator Title	3.2.1 Number of innovation disclosures made by the SAMRC intramural research and innovation units and platforms
Definition	New disclosures made to the SAMRC Technology Transfer Office of possible new intellectual property with potential for social and/or economic impact
Source of Data	Departmental records
Method of Calculation/Assessment	Count the number of invention disclosure forms submitted to the SAMRC TTO
Means of Verification	New invention disclosure forms
Assumptions	Evidence presented to AGSA is valid and reliable
Calculation Type	Cumulative
Reporting Cycle	Annual
Desired Performance	To achieve set targets for the reporting period
Indicator Responsibility	Exec Director: GIPD

Table 35. Programme 4 - Capacity Development

Indicator Title	4.1.1 Number of awards (scholarships, fellowships and grants) by the SAMRC for MSc, PhD, Postdocs and Early Career Scientists
Definition	Total number of total or part scholarships/ fellowships and grants funded by the SAMRC for post-graduate study at masters, doctoral and post-doctoral levels
Source of Data	RCD records
Method of Calculation/Assessment	Count of the number of scholarships/fellowships/grants funded by the SAMRC to enhance sustainability of health research in South Africa
Means of Verification	• EMC submission and approval (sign off) to indicate the number of scholars funded • signed contracts and proof of payment • list of declined awards to verify that those scholars were not included in the list submitted to SPMO
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Annual
Desired Performance	To achieve set target for the reporting period
Indicator Responsibility	President & CEO and CROO

Indicator Title	4.1.2 Number of awards by the SAMRC to female MSc, PhD, Postdocs and Early Career Scientists
Definition	Total number of total or part awards by the SAMRC to female recipients for post-graduate study at masters, and doctoral levels
Source of Data	RCD records
Method of Calculation/Assessment	Count of the number of grants/scholarships/fellowships awarded to female recipients by the SAMRC

Means of Verification	• EMC submission and approval (sign off) to indicate the number of female scholars funded • signed contracts and proof of payment • list of declined awards to verify that those scholars were not included in the list submitted to SPMO
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Annual
Desired Performance	To achieve set target for the reporting period
Indicator Responsibility	President & CEO and CROO

Indicator Title	4.1.3 Number of awards by the SAMRC to Black South African citizens and permanent resident MSc, PhD, Postdocs and Early Career Scientists classified as African
Definition	Awards by the SAMRC to Black South African citizens and permanent resident MSc, PhD, Postdocs and Early Career Scientists classified as African
Source of Data	RCD records
Method of Calculation/Assessment	Count of the number of awards to African South African citizens and permanent resident students receiving SAMRC funding
Means of Verification	• EMC submission and approval (sign off) to indicate the number of scholars funded • signed contracts and proof of payment • list of declined awards to verify that those scholars were not included in the list submitted to SPMO
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Annual
Desired Performance	To achieve set target for the reporting period
Indicator Responsibility	President & CEO and CROO

Indicator Title	4.1.4 Number of awards by the SAMRC to MSc, PhD, Postdocs and Early Career Scientists from historically disadvantaged institutions (HDIs)
Definition	Total number of scholarships/fellowships for students or SAMRC grant holders from previously disadvantaged institutions (HDIs)
Source of Data	RCD records
Method of Calculation/Assessment	Count of the number of scholarships/fellowships for students or SAMRC grant holders from previously disadvantaged institutions (HDIs)
Means of Verification	• EMC submission and approval (sign off) to indicate the number of scholars funded • signed contracts and proof of payment • list of declined awards to verify that those scholars were not included in the list submitted to SPMO
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Annual

Desired Performance	To achieve set target for the reporting period
Indicator Responsibility	President & CEO and CROO

Indicator Title	4.1.5 Number of MSc and PhD students graduated or completed
Definition	Develop human capital within the organisation to ensure excellence in all areas of operation
Source of Data	RCD and Units records
Method of Calculation/Assessment	Count the number of MSc and PhD students graduated or completed
Means of Verification	Documentary evidence received from the relevant academic institution or copy of certificate from graduate
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Annual
Desired Performance	To achieve set target for the reporting period
Indicator Responsibility	President & CEO and CROO

Table 36. Programme 5 - Research Translation

Indicator Title	5.1.1 Number of local or international policies, reports and guidelines that reference SAMRC research
Definition	Total number of local/international policies, reports and guidelines that have been influenced by SAMRC research
Source of Data	Unit records
Method of Calculation/Assessment	Count the number of local/international policies and guidelines that reference SAMRC research
Means of Verification	• Units are required to have their updated publication lists and documentary evidence (publication / journal) uploaded tothe SAMRC Homepage. • All outputs must be verifiable for audit purposes. • This indicator has external interdependencies hence the SPMO team having to physically search for the publications where the SAMRC is referenced.
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Bi-annual
Desired Performance	To achieve set targets for the reporting period
Indicator Responsibility	President & CEO and CROO

