

Valedictory Address by Shri Sanjay Bhattacharyya, Secretary (CPV&OIA) & BRICS Sherpa at the 6th BRICS Young Scientist Forum

16 September 2021



Namaskar from Delhi!

1. I am delighted to join you for the valedictory session at sixth BRICS Young Scientist Forum, hosted by the Department of Science & Technology (DST), in collaboration with the National Institute of Advanced Studies, Bengaluru (NIAS). I was happy to see the participation of leading scientific institutions from all BRICS partners at the event.
2. During India's Chairship in 2021, we have strengthened intra-BRICS cooperation under the overall theme of BRICS@15: Intra BRICS Cooperation for Continuity, Consolidation and Consensus with 4 priorities - reform of the multilateral system, counter terrorism cooperation, technological and digital solutions to SDGs and people-to-people cooperation. This forum represents two of the most important priorities, as we are in the age of technology and innovation and the fast changing scenario of the future will be determined by you, the youth. You will shape the world.
3. I recall PM Modi had mooted the idea of youth engagement during the 6th BRICS Summit (Fortaleza, July 2014) and desired that we develop an innovative mechanism to engage, network and connect BRICS youth. In line with this idea, BRICS Young Scientist Forum was created. Since its inception, the forum has played a crucial role in stimulating new ideas and enriching the overall repertoire of BRICS partnership. It created a network to harness knowledge to solve challenges through collaboration,

research and innovation. The ideas and thoughts emerging from this forum have been relevant for R&D and meaningful for society.

4. It is impressive that we received more than 1100 proposals involving 3400 researchers; and 91 projects were funded to the tune of US\$ 30 million, in ten thematic areas, thus far. Further, more than 50 BRICS Thematic Workshops were organized, networking more than 400 top research institutions. We are proud of your endeavours and collaborations.

5. We live in challenging times. Peace and security are challenged by terrorism, radicalism and conflict. Future livelihood is challenged by economic crisis and social distress. Our planet's fortunes are challenged by climate change and depletion of biodiversity. But I am optimistic that our human values of harmony and endeavour, our scientific temperament of enquiry and aspiration and our instinct for preservation and advancement will provide the hope for future.

6. In that context, I am happy the Forum aims to foster dialogue and has chosen important and relevant themes such as Health care, Energy, Cyber and Innovations, that reflect contemporary realities.

Health Care

7. The COVID-19 pandemic caused enormous hardship to citizens, not only in BRICS but across the globe. Both lives and livelihoods have been lost and inequities have widened. In the post-pandemic era, the imperative is to recover fast. BRICS must take the lead in agenda setting to Build back capacity, have Resilience, promote Innovation, have Credibility and establish Sustainability as the highest priority. Research and technological cooperation for ensuring supply of vaccines, raw material, etc. to facilitate inclusive recovery needs greater momentum.

8. As you are aware, in response to the COVID-19 pandemic, BRICS Scientific Ministries joined hands to support collaborative research in multiple areas. Funding agencies from BRICS countries, including Department of Science and Technology and Department of Biotechnology from India, are co-investing about US 10 million to support collaborative projects.

9. I understand 84 projects proposals were received under the BRICS COVID call, in which India is a partner in 6 projects out of 12 recommended for support. These projects aim to develop drugs, vaccines, diagnostic kits, genome sequencing, epidemiological studies and application of artificial intelligence for treatment and prevention of COVID-19 virus. Specifically, we have agreed to operationalise the BRICS Vaccine Research and Development Center as a virtual network. The Inaugural BRICS Digital Health Summit was also held, a few days ago, which reflected the growing need for innovative solutions to traditional challenges, which were exacerbated during the

pandemic.

10. Our overall objective should be directed to find new ways to maintain health of the people, prevent diseases, develop reliable diagnostics, effective therapies and innovative health technologies.

Energy

11. This is concern that current technologies generally demand energy for development but most energy options lead to emissions that contribute to global warming. Thankfully, clean alternatives are available and need to be encouraged. India is leaving no stone unturned to lead from the front as a responsible member of the global community. We are on the track to meet the target of 2 degrees compatibility. We have recently crossed the 100GW of renewable energy milestone and have enhanced our ambition to meet the target of 450 GW by 2030.

