



# ANNUAL CONVOCATION January 03, 2024

## Convocation Address



## Dr. Sharad R. Gadakh

Vice Chancellor Dr. Panjabrao Deshmukh Krishi Vidyapeeth Akola, Maharashtra

#### :: Venue ::

DIKSHANT MANDAP NEAR UNIVERSITY BHAVAN, NAVSARI AGRICULTURAL UNIVERSITY Navsari=396 450 (Gujarat)

# Convocation Address Dr. Sharad R. Gadakh

### Hon Vice Chancellor Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola

Hon. Governor of Gujarat and the Chancellor of Navsari Agricultural University; Shri Acharya Devvrat ji, The guest of Honour of the nineteenth convocation of NAU, Navsari Shri Raghavjibhai Patel saheb, Hon Cabinet Minister, Agriculture and Animal Husbandry, Rural Development, Government of Gujarat; Dr. Z. P. Patel, Hon Vice-Chancellor, NAU, Navsari; Dr. H.V. Pandya, Registrar; All Hon. Vice Chancellors of other agricultural universities of the state, Members of the University Board of Management and Academic Council; Deans of various Faculties; Professors; Scientists; Invited guests; Representatives of the media; dear students, their parents, ladies and gentlemen.

I feel honoured to be amongst this august gathering for 19<sup>th</sup> Annual Convocation of Navsari Agricultural University, Navsari and to share some of my views and thoughts about Agricultural education, research, and extension.

I am very grateful to Hon'ble Governor and

Vice Chancellor for giving me this opportunity to participate in this highest academic event of university.

At the outset, I congratulate the Vice Chancellor, members of the Board of Management, Academic Council, Faculty, and the Staff of this University on their untiring efforts to take this University to a better position among the agricultural universities of our country.

Today is certainly a historic moment for the university and especially in the lives of all the students, who would be receiving their hard-earned degrees and awards. I was told that today a total of 669 students are going to receive degrees in agriculture and allied sciences. I also thank the parents of these students for their support and often sacrifices they have made to teach their wards.

India is the world's second-largest agriculture producer, and Indian agriculture sector has been witnessing strong growth with an average annual growth rate of 4.6 per cent over the last six years. This has enabled agriculture and allied activities sector to contribute significantly towards country's overall growth, development, and food

security. There has been phenomenal progress in the agricultural sector since mid-1960 through the Green, followed by white, yellow and blue revolutions. The overall food grain production increased from 51MT in 1950-51 to over 329 MT in 2022-23. The production of food grains increased over 6 times, horticultural crops by 11 times, fish by 18 times, milk by 10 times and eggs by 53 times since 1950-51, thus making a visible impact on the national food and nutritional security. India has now emerged as the food secure nation.

Dear students as you know that the union government has granted approval to the National Education Policy- 2020 on July 29 and the NEP will bring about new changes in the employment and education scenario in the country. With NEP 2020. the focus is back on ancient Gurukul pedagogy with a multi-disciplinary holistic education, applied learning and formative assessment. All higher education institutes are said to be research institutes by 2040. Indian government's vision is to increase the gross enrolment ratio from 25.7 percent currently to 50% by 2030 which will boost country's economy and the per capita income. The decision to

increase public investment in education to 6% of GDP is critical to ensure quality education.

In the present context, after implementation of NEP 2020, education revolves around 4 alphabets **A B C D** which includes **A** means adoptive learning more personalized i.e. special functional and professional skill according to subject matter **B** means blended learning with practical hands-on training including experiential learning **C** means collaboration on tech driven framework and finally **D** means digital intelligence. Each University including our University Dr. PDKV, Akola has to plan their courses accordingly in future.

The word TREE in context of agriculture education refers as teaching, research, extension, and entrepreneurship development. Which means teaching for human resource development, research including basic research for knowledge development and applied research for development of technology, devices and system etc. extension or technology outreach education for technology transfer and finally entrepreneurship development at students' level so that they will become job provider rather

than jobs seekers. All these four pillars are there in most of the state Agriculture Universities.

In present context education is needed for quality assurance as per standards and guidelines and to meet different stakeholders' expectations. Quality human resource development. Maintaining global standards and enhancing competitiveness. Strengthening in the Students READY program includes experiential learning hands on training Implant training and industrial attachment and Rural Agriculture Work Experience (RAWE) also introducing Industry READY (rising excellence and attaining desired attaining desired yardsticks as per requirement of industries program). For teachers, it is their positive attitudes and passion for work and bringing perfection in teaching methodology so that timely action in teaching learning system with full transparency shall be maintained.

For quality assurance University should move for National and international ranking. Motivating, attracting, and retaining foreign students in some of unique courses should be priority in order to initiate internationalisation of our education. Promoting higher quality research is need of hour for higher education institutes. All courses should be designed to incorporate Traditional knowledge, Present technologies, Increasing talent and Federating students into trading or business.

