

**GULBARGA UNIVERSITY, KALABURAGI**

**36th Annual Convocation**

February 27, 2018

**CONVOCATION ADDRESS**

by

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His Excellency, The Chancellor of Gulbarga University and Governor of Karnataka, Shri Vajubhai Rudhabhai Vala, Pro-Vice Chancellor and Hon'ble Minister for Higher Education, Shri Basavaraj Rayaraddi, Vice-Chancellor Professor S R Niranjana; the members of the Syndicate and Academic Council, Deans of all faculties, Chairpersons of departments, distinguished colleagues on the dais, distinguished faculty of the University, dear students and Ladies and Gentleman,

It is indeed an honour and privilege for me to have been invited for addressing the 36<sup>th</sup> convocation of the University. First of all, I want to congratulate all those who have qualified to get their degrees at this convocation. You have worked hard all these years to reach this goal, and it is a red-letter day in your life. Your parents would be truly proud of your achievements, and I wish all of you the very best.

I do hope you are all aware of the rich political and cultural history of this region. The history dates back to 6<sup>th</sup> century. The region was successively ruled by Rashtrakutas, Chalukyas, Kalaharis, Yadavas, and Hoysalas. Around the end of 12<sup>th</sup> century, the Kakatiya kings of Warangal came into prominence, and the present Kalaburagi and Raichur districts became part of their domain. Subsequently, the entire Deccan came under the rule of Delhi Sultanate. This was followed by the Bahmani Sultanate, when Gulbarag was chosen as the capital in 1347. Vijayanagara Empire rose and flourished as a champion of protecting Hindu culture for around 250

years. It fell to the erstwhile Bahmani rulers. Eventually, the last of the Sultanates fell to Aurangzeb and came under the rule of the Moghul Empire in the early part of the 18<sup>th</sup> century. With the decline of the Moghul Empire, Gulbarga became part of the Hyderabad state, which became part of the Indian Union in 1948, an integration brought about by the indomitable Sardar Vallabhai Patel. In 1956, Gulbarga district became part of the new Mysore State and eventually the State of Karnataka.

I am amazed to read the historical, cultural and knowledge heritage of this region. The Gulbarga university leaflet describes the edicts and artefacts strewn all over the district, ranging from Ashoka edicts and slab inscriptions at Siddapur and Sannathi to World heritage monument at Hampi, expounding the integrated and composite culture of this region. Even more exciting is to experience the knowledge heritage governing literature, spirituality, science and social reforms. It is virtually impossible to do justice to the huge amount of information available. But, 'Kaviraja Marga', the first known Kannada literature by Srivijay in 850AD, the Mathematical works of Mahaveeracharya, the revolutionary movement brought about by Basaveshwara (12<sup>th</sup> century) in terms of social equality, dignity of labour and respect for women, the 'dasa' movement embellished by the 'Pithamaha' of carnatic music, PurandaraDasa, Madrasas established by Mohammad Gavan (14<sup>th</sup> century) and Sufism established by Hazrat Khwaja Banda Nawaz (15<sup>th</sup> century), educational institutions exemplified by Agraharas, Ghatikasthanas and Mathas ( around 1000 AD) , expounding the traditional 'Gurukula' systems, give a glimpse of the rich heritage. In the modern day context, this heritage is reflected by the Sharana Basaveshwara temple, heralding a famous saint of the 19<sup>th</sup> century, Buddha Viharas, Khwaja Banda Nawaz Dargah and Ladle Mashyak and the fort built during Bahmani rule, besides numerous other structures. The city of Flowers (Gulbarga) became the city of Forts (Kalaburagi) on November 1, 2014. Thus the university of Gulbarga, established in 1980, is a legacy of the great heritage of this region. It has rightly chosen its logo as 'Vidyeye Amrutha' translated as ' Education is Nector'. But, considering the enormous canvas of heritage, I would translate the logo as 'Knowledge is Bliss'.

But, it hurts me to read “In 2006 the [Ministry of Panchayati Raj](#) named Gulbarga as one of the country's 250 [most backward districts](#) (out of a total of 640). It is one of the five districts in Karnataka currently receiving funds from the Backward Regions Grant Fund Programme (BRGF)”. I do not want to get into the historical reasons for classifying Gulbarga as a backward district in terms of economic and social parameters. But, the district is considered as industrially backward in general with the predominant vocation being agriculture.

I notice that the major industries are agro-based, including the sugar and cotton-based textile industries. The other segment seems to be based on mineral wealth, cement industry in particular. The area is drought-prone with dependence on dry-land agriculture. The district is referred to as the ‘Tur’ bowl of the state with red gram occupying 65.7% of the area under the crop in the state. Statistics shows that 67% of the population depends on agriculture for employment, but only generating 31.7% of the state income. Progress has started happening through reviving the industries and diversifying agriculture to horticulture, as an example.

