# HIGHER EDUCATION IN INDIA (PRESENT STATUS AND A WAY FORWARD)

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Brief Academic Profile

Ex-Professor & Founder Head, Microbiology, C.C.S. University, Meerut, with teaching & research experience of 42 years in Microbiology & Biotechnology; known for his research contributions on "Protection of Human Hair Against Fungal Infections" and "Development of Eco-friendly Biobleach Process for Pulp and Paper Industry." Recipient of "Young Scientist Gold Medal" of I.B.S. (1993); Prof. Hiralal Chakravarty Award of Indian Science Congress Association (1994); Commonwealth Academic Staff Fellow in U.K. (1982-83; 1993-94); DAAD Fellow, Germany (1986-89; 1990-91; 1997); Supervised 32 Ph.D. and more than 75 M.Phil., published more than 110 research papers; Participated in more than two dozen International Conferences abroad, chaired various academic sessions, Member of more than a dozen of academic societies; Dean, Faculty of Engineering (2002 and 2005); Founder Coordinator at CCS University, Meerut-Applied Microbiology, Bioinformatics, Medical Microbiology, Food Microbiology, Safety & Quality Control; Also worked as OSD-Legal; Acted as Member of various Committees; Academic Council, Executive Council, Board of Studies, Selection Committees etc.; specialized in academic reforms in educational field; Joined JNU as Pro Vice-Chancellor in March, 2017.
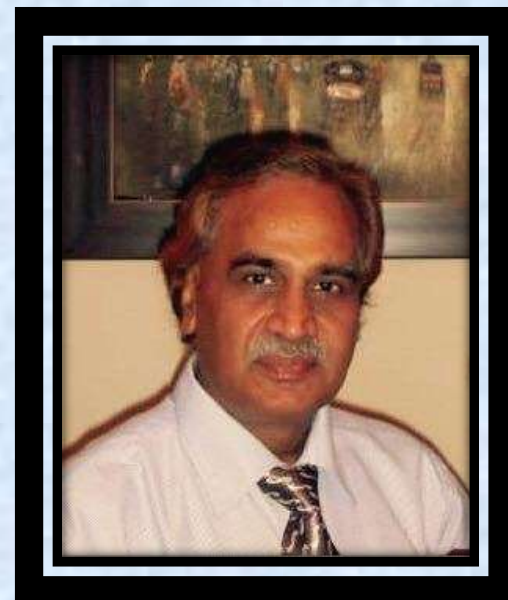

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The Perspective

- *Higher Education in India is moving on the maturity curve*

- *Institutions from A+ category to A , B , C and so on……*

- *Last 20-23 years have seen mushroom growth in B and C categories of institutions imparting higher education in Basic & Applied Sciences; Humanities; Management; Medical; Technology and other disciplines.*

Reasons:
- *Institutional Expectations*
- *Students' ambition, and*
- *Corporate expectations*
- *Government policies*
- *Societal needs*

