



AN ECONOMETRIC ANALYSIS OF HIGHER EDUCATION IN INDIA AND KARNATAKA - ISSUES AND CHALLENGES

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ABSTRACT

Higher education system in India includes both public and private universities. Public universities are supported by the Central government and the state governments, while private universities are supported by various bodies and societies. Research Methodology: Statement of the problem: Higher education sector is facing medium of instruction, poor quality, lack of funds, lack of innovative practices. To make solutions to these problems an attempt made in this study. Overall objective of the study: To examine the issues and challenges of higher education in India. Objectives of the study are: 1. To examine the higher education stages in India. 2. To examine the issues and challenges of higher education in India. 3. To examine issues and challenges of higher Education in Karnataka. Nature and Source of data: The study has been conducted with the help of primary as well as secondary data. Primary data collected with the help of interview schedule. Secondary data collected from Economic Survey, National and International Journals, Government Reports and Internet. Sample design: Sample size is 50. Simple Random sampling adopted for the selection of sample. Statistical tools applied: Likert scale applied for the statistical analysis. Student t test adopted for Regression model. In the last 30 years, higher education in India has witnessed enormous and substantial growth. The increase in the number of institutions is, however, disproportionate to the quality of education that is being dispersed. Unplanned over-expansion is often criticized as one of the biggest downfalls of Indian higher education. Many institutions suffer from subpar quality and a lack of funding. As a result, entry into the top institutions is highly competitive and translates into a contest for higher entrance test scores and better private coaching institutes.

KEY WORDS: University Grants Commission (UGC), National Institutional Ranking Framework (NIRF), Deemed Universities, Indian Institute of Technology (IIT), All India Institute of Medical Sciences (AIIMS).

1. INTRODUCTION

Higher education system in India includes both public and private universities. Public universities are supported by the Central government and the state governments, while private universities are supported by various bodies and societies. Universities in India are recognized by the University Grants Commission (UGC), which draws its power from the *University Grants Commission Act, 1956*. The main governing body is the University Grants Commission, which enforces its standards, advises the government, and helps coordinate between the center and the state.

2. REVIEW OF LITERATURE

1. Y. Praveen Kumar International Journal on Science and Technology (IJSAT) made study on Indian Higher Education Issues and Challenges. This article highlighted emerging issues and challenges in India's higher education (HE) sector, particularly in regional and semi-urban settings. The research paper has tried to focus on the problems identified with the understudy and the problems identified with the most extensive education system in the third world, with more than five million students in higher education is more than 12,000 colleges and universities. An academic has rightly pointed out that Indian higher education, in pockets of volatile exams, has poor-quality colleges and the best graduates. Yet, unemployment at home is a reality for some. Legislative issues often suppress grant and contingency criteria in many organizations. India today faces

many problems related to a lack of education, poverty, unemployment, income inequality, regional imbalance and global emergencies.

2. B. Sheeba Pearline and K. Kaleeswari made study on Indian higher education system: Challenges and Prospects. The study has focused that the higher education system in India has witnessed remarkable growth over the past few decades, becoming one of the largest systems in the world. However, the sector faces significant challenges, including issues of quality, accessibility, funding, and employability. This paper explores the current structure of Indian higher education, its historical evolution, and the key challenges it faces. It also discusses government initiatives and policy reforms aimed at improving the quality and reach of higher education. The paper highlights the role of private institutions, technology integration, and international collaborations in shaping the future of higher education in India. Finally, it offers suggestions for enhancing the overall efficiency and global competitiveness of Indian higher education institutions.

3. Shri Singh conducted study on Higher Education in India: Status, Challenges and Remedies. The study focused. The higher education system plays an important role in the overall development of a country, which includes social, economic, and industrial security and the well-being of individuals. The Indian higher education system is the third largest in the world, next to the United States and China. The role and responsibilities of Indian higher educational institutions such as colleges and universities are to provide quality-based



education to empower youth for self-sustainability. However, Indian universities are in a state of considerable disarray characterized by a total lack of motivation, vision, monitoring and commitment to implement policies with purpose and firmness. Significant problems are the lack of funding resulting in poor infrastructure, outdated laboratories, crowded classrooms, under-stocked libraries with poor digital resources, lack of basic amenities, and presence and recruitment of undeserving and incompetent faculty members. Another serious problem is the lack of faculty members, such that India's best universities have student-faculty ratios of 20:1 or higher. In this article, a brief discussion is presented on the status and key challenges that India is facing in the higher education system. Also, the urgent initiatives (or remedies) required to be taken on a priority basis to improve the higher education system are pointed out.

