Check for updates

AUTHOR:
Marthinus J. Booysen[1,2]

AFFILIATIONS:
[1]Department of Electrical and Electronic Engineering, Stellenbosch University, Stellenbosch, South Africa
[2]Department of Industrial Engineering, Stellenbosch University, Stellenbosch, South Africa

CORRESPONDENCE TO:
Marthinus Booysen

EMAIL:
mjbooysen@sun.ac.za

HOW TO CITE:
Booysen MJ. The National Research Foundation researcher rating system: An expensive bureaucracy whose time has passed. S Afr J Sci. 2026;122(9/10), Art. #27295. https://doi.org/10.17159/sajs.2026/27295

ARTICLE INCLUDES:
☐ Peer review
☐ Supplementary material

KEYWORDS:
NRF rating, research evaluation, bibliometrics, research policy, South Africa, academic incentives

PUBLISHED:
29 September 2026

© 2026. The Author(s). Published under a Creative Commons Attribution Licence.

The National Research Foundation researcher rating system: An expensive bureaucracy whose time has passed

Significance:

South Africa's National Research Foundation (NRF) researcher rating system consumes tens of thousands of hours of senior academic time annually, distorts research behaviour, entrenches social and epistemic inequalities, and now delivers negligible direct financial benefit. I argue that the system no longer justifies its costs and that the research community would be better served by abolishing it in favour of transparent, internationally recognised bibliometric indicators supplemented by competitive grant-based peer review.

Introduction

South Africa's National Research Foundation (NRF) researcher rating system has been a fixture of the academic landscape since its inception in 1984 under the Foundation for Research Development.[1] Originally conceived to concentrate scarce funding on demonstrably excellent researchers and to provide a nationally recognised benchmark of research quality, the system now rates researchers across all disciplines from the natural sciences to the humanities on a 5-year renewal cycle. In the mid-2000s, it awarded A-, B-, C- and Y-rated categories to about 3500 researchers, and drew on the time of more than 11 000 local and international reviewers over its first two decades of operation.[1]

The NRF rating system has attracted sustained critical attention in these pages over many years. Wingfield offered a practitioner's account of what the system demands of applicants, acknowledging both its value and its harshness.[2] Callaghan subjected its methodology to systematic scrutiny and found it wanting on validity and reliability grounds.[3] Tomaselli has repeatedly examined how state incentive structures distort the behaviour of researchers and institutions, arguing that the South African scientific publishing economy is built on perverse incentives that commodify research and prioritise countable outputs over substantive contribution.[4] McKenna and Swartz have interrogated the ideology of 'global excellence' that underpins systems like the NRF rating, arguing that the uncritical importation of Northern notions of research quality serves to marginalise locally relevant scholarship and to reproduce inequality within South African higher education.[5] This Commentary builds on that accumulated critical tradition.

It is time to ask an uncomfortable question: does this system still justify its existence? I argue that it does not. The direct financial incentives that once gave the ratings their practical force have been largely withdrawn.[1] What remains is a bureaucratic apparatus that consumes enormous quantities of academic time, introduces well-documented validity and bias concerns[3], distorts researcher behaviour in ways that are damaging to science, and perpetuates evaluation frameworks designed for and by institutions in the Global North.[6,7] The costs are real; the benefits, increasingly difficult to identify.

The hidden tax on academic time

The most immediate and least discussed cost of the NRF rating system is the sheer volume of academic time it consumes. Each applicant is required to assemble 8 years of research outputs, write personal statements and nominate six potential reviewers.[2] This process conservatively takes an applicant 20–40 hours to complete properly. With hundreds of new and renewal applications processed annually, and about 4500 rated researchers in a 5-year renewal cycle, the aggregate applicant burden alone amounts to thousands of hours per year across the South African research community.

