Report of the Consultative Forum in Open Access (OA)

Towards High Level Interventions for Research and Development in Africa

Hilton Hotel Nairobi, Kenya | 29–30 January 2015
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## Abbreviations & Acronyms

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<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>ASSAf</td>
<td>Academy of Science of South Africa</td>
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<td>AAS</td>
<td>African Academy of Sciences</td>
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<td>AJOL</td>
<td>African Journal Online</td>
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<td>IDRC</td>
<td>International Development Research Centre</td>
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<td>INASP</td>
<td>International Network for the Availability of Scientific Publications</td>
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<td>IR</td>
<td>Institutional Repository</td>
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<td>KNAS</td>
<td>Kenya National Academy of Sciences</td>
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<td>NASAC</td>
<td>Network of African Science Academies</td>
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<td>NORAD</td>
<td>Norwegian Agency for Development Cooperation</td>
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<td>OA</td>
<td>Open Access</td>
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<td>OER</td>
<td>Open Educational Resources</td>
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<td>SIDA</td>
<td>Swedish International Development Cooperation Agency</td>
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<td>TWAS</td>
<td>The World Academy of Sciences</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<td>WoS</td>
<td>Web of Science</td>
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The Objectives of the meeting 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 policymakers-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 partners 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.

Goal and Objectives

The overarching objective of the Forum was to “establish an agenda and programs to investigate, develop, and evaluate the relevant technical infrastructure, policy implications, and sustainability models.”

Composition and Approach

Discussions were organised into five main topics composed of seventeen panel presentations and group discussions. Group deliberations were in the form of panel discussions, during which participants reacted to issues emanating from panel presentations. Two stand-alone group sessions also took place, with participants analysing topical issues related to the Open Access initiative. In the sections below, a summary is given of proceedings at the Forum.

Opening Speeches

Seven speeches were delivered. Speakers addressed issues, challenges, lessons, opportunities, and benefits related to open scholarship. The salient points of the speeches are pointed out below.

Dr Indrajit Banerjee (UNESCO) made the following comments. It was needful to work out how to develop an OA policy for Africa, and determine the collaborative energies and initiatives needed in this endeavour. Under-developed areas of capacity that require upgrading have to be identified and filled. Ongoing good practices, successful initiatives should be showcased and shared. The other major points made in the opening remarks were as follows:

1. The AAS is committed, Prof. Fred Owino, AAS Fellow said, to actively supporting the follow-up actions of this Forum.
2. UNESCO will ensure the execution and promotion of OA initiatives in Africa for the benefit of all, Abou Amani, UNESCO noted.
3. According to David Maina, the Ministry of Science and Technology is committed to supporting Open Access in Kenya with favourable policies.
4. Prof. Hans Chang of KNAW wanted the problems of data sharing and data cost to be made policy topics and for institutions of science to negotiate favourable terms with publishers.
5. Prof. Robin Crewe called on participants to use the Forum to draw a coherent plan with which to make OA a live experience.
Global Perspectives on Open Access

The presentations 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, Ms. 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, Dr Bhanul Neupane, UNESCO laid out several problem areas concerning OA. Of note were 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, Dr Tiwonge Msulira Banda, of Ubuntunet mentioned impediments to publishing and using scholarship in the continent. Several domains of capacity building emerged or were implied, such as policy needing movement in the following areas—funding of research, incentivising of researchers, and setting up of institutional repositories. Highlighted in the presentation too was the need to build networks and partnerships for research and knowledge exchange. During a plenary presentation, the 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 bring out the challenges that relate to policy, capacity development, and partnership about OA. Three presentations were given, of which two were reports of studies on the challenges of academic scholarship in Africa. In the first presentation, Michelle Willmer, from the University of Cape Town submitted the findings of a study of eight African universities, which identified factors holding back scholarly publications. Remedial solutions were proposed and covered policy position, institutional practices (organisation of research), capacity development, and challenging the behaviour of researchers, who have tended 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 stymieing the scope of OA in Africa. The recommendations put forward included the need for an African statement on OA, further research to unearth 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 Knowledge Management Corporate. She reported on several discussions that have taken place on OA globally. The major hurdles can be 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 on deepening open scholarship.

Case Studies: Success Stories in Africa

The panellists tackled the specific questions of how to create an environment for Open Access and pinpointed the pertinent issues. Furthermore, they gave accounts of issues or experiences. In “Creating Enabling Policies for Open Access”, Prof. 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 is on ownership of innovations, rather than publication developed in institutional settings—was noted. In “Impact of Networking and Collaboration using Available Resources”, Francis Tusubira of UbuntuNet argued that networking was an effective vehicle in truncating the cost of accessing the Internet. This presentation was followed by one by 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. In his presentation, Dr Bhanu Neupane of UNESCO talked about the development of UNESCO’s training courses and identified the stakeholders to be targeted in capacity building.

