



**South African Medical Research Council
(SAMRC)**

ANNUAL PERFORMANCE PLAN

For 2019/2020

Date of Tabling:

June 2019

FOREWORD



The SAMRC 2019/20 Annual Performance Plan is drawn from the 2015/16 – 2019/20 Strategic Plan which remains aligned to the new mandate of the reformed health sector and South Africa's changing health research needs. This positions the SAMRC to respond to the Sustainable Development Goals (SDGs), the National Development Plan (NDP): Vision 2030 and the Medium Term Strategic Framework (MTSF) (2014 – 2019).

I am encouraged by the SAMRC's commitment to contribute to Government's vision of 'A long and healthy life for all South Africans'. The research agenda continues to address the quadruple burden of

disease, linked to both social determinants of health and the structural issues in health systems, by conducting, funding and promoting innovative and cutting-edge medical science that encompasses research and development, public health (epidemiology and health economics) and healthcare ethics.

The SAMRC has further committed itself to contribute and influence the NDoH's healthcare strategy to extend its role in engaging and providing technical support to the NDoH for the implementation of the National Health Insurance (NHI) Policy.

I thank the Board, the President and staff of the SAMRC for the development of this APP and wish them success in the execution of this plan.

Dr Zwelini Mkhize, MP
Executive Authority, Minister of Health

OFFICIAL SIGN OFF

It is hereby certified that this South African Medical Research Council's 2019/20 Annual Performance Plan:

- was developed by the management of the South African Medical Research Council under the guidance of its President, Professor Glenda Gray and approved by members of the SAMRC Board under the guidance of its Chairperson, Professor Mike Sathekge.
- considers all the relevant policies, legislation, and other mandates for which the South African Medical Research Council is responsible and accountable.
- accurately reflects the 2019/20 strategic outcome oriented objectives and performance targets which the South African Medical Research Council will endeavour to achieve over the period 2019-20 by implementing its 5-year Strategic Plan 2015/16 – 2019/20.



Mr Nick Buick
Chief Financial Officer (CFO)

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Signature



Dr Mongezi Mdhuli
Chief Research Operations Officer

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Signature



**Prof Glenda Gray
President**

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Signature



**Prof Machaba (Mike) Sathekge
Board Chairperson**

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Signature



**Approved by: Dr Zwelini Mkhize, MP
Executive Authority**

A handwritten signature in black ink, clearly legible as 'Z. Mkhize'.

Signature

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PART A
STRATEGIC OVERVIEW

PART A: STRATEGIC OVERVIEW

1. Situational Analysis

1.1 The SAMRC's Research and Performance

The South African Medical Research Council's (SAMRC) strategy is guided by the amended SAMRC Act (No. 58 of 1991), the country's health priorities defined by the quadruple burden of disease and top ten causes of mortality, and encompasses the social determinants of health and structural issues embedded in health systems. There are thus three interconnected concepts that defines the work of the SAMRC – leading impact, connecting and catalysing change.

The SAMRC together with the National Department of Health (NDoH) and other strategic partners like the Public Health Enhancement Fund is committed to developing the next generation of clinician scientists and growing the number of health related PhDs to improve the delivery of evidence based health care. The SAMRC is also committed to developing capacity in rural and under-served areas and supporting a knowledge economy in historically disadvantaged institutions

The SAMRC is in its 50th year since inception and continues to cooperate, collaborate and strengthen relationships with the NDoH to formulate, facilitate, implement and support a research agenda that leads to the successful achievement of the SDGs and the NDP. The SAMRC is thus committed to continue playing a critical role in engaging and providing scientific and technical support to the NDoH in its endeavour to attain universal health coverage and be responsive to the health needs of South Africans.

The SAMRC strategic plan encompasses 4 goals with a central feature of impacting on the health outcomes of South Africans. These goals will inform the research agenda and action plans of the council until 2019/20. The implementation of its research agenda will be realised through relevant research projects conducted by both intra- and extra-mural research units, centres, offices and platforms of the SAMRC, as well as through funding of self-initiated projects, Request for Applications (RFAs) and capacity development initiatives.

The SAMRC is committed to conduct research that will result in health systems strengthening. Our research forms the basis for the NDoH to optimise the way it delivers health care in South Africa. The Burden of Disease Research Unit of the SAMRC is critical to South Africa in that it has consistently tracked causes of death for almost two decades, providing valuable information to the NDoH. Our Health Systems Research Unit has been instrumental in supporting the NDoH in the roll out of PMTCT. Our Cochrane Research Unit's research has contributed to WHO clinical guidelines demonstrating the extent of our impact on research.

The SAMRC and National Department of Health hosted the 2018 BRICS TB Research Network with delegates from BRICS countries and WHO. This meeting formed part of the multi-country vision to accelerate research and innovation in TB, through the BRICS cooperation mechanisms and as an endeavour to collaborate with BRICS Ministries of Health and scientists to address the problems with TB in BRICS countries. This collaboration will work together to develop robust research into new tools, diagnostics, vaccines, drugs with the aim to inform and accelerate the best use of existing and new interventions in TB control and prevention toward elimination. The objective is for the BRICS to take the lead in a process that will contribute to the elimination of TB by investing in new diagnostics, vaccines, and drugs as well as contributing to reducing the pill burden through shortened treatment regimens.

The SAMRC is involved in cutting edge state of the art HIV & TB research. We contribute to the National and International scientific agenda by evaluating TB drugs, TB vaccines, Microbicides and HIV vaccines. The Tuberculosis Programme at SHIP/SAMRC is managed in 3 distinct components, i.e. drug discovery, diagnostics (includes medical devices) and vaccines, overseen by different individuals. The strategy is aligned with the national priorities. Notable advances in TB diagnostic technologies have been made in the past several years, and the potential exists for translating these developments into meaningful improvements in global TB clinical care and control.

The SAMRC funds Intramural and Extramural Research Units, Research Centres: HIV/TB, Cancer, and Malaria; and is the major African funder of research and innovation. All SAMRC Extramural Research Units are founded on scientific excellence and leadership by an internationally recognised researcher and a research team that is mandated to contribute towards National System of Innovation (NSI) indicators and developing the next generation of research leaders. The units are established within research institutions which are primarily South African universities and their goal is to generate new knowledge in strategic areas that are pertinent for the South African context. For the SAMRC Extramural Research Units, our financial support is approved in rolling 5-year cycles, based on satisfactory scientific productivity and other performance indicators, usually up to fifteen (15) years.

The SAMRC has a state of the art Non-Human Primate Research Unit that maintains captive bred Vervet and Rhesus monkeys (2nd and 3rd generation) and is the only African facility that breeds/produces captive bred African primates for biomedical research. The unit boasts the infrastructure and capacity to maintain and utilize primate models, allowing them to provide animal care and management as well as technical and scientific support to other units. Research undertaken by this unit is carried out either through collaborative research and/or contractual. The unit's established rhesus macaque facility will be vital in the next few years as SAAVI revives the HIV vaccine candidate development programme for South Africa.

As is evident, the SAMRC's strength is its truly comprehensive, integrated and national health research approach; borne of decades of experience in conducting (intramural) and supporting (extramural) health research focused on South Africa's health priorities. The SAMRC's activities uniquely straddle issues of health, including population health (with specific social science expertise), disease and disease mechanisms (with specific biomedical science expertise) and health systems, settings prevention and policy research, in which the SAMRC plays a unique and crucial national role as the champion and custodian of South African medical and health research.

Over the years the SAMRC has conducted and funded clinical trials, epidemiological research and surveys that provide vital information that is used by the NDoH and government in general for introducing highly efficacious health interventions such as rotavirus and pneumococcal vaccines for children to impact on child morbidity and mortality, health planning and assessing progress towards realising government's objectives. Some of these studies are conducted frequently as they form part of internationally accepted surveillance systems such as the demographic and health surveys and include the:

- National Tuberculosis Prevalence Survey.
- National Cause-of-Death validation.
- Evolving Risk Factors for Cancers in African Populations (ERICA-SA).
- Evaluation of health facility information systems.
- Burden of disease information (evaluation and synthesis of data).
- Improving population health information.
- South African Health and Demographic Surveys.
- Evaluation of health information systems for National Health Insurance.
- Rural Cancer Registry.
- Support of the National Cancer Registry.
- Second National Survey of Female and Child Homicide.

This research enables the Department of Health to plan relevant or responsive initiatives. Findings from these surveillance platforms and results from this clinical and epidemiological research has the potential to be translated into policy and practice.

The SAMRC, in response to the emerging antimicrobial resistance (AMR) crisis, has established the Centre for the Study of Antimicrobial Resistance (CAMRA) at the University of Cape Town (UCT) in South Africa. CAMRA is the first South African unit dedicated to studying the origin, development and fundamental drivers of antimicrobial resistance (AMR) and multidrug-resistant pathogens.

The establishment of the SAMRC's Extramural Unit, CAMRA, forms a part of the SAMRC's response strategy to existing and emerging disease burdens and will strengthen the World Health Organization's (WHO) critical call for attention to the crisis of drug resistance – which has been prioritised alongside global warming. The proposed work on AMR funded by the SAMRC at CAMRA is noteworthy in that it will also study non-TB AMR, which is a burgeoning health problem in South Africa. Preventative strategies, antibiotics, vaccination, economic and psychosocial issues, and promotion of the appropriate use of antibiotics – also known as antibiotic stewardship – are among the many aspects of antimicrobial resistance that demand attention.

The SAMRC has recently invested in similar research projects including collaborative research with the African Academy of Sciences (AAS) into the scope of antimicrobial resistance (AMR) in Africa where, although resistance to commonly prescribed antibiotics has been witnessed, the full scope of the burden is not yet understood as 40% of African countries do not have sufficient data on AMR.

CAMRA will combine the efforts of several multi-disciplinary national and international authorities in the fields of TB and antimicrobial resistance to study the movement and distribution of drugs in the body, molecular sequencing and the development of inhaled drugs. The Unit includes members and collaborators from the University of KwaZulu-Natal (UKZN), University of Pretoria (UP), Stellenbosch University (SUN), Walter Sisulu University (WSU), Sefako Makgatho Health Sciences University (SMU), SA National Institute of Communicable Diseases (NICD), London School of Hygiene and Tropical Medicine, University of Parma (Italy), and the Baylor Scott & White Research Institute in Dallas (Texas), in addition to those from UCT.

CAMRA is expected to span 10 to 15 years and hopes to generate data to leverage further research.

The SAMRC has invested R4 million in the development and delivery of new and affordable antibiotic treatments for drug resistant neonatal sepsis and sexually transmitted infections. Conducted by the Global Antibiotic Research and Development Partnership (GARDP), the clinical research studies aim to have a treatment for drug resistant gonorrhoea registered in a number of countries, including South Africa, and two new treatments for neonatal sepsis developed.

The World Health Organization (WHO) estimates that 3 million new-borns suffer from sepsis globally every year and that three out of every ten deaths are as a result of neonatal sepsis caused by antimicrobial resistance (AMR). Neonatal sepsis is of growing concern to South Africa where more hospital births are likely to expose new-borns to multi-drug resistant bacteria. Collaborating and investing in new drug development projects such as these is just one of our contributions towards achieving the sustainable development goal to reduce neonatal mortality. The research also intends to roll out a treatment for drug resistant gonorrhoea, which infects 78 million people globally. According to the WHO, antibiotic resistance is making the infection much harder to treat as the bacteria that causes it evolves every time a new class of antibiotics is introduced to treat the infection.

1.2 Organisational Environment

1.2.1 Vision, Mission, Values and Strategic Oriented Goals

Vision

Building a healthy nation through research and innovation.

Mission

To improve the nation's health and quality of life by conducting and funding relevant and responsive health research, development, innovation and research translation.

SAMRC mandate

The objects of the SAMRC are, through research, development, and technology transfer, to promote the improvement of the health and the quality of life of the population of the Republic and to perform such other functions as may be assigned to the SAMRC by or under this Act.

Organisational values

The SAMRC's three values are:

- PIONEERING – we push the boundaries between the known and the unknown to further our knowledge of human existence.
- COLLABORATIVE – we celebrate the capacity of collective minds toward a common goal.
- EXCELLENCE – distinction is in everything we do.

1.2.2 Our Strategic Outcome Oriented Goals

The SAMRC has 4 strategic goals that are aligned with the SAMRC's four budget programmes, Sustainable Development Goals (SDG), National Development Plan (NDP) 2030 (Tables 1 - 4) and contributes to the strategic objectives of the National Department of Health.

