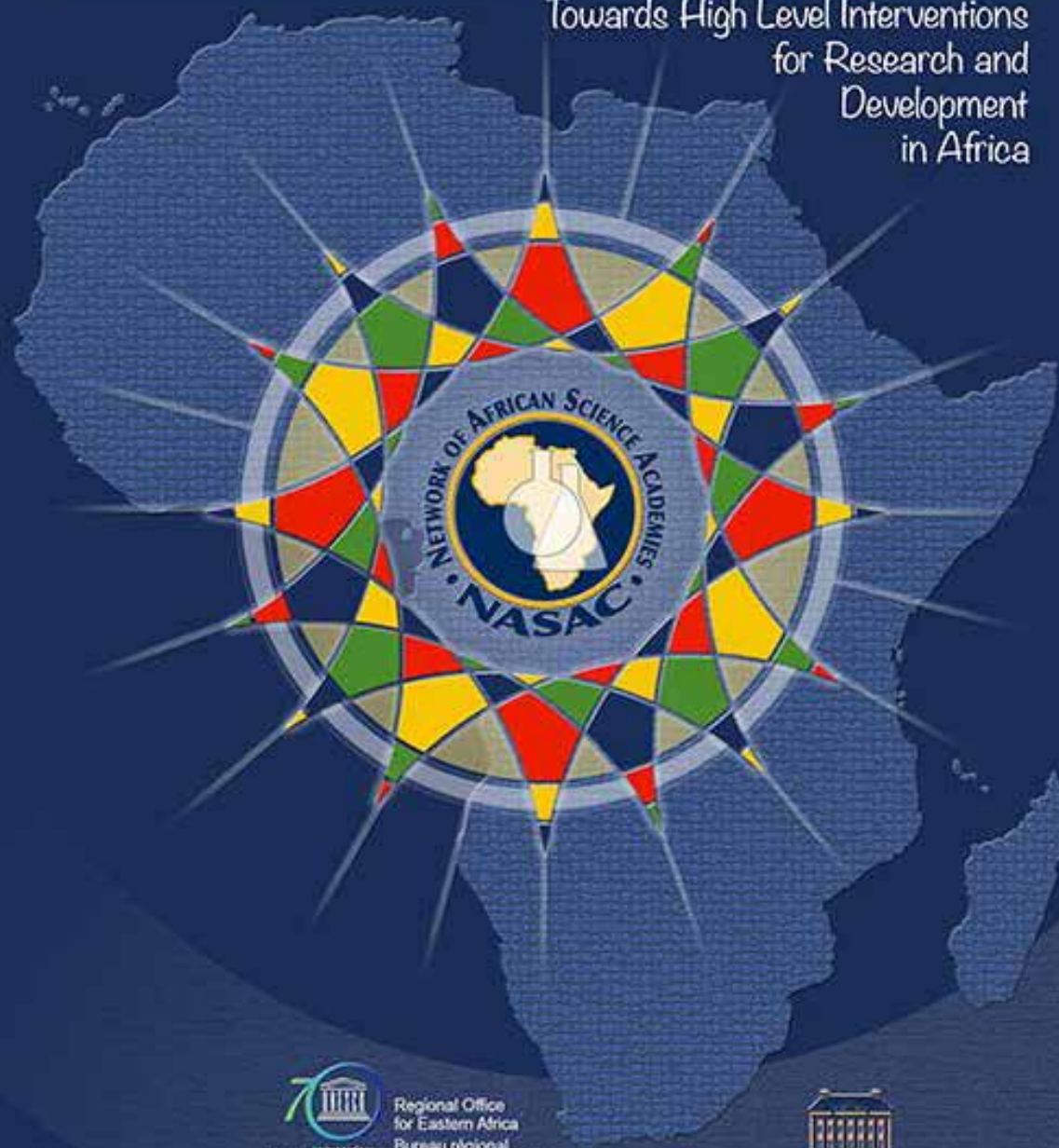


Report of the
**Consultative Forum
in Open Access (OA)**

*Towards High Level Interventions
for Research and
Development
in Africa*



Regional Office
for Eastern Africa
Bureau régional
pour l'Afrique de l'Est





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Abbreviations & Acronyms

ASSAf	Academy of Science of South Africa
AAS	African Academy of Sciences
AJOL	African Journal Online
IDRC	International Development Research Centre
INASP	International Network for the Availability of Scientific Publications
IR	Institutional Repository
KNAS	Kenya National Academy of Sciences
NASAC	Network of African Science Academies
NORAD	Norwegian Agency for Development Cooperation
OA	Open Access
OER	Open Educational Resources
SIDA	Swedish International Development Cooperation Agency
TWAS	The World Academy of Sciences
UNESCO	United Nations Educational, Scientific and Cultural Organization
WoS	Web of Science

Forum Objectives



The Objectives of the forum were to:

1. Initiate a dialogue between scientists and policymakers among stakeholders that will lead to the drafting of the NASAC Project Proposal on an Open Access Initiative for Africa;
2. Support the development of science-based advice on Open Access for Africa by the NASAC, with special input by UNESCO and KNAW – the Royal Dutch Academy of Arts and Sciences;
3. Establish relationships with organisations keen on Open Access and provide evidence to African policy-makers and other stakeholders in Africa working in the area of Open Access;
4. Bring together researchers, academics, scholars and librarians responsible for the publishing of research to exchange and share their experiences and research results with regards to Open Access;
5. Discuss the new models of scholarly communication based on Open Access, and the practical challenges encountered and the solutions that should be adopted;
6. Understand/share the experiences, investment and commitment of countries where successful Open Access has been implemented; and
7. Focus beyond building the project to developing recommendations to policy makers-with an ultimate target audience of the African Union (AU).

Background

On 29th–30th January, 2015, a Consultative Forum took place at the Hilton Hotel, Nairobi to discuss how to embed Open Access platforms in Africa. Stakeholders present were representatives of organisations of the Network of African Science Academies (NASAC) as well as academics, scholars, researchers, and librarians, professionals who generate, use, and mediate knowledge and information. The objectives were identified as indicated on Page 1.

Discussions were organised into five main topics composing of seventeen powerpoint presentations and group discussions. Group deliberations were in the form of open ended discussions, during which participants reacted to critical issues. Two stand-alone group sessions were organised with participants analysing topical issues related to the Open Access initiative. In the sections below, a summary of proceedings at the Forum is provided.

Opening Speeches

Speakers addressed issues, challenges, lessons, opportunities, and benefits related to open scholarship. The salient points of the speeches are highlighted below.

Dr Indrajit Banerjee (UNESCO) started by saying that there was need to develop an OA policy for Africa, and determine the collaborative efforts and initiatives needed in this endeavour. Under-developed areas of OA capacity that require enhancement should be identified and filled. Ongoing good practices and successful initiatives should be showcased and shared.

The main points made by other speakers during the opening session were as follows:

1. The AAS is committed, *Prof. Fred Owino*, AAS Fellow said, to actively support the follow-up actions emanating from this Forum.
2. UNESCO will ensure the execution and promotion of OA initiatives in Africa for the benefit of all, *Dr. Abou Amani*, UNESCO noted.
3. According to *Mr. David Maina*, the Ministry of Education, Science and Technology is committed to supporting Open Access in Kenya with favourable policies.
4. *Dr. Hans Chang* of KNAW highlighted the challenges of data sharing and data cost, which should be made policy topics and institutions of science should negotiate favourable terms with publishers.
5. *Prof. Robin Crewe* called on participants to use the Forum to develop a coherent plan that would make OA a viable option for scientific communication.

Global Perspectives on Open Access

The presentations made during this session focussed on developments in Open Access in three world regions: Latin America, Europe, and Africa. The challenges, critical success factors, lessons, good practices, and growth areas, in policy and programming, were

enumerated. Some of the challenges faced in Latin America, *Dominique Babini* noted, are research and publications of sub-optimal quality and the low scope and development of institutional repositories. Other challenges cited was the tension between publishing in local and international journals, which created difficulties in striking the balance between impact and evaluation of scholarly works. In Europe, *Bhanu Neupane*, laid out several problem areas concerning OA such as policy deficiencies that did little to minimise the emerging and insidious threats to effective transfer of knowledge in the regions. In the case of Africa, *Tiwonge Msulira Banda*, mentioned impediments to scholarly publishing in the continent. Several capacity building needs emerged, such as policy for funding of research, incentivising of researchers, and setting up of required institutional repositories. Highlighted in the presentation too was the need to build networks and partnerships for research and knowledge exchange. During the plenary presentation, a case was made for researchers to publish in reputable journals and for Open Access initiatives in Africa to borrow good practices on indexing.

