

13th Convocation

29th November, 2021

Convocation Address



Padma Bhushan Dr. Rajendra Singh Paroda
Chairman, Trust for Advancement of Agricultural Sciences (TAAS)
Former Secretary, DARE & Former Director General, ICAR
New Delhi



THIRTEENTH CONVOCATION ADDRESS

Integral University, Lucknow

Padma Bhushan Dr R S Paroda

Hon'ble Chancellor and Founder of Integral University, Prof. Syed Waseem Akhtar, Pro-Chancellor, Dr. Syed Nadeem Akhtar, Vice Chancellor, Prof. Jawed Musarrat, Pro-Vice Chancellor Prof. Aqil Ahmad, Prof. Mohammed Haris Siddiqui, Registrar, Members of the Governing Body, Members of the Executive and Academic Council, distinguished guests, recipients of *Honoris Causa*, medals, awards and degrees, faculty members, dear students, proud parents, representatives of Press and Media, Ladies and Gentlemen!

1. My warm greetings to all present today on this momentous occasion. I am humbled by the invitation from Chancellor to deliver this thirteenth Convocation address. It has provided an opportunity to visit and see this impressive campus of Integral University. Let me personally congratulate all the student, researchers and the teachers who have received degrees and awards today.
2. Dear students, the day signifies a memorable event in your life. You have all worked hard to gain new knowledge and have inculcated values that would stand in good stead to achieve new heights as you climb further. The joy and happiness today is a reflection of your perseverance, hard work and determination to fulfil your dreams. No doubt, this also is a day of great happiness for parents for which I congratulate them all.
3. It is gratifying that 3103 graduates from varied disciplines such as: Architecture, Sciences, Computer Applications, Commerce & Business Management, Engineering, Education, Pharmacy, Humanities & Social Sciences, Law, Medical Sciences & Research, Allied Health Sciences, Agricultural Science & Technology, and Mass Communication have been awarded their degrees. My special appreciation to all the recipients of medals, awards and distinctions.
4. I also take this opportunity to congratulate the faculty members, staff and leadership of this university on this solemn occasion for raising a new generation of competent human resource which will work for the growth and development of our nation.

Hon'ble Chancellor

5. At the outset, I would like to congratulate you for your vision to create this beautiful and vibrant institution of learning from a very small corpus of Rs 5000. Today, it has 13 Faculties and 45 Departments covering a broad range of subjects. It has also been acknowledged as a premier private educational institution in Uttar Pradesh and making its place among the top few in the country. I am pleased to know that around 12, 000 students from more than 25 countries are studying on this campus presently. These are quite laudable achievements in such a short period under your able leadership.
6. It also gives me immense pleasure to mention that this institution has a unique culture of inclusiveness, diversity, personal care, intellectual integrity and value-

based quality education. Integral University is today well recognised for serving its laudable mission and vision to make India a progressive, prosperous and advanced nation. Also it is known for its wider canvas imparting education in varied fields like science, pharmacy, engineering, law, business management, health and medical sciences, agriculture, humanities and social sciences, and computer applications with strong focus on individual growth and the development of essential tools so that its students make a mark in the corporate world. The University is known today for its state-of-art facilities and for providing excellent atmosphere for learning. Hence, lucky are those who are having an opportunity to study here.