In the presentation titled “Scholarly Publishing and African Universities” Paul Samwel Muneja examined some factors that were holding back scholarship in Africa, including cultural (reading habits) and institutional ones, opaque criteria for academic career progression. Additionally was the value of finding sound alternatives to assessing impact factors in the context of the OA. This presentation was followed by one in which a media representative, Daniel Kalineki of Nation Media Group who explained the difficulties faced by the media in obtaining academic reports. To improve collaboration between the media and the academic institutions, about Open Access, he made several recommendations that include the need for publicly funded research to be open to the public. In the plenary session, which followed the delivery of the presentations, discussions focussed around the following areas, the issues of interest where the need for policies on intellectual property, clarity on research focus of African scholarship, reducing the mortality rates of local journals, changing mind-sets of researchers about OA, and employing inter country collaborations to harness OA initiatives.

In another group session, participants discussed issues about a sustainable business access model for 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 engaged in critical reflection on the points made during the group debate.

**Case Studies/Success Stories in the Region**

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 outlined avenues for fixing this problem. Suggested remedies included exploring the impact of the OA on research publications and encouraging youth participation in OA. Jessica Collaco of the “iHub and Youth Engagement”, narrated how OA was facilitating creativity and innovation. Approaches to conducting research, using digital platforms, were suggested. The ensuing presentation, “AJOL in Africa-Wide Partnership”, flashed 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 by taking this strategic posture, which would optimise on favourable outcomes seen. The last presentation was “UNESCO’s Global Open Access Portal”, with Dr Bhanul Neupane explaining how the portal can be used.1

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

In this session, participants broke into three groups to tackle several questions, problems that covered a wide spectrum of issues related to implementing a viable open access system in Africa.

Key Issues Identified in the Forum

Policy moves needed to enable optimal application of OA were enumerated. The following areas were in focus:
- Intellectual property;
- Data sharing and data cost;
- Enable materialisation of digital repositories; and
- Public funding of research, which would be aligned to national and regional policies on OA.

Key Recommendations Emanating from Forum

- 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 we work with to realise OA in Africa;
- Develop capacities of different programmes and identify on-going initiatives;
- Each national academy to compile a document that explains OA;
- It was held that UNESCO training material could be rolled out at once.

Obligations Assigned to NASAC by the Forum

NASAC should do the following:
- Develop a comprehensive OA statement to be adapted by other members.
- Compile an OA document using non-technical language.
- Develop an OA policy paper and link it to UNESCO policy framework.
- Form an OA Steering Committee.
- Discuss with AU on how to have a continental statement on OA.
- Prepare an African Position Paper Advocacy at continental level.
- Spread the word on what is happening in various national academies.
- Develop effective approaches on ways to engage with national governments.
- Have discussions with national academies to initiate the processes of engaging governments on OA.
- Adopt OA as key strategic issue.
- Coordinate activities and lobby AU.
- Host information on OA for countries.

Obligations Assigned to UNESCO by the Forum

- To facilitate a policy development exercise in 3 African countries in 2015 – each country can approach UNESCO through NASAC on how OA can be developed in their country.
- To 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, as it were, by shifting emphasis to the concept of knowledge societies from information societies. It is against this backdrop 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 in knowledge, but also, how different segments of society interact with 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 pushing forward the agenda 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 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, KNAS Chairman

In kicking off his remarks, Prof. Munavu pointed to the 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 then laid out the characteristics and benefits of an ideal OA. There is need for people to consume and use knowledge or information generated. Besides, Open Access could help institutions or systems regenerate through flow of information.

3. African Academy of Sciences (AAS)
By: Prof. Fredrick Owino, Fellow of AAS

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

Prof. Owino further traced the history, organisation, programs, and achievements of the AAS. Founded in 1985 by 10 founding fellows, the AAS exists to support and enhance African scholarship. It has 300 scientists, who have been inducted as AAS Fellows. So far, amongst the Fellows are three Nobel Prize winners and 9 distinguished women scientists.

The AAS wants 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 platforms. The AAS will be a strong partner in the follow-up actions of this Forum.