Challenges to Open Access to African Research

The focus of this session was to highlight the challenges that relate to policy, capacity development, and partnership about OA. Three presentations were made. In the first presentation, *Michelle Willmer*, from the University of Cape Town discussed the findings of a study of eight African universities, which identified challenges of scholarly publishing. Remedial actions were proposed, such as developing and adopting good policy position, institutional practices (organisation of research), capacity development, and improving the behaviour of researchers, who tend to disengage in research work.

Susan Murray of African Journals Online outlined the findings of another initiative, which sought to analyse the challenges facing editors and publishers in Africa. These included institutional and infrastructural problems that were impeding the development of OA in Africa. The recommendations made included the need for an African statement on OA, further research to determine the enabling factors of successful OA enterprises, and the forging of stronger networks and collaborations, among other measures. The last presentation was by *Daisy Selematsela*, of the National Research Foundation, *South Africa*. She reported on several discussions that have taken place on OA globally. The major hurdles were clustered into four themes: unsatisfactory policy climate, limited outreach to researchers on OA, inadequate funding, poor quality management of research works, and limited access to data. In the ensuing plenary session, participants proffered ideas to stimulate action that promoted open scholarship.

Success Stories in Africa

The panellists tackled the specific questions of how to create an enabling environment for Open Access highlighted the pertinent issues and shared their experiences. In “*Creating Enabling Policies for Open Access*”, *David Bakibinga* of Makerere University delved into the link between law, institutional policies, and library management practices. The facilitative features of the law in Uganda on authorship (institutional rights) were outlined and the benefits of this arrangement on accessing of scholarly work given. Besides, an area the law could speak more clearly on is ownership of innovations, rather than publications developed in institutional settings—was noted. In “*Impact of Networking and Collaboration using Available Resources*”, *Francis Tusubira* of UbuntuNet stated that networking was an effective vehicle in reducing the cost of accessing the Internet. His presentation was followed by that of *Hermogenes Nsengimana* of ARSO on “*Standardising Open Science*”, which called on participants

to adopt international standards—standards of open science, which if followed, would speed the realisation of OA in Africa. *Bhanu Neupane* of UNESCO talked about the development of UNESCO’s training courses and targetted the stakeholders for capacity building.

In the presentation titled “Scholarly Publishing and African Universities” *Paul Samwel Muneja* of Consortium of Tanzania University and Research Libraries, examined some challenges of scholarly publishing in Africa, including cultural (reading habits) and institutional ones, such as opaque criteria for academic career progression. Additionally the value of finding alternatives to the use of impact factors in the context of the OA was discussed. *Daniel Kalinaki* of Nation Media Group explained the difficulties faced by the media in obtaining academic literature for publishing in the print media. To improve collaboration between the media and the academic institutions, he recommended that publicly funded research should be open to the public. The plenary session discussions focussed on the need for policies for intellectual property, clarity on research focus, appropriate OA reduction of mortality rates of local journals, and employing inter country collaborations to harness OA initiatives.

In another group session, participants discussed sustainable business model for OA in Africa. Deliberations to enhance thinking and action took place on following themes: publishing infrastructure, developing policy for Open Access, and training and advocacy. In the plenary session that followed, participants reflected on the points made during the group debate.

The presentations advocated the strengthening of the digital platforms for accessing OA. *Rosemary Otando* reported the findings of a study on the OA knowledge sharing and sustainable scholarly communication in East Africa. The findings shed light on the creation of outreach groups, OA policies, and OA practices. The major obstacles highlighted included policy inertia, lack of technical support, and indifference by researchers. In the subsequent presentation, “Strategic Approach to Scholarly Publishing in South Africa”, *Susan Veldsman* of the Academy of Science of South Africa (ASSAf), gave evidence that showed the scope of accessibility of online publications in South Africa was below par. She suggested remedies such as exploring the impact of the OA on research publications and encouraging youth participation in OA. *Jessica Collaco* of iHub highlighted how OA was facilitating creativity and innovation. She discussed different approaches to conducting research, using digital platforms, among the youth. The ensuing presentation on, “AJOL in Africa-Wide Partnership”, fleshed out the mandate and benefits of *African Journal Online*. To build on these advantages, it was suggested that coordination and collaboration needed to be increased to optimise on favourable outcomes already realized. “UNESCO’s Global Open Access Portal”, was then explained by *Bhanu Neupane* illuminating how the portal can be used.¹

Open Forum for General Plenary Discussion on Pertinent Issues on Open Access in Africa

In this session, participants went into three different groups to tackle several issues covering a wide spectrum of issues related to implementing a viable open access system in Africa.

¹GOAP Portal URL: <http://www.unesco.org/new/en/communication-and-information/portals-and-platforms/goap/>

Key Issues

Policies needed to enable optimal application of OA were enumerated. The following areas were in focus:

- Intellectual property;
- Data sharing and data cost;
- Enable the establishment of digital repositories; and
- Public funding of research, which would be aligned to national and regional policies on OA.

Key Recommendations

- Develop a document on the Way Forward on delivering an Open Access system in Africa;
- Pinpoint the coordination point for each country/region at national level consultation;
- Determine the partners to work with to realise OA in Africa;
- Develop capacities of different programmes and identify on-going initiatives;
- Each national academy to develop a document that explains OA;
- UNESCO training materials should be rolled out.

Obligations assigned to NASAC

NASAC should:

- Develop an OA statement to be adopted by its members, using non-technical language.
- Develop an OA policy paper and link it to UNESCO's OA policy framework.
- Discuss with AU the possibility of developing a continental statement on OA.
- Facilitate experience sharing among various national academies.
- Encourage national academies to initiate the processes of engaging governments on OA.
- Adopt OA as critical strategic issue.
- Provide a portal to host OA information for African countries.

Obligations assigned to UNESCO

- Facilitate OA policy development in 3 African countries in 2015 – each country can approach UNESCO through NASAC on how OA can be developed in their country.
- Assess the status and/or performance of OA in Africa.

1. United Nations Educational, Scientific and Cultural Organisation (UNESCO)

By: Dr Indrajit Banerjee, Director of Knowledge Societies Division, Communication and Information Sector

Background

In setting the stage for his comments, Dr Banerjee observed that UNESCO made a conceptual shift in 2005, by shifting emphasis to the concept of knowledge societies from information societies. It is against this background that UNESCO initiated the Open Access initiative worldwide.

UNESCO's concept of *knowledge societies* is built on four key pillars: (i) education for all, (ii) universal access to information and knowledge, (iii) freedom of expression, and (iv) the promotion and protection of linguistic and cultural diversity. Lack of access to information and knowledge has been associated with exclusion, poverty, and disempowerment. Open Access will help Africa achieve sustainable development. According to UNESCO's Global Report on Knowledge Societies, published in 2005, information can be leveraged to educate and empower people.

Issues

The notion of OA implies a shift in thinking about how knowledge is created, shared, and disseminated. It is not just about the creation and diffusion of knowledge, but also, how different segments of society interact with the available information. As it happens, information and knowledge are inaccessible to many people: for instance, more than half the world's population lack access to the Internet. This situation is compounded by weak information, a feeble infrastructure, and undeveloped capacity to access information.

In pursuit of OA, UNESCO has set policy guidelines and will provide the expertise required to build a worldwide consortium. To this end, it is interested in addressing the following questions:

- i. How can OA policy be developed for the whole of Africa? What cooperation and partnership will be forged around OA, and how can UNESCO help?
- ii. What capacity enhancement efforts are needed?
- iii. What are the key initiatives that need to be showcased and how can Africa share the experiences?

2. Kenya National Academy of Sciences (KNAS)

By: Prof. Raphael Munavu, Chairman, KNAS

In his remarks, Prof. Munavu pointed out that KNAS's interest in sharing information and knowledge with other academies and organisations, nationally and regionally, on development matters. For the KNAS, proceedings of the Forum would be beneficial because of the workshop's focus on how knowledge and information can be accessed and applied in development.

The Constitution of Kenya provides the primary framework in which policies of sharing, using, or accessing knowledge rest. Article 33 speaks to the freedom to generate, use, and access information, while Article 11, the Constitution requires the State to promote the cultivation of “culture and indigenous technologies” and safeguard the “intellectual rights of all people”.

Prof. Munavu reiterated the characteristics and benefits of an ideal OA framework. It is important for the knowledge generated to be relevant if it is to be useful. Besides, Open Access could help institutions or systems regenerate through flow of information.