In addition, research in agriculture sector is needed for increasing production, productivity, and profitability and therefore

Emphasis should be given on demand driven research and its relevance social relevance on local problems. For this dual program should be taken up with foreign institutes. Respond reset and rebound concept for converting research output into business outcome shall be our priority. There is a need of greater emphasis on industry based vocational and specialised courses like in USA and Canada and for that academic industry interaction in our education system needs to be strengthened.

Agricultural Universities have played an important role in an attainment of food security in the country. It has helped place Indian agriculture on stronger footing However future challenges in agriculture are much more formidable.

I wish to share here some serious concerns. The problem of land and water degradation is becoming a key constraint in augmenting Agriculture production. Available estimates reveal that nearly 120.72 million hectors of land in the country are being degraded due to soil erosion and about 8.4 million hectare has soil salinity and waterlogging problems.

The water table is lowering steeply in most of the irrigated areas and water quality is also deteriorating due to leaching of salts and other pollutants.

The demand for food and processed commodities is increasing due to growing population and rising per capita income. The country has current population of 1.428 billion and is going to be the most populous country of world by 2030 with predicted more than 1.5 billion people and 1.69 billion by 2050. This growing population will require more resources including food, fibre and wood. Feeding this huge population will be a challenge in view of limited natural resources having 2.3% global land and 4.2% water that are further diminishing and degenerating, There are projections that demand for food grains would increase from 329 million tonnes in 2023 to nearly 345 million tonnes by

2030. Hence during the current decade production of food grains needs to be increased at the rate of 5.50 million tonnes annually. Let us remember the history repeatedly tells that only a food secure nation can be a stronger nation.

Our oilseed production has got trapped at 37 million metric tons. we need to break this stagnation and aim to increase the output by at least 2 million tonnes a year. India is the second biggest oil importer and is highly dependent on imported crude oil.

The net imports of crude fuel rose from 171.73 MT during 2011–12 to 226.95 MT during 2020–21. "We have surplus sugar, corn and rice. It is an important time for the country to opt for alternative fuel particularly for ethanol, biofuel. Agriculture should be diversified into the energy and power sectors and future farmers would be the fuel provider.

Moreover, fast changing dietary patterns, consumer demands, climate change and it's adverse impact are other challenges. Some of the challenges that are faced by farmers includes limited use of modern farming methods, labour shortage, inadequate mechanisation, and

migration of agriculture labour to non-farm jobs. Over 86% of the farmers having less than average land holdings of 1.25 hectare, but their income also needs to be doubled. Increasing income would require technologies and innovations by which they can economize on cost of inputs and earn more income by higher productivity, product quality and by linking them to value chains and markets. At the same time, increasing in agricultural production and productivity should be holistic, sustainable environment friendly safe and supportive to animal and human health.

The Agriculture University can play an important role here. I feel privileged to mention that Hon'ble Vice Chancellor Dr.Z.P.Patel and his University Team have done exemplary work on the above mentioned issues . Accordingly notable research is witnessed in NAU on diversification of crop production, development of climate smart varieties of different crops, climate smart production technology through its 25 research stations at 15 different locations in South Gujarat, and 15 regular AICRP schemes and 4 voluntary AICRP centers.

Production of biochar and its use in agriculture for the earning carbon credit as well as soil reclamation is another important achievement where this university is leading nationally. The nationally acclaimed "Naurojistone House Fruit fly Trap" designed, developed, tested, popularized, and registered from the Patent Office, Government of India, is an excellent work in the direction of climate change. The work of the university towards tissue culture, bamboo processing and training of tribal artesian, postharvest technology, novel banana pseudostem sap production, biofertilizers & biopesticides, floriculture, Information technologies, etc are highly praiseworthy and keep the university at admirable position. I am informed that; this university has developed several software and particularly the software for the research management. Here, I like to mention that the return on the research and development investment in agricultural sector is still highest ie. more than 10 times. Therefore, India has to substantially increase investment in research and development in agriculture. Till date, NAU has generated a total of 114 varieties and 842 technologies for the benefit of farming

community over last 20 years including the Gujarat first protein rich rice variety. My compliments to the university staff for this great achievement under the vision of present and past Vice-chancellors and the support of the State Government.

I thank and appreciate this University for taking excellent initiatives towards organic farming and has remarkable contribution in all the facets of organic agriculture.

We are being celebrating Millet year from 2023. The government under National Food Security Mission- Nutri cereals is creating awareness among farmers for nutri cereals millets such as Ragi, Sorghum, Bajra and small millets through demonstrations and trainings. Nutri cereals are known for nutri rich contents having characteristics like drought tolerance, photo insensitivity and resilient to climate change. Likewise future food grain production should emphasize on Biofortified foods, especially grains, as it plays a critical role in addressing malnutrition and promoting public health.