Higher Education in India: Bird's Eye View
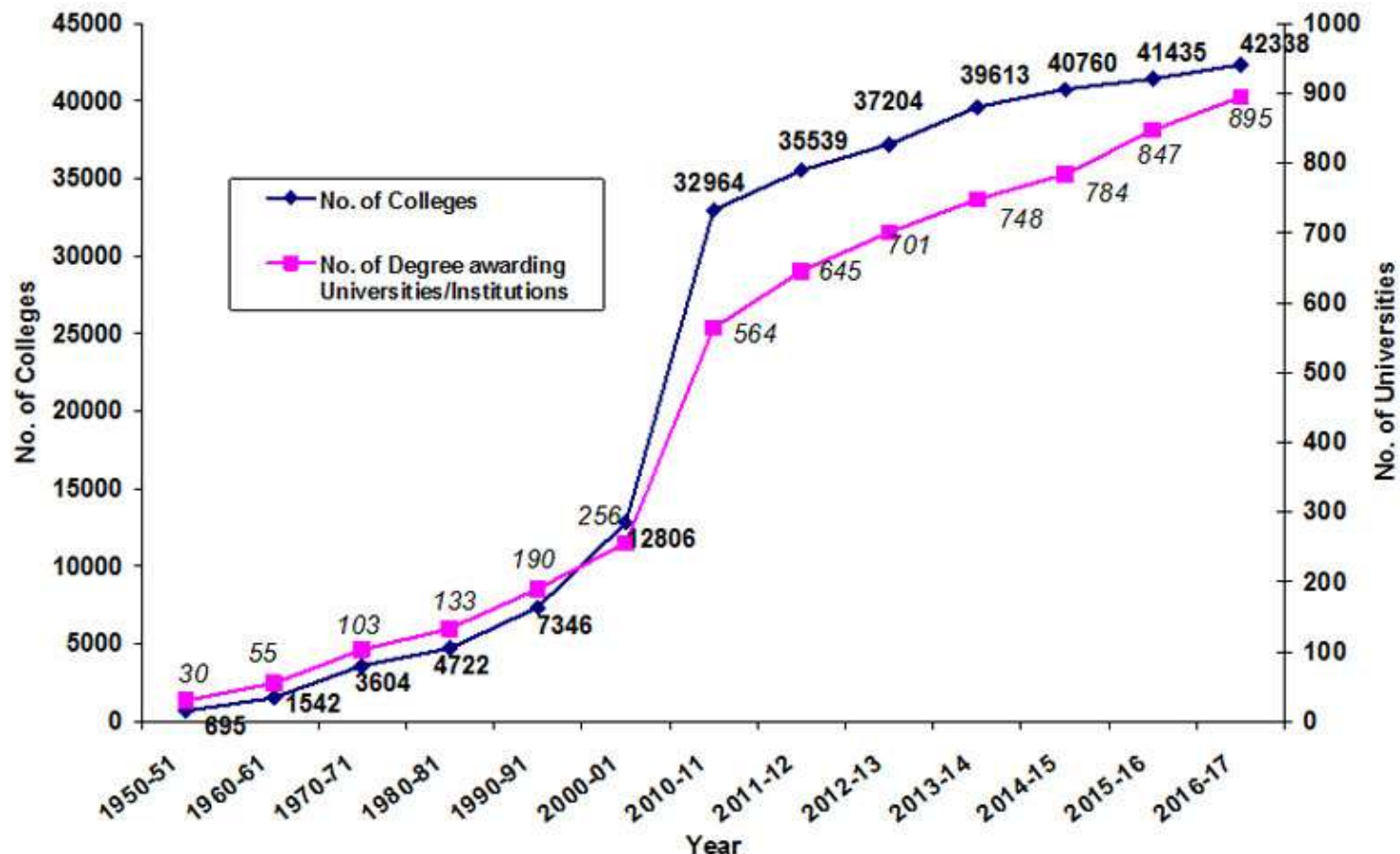
- *Number of institutions are going higher year by year. However, the student ratio per institution is going down if keep the number of courses constant.*

National Knowledge of Commission, India

- *40 percent of the Indian population is under 18*

- *Indians between age group 18 to 24 years, only 7 percent enter a University. Government sources 11%*

- *The Commission recommends creation of 1,500 new Universities in India over the years (which is still lesser in comparison to US which has 3,650 Universities for its 301 million; Japan has 4,000 Universities for its 127 million people)*

- *The Commission estimates that 160,000 Indians are studying abroad, spending an estimated $4 billion a year.*

Challenges

- *Orientation of the Governing Board Members*
- *Quality of students admitted*
- *Quality of Faculty*
- *Low level of concern for quality*
- *Lack of Quality Research leading to class room inputs*
- *Poor level of Industry Interface*
- *Outdated Course structure & Curriculum*
- *Lack of Experiential learning*
- *Less Focus on Professional Skill Building*
- *Vast difference in infrastructure of rural and urban institutions*
- *Less job opportunities*

Opportunities

Economic Outlook

- *Need of Corporates- Professionally skilled Junior and Middle level social workers, engineers, managers and trainers.*

- *Focus on emerging domain of studies such as Big Data and Analytics, Artificial Intelligence, Machine Learning, Bio-sensors, Food Processing, Cold chain management, Organic farming, Post harvest technology, Digitalization and Informatics etc.*

- *For placement with big companies also keep demand expected from E-commerce, MSME , NBFCs, Venture Capitalists and Entrepreneurs, NGOs and Social Sectors in consideration*

- *Focus on Quality Research and Consultancy*

Steps to be Taken

- *More reliable and socially acceptable National level accreditations should be Aimed for the University and Constituent Institutions.*

- *University and constituent Institutions should aim for International Accreditations*

- *Should develop quality assurance processes*

- *Focus on flexibility and creativity*

- *Industry relevant curriculum with periodical review*

Steps to be taken.........Contd.

