## SOUTH AFRICAN NATIONAL SURVEY OF RESEARCH AND EXPERIMENTAL DEVELOPMENT

KEY SECTOR RESULTS AND TRENDS

# SCIENCE COUNCILS SECTOR R&D AT A GLANCE 2020/21



South African science councils are created by an Act of Parliament, granted a specific research mandate and form an integral part of the national system of innovation. R&D performed by science councils in areas such as the social sciences, health, agriculture, mining, industrial development and health innovation, inform critical policy decisions by government. True to their mandate, science councils allocated most of their R&D expenditure in 2020/21 to research areas closely mirroring national priorities, such as economic development, health, and education.

FACT SHEET NO. 47







## THE BIG PICTURE



South Africa's gross domestic product (GDP)

in 2020/21 was R 5 521.075
BILLION



In 2020/21, 0.61% of GDP was spent on R&D



Real gross domestic expenditure on R&D (GERD) grew from



to a maximum of R 34.328
BILLION
in 2017/18

Since 2017/18 it has decreased each year to a low of



Science councils — contributed 17.6% to GERD



R&D expenditure in science councils increased from 2011/12 to 2017/18, declined in 2018/19 due to budgetary constraints, and has basically stagnated since.

#### Science council expenditure on R&D (2011/12 to 2020/21)



#### **R&D SPENDING PATTERNS**



Breakdown of science council R&D spending in 2020/21:



Expenditure by type of research (2011/12 to 2020/21)



Nearly all R&D expenditure in the science councils was on natural sciences, technology and engineering



Natural sciences, technology and engineering 98.3%



Engineering sciences 19.9%



Medical and health sciences 17.8%



Information, computer and communication technologies 16.6%



Agricultural sciences 13.4%

Science councils R&D expenditure in policy areas of interest:



**Environment** 



Space science



Tuberculosis, HIV/AIDS, malaria

### BENEFITS OF R&D SPENDING



Key socio-economic objectives around which science council R&D expenditure was oriented included:



## PERSONNEL IN SCIENCE COUNCILS



Science council personnel consisted mostly of researchers and technicians.





In 2020/21 the science councils employed:



## BEHIND THE NUMBERS

The annual South African National Survey of Research and Experimental Development (R&D Survey) is conducted by the Centre for Science, Technology and Innovation Indicators (CeSTII) at the Human Sciences Research Council (HSRC), on behalf of the Department of Science and Innovation (DSI). R&D statistics are collected in terms of the Statistics Act No. 6 of 1999, and are quality assured by Statistics South Africa. Data collected through the Survey, and its historic data series, helps to inform decision-makers on investment planning, policy-making, advocacy, and research in South Africa. Data also adds to benchmarking and performance comparisons with our international counterparts.

Access previous survey reports:

https://hsrc.ac.za/divisions/centre-for-science-technology-and-innovation-indicators/

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