7. For many years, not a single Indian institution was there in the list of top 200 universities of the world. Since 2017, only three Indian universities, namely Indian Institute of Technology (IIT) Bombay, IIT Delhi and Indian Institute of Science (IISc) in Bengaluru have consecutively maintained their ranking in the top 200 Quacquarelli Symonds (QS) World University Rankings (WUR). Hence, a lot more needs to be done to improve the ranking of universities at the global level. In order to do so, our universities will have to lay greater emphasis on the quality of education for which the role of institutions and human resource development is critical. The challenge before universities, especially before the Integral University, is to become one of the top 100 globally while adhering to the norms of New Education Policy (NEP).
8. Let me place my appreciation for your efforts to build this institution of excellence. Your endeavours have heightened from the fact that this university has been accorded accreditation by NAAC, NBA, NIRF, and approval by the statutory bodies like IMC, PCI, INC, COA, BCI, NCTE, UPSMF, UGC-DEC, IAP especially for the Integral University, etc. The university has been recognized by UGC under Section 2 (f) and 12 (B) of the UGC Act 1956 and has been given the status of Scientific and Industrial Research Organization by DSIR, DST-Govt. of India. DST-FIST is another feather to its cap very recently. I hope under your dynamic patronage it continues achieving excellence with yet greater momentum.
9. To be very frank, let me state that the education standards in our educational institutions are declining. There are rarely few islands of excellence amidst the pool of mediocre institutions. I do not know who is to be blamed. But nobody wants to go to the root cause of the problem. It seems everybody is looking for short gains. Dear Chancellor, there are few institutions only, such as your Integral University, where there is no compromise with standards of education and excellence for both staff and infrastructure being cradles of success.
10. We know to remain at the top, the academic curricula have to remain dynamic, it must be comparable to the best institutions in the world and it should have an industry or skill-oriented focus. For institution-industry interface, a 'Technology Park' is a must. Fortunately, the government has initiated the 'Start-up India' to offer incentives to boost entrepreneurship and job creation. Entrepreneurship development has immense potential through scaling of new innovations for economic growth and development. I urge the graduating students to become entrepreneurs and be "Job Providers rather than Job Seekers". Examples of successful entrepreneurs are: Bill Gates (Microsoft), Job Steeve (Apple), Warren Buffett (an investor), Elon Musk (Tesla electric car) who is the richest person in

the world today, Mark Zuckerberg (Facebook) who became billionaire when he was only 17 and Jeff Bezos (Amazon) being the second richest person.

Dear Students

11. We are heading towards a very defining moment of time. Critical challenges stare at us and stakes are high. Across the globe, the nations are facing conflict, strife and turmoil, beside the concern of poverty, hunger, environmental pollution, degradation of natural resources, including biodiversity, and adverse impact of climate change. To address these, you will have to be the agents of change. I believe each one of you have imbibed the ethics and values needed to meet them successfully.
12. You would hold in your hands the most valued degrees, when you step out with a robust education, pave your own way and carve your own path. Higher education with an innovative mindset is the key to meet new challenges and help the society.
13. The University education provides as Newman said: “clear, calm, accurate vision and comprehension of all things.” That allows the individuals to make good judgment, to distinguish between desirable and not desirable, and to separate chaff from the grain, truth from falsehood and fact from fiction.
14. The evolving globe in present scenario rests on the pillars of technological advancement and globalization which offers you opportunity to leverage your aspirations and fulfil your dreams. While enjoying the amazing and mysterious maze of life, you may make errors or even blunders at times but that should not deter you, rather bolster your zeal towards success. Remember, the first assignment be treated a jumping board for you to attain newer heights.
15. Integral University has nurtured you and provided you the desired platform to move forward and achieve success. I am confident that you will remember not only what you learned within the walls of classrooms but also the precious values you learnt outside. Learning does not cease ever. In fact, it is life long process. You must bring glory to yourself and legitimate pride to your Alma mater.
16. The new Education Policy (NEP)-2020 aims to make “India a global knowledge superpower”. The policy proposes to make all universities and colleges multidisciplinary by 2040, set-up Multidisciplinary Education and Research Universities (MERUs), at par with IITs, IIMs, create National Research Foundation (NRF) as an apex body for fostering a strong research culture and building research capacity across higher education, and set-up Higher Education Commission of India (HECI) to function as a single umbrella body for the entire higher education, excluding medical and legal education. There will be holistic undergraduate education with a flexible curriculum of 3 or 4 years with multiple exit options and appropriate certification within this period. M. Phil. courses has been discontinued and all the courses at undergraduate, postgraduate and Ph.D. level will now be inter-disciplinary. The new Education Policy would thus offer many new options to our students to excel.

Ladies and Gentlemen

17. In the Indian Science Congress held in 2001, which I happened to preside, the Hon’ble Prime Minister, Late Shri Atal Bihari Bajpai released a vision document:

“Food, Nutrition and Environmental Security” which focused on demographic front especially defining the critical role of youth including women.