The burden on reviewers is at least as large. Each application requires the NRF to solicit multiple external reviews, commonly from a pool including applicant-nominated and panel-nominated reviewers, with at least six reviewers typically approached. Writing a considered evaluation of a colleague's 8-year research record, reading publications, assessing impact and composing a report, takes a competent reviewer 3–6 hours at minimum. A conservative estimate of 500 applications per year, each generating four reviewer reports, yields between 6000 and 12 000 hours of senior academic time consumed annually by the review process alone, before accounting for panel member time, NRF administrative overhead or the institutional processing required at universities before applications can even be submitted.

These hours carry a direct monetary cost that is never acknowledged in any public accounting of the system. Illustratively, using a total employment cost of ZAR 800 000 to ZAR 1 200 000 per year for a senior academic, equivalent to approximately ZAR 450 to ZAR 680 per working hour, the reviewer burden alone represents ZAR 2.7 million to ZAR 8.2 million in senior academic labour annually. Adding applicant preparation time at the same rates yields a further ZAR 4.5 million up to ZAR 12 million. The combined and conservative estimate, excluding panel sittings, NRF staffing and university administration, places the total annual cost of the rating system in academic labour at between ZAR 7 million and ZAR 20 million per year. South Africa already spends less than 1% of its gross domestic product on research, well below the Organisation for Economic Co-operation and Development (OECD) average.[8] A system that silently consumes this volume of its most experienced researchers' time is a self-imposed handicap the country cannot afford.

This is not an abstraction. In May 2026, I received an email from the NRF apologising, in the NRF's own words, for "an unbearably long wait" on my own application, submitted 18 months prior and still unresolved. This is not an isolated experience; it is symptomatic of a system straining under its own weight. The problem extends beyond the rated and the applicants. A recent call for submissions in this Journal drew attention to the invisible labour of those who sustain the research enterprise without receiving formal recognition: technicians, field assistants, data managers and the many others whose contributions do not translate into authorships, citations or NRF ratings.[9] The rating system's focus on individually attributable research outputs sits uneasily with this broader concern: much of the labour that sustains research, including technical, field, data-management and administrative contributions, remains difficult to recognise within a rating framework centred on the individual researcher.

The comparison with other national evaluation systems is instructive. The United Kingdom's Research Excellence Framework (REF), widely criticised for bureaucratic excess, was estimated to cost GBP 246 million for a single exercise, with GBP 212 million of that borne by universities in preparing submissions.[10,11] The NRF rating system has never been subject to an equivalent cost–benefit audit. The absence of such an accounting is itself telling: a system that demands this much of the research community's most productive members ought to be able to demonstrate commensurate value. A commissioned historical review of the NRF rating system concluded as early as 2007 that "if ratings do not correlate strongly with outcomes, it is hard to justify the effort that goes into the rating system", noting that both the financial and non-financial costs of the system warranted serious scrutiny.[12]

International experience strengthens this cost–benefit concern. Australia's Excellence in Research for Australia, a national institutional research evaluation exercise analogous in burden if not in unit of assessment, was discontinued by the Minister for Education in 2023; the Australian Research Council is now developing a replacement approach.[13] New Zealand has announced that its Performance-Based Research Fund will be replaced by a streamlined Tertiary Research Excellence Fund, with the individual quality evaluation component replaced by a metric-based assessment of provider research performance.[14] In the United Kingdom, the REF remains active, but recent policy debate has again focused on whether its cost and bureaucracy are justified.[15] These cases do not map perfectly onto the NRF rating system, but they show that mature research systems are reconsidering expensive, cyclical peer-review evaluation exercises. South Africa should do the same.

The financial justification has collapsed

The NRF rating system was originally designed, in part, as a mechanism for channelling direct financial incentives to excellent researchers. At its height, A-rated researchers received ZAR 100 000 per annum, B-rated ZAR 80 000, and C-rated ZAR 40 000, with the system costing the public purse approximately ZAR 72 million per year when there were 1684 rated researchers in 2008.[1] Within a decade, the number of rated researchers had more than doubled to 3689 and, while individual grant sizes remained unchanged, the system cost South African taxpayers almost ZAR 160 million per year.[8] These were meaningful sums that provided a plausible rationale for the bureaucratic overhead, but the system had already become a victim of its own success.