- *Industry Collaborations – courses and live projects.*

- *Research Oriented faculty having sound background.*

- *Innovative pedagogy for more experiential learning, hands-on exercises and simulation*

- *Projects in Social Sector*

- *Cross-Discipline Courses*

- *Online Self study Courses*

RESTRUCTURING OF COURSES

- *Stage 1:* *Identification of strength and weaknesses of the ongoing courses, extensive discussions with faculty, feedback from the present students and alumni*

- *Stage 2:* *Formulation of specific goals- merger of courses wherever required, Closure of unviable courses and transfer of present students to other related courses.*

- *Stage 3:* *Planning for new viable courses, short term professional skill based certificate, diploma courses (in collaboration with local industries / organizations). These courses will be run simultaneously*

Strategies for Quality Education

- *Introduction of True CBCS with addition of adequate number of online courses already available on "Swayam", "Swayam Prabha" NPTL and other portals as per UGC guidelines.*

- *Introduction of "Exit System" in course curricula to attract the students.*

- *Professional Skill Enhancement Courses.*

- *Compulsory courses on Communication Skills and Personality Development, class seminars, debates, group discussions on current topics.*

- *Inter-disciplinary academic discussions, sports, cultural activities, creativity.*

- *Focus on placements and word of mouth (WoM) and e-WoM*

Enhancement of Practical Skill

- *PRACTICAL-* *Greater emphasis on practical, regular checking of their practical note books, practical by preparing own reagent (not by kit to reduce the costs), provide written protocol, well planning.*

- *PROJECTS-* *In house or outside in national and reputed institutions compulsory project 4-6 months, industrial training,*

- *WORKING M.o.U.s* *with reputed National and International Institutions/Universities.*

- *RESEARCH-* *Residential research scholars will be encouraged by way of scholarships who will in turn assist in teaching especially practical classes.*

GLOBAL EXCHANGE PROGRAMMES

M.o.U with Inrious International Agencies like IAESTE, British Council.

Strategies for Quality Research

- *Preference for NET/GATE passed students in Ph.D.*

- *Grant of Scholarships to Resident Research Scholars who will assist in teaching.*

- *Course work through workshops, assignments and contact by digital means.*

- *Twice a year entrance test for admissions followed by personal interview*

- *Pre-submission Seminar in presence of the Vice-Chancellor to ensure quality thesis*

- *Regular monitoring of progress (six monthly)*

- *Quality Publications in peer reviewed journals*

- *Collaboration with other Institutions for Ph.D.*

Branding of The University

- *SEMINAR/CONFERENCES- Regular seminars, symposia, conferences will be held on current burning topics.*

- *GUEST LECTURES- By eminent national and international personalities.*

- *SOCIAL SERVICE- The Courses like Law, Social Sciences, Commerce, Food Technology, Biotechnology etc. will be linked with social service*

- *PARTICIPATION IN NATIONAL EVENTS- Regular participation of students and faculty in national events like Polio, WHO awareness, international days like Human Rights, Women Empowerment, Yoga etc.*

- *UNIVERSITY NEWS PAPER (DIGITAL)- A weekly digital news paper for educating people will be launched.*

- *SOCIAL MEDIA- Very active presence of the University on Facebook, Twitter and other social sites, Blogs.*

- *SOCIAL AWARENESS- Food Quality Testing, TB, HIV, Vaccination, Legal Clinics, Participation in Lok Adalat, Raising of social and ethical issues, Environmental protection, Swachchha Bharat Abhiyan, Unnat Bharat Abhiyan, Health and Hygiene Awareness.*

Strategies for Admissions

- *Aggressive marketing through social media,*
- *Summer training/workshops to outsiders,*
- *Career counseling in other Institutions,*
- *Placements,*
- *Frequent interaction with students,*
- *Monitoring of quality education,*
- *Minimize negativity,*
- *Word of Mouth,*
- *Students and Parents Satisfaction-top priority,*
- *Image of University in Society,*
- *Branding of the University.*