Table 1: Goal 1

Goal 01	Administer health research effectively and efficiently in South Africa
Goal Statement	Strengthening of financial processes towards a clean audit opinion from the Auditor General
Indicator	1.1. Compliance with legislative prescripts, reflected in the final audit report relating to the processes and systems of the SAMRC 1.2. Percentage (%) of the 2019/20 SAMRC total budget spent on salaries and operations of all corporate administrative functions

Table 2: Goal 2

Goal 02	Lead the generation of new knowledge and facilitate its translation into policies and practices to improve health
Goal Statement	Promote the improvement of health and quality of life (prevention of ill health, improvements in public health and treatment) in South Africa through research
Indicator	2.1 Number of published journal articles, book chapters and books by SAMRC researchers within intramural, extramural research units and collaborating centres at the SAMRC (Malaria, TB, HIV and Cancer), Self-Initiated Research, SHIP and Flagship projects during the reporting period 2.2 Number of journal articles published by SAMRC grant-holders with acknowledgement of SAMRC support during the reporting period 2.3 Number of published indexed impact factor journal articles with a SAMRC affiliated author during the reporting period 2.4 Number of journal articles where the first and/or last author is affiliated to the SAMRC during the reporting period 2.5 Number of policies and guidelines that reference SAMRC research during the reporting period 2.6 Number of research grants (new and renewals) awarded by the SAMRC during the reporting period

Table 3: Goal 3

Goal 03	Support innovation and technology development to improve health
Goal Statement	Promote the improvement of health and quality of life (prevention of ill health, improvements in public health and treatment) in South Africa through innovation, technology development and transfer
Indicator	3.1 Number of innovation and technology projects funded by the SAMRC to develop new diagnostics, devices, vaccines and therapeutics during the reporting period

	3.2 Number of new diagnostics, devices, vaccines and therapeutics progressed to the next stage of development during the reporting period
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Table 4: Goal 4

Goal 04	Build capacity for the long-term sustainability of the country's health research
Goal Statement	To provide research support in the broad field of health research, describing original research initiated by a researcher at a recognised research institution and creating and maintaining collaborative research initiatives in collaboration with research programmes. The guiding elements for each initiative/project are: Long-term and sustainable; Focused; Strong corrective action; Private - public partnerships; Africa centric perspective; Innovation; Operationally - best business practices; Technology infrastructure
Indicator	4.1 Number (new and renewals) of SAMRC bursaries, scholarships and fellowships funded for postgraduate study at masters, doctoral and postdoctoral levels during the reporting period 4.2 Number of masters and doctoral students completed or graduated during the reporting period

1.2.3 Organisational Structure

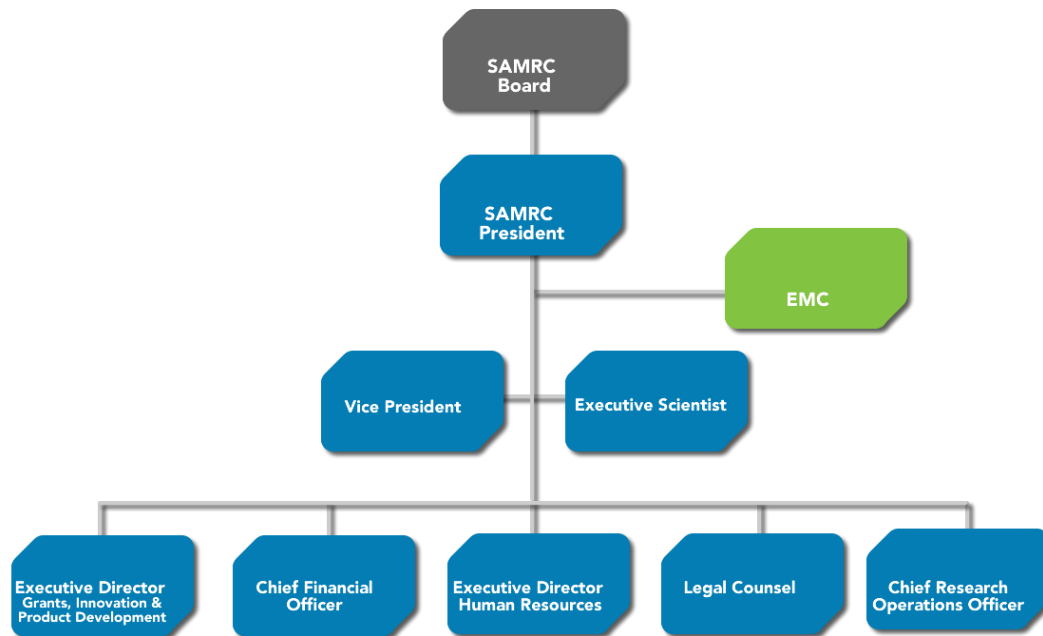
Professor Gray, the President and CEO of the SAMRC, is a South African paediatrician and clinical scientist specializing in the care of children and in HIV medicine and was awarded South Africa's highest honour, the Order of Mapungubwe (silver). She is a member of the Academy of Science of South Africa, a foreign associate of the United States Academy of Medicine, African Academy of Science, an A1-rated National Research Foundation of South Africa scientist and a fellow of the American Academy of Microbiology. Her major focus for research is in HIV vaccines. She is associated with the Perinatal HIV Research Unit (PHRU) based at Chris Hani Baragwanath Hospital, is a Professor in Paediatrics, at Wits University and holds two honorary doctorates (Simon Fraser University, and Stellenbosch University). Professor Gray also chairs the Global Alliance for Chronic Diseases to lead research collaborations on chronic diseases worldwide. The novelty and efficacious character of her work is evident by her being awarded the Nelson Mandela Health and Human Rights Award for pioneering work in the field of mother-to-child transmission of HIV-1. In 2017, TIME Magazine added Prof Gray to the 2017 TIME 100, annual list of the 100 most influential people in the world.

Professor Gray's leadership style has enabled the SAMRC to redirect resources to invest significantly in research in historically under-resourced universities and elevate the research agenda to build the next generation of black medical scientists in the country.

The SAMRC leadership comprises the CEO, Board and Executive Management Committee.

The Executive Management Committee (EMC) is comprised of medical scientists, and executives with expertise in finance, human resources, innovation and research operations to ensure that the SAMRC maintains its role as the custodian of medical research in South Africa.

Figure 1 shows the SAMRCs organisational structure.



Information Technology Services Division (ITSD)

Section 2 of the Public Finance and Management Act (PFMA) states that the objective of the Act is to secure transparency, accountability and sound management of the revenue, expenditure, assets, and liabilities of the institutions to which the Act applies. Information Systems plays a key role in ensuring that the management requirement as specified by the above Act, is fulfilled and upheld. The control environment of IT is wide with technology constantly changing and the volume of users constantly growing. Ensuring effective Information Security management within the South African Medical Research Council's is thus extremely important in ensuring quality delivery of technology services.

ITSD is committed to extend its role in engaging and providing technical support to the SAMRC and to protect the SAMRC's business information by safeguarding its confidentiality, integrity and availability. This division ensures that the SAMRC is able to continue its commercial activities in the event of significant information incidents.

The following frameworks and policy, respectively, ensures the smooth functioning and quality delivery of technology services to all users within the SAMRC:

- Information Technology Services (ITS) Framework [combined framework]
- Disaster Recovery Policy
- Information Security Framework

1.2.4 Organisational Functioning

The South African Medical Research Council (SAMRC) was established in 1969 with a mandate to improve the health of the country's population, through research, development and technology transfer, so that people can enjoy a better quality of life.

The scope of the organisation's research projects includes tuberculosis, HIV/AIDS, cardiovascular and non-communicable diseases, gender and health, and alcohol and other drug abuse. The SAMRC fund and conduct responsive health research and innovation to improve the nation's health through state-of-the-art laboratories and internationally recognised researchers.

The SAMRC continues to strengthen its public outreach programme where seasoned scientists are given a platform where they can interact with learners, in collaboration with Western Cape Education Department.

The 2017 SETI review has been successfully completed and the SAMRC in conjunction with the NDoH are exploring the findings and implementing recommendations.

The SAMRC's Strategic Plan and APP are aligned to the new mandate of the reformed health sector and the changing health research needs within South Africa, placing the SAMRC in a pivotal position to respond to the SDGs, the NDP: Vision 2030 and the Medium Term Strategic Framework (MTSF) (2014 – 2019). The SAMRC 2015/2016 – 2019/2020 approved Strategic Plan encompasses the following four goals with the theme of delivering high impact world class medical research:

- Administer health research effectively and efficiently in South Africa;
- Lead the generation of new knowledge and facilitate its translation into policies and practices to improve health;
- Support innovation and technology development to improve health;
- Build capacity for the long-term sustainability of the country's health research.

It is envisaged that the SAMRC will undertake several new initiatives during the 2019/20 period:

- The South African Medical Research Council (SAMRC) has collaborated with the Agricultural Research Council (ARC) and local wellness product development company Afriplex to produce Afriplex GRT™, an ingredient rich in aspalathin, one of the key actives in rooibos. The Afriplex GRT™ will be formulated into products aimed at managing conditions linked to cholesterol, blood glucose and insulin resistance.
- The prioritisation and focus of the SAMRC's intramural research programme will create a strengthened ethos of high quality science and health impact;
- Investigating paediatric and adolescent mental health;
- Revitalising the SAMRC's funding model by continuing the development of a responsive model to strengthen health research at Historically Disadvantaged Institutions (HDIs) thereby increasing the level of SAMRC funding to Previously Disadvantaged Individuals (PDIs) and Historically Disadvantaged Institutions (HDIs);

- Implementation of collaborative projects jointly funded by Forte (Swedish Council for Health, Working Life and Welfare) and the SAMRC focussing on inequalities in health, health systems and health system policies;
- Expand our African footprint through investigating collaborative projects with scientists in African countries, which compliments existing work in Rwanda, Ghana, Kenya, and Zambia;
- Continue our MoU with the University of Lausanne and the Swiss Vaccine Research Institute for collaboration on support and development of South Africa's next generation of scientists in Vaccinology to assist them in acquiring a broad knowledge of how vaccines are designed, developed, manufactured and implemented through public health programmes;
- Implement the MoU with the Chinese Academy of Medical Sciences (CAMS), and investigate other partnerships in China to promote collaboration in cancer research between scientists from both countries with an emphasis on oesophageal cancer;
- Implementing the DST funded South African Population Research Infrastructure Network;
- Initiate two new joint RFAs with the UK Newton Fund in antimicrobial resistance and mental health;
- Optimise capacity development in medical science with a focus on Black African scientists, especially female researchers.
- Establish a laboratory in collaboration with the Beijing Genome Institute to further support genomic science in Africa
- The GIPD launched a call for TB diagnostics and treatment – live on the 6th August.
- Currently known as the Primary Healthcare App, the SAMRC continues to fund the hosting of the platform. Since 2015 the App has been downloaded more than 72,000 times in more than 10 countries with more than 1.2 million active sessions. South Africa comprises 64,000 of these downloads and is growing at approximately 1000 new users per month.

The SAMRC has revamped and expanded extramurally funded research through the establishment and/or extension of several national and international partnerships

- 1) The Strategic Health Innovation Partnerships (SHIP), part of the newly formed Grants, Innovation and Product Development (GIPD) Division of the SAMRC has continued to expand its programmes and portfolios. SHIP was created in April 2013 as a funding and project management mechanism based at the SAMRC. Substantial funding of over R480m has been secured for SHIP from various sources including the DST, South African AIDS Vaccine Initiative (SAAVI)/NDoH, the Bill and Melinda Gates Foundation, the UK Newton Fund and Anglo-American. SHIP is currently funding the largest malaria and TB drug discovery projects in Africa linking seven academic groups in or under one research project to address Africa's health needs. The lead programme is in clinical trials in Africa. SHIP is also funding a large range of medical device projects focusing on the disease burden of Africa with particular emphasis on maternal and child health interventions, TB point-of-care diagnostics and a diagnostic for early onset of diabetes. A new medical devices call was released in 2018. SHIP is funding the investigation of vaccine development for both TB and HIV. South Africa is the only African country to design a HIV vaccine which was tested in humans in two trials both in South Africa and the USA – this was enabled through SAAVI funding. In addition, GIPD is supporting HIV research capacity development in the Eastern

Cape and community engagement efforts in HIV prevention research nationally. GIPD/SHIP's NCD Programme is currently being expanded through a Precision Medicine strategy.

- 2) The Newton Fund (UK MRC) Partnerships on (i) NCDs in Africa (together with Glaxo Smith Kline) and (ii) TB implementation science reached fruition this year with the selection of the awardees and initiation of the collaborative projects. For the NCD call, seven awards were made, none of which were awarded to HDIs. For the TB call, six awards were made, one to a HDI. A further two projects were awarded to the Mangosuthu University of Technology (MUT) and the Cape Peninsula University of Technology (CPUT), financed from the SAMRC's baseline funds. Three further programs have been initiated (i) Anti-Microbial Resistance (AMR) seed Grants; (ii) Precision medicine and (iii) Mental Health.
- 3) The SAMRC has partnered with the Canadian Institutes of Health Research (CIHR) to facilitate South Africa's participation in the Healthy Life Trajectories Initiative (HeLTI), a priority-driven initiative funded through the CIHR's Roadmap Accelerator Fund (RAF), co-ordinated by the World Health Organization (WHO) and involving regional cohorts in childhood obesity with other BRICS nations. South Africa's participation in HeLTI is funded by the NDoH. The Cohort Leadership Team has been selected and is an extra-mural unit based at the Chris Hani Baragwanath Hospital. The team will evaluate interventions along the continuum of care from pre-conception to pregnancy, infancy and childhood, to reduce the prevalence of obesity, adiposity and metabolic markers indicating risk of future cardiovascular disease, diabetes and other NCDs. Interventions addressing additional NCD risk factors will be considered.
- 4) ¹Malnutrition in children is a health priority and presents a major challenge in South Africa. The Development Pathways for Health Research Unit (an extramural unit) recently published a paper on 'Maternal and early life nutrition and physical activity: setting the research and intervention agenda for addressing the double burden of malnutrition in South African children.' The study investigated the effects of maternal and early life nutrition and physical activity on the health status of South African children. Some recommendations for future research and policy were reported to serve as a blueprint for research, intervention and a research translation agenda in South Africa. These interventions could be extended to effectively address the double burden of malnutrition in young African children for effective intervention.
- 5) In collaboration with an African consortium, SAMRC researchers conducted the first detailed analysis of obesity and diabetes in Africa reporting a steady increase across Africa since 1980, which highlights susceptibility determinants in Africans and will provide evidence that can be referenced when developing interventions in managing the dual burden of diabetes and obesity in Africa.
- 6) The SAMRC is leading a consortium which manages the Department for International Development (DFID)-funded global programme What Works To Prevent Violence Against Women and Girls? This programme undertakes research in 13 countries in Africa, the Middle East and Asia to enhance knowledge of drivers of violence against women and girls, develop and evaluation interventions to prevent violence. The programme also aims to develop a

¹ In response to Parliamentary comment dated 2 May 2017

sustainable global footprint of gender-based violence researchers across the 13 countries. In South Africa work is being conducted in partnership with Sonke Gender Justice, the University of the Witwatersrand, Project Empower and Health Economics and AIDS Research Division (HEARD) at the University of KwaZulu Natal.