In the field of extension or technology outreach we much concentrate on developing

new models of effective technology transfer to farmers for bridging the wide gap between the potential and realized productivity. The role of ICT and digital technologies needs to be promoted in all extension programs for faster, accurate and timely dissemination of knowledge of not only technology but marketing intelligence as well, then the objectives of electronics National platform like e-NAAM would be fulfilled. The government wishes to reduce the use of fertilisers by 20 percent; water use by 25 percent; and methane emission by 45 percent and doubling the income of farmers as desired by our Hon'ble Prime Minister of India .To my opinion it is possible in three ways.

Firstly we should make efforts to double the productivity of crops in villages by transferring all recommended technologies evolved by Agricultural universities and ICAR institutes to the farmers in support with line departments. This activity could lead to 33% increase in farmers income. Secondly, we should try to reduce the cost of cultivation by 50% in through mechanization, micro irrigation and other practices. These could be able to increase farmers income by 33%. Third the remaining 33 per cent

income rise of farmers could be possible through developing value chain from production, harvesting, grading, processing, packing and marketing.

And finally depending on the agro climatic conditions and resources available, adoption of integrated farming, organic farming, and agricultural diversification from cereal dominant crops to high value horticulture, apiculture, live stocks, goatary, poultry, sericulture and fisheries could help in getting sustainable income to the farmers.

However, if the youth does not enter this field as they don't consider agriculture a viable career, then neither the government nor the ageing farmer population is capable of achieving these targets on their own. Retaining youth in agriculture is crucial for the future of the agricultural sector. With the aging farming population and the increasing global demand for food, it is imperative to attract and retain young talent in agriculture. With 66 percent of its population (808 million) below the age of 35, India has the world's largest youth population., out of which 75% live in rural areas. Migration of rural youth to cities is

around 45% in the country, and it is estimated that only about 5% of youth are engaged in agriculture. Therefore, there should be greater emphasis on developing entrepreneurship among students. The slogan of the students should be **Job Provider not the job seeker** 

To support this, the ICAR schemes like ARYA and Student READY (Rural Entrepreneurship Awareness Development Yojana) and Govt. of India schemes like Skill India, Start-up India, Pradhan Mantri Kaushal Vikas Yojana are also playing significant role in capacity building of farming community, especially the rural youth. If business motive can be effectively induced into this component, then successful agripreneurs can be developed in rural areas. Effective hand holding support and incubation should be provided to agri-startups which will attract youth towards agriculture and reduce their migration to urban areas.

## Dear students

Being graduated from this esteemed University, I urge all of you to stay connected with your alma mater and contribute back to the institution that has nurtured and shaped you. Let

me end my address by giving you some advice based on my life experiences, and I hope you will not mind. First of all, if you think you should shift your career from agriculture to some other profession, do it without feeling guilty. You may join Indian civil services or state civil services but do not forget to help farmers because it is he who feeds us . If you are administrator or police officer, always try to help him. Remember farmers do not get casual leave, earn leave or medical leave. They work all 365 days. No matter what you do in life ,knowledge of agriculture will help you in performing your job better. If you have a liking for business, take a job in a business establishment and learn skills so that you could set up your own agri business. If you have family business, go ahead and join it, and then expand it to include agri business. If you have an excellent academic career, go for jobs in research and teaching. For the first 15 years of your career do not look at your wrist watch. In other words, work hard for long hours. Associate yourselves with seniors who are considered much more successful than others and who are respected more than others.

Lastly, Remember that Navsari Agriculture University has prepared you well with a powerful

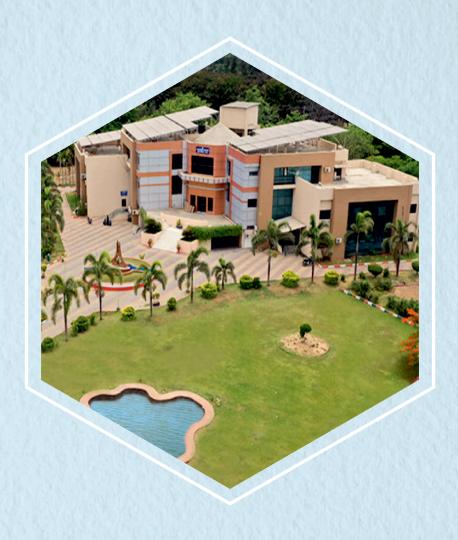
mind full of intellectual capabilities for whichever direction you take from here. Mahatma Gandhi once said" you can chain me, you can torture me, you can even destroy this body, but you will never imprison my mind," Believe in yourself and the power of your mind, you will achieve your goal no matter how many obstacles get thrown your way.

Once again, I extend my hearty congratulations to all the graduating students, awardees, faculty and farmers.

I express my sincere thanks to the authorities of this esteemed university for inviting me to the convocation function.

Jai Kisan, Jai Hind....Thank you.

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