

For a knowledge economy

The idea during the team work concept design.

India plans to pump in over 10,000 crore to build 20 world-class higher education institutions. However, for knowledge to translate into a wealthy society, we need to do more than just this; we need to create a conducive knowledge ecosystem, which is currently missing from our national plans. Institutions of higher education help in creating such an ecosystem, and improve a nation's productivity and wealth.

By the 1960s, American economists such as Kenneth Arrow and Robert Solow had begun to notice that growth and productivity could not be explained only by capital and labour. This differential they attributed to the knowledge content of an economy. Today, knowledge-intensive and high-technology industries contribute the most to long-term growth. It is no accident that the U.S. accounts for 33% of global output of knowledge-intensive services, China 10%, but India only 2%. In high-technology manufacturing, India barely exists.

It is here that institutions step in. The creation of a knowledge ecosystem that allows for robust institutions that focus on information gathering, planning, research, teaching, credit supply, and ensuring that people are filled with hope rather than derision for the society in which they live will make a society wealthier. Institutions can generate an ecosystem for innovation in many ways: by providing access to knowledge capital, an atmosphere of inquiry, and an experimental environment where those ideas can be tested. Given that the success rate of ideas is rather low, ideas need to be tested constantly. Funding enters the picture only after all this is done. For reality testing, we need collaboration between academic researchers and the users of that knowledge, industry, and government. It is this interface that is rather weak in India.

The heartening thing is that even with a rather low funding to research as percentage of GDP, with very few Indians taking to formal learning and research, India still accounted for 4.4% of the global output of science research publications in 2013. Translating this research into technology remains the weak link. For that to happen, the latest suggestion in the choice-based credit system is to include project work at all levels in higher education institutions.

We also need to ensure ease in movement of personnel between universities and industry. However, there are two obstacles in facilitating this. One, outdated service conditions in the government sector discriminate against people who make such lateral shifts. Two, completely artificial labels exist that distinguish between private and government-owned entities in funding for higher education. Institutions like the Indian Institute of Science, the Indian Institutes of Technology, and Christian Medical College and Hospital, Vellore are all proof that that such categories make little difference to the quality of research and graduate outcomes. We need to provide more autonomy to public institutions in hiring and firing people. And once an institution is given a grant, we need to ensure that it is utilised for the purpose given.

Meeta Rajivlochan is an IAS officer. M. Rajivlochan is a professor of Contemporary Indian History, Panjab University, Chandigarh. Views expressed are personal

The new U.S. Fed Chairman is unlikely to opt for policies that might upset the President's plan

END