

**SPEECH OF SHRI PRANAB MUKHERJEE, FORMER  
PRESIDENT OF INDIA ON GANDHI INSTITUTE OF  
TECHNOLOGY & MANAGEMENT (GITAM)  
FOUNDATION ENDOWMENT LECTURE ON THE  
OCASSION OF 39TH GITAM FOUNDATION DAY  
CELEBRATIONS**

I am happy to be present here today for the 39th Foundation Day Celebration of GITAM (Gandhi Institute of Technology and Management).

2. The vision of MAHATMA, the Father of the Nation was to see India as a socially and economically resurgent country and he looked upon education as an important means to achieve this goal. To fulfil his dream, Gandhi Institute of Technology and Management (GITAM) came into existence in 1980,

and it is indeed a special day for you as we gear to celebrate the 150<sup>th</sup> Birth Anniversary of the Mahatma.

3. Gandhiji is not just the Father of our Nation. He was also the maker of our Nation. He gave us the moral vector to guide our actions, a measure by which we are judged. Gandhiji saw India as an inclusive nation where every section of our population lived in equality and enjoyed equal opportunity. He saw India as a country which would celebrate and constantly strengthen its vibrant diversity and commitment to pluralism. Gandhiji wanted our people to move forward unitedly in ever widening thought and action. And most of all, he did not want us to convert the celebration of his life and message into a mere ritual.

4. Gandhiji taught us to be morally innovative. If India leads in moral innovation, all other forms of creativity which we have in abundance - would automatically fulfill the Talisman that Gandhiji gave us, namely, wiping every tear from each eye. Gandhiji's view of education was not narrow or sectarian. He envisaged universities as institutions of higher learning that transcend all linguistic, racial and other barriers. With what I have been told, GITAM is committed to imbibe his values and abide by his philosophy. Our history boasts of numerous cities and settlements which were cultural and educational hubs, institutions that invited mighty minds to congregate and nurtured thousands of inquisitive minds. These educational hubs were not only hotspots of research but were also centres of cultural amalgamation.

5. Today, the GITAM has completed 39 years of its existence. The endeavour you have taken in education finds reflection in the diversity of courses offered. I congratulate the GITAM institute and its members. I am glad to know that GITAM has tied up with Stanford University as a knowledge partner to develop the stream of 'advanced biotechnology and life sciences' as a centre of excellence. I am told that GITAM is the first university to establish a FinTech Academy, to offer financial programmes with IT inputs. This, it is hoped, will gradually develop the State of Andhra Pradesh as a FinTech hub for building Block-chain technology. I am told that to strengthen this resolve, GITAM has also signed MoUs with a number of world ranking global universities for collaborative research, faculty and student exchange.

My Dear Students,

6. Today we are in the middle of the “Fourth Industrial Revolution”. More than ever before, this is leading to unprecedented disruptions in the status quo. The explosion of disruptive technologies and internet of things has resulted in the blurring of physical, digital and biological spheres.

7. This transformation calls for affirmative and dramatic changes in the structure of governance, management and education, especially higher education. The rapid advancement is changing not only the nature of our economy but also the very concept of ‘work’. On one hand, certain jobs are being rendered obsolete, on the other, there are novel jobs being created. The universities in our

country have to cope with these dramatic changes and sustain their growth.

8. Today, we stand at a critical juncture and a challenging phase of our socio-economic transition. Complex global changes, which are both challenging and unpredictable are being witnessed every day. Indian expertise and talent have much demand worldwide. The prospects in a liberal economic environment are immense. Yet, to take advantage of the unfolding opportunities in a globalized market, we have to galvanize our demographic strength.

9. To prepare graduates for a competitive global economy, we have to impart quality education in our institutions. There has to be an alliance between the IT-enabled platforms and knowledge networks and

pedagogy. As concepts and understanding evolve, our faculty has to be better prepared with up-dated knowledge. A strong research ecosystem has to be built on the plank of institutional collaborations, research parks, and talented researchers.

My dear students,

10. Science is the knowledge while technology is its application. Today, countries which have a strong base in science and technology are also economically progressive, and are often called 'developed countries'. Indeed, Science, Technology and Innovation have emerged as the major drivers of global development and India is no exception. Indeed, India is now rapidly progressing in the development of skills, infrastructure, manufacturing and services through science and technology.

11. What are exactly '**research and innovation**'?

These cannot be conceptualized nor can they be formulated into a law. It is a spark which can be generated in any ignited mind. You may not be champion of science, yet you may come up with a brilliant idea that has numerous scientific implications. Go down to rural India and you will find that the people in small villages living in isolation from the big scientific globe have small innovative ideas to get their regular chores done.

12. I am happy to know that the faculty and students have contributed their time and efforts to find solutions through research and innovation. I am told that students here have developed bio-pesticide, designed a shoe with an electronic circuit to visually impaired people walk by sensing



obstacles, among other wonderful things; I congratulate you.

13. A nation's 'technological innovations' are directly proportional to its spend on Research and Development. I have no doubt that our country is brimming with potential innovators. But it is for the nation to foster and nurture this environment of innovation. It is a matter of disappointment and concern that for decades, our graduates from Universities of higher education have not been able to acclaim the Nobel Prize.

