NITI Aayog

Expanding Quality Higher Education through States and State Public Universities

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About the Photographs:

The cover page contains a collage of photographs of select State Public Universities (SPUs) from across India. Photographs of architecturally majestic SPUs have been displayed throughout the report. The collage of photographs next to chapter I captures select diversely designed universities from across India.

Expanding Quality Higher Education through States and State Public Universities

Policy Report

February 2025

Table of Contents

List of Figures

List of Maps

List of Tables

List of Abbreviations

Abbreviation	Description
ABC	Academic Bank of Credits
AICTE	All India Council for Technical Education
AISHE	All India Survey on Higher Education
AIU	Association of Indian Universities
ANRF	Anusandhan National Research Foundation
ASSOCHAM	Associated Chambers of Commerce and Industry
CII	Confederation of Indian Industry
CU	Central University
DU	Deemed-to-be University
FICCI	Federation of Indian Chambers of Commerce and Industry
GER	Gross Enrolment Ratio
GPI	Gender Parity Index
HEFA	Higher Education Financing Agency
HEI	Higher Education Institution
INI	Institutes of National Importance
NAAC	National Assessment and Accreditation Council
NCrF	National Credit Framework
NETF	National Educational Technology Forum
NIRF	National Institutional Ranking Framework
NTA	National Testing Agency
ONOS	One Nation One Subscription
PM-USHA	Pradhan Mantri Uchchatar Shiksha Abhiyan
PTR	Pupil-Teacher Ratio
RISE	Revitalising Infrastructure and Systems in Education
RUSA	Rashtriya Uchchatar Shiksha Abhiyan
SCHE	State Council of Higher Education
SEDG	Socially and Economically Disadvantaged Groups
SPU	State Public University
TLR	Teaching, Learning & Resources
UGC	University Grants Commission

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Azadi Ka Amrit Mahotsav

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FOREWORD

India's future will depend on how well we equip our students and youth to be ready for the demands of a Viksit Bharat by 2047. Under the leadership of Prime Minister Shri Narendra Modi, it has been this government's endeavour to strive towards reimagining higher education to align with innovation and entrepreneurship. To achieve this goal, the National Education Policy (NEP) 2020 has provided a roadmap. It has encouraged a notable transformation shifting the focus towards nurturing enlightened citizens by fostering inclusive education. India's transition from being primarily perceived as a land abundant in natural resources to being perceived as one rich in human capital marks a significant shift. Over the next two decades, India is poised to emerge as a major global source of human capital, aiming to leverage technology to amplify its global presence. While emphasizing the importance of applying the Indian mind to local challenges, equal emphasis is necessary on cultivating Indian minds capable of addressing global issues. There is a need for accentuating the role of building community and social capital within the Indian mind to foster qualified individuals capable of contributing to global solutions. The NEP signifies a decisive departure from the shortcomings of the previous education system, paving the way for transformative change through a holistic approach to student development, and by recognizing the dynamic nature of higher education.

In this context, State Public Universities (SPUs) have played a pivotal role over the last seven decades towards achieving the primacy of access to higher education in the cities as well as the hinterland. As institutions of learning, SPUs not only provide education to crores of students but are also strategically positioned to nurture the next generation of professionals, researchers, innovators and entrepreneurs who will drive India's growth story. As India strives to become a leader in the global knowledge economy, the collaboration between SPUs and industry will be central to building a future where our graduates are job-ready, and our economy remains competitive. The NEP has laid the foundation by encouraging an interdisciplinary and skills-driven approach to higher education. The SPUs must now take the lead in implementing these changes.

This report highlights the challenges faced by SPUs in the areas of quality, funding and financing, governance, and employability, and recommends pragmatic interventions to address them. It details reforms aimed at improving institutional financing capacity, research capacity, faculty capacity and governance capacity. I commend the Education Division of NITI Aayog for undertaking extensive consultations with government officers across most States and UTs, and Vice Chancellors from leading SPUs across India and collating the insights into this actionable report. I am convinced that by implementing the outlined recommendations, SPUs can play a key role in not only developing an employable workforce but also contributing to inclusive economic growth, thereby positioning India as a global leader.

(Suman Bery)

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February 3, 2025

MESSAGE

Education is the cornerstone of national development, and for India to fully harness its potential, our higher education system must evolve to meet the needs of a changing world. The NEP 2020 provides a strategic framework for reforming higher education and advancing towards a Viksit Bharat with higher education envisioned as the foremost enabler of societal advancement. It is clear that for India to compete globally, our universities must go beyond traditional academic boundaries and embrace a more holistic and socially conscious approach that prepares students for the challenges of the future.

The journey towards Viksit Bharat@2047 critically hinges on the advancement of both school and higher education. The aim is to double the Gross Enrolment Ratio (GER) in higher education from its current level of 28.4%, a target that must be achieved by both State and Central Institutions. While Higher Education has witnessed remarkable growth over the last seven decades, the challenge lies in ensuring world class quality. The NEP offers broad pathways for internal reforms, which must be leveraged to advance towards this overarching goal of delivering quality higher education.

State Public Universities (SPUs) serve over 80% of the total student population in higher education and hence are central to achieving the primacies of NEP 2020. They possess the regional reach and student base to become hubs of research, innovation, and entrepreneurship that India needs. By focusing on issues of quality and employability, SPUs can ensure that students are not just academically competent but are also equipped with practical exposure necessary to contribute to the economy in a meaningful way. With targeted investments and financing, empowered and transparent governance, and a focus on quality teaching and research, SPUs have the potential to become Centres of Excellence, leading the transformation of India's higher education system while also contributing to balanced regional development.

This Report is the culmination of the endeavours of the Education Division of NITI Aayog. I applaud the efforts of Shri Rajib Sen former Programme Director (Education), Ms. Sonia Pant, Programme Director (Education), Dr. Shashank Shah, Senior Specialist (Higher Education), Ms. Oshin Dharap, Consultant (Higher Education), and Ms. Upragya Kashyap, Young Professional (Higher Education) in putting together this pioneering work that throws the spotlight on the potential of SPUs and addressing their challenges. I also wish to acknowledge the active participation of Dr. (Mrs.) Pankaj Mittal, Secretary General, Association of Indian Universities, for being a co-collaborator in this endeavour throughout the extensive consultation process. I believe this is only the beginning, and as they say, well begun is half-done.

(Vinod Paul)

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MESSAGE

India is at a unique position in its developmental trajectory. Being the largest democracy, the fifth largest economy, and a leader of the Global South, it has the potential to leapfrog into becoming a Viksit Bharat by 2047. With more than 50% of its population, i.e., 70 crore people below the age of 25 years, its demographic dividend presents an unparalleled opportunity for socioeconomic growth. However, this can only be harnessed effectively if Education, especially Higher Education and Research is brought centre stage in the development dialogue of the nation.

While our usual focus is on Central Universities and Institutes of National Importance that excel in frontier areas of knowledge on national and international platforms, we need to be mindful of the fact that it is the 495 State Public Universities (SPUs) and their over 46,000 affiliated institutions that play a vital role in ensuring access to higher education across India. Currently, over 3.25 crore students are enrolled in SPUs across all varieties of programmes and disciplines. By 2035, the National Education Policy (NEP) 2020 target is to achieve a Gross Enrolment Ratio (GER) of 50%, essentially doubling enrolment in our higher education institutions from 4.33 crores to nearly 9 crore students. Bulk of these will continue to study in SPUs. Hence, it is of utmost importance that SPUs transition from focusing on access to higher education to delivering quality higher education.

With a clear focus on top quality pedagogy and research, SPUs have the potential to become engines of regional and national development. They also need to be nurtured to transition to world-class governance standards. The expansion of the higher education system will also require the expansion of brownfield and greenfield infrastructure in SPUs. Hence, financing for capex and opex is of utmost importance. For this, Central and State Governments will have to prioritise impactful funding and financing for SPUs, while also empowering and handholding them for internal revenue generation opportunities.

This report aptly captures these four critical areas for SPUs – quality, funding and financing, governance and employability, and outlines strategies to unlock their full potential. It serves as a guide for policymakers, regulators, educators, administrators, and indeed all stakeholders to nurture SPUs for harnessing India's demographic dividend, fostering a knowledge-based economy and becoming a global talent and innovation hub.

I congratulate Ms. Sonia Pant, Programme Director (Education), NITI Aayog, for bringing this report to fruition. I appreciate the excellent research work of Dr. Shashank Shah, Senior Specialist (Higher Education), NITI Aayog, and Dr. (Mrs.) Pankaj Mittal, Secretary General, Association of Indian Universities, in spearheading this initiative of bringing States and SPUs to the centre of the higher education policy dialogue.

I am confident that this report will inspire a collective effort of transforming SPUs into hubs of top-quality talent and innovation. By investing in the future of our students, we can build a prosperous and self-reliant Viksit Bharat where every student has the opportunity to contribute meaningfully to the nation's progress.

4/2

Dated: 4th February, 2025

[B.V.R. Subrahmanyam]

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MESSAGE

Expanding access to quality education is essential for empowering individuals and fostering sustainable development. State Governments and State Public Universities (SPUs) play a critical role in this endeavour by providing affordable, inclusive, and impactful access to quality education to masses. However, the challenges faced by SPUs and their affiliated colleges are part of the larger issues in higher education in India. Hence, a concerted effort is necessary, involving government support, collaboration between educational institutions, industry, and other stakeholders, to address these multifaceted challenges and elevate the quality of higher education in the country.

