

**ADDRESS BY THIRU BANWARILAL PUROHIT, HON'BLE GOVERNOR OF
TAMIL NADU AT THE CONFERENCE ON CHANCELLOR'S VISION 2030 :
INNOVATING EDUCATION IN THE ERA OF INDUSTRY 4.0
ON 19TH DECEMBER 2019 AT 10.00 A.M.**

Anaivarukkum Kaalai Vanakkam

Thiru Bhimaraya Metri,
Director IIM, Trichy

Shri Ramkumar Ramamoorthy,
Chairman & Managing Director, Cognizant India

All Vice- Chancellors from State Universities

Prof. Ramachandran,
National Institute of Educational Planning and Administration,
New Delhi,

Mr. Richard Rekhy,
Former CEO of KPMG,

Prof. V.K.Malhotra,
Member Secretary,
Indian Council of Social Science Research,

Thiru Anandrao V. Patil, I.A.S.,
Secretary to Governor

All Faculties from IIM, Trichy

Press and Media

It gives me great pleasure to be here at the inaugural function of the two-days Conference on 'Chancellor's vision 2030: Innovating Education in the Era of Industry Four Point Zero' being held for the purpose of bringing about structural changes in the University curriculum and realign strategies to meet the needs of Industry Four Point Zero.

Education is a powerful instrument for reducing poverty and inequality. It is, therefore, necessary to stress on a) Access to education, b) Availability of quality education and c) Dissemination of education through technology. India holds an important place in global education. India has one of the largest networks of higher

education institutions in the world with 993 universities and 39,931 colleges. Tamil Nadu enjoys a coveted reputation for higher education in the country. The State has a gross enrollment ratio of 48.6% compared to a national average of 25.8%. The State of Tamil Nadu has 59 Universities and about 8.64 lakhs of students passing out every year.

The late 18th century introduced mechanical production facilities to the world. Water and steam powered machines were developed to help workers in the mass production of goods, deemed as the beginning of the Industry 1.0. The beginning of 20th century marked the start of the second industrial revolution – The main contributor to this revolution was the development of machines running on electrical energy, as electrical machines were more efficient to operate and maintain. The industrial revolution 3.0 was brought about by the advancements in the fields of electronics and Information Technology, resulting in the automation of industries, in the last few decades of the 20th century.

The spurt of Internet and telecommunication industry in the 1990's revolutionized the way we connected and exchanged information called Industry Revolution 4.0. It also resulted in paradigm changes in the manufacturing industry and traditional production operations, through merger of boundaries of the physical and the virtual world. Cyber Physical Systems allow the machines to communicate more intelligently with each other to share, analyze and guide various processes in the industrial production with almost no physical or geographical barriers. Cyber Physical Systems allow an industry to be completely - virtually visualized, monitored and managed from a remote location and thus adding a new dimension to the working process.

The digital technologies have become game changers as they deliver three capabilities – ubiquitous data, unlimited connectivity and massive processing power. These technologies have led to revolution in the industry which in turn has opened many opportunities and challenges for academic institutions. We have to upgrade our education system so that graduates have the correct skills to get new-age jobs in Digital Era.

Human beings have always been creators, mentors and discoverers. We the human beings keep communicating across generations since our evolution, we did not stop but merely invented a better way in terms of e-mails, whatsapp, twitter, facebook etc.

Similarly, education here will focus on future trends of fourth Industrial revolution, while keeping intact today's values and beliefs.

The teaching pedagogies and the curricula of education have to be redesigned which will prepare the students to understand the dynamic demand side transformations in today's global context. They will experience perspectives of change, the uncertainty of the global and national environment, and find ways to manage and navigate themselves through the changes. It is, therefore, most pertinent that, as a response to the clarion call of the Nation to foster systematically the culture of dynamism and Innovation amongst all our Higher Education Institutions, the Raj Bhavan Secretariat has taken the initiative with the help of the Indian Institute of Management, Trichy to organize this two-days Conference.

We are here today, the Vice Chancellors of Tamil Nadu, not only to benefit from the deliberations at the Conference but also to formulate a most pragmatic education model to meet challenges of the fourth industrial revolution. We should implement the model in our universities and carry the message across the academic fora, so that we assume the primacy of 'educational institutions enabled for the era industry 4.0' in India.

