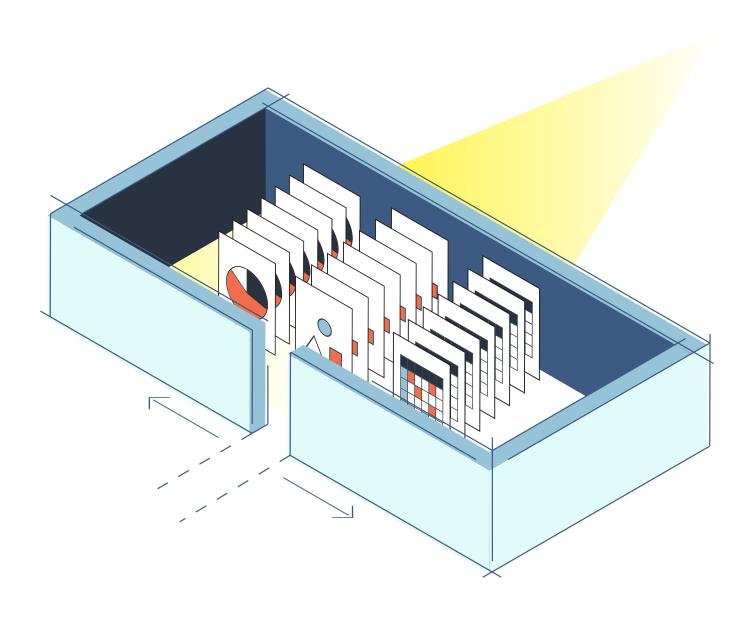
# Lessons for the Global Transition to Equitable Open Access to Research







#### Introduction

Open access unlocks research and facilitates collaborations to address the world's greatest challenges. It allows the public to engage with research and supports policymakers, journalists, medical professionals, teachers, students and the general public to translate research into action. Since open access (OA) was defined by the <u>Budapest Open Access Initiative</u> (BOAI) in 2002, a global movement has driven OA from an untested concept into the mainstream. Yet to fully realize the promise of OA that was envisioned when the BOAI was launched, we must ensure that the systems we are building are equitable and enable anyone, anywhere to both access and contribute to the global record of scholarship. To achieve this goal, we can take lessons from countries that pioneered the equitable development of scholarly communications. This paper is based on a series of interviews conducted with OA leaders who are implementing equitable OA models.

Today, approximately half of all research articles are OA and freely available to read, yet new barriers have been created for authors to publish. These barriers, including Article Processing Charges (APCs) and the current research assessment system, are not impacting authors evenly.

APCs are fees charged by publishers to authors (or their institution) to make their research articles OA. The rise in use of APCs essentially shifts the paywall from the reader to the author. There is growing recognition that OA publishing models that rely on APCs paid by authors are neither equitable nor sustainable. Researchers, including those early in their careers, as well as those in the Global South, often lack the financial resources necessary to pay APCs.

Globally, there is a need to reform research assessment and rewards to improve incentives. The current assessment system faces challenges including a focus on metrics over quality, marginalization of important research areas, and a lack of recognition for diverse research outputs and contributions. Many countries in the Global South now use the Web of Science, a commercial platform which uses the Journal Impact Factor. While there are myriad problems with the use of such metrics, including a bias towards English-language research, these metrics are often used to determine university rankings.

In the Global South, where some institutions do not have the funds to purchase journal subscriptions, leaders have developed their own systems and structures, including publishing platforms and repositories. What they have created is an ecosystem of community-led infrastructure, institutional support for publishing and alternative forms of research assessment which have allowed academics to be involved in the creation of the publishing enterprise and not simply to adopt the governance structures imposed by private interests. Yet these successful initiatives, such as the publishing platforms, Redalyc and SciELO in Latin America, are under threat from commercial models, particularly the APC-based business model, being driven from the Global North.

<sup>&</sup>lt;sup>1</sup> "San Francisco Declaration on Research Assessment," accessed April 25, 2025, <a href="https://sfdora.org/read/">https://sfdora.org/read/</a>.

The <u>BOAl20 Recommendations</u> emphasize that "OA is not an end in itself, but a means to further ends. Above all, it is a means to the equity, quality, usability, and sustainability of research." Equitable models of OA do not charge authors to publish and are openly available online. OA journals which do not charge fees to read or publish in have become known as diamond journals. In addition, depositing versions of articles into institutional or subject-based repositories, known as the green route, also represent an equitable form of OA. These equitable models of OA are supported by community-governed infrastructure, akin to a Public Digital Infrastructure for OA.

Through interviews with OA leaders in Chile, Costa Rica, India, Indonesia, Mexico, South Africa, Türkiye, and Zimbabwe who are implementing equitable models, I offer lessons for the global transition to equitable OA.