Policy Issues

- *Board of Management: All policy decisions shall be taken by the Board of Management/Chancellor including the opening and closing of a course, purchase of equipments, building construction and development of other infra-structure*

- *Financial Discipline: Strictly as per the directions of the Chancellor and/or Board of Management*

- *Employment: Strictly as per the decision of the Chancellor and/or Board of Management*

- *Academic Decisions: All academic matters will be dealt through Board of Studies / Academic Council*

- *Examination: Registrar shall be the Controller of Examinations and shall work as per the policy framed by the Examination Committee, the Vice-Chancellor and the Chancellor. Examinations shall be conducted at due time and the results shall be declared in time.*

- *Academic Session: Academic calendar shall be prepared and implemented strictly in order to start and end the session in time.*

FUNDS GENERATION

- *NATIONAL SOURCES- Potential faculty members will be encouraged to submit viable Research Projects to UGC, CSIR, DST, DBT, ICAR, ICMR, DOE, DRDO, AICTE, ICSSR and other organizations.*

- *INTERNATIONAL- Potential faculty members having academic contacts abroad will be asked to prepare projects of mutual interests to submit to various international organizations and also through DST/DBT.*

- *FUNDING FOR STRENGTHENING TEACHING FACILITIES- Proposals will be submitted to UGC, DST and AICTE for providing funds to strengthen teaching facilities. Under this scheme, funds for our Gangoh Campus can be easily obtained under "schemes for rural areas"*

The Statutory Bodies/Councils

- *All India Council for Technical Education (AICTE),*
- *Distance Education Council (DEC)*
- *Indian Council for Agriculture Research (ICAR),*
- *Bar Council of India (BCI),*
- *National Council for Teacher Education (NCTE) Rehabilitation Council of India (RCI)*
- *Medical Council of India (MCI),*
- *Pharmacy Council of India (PCI)*
- *Indian Nursing Council (INC)*
- *Dentist Council of India (DCI)*
- *Central Council of Homeopathy (CCH)*
- *Central Council of Indian Medicine (CCIM)*
- *Distance Education Bureau*

REGULATORY AUDITS

- *Compliance of NAAC Recommendations- All recommendations of NAAC report shall be implemented in true sense*

- *IQAC – Regular internal academic audit of the Departments (Proforma developed)*

- *Compliance of all norms of UGC, AICTE, MHRD and all other statutory bodies*

- *Strict Financial Disciplines – no expenditure without prior approval of the appropriate authority.*

- *Proportional expenditure as per income of the specific course.*

Areas of Distinction

- *Provide opportunities for many departments — even small ones — to pursue excellence and depth.*

- *Help attract the strongest new faculty members (scholarly communities = magnets).*

- *Motivation of talented faculty*

- *Encouragement for improvement of academics of the faculty*

- *Encouragement of students*

- *Regular contacts with parents of students*

- *Tutorial classes for slow learners*

- *No communication gap between Univ. and students*

- *Effective and informative website, preferably App of the University for better interaction*

- *Strong ties with alumni*

- *Regular Counseling of the students for their career including opportunities to study and work abroad*

- *Exploration of Competition classes e.g. UGC/CSIR NET; IAS/PCS*

PROVIDING LEADERSHIP

- *To strengthen the role of Shobhit University in the state's public education system.*

- *Build a strong, stable Department of Biosciences by:*
  - > *cultivating contributions from many departments*
  - > *enhancing communication with industry.*

- *Translate expertise into public policy involvement.*

- *Explore new possibilities for building Shobhit's industrial research infrastructure and entrepreneurial.*

- *Develop better mechanisms for cultivating leadership skills in early- and mid-career faculty members.*

- *Enhance opportunities for students to build leadership.*

- *Enhance interaction with all faculty members to build a strong academic force in the University*

Concluding Remarks

- *Objectives of the higher education need to be redefined with reference to social perspectives.*

- *International accreditations is need of the hour.*

- *Industry-Academia Gap requires Re-thinking and Experiential Learning needs to be brought in.*

- *Re-designing of course curriculum on regular interval as per global demand.*

- *Faculty skills are the backbone, need to be strong and further strengthened*

- *Admission Criteria should be re-formulated.*

- *Motivation and encouragement of committed faculty*