Indicator Title	5.1.2 Number of reports and guidelines (co)produced by the SAMRC intramural researchers
Definition	Total number of reports and guidelines produced by SAMRC intramural researchers
Source of Data	Unit records/Internet search
Method of Calculation/Assessment	Count the number of reports and guidelines produced by authors within the SAMRC intramural research units
Means of Verification	• Publications sourced by the due date will be included in the relevantquarter. • The earliest publication date on the publication is the date used for allocation of publication to a specific quarter of the financial year.
Assumptions	The evidence presented to the auditors is reliable, relevant and valid

Calculation Type	Cumulative
Reporting Cycle	Bi-annual
Desired Performance	To achieve set targets for the reporting period
Indicator Responsibility	President & CEO and CROO

Indicator Title	5.1.3 Number of national or international bodies/ committees SAMRC employees serve on
Definition	Total number of SAMRC intramural researchers who have been invited or is serving on national or international bodies or committees
Source of Data	Unit/HR records
Method of Calculation/Assessment	Count the number of SAMRC researchers contributing to understanding of research findings, guiding policy and service improvement processes, or influencing research funding, through serving as technical advisors, committee members, giving invited (non-conference) presentations at local, Provincial, National and global levels (UN bodies, including but not limited to WHO, UN Office on Drugs & Crime, and World Bank, major funders)
Means of Verification	Valid proof of membership
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Annual
Desired Performance	To achieve set target for the reporting period
Indicator Responsibility	President & CEO and CROO

Indicator Title	5.1.4 Number of conferences, seminars and continuing development points workshops supported by the SAMRC
Definition	Total number of conferences, seminars and CPD workshops supported by the SAMRC
Source of Data	Unit/HR records
Method of Calculation/Assessment	Count the number of SAMRC seminars and CPD workshops which the SAMRC supported financially
Means of Verification	Proof of payment; evidence of CPD points allocated for attendance and participation
Assumptions	The evidence presented to the auditors is reliable, relevant and valid
Calculation Type	Cumulative
Reporting Cycle	Annual
Desired Performance	To achieve set target for the reporting period
Indicator Responsibility	President & CEO and CROO

ANNEXURES

Annexure A: Consolidated Indicators

Outcome	Outputs	Output Indicator	Annual Target
1.1. To ensure good governance, effective administration and compliance with government regulations	Clean audit opinion	1.1 A clean audit opinion on the SAMRC from the Auditor-General	Clean Audit
1.2 To promote the organisation's administrative efficiency to maximise the funds available for research	Efficient expenditure of government allocated budget	1.2 Percentage of the SAMRC total budget spent on administration	20%
2.1. To produce and promote scientific excellence and the reputation of South African health research	Published journal articles, book chapters and books	2.1.1 Number of accepted and published journal articles, book chapters and books by SAMRC affiliated and funded authors	700
	Published journal articles by SAMRC grant-holders	2.1.2 Number of accepted and published journal articles by SAMRC grant-holders with acknowledgement of the SAMRC	180
2.2 To provide leadership in the generation of new knowledge in health	Published journal articles with the first or last author	2.2.1 Number of accepted and published journal articles where the first and/or last author is affiliated to the SAMRC	300
2.3 To provide funding for the conduct of health research	Research grants awarded	2.3.1 Number of research grants awarded by the SAMRC	160
3.1 To support the development of new or improved innovations aimed at improving health and targeting priority health areas	Innovation projects and platforms funded	3.1.1 Number of new innovation and technology projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions	4
		3.1.2 Number of ongoing innovation and technology projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions	30