Over the decades, higher education has seen tremendous growth in Tamil Nadu. At the time of my assumption as Governor-Chancellor, 6 out of 20 State Universities were headless with no Vice-Chancellors, due to which the administration in these universities was affected. In some Universities, the post of Vice-Chancellor had remained vacant for more than a year. There were also widespread allegations in the media about the quality of the persons selected for the post of Vice-Chancellors and the process involved in the selection. The vigilance raids on two former Vice-Chancellors, the arrest of a sitting Vice-Chancellor and the suicide committed by a former Registrar in the last two years bear testimony to the condition. It worries me when I see Vice-Chancellors and Professors are prosecuted for corruption. It is a blot on the civilization and this should never happen.

After I, assumed charge as the Governor-Chancellor, we changed the process of filling up of the posts of Vice-Chancellors. Since it is known to the entire Academia of Tamil Nadu that total transparency has been observed in appointments of all the Vice-Chancellors, now the expectations of the public in general and the student community in particular is that the University Administration should be transparent, highly disciplined,

corruption-free and in accordance to the Act and Statute. I expect all of you to work to the maximum with total dedication and leadership.

Universities and Colleges are the seats of higher learning at which it is important to practise scrupulously the virtues of transparency, efficiency and honesty. Since example has been set in the selection of Vice-Chancellors, the Vice-Chancellors, in turn, should follow this method of being totally honest and transparent when it comes to the students' admissions, affiliation of new colleges, approval of new courses, selection of the University faculty, etc.

If the higher echelons of University and College managements do not practise proper moral values, how can there be an expectation about the inculcation of the right values in the youth of the State? Vice Chancellors and Professors by their conduct should serve as beacon lights to guide the younger generation on the right path so as to achieve the goal of progress and prosperity in the society.

The true essence of democracy should be understood in the sense that, the common people are the masters of the nation. **Mahatma Gandhiji** wrote an Article in "Young India" on 22nd October 1925 and cautioned against seven deadly sins that can destroy a Nation. They are:-

1. **Wealth without work,**
2. **Pleasure without conscience,**
3. **Knowledge without character,**
4. **Commerce without morality,**
5. **Science without humanity,**
6. **Religion without sacrifice and**
7. **Politics without principle.**

It is important for us to identify the people who practise these sins in our midst and reform them without any further delay.

At this juncture, I would like to stress specially the importance of character building in educational institutions. **Albert Einstein** once said, '**Most people say that it is intellect which makes a great scientist. They are wrong. It is character.**' Character building goes beyond being good. To be able to distinguish between good and evil and to stand on the side of goodness is the first step towards character building. One must

have the courage of conviction in the greatness of goodness, rise above jealousy, suspicion and other petty failings and have the strength to support all those who are doing good work. This is the true essence of character building. Besides development of skills, education in colleges should also lay stress on character building and in inculcating a nationalistic spirit in the students. On the subject of character building, **Swami Vivekanda** has pointed out, and I quote, "**We need education through which character is formed, strength of mind is increased and the intellect is expanded by which one can stand on his own feet**". This is the true essence of character building. Academic brilliance, combined with a healthy mind in a robust body and character embellished with a nationalistic spirit is what a student must aspire for. All the institutions which provide education should focus on guiding and leading the students on this noble path.

Good Education is linked to good teachers. Our ancient spiritual texts explain the relationship between the teacher and student and as to how both have to grow together in the process of learning. In this context let me quote to you the relevant portions:

Saha Naa Vavatu (May the Supreme Lord protect us – the teacher and the student)

Saha Nau Bhunakthu (May the Supreme Lord nourish both of us)

Saha Veeryam Karavaavahai (May we do great deeds together)

Tejaswi Naavadheetham Asthu (May our learning illumine us)...

Maa Vidvishavahai...(Let us not quarrel but instead grow together in the process of learning).