- 7) The SAMRC is also hosting the DST funded South African Population Health Infrastructure network (SAPRIN) to fund the development of regional research nodes to conduct longitudinal Health and Demographic Surveys. The first three sites are in Agincourt (Wits), Digkale (UL) and Africa Centre (UKZN)

The Department of Biotechnology, Ministry of Science and Technology, India, in collaboration with the DST and the SAMRC are embarking on a collaborative research program on HIV, TB and TB/HIV over a period of three years. Key focus areas will include:

- Development of a preventive HIV vaccine by designing immunogens that can elicit potent and broadly neutralising antibodies;
- Isolation and characterisation of neutralising monoclonal antibodies effective against clade C HIV-1 viruses for use in combination therapies, passive immunisation, and/or for designing preventive vaccines;
- Creation of cohorts of TB patients with HIV-1 co-infection and formation of national biorepositories (for breath condensates, blood tissue) to facilitate immunological studies on HIV and TB;
- Identification of biomarkers and development of novel assays for diagnosis and management of TB and TB with HIV co-infection.

The goal is to link the programme into the newly established TB RePORT programme – a multicentre multi-country TB research programme – in partnership with Brazil and the US (NIH).

New SAMRC collaborations

SAMRC / FORTE Joint Research Projects

The SAMRC is injecting in excess of R22m over three years in 17 collaborative projects that will focus on key areas of healthcare, namely *inequalities in health* and *health systems policies*.

Funding for these projects is an initiative of the SAMRC and its Swedish counterpart, the Swedish Research Council for Health, Working Life and Welfare (FORTE). Both organisations entered into a MoU in August 2015 to expand collaboration between South African and Swedish scientists in line with the intention of the governments in both countries to increase bilateral cooperation.

Investing strategically in research and development across borders is imperative to advance the knowledge economy of any country. The SAMRC firmly believes that these projects will synergise and complement the expertise of scientists from both countries and enhance improvements of health outcomes in their respective nations.

There are three categories of project funding under the SAMRC and Swedish initiative, namely: category 1 and 2 grants for three-year joint projects, and category 3 grants, which are mobility grants during the first year to establish new collaborative partnerships followed by a 2-year project grant, if selected for funding through a competitive process.

Investment in biomedical research

The Grants, Innovation and Product Development (GIPD) division of the SAMRC continues to show its commitment to funding biomedical research that seeks to ease the burden of disease in poor and under resourced communities.

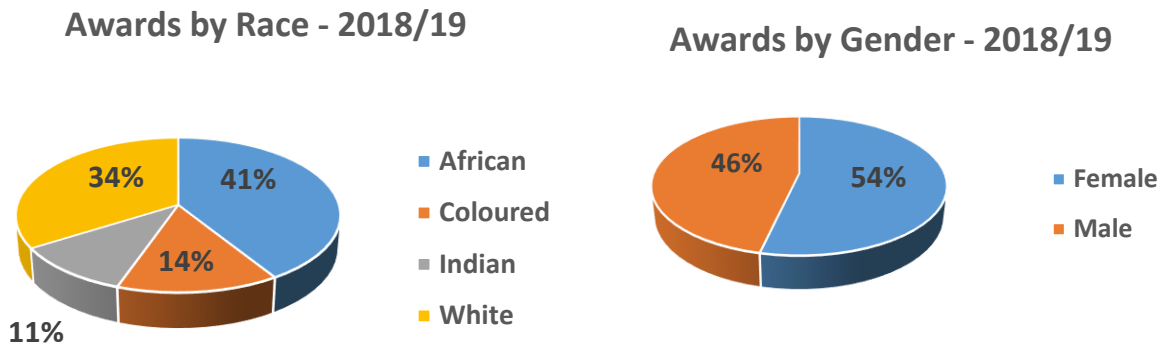
Essentially, SHIP focuses on biomedical products and solutions that will respond to the health needs of the average South African. Through partnerships, the division will facilitate the transfer of research outputs to improve health outcomes and social benefits, specifically for under-resourced communities. The division will endeavour to further entrench its commitment to enhancing the capacity of South African science by pursuing investors and investment opportunities whose contribution will advance health outcomes, benefit societies and improve on the overall existing South African health sciences landscape. Since its inception the unit has catalysed/contributed to:

- Establishment of 3 new start-up companies
- Registration of >10 new and/or related SA-owned patent applications
- Leveraging of additional direct foreign investment into research and innovation in SA in excess of R200M
- Training of 39 PhD and 13 MSc students
- 57 publications between April 2015 and March 2017 – a number of these were in high impact journals
- Advancement of more than 20 new technologies towards products

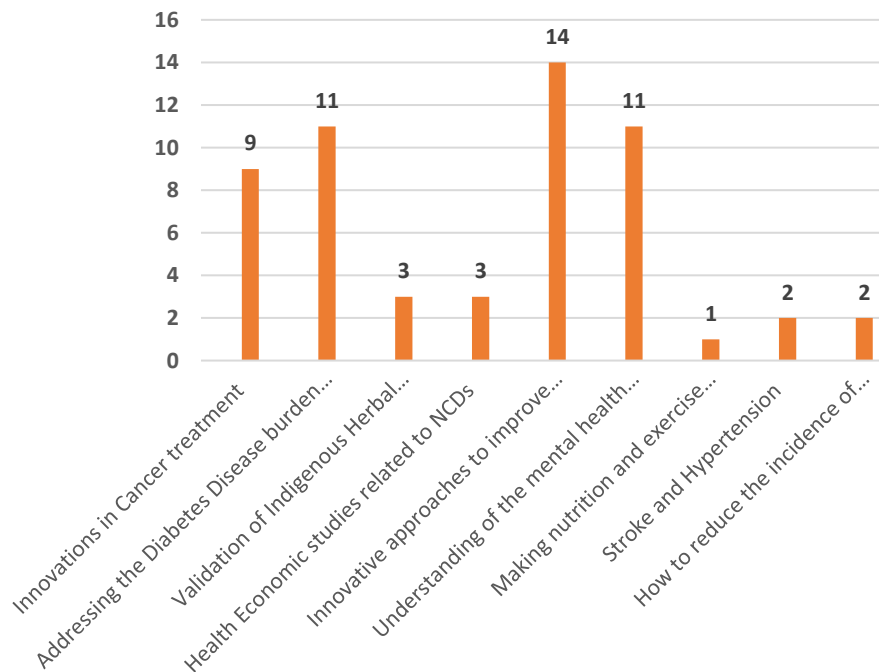
Self-initiated Research (SIR) grants

This category of research support by the SAMRC caters for health research applications that propose novel studies initiated by a researcher at a recognised research institution. Awardees qualify for funding amounting to R200,000 per annum for a maximum of 3 years. In 2015/16 the SAMRC, for the first time included two categories of applications, one for early-stage researchers and another for mid-level to established researchers. A new scoring mechanism which takes into account peer review scores and transformation imperatives was also used. For 2018/19 a total of approximately 50 awards were made at a total value of approximately R8 m. Thirty-seven per cent (18) of these were awarded to early-stage investigators and 63% (31) to mid-level to established researchers. A further R16,1m was allocated to renewal/ continuation of currently funded projects. Figures 2 depicts the distribution of awards by race, gender and priority area, respectively.

Figure 2: Distribution of Awards



Awards by Priority area 2018/19



SAMRC research centres and intra/extramural research units

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 conducts research on behalf of the SAMRC.

Table 5: SAMRC Health Priorities

SAMRC HEALTH PRIORITIES	
Programme	Purpose
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 diseases, such as malaria. It seeks to contribute to the national and international science system by testing TB drugs and malaria insecticides, carry out the AIDS Vaccine project through coordinating development and test HIV vaccines in South Africa, in partnership with our funders and our regional counterparts.
Health systems strengthening	To contribute to health systems strengthening by undertaking systematic reviews, health policy and health systems research to provide evidence for policy-makers, 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, 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, improvement of public health and treatment) in the Republic of South Africa through innovation, and 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 6: SAMRC intramural and extramural research units

SAMRC Research Sub-programmes	SAMRC Research Units	Unit Director	Institution
Health promotion and disease prevention	Alcohol, Tobacco and Other Drug Research Unit	C Parry	Intramural Research Unit
	Environment and Health Research Unit	A Mathee	Intramural Research Unit
	Hypertension and Cardiovascular Disease Research Unit	A Schutte	North-West University
	Microbial Water Quality Monitoring Research Unit	A Okoh	University of Fort Hare
	Non-Communicable Diseases Research Unit	A Kengne	Intramural Research Unit
	Risk and Resilience in Mental Disorders Research Unit	D Stein	University of Cape Town
	Rural Public Health and Health Transition Research Unit	S Tollman	University of the Witwatersrand
	Violence, Injury and Peace Research Unit	M Seedat	Intramural Research Unit
Maternal, child and women's health	Child and Adolescent Lung Health	H Zar	University of Cape Town
	Development Pathways Research Unit	S Norris	University of the Witwatersrand
	Gender and Health Research Unit	N. Abrahams	Intramural Research Unit
	Maternal and Infant Health Care Strategies Research Unit	R Pattinson	University of Pretoria

SAMRC Research Sub-programmes	SAMRC Research Units	Unit Director	Institution
HIV, AIDS, TB and other communicable diseases	Centre for the Study of Antimicrobial Resistance	K Dheda	University of Cape Town
	Centre for Tuberculosis Research Unit	R Warren	Intramural Research Unit
	HIV Prevention Research Unit	G Ramjee	Intramural Research Unit
	HIV-TB Pathogenesis and Treatment Research Unit	S Abdool-Karim	Centre for the AIDS Programme of Research in South Africa (CAPRISA)
	Molecular Mycobacteriology Research Unit	V Mizrahi	University of Cape Town
	Respiratory and Meningeal Pathogens Research Unit	S Madhi	Chris Hani Baragwanath Hospital
Health systems strengthening	Biostatistics Research Unit	S. Manda	Intramural Research Unit
	Burden of Disease Research Unit	D Bradshaw	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
Biomedical research	Antiviral Gene Therapy Research Unit	P Arbuthnot	University of the Witwatersrand
	Bioinformatics Capacity Development Research Unit	A Christoffels	University of Western Cape
	Immunology of Infectious Diseases Research Unit	F Brombacher	University of Cape Town
	Precision and Genomic Medicine	R Ramesar	University of Cape Town
	Stem Cell Research and Therapy Unit	M Pepper	University of Pretoria

Figure 3: SAMRC Intramural Research Units

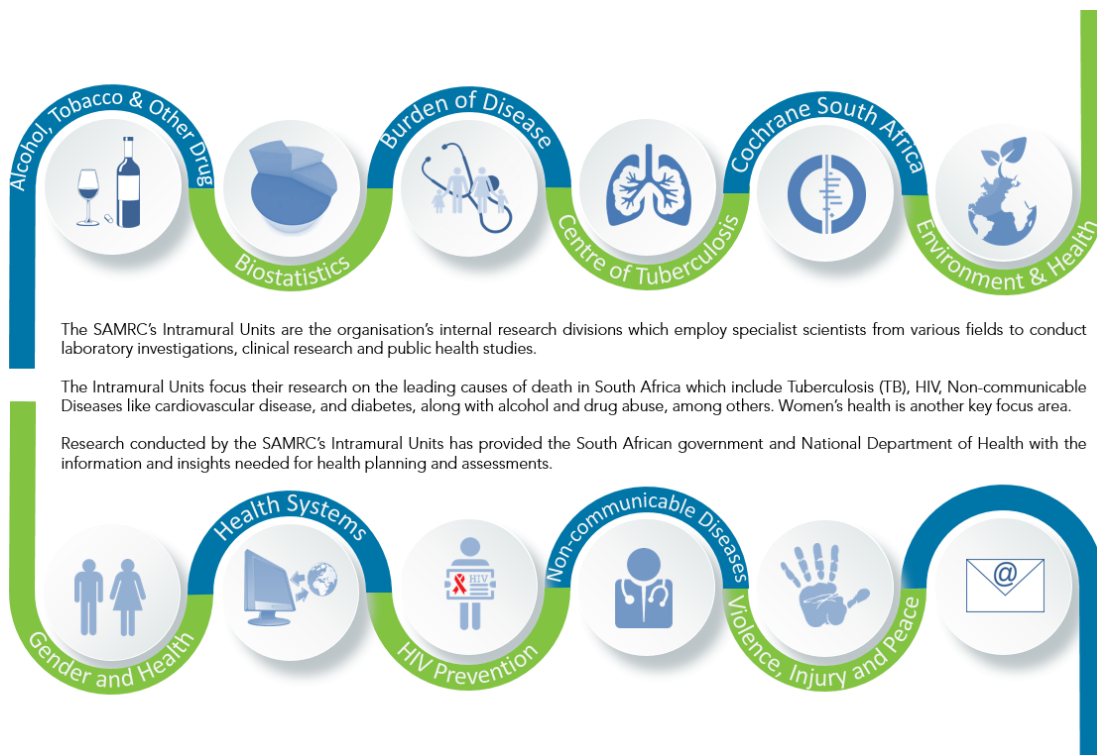


Table 7: SAMRC intramural research units' purpose

INTRAMURAL RESEARCH UNITS	
Unit	Purpose
Alcohol, Tobacco and Other Drug Research Unit	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 Research Unit	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 Research Unit	To assess and monitor the country's health status and determinants of disease; 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 which includes projects that are laboratory based, clinic based and involves either selected individuals or local populations. Areas of interest include bacteriology, immunology, genetics, bioinformatics, and clinical trials with national and international collaborators
Environment and Health Research Unit	To conduct population-based research on environmental risks to health, with special emphasis on those living in poverty
Gender and Health Research Unit	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 Research Unit	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 and 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 Prevention Research Unit	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 Research Unit	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

South African Cochrane Centre	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 within Africa
Violence, Injury and Peace Research Unit	To improve the population's health status and quality of life through research and advocacy, aimed at promoting safety and peacefulness through the prevention of death, disability and suffering arising from violence and injury

Figure 4: SAMRC Extramural Research Units

The SAMRC's Extramural Units are external research divisions commissioned to conduct research on its behalf. This research - which includes basic laboratory investigations, clinical research and public health studies - is undertaken by scientists employed by different South African and international science councils, medical schools, universities and research institutions that work with the SAMRC.



extramural research units' purpose

EXTRAMURAL RESEARCH UNITS	
Unit	Purpose
SAMRC/Wits Antiviral Gene Therapy Research Unit	Investigation by the AGTRU team is focused on countering viral infections that cause serious health problems in sub Saharan Africa. The long term objectives of AGTRU 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. Research activities are generously supported by South African and International funding agencies. South African and international partnerships have been established, and these are an important contributor to the group's resource base. AGTRU is equipped as a modern molecular biology research laboratory and has expertise in a range of techniques. These are advanced methods of nucleic acid manipulation, gene transfer to mammalian cells, and use of lipoplex and recombinant viral vectors. AGTRU is set up to investigate efficacy of antiviral compounds <i>in vivo</i> in murine (e.g. HBV transgenic mice) and cell culture models of viral replication.