3. African Academy of Sciences (AAS)

By: Prof. Fredrick Owino, AAS

Prof. Fredrick Owino representing the President of the African Academy of Sciences gave an overview of the structure and functions of AAS and confirmed that AAS committed to continue supporting NASAC and other partners towards achieving their common objective on OA.

Prof. Owino further highlighted the history, structure, programmes, and achievements of the AAS. Founded in 1985 by 10 founding fellows, the AAS exists to support and enhance African scholarship. It has more than 300 scientists, who have been inducted as AAS Fellows. So far, amongst the Fellows are three Nobel Prize winners and nine distinguished women scientists.

AAS plans to intensify its role as a key partner and leader in the realising of sustainable development in Africa. It engages governments and policy makers to promote Science, Technology and Innovation (ST&I) by holding open, top-level, continent-wide meetings. The AAS will be a strong partner in the follow-up actions of the OA consultative Forum.

4. UNESCO Regional Office

By: Dr. Abou Amani

Sustainable development grows out of access to knowledge, Mr Abou Amani noted. Therefore, UNESCO will strive to ensure the implementation and promotion of OA initiatives in Africa for the benefit of all. UNESCO will work with NASAC and individual countries to make proposals on legal and policy frameworks that would make Open Access a reality.

5. Network of African Science Academies (NASAC)

By: Prof. Robin Crewe, Immediate Past Chair, NASAC

Prof. Robin Crewe noted that academies of science have a vital interest in the matter of Open Access. After all, the credibility of Academies rests on the quality of scholarly communication that individual fellows produce. Communication sharing and open scholarly publishing are the life-blood of science Academies, which use the information to advise policy makers. In this respect, having open and accessible information is critical in generating the needed evidence.

He pointed out that the Forum would need a coherent plan with which to make Open Access a reality. He said that of critical interest should be the whole aspect of developing repositories of knowledge, securing funding to enable scholars publish

in journals, observing intellectual property rights, disseminating knowledge in the scholarly community, garnering resources, and building infrastructure for handling big data requirements in the future.

6. Kenya Ministry of Education, Science and Technology

By: Mr David Maina – Assistant Director

Given the requirements of the Constitution, especially Article 35, the Kenya Government is obliged to fulfil the rights of Kenyans to information. The government has taken steps towards fulfilling key international policies such as the provision of universal and free primary and secondary education.

On research, the Ministry of Education, Science and Technology has been in consultation with international organisations to set up a platform from which Kenyan universities can make information accessible to students. The Ministry sees Open Access as important in promoting global knowledge flow as well as social and economic development. For this reason, the concept of Open Access needs to be contextualised and made locally relevant.

The Kenya government is prepared to support the Open Access programme and will provide a conducive environment for policy formulation.

With these few remarks, Mr Maina declared the Consultative Forum officially opened.

By: Dr. Hans Chang, Director General, KNAW—the Royal Netherlands Academy of Arts and Sciences

In Europe, many research communities have set up online discussion forums. Technological factors are profoundly changing how scientific discourse occurs and how scientific knowledge is applied pragmatically. A major driver of the changes taking place is the Internet. The availability of online platforms means that universal policies are required to guide access to scientific evidence and information.

The following are the potential major impediments to OA:

1. Limited access to the Internet which may be manifested in the form of inadequate bandwidth, speed of data transmission, and prohibitive cost;
2. High or unaffordable costs of subscriptions, which has consequences on the impact factor of journals; and
3. A surge in publication of mediocre quality journals, prompted by concerns about career progression.

The following specific recommendations were made:

1. On the question of subscription costs, institutions of science should recruit an able negotiator to bargain for reasonable rates with publishers following the approach adopted in Netherlands;
2. Universities need to set up repositories where staff members can deposit their manuscripts for wider dissemination; and
3. Data sharing and data cost should be supported by a policy.

Open Access Development in South America

By: Dr. Dominique Babini – Latin America Council of Social Sciences, Argentina

Background

Dr. Dominique Babini highlighted the experiences of Open Access from Latin America. CLACSO (The Latin American Council of Social Sciences) is active in promoting Open Access initiatives, legislation and policies in Latin America and in developing regions. CLACSO is a regional network that has 380 research institutions in 25 countries. Its digital repository in the year 2000, has 850,000 downloads monthly, with users mainly drawn from Latin America and the Caribbean.

Opportunity and Risks

Increasingly, commercial publishers would like to manage Open Access academic journals. There is however concern about the commercialisation of OA, which would cause new barriers for researchers who use or are interested in using OA. To reduce this risk, it seems prudent to have as a basic global, free-to-use, free-to-publish OA ecosystem, secured by a worldwide network of interoperable digital repositories.

Highlights of Latin America's Progress in Open Access use

Dr Babini outlined the following characteristics of OA in Latin America:

1. With its inequalities, social and economic, the region needed research outputs to be visible and accessible in support of sustainable development challenges;
2. In the Latin America region, research is publicly funded and journals are published as part of the cost of research, mainly by universities and scholarly organisations, with no APC's (article processing charges);
3. Nearly 80% of reputable OA Journals from Latin America are in OA format;
4. Latin America has a regional OA Declaration (Salvador de Bahía, 2005) that, (i) urges governments to make OA a high priority in science policies, (ii) requires publicly funded research to be available through Open Access, (iii) calls for the cost of publication to be treated as part of the cost of research, (iv) promotes the integration of developing countries in scientific information in the worldwide body of knowledge, (v) promotes strengthening local OA journals, repositories and other relevant OA initiatives; and
5. Over the last 15 years, the regional approach to OA in Latin America has been done using regional subject digital repositories, regional portals of open access journals (SciELO and Redalyc) and, more recently, a regional network of national systems of institutional repositories, which started, with nine countries of the region (La Referencia).

Challenges to Open Access in Latin America

Dr Babini outlined the following challenges to OA in Latin America:

1. OA policies still require fine-tuning;
2. The evaluation process *only* considers what is published in journals yet, only 5% of quality journals from Latin America are in the Web of Science (WoS);
3. The quality of research and publications, still require improvement;

4. Institutional repositories are at a fledgling stage and contents are limited to thesis, journal articles, a growing collection of books, and multimedia with scanty data registers; and
5. There is tension between publishing in local and international journals in terms of differences in impact factors and evaluation assessments.

Good Practices of Open Access in Latin America

The following benchmarks exist in Latin America:

1. In countries like Brazil, Colombia, Chile, Mexico, and Argentina, national research keep a list of quality journals, which are used as benchmarks in evaluations together with quality journals in SciELO and Redalyc (Red de Revistas Científicas de América Latina y El Caribe, España y Portugal);
2. Over the last two years, universities have been using Scientific Electronic Library Online open source software to build their journal repositories. For example, the University of Chile, National Autonomous University of Mexico, and University of Sao Paulo (Brazil), each have more than 100 journals edited by different faculties and research departments and with open system platforms which run all the editorial processes and on open software, providing visibility and access to their journals;
3. A regional consultative meeting, sponsored by UNESCO in 2013, agreed on the following: Gold and Green routes are a suitable form of OA for the region: (i) for Green routes, inclusive and cooperative OA solutions, should be promoted to avoid new challenges, and (ii) the Gold OA route should keep its present emphasis on cost sharing;
4. National councils of research formed evaluation committees to set indicators for local publishing and the criteria to employ in evaluations; and
5. The use of digital repositories, open access journal portals, and networking of institutional repositories should be included or incorporated in the family of resources that can be considered for regional OA.

Plenary Discussions

The following are the key issues that arose from the discussions:

1. **On translation:** The high cost of translation of digital repositories contents into English is an encumbrance.
2. **On the mechanics of institutional repositories:** The following points emerged:
 - i. Researchers can consider having for a national repository when institutions lack a digital repository.
 - ii. The linkage between institutional and national repositories means institutions can build the metadata for their own use and then make such knowledge available for harvesting by national and regional repositories.
 - iii. Regarding the regional harvesting of information, it should be mandatory to operate through the OA, if the entity is publicly funded.
 - iv. In each country in the region, laws exist to protect publicly funded research that is strategic in nature; hence, research that can be commercialised.
 - v. OA policies can protect the rights and interest of researchers in agreements signed with publishers.
 - vi. Regarding funding of regional repositories, after initial external support, the costs should be borne by each of the countries.

- vii. Some challenges faced in Latin America regarding research include:
 - a. The need to encourage the new generation of researchers to work in the context of OA.
 - b. The evaluation procedures need to be reviewed to deemphasise the commercial element or interest.
 - c. Fresh training on how to evaluate researchers based on Open Access indicators should be undertaken.
- viii. On research funding, the proportion of publicly funded research in Latin America is 75%. Especially in public universities, it is becoming an accepted practice, in Latin America, for research results to be made available on Open Access.