I say all this to emphasize the importance of drawing inspiration from illustrious personalities and age old Indian tradition for imparting the right kind of knowledge in educational institutions. **Dr. Sarvapalli Radhakrishnan** used to say, "**One can shape National Solidarity by using neither bricks and lime nor hammer and chisel. It should bloom in the heart of every human. For the flower to emit fragrance we need to water the plant in the form of education**". **May I expect all of you as good teachers as our tradition expects you to be.**

The Vice-Chancellors shall sharpen their skills to track ever shifting environment and cultivate those skills in the academia. The effective transformation in Universities requires strong and dynamic leadership. A resourceful institutional head recognizes the

need to begin with diagnosing the correct issues and challenges and to align university with its main stakeholder, the industry. A successful academic leader in our changing times will need to construct or architect higher education institutions in which they need to think about how they can reframe their work around digital technology and industry. **The Vice-Chancellors as academic leaders should be the engine of innovation to discover new products and processes through their centres of excellence and departmental activities.** This Conference is really giving yourself time to recharge and reflect on your leadership to position universities as a role model for the rest of the universities in the country and even at the global level.

The Hon'ble Prime Minister of India, Shri. Narendra Modiji launched the Swachh Bharat Abhiyan on 2nd October 2014. Swachh Bharat Abhiyan aims to make cleanliness a people's movement. The aim of the movement is to provide sanitation facilities to every family, including toilets, solid and liquid waste disposal systems, village cleanliness, and safe and adequate drinking water supply. We have to achieve this by 2019 as a befitting tribute to the Father of the Nation, Mahatma Gandhi, on his 150th birth anniversary. I have in the last two years visited all the districts of Tamil Nadu for the promotion of Swachh Bharat Abhiyan activities. During these visits a pledge is taken for ensuring cleanliness. For making the district Open Defecation - Free Pamphlets, Posters and Stickers were distributed and mobile vans were sent out on propaganda missions. A Shramdan programme is always undertaken to involve all sections of the society in the cleanliness drive. Tamil Nadu has registered considerable progress in the ODF status, all the districts of the State have been declared 100 percent Open Defecation - Free. This is due to the rich tradition of the people of Tamil Nadu that venerates hygiene and cleanliness.

I am happy to note that the Manonmaniam Sundaranar University, has figured among the top five positions under the Government Residential Universities category in the 3rd Swachhata Ranking. Congratulation to Vice-Chancellor and his whole team. Last year, Alagappa University bagged the 4th position among the Government Universities. Next year, I would like to see all the first five positions among the Government Universities category taken by the Tamil Nadu State Universities.

The greatness of a civilization lies not in what people enjoy, but in what people can provide for the betterment of mankind and continued civilization in a

sustained manner. Mere enjoyment and economic prosperity without sustainable development will be short-lived and short-sighted.

Today the use of petrol and petroleum products, the use of plastics and the mindless dependence on artificial chemicals have resulted in serious environmental damage. Much before the Tamil Nadu Government's decision to go plastic-free by 01.10.2019, the residents of Raj Bhavan were advised not to bring single use carry bags inside Raj Bhavan premises. In order to encourage them, cloth bags were distributed to the residents of Raj Bhavan Estate as part of a pilot model of banning plastic carry bags. Tamil Nadu Government has also taken stringent measures for curbing the illegal use of plastic bags by shopkeepers and small vendors. Now I take this opportunity to awaken you to ensure that your campuses are plastic-free and totally ban the usage of single-use plastics. Let us start the protection of our Mother Earth from our door steps. May I request you to make all University and College campuses free of plastic? Will you take the initiative?

Water conservation is of utmost importance for the sustenance of living beings on earth. Conservation, recycling and reuse of water calls for attitudinal and behavioural changes. There is a need for education and creation of awareness among the masses in this regard.

Water problems are precarious not only in the domestic sector but, as a whole, the country has been facing a water crisis in agriculture and Industry sectors. Water demand is predicted to increase significantly over the coming decades. In addition to the agricultural sector, which is responsible for 70% of water abstractions nationwide, large increases in water demand are predicted for industry and energy production. Accelerated urbanization, climate change scenarios, the expansion of municipal water supply and sanitation systems also contribute to the rising localized demand so much that discrepancies between water supply and demand are becoming increasingly aggravated. Rain water harvesting is one of the most effective methods of water management and water conservation. I request you all to ensure rain water harvesting structures in all your Universities/Colleges and also guide people about saving water and optimum utilization of water.

