

SPEECH BY THE PRESIDENT OF INDIA, SHRI PRANAB MUKHERJEE AT THE INAUGURATION OF PLATINUM JUBILEE CELEBRATION OF THE COLLEGE OF ENGINEERING TRIVANDRUM

Thiruvananthapuram, Kerala: 18-07-2014

1. I am happy to join you for the inauguration of the Platinum Jubilee of the College of Engineering Trivandrum (CET), which is the oldest engineering college in Kerala. First of all, let me congratulate you all on this institution crossing a significant milestone.
2. CET is one of the pioneers in engineering education in the country. Established in 1939, this institute owes its glory and stature to the vision of the Maharaja of erstwhile Travancore, Balarama Varma; the support rendered by the state government; the hard work of the faculty and staff who have served this college since inception; the unrelenting support of thousands of alumni, and the dedication of the students. It is a delight to see this Institute spread over an expanse of 80 acres of lush greenery. With four thousand students on its rolls and three hundred faculty members, CET offers eight under-graduate and 23 post-graduate courses, besides doctoral programmes. Counted as one of the important engineering institutes in our country, CET has emerged as a shining example of a state government institution achieving national reputation.

Ladies and Gentlemen:

3. Education has a pivotal role to play in building a nation's soft power. Nelson Mandela had said and I quote: "*Education is the most powerful weapon which you can use to change the world*" (unquote). History bears testimony to the fact that great nations have progressed on the strength of an able workforce. We are pursuing a high growth strategy to make India a front-ranking nation in the world. This requires significant contribution from the knowledge sectors. One of the crucial academic streams that produce skilled personnel for the economy is engineering. It is a field of study which is vital for fulfilling our developmental objectives. Our engineering colleges therefore have a key task to produce highly competent engineers and scientists who can become an asset for the profession and the country.
4. Engineering is a sought-after discipline and accounts for one fourth of the total enrolment in higher education. The annual enrolment in engineering in India tripled during the course of the Eleventh Plan period to 55 lakh at the end of this period. A number of engineering colleges have been started in recent years and the capacity of existing ones increased. More institutes have also been envisaged in the coming years. The acid test before our institutions is to

produce a large cadre of scientific and technical manpower without sacrificing standards.

5. Our higher academic institutions, including engineering colleges, have some distance to cover in the journey of quality. Many meritorious students opt for higher studies abroad. We have to retain them by offering world-class education in their own country. Unfortunately, superior quality institutions to meet the expectations of bright students are few. It is a worrisome indicator that no single engineering institute or a university from India is ranked within the top two hundred universities in the world as per reputed international surveys. This is in stark contrast to the higher education sector prevalent in ancient times. Seats of learning like Takshashila, Nalanda, Vikramashila, Valabhi, Somapura and Odantapuri had dominated the world higher education system for about eighteen hundred years beginning Sixth Century BC. Takshashila was a meeting ground of scholars from four different civilizations – Indian, Chinese, Greek and Persian. Efficient management took our ancient universities to great heights before they declined by the Thirteenth Century AD. Today, we languish behind many nations.

Ladies and Gentlemen:

6. It is possible to reclaim the pre-eminent position but for that all-round changes are required in our educational system. Curricular reforms for regular revision and up-gradation of curricula, introduction of choice-based credit system and examination reforms to bring in holistic assessment must take place. A culture of excellence must be promoted. One or two departments in which an institute has special capability must be nurtured as Centres of Excellence. Formal linkage with the Industry must be established to have regular flow of inputs from industry experts on course curricula and research. Engineering programmes must be periodically evaluated based on industry trends.
7. The governance structure must facilitate transparent and faster decision-making. Alumni must be associated and their experience and expertise utilized for overall development of the institute. I am happy to note that the alumni of CET, many of whom are eminent scientists, technocrats and bureaucrats, have a strong network. It must be leveraged for the benefit of this institute. Being one of the institutions spearheading engineering education, you have an important role in setting benchmarks.
8. Intellectual collaboration amongst Indian institutions and with institutions abroad can provide impetus to knowledge generation and sharing. Expertise in key areas must be developed by associating with other knowledge-generating institutions. In the context of ICT (information and communication technology)

solutions, it is imperative for our institutions to be on existing knowledge networks.

9. Recently, India has entered as a permanent member of the Washington Accord, an agreement for engineering degrees between the accreditation bodies of its 17 signatories. It will bestow significant benefits, in terms of recognition of Indian engineering degrees abroad and better prospects of Indian engineers. The onus is on our engineering colleges to adhere to the requisite accreditation standards.

Ladies and Gentlemen:

10. Indian institutes must evolve from being a mere teaching institution to a knowledge-creating one. For that, research pursuits must be promoted through institutional support mechanisms. Research activity of an institute must focus on issues and problems that are peculiar to that region. Research must also endeavour to find ways of achieving greater efficiency in utilizing existing resources. In the face of increasing resource constraints, growth will be influenced positively by the velocity of technological developments. Recognizing this, Governments around the world have made a concerted effort to encourage innovation. As for India, we have dedicated the decade 2010-20 to innovation. The Science, Technology and Innovation (STI) Policy 2013 calls for an innovation-led development. This policy reflects the need to right-size our research and development system.
11. Engineering institutions are a fertile ground for innovation. You must work towards making the STI policy a success. You must ensure that research positions are filled up by talented people. You must mentor grassroots innovators to develop their ideas into useful products, benefitting the common man. I am happy to note the facilities being provided by the Technology Business Incubation Centre and the Centre for Engineering Research and Development at CET towards promoting research and encouraging innovation. I am told that a research park within the CET campus is being set up with the aim to propel breakthroughs in engineering science. The fact that 30 per cent of students graduating from CET join higher studies and research programmes shows the kind of interest in research that this institute has been able to generate amongst its students. It is heartening to learn that papers presented in national and international conferences by the faculty of CET have been recognized for their academic excellence.
12. This Institute, in its journey so far, has rendered outstanding education to generations of students. It has produced wonderful engineers who have done their alma mater and the country proud. Completion of 75 years is an occasion to reflect on what needs to be done to take the legacy of this institution forward and achieve greater success. I am sure that the activities being planned as part

of the Platinum Jubilee celebrations – conferences, fests, exhibitions and adoption of village – will give enough food for thought for launching the next phase of development. I wish all of you a successful conduct of the events. I also wish you all the very best for the future.

Thank you.

Jai Hind.