The current disparity in funding between Central and State Public Universities is concerning. This inequity hampers the ability of SPUs to enhance quality, innovation, and governance structures, which are essential for delivering quality education that meets global standards. SPUs along with their affiliated colleges suffer due to resource limitations and governance issues that hinders their ability to meet the rising demand for quality education. India had 482 SPUs catering to large number of students in 2024. In contrast, the 57 Central Universities, which are fully funded by the Central Government, represent a smaller fraction of India's higher education students but receive much higher funding. The financial constraint limits the ability of SPUs to upgrade infrastructure, promote research, and provide quality education. This report addresses these issues very well.

I congratulate NITI Ayog and its Education Division under the leadership of Ms. Sonia Pant, Adviser and Programme Director, Dr. Shashank Shah, Director and Senior Specialist, and their team for bringing out this important document which explores strategies and recommendations for enhancing the quality of education in SPUs. It highlights key areas of focus for enhancing the capabilities of these institutions and emphasizes the importance of collaboration between State Governments, SPUs, and industry to align academic programmes with the evolving demands of a globalized economy.

The report is a blueprint for transforming SPUs into engines of opportunity and excellence, fostering a brighter future for all. I hope the report will translate into policy guidelines for improving the quality of higher education, especially in States and State Public Universities.

(Pankaj Mittal)

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This report is an outcome of the ideas and efforts of a wide range of institutional stakeholders and experts. I wish to acknowledge them for enabling the fruition of this study and the publication of this report.

I thank Shri Suman Bery, Vice Chairman, NITI Aayog, for his foreword to this report. Dr. Vinod Kumar Paul, Member (Education), NITI Aayog, mentored and participated at every stage of the consultation process. I wish to thank him for his valuable advice and guidance. The idea of undertaking this study was seeded by Shri B.V.R. Subrahmanyam, CEO, NITI Aayog. I express gratitude to him for his constant encouragement.

As part of this study's research methodology and its primary data collection process, a series of consultations were organised. I wish to thank State Government Officers of Higher and Technical Education Departments from over 20 States and Union Territories, and several other administrators for sharing their challenges, interventions and practices. I am grateful to Vice Chancellors and senior academicians of 50 SPUs from 20 States and Union Territories across India and Chairpersons of several State Higher Education Councils for their insights that captured the challenges and underscored the probable solutions to expand quality higher education in SPUs. The report is an outcome of the very enriching discussions with all these stakeholders. We are immensely indebted to all of them for their time and inputs.

I thank the Association of Indian Universities (AIU), the knowledge partner for this study. I would also like to thank former Programme Directors (Education), NITI Aayog – Shri Rajib Sen and Ms. Gitanjali Gupta.

My deep appreciation for the core research and analysis team led by Dr. Shashank Shah, Senior Specialist, Higher Education and comprising Oshin Dharap, Upragya Kashyap, and Rahul Saini. I commend the enthusiastic contribution of a number of interns who worked at various stages of this report.

I believe that this report will be a valuable knowledge resource and provide a roadmap for transforming our SPUs into centres of education excellence.

Sonia Pant

(Sonia Pant)
Programme Director

EXECUTIVE SUMMARY

As India stands at the cusp of a transformative journey, envisioning itself as a Viksit Bharat by 2047, the role of human capital is the most fundamental. The children and youth of India can be nurtured to become competent, productive and responsible only through the foundation of education. Hence, education, especially higher education is a crucial lever in this process of transforming India into a Viksit Bharat, and a crucial pillar to sustain the edifice of a Viksit Bharat.

With the world's largest working age population — a demographic advantage extending over the next two decades — and the second largest higher education system in the world, India is uniquely positioned to meet the human capital demands of our growing economy and become a global talent and innovation hub. The National Education Policy (NEP) 2020, which has come at an opportune time, provides a transformative roadmap for this purpose.

Central Universities and Institutes of National Importance are the flagship institutions of higher education in India that excel in frontier areas of knowledge on national and international platforms. However, it is the 495 State Public Universities and their over 46,000 affiliated institutions that account for 81% of the total student enrolment and hence play a vital role in ensuring access to higher education across the length and breadth of India.

Technically, Universities established or incorporated by a Provincial Act or by a State Act, and funded by the State Government, are called State Public Universities (SPUs). Hence, they come under the predominant responsibility of State Governments. However, given their phenomenal reach and hence their vital role in grooming talent across the country that is vital for becoming a Viksit Bharat, their transformation into institutions of excellence is a collective national responsibility.

Over the last 70+ years, the nationwide growth and expansion of SPUs has been primarily driven to increase access to affordable higher education, particularly in remote and underserved regions. This has been essential in meeting the rising demand for higher education and addressing regional imbalances in educational access. Hence, SPUs serve as regional hubs for higher education, catering to over 3.25 crore students across India. By 2035, the NEP 2020 target is to double enrolment in our higher education institutions from 4.33 crores to nearly 9 crore students. Bulk of these will continue to be in SPUs. Hence, it is of utmost importance that SPUs transition from focusing on access to higher education to delivering quality higher education. The current study has been initiated with the objective of catalyzing and facilitating this very transition with comprehensive policy recommendations.

This Report on 'Expanding Quality Higher Education through States and State Public Universities' is an outcome of extensive consultations with Government Officers from over 20 States and Union Territories, Vice Chancellors and Senior Academics of 50 leading SPUs, and Heads of several State Higher Education Councils. While it is ambitious in its scope, it is tempered with pragmatism and ground realities as it has captured the distilled essence of the experiences and insights of eminent academics and officers from across India.

This Report is divided into 7 chapters. The first 4 chapters outline the history and achievements of India's Higher Education Sector – its role in achieving the vision of Viksit Bharat, key policy milestones since Independence, the current status of higher education, and the centrality of SPUs in the higher education landscape. Chapter 5 details the consultative process. Chapter 6 highlights the thematic challenges identified during the consultations, which revolve around the 4 major themes of quality, funding and financing, governance, and employability. Chapter 7 provides detailed policy recommendations with short, medium and long-term implementation roadmap and performance success indicators, to address the challenges emerging from the stakeholder consultations and by synthesizing the insights gained therefrom.

Nearly 80 policy recommendations have been provided under 12 sub-themes across the 4 major thematic areas along with over 125 performance success indicators. Under quality, the focus is on improving the quality of research, pedagogy and curriculum, digitalization and internationalization of higher education. Under funding and financing, the focus is on government funding, diversification of revenue sources, taxation and utility payments, enhanced funding for faculty recruitment and retention, and fee autonomy. Under governance, the focus is on improving institutional governance structures, and capacity building of faculty and administrators. Under employability, the focus is on skilling and employability enhancement for students across streams, and strengthening academia-industry interface.

India's students and youth account for 50% of our population. They will be the leaders of a Viksit Bharat. Hence, it is our duty and responsibility to provide them with the ability and nobility through the right ecosystem and opportunities to realise their full potential and become the best version of themselves. With their energy and enthusiasm, creativity and commitment, we can create a Bharat that is a global talent hub and a leader in education and research, innovation and entrepreneurship.


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CHAPTER 1

ACHIEVING THE VISION OF 'VIKSIT BHARAT@2047': ROLE OF HIGHER EDUCATION

India stands at a historic crossroads, at the cusp of a transformative journey, envisioning itself as Viksit Bharat – a developed nation by 2047. This vision is characterised by equity and sustainability, inclusion and innovation, prosperity and self-reliance, all of which are based on the foundation of education (Vidya). Higher education is a crucial lever for this process of transforming India into Viksit Bharat. It is the philosophical and cultural foundation upon which civilisations are built. India's march towards becoming a Viksit Bharat will be substantially determined by how effectively it can harness the power of higher education to create knowledge, foster innovation, and produce leaders capable of navigating through an increasingly complex world with ability and nobility.

1. Higher Education in Ancient India

Education in India is deeply embedded in its ancient philosophical tradition, where Vidya was seen not merely as the accumulation of knowledge but as the means for holistic self-empowerment. It laid emphasis on the concentration of the mind rather than mere collection of facts. In the ancient Indian texts, it is said that "The wealth of knowledge is indeed the supreme among all forms of wealth" (विद्याधनं सर्वधनं प्रधानम्) and 'True education is that which liberates one from the shackles of ignorance" (सा विद्या या विमुक्तये). This philosophical framework celebrates knowledge as a force that shapes individuals to escape the constraints of ignorance. In Indian culture, attaining knowledge is a sacred duty. From the *Gurukuls* of ancient India, where students imbibed not only academic knowledge but also arts, ethics and philosophy, to the modern education system, the country has always regarded education as a means to both personal and societal upliftment.

This culture of a continuous pursuit of knowledge scented the classrooms of Takshashila, Nalanda, Vikramshila, Odantapuri, Vallabhi, Kashi, Ujjain and Pushpagiri. These centres of learning, established several millennia ago, were unparalleled in their time, attracting hundreds of students and scholars from across the world as far as Japan in the east and Greece in the west. With the emergence of large educational centres, legendary accounts in the non-canonical Buddhist Jataka prose describe students journeying to Takshashila to study under renowned teachers.

