



Virtual Workshop

The Recommendation on Science & Scientific Researchers & COVID-19

July 9, 2020

THE RRING PROJECT

While science and innovation have been transformative forces with large positive impacts on human welfare and well-being, the existence of a gap between science and the society has increasingly been witnessed. A step to address this gap has been the promotion of Responsible Research and Innovation (RRI). This approach towards research and innovation (R&I) pushes for collaborative efforts between the societal actors (researchers, citizens, policy makers, business, etc.). With the aim of bringing RRI into the global world to promote mutual learning and collaboration, the Responsible Research and Innovation Networking Globally (RRING) Project, funded by the European Union under its Horizon 2020 programme, was launched in 2018.

The aim of the RRING project is to bring Responsible Research and Innovation (RRI) into the global world to promote mutual learning and collaboration. This will be achieved by the formation of the global RRING community network and by the development and mobilization of a global Open Access RRI knowledge base. RRING will align RRI to the Sustainable Development Goals (SDGs) as a global common denominator.

With the acknowledgement that each region of the world is advancing its own agenda on RRI, RRING recognises the need for a bottom-up approach and has thus collaborated with local organisations in different countries. In India, RRING is collaborating with Participatory Research In Asia (PRIA) to further their mission of learning about different local practices and creating a global RRI network.

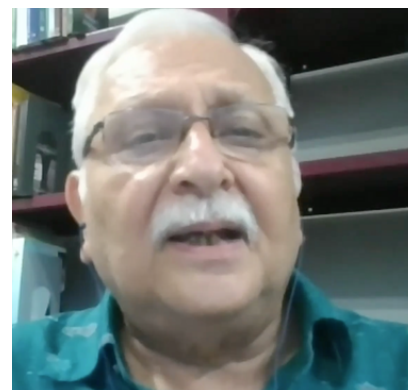
PRIA has almost four decades of experience in engaging with academia in a multitude of interventions, bringing community and practitioner knowledge into the portals of traditional research institutions and processes. It believes in knowledge mobilisation and advocacy using participatory research methodology. It emphasises on the need to integrate scientific research with local knowledge.

PRIA also hosts the UNESCO Chair in Community-Based Research & Social Responsibility in Higher Education. The UNESCO Chair has worked to foster social responsibility in higher education and supports partnerships that build on and enhance the emerging consensus in knowledge democracy. A recent initiative by the Chairs, Dr. Rajesh Tandon (Founder-President, PRIA) & Dr. Budd Hall (University of Victoria), addresses the need for Open Science.

OPENING COMMENTS

DR. RAJESH TANDON

**FOUNDER-PRESIDENT, PRIA
CO-CHAIR, UNESCO CHAIR IN COMMUNITY-BASED
RESEARCH & SOCIAL RESPONSIBILITY IN HIGHER
EDUCATION**



The pandemic in the last four months has brought the field of science into the spotlight. Communities across the world have begun to notice the work of scientists and the importance of the field. Individuals have turned to science to provide quick remedies to combat the current health crisis, tracking the progress of potential vaccines and information circulated by public health authorities. With this given importance and interest in science and scientific research, Dr. Tandon shared how understanding the Recommendation and its implication on the current situation lies critical. The Recommendation on Science and Scientific Researchers is an important standard-setting instrument codifying the value systems by which science systems operate and can play a critical role in guiding the policy response of public authorities at the face of the current pandemic.

Discussing the need for Open Science, Dr. Tandon shared a recent initiative he has been a part of, along with UNESCO Chairs around the world, which discusses the need for open science beyond open access and more aligned with the community. He shared how at present, science communication has remained a one-way channel of communication where scientists share what they believe is important with the public. This, Dr. Tandon shares, needs to change. There is a need to recognise the multiple systems of knowledge present and thus, a more inclusive consultation must be encouraged. Dr. Tandon emphasized that if one wants policies from the scientists to be trusted, accepted and owned by the society, then science needs to work with the society. In moving forward with the Recommendation, a more holistic and purposeful approach to science and science policy is required.