Open Access Development in Europe

By: Dr Bhanu Neupane, UNESCO

Challenges Observed

In this presentation, the European experience in Open Access was discussed.

In Europe, some countries are way ahead in conceptualising OA while others are still far behind. Drawbacks to OA include the policy setting framework, which does little to address the high cost of having research publications on OA. This means, in effect, that scientific outputs will become more costly to everyone. What is being observed is that the OA platform guarantees the outcome of science; yet, there is no guarantee that users will access scientific work. It is arguable that knowledge transfer process is not happening and the knowledge divide is not being bridged. In addition, the emerging form of OA seems unlikely to lead to creating a knowledgeable community. The emerging trends suggest OA in Europe may not foster freedom of expression and information sharing.

Other challenges cited include:

- i. Researchers and librarians are reluctant to use open journals;
- ii. Low scores (fourth quartile) have been observed in relation to Global Innovation Index;
- iii. Although innovation and knowledge sharing, borne of science and technology, is the game changer in poverty eradication, these things were not listed or noted in any of the Preambles of the MDGs; and
- iv. There is needless competition in relation to OA, with fragmentation, rather than consolidation, of groups observed.

Possible Remedies

- i. National policies and laws are required to enable the realisation of a truly OA digital repositories, which serve as the mainstay in all scientific discussions;
- ii. There is need to open up science and technology to improve standing in the Global Innovation Index; and
- iii. There is need to build capacity of librarians and young researchers.

Conclusion

- i. In mainstreaming OA towards the broader context of sustainable development, there is need to focus on the highest possible levels of authority.

- ii. There is need to revisit the economics of Open Access; article processing charges need to be reviewed with cost sharing in focus.

Plenary Discussions

Discussions focused around Indexing. The following are the key highlights:

1. An author's citation impact will rise if he/she publishes in OA journals. There is need for authors to publish in journals with credible indexing systems.
2. OA needs to borrow good practices on indexing from publishing houses and indexing systems.
3. The system for indexing of journals should be a crucial point for discussion.
4. In connection to the link between research finding and communication, it was observed in India that there was a sudden rise of biotechnology research when the government was interested in developing strategies to ensure food security. There is therefore a direct correlation in the money put in science and technology and the output produced thereafter, in terms of development.
5. Policymakers should support science and technology with enough funding for quality science to enrich development.

Open Access Development in Africa

By: Mr. Tiwonge Msulira Banda, Ubuntunet Alliance

Mr Tiwonge Banda defined OA as public information, which should be available for all towards knowledge and information sharing. OA is, at the same time, helpful to scholarly publishing, business, and development.

Impediments to scholarly publishing in Africa

- i. The existence of numerous publications makes it difficult for librarians to decide what to store or subscribe to;
- ii. Journal subscriptions are expensive, especially for scholarly journals published overseas;
- iii. Uncertain longevity of emerging technologies for accessing scholarship;
- iv. Lack of hardware and poor Internet connectivity in some places; and
- v. Author-pay's model discourages researchers from publishing in OA, especially for Gold OA.

Challenges Faced by African Researchers

- i. Limited equipment and facilities;
- ii. Lack of adequate funding; and
- iii. Limited access to research from journals published in the North, as libraries cannot afford to subscribe to several titles.

Aims of Open Access in Developing Countries

- i. Increasing access to research results from the South;
- ii. Enabling collaboration in research and access to more research funding; and
- iii. Making authors from the South and their institutions visible and increasing the citation of their research results.

African researchers depend on free information sources from the North because of local resource constraints. They have scanty access to world acclaimed scholarly journals as well as limited research funding.

Embedded, OA publishing in Africa will fill the problem of non-subscriptions and permit long term access to full text articles (even in small libraries). OA would heighten the research profile of local institutions, no less spur innovation and development. OA would foster strong academic links (south-south and south-north) and enable African scholarship to be available worldwide. In Africa, OA would assist African institutions develop their own open source software relevant to their indigenous languages and materials.

The Way Forward

1. Policy set up

- i. Install a bold national OA-friendly policy framework including public-funded research, which must be aligned with existing national and regional policies on OA.
- ii. Advocate for a National Institutional Repository (IR), which will consolidate IRs in the country for national development.
- iii. Government support is critical for national platforms for OA through IRs and OA journals.
- iv. Set up the necessary protocols to operate on an OA platform.

2. Economic Matters

- i. There should be strong economic support for OA from universities and funding agencies.
- ii. There should be no personal financial costs to be covered by authors who want to get their work published.

3. Procedures

- i. All OA journals will be peer-reviewed, indexed, and be of high quality.
- ii. Institutions will accept OA articles as peer-reviewed and of high quality and give them the same weight as hard copy subscriptions for the purpose of career progression.
- iii. There is need to cultivate and secure the buy-in of all stakeholders in the OA enterprise.
- iv. There is need to register IR with directories and registries for easy searchability.

4. Forging of Networks

- i. Build networks and partnerships with other OA compliant institutions (South-South, South-North) for research and knowledge exchange.
- ii. Support and recognition of OA.

Plenary and Discussion

Key discussion topic revolved on whether a duplication of effort exists in the creation of repositories, their content, effort and infrastructure. No conclusive decision was made on this issue.

The focus of this session was to bring out the challenges that relate to policy, capacity development and partnership.

Scholarly Communication in Africa Project (SCAP)

By: Michelle Willmers, University of Cape Town

Problem Areas

A study done in 2012 on research output from 8 universities in Africa², in terms of peer-reviewed research publication showed the numbers were extremely low. The University of Cape Town led with 1,017 publications per year and the lowest one was Eduardo Mondlane at 23 journal articles per year.

Numerous drawbacks were observed about scholarly discourse in Africa. The need for more collaboration around tools of scholarly communication. There are few repositories in African universities and scholars are not widely making their content freely available on the web. The reluctance of African scholars to publishing online can be attributed to anxieties about the risks of doing so. African academics are increasingly investing their time in consultancy work. But above all, many African countries lack OA policies, which frustrate the growth and development of scholarly communication.

Possible Solutions

- i. It would be prudent to understand the attitudes and behaviours of academics in their unwillingness to use OA for publishing scholarly work.
- ii. It would be fitting for knowledge institutions to first organise research for OA work to be effective.

Questions for Consideration:

- i. The problem of low OA use seems to subsist in a complex web of policy frameworks, behavioural systems, weak infrastructure and, capacity shortfalls.
- ii. There is need to define the role of libraries and other intermediaries of knowledge.
- iii. It would be good to understand how to engage in Green versus Gold discourse when even APCs are unaffordable.
- iv. There is need to mark the linkages between scholarly communication and big science initiatives, including how infrastructure/networks be leveraged?
- v. It is important to think about how to consolidate the networks and overall activities of the Open Access, Open Science and Open Educational Resources communities in Africa (OA > OER > Open Innovation).
- vi. There is need to work out how to effect a seismic shift in the policy space for OA.

²Cape Town, Makerere, Botswana, Nairobi, Ghana, Dar es Salaam, Mauritius, Eduardo Mondlane

Findings of the Survey into the Challenges of Editors and Publishers in Africa

By: Susan Murray, Africa Journals OnLine

The presentation reported findings of a study done into the challenges faced by editors and publishers in Africa. The following are the key issues that emerged from the presentation.

The Areas of Weakness

- i. There is no clear understanding on how OA is being realised in Africa, the existing complexities and issues in the African context. Looking at subscription journals as against open access journals would deepen the knowledge on the operational barriers.
- ii. The weak ICT infra-structure and costs of quality research influences the scope of OA application in Africa.
- iii. There is limited proficiency in the use of some open software systems for journal management.

Opportunities and Way Forward

- i. Need to build a strong and united Africa-wide network that can influence policy;
- ii. The challenges and complexities with regards to making OA work and be acceptable to the intended users need to be well addressed. If not, users could revert to subscription-based publishing models;
- iii. There is for more collaboration on OA between countries;
- iv. There is need to identify the enabling factors necessary for OA in Africa. An African statement on OA may help frame the conversation going forwards; and
- v. It might be helpful to set up a publishing services company based in Africa instead of paying firms based in Europe.

