

“Sisters and brothers,

I am delighted to visit the campus of IIT Jodhpur today and inaugurate the Jodhpur City Knowledge & Innovation Cluster and lay the Foundation Stone of Fab Lab for AIoT (Artificial Intelligence of Things) Systems. I am glad to be amidst some of the brightest minds in our country at this eminent institution.

The IIT Jodhpur campus, located near the historic and vibrant city of Jodhpur, is indeed impressive. Founded in 2008, this young institution has been pursuing excellence in research, innovation and academia, and is living up to the legacy of its sister institutes of Indian Institute of Technology.

I am given to understand that IIT Jodhpur is collaborating with many other institutions in the city and bringing many benefits to the people of the region. My compliments to the administration, staff and students of IIT Jodhpur for this laudable endeavour!

Sisters and brothers,

I have laid the foundation stone for a fabrication laboratory for Artificial Intelligence of Things (AIoT) earlier. The lab is expected to create an ecosystem for co-development of AIoT technologies with start-ups and industries hosted at the hub. I am told that it will create a one-point facility for end-to-end Design, Development, Prototyping, Testing and Delivery of AIoT products and applications. I am sure, this lab will become a major centre of excellence in artificial intelligence.

As you all are aware, Artificial Intelligence has been revolutionizing many sectors of the global economy in the last decade. Likewise, Internet of Things (IoT) too has been changing the way we interact with the physical world of electronic devices and how they communicate with each other. The convergence of these two technologies unleashes the power of data and automation and facilitates the development of the next generation of intelligent and connected systems.

Sisters and brothers,

It is estimated that AI has the potential to add USD 957 billion, or 15 percent of the current gross value added, to India's economy by 2035. It is also widely reported that the rapid rise of AI will lead to the automation of millions of routine jobs.

While this is true that AI will displace jobs, it will also create millions of new jobs that require new skill sets. It is, therefore, highly pertinent that we train and skill our youth with matching skills for future jobs. India should not be left behind; instead, we must try to become a global leader in the design, implementation and adoption of AI-based systems. India is blessed with talented and educated youth and we need to fully leverage their potential. To begin with, I suggest that basic courses in computing and data science be made mandatory to students in all disciplines to keep them abreast of the latest developments in information technology. This is absolutely important in today's technologically-driven world.

In recent years, many enterprising Indian startups have emerged and have been leveraging the power of AI and bringing out products and solutions in logistics, manufacturing, finance, retail and consumer products, among others. While these startups, no doubt, are leading India into the future, it is also a fact that a vast majority of our people are yet to witness the potential of this revolutionary technology.

AI's power to take smart decisions, mimic human behaviour and its capacity to self-learn from new data should be tapped in other areas such as agriculture, health, governance and education. In this regard, I call upon educational institutions, researchers and developers to strive and come out with practical solutions of AI in these fields. Such applications should aim at improving efficiency, enhancing productivity and bettering the quality of the life.

Governments too, on their part, should explore the possibilities of applying technologies of artificial intelligence and machine learning to improve governance and delivery of services. I have always maintained that science and technology must transform the lives of the people and bring happiness. This principle should be the guide for the development of AI too.

For instance, AI developers can work towards solutions for precision agriculture to ensure better quality farm output. AI can also help in more efficient grading of the produce and enable better price discovery for farmers. Some of these solutions are already being implemented in India and elsewhere. If such solutions can be scaled up, even a small gain in efficiency and quality can bring positive change in the lives of millions of people.

Similarly, AI-based smart solutions in health such as remote diagnosis, solutions in education such as automatic translation in Indian languages can be explored. I was glad to see a presentation recently on a tool developed by AICTE that uses AI to automate translation from English to 11 Indian languages. Clearly, the possibilities of AI are limitless.

On the same note, I urge universities to work with local governments and develop intelligent solutions in governance and welfare. This will not only give exposure to students to test their knowledge in the real world, but can also help in coming out with innovative solutions to some of the societal problems, apart from improving access to government services and enable them to work on longstanding issues such as seamless mobility in cities.

Young friends,

I am happy to note that IIT Jodhpur and other regional institutes have already been taking firm steps in this direction to collaborate with others. It gave me immense pleasure to inaugurate the Jodhpur City Knowledge and Innovation Cluster earlier today.

In my opinion, it is an excellent endeavour that connects and draws upon the synergies in the worlds of medicine, technology, handicrafts, governance, among others. With participation from regional partners such as IIT Jodhpur, AIIMS Jodhpur and more than 20 other institutions, this initiative will ensure sustainable, systematic and collaborative development of the city of Jodhpur.

We need more such innovation clusters and collaborative initiatives between various universities, government institutions and private organisations. Such clusters will ultimately bring great benefits to the people of a region by building on each other's expertise and sharing of knowledge.

Friends,

It is my firm belief that educational institutions such as yours should become the hubs of these innovation clusters. Premier institutes like IITs need to proactively share expertise and best practices with other educational institutes in their region. Innovation and collaboration should be embedded into the very DNA of higher education institutions.

This is the foundational principle of the National Education Policy 2020, a visionary document. It has quite rightly recognized the importance of multidisciplinary in education, encourages collaboration and seeks to foster innovation.

In the spirit of NEP, higher education should go beyond classroom programmes and inculcate an innovative, collaborative and multidisciplinary approach to problem solving among students. University curricula must also allow for a flexibility to learn a variety of courses-- from humanities to sciences to engineering.

Similarly, going forward, students must be incentivized to pursue their final year projects and internships in diverse fields and collaborate with students of other disciplines. This will improve their capacity for critical thinking and help in opening up new vistas of knowledge.

As you all are aware, holistic and dynamic approach to learning is an absolute necessity in today's job market. Going forward, Industrial Revolution 4.0 will demand employees to be adept at multiple technologies, think quickly on their feet and have an ability to assimilate knowledge from diverse areas. Our institutions must prepare students for this fast changing world.

Sisters and brothers,

Innovation should not stop with higher education; it should, in fact, become the national mantra for development. It is worth mentioning that India has indeed been on a rising trajectory in innovation. Over the past several years, India has risen from a rank of 81 in 2015 to 46 in 2021 in the Global Innovation Index (GI). Innovation has been critical in our efforts against the pandemic and will be the key in the coming years as we aim for self-reliance.

So, dear young friends, keep learning, keep collaborating and keep innovating!

Once again, I am very happy to be here with you all today. IIT Jodhpur has laid a strong foundation for the city to become a hub of innovation in the region. I hope, both the Fab Lab and the Innovation Cluster will bring benefits to the students, to the people of the region and offer scalable solutions to various problems. I am confident that all of you will succeed in your mission.

Thank you!
Jai Hind!"