3.2 To develop new or improved innovations aimed at improving health in key priority areas	Innovations developed by SAMRC researchers	3.2 Number of innovation disclosures made by the SAMRC intramural research and innovation units and platforms	1
4. To enhance the long-term sustainability of health research in South Africa by providing funding for the next generation of health researchers	SAMRC bursaries and/or scholarships and/or fellowships provided for MSc, PhD, Postdocs and Early Career Scientists	4.1 Number of awards (scholarships, fellowships and grants) by the SAMRC for MSc, PhD, Postdocs and Early Career Scientists	150
	Female students and/or Early Career Scientists receiving SAMRC funding	4.2 Number of awards by the SAMRC to female MSc, PhD, Postdocs and Early Career Scientists	110
	African South African citizens and/or permanent residents students receiving SAMRC funding	4.3 Number of awards by the SAMRC to Black South African citizens and permanent resident MSc, PhD, Postdocs and Early Career Scientists classified as African	110
	SAMRC scholarships/ fellowships provided for MSc, PhD, Postdocs and Early Career Scientists at HDIs	4.4 Number of awards by the SAMRC to MSc, PhD, Postdocs and Early Career Scientists from historically disadvantaged institutions (HDIs)	80
	MSc and PhD students graduated or completed	4.5 Number of MSc and PhD students graduated or completed	85
5. To facilitate the translation of SAMRC research findings into public understanding, policy and practice	Local or international policies, reports and guidelines that reference SAMRC research	5.1 Number of local or international policies, reports and guidelines that reference SAMRC research	6
	Reports and guidelines produced by SAMRC intramural authors	5.2 Number of reports and guidelines (co)produced by the SAMRC intramural researchers	7
		5.3 Number of national or international bodies/committees SAMRC employees serve on	50
	SAMRC researchers invited/serving on national and international bodies/committees	5.4 Number of conferences, seminars and continuing development points workshops supported by the SAMRC	10

Annexure B – SAMRC's Materiality and Significance Framework 2022/23

The proposed Materiality and Significance Framework for the SAMRC, in terms of the Treasury Regulation 28.3.1 and the National Treasury Practice Note on Applications under of Section 54 of the Public Finance Management Act (PFMA), is as follows –

Section 50: **Fiduciary duties of accounting authorities:**

1) The accounting authority for a public entity must –

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
(c) on request, disclose to the executive authority responsible for that public entity or the legislature to which the public entity is accountable, all material facts, including those reasonably discoverable, which in any way may influence the decisions or action of the executive authority or that legislature;	Disclose all material facts.	The Board will disclose to the National Department of Health all material facts as requested and all material facts not requested, including those reasonably discoverable, which in any way may influence the decisions or action of the National Department of Health, at the discretion of the Board.

Section 51: ***General responsibilities of accounting authorities:***

1) An accounting authority for a public entity –

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
(g) must promptly inform the National Treasury on any new entity which that public entity intends to establish or in the establishment of which it takes the initiative, and allow the National Treasury a reasonable time to submit its decision prior to formal establishment; and	Disclose all material facts timeously.	Full particulars to be disclosed to the Minister of Health for approval after which it is to be presented to Treasury.

Section 54: ***Information to be submitted by accounting authorities:***

2) Before a Public Entity concludes any of the following transactions, the Accounting Authority for the Public Entity must promptly and in writing inform the relevant Treasury of the transaction and submit relevant particulars of the transaction to its Executive Authority for approval of the transaction:

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
a) establishment of a company;	Any proposed establishment of a legal entity.	Full particulars to be disclosed to the Minister of Health for approval and National Treasury for noting
b) participation in a **significant** partnership, trust, unincorporated joint venture or similar arrangement;	Qualifying transactions exceeds R15Mil (based on 1% - 2% guidance of total average SAMRC assets, as at 31 March 2022). This includes research collaborative arrangements	
c) acquisition or disposal of a **significant** shareholding in a company;	Greater than 20% of shareholding.	
d) acquisition or disposal of a **significant** asset;	Qualifying transactions exceeds R15Mil (based on 1% - 2% guidance of total average	Any asset that would increase or decrease the overall operational functions of the

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
	SAMRC assets, as at 31 March 2022). Including Financial Leases	SAMRC, outside of the approved strategic plan and budget.
e) commencement or cessation of a **significant** business activity; and	Any activity not covered by the mandate / core business of the SAMRC and that exceeds the R15Mil transaction value (based on 1% - 2% guidance of total average SAMRC assets, as at 31 March 2022).	Full particulars to be disclosed to the Minister of Health and Minister of Finance (National Treasury) for approval (simultaneous submission).
f) a significant change in the nature or extent of its interest in a significant partnership, trust, unincorporated joint venture or similar arrangement.	Qualifying transactions exceeds R15Mil (based on 1% - 2% guidance of total SAMRC assets, as at 31 March 2022)	