18. The world population is likely to exceed 9 billion by 2050 requiring an estimated 70 per cent more food considering the present dietary pattern. The current population of India is 1.39 billion which is likely to reach 1.51 billion at the current growth rate of 1.13 per cent overtaking China by 2030. On the contrary, India with only 2.41 per cent area supports over 18 per cent of the world's population. As stated earlier, the main challenge is to alleviate poverty and hunger, reduce the impact of agriculture on the environment and global warming, sustain water and land resources, ensure profitability, and economic equity. Therefore, the challenge in future will be to produce more from less arable land and declining land and water resources. Fortunately, beginning with Green Revolution (GR) in mid-sixties, India's food production has increased almost six-fold (308.65 mt). In order to meet increasing demand for additional 15-16 million people each year, India would still need to produce around 55-60 mt more by 2030, i.e., around 5.0-6.0 mt per annum. Considering existing stress on natural resources, this indeed would be a formidable task. Fortunately, good progress is recorded in fruits, vegetables, fish production and poultry production. This has made us self-sufficient and net exporter (almost worth US \$ 40 billion).
19. As per Dr Norman E Borlaug, father of Green Revolution, the three cradles of success were: i) partnership between National Agricultural Research System and the global institutions, ii) good institution and human resource, including progressive farmers, and iii) political will which created required infrastructure and enabling environment. As a result, between 1966 and 2020, wheat production has swelled almost 10-fold, from 11 mt to 108 mt, and rice production increased 5.6-fold, from 21 mt to 117.47 mt, attaining an all-time high food production of over 308.65 mt. At the same time, good progress took place in case of horticultural crops touching almost 329.46 mt in 2020-21. About 80 per cent of the production gains were attributed to yield enhancement which transformed the nation from the state of 'ship-to-mouth' in 1960s to that of 'self-sufficiency'. The White, Yellow and Blue Revolutions also led to the current record production of nearly 208 mt of milk (the highest in the world), 38.4 mt of oilseeds and 15.0 mt of fish production. As a result, India is now among the top three food producers in the world.
20. Globally, around 900 million people live below poverty- almost 100 million got added since COVID 19 pandemic. No poverty and zero hunger are the two major challenges defined by the UN under sustainable development goals (SDG). By adopting sustainable agricultural practices, we do expect to feed our ever-growing population (15-16 million per year – equal to one Australia). Eliminating chronic hunger and malnutrition is our current priority. India is rather slow in this regard compared to other countries and hence we need to be more aggressive to eliminate hunger in its all forms. In fact, half of world's undernourished children live in India. Hence, under such circumstances, how can we consider our growth sustainable?
21. Smallholder farmers, accounting for nearly 86.25 per cent, cultivating around 47 per cent of land and producing almost 50 per cent of total agricultural production, deserve needed policy support. Despite their higher per unit productivity, the extremely small and fragmented holdings are economically non-viable, swelling

the ranks of hungry and poor. Recognizing that access of smallholders to technology, land, other production resources, credit, and capital is limited, a holistic pro-smallholder approach as “FARMER FIRST” supported well by robust policy initiatives is called for.