14. It is not a question of lack of talent because Indian citizens working from Universities abroad have, on numerous occasions, proved otherwise. It is a matter of lack of environment and that ecosystem which fosters and encourages

innovation. India is slowly giving boost to its research and development ecosystem, but it is not enough. **According to the data by UNESCO, India spends a meager 0.8% of its GDP on Research and Innovation. There are only approximately 156 researchers per million inhabitants in India.**

15. The quality of education in most of our institutes is below par. If we delve into our past, we could find renowned seats of higher learning – Nalanda, Takshashila, Vikramashila, Valabhi, Somapura and Odantapuri – that dominated the world higher education system for eighteen hundred years beginning sixth century BC. Scholars from round the globe flocked to these ‘poles of knowledge’. A different scenario is noticeable today. Many meritorious Indian students pursue their higher studies from foreign universities. Nobel laureates – Har Gobind Khorana; Subrahmanyam

Chandrasekhar; Dr. Amartya Sen; and Venkatraman Ramakrishnan – did their graduate or post-graduate studies in Indian universities before they went abroad for higher learning. Since 1930, no scholar from an Indian university has won the Nobel Prize. It is ironical that our higher education system, which is capable of producing world-class scholars, loses them to foreign universities.

16. None of our universities earlier found a place amongst the top two hundred positions in world university rankings. I have been repeating in my interactions with institutions of higher learning that the rankings process must be accorded due importance. In fact, IITs and a few other central institutions started appearing in the top 200 ranking during my tenure as the President of India. Today, I am happy to share that according to the Quacquarelli Symonds (QS) World University

Rankings, 23 Indian Institutions found a place in the top 1000 rankings, out of which 5 were private institutions/universities.

Like I have said before, making efforts to present credentials before the rating agencies in a more systematic manner and with a proactive approach will help in obtaining higher ranking by the Institutions. And high ranks can boost the morale of the academic and student communities, open greater avenues of growth and placement for students, help attract the best faculty from across the world and provide a benchmark for continuous quality enhancement.

17. Indian universities indeed have the potential to be leading institutions in the world if we ensure academic freedom. For that, urgent improvements

in academic management are needed. Our institutions must pursue excellence in every sphere of academic activity, be it teaching, evaluation, research or project work. To make learning more effective, teaching pedagogy must be refined, curricula up-dated regularly, an inter-disciplinary approach adopted and evaluation mechanism reformed. Physical infrastructure must be improved. To pursue excellence, core competencies must be identified and centres of excellence nurtured. To create quality consciousness, every institution must be benchmarked and accredited.

Distinguished Guests, Ladies and Gentlemen,

18. A healthy interface with the industry can benefit higher educational institutions in terms of: involvement of industry personnel in curriculum design and project guidance; sponsorship of chair

positions; and setting up of incubation centres and laboratories. Setting up industry-interface cell can accelerate these activities.

19. Research and innovation are the keystones for widening the country's production potential. Our future growth will result not so much from the utilization of our resources with existing technology than from its better usage through more advanced technology. Unfortunately, investment in research in our country is lacking. As mentioned earlier, R&D expenditure as percentage of GDP is a mere 0.8 percent in India. Compared to that, it is 3.6 percent in Japan, 2.7 percent in the US and 2.0 percent in China. Higher academic and research institutions must be the hotbeds of research activity. Building a sound research eco-system calls for a slew of measures like collaborative partnerships and better financial incentives for attracting and retaining

research talent. To imbibe a scientific temper and a spirit of inquiry in students, research at the undergraduate level must be promoted.

20. A country like India needs innovative solutions to issues in renewable energy, climate change, drinking water, sanitation and urbanization. These developmental challenges call for an inspired response from the higher education system.

21. Our innovations have to address many social challenges. We must adopt innovative problem-solving approaches. This requires a new mindset of interdisciplinary and multidisciplinary education and research out of traditional silos of knowledge. There is plenty in our history to take inspiration from. The rain-water harvesting techniques and structures built centuries ago, during the Indus Valley Civilization, are a great example.

22. Furthermore, the disconnect between university education and industry requirement has to be effectively bridged. Every university needs to set up an industry interface cell. I am happy that such cells comprising local industry, alumni and faculty are in place at GITAM. Further, universities should be the pioneers in converting knowledge into innovations, which is facilitated by technology incubators and startups.

Distinguished Guests, Ladies & Gentlemen,

23. The role of educational institutions goes beyond mere pedagogy and classrooms. It is incumbent on them to mould students into responsible human beings. They have to instill in the students the civilizational values of love for motherland; performance of duty; compassion for



all; tolerance for pluralism; respect for women; honesty in life; self-restraint in conduct; responsibility in action; and discipline.

24. In our pluralistic democracy, it is important that the values of tolerance, respect for contrary views and patience are inculcated amongst the citizens particularly the youth. Pluralism and respectful mutual tolerance have been the hallmark of our civilization. This is a core philosophy that must continue undeterred. For, India's strength lies in her diversity. I am reminded of Mahtma Gandhi's words to Gurudev Rabindranath Tagore here. He wrote and I quote, "***I do not want my house to be walled in on all sides and my windows to be stuffed. I want the culture of all lands to be blown about my house as freely as possible. But I refuse to be blown off my feet by any.***" (Unquote)

25. India is a multi-faceted nation of 1.3 billion people, 122 languages, 1600 dialects and 7 religions. In the words of Pandit Jawaharlal Nehru which I quote: ***"It is a country held together by strong but invisible threads"*** (Unquote). Diversity of our country is a fact. Plurality of our society has come about through assimilation and evolution of ideas over millenia. The multiplicity in culture, faith and language is what makes India special. We derive our strength from not tolerating but accepting, respecting and celebrating diversity. It has been part of our collective consciousness for centuries. It has worked well for us and it is the only way it will work for us. There are divergent strands in public discourse. We may argue. We may not agree. But we cannot deny the essential prevalence of multiplicity of opinion. Otherwise, a fundamental character of our thought process will wither away.

26. Towards the end, my message to you will be to strive not only for education in terms of a degree leading to a professional career, but for knowledge – the thirst and quest for which is endless.

Jai Hind

Thank You.