



SOUTH AFRICAN NATIONAL SURVEY OF RESEARCH AND EXPERIMENTAL DEVELOPMENT

KEY SECTOR RESULTS AND TRENDS

BUSINESS SECTOR R&D AT A GLANCE

R&D performance in the South African formal business sector is vital to the national system of innovation and the future growth of the economy. This fact sheet shows that business spent nearly R1.5 billion less year-on-year on R&D in 2018/19 than in 2017/18. Three-quarters of this investment was concentrated in the natural sciences, technology and engineering. The lion's share (93.5%) of all business sector R&D expenditure, in 2018/19, was for applied research and experimental development research, geared to solving problems at firm-level.

FACT SHEET NO. 26

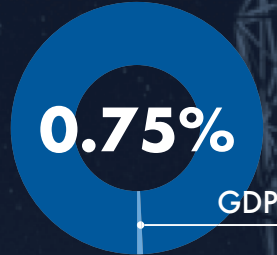
THE BIG PICTURE



THE VALUE OF **SOUTH AFRICA'S GROSS DOMESTIC PRODUCT (GDP)** IN 2018/19



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

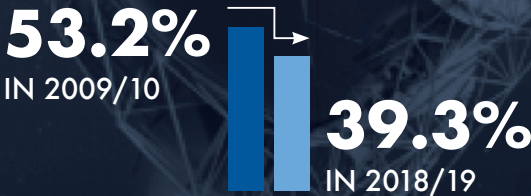


SOUTH AFRICA'S **ANNUAL R&D SPEND** HAS INCREASED OVER THE **PAST DECADE**:

**R 20.955
BILLION**
IN 2009/10

**R 36.784
BILLION**
IN 2018/19

THE BUSINESS SECTOR'S **SHARE** OF THE **COUNTRY'S TOTAL R&D SPEND** DECREASED FROM:



VALUE OF BUSINESS SECTOR **R&D SPEND** IN 2018/19

**R 14.448
BILLION** 
(**R15.859** IN 2017/18)

GEOGRAPHIC CONCENTRATION



IN 2018/19 **BUSINESS SECTOR R&D** WAS **CONCENTRATED** IN **THREE PROVINCES**:



GAUTENG 52.7%

KWAZULU-NATAL 10.0%

WESTERN CAPE 17.2%

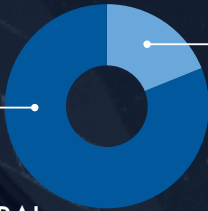
R&D SPENDING PATTERNS



BREAKDOWN OF BUSINESS SECTOR R&D SPEND BY TYPE OF RESEARCH:



CONCENTRATION OF BUSINESS R&D BY DOMAIN:



NATURAL SCIENCES, TECHNOLOGY & ENGINEERING

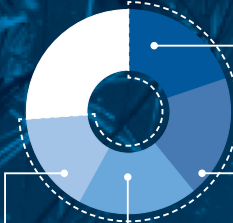
81.1%

SOCIAL SCIENCES & HUMANITIES

18.9%

NEARLY THREE-QUARTERS (73.9%) OF R&D SPENDING WAS TARGETED WITHIN JUST FOUR RESEARCH AREAS:

73.9%



MEDICAL & HEALTH SCIENCE (19.8%)

ENGINEERING SCIENCE (19.3%)

SOCIAL SCIENCE (18.9%)

ICT (15.9%)

R&D PERSONNEL

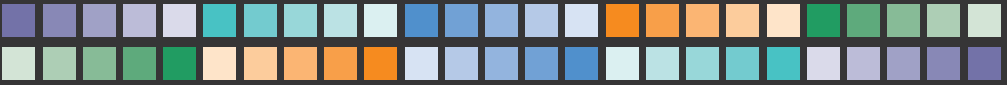


16 876

THE NUMBER OF R&D PERSONNEL IN THE BUSINESS SECTOR IN 2018/19, OF WHICH 755 HOLD A PhD (4.48%)

R&D PERSONNEL BY OCCUPATION

	TOTAL	MALE	FEMALE
RESEARCHERS	6 942	4 323	2 619
TECHNICIANS	5 286	3 508	1 778
OTHER PERSONNEL	4 648	2 823	1 825



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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