

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

KEY SECTOR RESULTS AND TRENDS



South Africa's Higher Education (HE) sector plays a pivotal role in the national system of innovation—both as a performer of research (whether basic, applied, or experimental development), but also as a capacity builder of researchers from South Africa and abroad. This fact sheet shows that in 2017/18, one third of South Africa's annual R&D spending, about R13 billion, took place within the HE sector, with nearly two thirds of spending geared towards the natural sciences, technology, and engineering. It also highlights that, in 2017/18, women made up just below half of all researchers in HE, and that just one third of post-doctoral fellows were South African citizens.

FACT SHEET NO. 19

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

HIGHER EDUCATION'S
SHARE OF THE TOTAL
R&D SPEND ALSO
INCREASED FROM:

19.9%
IN 2008/09



33.6%
IN 2017/18

VALUE OF HIGHER
EDUCATION'S R&D
SPEND IN 2017/18



**R 13.010
BILLION**

TOTAL NUMBER
OF RESEARCHERS
IN SOUTH AFRICA



61 840

32 171



= 52.0%

SOUTH AFRICAN CITIZENS

4 062



= 6.6%

CITIZENS OF OTHER COUNTRIES

25 607



= 41.4%

DOCTORAL STUDENTS & POST-DOCTORAL FELLOWS

R&D SPENDING PATTERNS IN 2017/18



BREAKDOWN OF HIGHER EDUCATION R&D SPENDING BY TYPE OF RESEARCH:



BASIC RESEARCH
55.7%



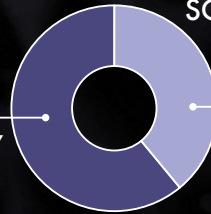
APPLIED RESEARCH
32.8%



EXPERIMENTAL DEVELOPMENT
11.5%

CONCENTRATION OF HIGHER EDUCATION R&D SPENDING BY RESEARCH FIELD DIVISION:

NATURAL SCIENCES, TECHNOLOGY & ENGINEERING 61%



SOCIAL SCIENCES & HUMANITIES
39%



R&D PERSONNEL IN 2017/18



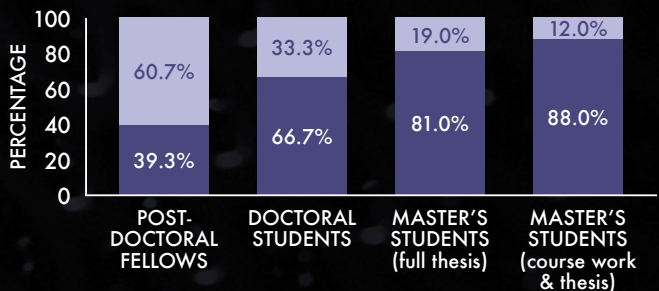
ALMOST TWO THIRDS OF ALL R&D PERSONNEL IN SOUTH AFRICA WERE SITUATED IN THE HIGHER EDUCATION SECTOR



WOMEN ACCOUNTED FOR 45.4% OF ALL RESEARCHERS IN HIGHER EDUCATION

PROPORTION OF SA VS NON-SA STUDENT SPLIT:

■ NON-SOUTH AFRICAN
■ SOUTH AFRICAN



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>

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