Bioinformatics Capacity Development Research Unit	Build bioinformatics capacity in South Africa and across the African continent through research and innovation
Centre for the Study of Antimicrobial Resistance	The Centre for the Study of Antimicrobial Resistance (CAMRA) consists of a multi-disciplinary team of national and international experts focused on addressing specific aspects of bacterial multi-drug resistant pathogens, including tuberculosis. The unit key focus areas are to better understand the pathogenesis of drug resistance by studying pharmacokinetic mismatch i.e. drug gradients and its relationship to minimum inhibitory drug concentrations across lung cavities and bacterial abscesses/collections in TB and non-TB MDR infections; evaluate signal amplification methods as diagnostic tools to detect micro hetero-resistance (rare populations of drug resistant bacteria) in sputum, tracheal aspirates and blood compared to the site of disease i.e. lung parenchyma, cavities, abscesses/fluid collections in TB and non-TB MDR infections and to 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 Research Unit	The MRC Unit on Child and Adolescent Health focuses on key health concerns affecting children and adolescents in South Africa and in Africa. A 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. Research encompasses a broad range of methodologies from epidemiology to clinical science to laboratory-based methods.
Developmental Pathways for Health Research Unit	To investigate genetic, physiological, psychosocial and lifestyle determinants of growth and development, risk of disease, and healthy ageing across the life course
Drug Discovery Research Unit	Establishment of a scientific infrastructure as well as capacity for drug discovery and development in the broad sense; Development of infrastructural and operational systems for new drug discovery and development; Attracting young South African and African scientists thereby contributing to transformation and capacity building; Providing career development opportunities for independent academic and/or research careers
Health Services to Systems Research Unit	The research of the unit focuses 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 Research Unit	The main aim of the Unit is 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 Research Unit	The purpose of the MRC HIV-TB Pathogenesis and Treatment Research Unit at CAPRISA is 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 and is among the highest research priorities in the SAMRC Strategic Plan.
Hypertension and Cardiovascular Disease Research Unit	The central aim of the Extra Mural Unit on Hypertension and Cardiovascular Disease is to directly contribute to new clinical and epidemiological knowledge within the field of <i>hypertension development in black populations</i> in order to facilitate more effective awareness, treatment and prevention programs in the future
Immunology of Infectious Disease Research Unit	To be a relevant and comprehensive multi-disciplinary team in a centre of excellence embracing basic and applied research, improving capacity, teaching and training in immunology of infectious diseases with a focus on TB and other important human infectious diseases
Maternal and Infant Health Care Strategies Research Unit	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 Centre Research Unit	The Microbial water quality monitoring centre was established to be a hub for addressing the myriad of challenges in the water sector in the Eastern Cape Province (ECP) within the overarching aim of the research initiatives which is “ <i>evaluating some 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 Province</i> ”

Molecular Mycobacteriology Research Unit	To investigate aspects of the physiology and metabolism of M. tuberculosis of relevance to TB drug discovery, drug resistance, mycobacterial persistence and TB transmission
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, including 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
Risk & Resilience in Mental Disorders Research Unit	The Unit's mission is 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 Research Unit	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 Unit	The main focus of this unit is on adult stem cells, namely hematopoietic stem cells (HSCs) and mesenchymal stem cells (MSCs). Our first objective is to use HSCs to generate an HIV-resistant immune system. Although our initial objective has been to use a lentiviral-based approach to knock down CCR5, one of the two HIV co-receptors, we are identifying other potential host targets. We have established a colony of immunodeficient mice at the UP Biomedical Research Centre at Onderstepoort, and will use these mice to generate "humanized mice" i.e. mice which have a human immune system, and which therefore can be infected with HIV, to study not only the efficacy of our gene therapy approaches, but also settings such as HIV and TB co-infection. We hope to use this project to initiate a gene therapy platform, from which gene therapy projects for other diseases will follow.
Precision and Genomic Medicine	The SAMRC/UCT Precision and Genomic Medicine Research Unit (PGMRU) is interested in using the exciting developments in the field of genomic sciences to investigate human biodiversity. This quest will 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. Its key focus areas are to identify the ancestral groupings detectable in the current populations of Southern Africa, and to compare the genetic lineages/composition of populations of Southern Africa, with those already characterised in Africa, and elsewhere in the world; identify low frequency, possibly functional genetic variants, in the populations of Southern Africa; collate allele frequencies of sample data in order to identify sub-populations and to relate this to susceptibility and resistance to disease; provide a genetic dimension towards understanding the heterogeneity of practically all disorders, and the biology underlying this heterogeneity, towards devising improved clinical management; create an attractive research environment comprising well characterised disease resources; establish a state of the art health ecosystem which has a knowledgeable subject/patient/client at its centre and to enhance public understanding of genetics and genomics.

Table9: SAMRC Platform and specialist scientific services purpose

PLATFORM and SPECIALIST SCIENTIFIC SERVICES		
Unit	Unit Director	Purpose
Biomedical Research and Innovation Platform (BRIP)	J Louw	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	C Chauke	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. PUDAC's research is important since this platform provides
SAMRC Office of AIDS & TB Research	F Abdullah	The Office of TB/HIV funds and co-ordinates research in HIV/TB with the aim of optimising research funding in these areas.
SAMRC Office of Malaria Research	R Maharaj	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	M Van Der Walt	The TB Platform oversees the execution of the National TB prevalence survey

Figure 5: 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's objectives.

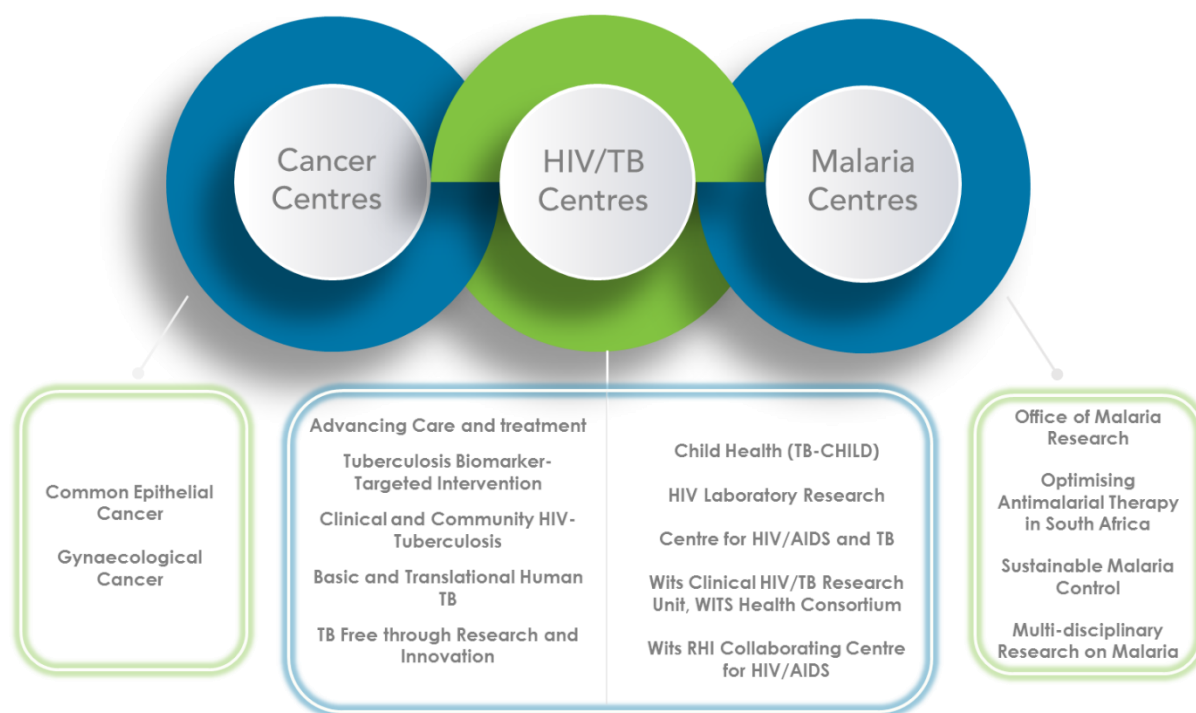


Table 10: SAMRC Research Centres

SAMRC Research Centres			
Centre	Purpose	Unit	Unit Director
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	P Ruff
		Gynaecological Cancer Research Centre	L Denny
Centre	Purpose	Unit	Unit Director
Malaria Centres	The SAMRC established three Malaria Research Centres of Excellence to assist the National Department of Health in reaching their goal of malaria elimination by 2018. Although South Africa has met the World Health Organisation (WHO) criteria for targeting elimination, there are still gaps in our knowledge that need to be filled before we can achieve elimination.	MRC Office of Malaria Research (MOMR)	R Maharaj
		University of Cape Town Collaborating Centre for Optimising Antimalarial Therapy in South Africa (C COAT)	K Barnes
		University of Pretoria Centre for Sustainable Malaria Control (UPCSMC)	C de Jager
		Wits University Collaborating Centre for Multi-Disciplinary Research on Malaria	M Coetzee
HIV/TB Centres	The purpose of the TB HIV Collaborating Centres is to create a national resource with investigators and sites in order to foster, stimulate, and/or expand basic, translational, behavioural and applied research that will advance scientific discovery and engage South African researchers working collaboratively in the areas of TB and HIV/AIDS	Advancing Care and treatment (ACT) for TB/HIV	G Churchyard
		Centre for Tuberculosis Biomarker-Targeted Intervention	M Hatherill
		Clinical and Community HIV-Tuberculosis Research Collaborating Centre	G Meintjes
		Centre for Basic and Translational Human TB Research	A Steyn
		TB Free through Research and Innovation	K Dheda
		Tuberculosis Collaborating Centre for Child Health (TB-CHILD)	M Nicol
		Tygerberg SAMRC Collaborating centre for HIV Laboratory Research	W Preiser
		Soweto Matlosana SAMRC Collaborating Centre for HIV/AIDS and TB	N Martinson
		Wits Clinical HIV/TB Research Unit, WITS Health Consortium	I Sanne
		Wits RHI Collaborating Centre for HIV/AIDS	H Rees

SAMRC Bursaries, Fellowships and Scholarships

The SAMRC supports the next generation of scientists by awarding scholarships and engaging in partnerships. One notable prestigious partnership is a Public Private Partnership that has resulted in the NDoH, the Public Health Enhancement Fund (PHEF) and the SA Medical Research Council working together to initiate a PhD development for South Africa that is by any

standards innovative. The PhD program, known as the “National Health Scholars Programme (NHSP)”, aims to develop young scientists from all health professions to acquire a PhD degree. This scholarship programme is responsive to national targets of health researcher development, and it is pivotal to the urgent mandate for PhDs in the country including within the clinicians cadre (MBCbBs). Thus the NHSP, together with other baseline funded PhD development programs ensure that MD-PhD development (known as the Clinician Researcher Development programme) is prioritised alongside other PhD development programmes in all other health professions. Further, special attention, with a ring-fenced budget has been assigned to PhD development in the identified scarce skills areas such as Biostatistics and Epidemiology.

The SAMRC also has an established in-house researcher development programme through its internship scholarship programme. The programme is an in-house “growing our own timber” programme which is creating opportunities for skills transfer and human capital development within the SAMRC core research areas defined by intramural research agendas.

The SAMRC President’s 2015 “Research Strengthening and Capacity Development Initiative (RCDI) at Selected South African Universities [also known as Historically Disadvantaged Institutions or HDIs] is one decisive action by the organisation to demonstrate its commitment to transformation in research funding in South Africa. Through this initiative, the SAMRC supports emerging researchers at selected universities (who are HDIs) who have immense potential to make significant contributions in health sciences, but are resource constrained. Through this initiative, the researchers in these institutions are mentored and enabled to reach their full potential as researchers in clinical and health research. It is envisaged that through this initiative the gap between the selected universities and established, research intensive universities will be narrowed.

