

# SOUTH AFRICAN NATIONAL SURVEY OF RESEARCH AND EXPERIMENTAL DEVELOPMENT 2017/18

## KEY SECTOR RESULTS AND TRENDS



South African science councils 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, industrial development, or water, inform critical policy decisions by government, as well as other actors. This fact sheet demonstrates the profile of R&D expenditure in science councils in 2017/18: between 2008/09 and 2017/18 for example, both annual R&D expenditure and R&D capital expenditure doubled. R&D spending by research field and socio-economic objective in 2017/18 closely mirrored national priority areas, such as economic development, health, and education.

## FACT SHEET NO. 23

# THE BIG PICTURE

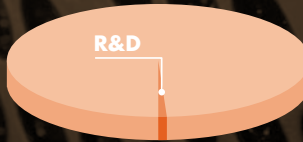


THE VALUE OF  
**SOUTH AFRICA'S GROSS  
DOMESTIC PRODUCT  
(GDP)** IN 2017/18



**R 4 653.579  
BILLION**

THE SHARE OF **GDP  
SPENT ON R&D**



**0.83%**

SOUTH AFRICA'S  
**ANNUAL R&D  
SPEND INCREASED  
FROM:**

**R 21.041  
BILLION**  
IN 2008/09

**R 38.725  
BILLION**  
IN 2017/18

**SCIENCE COUNCIL  
R&D EXPENDITURE  
STEADILY INCREASED  
FROM:**

**R 3.137  
BILLION**  
IN 2008/09

TO:



**R 6.313  
BILLION**  
IN 2017/18

## R&D SPENDING PATTERNS IN 2017/18



**ANNUAL CAPITAL  
EXPENDITURE HAS  
GROWN STEADILY:**

**R 0.384  
BILLION**  
IN 2008/09

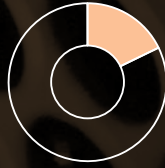


**R 0.824  
BILLION**  
IN 2017/18

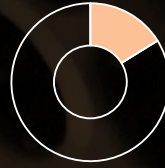
## RESEARCH FIELDS WITH THE HIGHEST R&D EXPENDITURE:



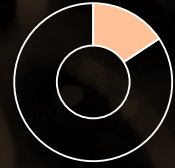
ENGINEERING SCIENCES  
**18.6%**



INFORMATION & COMMUNICATION TECHNOLOGY  
**17.8%**



MEDICAL & HEALTH SCIENCES  
**16.2%**



AGRICULTURAL SCIENCES  
**15.7%**

INVESTMENT IN ENVIRONMENT-RELATED R&D INCREASED SIGNIFICANTLY:



**6.9%**  
IN 2013/14



**15.1%**  
IN 2017/18



THE SHARE OF R&D IN NANO-TECHNOLOGY HAS DOUBLED FROM:



IN 2016/17



IN 2017/18



## BENEFITS OF R&D SPENDING 2017/18

### SCIENCE COUNCILS SECTOR R&D EXPENDITURE BY SOCIO-ECONOMIC OBJECTIVE



DIVISION 1: DEFENCE  
**14.5%**



DIVISION 2: ECONOMIC DEVELOPMENT  
**41.6%**



DIVISION 3: SOCIETY  
**15.5%**



DIVISION 4: ENVIRONMENT  
**12.4%**



DIVISION 5: ADVANCEMENT OF KNOWLEDGE  
**16.0%**

# 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: <http://www.hsrc.ac.za/en/departments/CeSTii/reports-cestii>

Data and analysis for this publication was prepared by Anele Slater and Nhlanhla Malaza in February 2020.

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