Certificate Program- Participatory Science Advice for Policy Making
A REPORT

Banner image:

A webpage was developed on the Science Policy forum page that contained information about the event. For details click here.

Report of the event

The certificate program was executed as a 2 days event online followed by mentoring the 60 selected participants (their details are enclosed) over the course of a month while they worked on 5 policy briefs.

DAY1: **04/12/2021**
The first day of the Participatory Science Advice for Policymaking certificate program was held virtually on the 4th of December 2021. The program was organised by The Department of Science and Technology's Centre for Policy Research (DST-CPR) at the Indian Institute of Science, Bangalore in conjunction with the Science Policy Forum and Global Young Academy and funded under the INGSA-Asia Grassroots Science Advice Promotion Awards 2021. The event saw **60 diverse participants from across South Asia**; librarians, academicians, policymakers and young researchers. Their list is enclosed.

Dr Jenice Jean Goveas, co-recipient of INGSA- Asia grant for the promotion of grassroots Science Advice and a Postdoctoral Fellow at DST-CPR, IISc, opened the event with an outline of the workshop. Dr Goveas emphasised the importance of bridging the gap between science policy and scientists, "There is a need to create awareness among researchers that there is a field called science policy. How does your research feed into the science advice that the government looks for? That makes your research more meaningful and creates a bridge between you and the policymaker to say that you are contributing to the larger science advice of your nation. In turn, science can make the world a much more beautiful place. "

Dr Chagun Basha, the founder of Science Policy Forum gave a brief overview of the importance of science advice and the mechanism behind it. "Policies can be for education, policies can be for the development of science and technology, policies can be for translation of technologies, for health energy, or anything! The science can play a role in any of these and

it would take months to discuss the role of science in the policy process!" As the founder of the Science Policy Forum, Dr Chagun is a practitioner of science advice, and his inputs on the practical process behind it were essential to the participants' understanding.

Dr Moumita Koley, co-recipient of INGSA- Asia grant for the promotion of grassroots Science Advice and a Postdoctoral Fellow at DST-CPR, IISc, introduced the participants to the tools of science advocacy. The participants had been sent a handbook on Open Science written by Dr Jenice and Dr Moumita before the workshop had begun. During Dr Moumita's presentation, the participants were encouraged to go through the handbook as she took the time to define the various terms that the workshop's open conversations were about.

After a group photo, the open conversations section of the workshop began. This part of the event encompassed presentations from five experts who each spoke about a different opportunity and challenge in the practice of Open Access from a South Asian perspective.

Dr Arul George Scaria was the first to present. As the co-director of the Centre for Innovation, Intellectual Property and Competition at the National Law University, Delhi, and a researcher in the fields of open science, open innovation, and regulation of digital markets in the context of big data, AI, and IoT, Dr Scaria is an expert in the topic 'Open Access to Scholarly Knowledge'. Dr Scaria explained the mechanism of the copyright system and how Open Access attempts to balance it by various funding requirements and/or processing charges. Dr Scaria's presentation looked into the challenges faced by Open Access and why its implementation is not a simple process, "When we explored why researchers are not sharing their article through open access modes, the most frequently cited reason was Article Processing Charges."

Dr Anders Karlsson is Elsevier's Japan chapter Chair of the International Association of Scientific, Technical and Medical Publishers (STM) and a member of the INGSA Asia Steering Committee. Dr Karlsson's presentation was about the importance of Open Research Data, "One of the keywords of research data management is FAIR; Findable, Accessible, Interoperable and Reusable; this is the open data policy for public-funded research." By taking the example of the COVID pandemic and research papers published during the time of global health crises, Dr Karlsson explained why the research is made freely available to the WHO etc before publishing. Open Research Data is important because it leads to Open science, which describes a way of working which makes research more inclusive, more collaborative and more transparent. Dr Karlsson made sure to explain the role of scientific journals in the ongoing Open science movement too, "Data alone doesn't imply knowledge. I do believe that digital journals in whatever form will also play a role in data-driven science and sharing."

