REGIONAL REPORT (PACIFIC)

OPEN SCIENCE BEYOND OPEN ACCESS: FOR AND WITH COMMUNITIES

A STEP TOWARDS THE DECOLONIZATION OF KNOWLEDGE

INTERNATIONAL WEBINAR SERIES

Organized by:
Canadian Commission for UNESCO, UNESCO Chair in Community Based Research and Social Responsibility in Higher Education, UNESCO Office for the Pacific States and UNESCO Regional Bureau of Sciences for Asia and the Pacific

In support of the creation of a UNESCO Recommendation on Open Science.

Tuesday, 03 November 2020
08:30 hrs India time, 10:00 hrs Indonesia time, 15:00 hrs Fiji time, 17:00 hrs Samoa time

PROGRAM AGENDA

Moderator- Mr. Rajendra Prasad (UNESCO)

Rapporteur- Ms. Niharika Kaul (PRIA)

Number of participants in the virtual event- Approximately 60 participants

Welcome Address (5 Min)- Shahbaz Khan, PhD, Director of UNESCO Regional Bureau of Sciences for Asia and the Pacific

Introducing the Open Science Brief (20 Min)- Rajesh Tandon, PhD, Founder-President, Participatory Research in Asia (PRIA) and UNESCO Co-Chair in Community Based Research and Social Responsibility in Higher Education

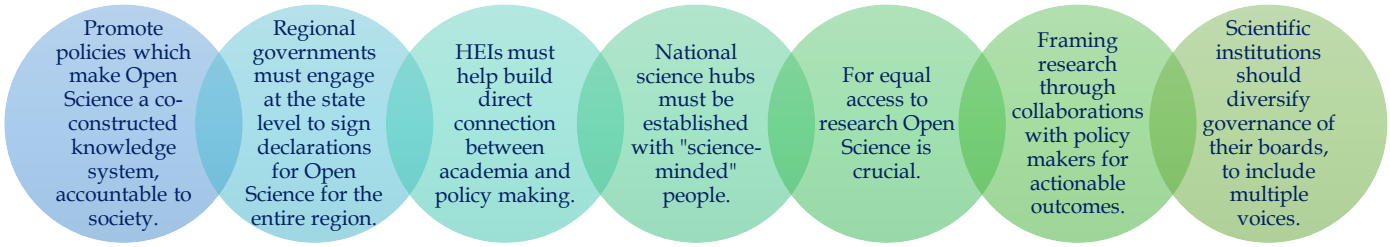
Speaker Response (15 Min)- Hon. Mahendra Reddy, PhD, Minister for Agriculture, Waterways and Environment, Government of Fiji

Speaker Response (15 Min)- Seuseu Tauati, PhD, Chief Executive Officer, Scientific Research Organization of Samoa (SROS)

Comments and feedback (15 Min)- Participants present online

Closing remarks (05 Min)- Nisha, Director of the Office and UNESCO Representative to the Pacific States

KEY MESSAGES



SPEAKERS

Dr. Shahbaz Khan

Dr. Rajesh Tandon

Dr. Mahendra Reddy

Dr. Seuseu Tauati

Ms. Nisha

Welcome Address

Dr. Shahbaz Khan commenced the dialogue by welcoming the participants, and thanking the speakers and the UNESCO Pacific Office for participating in this global initiative.

- He stated that Covid-19 has changed our lives forever; it is going to stay for a while and this makes the global consensus on Open Science all the more relevant.
- The pandemic has reflected that there is a lack of scientific infrastructure and digital divides across the world.
- On 30th March there was a meeting where 77 leaders from the region and eminent colleagues joined to deliberate on the issue. The leaders agreed that we must pool knowledge, mobilise sectors and provide access to data and research findings.
- UNESCO member states have requested a transparent process which will lead to a recommendation on Open Science. There has been an online consultation, a survey from February to June 2020, and UNESCO Chairs and field offices have actively contributed to this process.
- In Asia Pacific region, on 15th September, 2020, a consultation was organised which clearly highlighted the issue of infrastructure, the need for an international platform to bring together academics and academies of sciences which can create a space for open access to data and knowledge systems. Such platforms will help build capacities and provide a scientific ecosystem.

- There will be a chance to continue this process until January, 2021. It is important to make science truly open in terms of open access, open data and build capacities locally, which are interconnected globally.