In later well-documented instances, students travelled across India to attend prestigious institutions such as the universities of Nalanda and Vallabhi, or the temple schools in Kanchi, among others. (Scharfe, 2002) Similarly, Takshashila was one of the earliest multidisciplinary universities in the world, where numerous branches of learning were studied ranging from painting and handicraft to medicine and economics. Charaka, the Ayurvedic healer who was one of the leading authorities on Indian medicine is known to have studied at this institution. The Sanskrit grammarian Panini and Chanakya (also known as Kautilya), the author of the *Arthashastra*, worked at this University (Lowe & Yoshihito, 2016). These institutions laid the foundation for a culture that revered education, critical thinking, and global perspectives. Their collapse and destruction due to invasions in the early centuries of the second millennium marked a significant setback for Indian higher education. However, their legacy remains a source of pride and inspiration as India seeks to reclaim its intellectual heritage on the world stage.

2. Higher Education in the Colonial Period

The onset of the British colonial rule in the 18th century marked a rapid decline of indigenous educational systems and cultural heritage. The colonial administration,with a desire of creating an English-speaking administrative class, introduced various measures.The higher education system became utilitarian, primarily designed to create a workforce for administrative roles. Mount Stuart Elphinstone's Minutes of 1823 and Macaulay's Minutes of 1835 laid the groundwork for an English education system in India.This led to the establishment of universities in Calcutta, Madras, and Bombay in 1857, modelled after the University of London, and reflecting this shift towards Western education. The colonial period left an indelible mark on Indian higher education, with its structure and emphasis on English language instruction and a centralized, examination-focused system that carried over into the post-independence era.

3. Role of Higher Education in Independence and Nation Building

In later decades of the 19th century, visionary leaders like Rabindranath Tagore, Swami Vivekananda, Mahatma Gandhi and Sri Aurobindo offered profound insights into the role of education in shaping the nation's future. Rabindranath Tagore famously said that *"The highest education is that which does not merely give us information but makes our life in harmony with all existence."* Swami Vivekananda emphasised the importance of education by stating that *"We want that education by which character is formed, strength of mind is increased, the intellect is expanded, and by which one can stand on one's own feet."* Mahatma Gandhi advocated for an education that nurtured holistic individuals. He said that *"Literacy in itself is no education. Literacy is neither the end of education nor even the beginning. By education, I mean an all-round drawing out of the best in the child and man—body, mind, and spirit."* Sri Aurobindo envisioned education as a path to individual and national perfection, believing that *"The object of education is to train the individual to pursue the ideal of perfection, for the nation to serve the ideals of national life, and for humanity to realise its highest ideals."* Together, these leaders laid the intellectual foundation for an education system based on ancient Indian civilizational wisdom that could drive India's growth, and foster both personal development and national progress.

Indian Institute of Science, Bengaluru

In the early decades of the 20th century, when the globe was jolted by the world wars, India was fervently working towards her political independence. Higher educational institutions (HEIs) in India served as centres of intellectual renaissance and nationalism. Institutions like the Banaras Hindu University (BHU) and Aligarh Muslim University (AMU) produced eminent leaders across professions.

4. Role of Higher Education in Independent India

The post-independence period witnessed a renewed focus on higher education, recognizing its immense role in rebuilding the nation and laying the foundation for its scientific and industrial progress.

Establishment of the Indian Institutes of Technology (IITs), Indian Institutes of Management (IIMs), Central Universities, and other institutions of excellence was a visionary step in shaping modern India's higher education landscape. The vision, mission, and values of these eminent institutions of learning were to align with the strategic vision of the nation and set the tone for its development. Following the recommendations of the Sarkar Committee (1945) to build institutions that could produce world-class engineers to drive India's post-independence industrialization, the first IIT was set up in Kharagpur in 1951. Since then, 23 IITs have emerged as leaders in engineering and technical education. Similarly, in the late 1950s, the Planning Commission of India recommended the establishment of management institutes to fulfil the need for quality management education in India, after which the first IIM was established in Calcutta in 1961. Today, 21 IIMs established in phases over the last 7 decades are synonymous with excellence in business and management education, contributing to leadership across sectors globally. Central Universities were founded to promote interdisciplinary research and uphold academic rigour across diverse fields. By 2023, 56 Central Universities had been setup across states and union territories. These institutions remain critical to India's higher education ecosystem, by producing top-tier graduates, nurturing talent that powers industries, governance, and thought leadership.

In addition to Central Universities, India has a large number of State Public Universities. Universities established or incorporated by a Provincial Act or by a State Act, and funded by the State Government, are called State Public Universities (SPUs). The All India Survey on Higher Education (AISHE) report 2021-22 stated that SPUs account for 81% of the total student enrolment among Indian HEIs. Thus, they act as the backbone of this vast and interconnected educational ecosystem by serving crores of students across diverse regions and socio-economic backgrounds. These nearly 500 institutions along with thousands of affiliated colleges provide accessible, affordable and inclusive education for all, particularly in the hinterland. With their vast reach and influence, SPUs hold the potential to give a voice to local innovators, nurture regional talent, and significantly contribute to nation-building.

5. The Potential of Higher Education

India is now in a position where it can make a quantum leap to become a developed nation in the next 25 years. To leverage its demographic dividend, it must place higher education at the centre of its development strategy like its peer nations that have gone on to transform themselves from developing to developed economies .With such strong youth power, India must not depend on imported knowledge and human resources to fuel its growth. Instead it needs to focus on building a thriving entrepreneurial ecosystem for its home-grown pool of talent and ultimately solve national and global challenges. From the Silicon Valley's tech giants, where one-third of the workforce is of Indian origin and 25% of start-ups are led by them, to key roles in banking and healthcare systems across Europe, North America and West Asia, alumni of Indian HEIs have secured prominent positions in leading global institutions and proven their mettle across sectors. The potential of the Indian higher education system shines through

global business icons leading global MNCs and multilateral institutions who are products of the Indian higher education system, underscoring its contribution to the world.

To build a Viksit Bharat where every student gets an opportunity to become a leader in their profession, India must focus on creating a research-driven and innovation-led higher education system. In today's knowledge economy, research is a major contributor to innovation and economic growth. Students must be encouraged to 'create and lead' rather than 'consume and follow'. The National Education Policy (NEP 2020) recognises this need and encourages interdisciplinary research, global collaborations, internships while studying, multiple entry and exit options, and cultivating the much sought-after '21st century skills'. All the top institutions globally demonstrate practices like industry integration, global collaboration, inclusivity, and multidisciplinary focus and serve as valuable models for enhancing India's higher education landscape.

Higher education's role must also extend beyond academic excellence and economic contribution. HEIs must embrace their responsibility as catalysts for social change and sustainable development, actively mentoring students to build a sense of responsibility towards nature, patriotism, service to the local community, and multicultural competence with empathy. This holistic approach will ensure that growth is inclusive, sustainable and responsive to the needs of India.

6. Conclusion

It is a fact that no country has become a world power without a robust and dynamic higher education system. If one were to look back historically, it was India's system of higher education that made it the Vishwa Guru in the centuries before the Common Era (CE). Oxford and Cambridge (Oxbridge) have been instrumental in producing leaders and intellectuals who shaped not only the British Empire but also the global society over the last millennium. The Ivy League institutions such as Harvard and Princeton, and Institutes of Technology such as MIT and Caltech have been at the forefront of technological innovation, contributing significantly to the rise of the United States as a global scientific and industrial superpower over the last century. In China, universities like Tsinghua and Peking have driven technological advancements, research, and economic progress, helping the country emerge as a major player on the global stage in the last decade. These examples highlight the positive relationship between higher education and national development. The prosperity of these nations can be traced back to their investment in higher education, research and innovation, which has produced not only skilled professionals but also thought leaders and innovators.

Hence, the role of higher education in achieving the vision of *Viksit Bharat @2047* is without a parallel. It is the fundamental basis for achieving the country's aspirations for prosperity, social justice, and global leadership. By drawing on its rich intellectual and cultural traditions, aligning with global best practices, and fostering a research-driven ecosystem, India can build a higher education system that is globally competitive. The NEP 2020 needs to be implemented in letter and spirit to ensure that India's higher education system can meet the challenges of the 21st century. The future of India depends not just on the quantity of graduates it produces but on the quality of education they receive and the kind of leaders they become. By investing in higher education today, India is investing in a future where it will not only be a developed nation but also a beacon of knowledge, innovation, and leadership on the global stage. The vision of a *Viksit Bharat* will be realised when every student, every researcher, and every university contributes to the larger goal of nation-building, propelling India to its rightful place as a knowledge superpower by 2047.

CHAPTER-II

INDIAN HIGHER EDUCATION SECTOR: KEY POLICY MILESTONES SINCE INDEPENDENCE

At the time of India's independence in 1947, the country's education system was fraught with challenges. India had only 17 universities and 636 colleges serving about 2.38 lakh students. The literacy rate was alarmingly low at 14%, and expenditure on education constituted less than 0.5% of the national income (Naik, 1947). This situation underscored the urgent need for comprehensive education reforms to establish a robust system capable of addressing the country's needs.

India realized the importance of education in national development and social progress early on in its trajectory as an independent nation. It was built upon the visionary ideas of influential educators and leaders of the time who sought to create a higher education system that would focus on expanding access and improving quality. The vision was to create an ecosystem that would balance India's rich cultural heritage while addressing contemporary challenges in an increasingly modernizing world. To transform the higher education landscape, various education commissions were constituted and policies implemented. These efforts laid the foundation for the significant expansion and evolution of India's higher education sector that we see today.

