

Why Research Visibility and Impact matters to the Faculty of Natural & Agricultural Sciences (NAS)

Assessing Altmetric and other tools for reporting visibility and impact of research in NAS



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NAS at a glance

- 13 Departments
- 4 clusters - Biological Sciences, Food and Agricultural Sciences, Mathematical Sciences and Physical Sciences



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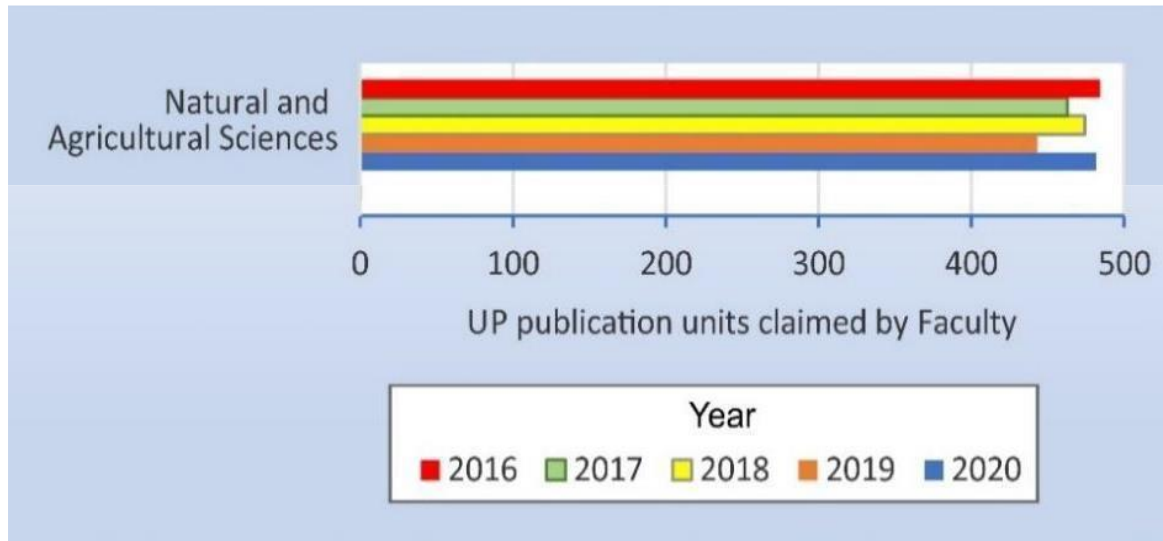
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NAS Research outputs and visibility



NAS publication outputs and units 2016-2020. ~450 units per year. 5 652 research outputs 2016-2020

- Publish in high impact journals – journal choice
- ORCiD numbers linked to outputs to increase discoverability
- Research results presented at conferences (local and international), radio and television
- Converting research findings into popular articles for newsletters, the conversation etc.
- Faculty and departmental social media accounts
 - Facebook, Twitter, LinkedIn