4. Shabnam and Savita Kaushal, Ms. Shabnam FOERA, Vol. 2, 2024, pp 1 - 14 ISSN-3048-6858 made study on Challenges and Prospects of Higher Education in India: A Critical Analysis for Viksit Bharat @2047.

This study employs a descriptive and exploratory research design to analyse the current state of higher education in India, specifically in the context of the National Education Policy (NEP) 2020. A comprehensive review of secondary data was conducted, utilizing information from valid sources, including government reports and academic literature, to establish a robust analytical framework. The findings reveal critical challenges within the sector, such as infrastructural inadequacies, faculty shortages, and funding constraints, alongside an alarming Gross Enrolment Ratio (GER) of 27.3%. Notably, NEP 2020 aims to achieve a 50% GER by 2035, underscoring the necessity for inclusive access and enhanced educational quality. Despite the challenges, the study identifies significant opportunities for reform through innovative pedagogical approaches and collaborative partnerships. Ultimately, the paper presents targeted recommendations for reforms designed to elevate educational standards, promote inclusivity, and position higher education as a vital contributor to national development in India for Viksit Bharat @2047.

3. RESEARCH METHODOLOGY

- Statement of the problem

Higher education sector is facing medium of instruction, poor quality, lack of funds, lack of innovative practices. To make solutions to these problems an attempt made in this study.

- Overall objective of the study:

To examine the issues and challenges of higher education in India.

- Objectives of the study are

1. To examine the higher education stages in India.
2. To examine the issues and challenges of higher education in India.
3. To examine issues and challenges of higher Education in Karnataka.

- Nature and Source of data

The study has been conducted with the help of primary as well as secondary data. Primary data collected with the help of

interview schedule. Secondary data collected from Economic Survey, National and International Journals, Government Reports and Internet.

- Sample Design

Sample size is 50. Simple Random sampling adopted for the selection of sample.

- Statistical tools applied:

Likert scale applied for the statistical analysis. Student t test adopted for Regression model.

- Research Gap

There are many studies conducted on Higher education in India. The current study focused on higher education stages in India, Post Graduate students enrolment and solutions to overcome the problems of higher education.

- Researchable Questions

1. What are the problems of higher education system in India and Karnataka.
2. What are the challenges of higher education system in India and Karnataka.
3. What measures Central and State Governments can take to overcome the problems and challenges of higher education sector in India and Karnataka.

- Limitation of the study

The study conducted only in India and Karnataka. Hence the results are applicable to those areas of different countries in the globe and different states in India.

- Scheme of presentation:

1. Section 1 deals with Introduction.
2. Section 2 deals with Review of literature
3. Section 3 deals with Research Methodology
4. Section 4 deals with Analysis of the Results.
5. Section 5 deals with Suggestions, Recommendations and Conclusion.
6. Section 6 deals with Area of further research.

4. ANALYSIS OF THE RESULTS

As of 2025, India has over 1000 universities, with a break up of 54 central universities, 416 state universities, 146 deemed universities, 361 state private universities and 159 Institutes of National Importance which include AIIMS, IIMs, IITs, IISERs, IITs and NITs among others, Number of Degree colleges are 52,627 colleges as government degree colleges, private colleges, standalone institutes and post-graduate research institutions, functioning under these universities as reported by the MHRD in 2025.

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Following recent changes in education, India, through its NEP 2020 project, plans to provide cost-effective access to higher education through the National Digital University (NDU). This online university operates on a hub-and-spoke model,



offering domestic and international students the opportunity to earn a degree certificate from India.

NEP's higher education policy proposes a 4-year multidisciplinary bachelor's degree in an undergraduate programme with multiple exit options. These will include professional and vocational areas and will be implemented.

- A certificate after completing 1 year of study (vocational)

- A diploma after completing 2 years of study (vocational)
- A Bachelor's degree after completion of a 3-year program (preferred bachelor's degree)
- A 4-year multidisciplinary bachelor's degree (professional bachelor's degree).