4. UNESCO Regional Office
By: 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. It will work with NASAC and individual countries to put forward 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 scholarships are the life-blood of research 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 lived experience. Matters of interest should be to include the whole aspect of developing repositories of knowledge, securing funding to enable scholars publish
in journals, securing intellectual property interests, disseminating knowledge in the scholarly community, garnering resources, and building infrastructure for handling big data requirements in the future.


*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 consulting with international organisations to set up a platform from which Kenyan universities can make information accessible to students. The Ministry sees Open Access as serviceable in promoting global knowledge flow as well as social and economic development. For this reason, the concept of Open Access needs to be entrenched to prosecute this ambition.

The Kenya government is prepared to support the Open Access programme and for that purpose has set in place a favourable environment for policy formulation.

Mr Maina declared the Consultative Forum officially opened.
Context of Open Access for Africa

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

Preface

In Europe, many research communities have set up online discussion forums. Environmental 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.

Challenges to Optimising Open Access

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. Costs of subscriptions are high or unaffordable, 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.

Recommendations

It was proposed as follows:

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.
1. **Open Access Development in South America**  
*By: Dominique Babini – Latin America Council of Social Sciences, Argentina*

**Background**

Ms. Dominique Babini narrated the experiences of Open Access from Latin America. CLACSO 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 begun 15 years ago, 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. With this in mind, there is concern about the commercialisation of OA. Such an outcome, were it to occur, would erect fresh barriers for researchers who use or are interested in using OA. To reduce this risk, it seems prudent to have 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 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 cooperative approach to OA in Latin America has been done using regional subject digital repositories, regional portals of open access journals and, more recently, a regional network of national systems of institutional repositories, which started, with 9 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 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) and 16% are in Scopus;
3. The quality of research and publications, which requires improvement;
4. Institutional repositories are at a fledgling stage whose contents are limited to thesis and journal articles, a growing collection of books, and multimedia with scanty data registers; and
5. There exists 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;
2. Over the last two years, universities have been using open source software to build their repositories, examples being the universities of Chile, Mexico, and Sao Paulo (Brazil), each of which has more than 100 journals edited by different faculties and research departments and with open system platforms which run all the editorial processes and ODS using software, providing visibility and access to their journals;
3. The shift from national OA to regional OA led to a loan of US$ 1 million, funds that each country would invest in developing a national system of digital repositories;
4. 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 enclosures, and ii) the Gold OA route should keep its present emphasis on cost sharing;
5. National councils of research formed evaluation committees to draw indicators of local production and what criteria to employ in evaluations; and
6. The use of digital repositories, open access journal portals, and network 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 translating digital repositories contents into English is an encumbrance.
2. On the Mechanics of Institutional Repositories

The following points emerged:

i. Researchers can request 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 harvester of information, there is a mandatory requirement to operate through the OA, that is, if the entity is publicly funded.
iv. In each country in the region, laws exist to protect publicly funded research that has a strategic nature; put differently, research that can be commercialised.
v. OA policies can protect the rights and interest of researchers in agreements signed with publishers.

vi. On funding of regional repositories, after initial external support, the costs are borne by each of the countries providing funding.

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.

viii. On research funding, the proportion of publicly funded research in Latin America is 75%.

ix. Especially in private universities, it is becoming an accepted practice, in Latin America, for research results to be made available on open access.

2. Open Access Development in Europe

By: Dr Bhanu Neupane, UNESCO

Challenges Observed

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

In Europe, some countries are way ahead in conceptualising OA while others are still far behind. Other drawbacks to OA include the policy setting, which does little to address the high cost of having research publications on OA. This means, in effect, that scientific outputs will become much dearer to everyone. What is being observed is that the OA platform guarantees the outcome of science; even so, there is no guarantee that users will access scientific work. It is arguable, then, 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 score on the goal of creating a knowledgeable community. The emerging trends suggest OA in Europe may not prize freedom of expression and information sharing.

Other challenges cited include:

i. Researchers and librarians are reluctant regarding the use of 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 our science and technology to shore up our 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, it would be needful 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. Most of the indexing and abstracting systems are commercial. Are there studies that show how much OA journals are abstracted and indexed by well-known abstracting agents?

4. The indexing of journals should be a crucial point for discussion.

5. In connection to the link between research finding and communications, it has been 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 indeed a direct correlation in the money put in science and technology and the output produced thereafter, in terms of development.

6. Policymakers should realise that science and technology should be granted enough funding for quality science to enrich development.

3. Open Access Development in Africa

By: Tiwonge Msulira Banda

Mr Twonge Banda defined what OA was and how it works. The numerous advantages of OA were delineated, including its moral imperatives and social obligations. OA is public information, which should be available for all towards knowledge and information sharing. OA is, at the same time, helpful to scholarship, business, and development.