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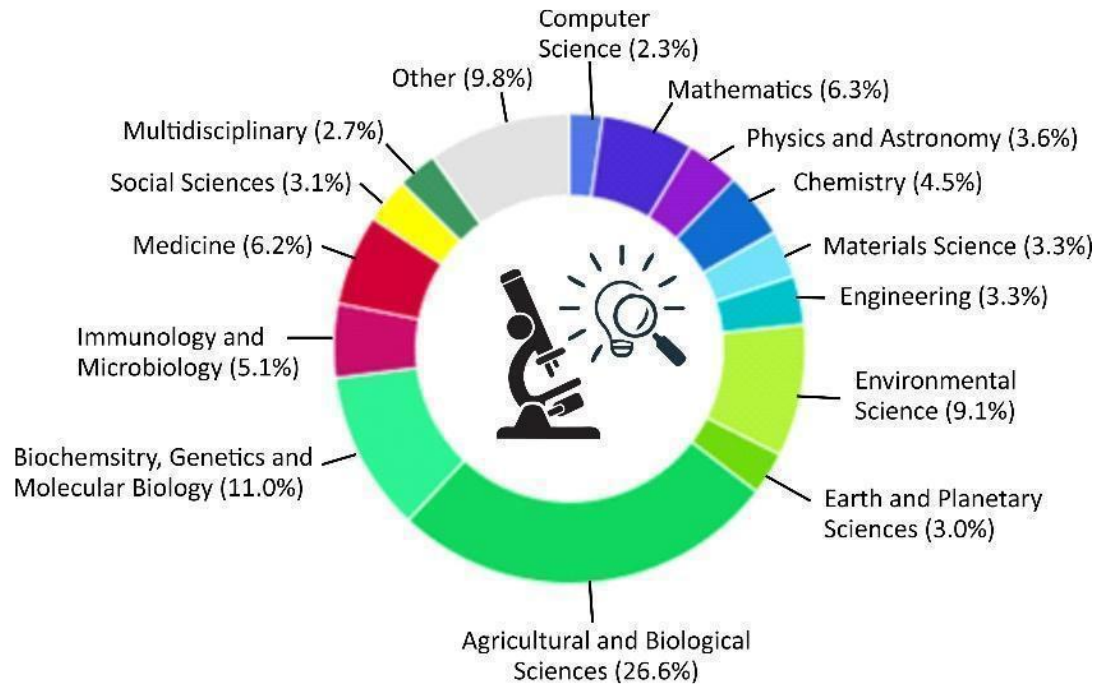
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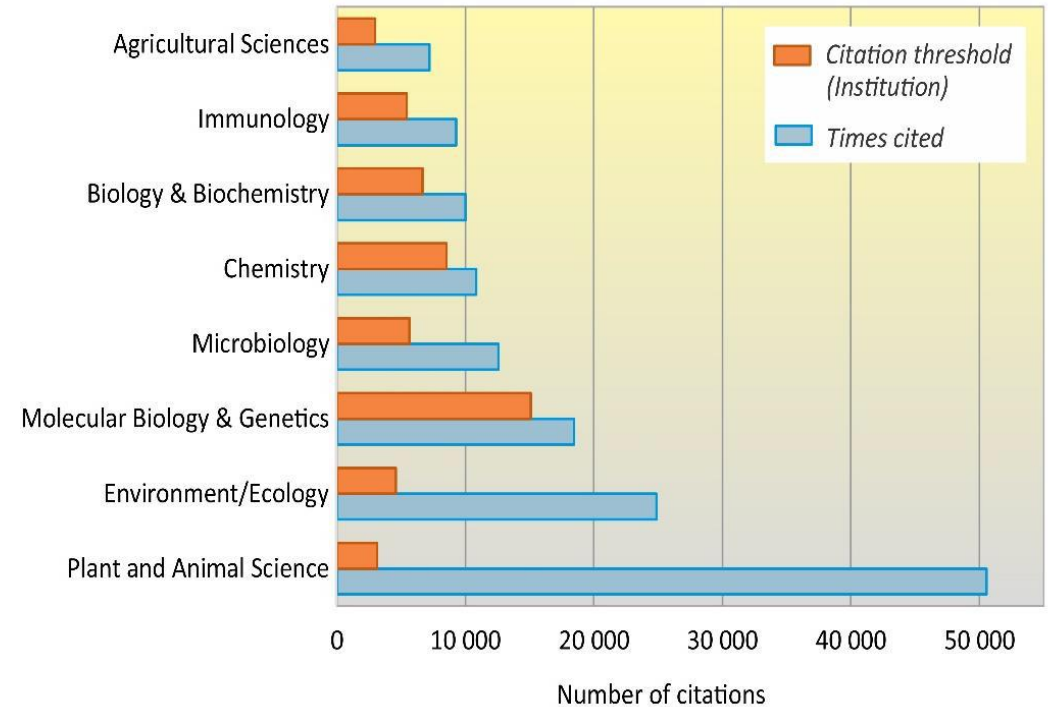
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NAS Research outputs analysis using traditional tools (5 652 research outputs 2016-2020)



Adapted pie graph originally from SciVal, based on Scopus data, includes the distribution of all NAS articles per SciVal research field (2015-2020).