The Role of the Global Research Council (GRC) in Promoting Open Access

By: Daisy Selematsela, National Research Foundation, South Africa

The presentation focused on several discussions that took place on the whole aspect of Open Access with a focus on the role of GRC. The following are key findings:

Challenges Observed by GRC on OA

- i. Governance
- ii. Policies
- iii. Accessibility to data
- iv. Funding and sustainability
- v. Technical feasibility and standards
- vi. Quality assurance and management
- vii. Raising awareness in the research community
- viii. Promoting and supporting OA
- ix. Divergent views on Open Data and Data Sharing
- x. Lack of African (regional) participation/contribution

For scientists and researchers, Open Access is not automatic; instead, it is a product of enabling factors and choices. In realising it, the sequence to be followed would be one that focuses on discovery and access to data/outputs.

Way Forward

- i. Policy: Licenses should allow a variety of access modes. Divergence of national policies needs to be accommodated by matching them with a small number of standardised licenses; and
- ii. IRs/data centres should allow multiple modes of access (free and open, acceptance of limiting conditions, and pay wall).

Plenary Discussions

The discussions brought out the following:

1. Building of Regional Arrangements

The proposed African Wide Conference on OA should be supported and preliminary regional conferences of the same should take place. Such forums would allow a wider number of people to attend and be made aware of OA. Concerted efforts, to this end, should therefore be seen at national as well as at a sub-regional level.

2. Valuing Collaboration rather than Competition at Institutional Level

Action is needed about the open content continuum in terms of engagement in the OA space. African researchers want to be part of the global conversation; however, their efforts are being undermined through intense competition.

3. Critical Success Factors

This means addressing the most critical action lines for the science system in sub-Saharan Africa, including addressing the nexus of skills, capacity, and scalability.

4. Optimising Existing Networks

This means linking to already existing initiatives on OA in Africa rather than having to re-invent the wheel. Africa needs a strategic response in dealing with regional scale, infrastructural developments. In this vein, UbuntuNet may be of help.

5. Audit of Initiatives

Stock taking on publishing initiatives in Africa would be welcome and help broaden the understanding on the transition taking place in publishing is playing itself out and the impact OA journals could have.

6. Funding conditionality

Some funding agencies require data to be delivered via OA. Whereas some institutions can fulfil this requirement, others cannot. In any event, there is need for due consideration to be given towards mechanisms, such as the universal access funds, to realise OA.

Creating an Environment for Open Access (Panel Discussion)

The panellists tackled the specific question on creating an environment for Open Access and what the pertinent issues or examples they have experienced.

1. Creating Enabling Policies for Open Access:

By: Prof. David Bakibinga, Makerere University

Prof. Bakibinga highlighted the relevant law for OA, and some institutional policies and library management practices, including that of repositories. The following are the salient points of his presentation:

- i. The law protects any author of original work and the author's permission is necessary in the OA context. Yet, the law permits the author to assign, licence, or transfer their interest in their work for economic reasons. The law gives the Ministry of Justice (case of Uganda) the power to set conditions for reproduction of works and authorise certain libraries, non-commercial documentation centres, scientific and educational institutions, to make use of certain works. The legal regime permits the use of a non-exclusive license in translating any work;
- ii. Provisions in the Copyright Act and the Industrial Property Act assign ownership of works produced by an employee during his/her term of employment to the employer. For learning institutions, this will help enhance OA since what is produced by employees can be made accessible to institutions; and
- iii. Institutional policies on OA could be adjusted to recognise ownership of innovations made under the institution.

2. Impact of Networking and Collaboration using Available Resources

By: Dr. Francis Tusubira, UbuntuNet

Networking sought to reduce internet costs. As it is, there is a functional network spread across 8 different countries, allowing users to access journals online at universities. Researchers in universities need to access information without worrying about bandwidth.

3. Standardising Open Science

By: Dr. Hermogenes Nsengimana, African Organisation for Standardisation (ARSO)

Standards to use in guiding policy issues about OA would be welcome. This will mean creating a business model that permits ownership. In general, international standards facilitate (i) openness and transparency, (ii) encourage the growth of systems, development of timelines, and processes, (iii) and enables market review of publications. If OA follows the international standard approach, it will become a reality.

4. UNESCO's Training Courses

By: Dr. Bhanu Neupane, UNESCO

Dr. Neupane talked about UNESCO's Training Curriculum on Open Access. In 2014, UNESCO identified the OA's most relevant stakeholders, those who would benefit most

from capacity building. Cited were four distinct levels of stakeholders towards whom OA training should be directed towards:

- i. Policymakers – they need to appreciate what OA is all about and how it will be of benefit to them.
- ii. Librarians or archivists
- iii. Young researchers
- iv. Publishers

Towards this end, UNESCO identified experts from all over the world to help develop a position paper on the type of capacity needs that would be required for the four groups of stakeholders. Guidelines were developed.

The process of developing the training course included, (i) having a web based consultation, (ii) carried out subjective assessments on the kind of curriculum to be developed, (iii) identified experts who would focus on specific modules and develop them further.

5. Scholarly Publishing and African Universities

By: Mr. Paul Samwel Muneja, Consortium of Tanzania University and Research Libraries

Africa's low contribution to global scholarly effort can be attributed to low motivation in reading and writing locally published scholarly works. Locally published journals are scarcely used and tend to be downgraded: for instance, due to these reasons, some of the locally published journals at the University of Dar-es-Salaam are leaving the publishing business.

At the same time, incentives for publishing in Africa are in short supply. Other challenges faced are undeveloped publishing policies and unsound research capacity. The criteria for promotions of academic journals are obscure. On top of this, the notion of the impact factor is a leading stumbling block to scholarly effort and needs to be fixed: especially, on how Open Access can forge a mechanism to substitute for the impact factor.

Opportunities

Encouraging the publication of locally published journals will stimulate a reading culture and build knowledge creation. The University of Dar-es-Salaam produces OA journals and encourages its scholars to publish in such journals.

Recommendations

The following are needed:

- i. Publishing policies
- ii. Shift in the mind-set of universities towards Open Access
- iii. Addressing of the issue of Intellectual Property
- iv. Sensitisation and advocacy campaigns
- v. Fostering of collaborations

6. Media and Open Access for Public Information

By: Daniel Kalinaki, Nation Media Group

Challenges

Collaboration between the academia and mainstream media is wanting. This creates problems for both institutions. The media fraternity find it hard to obtain information from research institutions.

Opportunities and Way Forward

- i. The Kenya Government has made information available to the public through Open Access to data.
- ii. Research supported by public funds should be accessible to the public, and not just to academics or researchers.
- iii. There is need to find a common ground for advocacy and for highlighting best practices.

Way Forward

- i. Facilitating Open Access in terms of funding.
- ii. Setting of infrastructure to be utilised holistically and affordably.

Plenary Discussions

The following are the key discussion outcomes:

1. Favourable Legal Instruments

Governments should be brought on board so as to enact enabling intellectual property laws.

2. Facilitating Collaboration

Communication is critical to enhance effective collaboration among countries.

3. Advocacy on OA

It is paramount to find a champion to push the cause of OA to greater heights.

4. Clarity on Research Priorities

What research are African scholars undertaking? Whose problem are they solving? Whose research are they doing and who will determine the impact?

5. Lower “Mortality Rate for Local Journals”

Policies are needed to create incentives to achieve this favourable outcome.

6. Change Mindset of Researchers

There is need for ownership of the process by researchers, using a bottom up approach and towards becoming more competitive in OA.

7. Setting of Standards on OA

There is need for systems to test and safeguard the quality of OA as we move towards a critical mass and towards regional cooperation.

A Sustainable Open Access Model for Africa



In this session, participants went into three groups to discuss the following three topics:

1. Publishing Infrastructure

(costs and logistical requirements, repositories, online content management services and journal platforms, other publishing services e.g. hosting, editorial services, and peer reviews).

Question	Feedback
<i>What is needed to conduct research?</i>	<ul style="list-style-type: none"> • Funding • Physical infrastructure (computers, software, and internet connectivity) • Standard/best practices • Policies • Platforms • Support structures (Mentorship and Advisory Boards)
<i>What content?</i>	<ul style="list-style-type: none"> • Question of books and monographs • What about 'grey literature'? • Crucial role of peer review and standards • Need for collaboration and coordination to avoid duplication • Dealing with plagiarism • What implication does choice of content have on infrastructure? • When do we get to the point of shared infrastructure?
<i>What is the role of stakeholders in the space?</i>	<ul style="list-style-type: none"> • Role of funders in the ecosystem • Key roles of partners like UbuntuNet (utilisation of research infrastructure) • What is the role of academies? <ul style="list-style-type: none"> – Establishing knowledge of OA activities in various Academies. – Placing OA at the centre of the agenda – Consensus among academies that the OA issue is critical. – Figure out ways to collaborate to engage/lobby government and regional entities, e.g. the AU.
<i>Key issues</i>	<ul style="list-style-type: none"> • Centralisation/coordination/advocacy • Training and capacity building • Standards/best practices>quality • Professionalisation • Need to differentiate between OA content and OA infrastructure.
<i>Way forward</i>	<ul style="list-style-type: none"> • NASAC and academies adopt OA as key strategic issues • NASAC to coordinate activities and lobby AU. • Academies to establish the current baseline state. • Key question: who will pull the activities together?