### Underlying Rationale for Countries to Support Equitable OA

In speaking with leaders in the Global South, I asked why their countries support equitable OA. Dasapta Erwin Irawan of the Bandung Institute of Technology explained that "the philosophical foundation of journal publishing in Indonesia centers on knowledge dissemination rather than commercial interests, emphasizing the importance of sustainable and accessible academic publishing models." He noted that "there is a strong cultural understanding that scientific knowledge should be treated as part of public goods, freely accessible to all members of society, which aligns with the fundamental principles of open access publishing."

Universities in Central America ground their support for equitable OA in the democratization of knowledge which they view as a "fundamental principle of public institutions to ensure access not only for the scientific community and directly related populations but also for as many people as possible." The Open Science Declaration developed by the Central American University Superior Council (CSUCA) goes on to state that "this democratization enhances the potential for broader impact and contributes to societal development."<sup>2</sup>

Bárbara Rivera López, a Chilean publishing expert, shared that in her country "journal publishing is regarded by the scientific community as part of research work. This is why most scientific journals are academy-led rather than commercial ventures. In fact, Gold Open Access journals (those that charge APCs) are frowned upon by the scientific community."

Inclusivity and social justice form the basis for South Africa's support for equitable OA.

<sup>&</sup>lt;sup>2</sup> "CSUCA Open Science Declaration," Central American University Council, accessed April 25, 2025, <a href="https://csuca.org/es/download/declaracion-de-ciencia-abierta-del-csuca/">https://csuca.org/es/download/declaracion-de-ciencia-abierta-del-csuca/</a>.

## Community, Institutional and Governmental Support for Infrastructure

The most common characteristic of countries that support equitable OA is community, institutional and/or governmental funding for publishing infrastructure that supports diamond journals and repositories.

In Türkiye, TÜBİTAK (The Scientific and Technological Research Council of Türkiye) serves as the country's primary agency for science and research policy. Operating under its umbrella, ULAKBİM (Turkish Academic Network and Information Center) manages national research infrastructure and supports scholarly communication. One of its key initiatives is a national infrastructure project (DergiPark) for diamond journals, which also covers the cost of DOIs for participating journals. This infrastructure is built on the Open Journal Systems (OJS) platform. The national-level support for DOI registration is particularly noteworthy, as such financial backing is rare globally, and many journals elsewhere often struggle to afford DOI-related expenses.

Irawan noted that the Indonesian government provides substantial non-financial support and infrastructure for OA journals, including technical assistance, training programs, and policy frameworks that enable their operation and growth. National publication policies promote OA publishing through specific guidelines and standards that journals must meet. A designated ministry body is responsible for accrediting these journals.

<u>Infraestructura Nacional de Acceso</u> (National Access Infrastructure) is a national initiative in Chile that is built on the country's existing infrastructure for access to scientific information and aims to facilitate OA to scientific knowledge, strengthen existing technical capabilities, increase the visibility of research outputs, and provide national-level services that meet global standards.

And national OA repositories are supported at the national level in many countries, including Indonesia and Türkiye.

# Community, Institutional, and Governmental Support for Equitable OA - Beyond Infrastructure

Publishing is considered part of the research process in many countries in the Global South, and therefore is supported by faculties within universities instead of university libraries. Faculties support diamond journals in their fields, including by hiring journal editors and interns to work on the journals.

As Arianna Becerril-García, the Executive Director of Redalyc, and a professor at the Autonomous University of the State of Mexico has highlighted, one key difference regarding how sustainability is seen in Latin America as opposed to the Global North is that the entity within a university that is sustaining diamond journals is not the university libraries but the faculties. Her own university supports more than 100 diamond journals.

The National University of Costa Rica has developed a comprehensive plan to support the 28 diamond journals published by the university. Similar to Mexico, each department or faculty hires journal editors and interns for the journals published by their department. As Andrea Mora Campos, Academic Advisor at the university explained, the university works with their journals to develop six-year plans for each journal, which include specific objectives for open science, such as the development of open peer review and open research data. A key component of the six-year plan are biannual reviews of each journal by external experts. In addition to the direct funding each department provides for their journals, the university supports a centralized publishing department which manages the journal infrastructure (OJS), translation of metadata into English and Portuguese, as well graphic design for the publications.

And in Zimbabwe, where resources are quite limited, there are investments in equitable OA. Sarlomie Zinyemba, the University Librarian at the Catholic University of Zimbabwe notes that her university publishes one diamond journal which is owned by the university's Research and Innovation Committee and supported by university administration. She believes securing management buy-in is crucial, and credits institutional participation at an OA symposium in 2016 as being pivotal to OA gaining high-level support within her university. In addition, diamond journals are published by Bindura University of Science Education, Chinhoyi University of Technology, and the National University of Science and Technology.