Dr. Rajesh Tandon

- UNESCO Chair in Community Based Research and Social Responsibility in Higher Education has been partnering with various UNESCO Offices, additionally with Canadian Commission UNESCO's support, to convene 11 webinars in different regions on this important issue of Open Science.
- These are abnormal times; therefore normal science is dealing with an abnormal virus. In the last 9 months, science has been under public gaze like never before.
- Science is facing "politics of evidence" which encapsulates the idea that evidence generated by scientists often does not get positive policy response.
- Open Science has been spoken about in the last decade in the context of "open access". Many international agencies, even the European Union have been promoting Responsible Research and Innovation (RRI) under which all research conducted must be accessible to scientists around the world.
- The issue of patenting, and using knowledge for profit began speeding up in the last century but more so since 1980s when global consensus on disinvestment in higher education increased and research funding gradually moved in the hands of the private sector. Linking knowledge for profit has resulted in less than ten international educational journals and educational companies gaining control of the patenting of all journal articles and published books. Under the name of "open access", you can publish your paper provided you pay for it.
- Open access is needed beyond fellow scientists; it is needed by practitioners, civil society organisations, service providers and ordinary people. The question of whether science is "open to society" is a critical one. The debate on "science citizenship" is gaining attention. In many countries, a group of scientists discuss scientific policies and priorities with key ministers and society at large remains unaware of the criteria of such decisions.
- The purpose of science is to contribute to social justice, to do no harm to our ecology. Science is accountable for making sustainable societies.
- A bulk of the global science which is acknowledged and certified is conducted in a few European languages. But knowledge is culturally and linguistically contextual. This gap in legitimacy of some knowledges creates a disconnect in society- both a linguistic and digital disconnect.
- In terms of openness to excluded knowledges, there are other indigenous and local knowledges which are not acknowledged by 'euro-centric' modern science. The pandemic has clarified the importance of harnessing locally produced and locally stored knowledge.
- Funding institutions must promote integrated science which brings best of all knowledge traditions.
- There must be investment in building capacity of young researchers so that they are sensitised to these broader conversations about Open Science.

Dr. Mahendra Reddy

- Science is about knowledge creation and dissemination; therefore no country or institution should have a monopoly on knowledge.
- When government officials have to make effective policies, they have very little access to academic research.

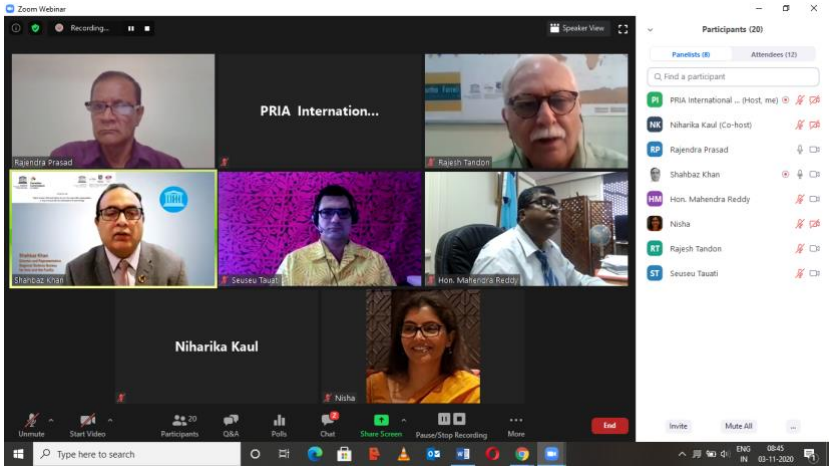
- There is little transformation from academia to intellectuals, who can then collaborate with policy makers.
- Many rich universities have access to rich databases while poorer universities do not; we must endeavour to create partnerships for sharing databases between higher education institutions.
- Patenting is one hurdle to opening up scientific methodologies and formulae.
- Competition amongst universities for database access is another hurdle, since they market themselves to students by emphasising on their "exclusive" access to such databases.
- Competition amongst businesses in the private sector is a third hurdle to Open Science.
- Issue of sequencing is critical; we need to identify what are the public goods which take precedence over private goods.
- Open Science can contribute to developing borderless regional blocs of shared knowledge.
- In the context of "pay to publish", it is important to remember that quality must not get compromised.
- A common pool of resources which can be part of Open Science must be identified to create a platform for Open Science. Dismantling the monopolisation of knowledge is critical for advancement of countries.
- We must make data on public goods such as fisheries, livestock, agriculture and environment publicly available.
- Regional governments must agree on regional projects for Open Science and data accessibility. This will allow people in an entire region to have access to different components of scientific research, from theories to data collection to data analysis.
- A consortium of funders will be required to be established for developing a framework for Open Science.