Impediments to Publishing Scholarship in Africa

i. The existence of numerous publications makes it hard 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 and 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 resource constraints locally. 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 for public-funded research, which must be aligned with existing national and regional policies on OA.
   ii. Advocate for a National 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. Advocacy is called for to make the case for the setting up of the necessary protocols.

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 wanting 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.

1. Scholarly Communication in Africa Project (SCAP)  
   *By: Michelle Willmers*

**Problem Areas**

A study done in 2012 on research output from 8 universities in Africa[^2], in terms of peer-reviewed research publication showed the numbers were extremely low. The University of Cape Town led the pack with 1017 publications per year and the lowest one was Eduardo Mondlane at 23 journal articles per year.

Numerous drawbacks have been observed about scholarly discourse in Africa. To begin with, it would be helpful to have 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. Increasingly, 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. If so, might there be an over-emphasis on policy?

ii. There is need to define the role of libraries and other intermediaries of knowledge?

iii. It would be right to figure out 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 incumbent 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.

[^2]: Cape Town, Makerere, Botswana, Nairobi, Ghana, Dar es Salaam, Mauritius, Eduardo Mondlane
2. Findings of the Survey into the Challenges of Editors and Publishers in Africa

By: Susan Murray

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 operation of barriers.

ii. The weak ICT sub-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. Need for more collaboration on OA between countries;

iv. Need for amalgamation of journals between countries;

v. Need to appreciate the enabling factors needed to build for OA in Africa. An African statement on OA may help frame the conversation going forwards; and

vi. It might be helpful to set publishing services company based in Africa instead of paying firms based in Europe.

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

By: Daisy Selematsela, Knowledge Management Corporate, South Africa

The presentation focused on several discussions that have taken place on the whole aspect of Open Access. The following are key findings:

Challenges Observed

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

Open Access is not a given; 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-Sahara 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.
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 concentrated on the relevant law 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: Francis Tusubira, UbuntuNet

   Networking sought to retrench 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 – those who have just started their careers
iv. Publishers

Towards this end, UNESCO begun to identify 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 then 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: Paul Samwel Muneja, Consortium of Tanzania University and Research Libraries, Tanzania

Problems

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 journals on OA 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 Kalineki, Nation Media Group

Challenges
Collaboration between the academia and mainstream media is wanting. This creates problems for both institutions. The media 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 in terms of moderating intellectual property laws.

2. Facilitating Collaboration
   Communication is basic to 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.
In this session, participants broke 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).*

<table>
<thead>
<tr>
<th>Question</th>
<th>Feedback</th>
</tr>
</thead>
</table>
| What is needed to conduct research? | • Funding  
• Physical infrastructure (computers, software, and internet connectivity)  
• Standard/best practices  
• Policies  
• Platforms  
• Support structures (Mentorship and Advisory Boards) |
| What content? | • 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? |
| What is the role of stakeholders in the space? | • Role of funders in the ecosystem  
• Key roles of partners like UbuntuNet (utilisation of research infrastructure)  
• What is the role of academies?  
  – 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. |
| Key issues | • Centralisation/coordination/advocacy  
• Training and capacity building  
• Standards/best practices>quality  
• Professionalisation  
• Need to differentiate between OA content and OA infrastructure. |
| Way forward | • 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 other members (2pgs)
   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 focusing 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 we have realistic discussions. Be realistic in what, how, and when it can be done.
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

i. 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: Bhanul Neupane*

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?
In this session participants broke into three groups to tackle 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:

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
</table>
| How can academies add value and how can technology and options be discussed with policymakers and the public? | Approaches to Adding Value  
- 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:  
  - 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  

How can technology and options to be discussed with policymakers and the public  
- Provide best practices, metadata standards, accredit repositories  
- Settle on one technology e.g. D-space  
- Utilise Open Journal Systems (OJS)  
- Run a workshop for editors  
- Assist with hosting of open journals and repositories  
- Utilise the NRENs for hosting the OA J repositories  
- Digital preservation and digital curation |
<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
</table>
| Who else is working on these issues and what are the opportunities for partnership to support African decision-makers and stakeholders? | • University councils  
• Policymakers  
• Professional bodies  
• Library consortium  
• UNESCO  
• TWAS                                                                 |
| What elements should an open access programme for Africa encompass?     | **Hardware**  
• Repositories  
• Metadata/Curation  
• Platform  
• Preservation  
• IP/Licensing  