To understand the course of development of the current educational policy, we trace its development in different phases: Post-Independence Foundational Phase (1947-1985), Economic Liberalization and Expansion Phase (1986-2005), Globalization and Reform Phase (2005-2019), and Contemporary Transformation Phase (2020-Present) (Borthakur et al.,2024).

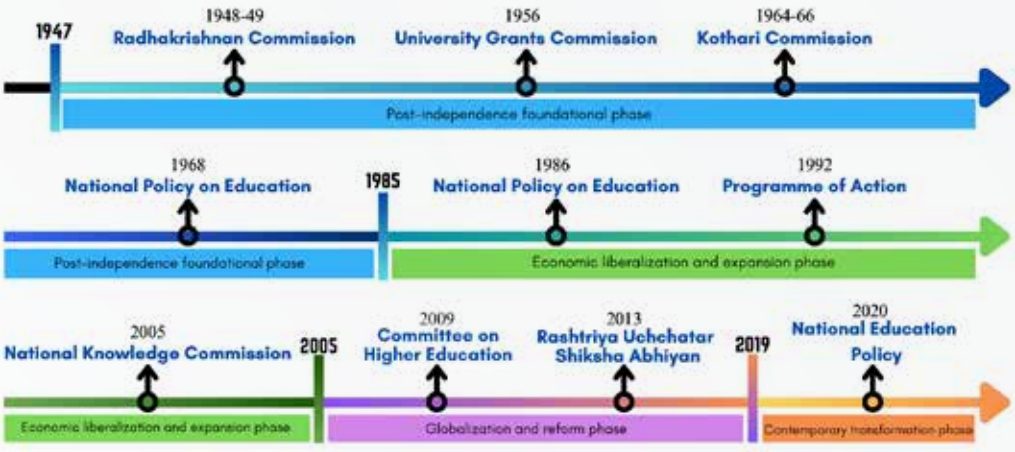


Figure 2.1: Timeline of the Evolution of India's Higher Education Policy Landscape

1. POST-INDEPENDENCE FOUNDATIONAL PHASE (1947-1985)

This phase was marked by concerted efforts to reshape India's higher education system to meet the needs of a newly independent nation. The Radhakrishnan Commission (1948-49) set the tone

by proposing sweeping reforms to oversee the coordination and funding of higher education. It recommended that universities should become teaching institutions rather than merely affiliating bodies, including a new pre-university structure, and laid emphasis on research and professional education. The Kothari Commission (1964-66) further refined these ideas, focusing on internal transformation, qualitative improvement and quantitative expansion of the education system.

These efforts culminated in the first National Policy on Education in 1968, which laid the groundwork for equalizing educational opportunities and promoting national integration. Throughout this period, there was a consistent push to increase educational spending, with the goal of reaching 6% of GDP, an aspiration that would be carried forward into subsequent decades. This foundational phase was characterized by the challenge of transitioning from a colonial education system to one that could serve the diverse needs of an independent India, with many of the ideas proposed during this time continuing to influence education policy in the years to come.

1.1 University Education Commission (1948-49)

Chaired by Dr. Sarvepalli Radhakrishnan, then Professor at the University of Oxford (later Vice President and President of India), this Commission focused on enhancing university education. Its key recommendations included:

i. Placing university education on the concurrent list to allow both State and Central Governments to legislate on it;

ii. Emphasizing the Central Government's role in financing and coordinating special subjects to maintain national standards;

iii. Transforming universities into teaching institutions rather than merely affiliating bodies;

iv. Establishing rural universities and colleges focusing on agriculture and industry, with dedicated institutions for women;

v. The medium of higher education to be in regional languages, with English taught to ensure access to global knowledge;

vi. Implementing mandatory health checks and physical training for students, and providing comprehensive health services at universities;

vii. Development of professional education in key fields such as agriculture, commerce, engineering, law, and medicine, with standardized Ph.D. admissions and increased research scholarships;

viii. Structuring academic programmes with a three-year degree following 11 years of schooling, ensuring 180 working days per year, and setting student limits for universities and affiliated colleges;

ix. Improvements in faculty quality through better qualifications, pay scales, and retirement policies;

x. Creation of the University Grants Commission (UGC) to oversee funding;

xi. Incorporating moral and religious education to develop character and civic responsibility among students;

xii. Introduction of general education courses in the first year of university to provide a broad foundation across disciplines;

xiii. Improving the examination system from memory-based to understanding-based assessments; and

xiv. Greater autonomy for universities in matters of curriculum development and administrative decisions, and restructuring universities as autonomous entities.

While not all recommendations were immediately implemented, the UGC was established in 1956, which was tasked with coordinating academic activities and maintaining standards of higher education and research. The expansion of women's education across all levels was also a significant outcome. The Commission's work laid the foundation for subsequent reforms and influenced educational policy for decades to come.

1.2 Education Commission (1964-66)

Chaired by Dr. Daulat Singh Kothari, then Chairman, UGC, this Commission conducted a comprehensive review of the education system and proposed significant changes. Established in 1964, it faced the challenge of aligning the education system with national goals and improving its quality and relevance. The Commission recognized the need for the provision of laboratories, libraries, sufficient strength of teachers and other staff as parameters to decide the number of students to be admitted to a college or university. It recognized the need for funds for setting up new universities. Some of its key recommendations included:

i. Giving special attention to postgraduate courses, training and research;

ii. The approach of clusters of centres to promote research and training;

iii. Various administrative reforms including greater autonomy for universities, establishment of academic planning boards, and focus on dynamic administration techniques;

iv. Dispensing with the affiliating system to promote academic freedom and innovation;

v. Giving education annual grants equal to 6% of GDP;

vi. Internal transformation of the education system, qualitative improvement in teaching and learning processes, and quantitative expansion of educational facilities; and

vii. Equalizing educational opportunities and linking education with national development goals.

The Commission's emphasis on science and technology education was particularly influential in shaping curriculum reforms. While not all its recommendations were immediately implemented, the proposal to increase educational spending to 6% of GDP by 1986 became a long-term goal. This Commission's report laid the groundwork for the formulation of the National Policy on Education in 1968, marking a significant step in creating a coherent national educational framework.

1.3 National Policy on Education, 1968

This Policy represented India's first comprehensive attempt to create a coherent national system of education after independence. Facing the challenges of regional and social disparities in educational access and quality, it proposed several far-reaching measures. It emphasized the promotion of national integration through education, the equalisation of educational opportunities, and a renewed focus on science education and research. It also stressed the importance of cultivating social, moral, and spiritual values, and aligning education with the needs of agriculture and industry. Special focus was given to developing facilities in agriculture, trade, medicine, arts, crafts, commerce, home management and secretarial training as well as opening new universities.

The Policy promoted functional literacy through adult education campaigns and aimed at improving self-employment opportunities for the youth. It highlighted the need to uplift the condition of teachers, promote their academic freedom and improve their professional competence, emoluments, and service conditions. It also focused on their training and education. Additionally, it introduced a new educational structure of 10+2+3 to help retain students within the mainstream education system and enhance educational infrastructure and opportunities across the nation.

2. ECONOMIC LIBERALIZATION AND EXPANSION PHASE (1986-2005)

With the liberalization of the Indian economy in 1991, the higher education sector experienced significant changes. The National Policy on Education (1986) focused on expanding access to secondary and higher education by introducing concepts like open universities and rural universities. This was further refined in the 1992 Programme of Action.

The economic reforms of 1991 led to a gradual shift towards privatization, with an increasing number of self-financing institutions and private universities emerging. This privatization helped meet the growing demand for higher education, while attempting to maintain the goals of equity and quality established in earlier policies.

Banaras Hindu University, Varanasi

2.1 National Policy on Education, 1986

The National Policy on Education (NPE) 1986, later updated in 1992 with the Programme of Action, represented a significant shift in India's approach to education in the context of rapid economic changes. Addressing persistent challenges of access, equity and quality, the policy introduced several innovative concepts. It emphasized 'Education for Equality,' aiming to use education as a tool for empowering disadvantaged groups.

It proposed the creation of a national body to oversee higher education across various fields including agricultural, medical, technical, and legal for better coordination and policy consistency. The Policy also recommended the establishment of research facilities in universities across all disciplines.

A major innovation was the emphasis on open and distance learning to expand educational access. It proposed the development of mechanisms for accreditation and assessment to maintain and enhance the quality of higher education institutions. The UGC was to establish an Accreditation and Assessment Council as an autonomous body, which led to the establishment of the National Assessment and Accreditation Council (NAAC) in 1994.

Key implementations included the creation of State Councils of Higher Education for better state-level coordination, and a significant expansion of open universities and distance education programmes. The 1992 revision led to a 'Plan of Action' that focused on adult education and the development of rural universities and institutions. It emphasized the need to assess and address the specific educational requirements of rural communities and recommended the establishment of Rural Universities.

The 1986 policy, along with its 1992 updates, set the stage for India's educational development in the era of economic liberalization, balancing the needs for skilled manpower with the goals of social equity and national integration.