THE RECOMMENDATION ON SCIENCE & SCIENTIFIC RESEARCHERS

ABOUT THE RECOMMENDATION

The Recommendation on Science and Scientific Researchers is an important standard-setting instrument which not only codifies the goals and value systems by which science operates, but also emphasizes that these need to be supported and protected if science is to flourish. The Recommendation was adopted by a consensus of 195 nations in 2017, superseding the previous global standard instrument agreed upon in 1974. Member States were invited to focus on 10 key areas:

- The responsibility of science towards the United Nations' ideals of human dignity, progress, justice, peace, welfare of humankind and respect for the environment.
- The need for science to meaningfully interact with society and vice-versa.
- The role of science in national policy and decision making, international cooperation and development.
- Promoting science as a common good.
- Inclusive and non-discriminatory work conditions and access to education and employment in science.
- Any scientific conduct is subject to universal human rights standards.
- Balancing the freedoms, rights and responsibilities of researchers.
- Scientific integrity and ethical codes of conduct for science and research and their technical applications.
- The vital importance of human capital for a sound and responsible science system.
- The role of Member States in creating an enabling environment for science and research.

MR. JUAN PABLO RAMIREZ-MIRANDA
PROGRAMME SPECIALIST & CHIEF OF SECTION -
SOCIAL & HUMAN SCIENCES, UNESCO NEW DELHI

With the pandemic impacting all aspects of the society, Mr. Miranda acknowledged the importance of discussing the Recommendation on Science and Scientific Researchers under the current circumstances.



He shared that the Recommendation provided a reference global standard on how governments, societies and concerned stakeholders should undertake development in science and guide their approach from policy to practice.

While the right to science is enshrined in the Universal Declaration of Human Rights, Mr. Miranda shared that the current Recommendation defines having access to science as a universal, indivisible and permanent human right. It stresses upon the importance of Open Science and recognises the need to use scientific knowledge in a responsible and accountable manner to inform national policy and decision making, especially during the times of crisis such as the present. Under the current circumstances of the pandemic, he shared how the Recommendation could play a critical role in translating into practice the public health concerns.

Furthermore, he shared how this Recommendation, while ensuring the freedom of science and scientists, emphasises on undertaking research in a responsible manner and aims to create an enabling environment for the science systems.

Mr. Miranda discussed that as signatories of the Recommendation, each one of the 195 nations are required to produce the first report on how the government authorities are translating the Recommendation in their own standard & system of science by March 31st 2021. This report aims at assessing the science system on different issues such as the freedom of scientists to advise government authorities on policy making, the inclusivity in STEM education schools, etc.

With the inclusion of both qualitative and quantitative indicators, this report would help authorities to understand the strengths and weaknesses of their country's science system, thus providing them with a means of assessing and improving the current state of affairs in the same. This report would not only act as the baseline for future exercises but also for comparisons and sharing lessons between countries.

Closing his presentation, Mr. Miranda urged the concerned stakeholders to promote this process of assessing the present science systems, sharing how their participation lay critical in holding the authorities accountable to improving the science systems in the country.

(For more information on the presentation: http://unescochair-cbrsr.org/pdf/presentation/UNESCO_RRING_Workshop_Right_to_Science_COVID.pdf)

PANEL DISCUSSION

DR. ANAND KRISHNAN

**PROFESSOR,
CENTRE FOR COMMUNITY MEDICINE
AIIMS, NEW DELHI**

Dr. Krishnan categorised the ten focus areas of the recommendation into three categories - conducting science (ethics, conflict management), managing science (the enabling environment for research, funding of research) and lastly, using science (in policy making).



With the evolution of technology, science, according to Dr. Krishnan, has remained accessible to all, yet, interpreting science still remains a challenge. This skill of interpretation is lacking amongst most individuals and thus, coupled with access to scientific information during the pandemic, has been a cause of distress. The inability to interpret scientific information is further accentuated by the difference in the languages spoken by scientists, public authorities and the public. Thus, he shares how one needs to initiate a dialogue between the concerned stakeholders and for this, strengthening institutional mechanisms remains critical.