22. Recently, the UN Climate Change Conference (COP 26) was held in Glasgow which reached a breakthrough agreement setting long-term goals to guide all nations. Hon’ble Prime Minister Shri Narendra Modi has committed to use green energy in India and reduce emissions intensity by at least 48 per cent from its 2005 levels, building on its enhanced renewable energy target of 450 GW, and increasing the share of non-fossil fuel sources in its energy generation capacity to at least 60 per cent, with the possibility of raising it to 65 per cent by 2030. We are advancing fast in solar energy generation. Our efforts on carbon sequestration through agriculture would require greater thrust on agro-forestry and conservation agriculture through sustainable intensification (CASI).
23. On the socio-economic front, we are still at a low paddle of development. In order to meet SDGs by 2030, we shall need to improve our social development index (SDI) especially in the eastern and north-eastern states. Unless we go in for higher capital investments for developing required infrastructure, as was done in the Green Revolution belt, the expected revolution in eastern region would not be possible despite all the potential that exists.
24. While the technology has taken the stride and has left no stone unturned, engineering inputs to agriculture require much greater focus. The synergy of mechanization and agriculture is witnessed in India but it remains uneven. Indian agriculture is dominated by small and marginal farmers thus there is an urgent need of setting-up custom hiring centres for their benefit.
25. Post-Harvest losses generally range from 5 to 10 per cent for non-perishables and 30 per cent for perishables. Agro-processing is a sunrise sector of our economy. Thus, agro-processing sector is quite essential for linking farmers to domestic and global markets. Trained youth from institutions like this shall have enormous options to play prominent role in this direction.
26. Renewable energy sources – solar, wind and biomass are the second largest energy generation sources next to thermal power. This is expected to be the first by 2022 with 175,000 MW as per current goal set by the government. Burning biomass is a cause of pollution while on the other hand biomass can be a good source of energy for the rural sector. The agro- wastes and crop residues have, therefore, considerable potential for energy generation.
27. Information technology has a key role in agriculture among other commodities. It is an instrument for research as well as knowledge sharing. Currently, farmer needs good knowledge and in view of current weak agricultural extension system, ICT offers enormous opportunities. Thus, graduates in ICT have a key role for future growth of Indian agriculture. The Technology Information, Forecasting and Assessment Council of DST has presented ‘Technology Vision 2035’ which foresees the technologies required to fulfil the needs of different sectors.
28. India is among 12 mega biodiversity countries and 25 hotspots of the richest and highly endangered eco-regions of the world. All these resources have unique biotic and abiotic properties. The accelerated loss of this biodiversity in the past

few years is a matter of concern and must be dealt with seriously. For biodiversity management, biotechnology may provide good avenues. Gene and genotype frequency data through genetically controlled markers, population stock structure, hybridization and gene flow can restore, manage and conserve the same.

29. The strength of any organization is determined not by mere numbers but by the technical competence of its human resource. This university should therefore lay greater emphasis on research, technology and innovation development. For this to happen, required incentives, awards and recognitions shall have to be in place, Moreover, the excellence be the only criterion for assessing the performance of faculty and post-graduate students.
30. Globally, there is an increasing concern about the generational gap in agriculture, aged farmers are engaged in farming and their efficiency is reducing. The youth of the nation are the `trustees of prosperity. Youth force is dynamic in nature as most skills and orientations are acquired in this stage. Youth is a huge reservoir of energy which needs to be tapped and harnessed intelligently for the development of society. Youth possess required energy and are capable of adopting new concepts, ideas, technologies which are vital for increasing production. Nations with motivated youth engaged in diverse, secondary and specialty agriculture, supported by enabling policies, have progressed well. India, with a median age of 29 years with largest population of youth (356 million between 10- and 24-years age group) in the world (United Nations, 2014) has only 5 per cent of the rural youth engaged in agriculture though over 60 per cent of the rural people derive their livelihood from farming and allied activities. Hence, a paradigm shift is needed from 'Youth as a Farmer' to 'Youth as Value Chain Developer and Agripreneur'.
31. The drive of digital India is in its full swing. The vision of Digital India is to digitally empower each citizen of the country. The objective is to come out with innovative ideas and practical solutions. It has rightly been said by Don Tapscott "All one needs is a computer, a network connection and a bright spark of initiative and creativity to join the economy". Classrooms are undergoing a fundamental change all over the world. Digital classrooms are changing the way teachers are teaching, and students are learning. In today's age of internet, smart phones and other gadgets, digital classroom is only a logical step in the field of knowledge-sharing and dissemination. We must see how digital classrooms help us to bring down the cost of education, produce and deliver quality lectures to the students and reach out to maximum students who wish to pursue higher education.
32. To achieve the distinctive profile of India, we have the mission of transforming India into developed nation. We have identified five areas where India has core competence for integrated action. (i) agriculture and food processing (ii) reliable and quality electric power, surface transport and infrastructure for all parts of the country (iii) education and healthcare (iv) information and communication technology and (v) self-reliance in critical technologies. These five areas are closely inter-related and if taken forward in a coordinated way, they will lead to food, economy and overall national growth.
33. In pursuit of academics, you should never forget that real education imparts wisdom along with that of knowledge. Good education has to be holistic as stated by Swami Vivekananda "Education is the manifestation of the perfection already

in man". Remember that true education is holistic and as we move on, we need not be merely educated but really educated individuals.

