

"Open Science in Africa: Key Challenges and Opportunities Reflection by the African Open Science Actors on the draft UNESCO Recommendation" APNET's Intervention at the African Regional Multi-stakeholder Meeting on Open Science delivered by APNET Chairman, Mr Samuel Kolawole on 15th December, 2020.

Let me begin by extending our appreciation to UNESCO and the African Union Commission for Human Resources Science and Technology, in collaboration with the Department of Science and Innovation of South Africa for organizing this online African Regional multi-stakeholder meeting on Open Science and for extending this generous invitation to African Publishers Network (APNET) to make an intervention on key challenges and opportunities relative to African publishers as key African Open Science Actors on the Draft UNESCO Recommendation.

African Publishers Network, a pan-African and continental organisation established in 1992, brings together national publishers associations and publishing communities to strengthen indigenous publishing throughout Africa. APNET with its Secretariat in Accra, Ghana currently has a membership of 42 National Publishers Associations in Africa.

The concept of Open Science as conceived by UNESCO and its stakeholders is a good idea that should contribute immensely to human development and advancement through open access to scientific research and data, as well as enhancing collaboration amongst researchers and scholars for quicker and better results. Therefore, APNET welcomes the initiative and the developments it can bring to Africa and the rest of the world.

Looking through the draft recommendations on Open Science that is the subject of this meeting, one is tempted to conclude that every possible area of concerns has been provided for. However, experience and the generalisations that permeate the recommendations call for caution and pose challenges to successful implementation of the concept in developing regions, like Africa and how those in these regions will benefit from the concept in the long run.

To illustrate this, under the Aims and Objectives of the recommendations, item 4 talks about providing an international framework for Open Science policy and practice that recognises regional differences in Open Science perspectives, takes into account in particular, the specific challenges of scientists and other Open Science actors in developing countries and contributes to reducing the digital, technological and knowledge divides existing between and within countries, yet, there is no particular or specific recommendation on how this is to be achieved. Rather,

member states are encouraged to ensure adequate investment of at least 1% of national GDP on research and development expenditure and provide reliable internet connectivity and bandwidth use for scientists and science-users across the world.

These "encouragements" suggest that success hinges on those requirements being put in place. In developing regions where governments are struggling to fund education and where there are challenges with internet connectivity and bandwidth, there is automatically a playing field that is not level.

Recommendation can be good. Applying them universally without addressing the peculiar challenges of individual countries and regions and adjusting for the different levels of development in implementation of the recommendations will not be equitable.

It is in line with this that I will make the following other observations:

- In developing countries, open access funding policies are mostly directed at financing technical infrastructure required to operate open access online platforms, with little or no measures directed at funding content production.
- In African and other developing countries, private investment in and public funding of scientific research are scarce.
- In the absence of measures or capacity to incentivize content production and scientific research, UNESCO's initiatives on open science can have unintended negative effects, as they recommend publication models that discourage investments in African publishing industries.
- One very important question to consider is how does UNESCO's draft recommendation affect African creators, scholars, and publishing industries?
- An important step to answer this question is a proper impact assessment for Africa. As it is often the case, one size does not fit all in public policies directed at promoting scientific research. In spite of the fact that these recommendations are said to intend a level playing field, the realities of African economies could negate the good intentions.
- If African publishers are not allowed to sell and license their content, investments in open access online platforms will only encourage increased use of content produced by developed countries, rather than promoting African research.
- UNESCO's mission includes promoting cultural diversity and freedom of expression. Independent publishing industries are vital to achieve these objectives in Africa and in other developing countries.
- Policies that compromise the sustainability of private and independent publishing industries in developing countries are contrary to UNESCO's mission and undermine efforts to achieve it.

- The statement that information and research should be available for free is demagogical, and disregards the costs involved in producing and promoting quality research.
- Publishing and accessibility of quality research require services associated with content production, peer reviewing and enhanced discoverability of content by relevant audiences. These services, which are not considered in UNESCO's recommendation, have costs.
- The way payment of these costs is set out influences authors' ability to publish their works and the availability of research outputs produced by developing countries.
- For example, in open access Gold Models (which stemmed out of European and other developed countries' policies on open access) the author pays to be published and users have access for free. Publication costs are born jointly by authors and publishers.
- In developing countries, by creating a free reading experience to users, these models often generate obstacles to publication.
- In recent years, the open access model adopted by some developing countries is the diamond model. In this model, neither the author nor the reader pays. Technical infrastructure (including platforms, software, hardware, etc) is funded through public funding, while content is curated by academics on a voluntary basis.
- However, these models are more prompt to raise concerns related with quality of content (absence of professional editorial and peer reviewing services, which are not funded), and in addition might create opportunities for State censorship, insofar as governments funding the platforms might to some extent decide what is published.
- This is a particular concern in social and human sciences, but also in other scientific areas, such as medical research. Freedom to publish scientific research is vital in all scientific areas.
- At the moment, most developing countries (including African countries) don't have the financial resources to implement incentives for research, content production and curation. If international funding is entirely channelled to bear the costs of technical infrastructure, that will limit African publications to be made available.
- Imposing open access publication models does not bring benefits to authors and publishing industries in developing countries when public funding is directed only at financing technical infra-structure, failing to provide incentives for content production and curation, and ignoring the need to prioritize professional publication of research produced by authors and scholars in developing countries.
- Despite the virtues of open access models, the existence of and access to premium published content continues to be important.
- The reasons why publishing in specific journals is important relate to the value offered by those publications, notably peer reviewing processes, quality filters, discoverability of

content and curation services specifically designed for content to be made available to relevant audiences, who in turn value the curation they benefit from.

- Premium professionally published content is important for scientific progress, but also for researchers' professional rank, and should continue to be available for scientific authors at their discretion.
- In that regard, public policies that force authors to publish exclusively under open access models are unfair to the author, as they prevent the author from accessing the publishing market and as a result impair the authors' ability to reach suitable audiences.

How Can The Draft Recommendation Be Improved To Benefit African Countries?

- Encourage policies and programs to fund content production and research by African authors, scholars, and publishers.
- Establish measures to preserve and promote the sustainability of independent publishing industries in Africa. Publishing industries are vital to preserve Africa's cultural heritage and ensure that African voices are heard at a global level.
- Include a provision to safeguard that any policies stemming from the recommendation are without prejudice to copyright protection, which is the bedrock of the publishing industry, and freedom to publish under different publication models.
- Set out transparency mechanisms to avoid predatory publishing that brings no value to authors or to audiences and misappropriates open access publication models without the necessary curation.
- Encourage governments to keep scientific research and publishing industries harmless in contexts of trade sanctions.

APNET invites UNESCO, AU and other partnering organisations to critically look into the aforementioned challenges and possible solutions made and address them in the Draft Recommendation so that the interests and motivations of researchers, authors and publishers of scientific publications do not die. Considering the perspectives of the African publishing industry would help to sustain the industry. APNET is always available for further engagement to help make this initiative mutually beneficial to all actors especially in the publishing industry.

Contact:

APNET Secretariat:info.africanpublishers@gmail.comAPNET Chairman:samkolawole@gmail.com