The SAMRC also houses a “mid-career scientist programme” to fast-track and transition mid-career scientists to independent researchers who will become equipped to write their own grants and thereby secure their own salary and research support. The mid-career scientist programme invests in promising mid-career scientists to facilitate their retention in the public sector in areas of strategic interest to both the NDoH and the SAMRC - thus building capacity and excellence in identified strategic health priorities focusing on black (mainly women) South African researchers who may be based at both HDI and non-HDIs.

The SAMRC’s strategy remains aligned to the NDP and outputs of NDoH 2017/18 – 2019/20 APP and are geared towards increasing life expectancy; decreasing maternal and child mortality; combating HIV/AIDS and TB; and strengthening health system effectiveness. Hence, funding schemes for masters and doctoral candidates, to especially black females, are allocated across these national health priorities.

1.2.4 Human resource management and transformation

Appropriate strategic human resource management, including the attraction and appointment of employees with key skills, concomitant with training, development and performance management of our employees and the implementation of innovative and fair remuneration practices will be a priority.

In addition, the SAMRC needs to continue to foster and maintain sound labour relations between employees, management and the union. A revised recognition agreement will be negotiated and implemented to guide our relationship with the union.

The SAMRC has 666 employees, 52.10% (347/666) of which are African, 12.91% (86/666) Indian, 22.98% (153/666) Coloured and 12.01% (80/666) White. Most of our employees are female (70.42% or 469/666) with a male complement of 29.58% (197/666).

Table 11: SAMRC Employees

RACE	GENDER	TOP MANAGEMENT	SENIOR MANAGEMENT	PROFESSIONALLY QUALIFIED & SPECIALISTS	SKILLED TECHNICAL & ACADEMICALLY QUALIFIED	SEMI-SKILLED & DISCRETION DECISION MAKING	UNSKILLED AND DEFINED DECISION MAKING	TOTAL BY GENDER	TOTAL BY RACE
African	Male	2	3	17	32	42	11	107	347
	Female		2	40	113	80	5	240	
Indian	Male		5	4	13			22	86
	Female		3	27	31	3		64	
Coloured	Male	1	3	10	22	9	3	48	153
	Female		4	25	54	18	4	105	
White	Male	2	11	2	4	1		20	80
	Female	2	13	32	9	4		60	
TOTAL BY LEVEL		7	44	157	278	157	23	666	666

Info taken as at 15 August 2018

The Senior Management level, made up of 8.0% of the total number of employees (51/666), is constituted of 13.72% (7/51) African, 15.69% (8/51) Indian, 15.69% (8/51) Coloured, and 54.90% (28/51) White employees; with 52.94% (27/51) male and 47.06% (24/51) female Senior Managers.

Table 12: Senior Management Demographics

African		Indian		Coloured		White	
7		8		8		28	
13.72%		15.69%		15.69%		54.90%	
Male	Female	Male	Female	Male	Female	Male	Female
5	2	5	3	4	4	13	15
9.8%	3.9%	9.8%	5.9%	7.8%	7.8%	25.5%	29.5%

Info taken as at 15 August 2018

Transformation and diversity management is critical for the SAMRC. The SAMRC will continue to create a staff complement in line with South Africa's demographics, paying particular attention to the senior management positions.

Targets for improving the representation of both women and African employees at the Senior Management level and across the organisation have been set. The SAMRC has already appointed six Deputy-Directors, with a view to creating the opportunities for talented, younger Black employees to acquire management and supervisory skills in the field of medical research. This, in turn, will assist with transformation and also facilitate succession into Senior Management positions. We will continue the process of employing Deputy-Directors with diversity as a priority.

We have developed a five-year Transformation Plan for Science. A limited critical mass in medical and health research has been identified. Therefore, the transformation of the pool of

scientists, particularly at the Specialist Scientist level and above, along with the key targets over the coming 5 years, have been set. To enhance research critical mass, the SAMRC will:

- Continue to implement the Deputy-Directors programme across all units in order of priority increasing the number of Deputy Directors from 6 to 10;
- Increase the number of Chief Specialist Scientists from 10 to 15 over the next 5 years (average of 1 per year);
- Increase the number of Senior Specialist Scientists from 10 to 15 over the next 5 years;
- Increase the number of Specialist Scientists from 26 to 31 over the next 5 years;
- Employ 20 doctoral and postdoctoral researchers.

A disability and access in the workplace audit will also be conducted to improve employment prospects for disabled people. These initiatives will continue to be supported by the Accelerated Development Programme which aims to enable the training and development of Black scientists (particularly at the Senior Specialist Scientist level) and prepare them for future managerial responsibilities.

Succession planning will be used as a strategic tool for continuity and sustainability of the organisation. A succession planning framework focussed on the leadership at the Executive and Director level, critical and scarce skills and planned retirements will be implemented to mitigate the potential risks and enable planning for long-term succession in strategic and key management and leadership positions. The SAMRC will ensure a continuous succession pipeline by a deliberate focus on career progression, development initiatives and capacity building.

2. Revisions to legislative and other mandates

There have been no significant changes to the South African Medical Research Council's legislative and other mandates.

2.1 Policies and Governance

Effective management and containment of the SAMRC's strategic risks is a high priority of the SAMRC's Board. The SAMRC's strategic goals are the basis for identifying the strategic risks that may prevent the SAMRC from achieving its business objectives. The formation of the National Public Health Institutes of South Africa (NAPHISA) has been identified as the primary strategic risk. Other risks include transformation challenges and inefficiencies in certain corporate processes. The status of the strategic risks is monitored quarterly by the SAMRC's Board.

The SAMRC has continued with the effective management of its finances and has maintained a sound internal control environment.

3. Overview of 2018/19 budget and Medium-Term Expenditure Framework (MTEF) estimates

3.1 Financial resource growth, allocation and management (budget allocation to priority areas)

The SAMRC's total budgeted revenue consists of the annual baseline grant and donor funding. Over the period 2015/16 to 2018/19, the total budget of the SAMRC grew at an average rate of 2.7% per annum from R963m to R1043m. This is an increase of 8% over the period 2015-2019.

Over the MTEF period, (2019/20 to 2021/22) the SAMRC's annual budget revenue is projected to grow at an average rate of 5.3% annually. This is a budget increase of R173m from 2018/19 to 2021/22. This increase of 16.5% over the MTEF is due to the projected average annual increase (7%) of the SAMRC's annual transfer payment.

Throughout the MTEF period, the aim of the SAMRC will be to contain the expenditure of Administration through the implementation of efficiency processes. The budget savings from these efficiency processes will be re-allocated to Innovation and Technology, Capacity Development and Core Research to increase the investment and outputs in these areas.

The budget allocation across strategic objectives is listed in Table 6 below.

- Administration grew at an average rate of 2.4% and the average ratio of Administration versus total expenses is 17.8% over the period 2015/16 to 2018/19. Over the MTEF Administration will grow at an average rate of 5.9% and the average ratio of Administration versus Total Expenses will be 17.2%.
- Core Research grew at an average rate of 7.5% over the period 2015/16 to 2018/19 and the average ratio of Core Research versus Total Expenses is 56.1%. Over the MTEF period, these rates will change to 1% and 57.1%.
- Innovation and Technology grew at an average rate of 10.8% over the period 2015/16 to 2018/19 and the average ratio of Innovation and Technology versus Total Expenses is 19.9%. Over the MTEF period, these rates will change to -0.5% and 17.4%.
- Capacity Development grew at an average rate of 27.4% over the period 2015/16 to 2018/19 and the average ratio of Capacity Development versus Total Expenses is 6.2%. Over the MTEF period these rates will change to 1.7% and 8.3%.

Table 13: Budget allocation across strategic objectives

	Audited Outcome				Approved budget	Average growth rate (%)	Expenditure/total: Average (%)	Medium-term estimate			Average growth rate (%)	Expenditure/total: Average (%)
	2015/16	2016/17	2017/18	2018/19				2019/20	2020/21	2021/22		
R thousand	2015/16	2016/17	2017/18	2018/19		2015/16-2018/19		2019/20	2020/21	2021/22		2018/19 - 2021/22
Administration	170,348	189,396	211,056	183,111		2.4%	17.8%	195,526	204,284	217,488	5.9%	17.2%
Core research	535,096	542,672	639,238	664,890		7.5%	56.1%	639,490	672,447	684,554	1.0%	57.1%
Innovation and technology	151,747	236,581	255,667	206,247		10.8%	19.9%	202,591	200,013	203,166	-0.5%	17.4%
Capacity development	45,059	60,584	67,683	93,065		27.4%	6.2%	98,302	97,483	97,847	1.7%	8.3%
Total expense	902,250	1,029,233	1,173,644	1,147,313		8.3%	100.0%	1,135,909	1,174,227	1,203,055	1.6%	100.0%

3.2 Leverage Funding Agreements

The GIPD unit of the SAMRC has entered several leverage funding partnerships:

- The SAMRC entered into a collaborative agreement with the National Institutes of Health (NIH), US in 2014. This collaborative agreement comes to an end in 2018/19. The Minister of Health approved the second collaborative agreement with NIH to start in 2019/20. In terms of this agreement, the SAMRC is providing funding of R45m annually and NIH US\$4m.

- The Newton Fund Partnership – Non-communicable Diseases is an agreement between the SAMRC, UKMRC and GlaxoSmithKline. The SAMRC will contribute R30m over 3 years whereas the UK partners will contribute approximately R60m. The agreement is for 3 years (ending 2017/18) with the possibility of an extension.
- The Newton Fund Partnership – TB Implementation Science is an agreement between the SAMRC and the UKMRC. The SAMRC will contribute R30m over 3 years whereas the UKMRC will contribute approximately R40m. The agreement is for 3 years (ending 2017/18) with the possibility of an extension.
- The Gates Foundation Vaccine Partnership is an agreement between the SAMRC and the Gates Foundation. The SAMRC will contribute approximately R90m over 3 years whereas the Gates Foundation will contribute approximately R120m. The agreement is for 3 years (ending 2016/17) with the possibility of an extension. For this funding initiative, the SAMRC funding is supplied by the DST.
- The Gates Foundation – SA Grand Challenges is an agreement between the SAMRC and the Gates Foundation that focuses on maternal and child health interventions. The SAMRC will contribute a maximum of R30m over 3 years whereas the Gates Foundation will contribute approximately \$3m. The agreement is for 3 years (ending 2017/18) with the possibility of an extension.

3.3 Expenditure estimates

Table 14: Expenditure estimates

The SAMRC budget for 2019/20 is attached as Annexure A.

Statement of financial performance	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	2015/16		2016/17		2017/18		2018/19			2015/16-2018/19		2019/20	2020/21	2021/22	2018/19 - 2021/22	
Revenue																
Non-tax revenue	413,480	339,097	356,154	403,921	372,762	512,203	418,386	418,386	107.2%	7.3%	39.7%	424,261	454,262	452,262	2.6%	38.5%
Sale of goods and services other than capital assets	359,221	306,766	322,954	366,443	342,414	467,078	387,436	387,436	108.2%	8.1%	36.2%	395,812	426,212	426,212	3.2%	36.0%
Other non-tax revenue	54,259	32,331	33,200	37,478	30,348	45,125	30,950	30,950	98.1%	-1.4%	3.5%	28,449	28,050	26,050	-5.6%	2.5%
Transfers received	623,892	623,892	657,590	657,590	614,961	614,961	624,829	624,829	100.0%	0.1%	60.3%	689,819	726,109	764,395	7.0%	61.5%
Total revenue	1,037,372	962,989	1,013,744	1,061,511	987,723	1,127,164	1,043,215	1,043,215	102.8%	2.7%	100.0%	1,114,080	1,180,371	1,216,657	5.3%	100.0%
Expenses									-							
Current expenses	990,754	825,632	954,987	948,477	976,185	1,098,082	1,054,840	1,070,580	99.1%	9.0%	92.6%	1,045,932	1,079,518	1,103,351	1.0%	92.3%
Compensation of employees	312,162	283,168	334,638	303,910	337,545	359,098	361,957	361,957	97.2%	8.5%	30.8%	388,116	416,027	443,070	7.0%	34.5%
Goods and services	658,192	522,591	599,849	625,335	617,640	716,894	671,383	687,123	100.2%	9.6%	59.9%	635,085	640,200	636,613	-2.5%	55.8%
Depreciation	20,400	18,627	20,500	19,013	21,000	21,340	21,500	21,500	96.5%	4.9%	1.9%	22,731	23,291	23,668	3.3%	2.0%
Interest, dividends and rent on land	-	1,246	-	219	-	750	-	-	-	-100.0%	0.1%	-	-	-	-	-
Tax payment	76,618	76,618	80,757	80,756	75,439	75,562	76,733	76,733	100.0%	0.1%	7.4%	89,977	94,709	99,704	9.1%	7.7%
Total expenses	1,067,372	902,250	1,035,744	1,029,233	1,051,624	1,173,644	1,131,573	1,147,313	99.2%	8.3%	100.0%	1,135,909	1,174,227	1,203,055	1.6%	100.0%
Surplus/(Deficit)	(30,000)	60,739	(22,000)	32,278	(63,901)	(46,480)	(88,358)	(104,098)		-219.7%		(21,829)	6,144	13,602	-150.7%	

3.4 Relating expenditure trends to strategic outcome oriented goals.

Over the period 2015/16 to 2018/19, the SAMRC's income grew by 8% (R80m). This is an average growth rate of 2.7% p.a.. Over the MTEF period 2019/20 to 2021/22, the SAMRC's estimated funding will increase by 16.5% (R173m). This is an average growth rate of 5.3% over the period. THE SAMRC's baseline funding will increase by 22% (R140m) over the MTEF period. This is an average growth of 7% annually. Our grant and contract income is projected to grow by 10% (R39m) and an average growth rate of 3.2%p.a.