34. India is expected to achieve the ambitious goal of doubling farmer's income by 2022. The agriculture sector in India is expected to generate momentum in the next few years due to increased investments in agriculture infrastructure such as irrigation facilities, warehousing and cold storage, processing facilities and marketing. Also, the scaling of genetically improved crops is likely to enhance productivity. The Government of India targets to increase the average income of a farmer household to Rs 219,724 by 2022-23 from an earlier estimate of Rs 96,703 per annum attained in 2015-16.
35. Our country is undergoing a rapid transformation process. Our government's vision is to take India to its rightful place in the world. This is not possible without the empowerment of the people at the bottom of the pyramid.
36. The country's economic progress is dependent on several critical factors and the most important is the quality of human resources. Higher education is the key to making available a large pool of skilled manpower. Higher education has made significant contribution towards economic development, social progress and political democracy in independent India.
37. Most crucial issue before us is how to continue building our human resource in order to compete globally and serve the diverse needs of society. Emerging challenges will require a new breed of scientists, engineers and managers that have excellence in the field of new sciences.
38. The recent clarion call for 'Skill India', 'Start-up' India and 'Make-in-India' has the capability to make India one of the manufacturing hubs globally. This will enable the development of domestic manufacturing giants by providing an entire ecosystem conducive to low cost and high-quality products.
39. The Integral Institute of Agricultural Science and Technology could exhibit dynamism and excellence in agricultural education, research and extension service. I strongly urge the concerned authorities, ministries and concerned state departments for whole hearted support to Integral University especially to the Integral Institute of Agricultural Science and Technology (IIAST). The institutes imparting agricultural education are helpful in changing the scenario by promoting development and delivering the educational programmes that would enhance the employment potential and build-up an easily accessible and cost-effective knowledge intensive information system.

Dear Graduating Youth

40. Integral University has tremendous strengths that provide a powerful platform for ongoing success. The Hon'ble Founder and Chancellor has ensured to endow with all that you need to excel. You are the custodian of the rich tradition of the University. I have full confidence that you will carry the name of your university to new heights and you will strive hard to achieve your goals.
41. I would like to remind you that you are among the few fortunate persons who had access to educational experience to this esteemed institution. You are already awakened to realities. While you may use this capacity to create wealth and welfare for yourself, it is also your duty to work for welfare of society, for reducing disparity therein and to empower the disadvantaged.

Taking the legacy forward of our former Hon'ble President of India Late Dr A P J Abdul Kalam, I would like you to remember that:

“Always think high and have a dream but then work hard and have perseverance to achieve your Goal”.

42. You all know that given proper opportunities, Indians have excelled in all fields of specialisation abroad. What we need is to provide enabling environment to excel while working in India – some such examples are: NR Narayan Murthy - Indian billionaire and founder of Infosys. Many Indians are CEOs of global organisations such as: Google - Sunder Pichai; Microsoft - Satya Nadella - both worth 600 million; PepsiCo - Indra Nooyi; Citigroup - Vikram Pandit; Master Card - AS Banga. It is gratifying that today about 30 per cent of Fortune 500 companies have Indians as CEOs.
43. While leaving the portals of this institution and going elsewhere, you must take pride of being a graduate of Integral University. Time has come to rejuvenate and recapture the past glory of this country through your character, innovation and services to society. I call upon each one of you to promise to make the best use of your knowledge not only for your own benefits but also for the benefit of society and humanity at large. I wish you all the success in your career.

Finally, I once again congratulate the Chancellor and entire academic council on the success of this 13th Convocation. Let Integral University continue serving and prosper under the leadership of Prof. Syed Waseem Akhtar.

Jai Hind