Call to action: Transforming 'excellence' for the Global South and beyond

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This book highlights gaps and shortcomings in how the notion of 'excellence' is currently applied across research ecosystems. It argues that we must do better if scientific research is to fulfil its promise – as a productive force in creating a healthier, happier, more prosperous society, in particular in the Global South, where the hazards of striving for 'excellence' can lead to troubling effects. It is time for change, and this book highlights ideas for how we can achieve this.

From a range of theoretical and practical perspectives, we dug deep to understand the current scope of problems associated with the general notion of 'research excellence', especially in the context of performance assessment systems applied by funders. We have identified deficiencies in current systems of research evaluation that have the potential to further exacerbate the gaps between North and South. We have proposed new ideas, informed by knowledge and experiences working across the Global South, that offer alternatives to the status quo.

But the discussion contained in this book is not just about research in low- and middle-income countries (LMICs). Positive change comes from fresh thinking, and the Southern research community has no shortage of this resource. Indeed, with more than half of the world's population growth between now and 2050 to come from LMICs, the entire globe will depend on this burgeoning talent pool for the knowledge and innovation a prosperous global future will need to tap into. Accordingly, this book has laid the groundwork for a new vision of what is important for high-quality and high-impact research to emerge. There is a clear appetite among researchers, funders and administrators to have research excellence better reflect context and the ultimate objectives of science policies and research initiatives, reconciling the needs of scientists and society at large.

The misuse of the term 'research excellence' has led to debates around the globe. There is an opportunity for new ideas from the Global South to lead to positive change not only in their respective research ecosystems, but also around the globe. At the heart of the issue is the need for a pluralistic view of what quality means and a better understanding of what it means to recognise the 'best' researchers, as well as a drive to operationalise and systematise our knowledge on the issue. Simplistic views of 'excellence' in scientific output are unhelpful in a world that enables research to be shared in increasingly more open, accessible and usable forms. While avoiding its most egregious misuses, we can also reclaim the term 'research excellence' by building improved or radically new assessment tools and science policies, with more appropriate stakeholder expectations based on norms and values that align with research practices and goals of the Global South.

'Beyond buzzwords': Research excellence should not be taken for granted, but made transparent, precise and tailored to context, or avoided altogether

Research *excellence*, while incorporating the ideal standards (whatever they may be) of 'high-quality' science, is fundamentally different from research *quality* in that it implies superiority and a scientific 'elite'. In addition, as many of the contributions to this collection have

highlighted, it has become a powerful rhetorical technique, particularly among funders and institutions. While references to 'top' researchers, institutions, papers, etc., may not be problematic *per se*, excellence as a buzzword or public relations tool has become disproportionately dominant. At best, the term provides very little information on the science – or scientists – that it qualifies, nor does it say much about the potential use, re-use or practical application of research. At worst, it can lead to perverse incentives and introduce significant biases in how research from the Global South is judged. There are advantages and drawbacks to concentrating rewards and resources among a small group of extraordinary 'excellent' researchers, particularly where resources are scarce. Policies and institutional strategies should be able to choose to eschew the term 'excellence' not to decrease the quality of the research performed, but to focus efforts on strengthening research ecosystems or focusing on specific societal challenges, for instance.

Transparency means being open and systematic about how we approach the definition and measurement of research quality or excellence. Advancing the quality of research will require quantitative and qualitative approaches that are tied overtly to the underlying objectives of the work. But to what degree, and how, is excellence measurable? Meaningful research evaluation must be purpose-built. It cannot simply be transposed or assumed from other tools, or from political discourses, and the effects of evaluation frameworks, particularly 'excellence'-driven, must be explicitly considered. Evaluators must reflect on the intentions, and potential unintended consequences, of their efforts.

Finally, more efforts should be devoted to measuring meaningful research impact, which is perhaps distinct from the notion of 'research excellence' that currently prevails, but should be an increasingly important approach to research evaluation. It is time for funders, universities, governments and others to innovate in tailoring the processes of reviewing research proposals, setting up incentive structures, and gauging the results of research projects. Addressing research funding and publication processes is especially critical for achieving this type of change. We need to recognise, describe and incentivise research that has value across a variety of local, national and global contexts; it needs to be done well, be valid, but need not be 'excellent' or 'superior'.

'Many voices': Excellence is pluralistic, and should be used to recognise diverse forms of scholarship

To reinforce this last point, research has value and importance in different contexts, places and in time. Where the term 'excellence' is used, it must be seen as fundamentally pluralistic. There is no globally accepted definition of excellent science, and evaluators should accept the opportunity for exploration and contextualisation this freedom provides. We need to move away from a homogenous view of both research quality and research excellence to allow for science to be measured against local priorities or the critical needs of national research ecosystems.

Second, a pluralistic view of research excellence is intertwined with the diversity in the knowledge that is produced through research. Scientific results are produced in specific settings, with specific values, objectives and institutions guiding the work. We must enable different forms of high-quality knowledge to be produced through different methodologies and in different languages and formats. This not only helps develop a multiplicity of better-tailored standards for assessing research in different contexts, but can also help research and researchers from the Global South be better recognised locally and globally, rather than being restricted to a narrow range of 'Northern' indicators and metrics.

Accepting pluralism also links to being purposeful and transparent about how terms such as 'research excellence' are used. Research evaluations can and should have different objectives. At times, evaluations should seek to reward the top performers; at other times, evaluations should aim to shed light on novel or breakthrough ideas; and sometimes, evaluation should be used to prioritise research that addresses pressing societal or environmental challenges.

'Towards operationalisation': Actors and platforms that can change how science is done

Meaningful change will require a large-scale systematic effort. Structural change is needed. Many contributing actors – such as researchers,

funders, universities and journals, to name but a few – play particular roles in valuing and assessing research. With an all-of-system understanding of the issue, different actors should consider how their efforts can make a difference for their own community, and how change may contribute to wider systems' transformation. Here there is a significant opportunity. New partnerships and platforms that rest on the collective action of multiple actors have the potential to stimulate change in deep and far-stretching ways. For example, new publishing platforms and evaluation schemes can help value locally relevant knowledge and move beyond a 'catch-up' mentality – this is seen through 'open science' leadership in Latin America, for instance. Another example is the African Academy of Science which, in collaboration with key international donors such as the Wellcome Trust, has developed tools and programmes to 'shift the centre of gravity' of global research. And national granting councils are increasingly at the forefront of these efforts. The Science Granting Councils Initiative (SGCI) in sub-Saharan Africa contributes to empowering national research agencies through dialogues and capacity building to focus precisely on collaboratively operationalising new ideas and improving the effectiveness of grant-making in contexts where funds and other resources are scarce.

Many theoretical underpinnings, methodologies and performance indicators are there, as evidenced by the contributions in this book. Now is the time for dedicated leadership in operationalising, adapting and continuously improving on them, with a view to either moving beyond or to reclaiming 'research excellence' in the Global South and globally. We need compelling, effective, affordable, scalable and sustainable solutions. This will have important 'bottom-up' and 'top-down' implications on how different modalities of knowledge are perceived and produced, shared and used, and on researchers' careers, as high-quality science and scientists are increasingly called upon to tackle the most pressing socio-economic and environmental problems at national, regional and global scales.