Over the period 2015/16 to 2018/19, the expenditure of the SAMRC increased by 27% (R245m). This increase over the mentioned period is more than the income increase over the same period which is reflected in the deficit budgets over the period. All deficits were and will be funded from the SAMRC's reserves. Salaries, one of the SAMRC's greatest expenditure items, reflects an average grow rate of 8.5% over the mentioned period. Goods and services shows an average growth rate of 9.6% and constitutes almost 60% of the total expenditure. This is due to the increase in collaborative research and leverage funding agreements concluded.

Over the MTEF period 2019/20 to 2021/22, the SAMRC's budgeted expenditure is estimated to increase at an average growth rate of 1.6%. This below inflation increase is due to the low increase in the SAMRC's baseline funding. Salaries will increase at an average rate of 7% and goods and services is estimated to increase at an average rate of -2.5%. The low increase on goods and services is due to the low increase on the SAMRC's baseline funding, which reduce the funding availability for collaborative research and leverage funding agreements. SAMRC will continue funding existing collaborative agreements through its' cash reserves as reflected in the statement of financial performance above. This will allow the SAMRC to achieve its' annual

PART B
PROGRAMME AND SUB-PROGRAMME PLANS

PART B: PROGRAMME AND SUB-PROGRAMME PLANS

The SAMRC's nine strategic objectives informs the research agenda and action plans of the organisation for the next financial year. Implementation will be through the relevant research projects conducted by both intra- and extramural research entities of the SAMRC, as well as through funding of self-initiated projects and capacity development initiatives. The performance plans, to achieve the strategic objectives are presented in the next section, clustered into the following four budget programmes:

- Programme 1: Administration
- Programme 2: Core Research
- Programme 3: Innovation and Technology
- Programme 4: Capacity Development

Table 15 summarises the strategic goals and objectives presented in the SAMRC 2015/16 – 2019/20 Strategic Plan.

Table 15: SAMRC's strategic goals and objectives

Goals and objectives	
Strategic goals	Objectives
1. Administer health research effectively and efficiently in South Africa	1.1. To ensure good governance, effective administration, a clean audit opinion and compliance with government regulations
	1.2. To promote the organisation's administrative efficiency to maximise the funds available for research
2. Lead the generation of new knowledge and facilitate its translation into policies and practices to improve health	2.1 To produce and disseminate new scientific findings and knowledge on health
	2.2 To promote scientific excellence and the reputation of South African health research
	2.3 To provide leadership in the generation of new knowledge in health
	2.4 To facilitate the translation of SAMRC research findings into health policies and practices
	2.5 To provide funding for the conduct of health research
3. Support innovation and technology development to improve health	3. To provide funding for health research innovation and technology development
4. Build capacity for the long-term sustainability of the country's health research	4. To enhance the long-term sustainability of health research in South Africa by providing funding for the next generation of health researchers

Budget Programmes

Programme 1: Administration

Purpose: Administer health research effectively and efficiently in South Africa

Table 16: Programme 1 - Strategic Objective: Annual Targets

Strategic objective	SP target 2015/16 – 2019/20	Audited			Estimated performance	Medium Term Estimate
		2015/16	2016/17	2017/2018	2018/2019	2019/2020
1.1 To ensure good governance, effective administration and compliance with government regulations	Unqualified	Clean audit	Clean audit	Unqualified	Unqualified	Unqualified
1.2 To promote the organisation's administrative efficiency to maximise the funds available for research	20%	19%	18%	19%	20%	20%

Table 17: Programme 1 - Performance Indicators

Performance indicator	SP target 2015/16 – 2019/20	Audited			Estimated performance	Medium Term Estimate
		2015/16	2016/17	2017/2018	2018/2019	2019/2020
1.1 Compliance with legislative prescripts, reflected in the final audit report relating to the processes and systems of the SAMRC during the reporting period	Unqualified	Clean audit	Clean audit	Unqualified	Unqualified	Unqualified
1.2 Percentage (%) of the 2019/2020 SAMRC total budget spent on salaries and operations of all corporate administrative functions during the reporting period	20%	19%	18%	19%	20%	20%

Table 18: Programme 1 - Quarterly Targets 2019/2020

No.	Programme performance indicator	Reporting period 2019/2020	Frequency	Quarterly targets			
				1 st	2 nd	3 rd	4 th
1.1	Compliance with legislative prescripts, reflected in the final audit report relating to the processes and systems of the SAMRC during the reporting period	Unqualified	Annual				Unqualified
1.2	Percentage (%) of the 2019/2020 SAMRC total budget spent on salaries and operations of all corporate administrative functions during the reporting period	20%	Quarterly	20%	20%	20%	20%

Table 19: Programme 1 – Reconciling performance targets with the Budget and MTEF

Administration Expenses	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
	Audited Outcome	Audited Outcome	Audited outcome	Current	Medium Term Estimate		
				Approved budget	Revised budget estimate	Revised budget estimate	Planning Budget Estimate
Rand thousand							
Total Administration	170,348	189,396	213,522	183,111	194,684	203,259	214,927
Current payments	155,882	174,521	199,769	170,694	180,193	188,142	198,335
Compensation of employees	70,124	82,638	80,501	83,850	89,750	96,180	102,432
Goods and services of which:	63,791	71,760	96,010	65,344	67,193	67,962	71,403
Advertising	-	-	1,380	-	-	-	-
Audit costs	-	-	2,370	-	-	-	-
Bank charges	-	-	314	-	-	-	-
Board costs	-	-	708	-	-	-	-
Communication	4,299	3,492	1,801	5,664	5,981	6,000	6,390
Computer services	11,360	13,016	15,802	12,500	13,500	13,500	14,375
Consultants	4,416	9,071	8,376	6,500	7,250	7,000	7,455
Lease Payments	3,035	4,241	3,388	6,142	6,486	6,000	6,250
Legal fees	-	-	777	-	-	-	-
Printing and publication	-	-	2,991	-	-	-	-
Property payments	-	-	7,754	-	-	-	-
Repairs and maintenance	7,472	11,337	8,920	9,100	10,500	8,500	8,500
Research and development	-	(1,469)	11,220	1,324	4,038	3,800	3,850
Training and staff development	1,157	1,472	745	529	559	598	650
Travel and subsistence	6,171	7,913	10,456	6,564	7,050	7,050	7,408
Other expenditure	25,881	22,687	19,008	17,021	11,829	15,514	16,525
Depreciation	18,627	19,013	21,340	21,500	23,250	24,000	24,500
Losses from	2,101	891	1,168	-	-	-	-
Interest	1,239	219	750	-	-	-	-
Tax payment	14,466	14,875	13,753	12,417	14,491	15,117	16,592

Programme 2: Core Research

Purpose: Lead the generation of new knowledge and facilitate its translation into policies and practices to improve health

Table 20: Programme 2 - Strategic Objective: Annual Targets

Strategic objectives	SP target 2015/16 – 2019/20	Audited			Estimated performance	Medium Term Estimate
		2015/16	2016/17	2017/2018	2018/2019	2019/2020
2.1 To produce and disseminate new scientific findings and knowledge on health	3150	680	660	865	750	800
	825	101	135	197	196	214
2.2 To promote scientific excellence and the reputation of South African health research	*2124	602	605	765	700	750
2.3 To provide leadership in the generation new knowledge in health	*1830	417	415	490	500	550
2.4 To facilitate the translation of SAMRC research findings into health policies and practices	27	4	4	9	6	7
2.5 To provide funding for the conduct of health research	750	112	147	168	176	186

Table 21: Programme 2 - Performance Indicators

Performance indicator	SP target 2015/16 – 2019/20	Audited			Estimated performance	Medium Term Estimate
		2015/16	2016/17	2017/2018	2018/2019	2019/2020
2.1 *Number of published journal articles, book chapters and books by SAMRC researchers within intramural, extramural research units and collaborating centres at the SAMRC (Malaria, TB, HIV and Cancer), Self-Initiated Research, SHIP and Flagship projects during the reporting period	3150	680	660	865	750	800
2.2 *Number of journal articles published by SAMRC grant-holders with acknowledgement of SAMRC support during the reporting period	825	101	135	197	196	214
2.3 *Number of published indexed impact factor journal articles with a SAMRC affiliated author during the reporting period	*2124	602	605	765	700	750
2.4 *Number of journal articles where the first and/or last author is affiliated to the SAMRC during the reporting period	*1830	417	415	490	500	550
2.5 Number of policies and guidelines that reference SAMRC research during the reporting period	27	4	4	9	6	7
2.6 Number of research grants (new and renewals) awarded by the SAMRC (new/renewals) during the reporting period	750	112	147	168	176	186

Table 22: Programme 2 - Quarterly Targets 2019/2020

No.	Programme performance indicator	Reporting period 2019/2020	Frequency	Quarterly targets			
				1 st	2 nd	3 rd	4 th
2.1	*Number of published journal articles, book chapters and books by SAMRC researchers within intramural, extramural research units and collaborating centres at the SAMRC (Malaria, TB, HIV and Cancer), Self-Initiated Research, SHIP and Flagship projects during the reporting period	800	Quarterly	140	205	215	240
2.2	*Number of journal articles published by SAMRC grant-holders with acknowledgement of SAMRC support during the reporting period	214	Quarterly	55	60	40	59
2.3	*Number of published indexed impact factor journal articles with a SAMRC affiliated author during the reporting period	*750	Quarterly	170	195	165	220
2.4	*Number of journal articles where the first and/or last author is affiliated to the SAMRC during the reporting period	*550	Quarterly	135	140	115	160
2.5	*Number of local/international policies and guidelines that reference SAMRC research during the reporting period	7	Bi-Annual		3		4
2.6	Number of research grants (new and renewals) awarded by the SAMRC during the reporting period	186	Quarterly	55	65	30	36

Table 23: Programme 2 – Reconciling performance targets with the Budget and MTEF

Core Research Expenses	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
	Audited Outcome	Audited Outcome	Audited outcome	Current Year	Medium Term Estimate		
				Approved budget	Revised budget estimate	Revised budget estimate	Planning Budget Estimate
Rand thousand							
Objective/Activity							
Core research	535,096	541,656	636,200	660,301	601,655	651,300	703,800
Current payments	489,656	499,114	595,223	615,525	556,873	602,865	649,473
Compensation of employees	182,324	187,042	234,780	237,970	255,341	273,725	291,517
Goods and services of which	307,325	312,555	359,954	377,555	301,532	329,140	357,956
Advertising	-		396				-
Bank charges	-		209				-
Communication	6,118	6,885	1,687	8,650	9,345	9,000	9,585
Computer services	3,302	3,889	4,690	7,138	7,750	7,650	8,150
Consultants	2,608	2,914	1,933	7,500	8,000	7,400	7,600
Lease Payments	4,829	3,131	3,493	4,396	4,850	4,000	4,260
Printing and publication	-		5,446				-
Property payments	-		1,087				-
Repairs and maintenance	3,461	2,542	2,812	4,450	4,469	4,500	4,795
Research and development	258,162	261,615	298,359	298,617	187,885	252,162	277,300
Training and staff development	790	1,245	763	1,588	1,117	1,200	1,200
Travel and subsistence	19,627	19,144	28,601	22,544	22,278	21,500	21,500
Other expenditure	8,428	11,190	10,478	22,672	55,838	21,728	23,566
Losses from	-	(483)	489	-	-	-	-
Tax payment	45,440	42,542	40,977	44,776	44,782	48,435	54,327

Programme 3: Innovation and Technology

Purpose: Support innovation and technology development to improve health

Table 24: Programme 3 - Strategic Objective: Annual Targets

Strategic Objective	SP target 2015/16 – 2019/20	Audited			Estimated performance	Medium Term Estimate
		2015/16	2016/17	2017/2018	2018/2019	2019/2020
To provide funding for health research innovation and technology development	180	34	56	92	40	40
	New indicator	New indicator	2	2	2	2

Table 25: Programme 3 - Performance Indicators

Performance indicator	SP target 2015/16 – 2019/20	Audited			Estimated performance	Medium Term Estimate
		2015/16	2016/17	2017/2018	2018/2019	2019/2020
3.1 Number of innovation and technology projects funded by the SAMRC to develop new diagnostics, devices, vaccines and therapeutics during the reporting period	180	34	56	92	40	40
3.2 Number of new diagnostics, devices, vaccines and therapeutics progressed to the next stage of development during the reporting period	New indicator	New indicator	2	2	2	2

Table 26: Programme 3 - Quarterly Targets 2019/2020

No.	Programme performance indicator	Reporting period 2019/2020	Frequency	Quarterly targets			
				1 st	2 nd	3 rd	4 th
3.1	Number of innovation and technology projects funded by the SAMRC to develop new diagnostics, devices, vaccines and therapeutics during the reporting period	40	Annual				40
3.2	Number of new diagnostics, devices, vaccines and therapeutics progressed to the next stage of development during the reporting period	2	Annual				2

Table 27: Programme 3 – Reconciling performance targets with the Budget and MTEF

Innovation and Technology Expenses	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
				Current Year	Medium Term Estimate		
Rand thousand	Audited Outcome	Audited Outcome	Audited outcome	Approved budget	Revised budget estimate	Revised budget estimate	Planning Budget Estimate
Objective/Activity							
Innovation and technology	151,747	236,581	255,109	202,596	203,330	205,857	224,309
Current payments	138,861	218,000	238,678	188,858	188,196	190,548	206,993
Compensation of employees	25,647	30,424	40,225	35,690	38,260	41,014	43,680
Goods and services of which:	113,214	186,264	197,318	153,168	149,936	149,534	163,313
Advertising	-	-	53	-	-	-	-
Bank charges	-	-	24	-	-	-	-
Communication	332	480	187	94	99	106	-
Computer services	77	138	115	59	62	66	-
Consultants	927	932	1,263	475	501	536	-
Legal fees	-	-	183	-	-	-	-
Printing and publication	-	-	286	-	-	-	-
Repairs and maintenance	305	267	1,186	265	280	300	300
Research and development	108,826	181,366	190,496	143,099	142,383	141,921	155,963
Training and staff development	153	78	67	268	283	303	325
Travel and subsistence	2,450	2,833	3,139	5,833	6,160	6,000	6,400
Other unclassified expenditure	144	170	319	3,075	168	302	325
Losses from	-	1,312	1,135	-	-	-	-
Tax payment	12,886	18,581	16,431	13,738	15,134	15,309	17,316