**Software**  
• Metadata  
• IP/licensing  
• Publishing skills  
• Discoverability skills (search)  
• Metrics  
• Author’s publishing cost (APCs)  
• Best practices |
| What is the role of academies and Open Access experts?                  | **Role of Academies**  
• Lobby governments and institutions focusing on higher education and research institutions *(June 2015)*  
• Advocacy – public, academics/researchers and media *(April 2015)*  
• Cooperation and coordination between the various academies *(should be on-going)*  
• Communication *(on-going)*  
• Reporting to various academies *(every 6 months)*

**Role of Experts**  
• 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)* |
| What are the budgetary implications? How can financial resources be secured from Africa and beyond? | **Budgetary Implications**  
• Infrastructure  
• Planning  
• Training/advocacy  
• Policy formulation  
• Publications in publishing  
• Research on OA |
### Question

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
</table>
| • Indexing  
• Consultancy  
• Communication and marketing  
• Sensitisation or advocacy  
• APCs  

*How financial resources can be secured from Africa and beyond*

• Institutional financial resources  
• National Partners/Funders  
  – Consortiums  
  – Ministries of Science and Technology  
  – Ministries of Higher Education  
  – Commissions for Education  
  – Telecommunication Companies  

• Regional Partners/Funders  
  – 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  

*What timeframe is being envisioned?* Before this can be determined, there is need to understand the key actors

*Which crucial partnerships should be pursued?*

*Recommendation: NASAC should discuss through the AU to have a continental statement on OA*
<table>
<thead>
<tr>
<th>Activity</th>
<th>Responsible</th>
<th>Timeframe</th>
</tr>
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<tbody>
<tr>
<td>Advocacy</td>
<td>Local academy and NASAC</td>
<td>Continuous</td>
</tr>
<tr>
<td>Development of regular feedback mechanism</td>
<td>All academies</td>
<td>Continuous</td>
</tr>
<tr>
<td><strong>OA Training (UNESCO Curriculum):</strong></td>
<td>NASAC</td>
<td>Immediately</td>
</tr>
<tr>
<td>• Call for proposals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Decision</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Names through to NASAC</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Open Access Policy Development in 3 countries:</strong></td>
<td>NASAC</td>
<td>Immediately</td>
</tr>
<tr>
<td>• Call for proposals (expression of interests)</td>
<td></td>
<td></td>
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<tr>
<td>• Decision</td>
<td></td>
<td></td>
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<tr>
<td>• Names to NASAC</td>
<td></td>
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<tr>
<td><strong>OA statement/position paper:</strong></td>
<td>ASSAf through NASAC</td>
<td>Immediately</td>
</tr>
<tr>
<td>• Develop a comprehensive statement</td>
<td>Academies</td>
<td>March – August 2015</td>
</tr>
<tr>
<td>• Circulate to academies for comments</td>
<td></td>
<td></td>
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<tr>
<td>• Approve</td>
<td></td>
<td></td>
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<tr>
<td>• Sign</td>
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<tr>
<td><strong>Prepare OA documents – non-technical language</strong></td>
<td>ASSAf through NASAC</td>
<td>March – May 2015</td>
</tr>
<tr>
<td><strong>Update of OA information on UNESCO Portal (GOAP):</strong></td>
<td>NASAC</td>
<td>March – July 2015</td>
</tr>
<tr>
<td>• Identify key people in each academy</td>
<td>NASAC</td>
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</tr>
<tr>
<td>• Call for update according to template</td>
<td>ASSAf</td>
<td></td>
</tr>
<tr>
<td>• Coordinate</td>
<td>NASAC</td>
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<tr>
<td>• Send information through to UNESCO</td>
<td></td>
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</tr>
<tr>
<td><strong>Marketing brochure:</strong></td>
<td>ASSAf and UNESCO</td>
<td>March – April 2015</td>
</tr>
<tr>
<td>• Design of brochure/pamphlet for funding purposes</td>
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<tr>
<td><strong>Launch in Open Access week in October</strong></td>
<td>NASAC</td>
<td>October 15</td>
</tr>
<tr>
<td><strong>NASAC OA Steering Committee:</strong></td>
<td>NASAC</td>
<td>2015</td>
</tr>
<tr>
<td>• Complete African membership</td>
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<tr>
<td>• Other experts?</td>
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<tr>
<td><strong>Standards Development:</strong></td>
<td>ASSAf</td>
<td>2016</td>
</tr>
<tr>
<td>• Code of best practices for editors and peer reviewers</td>
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<tr>
<td>• Metadata standards</td>
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<tr>
<td>• Other standards for repositories</td>
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<tr>
<td><strong>Centralised hosting services:</strong></td>
<td>NASAC</td>
<td>2016</td>
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<tr>
<td>• IR’s</td>
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<tr>
<td>• Journals</td>
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Through the Closing Remarks made by Prof. Robin Crewe, Prof. Hans Chang and Dr Bhanu Neupane, the following are the key next steps to be followed through in the next four months:

<table>
<thead>
<tr>
<th>Action By:</th>
<th>Details</th>
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<tbody>
<tr>
<td>National academies</td>
<td>• Present or inform the national government on the opportunities of OA for the country.</td>
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<tr>
<td></td>
<td>• 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.</td>
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<tr>
<td></td>
<td>• Build in receiving broad national support through universities, media, researchers, etc.</td>
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<td>• Compile a document that explains OA.</td>
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<td></td>
<td>• Determine the partners they work with to realise OA in Africa.</td>
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<td>• Develop a document on the Way Forward on delivering an Open Access system in Africa.</td>
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<td>• Pinpoint the coordination point for each country/region at national level consultation.</td>
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<td>• Develop capacities of different programmes and identify on-going initiatives.</td>
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<td>• Develop an e-learning tool by 2016.</td>
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<td>• Spell out what the ultimate goal of OA in Africa is.</td>
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<td><strong>UNESCO</strong></td>
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<td>• 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.</td>
</tr>
<tr>
<td></td>
<td>• Assess the status and/or performance of OA in Africa.</td>
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<td></td>
<td>• 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.</td>
</tr>
<tr>
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<td>• Key measures to be employed:</td>
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<td>– Development of a coordination mechanism that will bring together all parties working in OA.</td>
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<td>– Development of best case practices from around the world, process documents and outcome documents that will be given to the General Conference in 2017.</td>
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<td></td>
<td>• UNESCO’s Policy Framework and training material to be rolled out together.</td>
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<tr>
<td></td>
<td><strong>NASAC</strong></td>
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<td></td>
<td>• Spread the word on what is happening in the various national academies.</td>
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<td>• Coordinate group actions.</td>
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<td>• Develop effective approaches on ways to engage with national governments.</td>
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<td></td>
<td>• Have discussions with national academies to initiate the processes of engaging governments.</td>
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<td>• Host information on OA for countries.</td>
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</tbody>
</table>

**Key Interventions Needed**

1. Have information exchange and coordination with respect to negotiating with publishing companies (on increasing access fees).
2. Draw up an OA statement that is agreeable 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**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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**Opening remarks and context of Open Access for Africa:**<br>Hans Chang, Director General, KNAW – the Royal Netherlands Academy of Arts and Sciences (15 minutes)

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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>10.20 – 10.50</td>
<td><strong>REFRESHMENT BREAK AND GROUP PHOTO</strong>&lt;br&gt;1. Open Access development in Europe – Bhanu Neupane – UNESCO&lt;br&gt;(20mins presentation and 10mins discussion)</td>
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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>11.20 – 11.50</td>
<td>1. Open Access development in Africa – Tiwonge Msulira Banda – Association of African Universities&lt;br&gt;(20mins presentation and 10mins discussion)</td>
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### 11.50 – 13.05

**CHALLENGES TO OPENING ACCESS TO AFRICAN RESEARCH**

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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>11.50 – 13.05</td>
<td>1. Scholarly Communication in Africa Project (SCAP): Michelle Wilmers (15mins presentation 10mins discussion)</td>
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<th>Time</th>
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<td></td>
<td>2. Findings of the survey into the challenges of editors and publishers in Africa: Susan Murray (15mins presentation 10mins discussion)</td>
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<th>Time</th>
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<td></td>
<td>3. The role of the GRC in promoting open access in Africa: Daisy Selematsela (15mins presentation 10mins discussion)</td>
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<tr>
<td>8:30–9:00</td>
<td>Registration of participants</td>
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<tr>
<td>13.05 – 14.00</td>
<td><strong>LUNCH BREAK</strong></td>
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<tr>
<td>14.00 – 15.30</td>
<td>MODERATOR: Gilford Hapanyengwi, ZAS</td>
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<tr>
<td>15.30 – 16.00</td>
<td><strong>REFRESHMENT BREAK</strong></td>
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<tr>
<td>16.00 – 17.30</td>
<td>MODERATOR: Kenneth Kaduki, KNAS</td>
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# DAY 2: Open Access Framework for Science-Policy Dialogue