The OA models developed in India predominantly center on community support and have been driven by prominent leaders, including Subbiah Arunachalam (Arun). An early OA advocate, Arun organized some of the first workshops in the world on OA. India has developed IndiaJOL, a diamond journals platform to support non-profit scholarly societies, as well as IndiaRxiv, a community-driven preprint server.

#### Cautionary Lessons

The development of equitable OA, rooted in knowledge dissemination as a public good, inclusion and social justice, could be undermined by commercial models driven by the Global North. Such models include APCs, Read-and-Publish Agreements, and the current research assessment system.

As Becerril-García and Eduardo Aguado López warned in 2019, "for a system that publicly subsidises scholarly communication through academic institutions, as exists in Latin America, establishing charges for authors risks undermining a structure designed to support researchers and keep public money within a publicly managed ecosystem."<sup>3</sup>

The concern regarding APCs is two-fold. As highlighted in the introduction, authors from the Global South, as well as those early in their careers, often lack the funds to pay APCs. In addition, we are seeing some diamond journals in the Global South adopt APCs as well as

<sup>&</sup>lt;sup>3</sup> Eduardo Aguado López and Arianna Becerril García, "Latin America's longstanding open access ecosystem could be undermined by proposals from the Global North," LSE Blog, November 6, 2019, <a href="https://blogs.lse.ac.uk/latamcaribbean/2019/11/06/latin-americas-longstanding-open-access-ecosystem-could-be-undermined-by-proposals-from-the-global-north/">https://blogs.lse.ac.uk/latamcaribbean/2019/11/06/latin-americas-longstanding-open-access-ecosystem-could-be-undermined-by-proposals-from-the-global-north/</a>.

diamond journals in these regions being purchased by commercial publishers which impose the APC-based business model.

Irawan noted that he has observed a gradual shift in Indonesia where some journals have begun charging low APCs. He added "this represents a significant change in the traditional Indonesian publishing model, though these charges remain relatively modest compared to international standards. While these APCs are considerably lower than those charged by Western publishers, there are concerns that some editorial boards may be viewing this as an opportunity to generate additional revenue, potentially shifting away from the purely academic mission that has traditionally characterized Indonesian scholarly publishing." In addition the adoption of the APC-based business model is also being seen in Latin America. Redalyc recently discovered that out of the 1,717 journals in their index, 137 have started to charge APCs. Becerril-García shared that in response, Redalyc is now working with these journals to understand why the changes were made and what support the journals may need in order to transition back to the diamond model.

And in Chile, Rivera López reported instances where Editors-in-Chief have received offers from publishers, particularly from the Asian region, to sell their journals. However, in Chile, most journals are institutionally owned, which means they cannot be sold.

Building on the APC model, commercial publishers developed Read-and-Publish Agreements, which have the stated aim of shifting the traditional subscription-based publishing model towards OA. Institutions negotiate with publishers to repurpose their subscription expenditures to cover APCs for their affiliated researchers who choose to publish OA. As we highlight in the BOAI20 Recommendations, these agreements have the beneficial effect of increasing the number of OA articles, however they further entrench the APC model.

As noted, globally, the research assessment system faces challenges including a focus on metrics over quality, marginalization of important research areas, and a lack of recognition for diverse research outputs and contributions. "In Indonesia, the research evaluation system strongly encourages scholars to publish in what they regard as highly reputable journals, particularly those with high impact factors. This pressure often leads to a compromise in academic integrity and the quality of research, as individuals prioritize meeting institutional demands and advancing their careers over producing genuinely impactful research." Irawan concludes that "the OA movement still exists in Indonesia, but given the current situation, its potential progress is stalled." He argues that "Indonesia and other Global South nations may have fewer resources, but it is essential that they maintain academic and research integrity and assert their value without relying on biased indicators to be labeled as world-class universities."

By contrast, in Latin America, Redalyc has supported the <u>San Francisco Declaration on Research Assessment</u>, citing the importance of creating an inclusive system of scholarly communication where local languages and local relevance are recognised.

<sup>&</sup>lt;sup>4</sup> Dasapta Erwin Irawan, "The Thwarted Progress of Open Access in Indonesia," Katina Librarianship Elevated, December 11, 2024, <a href="https://katinamagazine.org/content/article/open-knowledge/2024/the-thwarted-progress-of-open-access-in-indonesia">https://katinamagazine.org/content/article/open-knowledge/2024/the-thwarted-progress-of-open-access-in-indonesia</a>.

