

Panel Discussions on Science Communication, Popularisation and Extension in Bengali – the Road Ahead



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I thank Vigyan Prasar for organizing this wonderful meeting, which is giving us an opportunity of discussing the ways and means of taking science to the people through the mother tongue.

Those of us who are gathered here agree that science needs to be disseminated among a wider section of the public, but there are differences of opinion regarding *what* we should communicate. Some of us feel that the modern developments in science should be conveyed to the people in non-specialists' language. Some feel that people should be made aware of the developments in science in ancient India, not only for its historical importance but also for learning from the past discoveries. Some feel that science should be taught up to the highest level through the mother tongue, and so advanced-level textbooks have to be written in Bengali.

I feel that the urgent need of the hour is to convey to the people the style of thinking that science preaches, rather than the information content of different scientific disciplines. Science demands us not to believe anything without evidence. Science emphasizes that there is cause-and-effect relation behind every event, and a scientifically minded person should look for the causal connections in understanding and explaining everything. Science believes that the world is composed of matter and there is nothing supra-matter in the universe. Therefore science looks for the causal factors behind every event in the material processes and phenomena rather than non-material supernatural forces. The content of science communication should focus on these aspects, so that it helps develop scientific temper among the people and dispels unscientific beliefs and superstitions.

I completely agree that teaching and learning of science at the school level should be in the mother tongue. For that, text books and supporting material of very high standard have to be written in Bengali. Presently there is shortage of such material, as a result of which most students studying in Bengali medium use English books as supplementary material. This gap needs to be filled.

However, it is a fact that English has emerged as the medium of science internationally. All scientific journals are in English. All scientific conferences are conducted in the medium of

English. So it works to our advantage if higher education and research are carried out in the medium of English. On the other hand, depriving our students the opportunity of being proficient in English will only result in depriving them the access to scientific research. That is why I do not think our focus should be in writing or translating university-level textbooks, reference books, or research monographs into Bengali.

I think high-quality popular science books, like the ones written by Isaac Asimov, Richard Dawkins, George Gamow, Richard Feynman, John Maynard Smith, Stephen Jay Gould and others, should be translated into Bengali in an organized way, and Vigyan Prasar can play the role of catalyst – by financially supporting such efforts. These books will be accessible to a large section of the population and will carry the proper message of science to them.

Writing science in Bengali has a rich history, spread over more than 150 years. Many able authors are still writing original popular science books. But we have to recognize the fact that Bengali readership has shrunk over the years. Because of wrong educational policies followed by successive governments and meagre financial support for government-run schools, we have seen a mushrooming of private English medium schools. The abolition of English in the primary level and the introduction of the no-detention policy have resulted in an exodus of students from Bengali-medium schools to private English medium schools. Today even lower middle class parents want to put their children in English medium schools. The kids educated in such schools are not exposed to the scientific terms in Bengali and cannot read science books written in Bengali.

For the sake of the development of our mother tongue, this retrograde trend has to be reversed and the status and prestige of Bengali medium schools have to be returned to the pre-1980s level. This is not a wishful thinking. This is possible, but requires the following steps from the government: (a) ensuring that the students studying in Bengali medium also learn English well, (b) proper examination and detention systems are reintroduced, and (c) ensuring that these schools have adequate infrastructure including building, clean toilets, laboratories, and proper teacher-student ratio.

I would like to touch upon another aspect. We see a lot of science writing in Bengali where the usage of the language is not proper. Sometimes the language is clumsy, resulting from literal translation from English without respecting the fact that sentence construction styles in the two languages are different. Some authors try to invent Bengali terms for English words even though the terminologies already exist. Writing science in Bengali has to be learned. I would request Vigyan Prasar to arrange workshops on science writing in Bengali with established writers like Palash Baran Pal and Pathik Guha as resource persons. That might help in creating a band of writers who can translate and/or write in readable Bengali.

Thank you.