3. GLOBALIZATION AND REFORM PHASE (2005-2019)

The period from 2005 to 2019 was characterized by efforts to reform and globalize India's higher education system in response to the challenges of the 21st century. The National Knowledge Commission (2005) was established to advise the government on transforming India into a knowledge economy. The Committee on Higher Education Report (2009) addressed the fragmentation of higher education, advocating for universities as innovation hubs and a more interdisciplinary approach to learning. Throughout this phase there was a growing recognition of the need to balance expansion with quality, equity with excellence, and traditional knowledge systems with global best practices.

3.1 National Knowledge Commission (2005)

The National Knowledge Commission (NKC) was established to advise the Prime Minister of India on policies related to education, research, and intellectual property to make India competitive in the knowledge economy.

The NKC made several proposals:

i. Establishment of 1,500 universities to achieve a Gross Enrolment Ratio of 15% by 2015, and the creation of 50 national universities as examples of excellence;

ii. University autonomy and regulation with universities becoming self-regulatory bodies and professional bodies being relieved of their academic oversight roles;

iii. Establishing an Independent Regulatory Authority for Higher Education (IRAHE) to replace existing regulatory bodies like UGC, AICTE and NCTE;

iv. Creating a flexible curricular framework that integrates skills training with academic depth and facilitates mobility across disciplines;

v. Curricular and programmatic reforms including restructuring undergraduate programmes to allow students to explore a broad range of subjects with significant mobility;

vi. All universities to offer a comprehensive range of knowledge areas, avoiding the creation of specialised or single-discipline institutions;

vii. Existing institutions of excellence such as IITs and IIMs to be expanded into full-fledged universities while preserving their distinctive characteristics; and

viii. Integrating all levels of teacher education into the higher education framework and designing new governance structures to ensure university autonomy while maintaining transparency and accountability.

Many of the NKC's recommendations were implemented, including the National Library Mission, National Translation Mission, National Knowledge Network, Right To Education Act, National Eligibility Cum Entrance Test (NEET), establishment of the National Skill Development Corporation (NSDC), the Science and Engineering Research Board (SERB), and the National Institute of Intellectual Property Management (NIIPM). The NKC significantly influenced the 11th Five Year Plan's approach to higher education, leading to increased research funding and the expansion of premier institutions like IITs and IIMs.

3.2 Committee on Higher Education (2009)

Chaired by Prof. Yash Pal, then Chancellor, Jawaharlal Nehru University, it addressed critical issues in India's higher education system and highlighted that only about 12.4% of the eligible age group (18-23 years) were enrolled in higher education, significantly lower than the global average at the time. One of the key challenges it identified was the fragmentation of the system with numerous colleges and universities operating under multiple regulatory bodies such as AICTE and UGC. To tackle these issues, the Committee proposed several solutions including:

i. Establishment of a single regulatory body;

ii. Creation of the National Commission for Higher Education and Research (NCHER), an apex body to streamline governance and reduce regulatory fragmentation; and

iii. Need for interdisciplinary approaches, suggesting that at least 25% of courses in undergraduate programmes should be from other disciplines.

The report on "Renovation and Rejuvenation of Higher Education in India" submitted by the Committee to the Ministry of Education, called for integrating research with undergraduate education, and ensuring students are exposed to cutting-edge knowledge and research methodologies.

4. CONTEMPORARY TRANSFORMATION PHASE (2020 ONWARDS)

The National Education Policy (NEP) 2020 marked the beginning of a transformative phase in India's approach to higher education, addressing persistent challenges such as low GER, quality concerns and a fragmented ecosystem. The policy carried forward ambitious goals from previous eras such as increasing the GER to 50% by 2035 and raising public investment in education to 6% of GDP. The NEP 2020 envisioned the transformation of India's higher education system into one that is flexible, inclusive, and globally competitive while ensuring that students are equipped with 21st century skills.

4.1 National Education Policy, 2020

The National Education Policy (NEP) 2020, developed under the leadership of Dr. K. Kasturirangan, former Chairman, Indian Space Research Organisation (ISRO), represents a comprehensive and transformative policy for India's education system. Building on the work of the earlier committee led by Shri T.S.R. Subramanian, former Cabinet Secretary, the NEP proposes transforming HEIs into multidisciplinary universities, emphasizing a more integrated approach to learning that combines academic rigour with practical skills.

Key reforms recommended by NEP 2020 include establishment of the Academic Bank of Credits (ABC) for seamless credit transfer, the Anusandhan National Research Foundation (ANRF) to boost research and innovation, and the Higher Education Commission of India (HECI). The HECI would streamline regulation while maintaining high standards through its constituent bodies like the National Higher Education Regulatory Council (NHERC) and National Accreditation Council (NAC). NEP introduces flexible curricula with multiple entry/exit points and advocates for the integration of vocational education into mainstream academia to enhance employability. It places strong emphasis on equity and inclusion, proposing a Gender Inclusion Fund and Special Education Zones to support Socially and Economically Disadvantaged Groups (SEDGs). It also focuses on internationalization of higher education, promoting Indian languages, arts and culture while aiming to position India as a global study destination. It emphasizes the integration of technology in education through initiatives like the National Educational Technology Forum (NETF) and the National Digital Education Architecture (NDEAR).

Indian Institute of Management, Ahmedabad

Implementation efforts have seen significant progress in a very short period of time. Some of these are briefly listed below:

i. The National Testing Agency (NTA), established in 2017, has been mandated to conduct unified entrance tests for higher education. Over the years, around 1 crore students have registered on the platform every year.

ii. The Higher Education Financing Agency (HEFA) was set up in 2017 to finance infrastructure in Central Government HEIs. In 2018, as a part of "RISE (Revitalising Infrastructure and Systems in Education) by 2022" the scope of HEFA was expanded and its authorised capital was enhanced to ₹10,000 crores. In 2024, the RISE scheme through HEFA has been extended through 2025-26.

iii. The Academic Bank of Credit, launched in July 2021 as part of the "One Nation, One Student ID" initiative, has registered over ₹30.56 crore students and 2,141 HEIs.

iv. To foster academic collaboration between Indian HEIs and foreign HEIs, the University Grants Commission (Academic Collaboration between Indian and Foreign Higher Educational Institutions to offer Twinning, Joint Degree, and Dual Degree Programmes) Regulations, 2022 were notified in May 2022.

v. The UGC guidelines for transforming single-stream institutions into Multidisciplinary Universities and autonomous degree-awarding institutions were issued in September 2022.

vi. The National Credit Framework (NCrF), jointly developed by the regulators of School and Higher Education and Skill Development was released in 2023. It provides a framework for accumulation of credits from academic courses, skill programmes, and relevant experience. Along with the provision of Multiple Entry and Exit and Academic Bank of Credit, this framework facilitates the seamless mobility of learners between various academic streams.

vii. The ANRF was established through legislation passed in August 2023, replacing the SERB and aiming to advance research in India. This initiative received a significant budgetary allocation of ₹50,000 crores.

viii. To provide an international dimension to higher education, enable Indian students to obtain foreign qualifications at affordable cost, and make India an attractive global study destination, University Grants Commission (Setting up and Operation of Campuses of Foreign Higher Educational Institutions in India) Regulations, 2023 were notified on 7th November 2023 to allow the entry of higher-ranked foreign universities.

ix. In February 2024, the UGC introduced new enrolment procedures for Open and Distance Learning (ODL) and Online Programmes, to ensure transparency by requiring students to enrol only in approved institutions and register on the UGC-DEB web portal, and Guidelines for the Institutional Development Plan with a focus on enhancing institutional infrastructure and faculty capacity for multidisciplinary education and research.

x. From 1st January 2025, the One Nation One Subscription (ONOS) Scheme provides access to over 13,000 journals for more than 6,300 government academic and R&D institutes including Central and State Government Institutes, Universities and Colleges. This translates to nearly 1.8 crore students, faculty and researchers getting access to high quality research publications.

By balancing global competitiveness with cultural preservation, fostering innovation, and prioritizing inclusivity, NEP 2020 aims to create a more dynamic and responsive education ecosystem. It represents a bold attempt to address both long-standing issues and emerging challenges. It sets the stage for a more flexible, inclusive, and globally competitive higher education system, which will be the largest in the world by 2035. It not only equips students with 21st century skills but also positions India as the global talent hub, the global startup hub, and a global knowledge leader.

The Way Forward

The evolution of India's higher education system since independence is a testament to the nation's enduring commitment to intellectual advancement and social transformation.

The recommendations of the Radhakrishnan Commission in 1948 and the Kothari Commission in 1966 were pivotal in laying down a structured framework for higher education, emphasizing quality, accessibility, and a holistic approach to learning. Subsequent National Education Policies, including those of 1968, 1986 and the most recent 2020 have each contributed uniquely to the development of higher education in India. The 1968 policy sought to promote a uniform system of education, while the 1986 and 1992 policies introduced significant reforms aimed at improving the quality and relevance of higher education. NEP 2020 aims to make higher education committed to access, quality, and future readiness.

By implementing the recommendations of NEP 2020 in letter and spirit, Indian higher education will become a key driver of social change, innovation, and national development, ensuring that the vision of a Viksit Bharat is realized.