Dr. Seuseu Tauati

- Scientific Research Organisation of Samoa (SROS) is a Government Organisation with a vision to develop Samoa through science, technology and innovation.
- Most of us have come through education systems where there is a culture of closed science, which requires good collaborations and subscriptions to get access to the latest publications.
- Scientific data from the islands is often ignored in mainstream science, even though this knowledge may be complementary to existing forms of scientific knowledges. Is it possible that local island research is not being produced in sufficient volumes for it to be noticed? Is it possible that we have been silenced because we do not follow the standard law of science? We must return to conventional ethics of research which considers science as a common good and that sciences must collaborate to advance knowledge.
- There is growing recognition for traditional medicine recommended by traditional healers. This is where SROS steps in; presently members are studying local plants and sea creatures and working with traditional healers to understand the full potential of these species. The question is will SROS's evidence get published and recognised if it authors a paper by itself, or will it require collaboration with reputed international authors for the same?
- For equal access to research which may help save many lives, it is imperative to allow open access to it. There must be more emphasis on science in policy making; national science hubs must be created having science-minded individuals. These hubs can

communicate regionally and internationally to provide sound science policy advice that informs leadership.

DISCUSSION



Steps the governments may take to reimagine and redesign education systems as pathways to create a supportive environment for Open Science.

One participant stated that we must identify the institutional barriers that need to be overcome for developing a workable framework and academic collaboration for Open Science. There was mention of the Pacific Island University Research Network set up in 2012 for universities in the Pacific to collaborate on this issue of Open Science. There is a mechanism in place through such collaborations which could be used a whole lot better in terms of sharing resources. Participants agreed that universities which are not able to access such databases suffer a big loss, which deepens the inequality within the education system.

In Tonga, the USP Centre has just started collecting hard-copies of all researches/thesis carried out in Tonga so it would be a good start for someone to start revisiting them, analyzing findings and recommendations. There is also a perception in Tonga that study of science is declining or students are losing interest in science. One solution for changing this is by re-designing the school curriculums. Another way is by introducing students earlier to career routes and providing greater insight into science-based careers through career "open days" earlier in their school cycle.

Reading and writing of traditional knowledge must be emphasised in the Pacific to preserve such knowledge systems which have previously been passed on orally through generations. The divisions between western and traditional knowledge must be reduced to see commonalities and share each other's perspectives.

Bridging the gap between the education sector and policy makers

One hurdle which causes the gap between the education sector and policy makers to widen is that knowledge that is created and generated is often not passed on to policy makers. One way in which academia can influence state policies and make their voices heard is by making

shorter findings which can be read easily and are more palatable for policy-oriented purposes. There must be more academic debates, lectures and publicly available material by scholars and universities. Grant agreements given to universities must be revisited, as must be the outputs that are expected. There must be a built- in component of these agreements for university research.

When we talk of co-construction of knowledge, we mean that research agendas could be co-determined with other stakeholders, where policy makers can also play a role. When research questions are framed in consultation with policy makers, then findings have a meaning which is relevant to their local context in which they are framed. There is a need for training researchers in disseminating their research findings by methods other than scholarly publications and academic conferences; they must be supported to share findings with the communities from where they collected their data.

Technological advancements and use of technologies such as artificial intelligence to explore traditional knowledge

Members of SROS are using technological tools to test what the local science is coming up with. They use technology sensitively towards the local culture, so if any participant of the study is uncomfortable they cease the testing with them. They keep thinking, rethinking and retesting whether they can combine one kind of local science with another kind of traditional science. In Samoa, since SROS is a Government-run research organisation, it is the policy makers that instruct SROS members for the subject areas to look into. This helps because members can work towards policy response outcomes instead of doing research in isolation.

Closing Remarks

Ms. Nisha gave closing remarks, thanking key speakers, UNESCO Co-Chairs, Staff and students of PRIA, Canadian University of Victoria, Canadian Commission for UNESCO and colleagues in the Pacific office for the enriching session.

- She stated that Open Science helps enhance the quality of research, maximize the value and potential impact of scientific research on society. It drives progress in an informed manner.
- Dialogues like this are needed to bring policymakers, research institutions, academia, private sector and researchers to critically consider standards for evaluating scientific research.
- As social beings, we internalize that what is common is not valuable. Nevertheless, because Open Science raises doubts, there is a need to transparently consider research integrity and differentiated quality measures for different disciplines. Not all science is the same.
- Science is not just research coming from institutions. Science also has its spread in oral traditions and linguistically diverse societies, which do not necessarily speak the modern international languages.
- While this webinar is closing, our task of working with the national stakeholders for the implementation of Open Science is in front of us. We need to consider elements that constitute Open Science ecosystem. There is a need to improve diversity in research; therefore this ecosystem must remain open to innovations.
- While the scale of economy in the Pacific countries is not large, research still needs Open Science policy, codes for Open Science practice and research integrity. Open Science is dependent on participation, at individual and community levels. It is also dependent on a culture that is genuinely open, curious and questioning.