


SOUTH AFRICAN NATIONAL SURVEY OF RESEARCH AND EXPERIMENTAL DEVELOPMENT

SECTOR RESULTS AND TRENDS

AGRICULTURAL R&D AT A GLANCE 2020/21



Agriculture is central to economic growth, poverty reduction, and food security. Agricultural research and experimental development (R&D) received more attention from investors in recent years. The public sector invested the most in research in the agricultural sciences, predominantly in the science councils. Most of the R&D performed was in crop and pasture production. The overall decline in agricultural R&D in 2020/21, as with all R&D, may be attributed to the COVID-19 pandemic. This decline was most noticeable in the business sector as a result of national restrictions on economic activity.

FACT SHEET NO. 48



Science and Innovation
Statistics South Africa



Investment • Insight • Impact

THE BIG PICTURE



South Africa's **GDP**
in 2020/21 was

**R 5 521.075
BILLION**



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



Of this, **R 2.655**



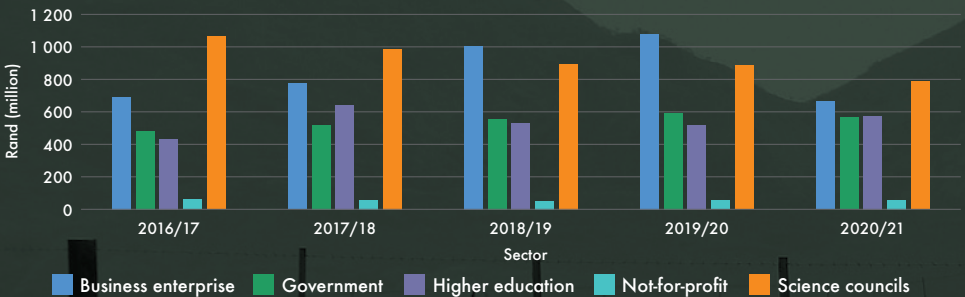
BILLION
was spent on
**agricultural
research**

SPENDING PATTERNS IN AGRICULTURAL R&D



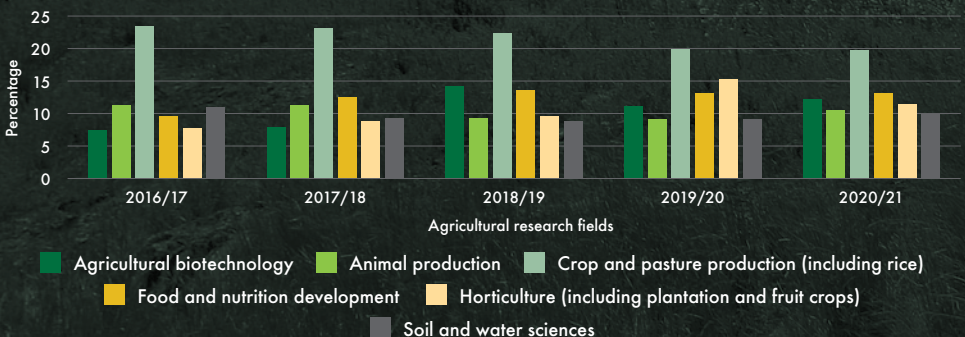
R&D in agriculture was performed mostly by the business and science council sectors over the last five years. However, the large decrease in business sector spending on R&D may be as a result of the global COVID-19 pandemic and the resulting impact on businesses.

Agricultural R&D expenditure by sector, 2016/17 to 2020/21



Over a five-year period, the share of R&D expenditure on crop and pasture production declined, yet it still accounted for approximately 20% of all agricultural R&D expenditure in 2020/21. A growing percentage of R&D spending was in food and nutrition development, peaking in 2019/20.

Share of agricultural R&D by main research fields, 2016/17 to 2020/21



PUBLIC VS OTHER SPENDING ON AGRICULTURAL R&D

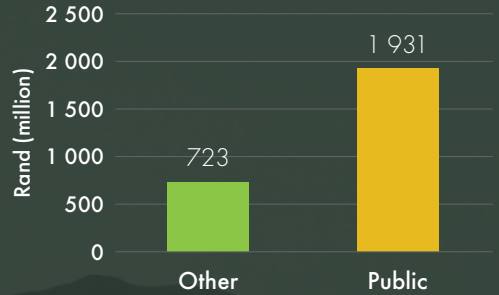


Government departments, higher education institutions and science councils spent the most on agricultural R&D in the last five years, to the tune of R1.931 billion in nominal terms. By contrast, business and the not-for-profit sectors spent R723 million over the same period.

Data note:

Public includes state research institutes, national departments, provincial departments, museums, municipalities, higher education institutions and science councils.

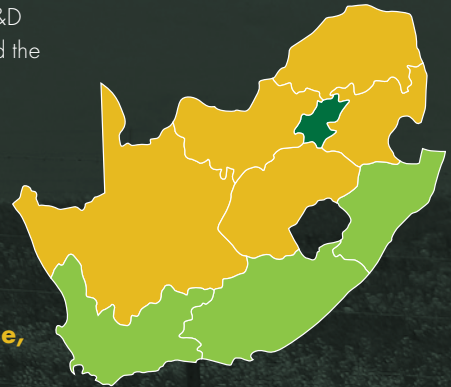
Public versus other expenditure, 2020/21



GEOGRAPHIC LOCATION OF AGRICULTURAL R&D



In the past five years, most spending on agricultural R&D occurred in Gauteng, followed by KwaZulu-Natal and the Western Cape with similar levels of expenditure.



Agricultural R&D expenditure by province, 2016/17 to 2020/21 (R million)

	Eastern Cape	Free State	Gauteng	KwaZulu-Natal	Limpopo	Mpumalanga	Northern Cape	North West	Western Cape
2016/17	299	152	589	454	197	279	103	194	476
2017/18	306	160	711	534	257	230	94	175	530
2018/19	251	210	745	568	241	317	45	124	549
2019/20	271	216	749	662	171	344	31	120	552
2020/21	282	159	716	431	234	240	37	96	454

■ 30 - 270 = Low
 ■ 270 - 510 = Medium
 ■ 511 - 750 = High

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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