Making Innovation More Inclusive in the Post-Pandemic World

Draft of Remarks by Dr. Abhilash Mishra, Kevin Xu Initiative on Science, Technology, and Inequality, University of Chicago

Distinguished guests, Members of the International Peace Committee and Economic Forum Association, Ladies and Gentlemen. I am grateful for this opportunity to share some ideas at this meeting.

In 2020 a reusable rocket launched two astronauts into space, multiple vaccines were developed in record time, and an AI algorithm was able to publish a persuasive op-ed. The year also saw public distrust of science fuel the worst health crisis in modern history. This contrast highlights a sharp dichotomy in scientific and technological innovation globally: breathtaking discovery and innovation alongside the widespread rejection of scientific evidence and growing distrust in emerging technologies.

Scientific and technological innovation is central to economic progress and human well-being. So it is essential that innovation is inclusive and equitable. By this I mean innovation needs to more participatory *(innovation by all)* and needs to benefit people broadly *(innovation for all)*. But how do we ensure that innovation is inclusive in an age of growing distrust in science and technology? In my remarks, I will highlight three core values that I believe we need to focus on to ensure that innovation is more inclusive. I will mention some approaches -- relevant both to policymakers in the public sector and stakeholders in the private sector -- that can help us realize these values practically.

I. **Inclusion:**
Science and technology innovation is geographically concentrated in a small number of urban areas in the world. This includes R&D at major research universities globally as well as startup hubs. For example, more than 50% of global venture capital goes to just three US states: California, Massachusetts, and New York. Low-income students and even the middle class are heavily underrepresented at top research universities. This uneven distribution has serious implications for who gets to be an innovator and for creating a world in which the innovator pool represents the population at large.

We need to ensure that the global innovator pool is more inclusive and representative of the larger population. The central problem is that most young people in the world will never have a chance to attend college, let alone attend a leading research university. In such a scenario it is essential that we envision policies that "bring the university to the people". In the American context one such policy that I have recently proposed, along with my colleague Dr Aaron Mertz at the Aspen Institute, is the creation of a new "American Science Corps". We call for placing 20,000 scientists in rural and low-income communities in the United States to enable scientific and technical upskilling of millions of Americans who have never studied science and have never

been to college. We believe this will make scientific and technological innovation more inclusive by providing crucial upskilling opportunities for all Americans. We believe governments globally and international organizations like the UN should support such policies worldwide.

II. **Equity:**
Technological innovation can amplify existing social inequalities. For instance, innovations in algorithms trained on large datasets increasingly play a pivotal role in solving complex social problems in healthcare, education, law enforcement, and governance. There is growing concern that these algorithms inherit the biases baked into their training datasets or have biased outcomes due to design flaws.

If we are to realize the true potential of advanced technological tools that use Artificial Intelligence it is critical that we ensure they are equitable -- otherwise, distrust in these technologies will increase and their benefits will not be widely shared. One way to ensure equity in AI is to create new Advanced Market Commitments (AMCs) for datasets. These AMCs will incentivize the private sector to collect representative data and build equitable AI algorithms that can benefit everyone.

III. **Openness:**
Finally, an open, interconnected world that enables the free flow of ideas and capital is critical for innovation. However, there has been a growing backlash against immigration (in the US and elsewhere) and to the open exchange of ideas. This global backlash against immigration also risks seriously hindering the process of innovation, particularly by denying opportunities to innovators from the Global South. How can we create a global compact for inclusive innovation that both enable an open and interconnected world and promotes fairness and adherence to the highest ethical standards for applications of new scientific and technological developments?

I believe immigration policy reform and create institutions that foster greater cooperation amongst countries and communities is crucial for innovation. For example, the American Citizenship Act of 2021 can incentivize non-US entrepreneurs to start companies in the US. Similar programs have been launched in France. I believe advocating for a more open world where entrepreneurs and innovators can seamlessly collaborate across national borders will be crucial to making global innovation more inclusive in the coming decades.

Thank you.
Dr. Abhilash Mishra