The importance of sharing of research infrastructure was presented by **Dr S. A. Shivashankar**, a faculty member at CeNSE, IISc and the author of numerous research papers and several patents. Dr Shivashankar used examples of infrastructure across India to make his point: "There are very large facilities that are made available to the public. But what about lesser facilities more commonly needed by graduate students all over the country? Research sharing infrastructure enables this." Dr Shivashankar explained that web-based facilities are bridging the gap between scientists across India and large infrastructure. With the practical approach that more use of research infrastructure increases its value, "Sharing is a force-multiplier," Dr Shivashankar calls for collaborations.

Speaking about Open Science requires addressing the impact of Science Communication, about which **Dr Karishma Kaushik**, a faculty member at Savitribai Phule Pune University and the

co-founder of Talk To A Scientist, a weekly webinar-based interactive science outreach platform for children in India, gave a hard-hitting talk. Speaking from experience, Dr Kaushik called for scientists to leave their ivory towers and partake in science communication to ensure that their research has an impact. "I noticed this stereotype with scientists who have websites, write blogs, run outreach programs as being "lesser serious scientists". Science communication is critical to bringing scientists out of the ivory tower."

With the aim of covering all forms of Open Science, **Dr Shannon Olsson**, an NCBS faculty who is the Global Director of the Echo network, a social innovation partnership focussed on increasing scientific awareness, engagement, and insight regarding India's human and environmental ecosystems, was invited to give a presentation on Citizen Science. Rather than look at how citizen science increases public engagement, Dr Olsson focussed on how science benefits from public opinion, "Citizen science and public engagement has less to do with how we (researchers) can help society and more with how society can help us."

The workshop was concluded with a questions & answers round during which participants enthusiastically posed their doubts to the five panellists.

DAY 2: 11/12/2021
Day 2 of the Participatory Science Advice for Policymaking certificate program was held virtually on the 11th of December, 2021. While Day 1's talks exploredthe five pillers of Open Science, Day 2 was about practising them by putting the knowledge into action.
The event was started with a recorded message from **Prof. Dr Abhi Veerakumarasivam**, Dean - School of Medical and Life Sciences at Sunway University, Malaysia and the Chair of INGSA-Asia Steering Committee. His talk looked at the role of evidence in science advice from a practitioner's perspective. This led straight into **Dr Jenice Goveas'** presentation, which was an introduction to tools of science advocacy. Participants were encouraged to ask questions about the process behind writing a policy brief and what their briefs should contain. This was in preparation for the main part of this day's program i.e. the breakout room sessions.