That rationale has now largely evaporated. The scale of the collapse is stark. An A-rated researcher who previously received ZAR 100 000 per year (ZAR 500 000 over a 5-year rating cycle), under the revised 2018 framework, received a single once-off payment of ZAR 30 000 for the entire cycle: a reduction of 94% in real incentive value. B- and C-rated researchers faced equivalent cuts.[16] The NRF's own framework document acknowledged that "the costs of supporting IFRR [Incentive Funding for Rated Researchers] is simply not sustainable in the long term, especially in a constrained fiscal environment"[16]. Over the 10 years from 2008 to 2018, the NRF invested a total of ZAR 816 944 793 in incentive funding for rated researchers[16] – a substantial public commitment that is now being unwound. The primary monetary benefit of a rating has shifted from the NRF itself to individual universities, which set their own top-up payments and use ratings for internal promotion and resource allocation decisions.

This shift transforms the NRF rating from a funding instrument into a reputational one: a credential used principally for institutional positioning and personal career advancement. But if that is its function, one must ask whether the NRF rating adds meaningful information that is not already captured by a researcher's publication record, citation profile, h-index, grant success and international invitations, all of which are continuously and publicly available. The Leiden Manifesto supports the responsible, transparent and contextual use of research metrics, while emphasising that indicators should inform, rather than replace, judgement. A defensible alternative to the NRF rating system would therefore combine transparent, field-normalised evidence of contribution with qualitative assessment of research content, mentorship, societal impact and grant and project performance.[17]

Validity, bias and the perverse incentive to disengage

The NRF rating process has well-documented problems of validity and reliability. Callaghan has shown that the system's subjective, closed peer review methodology is structurally prone to inconsistency: an applicant is not anonymised to reviewers, yet the review itself is opaque to the applicant and to the research community, inverting the protections offered by standard double-anonymous peer review.[3] Where four reviewers may recommend rating and two object, the outcome can turn on individual reviewer disposition rather than the objective quality of the research record. Marshall and colleagues have demonstrated through linguistic analysis of reviewer reports that the evaluative language used in NRF reviews is heavily judgement laden and shaped by reviewers' subjective appreciation of a researcher's standing, rather than systematic assessment of output.[18]

Defenders of the system have argued that the rating process includes safeguards against individual reviewer bias, including specialist committees and independently nominated reviewers; however, these safeguards do not remove the substantial transaction cost, opacity to applicants, or dependence on subjective judgement. These are not merely methodological concerns; they have ethical consequences. A system that purports to identify the best researchers in South Africa, but does so through a process whose outcomes are not verifiable, is making high-stakes career decisions (influencing promotion, institutional funding, and national recognition) on an unreliable basis.

The bias problem is compounded by the structure of the nomination process. Applicants nominate their own reviewers, creating an obvious incentive to list colleagues who are likely to be sympathetic.[3] Researchers in well-networked, English-language, research-intensive institutions are likely advantaged over colleagues at teaching-focused or historically disadvantaged universities whose international networks are thinner. Researchers in fields that align well with Global North publication norms (high-volume, English-language, journal-article-centric disciplines) are systematically favoured over those in humanities, applied, practice-based or Indigenous knowledge fields.[6,7] The transformation agenda that South African higher education has committed to is not well served by an evaluation system with these structural properties.[19]

A particularly acute manifestation of this structural problem is the assignment of assessors from natural science disciplines to humanities panels in the name of procedural objectivity. Reviewers unfamiliar with inter-, multi-, and transdisciplinary critical frameworks tend to undervalue work that does not conform to the conventions of their own fields, effectively penalising the most intellectually adventurous scholarship. It is worth recalling that the social sciences and humanities were only incorporated into the rating system in 2002 and 2003, nearly two decades after its 1984 inception: the system was designed for and by the natural sciences and subsequently extended to disciplines it was not built to accommodate.[12]