Programme 4: Capacity Development

Purpose: Build capacity for the long-term sustainability of the country's health research

Table 28: Programme 4 - Strategic Objective: Annual Targets

Strategic Objectives	SP target 2015/16 – 2019/20	Audited			Estimated performance	Medium Term Estimate
		2015/16	2016/17	2017/2018	2018/2019	2019/2020
To enhance the long-term sustainability of health research in South Africa by providing funding for the next generation of health researchers	435	66	156	155	101	106
	New indicator	New indicator	69	80	60	65

Table 29: Programme 4 - Performance Indicators

Performance indicator	SP target 2015/16 – 2019/20	Audited			Estimated performance	Medium Term Estimate
		2015/16	2016/17	2017/2018	2018/2019	2019/2020
4.1. Number (new and renewals) of SAMRC bursaries, scholarships and fellowships funded for postgraduate study at masters, doctoral and postdoctoral levels during the reporting period	435	66	156	155	101	106
4.2. *Number of new masters and doctoral students completed or graduated during the reporting period	New indicator	New indicator	69	80	60	65

Table 30: Programme 4 - Quarterly Targets 2019/2020

No.	Programme performance indicator	Reporting period 2019/2020	Frequency	Quarterly targets			
				1 st	2 nd	3 rd	4 th
4.1	Number (new and renewals) of SAMRC bursaries, scholarships and fellowships funded for postgraduate study at masters, doctoral and postdoctoral levels during the reporting period	106	Annual				106
4.2	*Number of masters and doctoral students completed or graduated during the reporting period	60	Annual				60

Note: * signifies that data will be contributed by both intramural and extramural units. Where the symbol does not appear, the data is only from intramural units or SAMRC administrative processes for 2015/16 – 2019/20 Ministerial approval received to amend 2015/16 to 2019/20 Strategic Plan annual targets for indicators 2.1 to 2.4

Table 31: Programme 4 – Reconciling performance targets with the Budget and MTEF

Capacity Development Expenses	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
	Audited Outcome	Audited Outcome	Audited Outcome	Current Year	Medium Term Estimate		
				Approved budget	Revised budget estimate	Revised budget estimate	Planning Budget Estimate
Rand thousand							
Objective/Activity							
Capacity development	45,059	60,584	67,689	85,565	88,980	89,092	97,875
Current payments	41,233	55,826	63,329	79,763	82,357	82,466	90,319
Compensation of employees	5,073	3,806	3,562	4,447	4,765	5,108	5,441
Goods and services of which	36,160	52,020	59,767	75,316	77,592	77,358	84,878
Bank charges	-	-	5	-	-	-	-
Communication	35	53	20	289	303	324	325
Computer services	12	10	27	394	416	445	445
Consultants	-	19	-	45	48	51	51
Printing and publication	-	-	110	-	-	-	-
Repairs and maintenance	-	1	-	-	-	-	-
Research and development	35,299	50,164	58,373	69,477	75,625	74,836	82,237
Training and staff development	57	28	22	106	112	120	120
Travel and subsistence	599	655	529	600	588	629	650
Other expenditure	158	1,090	681	4,405	500	953	1,050
Tax payment	3,826	4,758	4,360	5,802	6,623	6,626	7,556

ANNEXURES

Annexure A – Detailed SAMRC Budget

South African Medical Research Council of South Africa – Budget 2017/18

	Audited Outcome	Audited Outcome	Audited Outcome	Approved budget	Average growth rate (%)	Expenditure/total: Average (%)	Medium-term estimate			Average growth rate (%)	Expenditure/total: Average (%)
R thousand	2015/16	2016/17	2017/18	2018/19	2015/16-2018/19		2019/20	2020/21	2021/22	2018/19 - 2021/22	
Administration	170,348	189,396	211,056	183,111	2.4%	17.8%	195,526	204,284	217,488	5.9%	17.2%
Core research	535,096	542,672	639,238	664,890	7.5%	56.1%	639,490	672,447	684,554	1.0%	57.1%
Innovation and technology	151,747	236,581	255,667	206,247	10.8%	19.9%	202,591	200,013	203,166	-0.5%	17.4%
Capacity development	45,059	60,584	67,683	93,065	27.4%	6.2%	98,302	97,483	97,847	1.7%	8.3%
Total expense	902,250	1,029,233	1,173,644	1,147,313	8.3%	100.0%	1,135,909	1,174,227	1,203,055	1.6%	100.0%

Annexure B – SAMRC’s Materiality and Significance Framework 2019-2020

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 and Minister of Finance (National Treasury) for approval (simultaneous submission).
(b) participation in a significant partnership, trust, unincorporated joint venture or similar arrangement;	Qualifying transactions exceeds R12.5Mil (based on 2% of total average SAMRC assets, as at 31 March 2017). This includes research collaborative arrangements	
(c) acquisition or disposal of a significant shareholding in a company;	Greater than 20% of shareholding.	

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
(d) acquisition or disposal of a significant asset;	Qualifying transactions exceeds R12.5Mil (based on 2% of total average SAMRC assets, as at 31 March 2017). Including Financial Leases	Any asset that would increase or decrease the overall operational functions of the 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 R12.5Mil transaction value (based on 2% of total average SAMRC assets, as at 31 March 2017).	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 R12.5Mil (based on 2% of total SAMRC assets, as at 31 March 2017)	

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	<ul style="list-style-type: none"> • 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.		

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 R12.5 Million;
- 2) Obtained prior written approval from National Treasury for 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 parameters the SAMRC materiality level calculation outcomes were as follows:

Element	Max. % to be applied against R value	Unaudited Value at 31 March 2018	Calculated Materiality & Significance Value
Total Assets (1%-2%)	2%	R724 629 738	R14 492 595

The SAMRC materiality and significance value will be R12.5 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 – SAMRC’s Strategic Risks

The Board is ultimately accountable for the SAMRC’s risk management process and system of internal control, and to ensure that an effective holistic approach to risk management is in place to understand, evaluate and mitigate risk at the SAMRC. In terms of a mandate by the Board, the Audit, Risk & IT Committee (ARIC) has been delegated the oversight role over the risk management process, systems of internal control, fraud risk as it relates to financial reporting and information technology risks as it relates to operational and financial reporting. The strategic risk management activities are reported to the Board on a quarterly basis.

Major risks that could influence the achievement of SAMRC’s strategic objectives are actively and continuously identified throughout the organisation, together with the key current mitigation strategies. Where appropriate, management action plans to further improve the management of the risk are timeously developed and implemented. While risk cannot be fully eliminated, the SAMRC endeavours to minimise its exposure by ensuring that appropriate infrastructure, controls, systems and ethical behaviour are applied across the entity.

The SAMRC Executive Management and Board identified, and took necessary mitigating actions on the key business risks identified. The table below shows the alignment between strategic focus areas and current business risks facing the organisation:

Strategic focus area	Risk context	Key response measures
Administer health research effectively and efficiently in South Africa	Relationship with organised Labour	<ul style="list-style-type: none"> • Standing monthly meetings with Union • Strengthened industrial relations within SAMRC • Union recognition agreement
	Inefficiencies in Corporate Processes	<ul style="list-style-type: none"> • Management oversight • Online helpdesk services and technology • Contracts for major procurement spends • Policies, processes, SOPs
	Lack of modernisation of the MRC Act	<ul style="list-style-type: none"> • On-going consultation and engagement with NDoH
	Insufficient facility management, including movable and immovable assets	<ul style="list-style-type: none"> • Asset management and verification • Capital project refurbishment • Revamping and leasing out of office space in Ridge Road building
	Ineffective implementation of Board strategies	<ul style="list-style-type: none"> • On-going engagement between SAMRC President and Board Chairperson • Executive coaching and senior management training
	Potential non-compliance to legal and regulatory requirements as well as policies and procedures	<ul style="list-style-type: none"> • Policies, guidelines and SOPs • Legal & Compliance Services • Occupational Health and Safety support

Strategic focus area	Risk context	Key response measures
Lead the generation of new knowledge and facilitate its translation into policies and practices to improve health	Formation of NAPHISA	<ul style="list-style-type: none"> On-going engage with NDoH on the establishment of NAPHISA and Parliamentary discussions
	Inferior quality of research output / Lack of research integrity	<ul style="list-style-type: none"> External and internal quality review process Scientific advisory committees Research Integrity Office Oversight over the conduct of human and animal research
	Ineffective management of Extra-mural research Units (EMUs)	<ul style="list-style-type: none"> Approved EMU management strategy Scientific Advisory Committees
	Human capital skills deficit	<ul style="list-style-type: none"> Career Progression and Advancement process Roll out of leadership interventions, coaching and mentoring programmes Accelerated Development and Study Support programmes
	Transformation challenges	<ul style="list-style-type: none"> EE Strategy and Plan Appointment of Intramural Unit Deputy Directors Diversity intervention initiatives / programs Succession planning
	Inability to sustainably grow funding	<ul style="list-style-type: none"> Dedicated on-going investigation for further international funding opportunities
Support innovation and technology development to improve health	Ineffective support for innovation, partnerships, platforms and technology development	<ul style="list-style-type: none"> IP Policy and strategy Commercialisation plan Spending model with long term return defined Dedicated on-going investigation for further international funding opportunities
Limited research capacity	Limited research capacity	<ul style="list-style-type: none"> 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

Annexure D – Acronyms and Abbreviations

AAS	African Academy of Sciences	MSc	Master of Science
ACT	Advancing Care and Treatment	NAPHISA	National Public Health Institutes of South Africa
AGTRU	Antiviral Gene Therapy Research Unit	NCD	Non-Communicable Disease
AIDS	Acquired Immune Deficiency Syndrome	NDoH	National Department of Health
AMR	Anti-Microbial Resistant	NDP	National Development Plan
APP	Annual Performance Plan	NHI	National Health Insurance
ARC	Agricultural Research Council	NHSP	National Health Services Professional
ARIC	Audit Risk and IT Committee	NICD	National Institute of Communicable Disease
ATOD	Alcohol, Tobacco and Other Drug	NIH	National Institutes of Health
BoD	Burden of Disease	NMU	Nelson Mandela University
BRIP	Biomedical Research and Innovation Platform	NRF	National Research Foundation
CAMRA	Centre for Anti-Microbial Resistant	NSI	National System of Innovation
CAMS	Chinese Academy of Medical Sciences	PDI	Previously Disadvantaged Individual
CAPRISA	Centre for the AIDS Programme of Research in South Africa	PFMA	Public Finance Management Act
C COAT	Collaborating Centre for Optimising Antimalarial Therapy	PGMRU	Precision and Genomic Medicine Research Unit
CCR5	C-C chemokine receptor type 5	PhD	Doctor of Philosophy
CEO	Chief Executive Officer	PHEF	Public Health Enhancement Fund
CFO	Chief Financial Officer	PMTCT	Prevention of mother-to-child transmission
CIHR	Canadian Institutes of Health Research	PUDAC	Primate Unit and Delft Animal Centre
CPUT	Cape Peninsula University of Technology	QSE	Quality, Safety & Efficacy
CRC	Cancer Research Centre	RAF	Roadmap Accelerator Fund
CROO	Chief Research Operations Officer	RCDI	Research Strengthening and Capacity Development Initiative
DFID	Department for International Development	RFA	Requests for applications
DST	Department of Science and Technology	RHI	Reproductive Health Institute
ECP	Eastern Cape Province	RSV	Respiratory Syncytial Virus
EDCTP	European and Developing Countries Clinical Trials Partnership	SAAVI	South African AIDS Vaccine Initiative
EE	Employment Equity	SAMRC	South African Medical Research Council
EMC	Executive Management Committee	SAPRIN	South African Population Health Infrastructure Network
EML	Emergency Medical List	SDG	Sustainable Development Goals
EMU	Extra-mural Units	SETI	Science, Engineering and Technology Institution
ERICA SA	Evolving Risk Factors for Cancers in African Populations	SHIP	Strategic Health Innovation Partnerships
GARDP	Global Antibiotic Research & Development Partnership	SIR	Self-Initiated Research
GBS	Group B Streptococcus	SMU	Sefako Makgatho Health Sciences University
GIPD	Grants, Innovation and Product Development	SOP	Standard Operating procedure

HBV	Hepatitis B Vaccine	SP	Strategic Plan
HDI s	Historically Disadvantaged Institutions	SUN	Stellenbosch University
HEARD	Health Economics & AIDS Research Division	TB	Tuberculosis
HeLTI	Healthy Life Trajectories Initiative	TB-Child	Tuberculosis Collaborating Centre for Child Health
HIV	Human immunodeficiency virus	UCT	University of Cape Town
HSC	hematopoietic stem cells	UK	United Kingdom
HVTN	HIV Vaccine Trials	UKMRC	United Kingdom Medical Research Council
IP	Intellectual Property	UKZN	University of Kwa-Zulu Natal
IT	Information Technology	UL	University of Limpopo
MBChB	Bachelor of Medicine, Bachelor of Surgery	UP	University of Pretoria
MD	Medical Doctor	UPCSMC	University of Pretoria Centre for Sustainable Malaria Control
MDR	Multidrug resistance	USA	United States of America
MOMR	MRC Office of Malaria Research	VP	Vice President
MoU	Memorandum of Understanding	WHO	World Health Organization
MTSF	Medium Term Strategic Framework	WITS	University of Witwatersrand
MTEF	Medium Term Expenditure Framework	WSU	Walter Sisulu University
MUT	Mangosuthu University of Technology		