2. Developing a policy for Open Access

(institutional policies, government policies, funders and academies' policies).

Procedure to be followed

1. NASAC should develop a comprehensive OA statement that should be adapted by its members (2 pages)
 - i. Respective institutions will link their policies to the NASAC statement.
 - ii. Check European Academies Science Advisory Council (EASAC) to avoid "reinventing" the wheel.
 - iii. Circulate the draft to stakeholders (NASAC network members) for input.
2. NASAC to prepare OA document using non-technical language.
3. Develop an OA policy 8–10 pages and link it to UNESCO policy framework.
 - i. Get buy-in from various stakeholders e.g. universities, Ministry of Education, and so on.
 - ii. Conduct advocacy activities in different arena.
4. Forming NASAC OA Steering Committee:
 - i. Appoint associate committee and be split into regional groups because of its large size. Its mandate will be to collaborate with national stakeholders to have a workshop on OA.
 - ii. Complete African membership.
5. Review funders policies and how it impacts NASAC policy in terms of public and private funders.

3. Training and Advocacy

(existing training needs, advocacy network, concept document for Tunisia).

The Group focused on the Training and Advocacy material prepared by UNESCO. Comprised of two modules, the course is customised and will be online in the next few weeks.

The Group recommended that UNESCO material forms a good basis to start the training within institutions and that it be adapted. This approach would help bring about uniformity in training.

Approaches to make it a success would include:

- i. Sensitising Deputy Vice Chancellors (Research);
- ii. OA be made part of the curriculum in undergraduate and postgraduate institutions;
- iii. Influence policy formulation and adoption;
- iv. Getting outsiders to conduct training;
- v. Teaming up with existing institutions such as graduate schools;
- vi. Have student champions and involve them in the college's OA week;
- vii. Piggyback on workshops/conferences by academics;
- viii. Take advantage of discussion forums;
- ix. Be visible on social media;
- x. Give incentives in the form of prizes and gifts.

Plenary Discussions

Key discussion outputs:

1. Optimising advocacy

There is need to engage a professional to draw up an advocacy strategy for OA. This effort can be coupled by using a champion, for example, the Minister of Science and Technology. Outreach efforts should include initiatives focussing on novice and intermediate researchers.

2. Shift in the genre of publications

The type of publishing taking place in Africa is mainly case reporting. This form of publishing is not well recognised.

3. Stimulating efficiency

Effective networks should neither be insular nor closed.

4. Integrating OA into the curriculum

The UNESCO curriculum has been upgraded into an e-learning tool. One can be a node to host the course.

5. Materials and training

There is need for open education resources with an African focus e.g. OER African Hub for material and training.

6. Task for NASAC

In a collaborative step, NASAC should seek to understand what is being done to promote and support OA. Pertinent questions include the following:

- i. What can NASAC do and what can be realistically done, and
- ii. With whom can realistic discussions be held?

1. Presentation on the results of the study on the OA knowledge sharing and sustainable scholarly communication in Kenya, Tanzania and Uganda

By: Rosemary Otando, KNAS/University of Nairobi

The project was implemented from January 2013 till July 2014 by EIFL and partner consortia. The objectives of the study were as follows:

- i. To raise visibility and accessibility of research outputs;
- ii. To enhance access to and greater use of research findings produced by universities and research organisations;
- iii. To set up 25 OA repositories and 5 OA journals;
- iv. To organise 45 events;
- v. To adopt at least 5 OA policies;
- vi. To run institutional, national and regional campaigns to encourage use and reuse of OA content in education, science and research;
- vii. To set up institutional and national OA advocacy groups (researchers, students, librarians, research managers); and
- viii. To increase understanding and awareness of OA.

Major Project Results

- i. Over 20 institutional and national OA advocacy groups (researchers, students, librarians, research managers) have been set up and institutional and national OA campaigns have been implemented to promote and develop institutional and national OA policies and practices and encourage use and reuse of OA in education, science and research.
- ii. Four OA policies have been adopted at:
 - a. Kenyatta University (Kenya),
 - b. Muhimbili University of Health and Allied Sciences (MUHAS, Tanzania),
 - c. Climate Change Impacts, Adaptation and Mitigation Programme (CCIAMP Tanzania) and;
 - d. Regional University Forum for Capacity Building in Agriculture (RUFORUM, Uganda).
- iii. So far, there are five OA policies (mandates) in East Africa.
- iv. Thirty seven (37) OA awareness raising workshops held and 30 CB events on OA repository managers conducted.
- v. OA journal editors, institutional OA champions, setting up of over 20 institutional and national OA advocacy groups, increased institutions positions in global rankings, there are 31 fully operational OA repositories in Kenya, Tanzania and Uganda and 29 others are under construction.

Key Challenges

- i. Slow OA policy implementation
- ii. Government support is wanting
- iii. Lack of capacity to provide technical support
- iv. Indifference by researchers
- v. A general lack of preparedness to undertake projects at institutional levels

Key Lessons

The government, institutions including academic and research consortia should all work together to ensure the success of OA initiatives.

2. A Strategic Approach to Scholarly Publishing in South Africa

By: Susan Veldsman, Academy of Science of South Africa (ASSAf)

Issues:

- i. Of the 262 published journals, 27% are open accessible.
- ii. 1% of all journals in Africa are indexed in WoS Journals.
- iii. Up to 2011 there was a steep growth of OA publication. From 2011 the growth was not as sharp.
- iv. There is need to explore the impact of OA in terms of research publications and research.

Challenges:

- i. No Open Access policies in place
- ii. High article processing charges
- iii. Perception of poor quality OA
- iv. Impact factor “pressure” vs OA encouragement – government and universities
- v. Weak data management

Next Steps:

- i. The policy regime should facilitate the participation of youth in OA.
- ii. There is need for the development of creative ways of working together.

3. iHub and Youth Engagement

By: Jessica Colaco, iHub

Background

Ms. Colaco explained the role of iHub in youth engagement that is, catalysing open and collaborative science for development in the Global South. Used were case studies of Open Innovation and Open Science. The open innovation module obtains ideas from the community that uses the product and permits creating disrupting innovation and the creation of new ideas and new markets. Its approach is towards Open Access using people as a source of information.

Issues

In applying the iHub, new approaches and technologies in research – using open systems or public engagement such as twitter and Facebook are required. Approaches could include (i) social media, (ii) public engagement, (iii) open access, open peer review, (iv) open lab notebook, (v) citizen participation, (vi) open hardware and software.

There is need to reinvent and re-use iHub for purposes of openness through the research process, using Open Science Development (OCSDNet) in research.

4. AJOL on Africa-wide Partnership

By: Susan Murray, African Journals OnLine

The mission of African Journals Online was enumerated. The **AJOL** works to increase visibility, quality and online access of African-published scholarly journals in support of higher education, research and research dissemination on the continent (*www.ajol.info*).

Benefits of AJOL

- i. Free hosting (SEO), software and website maintenance
- ii. Free, permanent and reliable back up of digital archive
- iii. Free DOIs (Digital Object Identifiers) through AJOL
- iv. Free (invitation only) training workshops in online publishing software, and publishing best practices
- v. Free Open Journal Systems(OJS) online publishing workflow hosting
- vi. Free access to publishing best practice resources, and publishing ethics guides via COPE
- vii. Much higher visibility than being online alone
- viii. Affords a huge international readership

Next Steps

Coordination and collaboration needs to be enhanced to share a strategic approach to optimise on their outcome.

5. UNESCO's Global Open Access Portal

By: Bhanu Neupane, UNESCO

UNESCO's Open Access Portal supports member states to have a full view of the OA scenario in specific countries and regions. The portal plays the role of disseminator for decision-making. It is dynamic and carries current information. Individual experts who volunteer to write for the portal, play the role of editors, reviewers, and oversight champions to promote Open Access.

Issues

- i. For countries where Open Access has had some success, it would be right to know what the enabling features or critical success factors are.
- ii. What national organisations or funding agencies have mandates in place requiring researchers to deposit their scholarship into an Open Access repository?
- iii. Who are the major players (organisations and institutions) in the OA repository, and what are the key national projects and initiatives?
- iv. What are the potential barriers for further adoption of the Open Access repository?