A further risk is that strongly individualised assessment can undervalue collaborative, interdisciplinary, mentorship-intensive and community-engaged research. Where the unit of assessment is the individual researcher, contributions to team science may be harder to attribute than single-author or small-team outputs, particularly when reviewers must infer individual standing from publication and citation records. This does not prove that the

NRF system directly discourages collaboration, but it creates an incentive environment in which researchers may rationally prioritise outputs that are most legible to evaluators. Tomaselli's analysis of perverse incentives in South African academic publishing is instructive here: when countable outputs become the primary currency of institutional reward, the pressure to maximise individually attributable, journal-indexed work crowds out the broader forms of scholarly contribution that a developing research system most needs.[4] De Rijcke and colleagues have documented this behavioural distortion extensively in the international literature on performance-based research evaluation: when individual researchers are the unit of assessment, the system progressively narrows the range of activities that rational actors will invest in, concentrating effort on whatever is most legible to reviewers.[20] Butler's landmark study of Australia's analogous system demonstrated empirically that output volumes increased under performance-based funding, but that this came at the cost of research quality and the breadth of academic engagement.[21]

A Global North instrument in a Global South context

There is a deeper structural problem that transcends the operational failures of the NRF system. The very logic of the rating system, namely that research quality is best determined by closed expert panels using criteria derived from Northern-centric notions of excellence and publishing primarily in English-language journals indexed in Web of Science or Scopus, replicates the epistemic hierarchies of a colonial research order.[6] Beigel has argued that researchers in the Global South who operate within local knowledge frameworks, who publish in national languages, or whose work is oriented toward the developmental needs of their societies, are structurally penalised by evaluation systems designed to benchmark against Northern standards of excellence.[6] Love and Hall have made the same argument with respect to indigenous researchers in New Zealand's analogous Performance-Based Research Fund, finding that the system reinforces the hegemony of Western epistemologies and marginalises non-Western research traditions.[7]

South Africa, with its profound commitment to epistemic justice and the decolonisation of knowledge, ought to be especially alert to an evaluation system that operationalises Global North standards as the universal measure of research worth. McKenna and Swartz have shown that the discourse of 'global excellence' functions ideologically to position Southern universities and their researchers as perpetually catching up to a Northern standard they had no hand in defining, and that this framing marginalises the locally grounded, practice-oriented and community-engaged scholarship that South African conditions most urgently demand.[5] The country's researchers who work on African problems, in African languages, for African communities, should not be evaluated as imperfect approximations of Northern ideal types.

A better way forward

The argument here is not that research quality is unimportant or that accountability for public investment in research is unnecessary. It is that the NRF rating system is a disproportionately costly, structurally biased and behaviourally distorting instrument for achieving those legitimate goals, and that better alternatives are available.

A more defensible approach would rest on three pillars. First, publicly available bibliometric profiles (publication record, field-normalised citation indicators, grant record, postgraduate supervision, open data and software outputs, policy or practice influence, and documented societal impact) should serve as the transparent, continuously updated baseline for assessing individual research productivity. These are imperfect, as the Leiden Manifesto carefully acknowledges[17], but they are open, verifiable and free of the opacity that makes the current system unaccountable. Second, competitive grant review (already conducted by the NRF for its own funding instruments) provides rigorous, purpose-specific peer evaluation of research quality and direction, without the overhead of a parallel national rating bureaucracy. Third, where institutions need to make promotion and resource allocation decisions, they are already better positioned than any national panel to contextualise a researcher's contributions within their disciplinary and institutional context.

One concession is warranted: for early career researchers, a structured external evaluation may retain developmental value in helping them benchmark their progress and establish credibility within the research community. The critique advanced here is directed primarily at the system's burden on established researchers, for whom the rating adds little information that is not already publicly available and continuously updated.