Dr. Krishnan touched upon the challenge of data sharing and accountability. According to him, it is critical that while respecting the privacy of individuals, better access to data is ensured. He also shared how there is a need for a better funding opportunities and more equitable distribution of funding amongst various sciences if one wants to promote a better research environment in the future.

DR. RASHMI RODRIGUES

**ASSOCIATE PROFESSOR
DEPT. OF COMMUNITY HEALTH
ST. JOHN'S MEDICAL COLLEGE, BANGALORE**

With the emphasis of the Recommendation on the need for Open Science, Dr. Rodrigues discussed its three components of open data, open access and open source. She shared how understanding these components would enable us to think deeper on the gaps present and on the initiatives which would be helpful to bridge the same.



Dr. Rodrigues elaborated on certain barriers to open access, some in the form of the policies and others in the academic culture and economics of Open Access.

Linking these challenges with the pandemic, she shared how all data may not be sufficiently findable, accessible, interpretable and reusable. Looking at the Indian setting, she shared how not all hospitals have EMRs (Electronic Medical Resources) and thus it led to difficulty in accessing and pooling of data. Reemphasising on the communication gaps discussed by Dr. Krishnan, she stated that there are large issues of communicating the data with the public.

With the need for transparency of statistics to guide the national policies, Dr. Rodrigues shared that the way forward required development of regulatory frameworks, proper infrastructure and institutional capacity for Open Access.

(For more details on the presentation on Open Science:

http://unescochair-cbrsr.org/pdf/presentation/UNESCO_open_science.pdf)

MR. DINESH SHARMA

**JAWAHARLAL NEHRU FELLOW & FOUNDING MANAGING EDITOR,
INDIA SCIENCE WIRE**

As a science communicator, Mr. Sharma shared how the point from the Recommendation on “*the need for Science to interact with community and vice-versa*”, struck him as important. He shared that this current workshop was being held at a timely moment not only due to the pandemic but also with the new Science, Technology and Innovation Policy of India which is under work.

According to him, the Recommendation could play a guiding role in the formulation of this policy



Sharing an intriguing follow up from the pandemic, Mr. Sharma discussed the new health crisis of “Infodemic”- how information was now posing to be a threat to human health. This infodemic consists of three elements- misinformation, disinformation and fake news. It is in dealing with this infodemic that science communication can play a critical role. Immunisation of the public against this infodemic required the science communicators and journalists to provide accurate information.

Assessing the impact of this infodemic within the country, Mr. Sharma shared that during the pandemic in India, one has witnessed a strong belief in evidence-based science amongst the public. Some essence of this trust and faith in science can be attributed to the country's rich history of people science movements.

While a positive response in health and science communication has been witnessed, he shared that one cannot sit idle. Science communication needs to be strengthened not only between science and the community but also between scientists and the authorities. There is a need to invest in science communication within the structure of science institutions. Mr. Sharma stated that the onus of flow of accurate information to both the public and the authorities lay with the science communicators and journalists.

KEY MESSAGES

- The Recommendation on Science and Scientific Researchers helps in providing a global standard on how governments, societies and concerned stakeholders should undertake development in science and their approach from policy to practice. Science needs to be as immune as possible to provide clear facts which can guide policy and decision making.
- With the difference in the languages spoken by the scientists, the public authorities and the public, there is a communication gap present. Institutional mechanisms need to be strengthened for a dialogue to be initiated between the stakeholders. Science communicators and journalists can play a crucial role in bridging this gap between the world of science and the community by ensuring the flow of accurate information.
- There is a need to recognise the multiple systems of knowledge present in the community and encourage a bottom-up, inclusive approach to science and technology policy-making. If we want science policies to be trusted and accepted by people, then science needs to work with the society.