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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>08.30 – 08.40</td>
<td>Recap of Day 1 by Forum Rapporteur</td>
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<tr>
<td>08.40 – 10.50</td>
<td><strong>MODERATOR:</strong> Asifa Nanyaro, TAAS</td>
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<tr>
<td></td>
<td><strong>Case Studies/Success Stories in the Region</strong></td>
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<tr>
<td></td>
<td>- Spider by eIFL – <em>Rosemary Otando</em></td>
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<td>- SciELO SA by ASSAf – <em>Susan Veldsman</em></td>
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<td>- iHub and youth engagement – <em>Jessica Colaço</em></td>
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<td>- AJOL on Africa-wide partnership – <em>Susan Murray</em></td>
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<td></td>
<td>- Global Open Access Portal by UNESCO – <em>Bhanu Neupane</em></td>
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<td></td>
<td><em>(20mins presentation each and 30mins discussions at the end)</em></td>
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<tr>
<td>10.50 – 11.30</td>
<td><strong>REFRESHMENT BREAK</strong></td>
</tr>
<tr>
<td>11.30 – 13.00</td>
<td><strong>MODERATOR:</strong> Gilford Hapanyengwi, ZAS</td>
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<tr>
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<td><strong>Reporting Back Session From Group Discussions</strong></td>
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<td>- <em>Group 1:</em> Publishing Infrastructure</td>
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<td>- <em>Group 2:</em> Developing policy for Open Access</td>
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<td>- <em>Group 3:</em> Training and Advocacy</td>
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<tr>
<td></td>
<td><em>(20mins presentation and 10mins discussion each)</em></td>
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<tr>
<td>13.00 – 14.00</td>
<td><strong>LUNCH BREAK</strong></td>
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<tr>
<td>14.00 – 16.00</td>
<td><strong>MODERATOR:</strong> Robin Crewe, NASAC/ASSAf</td>
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<tr>
<td></td>
<td><strong>Open-forum for general plenary discussion on pertinent issues on Open Access for Africa, preceded by group discussions</strong></td>
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<tr>
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<td><strong>Questions for consideration</strong></td>
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<tr>
<td></td>
<td>1. How can academies add value and how can technology and options be discussed with policy-makers and the public; and</td>
</tr>
<tr>
<td></td>
<td>2. Who else is working on these issues and what are the opportunities for partnership to support African decision-makers and stakeholders?</td>
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<td>3. What elements should an open access programme for Africa encompass?</td>
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<td>4. <strong>What is the role of academies and Open Access experts?</strong></td>
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<td>5. What are the budgetary implications? How can financial resources be secured from Africa and beyond?</td>
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<td>6. Which crucial partnerships should be pursued?</td>
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<td>7. What timeframe is being envisioned?</td>
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<tr>
<td>16.00–16.30</td>
<td><strong>Summing up and Closing Session</strong></td>
</tr>
<tr>
<td></td>
<td>- Summary of consultative forum discussions and forum’s recommendations</td>
</tr>
<tr>
<td></td>
<td>- Closing remarks <em>(Robin Crewe-NASAC/Hans Chan-KNAW/Jaco du Toit-UNESCO)</em></td>
</tr>
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<td>- Vote of thanks</td>
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</tbody>
</table>
### APPENDIX 2: List of Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
<th>Organisation</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominique Babini</td>
<td>Argentina</td>
<td>Latin American Council of Social Sciences</td>
<td><a href="mailto:dasbabini@gmail.com">dasbabini@gmail.com</a></td>
</tr>
<tr>
<td>Tonye Emmanuel</td>
<td>Cameroon</td>
<td>Cameroon Academy of Sciences</td>
<td><a href="mailto:tonyee@hotmail.com">tonyee@hotmail.com</a></td>
</tr>
<tr>
<td>Rabab Rashwan</td>
<td>Egypt</td>
<td>Internationalisation of local journals and scientific publishing programs</td>
<td><a href="mailto:rabablashwan@gmail.com">rabablashwan@gmail.com</a></td>
</tr>
<tr>
<td>Masresha Fetene</td>
<td>Ethiopia</td>
<td>Ethiopian Academy of Sciences</td>
<td><a href="mailto:eassecretariat@gmail.com">eassecretariat@gmail.com</a></td>
</tr>
<tr>
<td>Indrajit Banerjee</td>
<td>France</td>
<td>UNESCO</td>