Source: UP Library and DIP -Sunette Steynberg



Essential Science Indicators (ESI) based on citations over 10 years

Source: UP Library and DIP - Sunette Steynberg

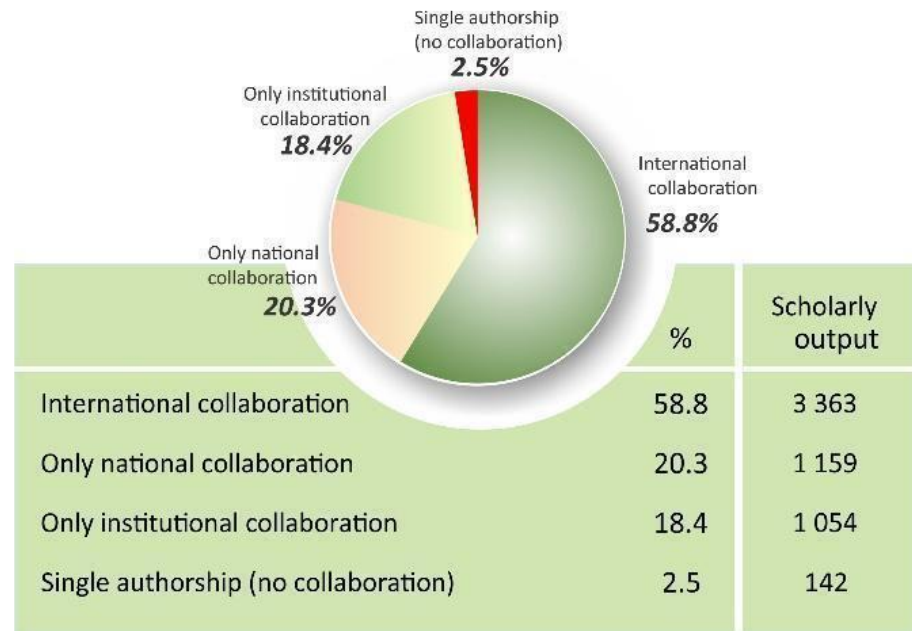


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NAS collaborations (agreements and co-authorship 2016-2020)



Agreements

- International and local partnership agreements
 - Funding contracts
 - Outputs network analysis based on co-authors (Stats Department)
- Institutions we collaborate and publish with



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Altmetric analysis (5 652 research outputs 2016-2020)



Total mentions
58,994



Outputs with attention
2,626



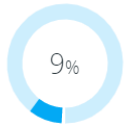
Total outputs tracked
2,841

SAVE SEARCH

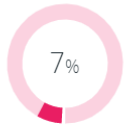
Attention breakdown



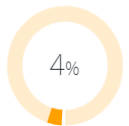
Top journals and collections



The Astrophysical Journal Letters
10 outputs with a total of 5,568 mentions

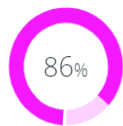


Science
12 outputs with a total of 4,148 mentions

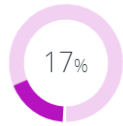


Nature Plants
6 outputs with a total of 2,416 mentions

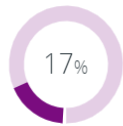
Top affiliations



University of Pretoria
2,484 outputs with a total of 50,942 mentions



Harvard University
53 outputs with a total of 10,550 mentions



Ghent University
132 outputs with a total of 10,393 mentions

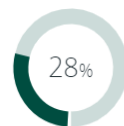
Top subject areas



Biological Sciences
1,592 outputs with a total of 38,353 mentions



Ecology
539 outputs with a total of 17,778 mentions



Environmental Sciences
360 outputs with a total of 16,676 mentions



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The demise of the largest and oldest African baobabs

Article in **Nature Plants**, June 2018

3 affiliations

University of Pretoria

Woods Hole Oceanographic Institution

Babeş-Bolyai University

4 subject areas [\[show more\]](#)

06 Biological Sciences

0607 Plant Biology

07 Agricultural and Veterinary Sciences



Fructose-driven glycolysis supports anoxia resistance in the naked mole-rat

Article in **Science**, April 2017

6 affiliations [\[show more\]](#)

University of Illinois at Chicago

Max Delbrück Center for Molecular Medicine

2 subject areas

11 Medical and Health Sciences

1109 Neurosciences



How many bird and mammal extinctions has recent conservation action prevented?

Article in **Conservation Letters**, September 2020

35 affiliations [\[show more\]](#)

University of Queensland

Newcastle University

University of Melbourne

4 subject areas [\[show more\]](#)