Annexure E –2019/20 Technical Descriptions

Strategic Objective 1:1

To ensure good governance, effective administration and compliance with government regulations

Indicator title and no	1.1 Compliance with legislative prescripts, reflected in audit findings relating to the processes and systems of the SAMRC during the reporting period
Short definition	Audit opinion expressed by auditor general
Purpose/importance	To strengthen financial management monitoring and evaluation
Source/collection of data	Documented Evidence: Annual Report; Auditor General's Report
Method of calculation	No calculation required
Means of verification	Final audit report determines the validity of the performance
Data limitations	None
Type of indicator	Outcome
Calculation type	No calculation required
Reporting cycle	Annual
New indicator	No
Desired performance	To achieve a clean audit opinion from the Auditor General
Indicator coordinator	CFO
Performance responsibility	CFO

Strategic Objective 1:2

To promote the organisation's administrative efficiency to maximise the funds available for research

Indicator title and no	1.2 Percentage (%) of the 2017/18 SAMRC total budget spent on salaries and operations of all corporate administrative functions during the reporting period
Short definition	Percentage of baseline (government) funding that is spent on salaries and operations of all corporate administrative functions.
Purpose/importance	Reducing the amount of money spent on support functions will lead to more funds being channelled towards research
Source/collection of data	Documented Evidence: Financial Records
Method of calculation	Count
Means of verification	Management reports received from Finance
Data limitations	None
Type of indicator	Outcome
Calculation type	Non-Cumulative
Reporting cycle	Quarterly
New indicator	No
Desired performance	To achieve the target for the reporting period
Indicator coordinator	CFO
Performance responsibility	CFO

Strategic Objective 2:1

To produce and disseminate new scientific findings and knowledge on health

Indicator title and no	2.1 Number of published journal articles, book chapters and books by SAMRC researchers within intramural, extramural research units and collaborating centres at the SAMRC (Malaria, TB, HIV and Cancer), Self-Initiated Research, SHIP and Flagship projects during the reporting period
Short 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. Publications are regarded as accredited when they are published in ISI-indexed journals
Purpose/importance	To contribute to the production of new knowledge aimed at improving the nation's health.
Source/collection of data	ISD
Method of calculation	Count of publications (Original articles, editorials, commentaries or letters) in the top journals where the SAMRC is listed as an affiliation of at least one of the authors
Means of verification	<ul style="list-style-type: none"> • 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 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.
Data limitations	None
Type of indicator	Output
Calculation Type	Cumulative
Reporting cycle	Quarterly
New indicator	No
Desired performance	To achieve the target for the reporting period
Indicator coordinator	ISD
Performance responsibility	VP: Research and VP: Research Management

Indicator title and no	2.2 Number of journal articles published by SAMRC grant-holders with acknowledgement of SAMRC support during the reporting period
Short 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 ISI-indexed 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
Purpose/importance	To contribute to the production of new knowledge aimed at improving the nation's health.
Source/collection of data	ISD
Method of calculation	Count of the number of ISI publications that list the SAMRC in the Acknowledgement section
Means of verification	<ul style="list-style-type: none"> • 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 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. <p>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.</p>
Data limitations	None
Type of indicator	Output
Calculation type	Cumulative
Reporting cycle	Quarterly
New indicator	No
Desired performance	To achieve the target for the reporting period
Indicator coordinator	ISD
Performance responsibility	VP: Research and VP: Research Management

Strategic Objective 2:2

To promote scientific excellence and the reputation of South African health research

Indicator title and no	2.3 Number of published journal articles with an indexed impact factor > or equal to 5 with a SAMRC affiliated author during the reporting period
Short definition	Total number of articles with indexed impact factor > or equal to 5 published in top journals in which one of the authors is SAMRC affiliated (baseline or contract funded and in an intra- or extramural unit)
Purpose/importance	To contribute to the production of new knowledge aimed at improving the nation's health
Source/collection of data	ISD
Method of calculation	Count of the number of ISI publications where at least one author has listed the SAMRC as his/her affiliation
Means of verification	<ul style="list-style-type: none"> • 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 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. <p>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.</p>
Data limitations	None
Calculation type	Cumulative
Type of indicator	Output
Reporting cycle	Quarterly
New indicator	No
Desired performance	To achieve the target for the reporting period
Indicator coordinator	ISD
Performance responsibility	VP: Research and VP: Research Management

Strategic Objective 2:3

To provide leadership in the generation of new knowledge in health

Indicator title and no	2.4 Number of journal articles where the first and/or last author is affiliated to the SAMRC during the reporting period
Short definition	Total number of ISI publications (original articles, editorials, commentaries or letters) where the first 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
Purpose/importance	Generation of new knowledge
Source/collection of data	ISD
Method of calculation	Count of first-author ISI publications where the first author has listed the SAMRC as an affiliation
Means of verification	<ul style="list-style-type: none"> • 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 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. <p>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.</p>
Data limitations	None
Calculation type	Cumulative
Type of indicator	Output
Reporting cycle	Quarterly
New indicator	No
Desired performance	To achieve the target for the reporting period
Indicator coordinator	ISD
Performance responsibility	VP: Research and VP: Research Management

Strategic Objective 2:4

To facilitate the translation of SAMRC research findings into health policies and practices

Indicator title and no	2.5 Number of policies and guidelines that reference SAMRC research during the reporting period
Short definition	Total number of local/international policies and guidelines that have been influenced by SAMRC research
Purpose/importance	Translate SAMRC research into local/international policies
Source/collection of data	Unit records
Method of calculation	Count of the number of local or international policies and/or guidelines make reference to SAMRC research findings
Means of verification	<ul style="list-style-type: none"> ▪ Units are required to have their updated publication lists and documentary evidence (publication / journal) uploaded to the 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.
Data limitations	None
Type of indicator	Output
Calculation type	Cumulative
Reporting cycle	Bi-annually
New indicator	No
Desired performance	To achieve the target for the reporting period
Indicator coordinator	Head of the SAMRC Office of Strategy and Performance
Performance responsibility	VP: Research and VP: Research Management

Strategic Objective 2:5

To provide funding for the conduct of health research

Indicator title and no	2.6 Number (new and renewals) of research grants awarded by the SAMRC during the reporting period
Short definition	Total number of Research grants awarded to academic institutions by the SAMRC
Purpose/importance	To provide funding for health research
Source/collection of data	Unit records
Method of calculation	Count of the number of individual research grants awarded by the SAMRC to extramural researchers during the financial year. These are new awards rather than renewals and relate to Self-Initiated Grants, awards made by SHIP and the Offices for AIDS, TB and Malaria Research, and SAAVI; and Flagship awards
Means of verification	EMC submission and approval; Letter/signed contract of renewal/new award and spreadsheet from SIR, SHIP, 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
Data limitations	None
Type of indicator	Output
Calculation type	Cumulative
Reporting cycle	Annual
New indicator	No
Desired performance	To achieve the target for the reporting period
Indicator coordinator	Manager of RAMD
Performance responsibility	VP: Research Management

Strategic Objective 3:1

To provide funding for health research innovation and technology development

Indicator title and no	3.1 Number of innovation and technology projects funded by the SAMRC to develop new diagnostics, devices, vaccines and therapeutics during the reporting period
Short definition	Total number of Projects funded by the SAMRC that are aimed at developing new diagnostics, vaccines, etc.
Purpose/importance	To provide funding for innovation and technology projects that will lead to the development of diagnostics, vaccines, etc.
Source/collection of data	Unit record
Method of calculation	Count of the number of projects funded for innovations aimed at developing new vaccines, drugs, diagnostics, devices or any other technology aimed at improving health during the financial year
Means of verification	<ul style="list-style-type: none"> • EMC approval (sign off) to indicate the number of innovation and technology projects that have been funded by the SAMRC to develop new diagnostics, devices, vaccines and therapeutics during the reporting period • signed contracts and proof of payment
Data limitations	None
Type of indicator	Output
Reporting cycle	Annual
Calculation type	cumulative
New indicator	No
Desired performance	To achieve the target for the reporting period
Indicator coordinator	Director of SHIP
Performance responsibility	Director of SHIP

Indicator title and no	3.2 Number of new diagnostics, devices, vaccines and therapeutics progressed to the next stage of development during the reporting period
Short definition	Promote the improvement of health and quality of life in the country through innovation, technology development and transfer (invention disclosures, patents filed and licences concluded)
Purpose/importance	Develop and refine knowledge transfer model as innovative best practice approaches for health promotion
Source/collection of data	Unit record
Method of calculation	Count of the number of new diagnostics, devices, vaccines and therapeutics progressed to the next stage of development during the reporting period (examples of Innovations are vaccines; drug models; molecules, etc)
Means of verification	<ul style="list-style-type: none"> • evidence of the number of new diagnostics, devices, vaccines and therapeutics that have progressed to the next stage of development during the reporting period
Data limitations	None
Type of indicator	Output
Reporting cycle	Annually
Calculation type	Non-cumulative
New indicator	No
Desired performance	To achieve the target for the reporting period

Indicator coordinator	Director of SHIP
Performance responsibility	Director of SHIP

Strategic Objective 4:1

To enhance the long-term sustainability of health research in South Africa by providing funding for the next generation of health researchers

Indicator title and no	4.1 Number (new and renewals) of SAMRC bursaries/ scholarships/ fellowships funded for post-graduate study at masters, doctoral and post-doctoral levels during the reporting period
Short definition	Total number of total or part bursaries/ scholarships/ fellowships funded by the SAMRC for post-graduate study at masters, doctoral and post-doctoral levels
Purpose/importance	To enhance sustainability of health research in South Africa by providing funding for the development of the next generation of health researchers
Source/collection of data	RAMD records
Method of calculation	Count of the number of bursaries/scholarships/fellowships funded by the SAMRC to enhance sustainability of health research in South Africa
Means of verification	<ul style="list-style-type: none"> ▪ 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
Data limitations	None
Type of indicator	Output
Reporting cycle	Annually
Calculation type	Cumulative
New indicator	Yes
Desired performance	To achieve the target for the reporting period
Indicator coordinator	Manager of RAMD
Performance responsibility	VP: Research Management

Indicator title and no	4.2 Number of masters and doctoral students completed or graduated during the reporting period
Short definition	Develop human capital within the organisation to ensure excellence in all areas of operation
Purpose/importance	To promote growth of the research field and health through contributions to academic studies, training and mentoring.
Source/collection of data	Organisational records
Method of calculation	Count
Means of verification	Documentary evidence received from the relevant academic institution or copy of certificate from graduate
Data limitations	None
Type of indicator	Cumulative
Reporting cycle	Output
Calculation type	Annually
New indicator	No
Desired performance	To achieve the target for the reporting period

Indicator coordinator	Manager of RAMD
Performance responsibility	VP: Research Management

ADDENDUMS

Addendum 1 to Strategic Plan (SAMRC expenditure estimates)

Statement of comprehensive income	Budget	Audited Outcome	Budget	Audited Outcome	Budget	Audited Outcome	Revised estimate	Audited Outcome	Outcome/Budget Average %	Average growth rate (%)	Expenditure/total: Average (%)	Medium-term estimate			Average growth rate (%)	Expenditure/total: Average (%)
R thousand	2013/14		2014/15		2015/16			2016/17	2013/14-2016/17			2017/18	2019/2020	2019/20	2016/17 - 2019/20	
Sale of goods and services other than capital assets	321,885	287,805	283,006	278,813	359,221	306,766	322,954	366,443	36.1%	8.4%	34.9%	342,414	300,024	335,079	-2.9%	32.4%
Other non-tax revenue	27,250	28,022	25,050	24,993	54,259	32,331	33,200	36,462	4.4%	9.2%	4.0%	31,019	32,472	31,483	-4.8%	3.8%
Transfers received	416,460	416,460	460,638	446,331	623,892	623,892	657,590	654,170	59.4%	16.2%	61.1%	614,290	624,829	659,819	0.3%	63.8%
Total revenue	765,595	732,287	768,694	750,137	1,037,372	962,989	1,013,744	1,057,075	100.0%	13.0%	100.0%	987,723	957,325	1,026,381	-1.0%	100.0%
Expenses																
Compensation of employees	330,722	298,099	235,811	277,270	312,162	283,168	334,638	303,910	33.0%	0.6%	34.1%	357,394	378,124	399,299	9.5%	36.8%
Goods and services	417,483	356,022	553,358	402,430	658,192	522,591	599,849	624,537	60.5%	20.6%	55.9%	597,791	524,667	529,396	-5.4%	53.5%
Depreciation	19,100	16,556	19,500	18,022	20,400	18,627	20,500	19,013	2.2%	4.7%	2.1%	21,000	22,218	23,462	7.3%	2.2%
Interest, dividends and rent on land	101	5,932	25	1,370	-	1,246	-	-	0.0%	-100.0%	0.3%	-	-	-	-	-
Tax payment	-	51,144	-	54,812	76,618	76,618	80,757	77,337	4.3%	14.8%	7.6%	75,439	76,734	81,031	1.6%	7.6%
Total expenses	767,406	727,753	808,694	753,904	1,067,372	902,250	1,035,744	1,024,797	100.0%	12.1%	100.0%	1,051,624	1,001,743	1,033,188	0.3%	100.1%
Surplus/(Deficit)	(1,811)	4,534	(40,000)	(3,767)	(30,000)	60,739	(22,000)	32,278		92.4%		(63,901)	(44,418)	(6,807)	-159.5%	

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