Table 1.1

Higher Education Stages in India			
Category	Year	Ages	Comments
Undergraduate school	First year	18-19	1-year Vocational Certificate
	Second year	19-20	2-years Vocational Diploma (50 - 60 credits)
	Third year	20-21	3-years bachelor's degree (150 credits) or Advanced Diploma (120 credits)
	Fourth year	21-22	4-years multidisciplinary bachelor's degree (120 -160 credits) or P.G. Diploma (60 credits)
	Fifth year	22-23	5-years bachelor's degree like MBBS (180 - 200 credits) or law.
Graduate school	First year	21+	regular multidisciplinary master's degrees (120 -150 credits)
	Second year	22+	
	Third year	23+	3-years master's degree like MCA with Internship (180 credits)
Doctorate		24+	Up to 5 years and 125 credits

Accreditation for higher learning is overseen by autonomous institutions established by the University Grants Commission:

- All India Council for Technical Education (AICTE)
- Distance Education Bureau (DEB)
- Indian Council of Agricultural Research (ICAR)
- Bar Council of India (BCI)
- National Assessment and Accreditation Council (NAAC)
- National Council for Teacher Education (NCTE)
- Rehabilitation Council of India (RCI)
- National Medical Commission (NMC)
- Pharmacy Council of India (PCI)
- Indian Nursing Council (INC)
- Dental Council of India (DCI)
- National Commission for Homoeopathy (NCH)
- Central Council of Indian Medicine (CCIM)
- Veterinary Council of India (VCI)

Table 1.2 Graduation statistics

This chart is based on 2014-2015 data from the 2016 national statistics.

Post-graduate degree holders	Percentage
Social science	16.89
Management	16.65
Science	12.44
Commerce	8.45
IT and Computer science	7.87
Engineering and technology	7.18
Medical science	2.96
Others	12.41

Post-Secondary Education Stages

The new National Education Policy 2020 (NEP 2020) introduced by the central government is expected to bring profound changes to education in India. The policy approved by the Union Cabinet of India on 29 July 2020, outlines the vision of India's new education system. The new policy replaces the 1986 National Policy on Education. The policy is a comprehensive framework for elementary education to higher education as well as vocational training in both rural and urban India. The policy aims to transform India's education system by 2021.

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- A Bachelor's degree after completion of a 3-year program (preferred bachelor's degree)
- A 4-year multidisciplinary bachelor's degree (professional bachelor's degree)

Administration Issues

The institutional framework of higher education in India consists of Universities and Colleges. As reported in 2015, India has 760 universities and 38,498 colleges. There are three types of universities: Conventional Universities, Deemed Universities and Institutions of National Importance. While Conventional Universities are established through Act of Parliament or State Legislatures, Deemed Universities award degrees through the notification of the central government. Institutes of National Importance are those that have been awarded the status by Parliament.



Current Government Initiatives include

- **Rashtriya Uchattar Shiksha Abhiyan** - A total of 316 state public universities and 13,024 colleges will be covered under the Rashtriya Uchattar Shiksha Abhiyan, a plan to manage funding for higher education. This is a scheme to develop state university by central govt funding (60% for general category states, 90% for special category states, 100% for union territories).
- **Scheme of Integrating Persons With Disabilities In The Mainstream Of Technical And Vocational Education** - Caters to around 50 polytechnics in the country and provides them with grants-in-aid aimed at facilitating greater integration of disabled individuals into higher education.
- **Scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT)** - The purpose of this scheme is to raise the quantity and quality of teaching staff across schools and colleges. It also aims to create better institutional frameworks in order to cultivate change in the positive direction.

University rankings are used to measure and compare institutional quality based on a range of indicators related to research, reputation and teaching. Indian government's National Institutional Ranking Framework, or NIRF is the mechanism for measuring quality and also intended to determine funding and world-class university endeavors. While being popular, NIRF rankings have been criticized for being inaccurate and biased. The Indian Institute of Technology (BHU) Varanasi has criticised NIRF rankings multiple times.