I believe that Gulbarga university has a major role to play in the revival of the district in terms of economic and social growth. Science and Technology should be used as a weapon to alleviate hunger, malnutrition, farmer distress and environment pollution. I notice that the university has 38 PG departments, besides 2 PG centres, with 3500 P G students, M.Phil and Ph.d. degree holders covering all branches of physical, natural and social sciences. The present strength of 79 faculty members looks rather small for rendering justice to train and mentor the future generation of this state and country.

Information Technology (IT sector) has caught the attention of the younger generation for professional growth. While, it does make inroads into several sectors such as education, communication, commerce, entertainment, devices etc, I think we need core technologies to ensure food, nutrition and health security of people. Biotechnology (BT) can offer solutions to increase agricultural productivity, enhanced nutrition, health security through the use of diagnostics, vaccines and drugs. Besides, secondary agriculture where biomass obtained after harvest can be used for the

generation of Biofuel and several chemicals of industrial importance. Students should be trained to have hands on experience so that they are ready for the industry. Karnataka is a leader not only in the IT sector, but also BT sector. As a member of the BT Vision Group, I had suggested for the Biotechnology Finishing School (BTFS) by the State, where students with PG degrees would be exposed to industry-oriented subjects for 6 months followed by 6 months of internship in industry. This was accepted and the first five years of BTFS experience indicates that 70% of the candidates were absorbed in the industry. In the second phase, this would be continued as Biotechnology Skill Enhancement Programme (BiSEP). I am very happy to record that Gulbarga University is a partner in both these schemes and one of the few establishments selected by the State for this purpose. It is a significant achievement for the University. I chair the Technical Committees of BIRAC (Biotechnology Industry Research Assistance Council), a section 8 company, of the Department of Biotechnology, Government of India. I am happy to let you know that BIRAC has supported around 700 projects in around 500 industries and 100 products ranging from diagnostics, devices and agricultural products have become a reality. The turnover in BT industry is around 11bn USD at present, and the Government has set a target of 100bn USD by 2025. Karnataka accounts for 35% of the projects and turnover. A major emphasis of our Prime Minister is on start-ups, where qualified young Indians can come together and develop technologies and products and become entrepreneurs themselves. I am proud to tell you that many start-ups have been generated in the BT sector and again Bengaluru is the leader. I want to suggest that Gulbarga university sets up incubators for housing start-ups, who would catalyse innovation in different sectors, eventually contributing to the welfare of the society. Our state government has also programmes to support start-ups and BT sector. Thus, you have options to get support from the State as well as the Centre for innovative ideas to generate the concept of entrepreneurship among your young post-graduates. Application of technology to efficient management of soil and water along with Biotechnology can rejuvenate agriculture in the district.

While, I am excited about a new India with world-class indigenous technology capabilities, I realize this can come only from hard-core basic science and research. Great leaders of Science and Engineering of Indian origin such as C V Raman, Ramanujan, Sir M Visvesvaraya, J C Bose, Vikram Sarabhai, Hargobind Khorana, Chandrasekar and many others should inspire you to take to you a career in Science. Science is exploding in the modern day context. In my own field of Molecular Biology, many applications such as gene therapy, stem cell therapy, gene-editing, synthetic biology etc are the outcome of years of dedicated research in basic science. I am not so excited when I find that S&T and research is not a priority for the younger generation or their parents. But, from my own career, I can assure you that Science can help you to lead a decent life, if not a life of opulence. Apart from job opportunities in private industry and universities, you should be aware that there are hundreds of public sector laboratories under the Department of Science and Technology (DST), Department of Biotechnology (DBT), Council of Scientific and Industrial Research (CSIR), Indian Council of Agricultural Research (ICAR), Indian Council of Medical Research (ICMR), Department of Space Research, Department of Atomic Energy (DAE), Defence Research and Development Organization (DRDO) and State research units looking for committed young men and women to undertake research for solving problems of the country. I want to emphasize that research in social sciences is also important to translate the findings from the laboratory to the field in all areas of relevance. Above all monetary gains, it will give an immense satisfaction that you have a contributed a small bit towards the alleviation of human suffering. In my own career, I had opportunities to head an industry, become Director of an International Research Laboratory, Secretary of DBT etc, but I chose to remain at IISc to stick to a career in research and I still continue to do research to tackle malaria. I want to make an appeal to the community to believe in S&T and also for more support from the Government to foster this segment.

I want to appeal to the students of this region to have confidence in their ability and skills. You are no less intelligent than the kid from the metropolis. But, in general, I find students from rural communities lack in confidence, although their knowledge

of the subject is as good as anyone else. You should work hard and improve your communication skills. Don't make language as a barrier. Develop exemplary skills not only in Kannada, but also in English and Hindi. Tomorrow you will be an Indian, globe-trotting to give lectures or sell your goods. Finally, I want to make an earnest appeal to all of you not to forget this soil. Despite difficult circumstances, your parents have supported you, your teachers have mentored you and the society has stood by you. Therefore, you need to give something back to the society. Humility is a virtue, not a weakness. We are but small specks in this cosmos, but still can make a mark for the society to remember. May God Bless you all with the very best in life!

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