<td><a href="mailto:eassecretariat@gmail.com">eassecretariat@gmail.com</a></td>
</tr>
<tr>
<td>Bhanu R. Neupane</td>
<td>France</td>
<td>UNESCO</td>
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</tr>
<tr>
<td>Anaba Anankyela Alemna</td>
<td>Ghana</td>
<td>University of Ghana</td>
<td><a href="mailto:aalemna@yahoo.com">aalemna@yahoo.com</a></td>
</tr>
<tr>
<td>Jaco du Toit</td>
<td>Kenya</td>
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<td><a href="mailto:j.dutoit@unesco.org">j.dutoit@unesco.org</a></td>
</tr>
<tr>
<td>Rosemary Otando</td>
<td>Kenya</td>
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<td><a href="mailto:rosemary.otando@uonbi.ac.ke">rosemary.otando@uonbi.ac.ke</a></td>
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<tr>
<td>Jessica Colaço</td>
<td>Kenya</td>
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</tr>
<tr>
<td>Jackie Olang</td>
<td>Kenya</td>
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<td><a href="mailto:jolang@nasaonline.org">jolang@nasaonline.org</a></td>
</tr>
<tr>
<td>Philbert Okello</td>
<td>Kenya</td>
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</tr>
<tr>
<td>Rahab Gitahi</td>
<td>Kenya</td>
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</tr>
<tr>
<td>John Okande</td>
<td>Kenya</td>
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<tr>
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</tr>
<tr>
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<td>Kenya</td>
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<td><a href="mailto:forin@kenyaweb.com">forin@kenyaweb.com</a></td>
</tr>
<tr>
<td>Daniel Kalinaki</td>
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<td>Nation Media Group</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Raphael Munavu</td>
<td>Kenya</td>
<td>Kenya National Academy of Sciences</td>
<td><a href="mailto:rmmunavu@uonbi.ac.ke">rmmunavu@uonbi.ac.ke</a></td>
</tr>
<tr>
<td>Frederick A. Ochieng Otieno</td>
<td>Kenya</td>
<td>Masinde Muliro University of Science and Technology</td>
<td><a href="mailto:faotieno@yahoo.com">faotieno@yahoo.com</a>; <a href="mailto:vc@mmust.ac.ke">vc@mmust.ac.ke</a></td>
</tr>
<tr>
<td>George G. Njoroge</td>
<td>Kenya</td>
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<tr>
<td>Noasilalaonomenjanahary Ambinintsoa Lucie</td>
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<td><a href="mailto:noasilalaao@meeft.gov.mg">noasilalaao@meeft.gov.mg</a>; <a href="mailto:noasilala912@gmail.com">noasilala912@gmail.com</a></td>
</tr>
<tr>
<td>Fiskani Ngwira</td>
<td>Malawi</td>
<td>Mzuzu University</td>
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</tr>
<tr>
<td>Tiwonge Msulira Banda</td>
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<td>Ubuntunet/Alliance</td>
<td><a href="mailto:tiwobanda@gmail.com">tiwobanda@gmail.com</a>; <a href="mailto:tiwonge.banda@ubuntunet.net">tiwonge.banda@ubuntunet.net</a></td>
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<td>Abed Peerally</td>
<td>Mauritius</td>
<td>Mauritius Academy of Science and Technology</td>
<td><a href="mailto:apeerally@intnet.mu">apeerally@intnet.mu</a></td>
</tr>
<tr>
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<td>Academy of Sciences of Mozambique</td>
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</tr>
<tr>
<td>Hans Chan</td>
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<td>KNAW</td>
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<td>Monica M. Mugo</td>
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<td>Timothy Obi</td>
<td>Nigeria</td>
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</tr>
<tr>
<td>David Maina</td>
<td>Kenya</td>
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<td>Susan Veldsman</td>
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<tr>
<td>Robin Crewe</td>
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<td>University of Pretoria</td>
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<tr>
<td>Michelle Willmers</td>
<td>South Africa</td>
<td>University of Cape Town</td>
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<td>Sudan National Academy of Sciences</td>
<td><a href="mailto:suadsulaiman@gmail.com">suadsulaiman@gmail.com</a></td>
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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.nasaconline.org or contact The NASAC Secretariat on:
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As at June 2014, NASAC comprised of the following twenty-one members:

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- Cameroon Academy of Sciences (CAS)
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- Ethiopian Academy of Sciences (EAS)
- Ghana Academy of Arts and Sciences (GAAS)
- Kenya National Academy of Sciences (KNAS)
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- Mauritius Academy of Science and Technology (MAST)
- Hassan II Academy of Science and Technology, Morocco
- Academy of Sciences of Mozambique (ASM)
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- Académie Nationale des Sciences et Techniques du Sénégal (ANSTS)
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