The Indian Institute of Technology, Madras was ranked 1st among Overall Institutions in NIRF Overall Rankings 2022 with a score of 87.59, followed by IISc Bangalore, IIT Bombay, IIT Delhi, IIT Kanpur and IIT Kharagpur. The Indian Institute of Science (IISc) was ranked 1st among Indian Universities in NIRF University Rankings 2022 with a score of 83.57 followed by Jawaharlal Nehru University, Jamia Millia Islamia, Jadavpur University, Amrita Vishwa Vidyapeetham and Banaras Hindu University.^[51] The Indian Institute of Technology, Madras was ranked 1st among the Indian Engineering Institutions in NIRF Engineering Rankings 2022 with a score of 90.04 followed by IIT Delhi, IIT Bombay, IIT Kanpur and IIT Kharagpur. The Indian Institute of Management Ahmedabad was ranked 1st among the Indian Management Institutions in NIRF Management Rankings 2022 with a score of 83.35 followed by IIM Bangalore, IIM Calcutta, IIT Delhi and IIM Kozhikode. The AIIMS, New Delhi was ranked 1st among the Indian Medical Institutions in NIRF Medical Rankings 2024 with a score of 91.60 followed by PGIMER, Christian Medical College, NIMHANS and JIPMER. The "Institutions of Eminence (IoE)" initiative by the Government of India aims to build top-ranked Indian universities by providing autonomy and funding (only for public universities) and identified six institutions.

The University of Mumbai was ranked 41 among the Top 50 Engineering Schools of the world by America's news broadcasting firm *Business Insider* in 2012 and was the only university in the list from the five emerging BRICS nations (viz. Brazil, Russia, India, China, and South Africa). It was ranked at 62 in the QS BRICS University rankings for 2013 and was India's 3rd best Multi Disciplinary University in the QS University ranking of Indian Universities after University of Calcutta and Delhi University.

Three Indian universities were listed in the Times Higher Education list of the world's top 200 universities — Indian Institutes of Technology, Indian Institutes of Management, and Jawaharlal Nehru University in 2005 and 2006. Six Indian Institutes of Technology and the Birla Institute of Technology and Science Pilani were listed among the top 20 science and technology schools in Asia by *Asiaweek*. The Indian School of Business situated in Hyderabad was ranked number 12 in global MBA rankings by the *Financial Times* of London in 2010 while the All India Institute of Medical Sciences has been recognised as a global leader in medical research and treatment. The Quacquarelli Symonds (QS) World University Rankings published in 2013 ranked IIT Delhi at number 222 with a 49.4% score, IIT Bombay at 233, and IIT Kanpur at 295. No Indian universities appear in the top 200 worldwide except IISc Bangalore which is ranked at 147.

Challenges Ahead

In the last 30 years, higher education in India has witnessed enormous and substantial growth. The increase in the number of institutions is, however, disproportionate to the quality of education that is being dispersed. Unplanned over-expansion is often criticized as one of the biggest downfalls of Indian higher education. Many institutions suffer from subpar quality and a lack of funding. As a result, entry into the top institutions is highly competitive and translates into a contest for higher entrance test scores and better private coaching institutes.

Higher education in India faces problems ranging from income and gender disparities in enrolment, to poor quality of faculty and teaching and even to a general lack of motivation and interest amongst students. Industries cite skill shortage as one of the major factors contributing to the mounting number of unemployed graduates. Some of the main challenges faced by the Indian higher education system include:

- **Financing** – The inability of the state to fund the expanding higher education system has resulted in the rapid growth of private higher education. In addition, diminished governmental financial support adversely affects small and rural educational institutions. A growing number of public institutions are forced to resort to self-financing courses and high tuition costs. The private sector's primary modes of financing include donations, capitation fees and exorbitant fee rates. This in turn limits general accessibility to higher education, by catering to only an elite few.
- **Enrolment** – As of 2019–20, Gross Enrolment Ratio in higher education is 27.3 for 18 – 23 year old age group. On the whole, India has an enrolment rate of 9% which is similar to that of other lower middle income countries. The



population that is enrolled in higher education consists largely of urban metropolitan dwellers. Rural enrolment in higher education is very low. Moreover, a majority of the recorded enrolment is at the undergraduate level. Over the last 4 years, Indian higher education has maintained a steady female enrolment rate of around 45%. Although the gender gap in enrolment has decreased significantly post-independence, there still exists a disparity amongst different departments. Technology, medicine and commerce are some of the areas of study that are heavily male-dominated while humanities departments show the opposite trend.