Open Forum for General Plenary Discussion on Pertinent Issues on Open Access in Africa

In this group session, participants tackled the following questions:

- i. How can Academies add value and how can technology and options be discussed with policy-makers and the public; and
- ii. Who else is working on these issues and what are the opportunities for partnership to support African decision makers and stakeholders?
- iii. What elements should an open access programme for Africa encompass?
- iv. What is the role of academies and Open Access experts?
- v. What are the budgetary implications? How can financial resources be secured from Africa and beyond?
- vi. Which crucial partnerships should be pursued?
- vii. What timeframe is being envisioned?

The following is the Groups' feedback:

Question	Response
<i>How can academies add value and how can technology and options be discussed with policymakers and the public?</i>	<p>Approaches to Adding Value</p> <ul style="list-style-type: none"> • Audit – to document and report on the UNESCO portal with regards to what is going on in African countries viz OA. A position paper to be produced by the academies after this activity. • Advocacy work to the importance of OA with focus on policymakers and the public. • Academy can start a training node using the UNESCO material • Harvesting of metadata from various repositories • Cascading or taking the initiatives to young academies • Noted that only 21 countries have academies • Journal hosting service • Advocate for article writing workshops/editing workshops/ capacity building courses for the editorial boards and the authors • Engage stakeholders including Library Consortium, Professional Bodies, Government, University Councils, UNESCO, TWAS • NASAC to: <ul style="list-style-type: none"> – Prepare an African position paper; Advocacy at continental level – Come up with standards that can be cascaded to the national level – Assisting journals to be of high quality – Use local scientists to do the work of the academy
<i>How can technology options be discussed with policymakers and the public</i>	<ul style="list-style-type: none"> • Provide best practices, metadata standards, accredit repositories • Settle on one technology e.g. D-space • Utilise Open Journal Systems (OJS) • Organise a workshop for editors • Assist with hosting of open journals and repositories • Utilise the NRENs for hosting the OAJ repositories • Digital preservation and digital curation

Question	Response
<p><i>Who else is working on these issues and what are the opportunities for partnership to support African decision-makers and stakeholders?</i></p>	<ul style="list-style-type: none"> • University councils • Policymakers • Professional bodies • Library consortium • UNESCO • TWAS
<p><i>What elements should an open access programme for Africa encompass?</i></p>	<p>Hardware</p> <ul style="list-style-type: none"> • Repositories • Metadata/Curation • Platform • Preservation • IP/Licensing <p>Software</p> <ul style="list-style-type: none"> • Metadata • IP/licensing • Publishing skills • Discoverability skills (search) • Metrics • Author's publishing cost (APCs) • Best practices
<p><i>What is the role of academies and Open Access experts?</i></p>	<p>Role of Academies</p> <ul style="list-style-type: none"> • Lobby governments and institutions focusing on higher education and research institutions (<i>June 2015</i>) • Advocacy – public, academics/researchers and media (<i>April 2015</i>) • Cooperation and coordination between the various academies (<i>should be on-going</i>) • Communication (<i>on-going</i>) • Reporting to various academies (<i>every 6 months</i>) <p>Role of Experts</p> <ul style="list-style-type: none"> • Information collection on best practices • Training on the various elements to ensure successful OA operations • Formulation of strategic plans for implementation • Populating repositories/the pulling effect • Dissemination/the push effect (information on social media)
<p><i>What are the budgetary implications? How can financial resources be secured from Africa and beyond?</i></p>	<p>Budgetary Implications</p> <ul style="list-style-type: none"> • Infrastructure • Planning • Training/advocacy • Policy formulation • Publications in publishing • Research on OA

Question	Response
	<ul style="list-style-type: none"> • Indexing • Consultancy • Communication and marketing • Sensitisation or advocacy • APCs
<p><i>How financial resources can be secured from Africa and beyond</i></p>	<ul style="list-style-type: none"> • Institutional financial resources • National Partners/Funders <ul style="list-style-type: none"> - Consortiums - Ministries of Science and Technology - Ministries of Higher Education - Commissions for Education - Telecommunication Companies • Regional Partners/Funders <ul style="list-style-type: none"> - African Development Bank (ADB) - African Union Foundation - The Commonwealth - UNESCO - EIFL - INASP - European Commission - IDRC - Carnegie Foundation - Mellon Foundation - Gates Foundation - China Development Bank - Ford Foundation - SIDA - NORAD - Spider Publisher - Global Research Council
<p><i>Which crucial partnerships should be pursued?</i></p>	<p><i>Recommendation: NASAC should discuss through the AU to have a continental statement on OA</i></p>
<p><i>What time frame is being envisioned?</i></p>	<p>Before this can be determined, there is need to understand the key actions. See next page for proposed time frame.</p>

Table on the Timeframe

Activity	Responsible	Timeframe
Advocacy	Local academy and NASAC	Continuous
Development of regular feedback mechanism	All academies	Continuous
OA Training (UNESCO Curriculum): <ul style="list-style-type: none"> • Call for proposals • Decision • Names through to NASAC 	NASAC	Immediately
Open Access Policy Development in 3 countries: <ul style="list-style-type: none"> • Call for proposals (expression of interests) • Decision • Names to NASAC 	NASAC	Immediately
OA statement/position paper: <ul style="list-style-type: none"> • Develop a comprehensive statement • Circulate to academies for comments • Approve • Sign 	ASSAf through NASAC	Immediately
Prepare OA documents – non-technical language	Academies	March – August 2015
Update of OA information on UNESCO Portal (GOAP): <ul style="list-style-type: none"> • Identify key people in each academy • Call for update according to template • Coordinate • Send information through to UNESCO 	ASSAf through NASAC	March – May 2015
Marketing brochure: <ul style="list-style-type: none"> • Design of brochure/pamphlet for funding purposes 	NASAC NASAC ASSAf NASAC	March – July 2015
	ASSAf and UNESCO	March – April 2015
Launch in Open Access week in October	NASAC	October 15
NASAC OA Steering Committee: <ul style="list-style-type: none"> • Complete African membership • Other experts? 	NASAC	2015
Standards Development: <ul style="list-style-type: none"> • Code of best practices for editors and peer reviewers • Metadata standards • Other standards for repositories 	ASSAf	2016
Centralised hosting services: <ul style="list-style-type: none"> • IR's • Journals 	NASAC	2016

Through the Closing Remarks made by *Prof. Robin Crewe, Dr. Hans Chang and Dr Bhanu Neupane*, the following are the key next steps to be followed through in the next four months:

Action By:	Details
National academies	<ul style="list-style-type: none"> • Present or inform the national government on the opportunities of OA for the country. • Present an action plan based on the description of the country's national situation in as far as OA is concerned. This would include mission, goal, and actions needed to meet the goal, budgets and timescale. • Build in receiving broad national support through universities, media, researchers, etc. • Compile a document that explains OA. • Determine the partners they work with to realise OA in Africa. • Develop a document on the Way Forward on delivering an Open Access system in Africa. • Pinpoint the coordination point for each country/region at national level consultation. • Develop capacities of different programmes and identify on-going initiatives. • Develop an e-learning tool by 2016. • Spell out what the ultimate goal of OA in Africa is.
UNESCO	<ul style="list-style-type: none"> • Facilitate a policy development exercises in 3 African countries in 2015 – a country can approach UNESCO through NASAC on how OA can be developed in their country. • Assess the status and/or performance of OA in Africa. • Carry out capacity building exercises for the curriculum that has been developed towards making it suitable and adaptable to Africa. UNESCO to work with NASAC in this regard. • Key measures to be employed: <ul style="list-style-type: none"> – Development of a coordination mechanism that will bring together all parties working in OA. – Development of best case practices from around the world, process documents and outcome documents that will be given to the General Conference in 2017. • UNESCO's Policy Framework and training material to be rolled out together.
NASAC	<ul style="list-style-type: none"> • Spread the word on what is happening in the various national academies. • Coordinate group actions. • Develop effective approaches on ways to engage with national governments. • Have discussions with national academies to initiate the processes of engaging governments. • Host information on OA for countries.

Key Interventions

1. Have information exchange and coordination with respect to negotiating with publishing companies (on reducing access fees).
2. Draw up an OA statement that is supported by all academies as soon as possible. The statement would provide a platform as an advocacy tool for discussions with governments.
3. The key interventions should not be restricted to NASAC affiliated academies but to all academies in Africa.