Currently unique to Asia, India recently launched the One Nation One Subscription (ONOS) model, which is a county-wide project and is expected to provide access to 13,000 online journals from 30 publishers to 18 million students, faculty, researchers, and scientists across 6,300 government-run higher education and research institutions. The government will spend approximately \$723 million on these subscriptions over a three-year period and asserts that it is an "India-specific solution for expanding knowledge access until a sustainable Open Access model is achieved globally." However, contrary to its intended goals of reducing subscription costs and improving access to scientific literature in India, Muthu Madhan, Director of the Global Library at O.P. Jindal Global University in India, believes the much-hyped ONOS project risks significantly increasing expenditure while delivering little in return. In its current form, total expenditure on the project is more than double earlier estimates and capping APCs, one of the project's aims which sought to use savings from consolidating library subscriptions to fund APCs, has not been achieved. While it is not a model that supporters of equitable OA would like to see replicated elsewhere, Indonesia recently announced that it had adopted an ONOS program. Details are still to be forthcoming.

#### Call for Closer Collaborations in the Global South

In his article, "The Thwarted Progress of Open Access in Indonesia," Irawan noted that "Global South nations can collaborate to share resources, ideas and support to make our research more impactful and accessible without relying on expensive and often exclusive publishing platforms...if we work together and focus on the true goals of open science, we can create a reputable and inclusive academic community that benefits everyone." This call is echoed in the *Research and Innovation Strategy Project of Universities South Africa* which aims to develop "south-south collaboration to advance a decolonised publishing ecosystem." To do this, the Universities of South Africa will forge partnerships between institutions, diamond OA publishers, and stakeholders from countries in the Global South, facilitating knowledge exchange and resource sharing. Projects include hosting the 2nd Global Summit on Diamond OA, which was organized in Cape Town in 2024, as well as the formation of communities of practice in the Global South regions. And the call for closer collaboration is seen in the work being done in Latin America, which has developed successful models for regional partnerships to support equitable OA, including Redalyc, SciELO, AmeliCA, CLACSO, La Referencia and CSUCA.

<sup>&</sup>lt;sup>5</sup> Praharsh Gour and Shravya Pandre, "Is One Nation One Subscription A Panacea for the Gap in Widespread Access to Knowledge?," SpicyIP Decoding Indian Intellectual Property Law, December 14, 2024,

https://spicyip.com/2024/12/is-one-nation-one-subscription-a-panacea-for-the-gap-in-widespread-access-to-knowledge.html.

<sup>&</sup>lt;sup>6</sup> Muthu Madhan, "India's One Nation One Subscription Deal Enriches Publishers and Benefits Few," LSE Blog, December 5, 2024, <a href="https://blogs.lse.ac.uk/impactofsocialsciences/2024/12/05/indias-one-nation-one-subscription-deal-enriches-publishers-and-benefits-few/">https://blogs.lse.ac.uk/impactofsocialsciences/2024/12/05/indias-one-nation-one-subscription-deal-enriches-publishers-and-benefits-few/</a>.

<sup>&</sup>lt;sup>7</sup> Indonesian Directorate General of Science and Technology, "One Nation One Subscription," Instagram, March 12, 2025. <a href="https://www.instagram.com/p/DHGY3hxJKHG/?">https://www.instagram.com/p/DHGY3hxJKHG/?</a> <a href="mailto:img\_index=3&igsh=MWkzeGlrd25yZTJrMA%3D%3D">img\_index=3&igsh=MWkzeGlrd25yZTJrMA%3D%3D</a>.

<sup>&</sup>lt;sup>8</sup> Irawan, "The Thwarted Progress of Open Access in Indonesia." <a href="https://katinamagazine.org/content/article/open-knowledge/2024/the-thwarted-progress-of-open-access-in-indonesia">https://katinamagazine.org/content/article/open-knowledge/2024/the-thwarted-progress-of-open-access-in-indonesia</a>.

#### Conclusion

This paper reflects a sampling of the rich experiences of those outside the Global North that can be collected and shared more widely. To achieve the promise of OA as envisioned by the BOAI of "uniting humanity in a common intellectual conversation and quest for knowledge" we must promote an understanding of, and appreciation for, publishing models centered on equitable OA.

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#### Zimbabwe

Sarlomie Zinyemba, University Librarian, Catholic University of Zimbabwe

#### About this report

<u>Open Future</u> is a European think tank that develops new approaches to an open internet that maximize societal benefits of shared data, knowledge and culture. The organization creates strategies for Digital Commons—democratically governed, collectively managed resources that provide an alternative to traditional ownership models. Open Future focuses on reimagining openness to foster a more balanced digital future that serves the public interest.

The <u>Budapest Open Access Initiative (BOAI)</u> offered the first definition of open access (OA), proposed complementary strategies for realizing OA, and launched a worldwide campaign for OA to all new peer-reviewed research. The initiative has transitioned into an organization that fosters the development of equitable OA and supports the adoption of policies, practices and sustainability models that make scholarly communications free to read and publish.

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