CHAPTER-III

HIGHER EDUCATION IN INDIA – CENTRE & STATES: CURRENT SCENARIO

1. OVERVIEW

India is one of the youngest nations in the world with a median age of 28.2 years (World Population Prospects, 2022). Youth in the age group of 15-29 years made up 27.2% of the population in 2021, which is expected to decrease to 22.7% by 2036, but will still remain large in absolute numbers at 34.5 crores. (Report of the Technical Group on Population Projections for India and States 2011-2036, Ministry of Health & Family Welfare, July 2020) India accounts for nearly 20% of the world's young population. (World Economic Forum, 2018) This gives it a significant advantage since its share of the working-age population is high and rising vis-a-vis its dependent population, with the prospect for many more people to participate in the labour market and contribute to economic growth. This is an enormous opportunity that is likely to last till 2047. Hence policymakers have been and need to further ensure efficient pathways for youth to acquire quality higher education.

This chapter focuses on the efforts of the Central and State Governments to enhance the quality and accessibility of higher education in India, particularly in the last decade. Various indicators like access, quality, research and innovation, funding and financing, and governance of HEIs have been considered while evaluating the performance of each state in this sector.

1.1 Growth of Higher Education Ecosystem in India

The higher education ecosystem has grown by leaps and bounds since the establishment of the earliest universities in Calcutta, Bombay, and Madras in 1857. In 1950-51, the country had a total of only 30 universities and 578 colleges.

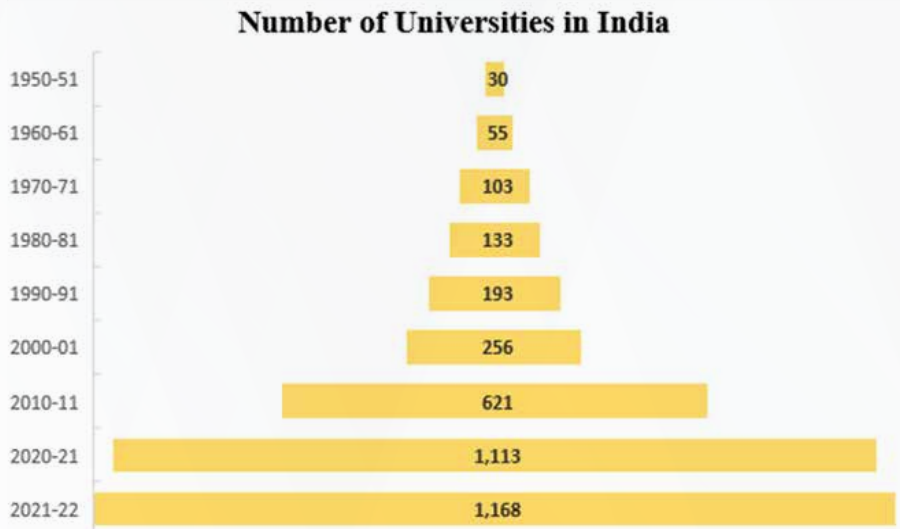


Figure 3.1: Number of Universities in India (1950-2022)
Source: Ministry of Education, AISHE 10-11, 21-22

The current number of universities depicts the noteworthy growth and progress of the Indian higher education sector over the last 75 years. According to AISHE Report 2021-2022, there were 1,168 universities, 45,473 colleges and 12,002 stand-alone institutions in the country. This almost 40-fold increase in the number of universities is a significant achievement in creation of access and facilities in the Indian higher education ecosystem. This approach is termed as 'massification' in contrast to the elitist education approach of the colonial period. (Powar & Chaturvedi, 2015)

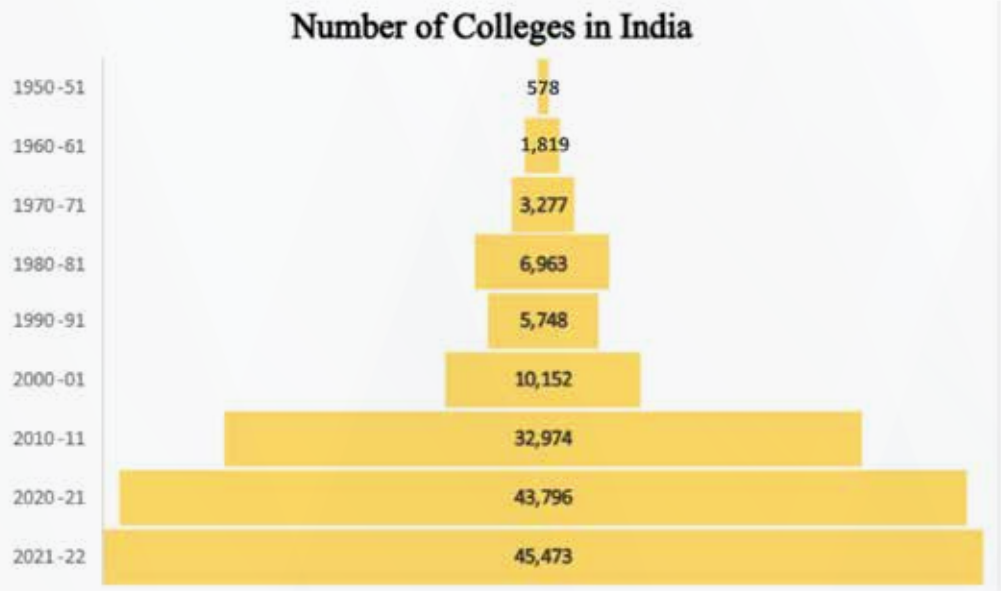


Figure 3.2: Number of Colleges in India (1950-2022)
Source: Ministry of Education, AISHE 10-11, 21-22

As per AISHE reports, colleges include 'only the affiliated and constituent institutions of Central and State Public Universities'. The number of colleges has shown a noteworthy increase from 578 in 1950-51 and 1,819 in 1960-61 to 10,152 in 2000-01, but even more so in the last 2 decades when the expansion has more than quadrupled, with the latest number exceeding 45,000.

1.2 Number of Universities by Type

Universities in India are classified into 6 broad types, the definitions of which are stated below and their numbers are depicted in the Table 3.1.

- **Central University (CU):** A university that is established or incorporated by an Act of the Central Government is called a Central University. There are 53 Central Universities in India, and 1 Central Open University for distance learning.
- **State Public University (SPU):** A university established or incorporated by a Provincial Act or by a State Act can be termed a State (Public) University. There are 423 State Public Universities in India and 16 State Open Universities for technology-based distance learning.
- **Private University:** It is a university established through a State or Central Act by a sponsoring body viz. a Society registered under the Societies Registration Act 1860, or any other corresponding law for the time being in force in a State or a Public Trust or a

Company registered under Section 25 of the Companies Act, 1956. There are 391 Private Universities in India.

- **Deemed-to-be University (DU):** This Institution, commonly known as Deemed University, refers to a high-performing institution, which has been so declared by the Central Government under Section 3 of the University Grants Commission (UGC) Act, 1956. There are various subtypes of these, like Deemed University - Government, Government Aided, and Private. There are 124 Deemed Universities in India.
- **Institution of National Importance (INI):** It is an Institution established by an Act of Parliament and declared as an Institution of National Importance, such as the Indian Institutes of Technology (IITs), the National Institutes of Technology (NITs), the Indian Institutes of Management (IIMs), among others. There are currently 153 INIs in India.
- **Institution under State Legislature Act:** It is an Institution established or incorporated by a State Legislature Act. There are only 6 such institutions in India.

Table 3.1: Number of Universities by Type in India (2021-22)

State/UT	CU	Central Open Univ.	INI	SPU	Institute under State Leg. Act	State Open Univ.	State Private Univ.	State Pvt. Open Univ.	DU Govt.	DU Govt. Aided	DU Pvt.	Total No. of Universities in the State/UT
Andhra Pradesh	3		10	24	1		5				4	47
Arunachal Pradesh	1		1				6	1	1			10
Assam	2		5	15		1	6		1			30
Bihar	4		6	17	1	1	7		1			37
Chandigarh			1	1					1			3
Chhattisgarh	1		4	14		1	14					34
Delhi	6	1	6	9					6	1	1	30
Goa			2	1								3
Gujarat	1		9	26		1	51		1	1	1	91
Haryana	1		5	20			24		3		3	56
Himachal Pradesh	1		5	7			17					30
Jammu & Kashmir	2		4	9	1							16
Jharkhand	1		5	11			15				1	33
Karnataka	1		6	33		1	20		2		12	75

State/UT	CU	Central Open Univ.	INI	SPU	Institute under State Leg.Act	State Open Univ.	State Private Univ.	State Pvt. Open Univ.	DU Govt.	DU Govt. Aided	DU Pvt.	Total No.of Universities in the State/UT
Kerala	1		6	14		1			2		1	25
Ladakh				1					1			2
Madhya Pradesh	2		10	23		1	40		1			77
Maharashtra	1		7	23		1	21		7	2	12	74
Manipur	3		2	3			2					10
Meghalaya	1		2				8					11
Mizoram	1		1				1					3
Nagaland	1		1				4					6
Odisha	1		5	19		1	8				3	37
Puducherry	1		2								1	4
Punjab	1		6	12		1	18		1		1	40
Rajasthan	1		5	26	1	1	49				7	90
Sikkim	1		1	1			6					9
Tamil Nadu	2		7	21		1	3			2	26	62
Telangana	3		4	15	1	1	4		1		2	31
Tripura	1		2	1			1					5
Uttar Pradesh	6		11	32	1	1	31		2	3	4	91
Uttarakhand	1		4	10		1	19		1	1	1	38
West Bengal	1		8	35		1	11		1		1	58
TOTAL	53	1	153	423	6	16	391	1	33	10	81	1,168

Source: AISHE 2021-22

Note: There is no university in the UTs of Andaman & Nicobar Islands, Dadra & Nagar Haveli and Daman & Diu, and Lakshadweep.