A critical advantage of this approach is that it carries no additional cost: the indexes that underpin these profiles already exist and are continuously maintained. Every South African researcher already has a publicly visible record in one or more academic databases. Consulting these profiles costs nothing, whereas the NRF system consumes the tens of thousands of hours documented above to produce a rating that contains less information than the underlying profiles already provide. A common objection is that international bibliometric databases reflect Global North publication norms and therefore disadvantage researchers publishing locally or in African contexts. This concern is real, but it does not uniquely afflict the bibliometric alternative: the NRF rating system itself rewards publication in exactly the same Global North indexed journals and penalises the same locally oriented scholarship. Replacing the NRF system with existing metrics does not worsen this underlying bias; it simply removes the bureaucratic overhead that currently sits on top of it. Where field-specific differences in citation norms are a concern, field-normalised indicators directly address this by benchmarking a researcher's output against the norms of their own discipline rather than against an undifferentiated universal standard. Moreover, these profiles are already consulted informally in every appointment, promotion and grant decision: the proposal is not to introduce a new instrument but to formalise what the research community already does, without the parallel bureaucracy of a national rating exercise sitting on top of it.

The NRF's considerable administrative capacity and its national convening role could be redirected toward what matters more: growing the number of researchers, funding more projects, supporting postgraduate training and building the research infrastructure that South Africa's universities desperately need. A rating system that costs tens of thousands of hours of irreplaceable academic time, and that delivers in return only a label that expires every 5 years and comes with declining financial reward, is not a good use of the country's scientific capital.

Conclusion

The NRF researcher rating system was a reasonable institutional response to a problem of the 1980s: how to allocate scarce research funding in the absence of reliable public information about researcher quality. Forty years later, that information is publicly and continuously available in every researcher's citation profile, publication record and grant history. The system now consumes resources it cannot justify, produces outcomes it cannot guarantee are unbiased and shapes research behaviour in ways that are at odds with the collaborative, contextually grounded, developmental research that South Africa most urgently needs.

The NRF would do more for South African science by abolishing the rating system and redirecting those resources toward funding research itself.

There is, finally, a more fundamental question that the operational critique of the NRF system raises but does not exhaust: whether the individual ranking of researchers is a coherent undertaking at all. Rankings make sense in sport because athletes compete directly against one another in defined events under identical rules. Research does not work this way. A theorist and an empiricist, a fieldworker and a modeller, a mentor who builds 10 successful doctoral researchers and a prolific sole author, are not playing the same game and cannot meaningfully be placed on a single scale. Research is a cumulative, collaborative, long-horizon enterprise in which the most transformative contributions are often the least legible to any ranking system, precisely because they challenge existing frameworks rather than extend them. A system that ranks individual researchers as if they were competitors in a tournament mistakes the nature of science itself. This is not a new concern: a formal review of the NRF system in the 1990s observed that "the setting up of a hierarchy of researchers is fraught with difficulty, particularly when it

is viewed sceptically (sometimes with good cause), and may act as a disincentive to many able individuals"[12]. The concern has persisted for 30 years. It is time to act on it.

Declarations

I have no competing interests to declare. I have no AI or LLM use to declare. The opinions expressed in this work are my own and do not necessarily reflect those of my affiliated university.