The state universities should strive to make their campuses eco-friendly and

green. The universities should harness green and clean energy resources like solar and wind power to offset the pressure of pollution on the environment. You should harvest rain water, conserve and recycle the water to maximize its utility. Since my assumption of office, I have initiated many mass tree plantation campaigns in our universities and such campaigns at Tamil Nadu Agricultural University, Madurai Kamaraj University are a few best initiatives to quote. I will closely monitor the progress of all these initiatives and I invite all Vice-Chancellors to contribute their mite to our environment with total Devotion. Inculcation of green initiatives in the young minds, through teaching, participation in practising and propagating to mass is the need of the hour. Let us make University and College campuses full of green cover by planting maximum trees.

The villages in Tamil Nadu should be enlightened about the various schemes of the Central and the State Government aimed at improving their livelihoods. In order to achieve this, the students in the Universities and Colleges may be encouraged to make field visits to the nearby villages and illuminate them regarding the schemes of the Government. The importance and relevance of the flagship schemes like Swachh Bharat Abhiyan, Ayushman Bharat, Pradhan Mantri Kaushal Vikas Yojana, Beti Bachao Beti Padhao, Jan Dhan Yojana, Digital India, Make in India, Har Ghar Jal Yojana, etc., has to be taken to the door steps of every citizen. You may utilize NCC and NSS activities for this.

The State has 12,620 Village Panchayats and 2,466 colleges. If each and every college works earnestly and adopts one village per year, it is imminent that within 5 years all the villages in the state would be enlightened. We have to go a long way ahead and I expect all the Vice-Chancellors to put their meticulous effort by leading the Nation in upbringing of the villages. May I request all of you that every college shall adopt at least one village per year?

In the National Institutional Research Framework (NIRF) ranking 2019, ten out of 20 State Universities have achieved ranks within 100 among the Universities category. Anna University has scored an impressive 7th rank among the Universities in the NIRF ranking 2019. This is an improvement over last year when only 7 out of the 20 Universities were listed within the first hundred rankings. In the grading awarded by the National Assessment and Accreditation Council also the State Universities in Tamil Nadu have

performed well with 12 out of 13 Universities which were accredited scoring above 2.5 out of 4 in the grading system. I call upon all the State Universities to apply for accreditation and constantly strive for improving the grades. The accreditation parameters include the curriculum, teaching-learning evaluation, research, infrastructure, innovation etc., working towards accreditation will raise the bar of quality of education in the Universities and ultimately the students will be the beneficiaries.

Higher Education should focus on research aspect in order to contribute to chosen discipline and in turn to the society at large. The State Universities in Tamil Nadu should be praised for encouraging students in research work. As per the All India Survey on Higher Education 2018-19, Tamil Nadu stands first in the number of Doctoral degrees awarded, with 5,844 Ph.Ds among the total 40,813 Ph.Ds awarded in the nation, for the year 2018-19. While we can take pride in the statistics, it may also be ensured by the Universities that the quality of the research work undertaken should be of very high standards and contributing to nation building. These measures would enable our Universities to compete for QS World University Rankings which are the benchmark rankings for Universities at the world level. Anna University has been ranked as one of the top 150 young universities in the world as per global QS rankings 2020. Anna University has also been granted 26 National patents and 10 International patents, which speaks volumes about the quality of research work undertaken in the University. The Scopus based h-index of the State Universities in the past five years was also high, which is an encouraging statistic that the universities should strive to improve in the future. No wonder Anna University has been chosen as an Institute of Eminence (IoE). I congratulate the Vice-Chancellor and all the stake holders.