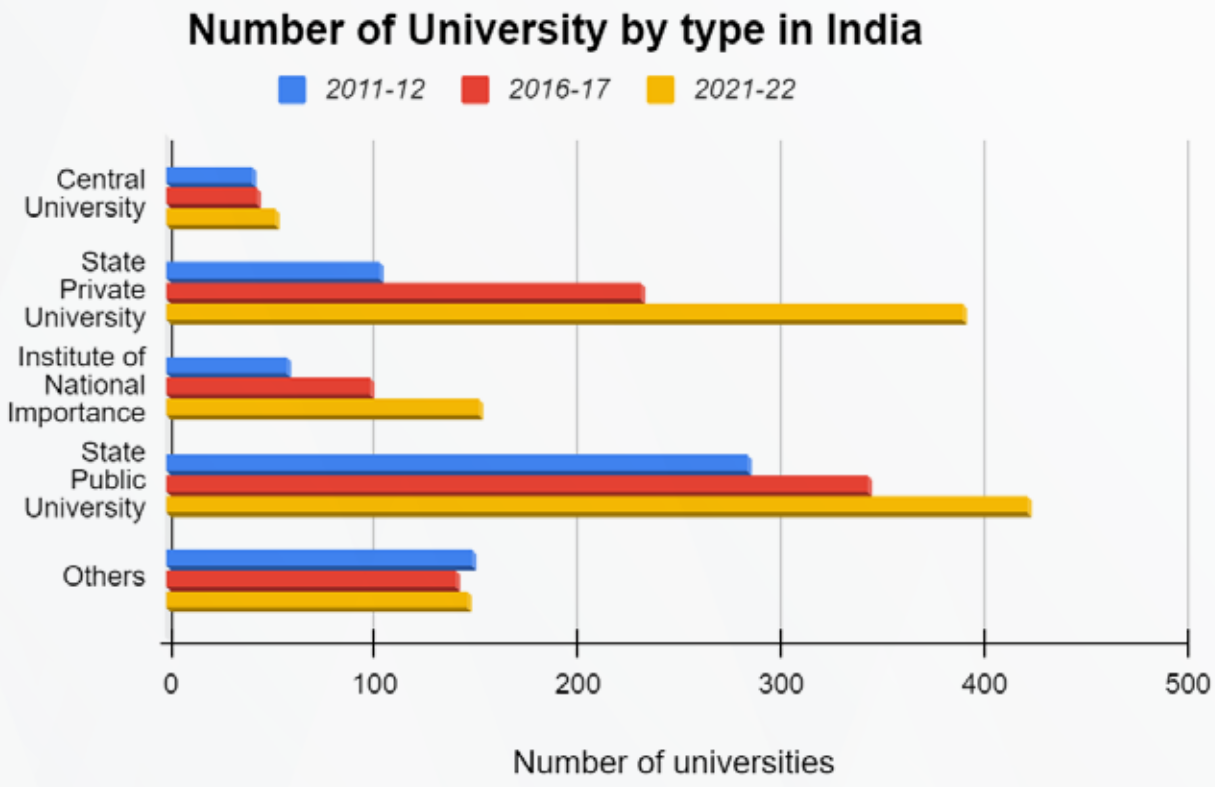
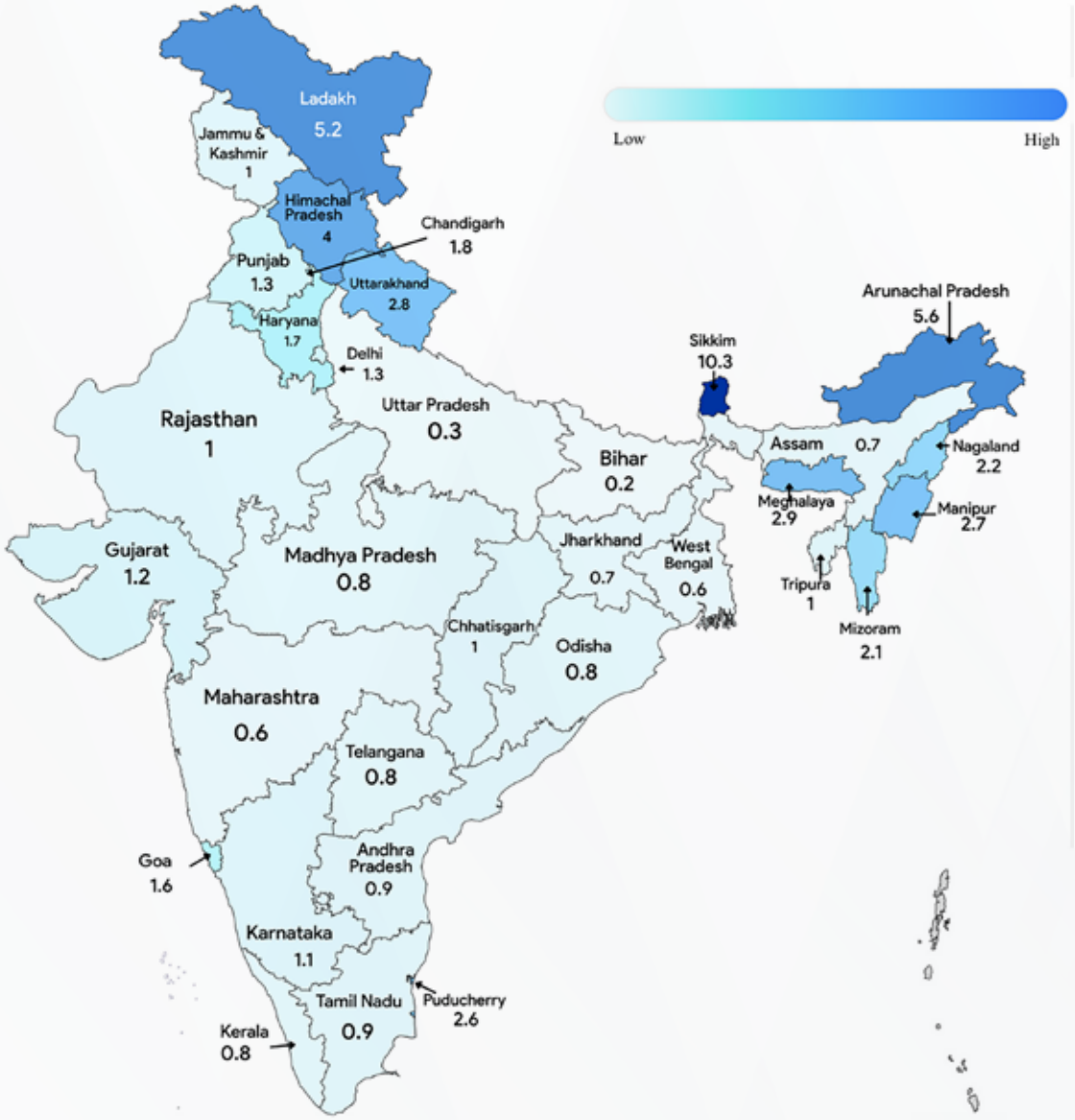


Figure 3.3: Number of Universities by type in India
Source: AISHE 11-12, 16-17, 21-22
Note: The 'Others' Category includes the Institutes under State Legislature, Deemed University-Government, Deemed University-Private, Deemed University-Government Aided, State Open University, State Private Open University, Central Open University.

It is evident from Table 3.1 and Figure 3.3 that State Public Universities (SPUs) constitute the largest share among Universities, followed by State Private Universities. Both types of universities have seen rapid expansion in the last 10 years, indicating greater expansion of higher education in the states along with the increasing dominance of private players in the higher education sector.