Section 55: Annual report and financial statements

2) The annual report and financial statements referred to in subsection (1) (d) ("financial statements") must -

a) fairly present the state of affairs of the Public Entity, its business, its financial results, its performance against predetermined objectives and its financial position as at the end of the financial year concerned;

b) include particulars of—

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
(i) any material losses through criminal conduct and any irregular expenditure and fruitless and wasteful expenditure that occurred during the financial year:	All instances	• Report quarterly to the Minister of Health. • Report annually in the Annual Financial Statements
(ii) any criminal or disciplinary steps taken as a consequence of such losses or irregular expenditure or fruitless and wasteful expenditure;		
(iii) any losses recovered or written off;		
(iv) any financial assistance received from the state and commitments made by the state on its behalf; and		
(v) any other matters that may be prescribed.	All instances, as prescribed	

Section 56:

Assignment of powers and duties by accounting authorities

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
1) The accounting authority for a public entity may— (a) In writing delegate any of the powers entrusted or delegated to the accounting authority in terms of this Ac, to an official in that public entity (b) Instruct an official in that public entity to perform any of the duties assigned to the accounting authority in terms of this Act.	Values excluded from the Delegation of Authority Framework Policy.	Instances that are excluded from the Delegation of Authority Framework Policy.
2) A delegation or instruction to an official in terms of subsection (1)— (c) Is subject to any limitations and conditions the accounting authority may impose; (d) May either be to a specific individual or to the holder of a specific post in the relevant public entity; and (e) Does not divest the accounting authority of the responsibility concerning the exercise of the delegated power or the performance of the assigned duty.	Values excluded from the Delegation of Authority Framework Policy.	Instances that are excluded from the Delegation of Authority Framework Policy.

Treasury Circulars and Guidelines related to Supply Chain Management

1) National Department of Health and National Treasury are to be notified of procurement transactions exceeding R15 Million;
2) National Treasury to be informed of variation amounts in excess of:
   a. 20% or R20 Million (including applicable taxes) for construction related orders; and
   b. 15% or R15 Million (including applicable taxes) for goods / service related orders

The materiality level mentioned above was calculated using the guidance practice note of the National Treasury. Using these guidance parameters below, the SAMRC materiality level calculation outcomes are as follows:

Element range	% to be applied against R value	Audited Value at 31 March 2022	Calculated Materiality & Significance Value
Total Assets (1%-2%)	1.41%	R1 061 673 881	R15 000 000

The SAMRC materiality and significance value will be R15 Million based on the percentage range of the total asset element and the significant fluctuations in the month-to-month total asset value. This is the most stable element, given the performance statement outcomes associated with the current economic climate challenges.

Annexure C: Acronyms

4IR	4th Industrial Revolution	NIH	National Institutes of Health
AIDS	Acquired Immuno Deficiency Syndrome	NIMS	National Injury & Mortality Surveillance
AU	African Union	NRF	National Research Foundation
BOD	Burden of Disease	NSDA	Negotiated Service Delivery Agreement
BRIC	Brazil, Russia, India and China	PhD	Doctor of Philosophy
CANSA	Cancer Association of South Africa	PFMA	Public Finance and Management Act
CEO	Chief Executive Officer	PHEF	Public Health Enhancement Fund
CRA	Comparative Risk Assessment	POPI	Protection of Proprietary Information
CSIR	Council for Scientific and Industrial Research	PPIP	Perinatal Problem Identification Programme
DHE	Department of Higher Education	Prof	Professor
DR	Doctor	RFA	Request for Application
EE	Employment Equity	SACENDU	South African Community Epidemiology Network on Drug Use
EMU	Extramural Research Units	SADC	Southern African Development Community
HIV	Human Immunodeficiency Virus	SADHS	South African Demographic Health Survey
HR	Human Resources	SAMRC	South African Medical Research Council
HRMS	Human Resource Management System	SDGs	Sustainable Developments Goals
HSRC	Human Sciences Research Council	SETI	Science, Engineering, & Technology Institution
HVTN	HIV Vaccine Trials Network	SHIP	Strategic Health Innovation Partnerships
MDG	Millennium Development Goals	SIR	Self-Initiated Research
MOU	Memorandum of Understanding	SP	Strategic Plan
Mr	Mister	TB	Tuberculosis
MTEF	Medium Term Expenditure Framework	UKMRC	United Kingdom Medical Research Council
MTSF	Medium-Term Strategic Framework	UHC	Universal Health Care
NCD	Non-Communicable Disease	UN	United Nations
NDoH	National Department of Health	US	United States
NDP	National Development Plan	USA	United States of America
NHI	National Health Insurance	VAT	Value Added Tax
NHRC	National Health Research Committee	WHO	World Health Organization
NHSP	National Health Scholars Programme		