- **Accreditation** - Driven by market opportunities and entrepreneurial zeal, many institutions are taking advantage of the lax regulatory environment to offer 'degrees' not approved by Indian authorities, and many institutions are functioning as pseudo non-profit organisations, developing sophisticated financial methods to siphon off the 'profits'. Regulatory authorities like UGC and AICTE have been trying to extirpate private universities that run courses with no affiliation or recognition. Students from rural and semi-urban background often fall prey to these institutes and colleges.
- **Quality** - The quality of programs structure-wise and quality-wise are substandard and lack objectives that can meet the basic industrial requirement of "skilled-professionals." However, the assessment methods employed are taxing and the pacing of the courses (quantity over quality approach) are made forcefully quick under the assumption that these are the essential indicators of 'show' quality (appearance quality). These unscientific strategies and promotion of survival mentality instead of growth mentality leads to unsuccessful learning among students. Streamlining of bachelor's program was brought in the Indian system by following other countries by educators who proved they could give the same quality that a four-year degree could provide with a three-year degree. However, the vision of these resolute educators are lost in time, and sub-standardization and political objectives took over the program structure. For example, when a 21st-century three year Indian bachelor's program is compared with a four-year International bachelor's programs it would be in quality only worth of a two-year college program because usually the first year of these programs are heavily focused on general and arts subjects. When core courses of these programs that cover the same topic are compared, Indian courses lack both leading building blocks of learning content, and the depth and fluidity of international courses. A minimum of 65 - 70 percent mastery threshold that internationally is considered as basic readiness for advancing from foundational to advanced courses is not required in Indian programs. Lack of quality in education resulting from these drawbacks lead students gaining substandard and unclear knowledge which in-turn leads to mass unemployment rates among educated youths of India, and it's primarily due to this learned incompetency or incapacity. As part of the ongoing reformation of the National Education Policy (NEP), the Indian government plans to shift academic curriculums from the perspective of academics to that of professors with practical industry

experience. Additionally, there are plans to introduce four-year degree programs instead of restructuring the existing three-year degrees with the aims to ensure competence and quality while offering students a wider range of options. Furthermore, there are plans to establish accelerated two-year bachelor's degree programs that meet international standards to address the increasing demand for skilled professionals in specific sectors, and providing curriculum licensing agreements to industry giants, allowing them to hire workers at a young age and provide them with on-the-job education to obtain a respective University education. Bringing four-year degree programs is seen with doubt by the media during a time and period when nations with four-year degree programs are lamenting the sustainability of prolonged educational pathways. Experts opine that in an age marked by the widespread availability of information and the rise of modern technologies, traditional educational structures fails to meet the dynamic demands of the labor market.

- **Politics** - Higher education is a high stakes issue in India. It is subject to heavy government involvement. Despite the system's lack of state funding, 15.5% of government expenditure goes toward higher education. Also, many prominent political figures either own or sit on the managerial board of the Universities. This leads to the exertion of intense political pressures on the administration of these institutions. Caste based reservations make Indian higher education an even more contested topic. While some make the case that caste-based quotas are necessary to tackle prevailing socio-economic disparities, others see it as exclusionary to upper-caste individuals. The NEP reformation further helps to increase these problems where educators will hold a power to act based on caste and religion based politics in determining who will go further in studies and who should not. This effectively reduces the race for quality education at quality institutions in favor of majority power holders. As a result of biased inclusionism that does not fit for needs of the society as whole and the historic exclusionism of minorities, student activisms are rampant, apart from this political organization of academic staff are widespread to protect their own interests.

The complex socio-political nature of the education sector in India makes it difficult to implement social reform. As a result, the overall quality of education suffers.

5.SUGGESTIONS, RECOMMENDATION AND CONCLUSION

1. People should be aware about the importance of higher education so that more number of enrollment to higher education may be made.
2. Universities and Colleges should take measures in order to enhance quality in higher education.

Conclusion

By enhancing quality in higher education, by enhancing capital base by providing financial resources to higher education and research, Central, State Governments and Funding Agencies can support to higher education which is necessary to strengthen social sector.



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