At the end of Day 1, the participants were divided into five groups: Sharing of Research Infrastructure, Open Access to Scholarly Knowledge, Open Research Data, Citizen Science & Public Engagement in Science and Science Communication. Each participant submitted a 300-word policy brief based on their group allotment and the briefs were sent to the moderators of the breakout sessions.
They were:
Ms Remya Haridasan, Scientist 'D', Office of the Principal Scientific Adviser to the Govt. of India, for **Open Access to scholarly knowledge**
Dr Moumita Koley, co-recipient of INGSA- Asia grant for the promotion of grassroots Science Advice and a Postdoctoral Fellow at DST-CPR, IISc **& Dr Anders Karlsson,** Elsevier's Japan chapter Chair of the International Association of Scientific, Technical and Medical Publishers (STM) and a member of the INGSA Asia Steering Committee for **Open research data**
Dr Rabindra Panigrahy, Scientist 'D', Department of Science and Technology, Govt. of India, for **Sharing of research infrastructure**
Dr Priya Singh, an independent Wildlife researcher in north-east India, lead member of the Wild Canids-India Project, for **Citizen Science and Public Engagement in Science**
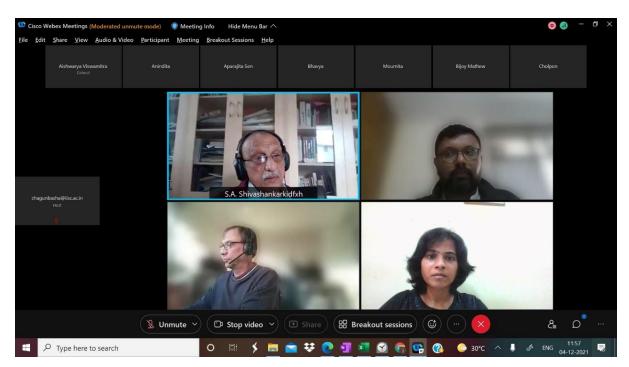**Dr Mohit Kumar Jolly**, Assistant Professor, Centre for BioSystems Science and Engineering (BSSE), IISc, for **Science Communication.**
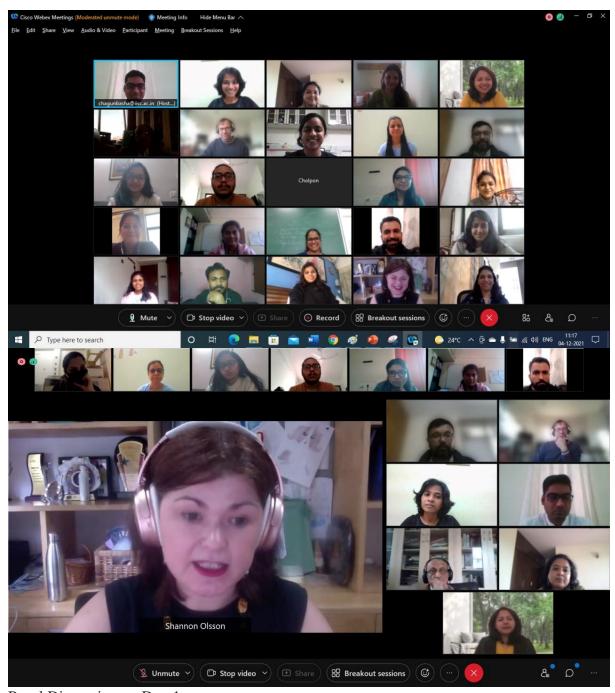
After Dr Goveas' presentation and the question and answers round, the participants were allocated into their breakout rooms with their moderators. They were given an hour and a half to discuss the briefs they had sent in, as well as plan the policy brief topic for the final submission; 2500 words on 'Current Challenges, opportunities and the way forward for South Asia' relevant to their group. The participants had a lot to gain as the moderators chosen were experts in their relative fields. During the following weeks, the participants continued to be mentored by their moderator through email and group calls for an entire month after the event.

The breakout rooms ended after an hour and a half of discussion and all participants reassembles in the main conference call. Each moderator gave a summary of the breakout discussion as well as an overview of the policy brief that would be submitted for publishing. Moderators exchanged ideas after each summary and participants added their learnings in the call's chatbox.
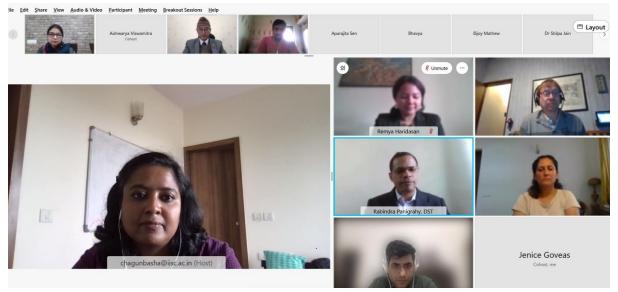
The event closed with a **Valedictorian Address from Chief Guest Dr Shresta Babu, the Vice-Chancellor and an Academician of Nepal Academy of Science and Technology (NAST)**. Dr Babu spoke about why and how scientists of South Asia need to participate in the science advice mechanism and motivated the participants to take a keen interest in their final policy brief submission.

Photos from the workshop:

Panel Discussion on Day 1

Valedictory Addresss by Dr Shresta Babu, Vice-Chancellor, Nepal Academy of Science and Technology (NAST).

Progress After the Event:

Participants who successfully completed the course received a certificate as below:

The 5 policy briefs prepared by the participants are under communication to be published in the CSIR- NISCAIR publications. Once published they will be sent to the national Academies of all 8 SAARC countries.

Budget and Expenses:

SL No.	Category	Amount in Rs	Approx Amount in €
1.	**Human Resource:**		
	Student Associate honorarium-	**10,000**	**120**
	Resource Person Honorarium/mementoes	**10,000**	**120**
2.	**Logistics:**		
	Designing, banners, social media campaign, certificates-	**15,000**	**160**
3.	**Travel:**		
	Meeting resource persons, organizing meetings etc	**5,000**	**55**
4.	**Miscellaneous:**	**2,000**	**35**
	Total	**42,000**	**€500**