The All India Council for Technical Education had come out with a 'Startup Policy 2018' and a One day Conference on "Startup Policy and Skill Development for employment – An initiative by State Universities" was successfully organised by Raj Bhavan and State Universities on July 2018. We can proudly say that, the universities and colleges of Tamil Nadu were the first to leap forward along with the 'Startup Policy 2018'. The efforts by our Vice-Chancellors need a special mention in this regard at this juncture. Now, the Ministry of Human Resource Development, Government of India, has widened the scope of Startup Policy to all Universities beyond the ambit of technical

Universities, as initiated by AICTE. Ministry of Human Resource Development (MHRD), has recently established 'MHRD's Innovation Cell (MIC)' to foster systematically the culture of Innovation amongst all Higher Education Institutions. The Innovation Cell is established with the mandate to work closely with our Higher Education Institutions to encourage the creative energy of our student population to work on new ideas and innovation and promote them to create start-ups and entrepreneurial ventures. Innovation Cell will focus on creating complete ecosystem which will foster the culture of Innovation across all educational institutions from ideas generation to pre-incubation, incubation and graduating from the incubator as successful start-ups. It will also work on designing ranking system to identify institutions in the forefront of innovation. Our Hon'ble Prime Minister has launched 61 Entrepreneurship, Innovation and Career Hubs in 51 districts, spread across 25 States and Union Territory. Two of our State Universities had also established Entrepreneurship, Innovation and Career Hub under the same programme. I request all our universities to brighten up their approach to create more startups and entrepreneurs. My concern for the quality of education at our Educational Institutions and quality of skill sets provided to our students is the main reason for this Conference. You may have free discussions and come up with implementable and measurable action plan to equip our educational institutions and students to face the Digital Age Challenges. I want the students of Tamil Nadu to excel in all fields and to advance in life towards a brighter future. This is an attempt to all initiatives for facing the challenges of fourth industrial revolution. Tamil Nadu is the first State to hold this Conference with the participation of 20 Universities. I have great pleasure in inaugurating this Conference on Chancellor's Vision 2030 : Innovating Education in the Era of Industry 4.0. May the youth of the Nation and the State derive the maximum benefit from it.

Since the Indian Institute of Management (IIM) Trichy has joined hands with us in organizing this Conference, I take pleasure in recalling some moments in the early history of the great institution.

All of us know that the IIM was established by the legendary scientist and visionary Dr. Vikram Sarabhai, with the help of a few industry captains such as (the late) Kasturbhai Lalbhai, at Ahmedabad.

Dr. Vikram Sarabhai became the founder Director of IIM-A without taking any salary. He established not just a B-School but also created a great institution with sound values.

Later on, Dr.Sarabhai convinced Dr.Ravi Mathai, son of the legendary thinker and management master Dr.John Mathai of the Tatas, to work as the IIM's first salaried Director.

These two men – Dr.Sarabhai and Dr. Mathai – should be your role model and I expect all of you to.

They created a well-thought set of rules and regulations and norms that nobody could compromise with. They created a solid foundation and creative culture that now marks an iconic institution of higher learning with global reputation.

The IIM is a great institution because of its uncompromising commitment to transparency in administration highest possible quality of education.

I have had a long experience of over 40 years in high-quality education management at school and college levels. Here, I join the dots for your benefit and appeal to all of you to establish a great and fine educational culture in your esteemed universities.

Ultimately, that alone is going to make a difference between great Universities and others. It is my dream that all the Universities in Tamil Nadu rise to league of Iconic Institutions from which will emerge generations of great students and truly good Indian citizens.

India's biggest resource is its youth who can be trained gainfully to reap the benefits of the demographic dividend. I wish to conclude by sounding a note of optimism by declaring that we in India and more particularly in Tamil Nadu have the best potential for designing and implementing the best educational model to suit the dynamism of Industrial Era 4.0, since a) the weather conditions suit to work all 365 days of the year, b) the infrastructure already built up is sound and robust and c) the early leaps already taken by our institutions and entrepreneurs have shown great promise.

The time is ripe for a quantum leap forward. Let the Universities, colleges and students of Tamil Nadu perform this leap with aplomb. The whole world is our stage and our performance is going to spur us on the path of high growth employment and prosperity. I wish one and all present here in this August Gathering all the best for future

endeavours and may success greet you at every step. Let us take a determined step to change the Ecosystem of Tamil Nadu State Universities.

Nandri Vanakkam....

Jai Hind....

Jai Tamil Nadu....