12. On energy security, with focus shifting from hydrocarbon sources, technology is at a critical juncture, with economies and sustainability becoming practical for alternative and sustainable energy. Development of technical cooperation should be a strategic priority for BRICS countries especially in clean and renewable energy, storage technologies, distribution, energy efficiency and applications. Collaborations in R&D, supply chains and setting up sustainable networks are the need of the hour.

Cyber

13. The digital revolution has had an impact in all spheres of economic and social life. Data has become the new gold. Cyber applications have transformed the world, over the last few decades, and the pandemic has shown how relevant it is in our day-to-day lives.

14. Digital technology has emerged as a great enabler. It has paved the way for efficient service delivery and governance. In several areas, it provides a level playing field to the less privileged sections of society. On a macro-scale, it has contributed to the emergence of a flat world, where developing nations like ours can leapfrog the development path, grow faster and deliver better livelihoods to our citizens; and even close the gap with the developed world. This is an exciting prospect.

15. Through our Digital India Programme, we have fostered innovation and enterprise and transformed the lives of our citizens in unprecedented ways. Our Direct Benefit Transfer scheme, enabled by our national identity programme, Aadhaar, has provided social security to millions. We have achieved significant success with our vaccination programme, crossing the 750 million mark recently, with the help of apps like Aarogya Setu and CoWin.

16. We took a number of initiatives under BRICS partnership viz. iBRICS Network, BRICS Global Research Advanced Infrastructure Network (BRICS GRAIN), BRICS Science, Technology and Innovation Architecture to foster scientific collaboration on research, development and innovation facilities.

17. Recently, we inaugurated BRICS Agricultural Research Platform. This is the first such multi-disciplinary and multilateral Platform established in Indian agriculture, which has five big countries participating through virtual network, for agricultural development and growth. We also hope to come up with a BRICS portal for Digital Public Goods. In the spirit of Vasudhaiva Kutumbhakam, we have decided to make these available as open source applications. Infact, I am sure each of our countries has useful applications like these, which we can share with the rest of the world for common good. The economic and social potential of such systems platforms is greater than what has been realized. There is need to address the technology gaps.

Innovation

18. In this technological age, we find the rate of transformation is rapid and its scale is enormous. This is an unprecedented opportunity to reach out to the masses and to empower them. The flow of information, use of data-based delivery platforms and harnessing of cyber potential have made enterprise and innovation the closest partners of technology.

19. Innovation not only makes technology marketable, but also provides it with a territory and medium to operate upon. Collaboration between institutes of technology and management, incubation centres across boundaries and the financing by VCs or angels are the new reality. Whenever an IPO moves towards unicorn-hood, it also spawns a new set of potential ideas for others to take forward. Our economic system needs such solutions to remain energised.

20. I was particularly pleased to find the emphasis on innovation at the forum. I extend congratulations to the winners of the Innovation Prize and also convey best wishes to all the participants. You have not only demonstrated scientific excellence but also strengthened the R&D ecosystem of BRICS community.

21. This forum has been a platform to discuss key issues and to highlight evidence emerging from academic research and innovative ideas. The importance of this process is only expected to grow, as we realise that many of the emerging challenges are global and that an effective response would benefit from cooperation.

22. As we move towards achieving the Sustainable Development Goals, efforts are needed to bring about truly transformative changes around the world. Your generation of researchers will need to re-energise science to tackle global challenges

with an evidence based approach. The pursuit of science must also proceed on the basis of ethics and a service oriented philosophy.

23. In conclusion, I wish to share that BRICS in a unique grouping of emerging economies that is fortunate to have tremendously talented human resources. Our objective is to build partnerships and friendships. What we do, helps not only our citizens but contributes to humanity. So, your role is crucial.

24. I once again thank you for your active participation in the forum and for your support and cooperation towards BRICS priorities during India's Chairship.

Thank you.