05 Environmental Sciences

0502 Environmental Science and Management



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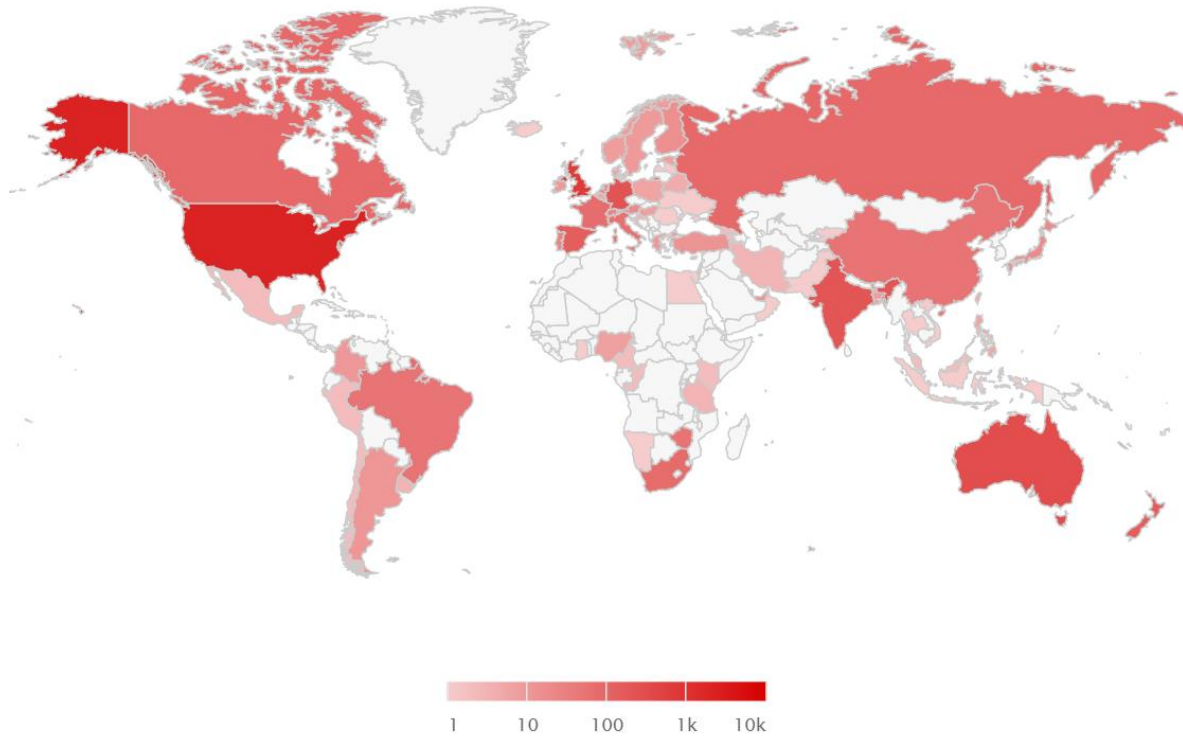
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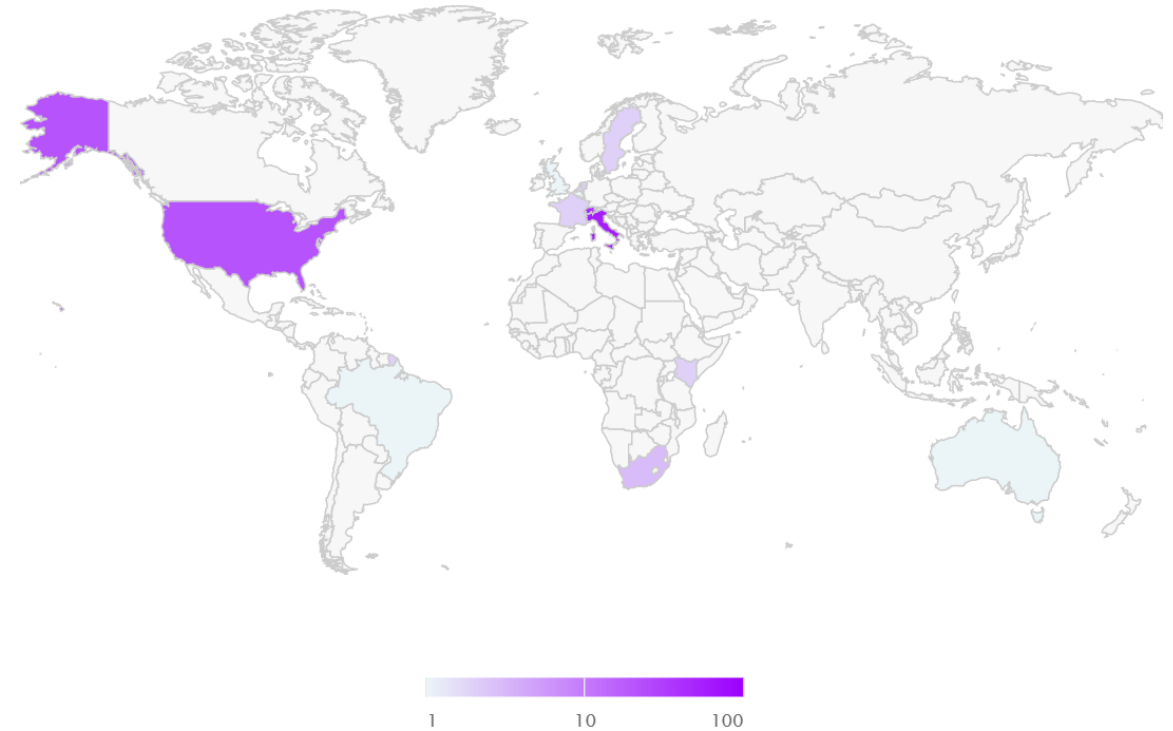
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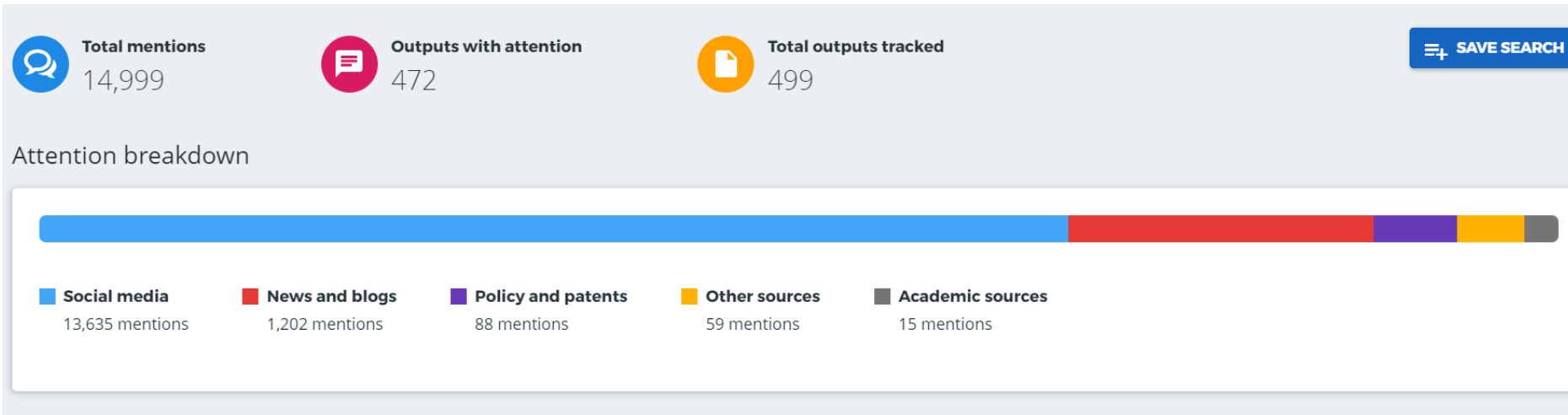
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SDG analysis (5 652 research outputs 2016-2020)



How many bird and mammal extinctions has recent conservation action prevented?
Article in **Conservation Letters**, September 2020

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05 Environmental Sciences

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1 sustainable development goal

15 Life on Land



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Faculty

- ✓ Successfully used Altmetric to obtain data on policy mentions, SDG output reports and social media engagements
- ✓ Used Altmetric analysis and a combination of traditional approaches to report of impact of NAS research outputs for the faculty quinquennial review
- Continue to use Altmetric for reporting and routine monitoring
- Align and monitor effectiveness of the NAS integrated marketing and comms plan

Department

- Roll out to departments for reporting and planning
- Assessing departmental level impact and areas of strengths to develop

Researcher

- ✓ Have used the tool for individual research analysis for internal UP motivation
- Roll out the explorer to researchers as a tool to monitor their own research social engagement/impact
- May use the reports for various applications as necessary



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Why Research Visibility and Impact matters to NAS?

We are a faculty that CARES

- ✓ *That our research addresses and progresses solutions to real world problems*
- ✓ *That the excellence and outcomes of our research is shared with our peers and communities of practice*
- ✓ *That our research is relevant and accessible to the end users in various mediums and on various platforms*

Research with impact, demonstrated, supports NAS' internationalization, fundraising and reputation



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