DAY 1: Defining Open Access for Africa

8:30–9:00	Registration of participants
<p>09.00 – 09.50</p> <p>Opening Session</p> <p>MODERATOR: <i>Jackie Olang, NASAC</i></p>	<p>OPENING SESSION</p> <p>Welcome Addresses from:</p> <ol style="list-style-type: none"> 1. United Nations Educational, Scientific and Cultural Organization – Indrajit Banerjee, <i>Director, Knowledge Societies Division, Communication and Information Sector, UNESCO</i> 2. Kenya National Academy of Sciences – Raphael Munavu, <i>Chairman, KNAS</i> 3. African Academy of Sciences – Fred Owino, <i>Fellow, AAS</i> 4. Network of African Science Academies – Robin Crewe, <i>Immediate Past Chair, NASAC</i> 5. Kenyan Ministry of Education, Science and Technology – David Maina, <i>Ministry of Education, Science and Technology</i> <p>(7 minutes each)</p> <hr/> <p>Opening remarks and context of Open Access for Africa: Hans Chang, <i>Director General, KNAW – the Royal Netherlands Academy of Arts and Sciences (15 minutes)</i></p>
<p>09.50 – 10.20</p>	<p>GLOBAL PERSPECTIVE OF OPEN ACCESS</p> <ol style="list-style-type: none"> 1. Open Access development in South America – Dominique Babini – <i>Latin America Council of Social Sciences, Argentina</i> <p>(20mins presentation and 10mins discussion) Link to the slideshare http://www.slideshare.net/CLACSOredbiblio/nasac-oa-forum-2015-44002763</p>
<p>10.20 – 10.50</p>	<p>REFRESHMENT BREAK AND GROUP PHOTO</p>
	<ol style="list-style-type: none"> 1. Open Access development in Europe – Bhanu Neupane – <i>UNESCO</i> <p>(20mins presentation and 10mins discussion)</p>
<p>11.20 – 11.50</p>	<ol style="list-style-type: none"> 1. Open Access development in Africa – Tiwonge Msulira Banda – <i>Association of African Universities</i> <p>(20mins presentation and 10mins discussion)</p>
<p>11.50 – 13.05</p> <p>MODERATOR: <i>Jaco Du Toit, UNESCO</i></p>	<p>CHALLENGES TO OPENING ACCESS TO AFRICAN RESEARCH</p> <ol style="list-style-type: none"> 1. Scholarly Communication in Africa Project (SCAP): Michelle Willmers (15mins presentation 10mins discussion) 2. Findings of the survey into the challenges of editors and publishers in Africa: Susan Murray (15mins presentation 10mins discussion) 3. The role of the GRC in promoting open access in Africa: Daisy Selematsela (15mins presentation 10mins discussion)

8:30–9:00	Registration of participants
13.05 – 14.00	LUNCH BREAK
14.00 – 15.30 MODERATOR: <i>Gifford Hapanyengwi, ZAS</i>	<p>CREATING AN ENVIRONMENT FOR OPEN ACCESS (<i>Panel Discussion</i>)</p> <ul style="list-style-type: none"> • Creating enabling policies for Open Access: David Bakibinga, <i>Makerere University</i> • Impact of networking and collaboration using available resources: Francis Tusubira, <i>UbuntuNet</i> • Standardising open science: Hermogene Nsengimana, <i>ARSO</i> • UNESCO's training courses: Bhanu Neupane, <i>UNESCO</i> • Scholarly publishing and African universities: Paul Muneja, <i>Consortium of Tanzania University and Research Libraries</i> • Media and Open Access for public information, Daniel Kalinaki, <i>NMG</i> <p>Questions for discussion by panelists:</p> <p>(a) Elaborate on examples of Open Access initiatives that have worked.</p> <p>(b) What constituted the regulatory frameworks under which the initiatives operated?</p> <p>(c) How can science-policy dialogue be facilitated through Open Access?</p> <p>(d) What roles can science academies play?</p> <p><i>(Panel discussion for 60mins followed by general discussions for 30mins)</i></p>
15.30 – 16.00	REFRESHMENT BREAK
16.00 – 17.30 MODERATOR: <i>Kenneth Kaduki, KNAS</i>	<p>A SUSTAINABLE OPEN ACCESS MODEL FOR AFRICA (<i>Group Discussion</i>)</p> <p>GROUP 1: Publishing Infrastructure (costs and logistical requirements, repositories, online content management services and journal platforms, other publishing services e.g. hosting, editorial services, peer reviews).</p> <p>GROUP 2: Developing Policy for Open Access (institutional policies, government policies, funders and academies' policies).</p> <p>GROUP 3: Training and Advocacy (existing training needs, advocacy network, concept document for Tunisia).</p>
From 18.00	GROUP DINNER – Sarova Stanley Hotel

DAY 2: Open Access Framework for Science-Policy Dialogue

08.30 – 08.40	Recap of Day 1 by Forum Rapporteur
08.40 – 10.50 MODERATOR: <i>Asifa Nanyaro, TAAS</i>	<p>Case Studies/Success Stories in the Region</p> <ul style="list-style-type: none"> ● Spider by eIFL – <i>Rosemary Otando</i> ● SciELO SA by ASSAf – <i>Susan Veldsman</i> ● iHub and youth engagement – <i>Jessica Colaço</i> ● AJOL on Africa-wide partnership – <i>Susan Murray</i> ● Global Open Access Portal by UNESCO – <i>Bhanu Neupane</i> <p><i>(20mins presentation each and 30mins discussions at the end)</i></p>
10.50 – 11.30	REFRESHMENT BREAK
11.30 – 13.00 MODERATOR: <i>Gilford Hapanyengwi, ZAS</i>	<p>Reporting Back Session From Group Discussions</p> <p>Group 1: Publishing Infrastructure</p> <p>Group 2: Developing policy for Open Access</p> <p>Group 3: Training and Advocacy</p> <p><i>(20mins presentation and 10mins discussion each)</i></p>
13.00 – 14.00	LUNCH BREAK
14.00 – 16.00 MODERATOR: <i>Robin Crewe, NASAC/ASSAf</i>	<p>Open-forum for general plenary discussion on pertinent issues on Open Access for Africa, preceded by group discussions</p> <p>Questions for consideration</p> <ol style="list-style-type: none"> 1. How can academies add value and how can technology and options be discussed with policy-makers and the public; and 2. Who else is working on these issues and what are the opportunities for partnership to support African decision-makers and stakeholders? 3. What elements should an open access programme for Africa encompass? 4. What is the role of academies and Open Access experts? 5. What are the budgetary implications? How can financial resources be secured from Africa and beyond? 6. Which crucial partnerships should be pursued? 7. What timeframe is being envisioned?
16.00–16.30 <i>Jaco Du Toit, UNESCO-Nairobi</i>	<p>Summing up and Closing Session</p> <ul style="list-style-type: none"> ● Summary of consultative forum discussions and forum’s recommendations ● Closing remarks (Robin Crewe – NASAC / Hans Chang – KNAW / Jaco du Toit – UNESCO) ● Vote of thanks

APPENDIX 2: List of Participants

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Group Photo – OA Consultative Forum Participants

The Network of African Science Academies (NASAC) was established on 13th December 2001 in Nairobi, Kenya, under the auspices of the African Academy of Sciences (AAS) and the InterAcademy Panel (IAP).

NASAC is a consortium of merit-based science academies in Africa and aspires to make the “voice of science” heard by policy and decision makers within Africa and worldwide. NASAC is dedicated to enhancing the capacity of existing national science academies and champions the cause for creation of new academies where none exist.

For more information, please visit www.nasaonline.org
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As at June 2014, NASAC comprised of the following twenty-one members:

African Academy of Sciences (AAS)
Académie Nationale des Sciences, Arts et Lettres du Benin (ANSALB)
Académie Nationale des Sciences du Burkina (ANSB)
Cameroon Academy of Sciences (CAS)
Académie Nationale des Sciences et Technologies du Congo, Brazzaville (ANSTC)
Ethiopian Academy of Sciences (EAS)
Ghana Academy of Arts and Sciences (GAAS)
Kenya National Academy of Sciences (KNAS)
Madagascar National Academy of Arts, Letters and Sciences
Mauritius Academy of Science and Technology (MAST)
Hassan II Academy of Science and Technology, Morocco
Academy of Sciences of Mozambique (ASM)
Nigerian Academy of Science (NAS)
Académie Nationale des Sciences et Techniques du Sénégal (ANSTS)
Academy of Science of South Africa (ASSAf)
Sudanese National Academy of Sciences (SNAS)
Tanzania Academy of Sciences (TAAS)
Académie Nationale des Sciences, Arts et Lettres du Togo (ANSALT)
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Zambia Academy of Sciences (ZaAS)
Zimbabwe Academy of Sciences (ZAS)