MEETING REPORT

The science communication dialogue for a new India*

A seminar was held to attain diverse perspectives and opinions and begin a sustained discussion on improving science communication for better policy formulation and implementation. Scientists, policy makers and academicians presented their views to build science communication into a national movement. At the event, a book entitled *Bridging the Communication Gap in Science and Technology: Lessons from India*, was released. Raghunath Mashelkar was the chief guest.

Mashelkar stressed the importance of public awareness for increasing public engagement in varied fields such as health, nutrition, food and security, etc. Science communication needs to be creative. For better understanding of science, it is important to communicate it in the language of the common man. To reach out to people and improve communication between science and society, special training for scientists and science communicators is required. It is important to engage people who influence the national policy makers. Thus, innovation in public engagement is necessary to bridge the communication gap in S&T.

Pallav Bagla (NDTV) gave an insight into India's mission to Mars and ISRO's efforts at public outreach and communication. According to him, Mars Orbiter Mission (MOM) was not a scientific mission. It was a technological vision undertaken for the single objective of reaching the orbit of Mars ahead of China.

India's mission to Mars has been a marvel because it was fabricated in the shortest time, in less than 15 months, and also because this was a result of frugal Indian technology made at a cost of INR 4500 million. The hugely symbolic satellite mission failed to capture the imagination of the country. The mission was successful, but the outreach was not as much as desired; it should have captured the imagination of 1.2 billion people.

Amongst the several science outreach programmes, Science Centres play an important role to promote a National Science Communication Movement (NSCM) in India. Shivaprasad Khened (Nehru Science Centre, Mumbai) opined that Science Centres could be an effective interface to bridge the communication gap between the scientific community and public. There have been many success stories of Science Centres, but there have also been a few lacunae in promoting NSCM in India.

Science communication regarding the peaceful uses of nuclear energy is what people need to be made aware of. For long-term sustainable development of India, nuclear power is an inevitable option said S. K. Malhotra (formerly with DAE). Perceptions about atomic energy amongst general public are not based on scientific facts. Proper public outreach approach is the answer to this and the strategy to attain a successful public outreach is through continuous communication with the stakeholders in a simple language, free of technical jargon.

The status of public understanding of science in Karnataka is improving. The state has received eight national awards for popularization of science. In fact, the first ever science museum was set up in Bengaluru. Effort to develop human resource in science communication through workshops was a pioneering effort in Karnataka amongst many others. In Karnataka, S&T is communicated to people through books, periodicals, magazines, television podcasts, social media, streaming and internet radio.

Yet the need for science communication in Karnataka remains the same as in any other state and is turning out to be more challenging, said A. S. K. V. S. Sharma (CFTRI, Mysuru). A separate group of science communicators needs to be formed to formulate and execute their communication skills. However, the challenge is to bring in regional languages through the use of application formatting interface (API) and citizen science.

Scientists today face various technical, social and cultural challenges in publishing and managing their research data. Shinjini Chatterjee (Springer Publishing) speculated whether digital sphere changes the nature of doing research itself. Scientists can now relate their work to peers, non-specialist knowledgeable audiences and laypersons using the digital world.

The latest in the publishing world is digital format, interactive text content, 3D enhancement and data sharing. Future of science publishing lies in better science through better research data – 'discoverability'. 'Humanizing' scientific research, using storytelling as a way of communication as well as anecdotes and personal stories can make science more interesting and appealing to people.

Soutik Biswas (BBC) also agreed to the fact that innovative storytelling interests readers and can be entertaining. According to him, people are interested in politics in the morning, while in the evening science and medical stories do well. To inculcate interest in science stories, news organizations like the BBC adopt storytelling using text, sound, videos, graphics and visual journalism.

Science education in India has fallen prey to memorization of facts and quick-fix recipes. Aniket Sule (HBCSE, TIFR, Mumbai) said that the education system today does not instill the ethos of 'doing science' in students. Science communicated through mobile apps, hands-on experiments, etc. works better in educating people. Barring a few exceptions, the scientific community is not taking active measures to bring about a change.

In his concluding remarks, Sudheendra Kulkarni (Mumbai) stressed that although there has been a great development in S&T until the common man understands it, there will be no progress. Therefore, communication of S&T needs to happen very fast to make an impact on the society.

To keep the public engaged and motivated, media must publish science stories, especially those about innovations and about the latest research and happenings. Kulkarni also revealed that IITB and ORF together would soon be starting short-term courses for MPs and MLAs.

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