References

1. Pouris A. The National Research Foundation's rating system: Why scientists let their ratings lapse. S Afr J Sci. 2007;103(11/12):439–441.
2. Wingfield B. The ABCs of an NRF rating. S Afr J Sci. 2014;110(7/8), Art. #a0072. https://doi.org/10.1590/sajs.2014/a0072
3. Callaghan C. A review of South Africa's National Research Foundation's ratings methodology from a social science perspective. S Afr J Sci. 2018;114(3/4), Art. #2017-0344. https://doi.org/10.17159/sajs.2018/20170344
4. Tomaselli KG. Perverse incentives and the political economy of South African academic journal publishing. S Afr J Sci. 2018;114(11/12), Art. #4341. https://doi.org/10.17159/sajs.2018/4341
5. McKenna S, Swartz L. The university of global excellence. S Afr J Sci. 2024;120(1/2), Art. #17469. https://doi.org/10.17159/sajs.2024/17469
6. Beigel F. Publishing from the periphery: Structural heterogeneity and segmented circuits. Curr Sociol. 2014;62(5):743–765. https://doi.org/10.1177/0011392114533977
7. Love TR, Hall CM. Understanding indigenous exploitation through performance-based research funding reviews in colonial states. Front Res Metr Anal. 2020;5, Art. #563330. https://doi.org/10.3389/frma.2020.563330
8. Wingfield B, Vaughan K. Money woes force South Africa to revisit how it rewards researchers. The Conversation. 2017 October 23. https://doi.org/10.64628/AAJ.5juj6wt4d
9. Swartz L. Making the hidden visible: A challenge and call for submissions. S Afr J Sci. 2026;122(3/4), Art. #25640. https://doi.org/10.17159/sajs.2026/25640
10. Pinar M, Horne TJ. Assessing research excellence: Evaluating the Research Excellence Framework. Res Eval. 2022;31(2):173–187. https://doi.org/10.1093/reseval/rvab042
11. Wilsdon J, Allen L, Belfiore E, Campbell P, Curry S, Hill S, et al. The metric tide: Report of the independent review of the role of metrics in research assessment and management. London: HEFCE; 2015. https://doi.org/10.13140/RG.2.1.4929.1363
12. Krige S. An historical review and analysis of the NRF rating system 1983-2005. Pretoria: National Research Foundation; 2007.
13. Sheil M, Dodds S, Hutchinson M. Trusting Australia's ability: Review of the Australian Research Council Act 2001. Canberra: Australian Government Department of Education; 2023. Available from: https://www.education.gov.au/download/15976/trusting-australias-ability-review-australian-research-council-act-2001/32415/document/pdf
14. New Zealand Ministry of Education. Government launches university reforms: Replacing the Performance-Based Research Fund with the Tertiary Research Excellence Fund [webpage on the Internet]. c2025 [updated 2025 Sep 02; cited 2026 Jun 18]. Available from: https://www.education.govt.nz/news/government-launches-university-reforms
15. Dalmia S, Carr R. Replacing the Research Excellence Framework [webpage on the Internet]. c2024 [cited 2026 Jun 01]. Available from: https://britishprogress.org/uk-day-one/replacing-the-research-excellence-framework
16. South African National Research Foundation (NRF). Incentive Funding for Rated Researchers (IFRR): Knowledge Advancement and Support (KAS) framework document and funding guide. Pretoria: NRF; 2018.
17. Hicks D, Wouters P, Waltman L, de Rijcke S, Rafols I. Bibliometrics: The Leiden Manifesto for research metrics. Nature. 2015;520(7548):429–431. https://doi.org/10.1038/520429a
18. Marshall C, Adendorff R, de Klerk V. The role of APPRAISAL in the NRF rating system: An analysis of judgement and appreciation in peer reviewers' reports. S Afr Linguist Appl Lang Stud. 2009;27(4):391–412. https://doi.org/10.2989/SALALS.2009.27.4.3.1023
19. Govinder KS, Zondo NP, Makgoba MW. A new look at demographic transformation for universities in South Africa. S Afr J Sci. 2013;109(11/12), Art. #2013-0163. https://doi.org/10.1590/sajs.2013/20130163
20. De Rijcke S, Wouters PF, Rushforth AD, Franssen TP, Hammarfelt B. Evaluation practices and effects of indicator use: A literature review. Res Eval. 2016;25(2):161–169. https://doi.org/10.1093/reseval/rvv038
21. Butler L. Modifying publication practices in response to funding formulas. Res Eval. 2003;12(1):39–46. https://doi.org/10.3152/147154403781776780