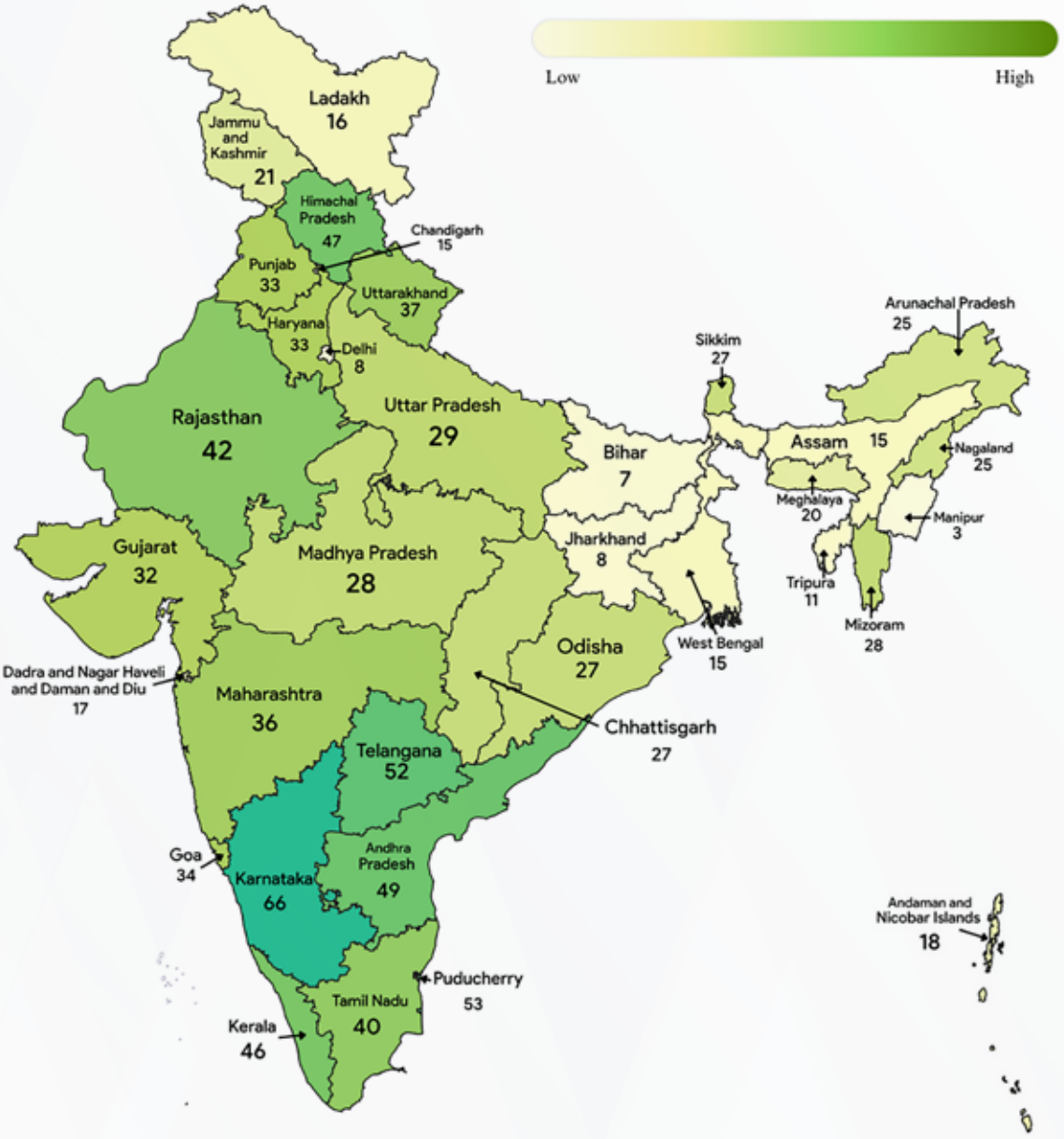
1.3 University and College Density

Although India has made considerable progress towards expanding HEIs in the last two decades, these universities and colleges are not equitably distributed across states. There are some notable disparities between states which are measured using the university and college densities in Maps 3.1 and 3.2.



Map 3.1: University Density across states/UTs (2021-22)
Source: AISHE 21-22
Note: There are no Universities in the UTs of Andaman & Nicobar Islands, Dadra & Nagar Haveli and Daman & Diu and Lakshadweep.

University density is the total number of universities per 1 lakh eligible population (18-23 years of age) in a state. The national average university density is 0.8. Sikkim has the highest density of 10.3, followed by Arunachal Pradesh, Ladakh, Himachal Pradesh, Meghalaya and Uttarakhand. These are all sparsely populated regions. In the highly populated states of Bihar, Uttar Pradesh, West Bengal and Maharashtra, density at the state level is below the national average, with Bihar recording the lowest at 0.2. This indicates that while the absolute number of universities and colleges is rapidly growing, their distribution among the population is unequal, especially in the high population states. Hence, efforts need to be made to ensure equitable access to higher education by improving university density in these states.



Map 3.2 College Density across states/UTs (2021-22)
Source: AISHE 21-22
Note: There is no College in the UT of Lakshadweep.

College density is the total number of colleges per 1 lakh eligible population (18-23 years of age) in a state. The national average college density was 30 in 2022. Karnataka leads with a density of 66, which is more than twice the national average, followed by the states of Telangana, Andhra Pradesh, Himachal Pradesh and Kerala. The UT of Puducherry has the highest college density of 53. The states with the least college densities are Manipur, Bihar and Jharkhand.

2. ACCESS

The key driving force behind ensuring equal access to higher education for all should be that 'no talented and deserving person should be denied access to higher education'. (Powar & Chaturvedi, 2015) The government has made consistent efforts to ensure that higher education is accessible to all. Access to higher education has been measured in this report mainly based on two parameters: Gross Enrolment Ratio (GER) and Gender Parity Index(GPI). When it comes to enrolment in higher education, many students tend to drop out of education at primary and secondary levels, thus adversely affecting the enrolment ratios in the higher education sector. There is a need to curb the dropout rates at primary and secondary school levels and encourage students to enrol in higher education. Moreover, those who drop out early need to be brought back into the fold.

2.1 Students enrolled in Tertiary Education

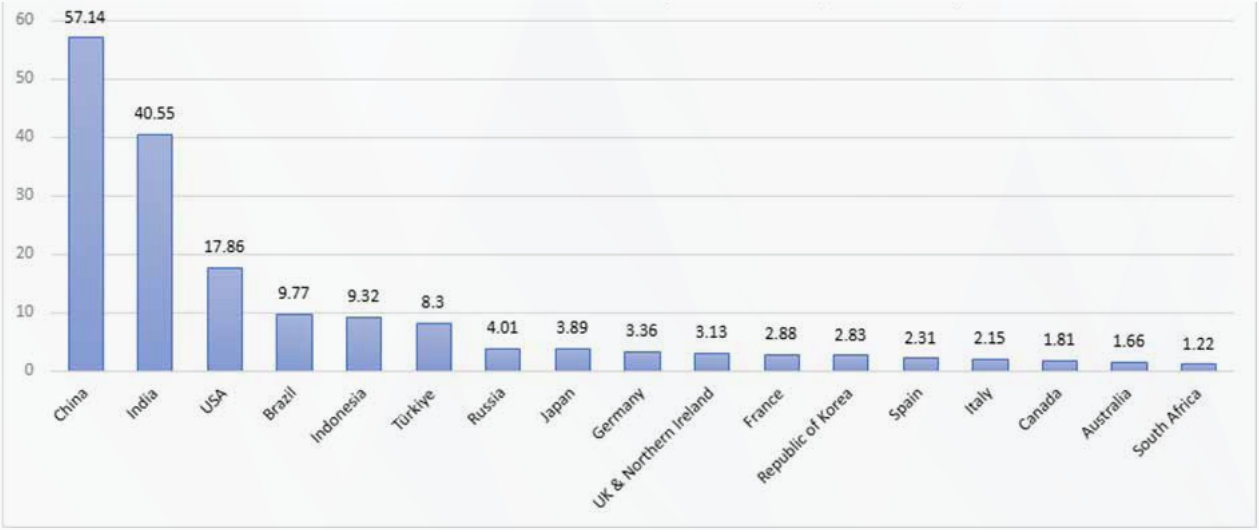


Figure 3.4 Student Enrolment in Tertiary Education across countries (in millions)
Source: UNESCO Institute of Statistics

According to the UNESCO Institute for Statistics (2012), "Tertiary education builds on secondary education, providing learning activities in specialised fields of education. It aims at learning at a high level of complexity and specialisation. Tertiary education includes what is commonly understood as academic education but also includes advanced vocational or professional education. It comprises ISCED levels 5, 6, 7 and 8, which are labelled as short-cycle tertiary education, Bachelor's or equivalent level, Master's or equivalent level, and doctoral or equivalent level, respectively". As of 2022, India had the second largest number of students enrolled in tertiary education with more than 4 crore student enrolments, only behind China. The Indian number is far higher than that of the USA, Brazil and Indonesia combined.

2.2 Gross Enrolment Ratio in India

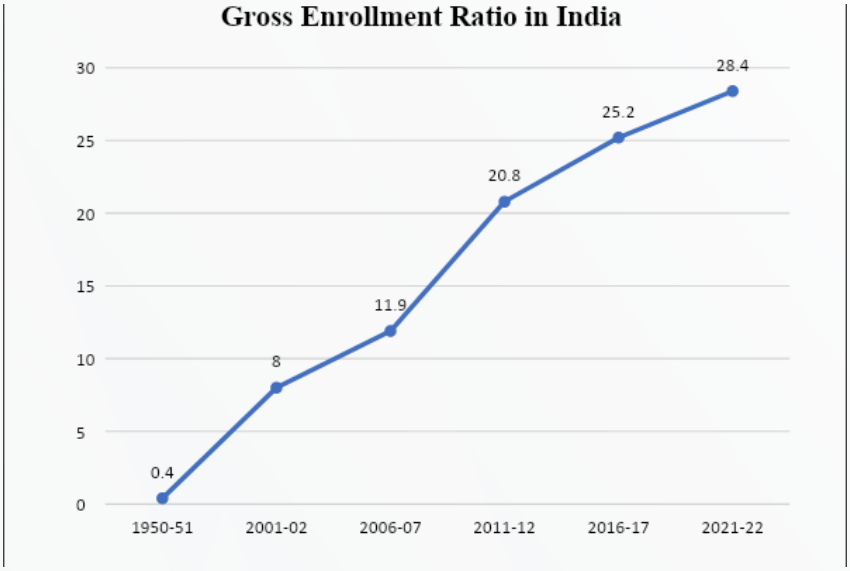
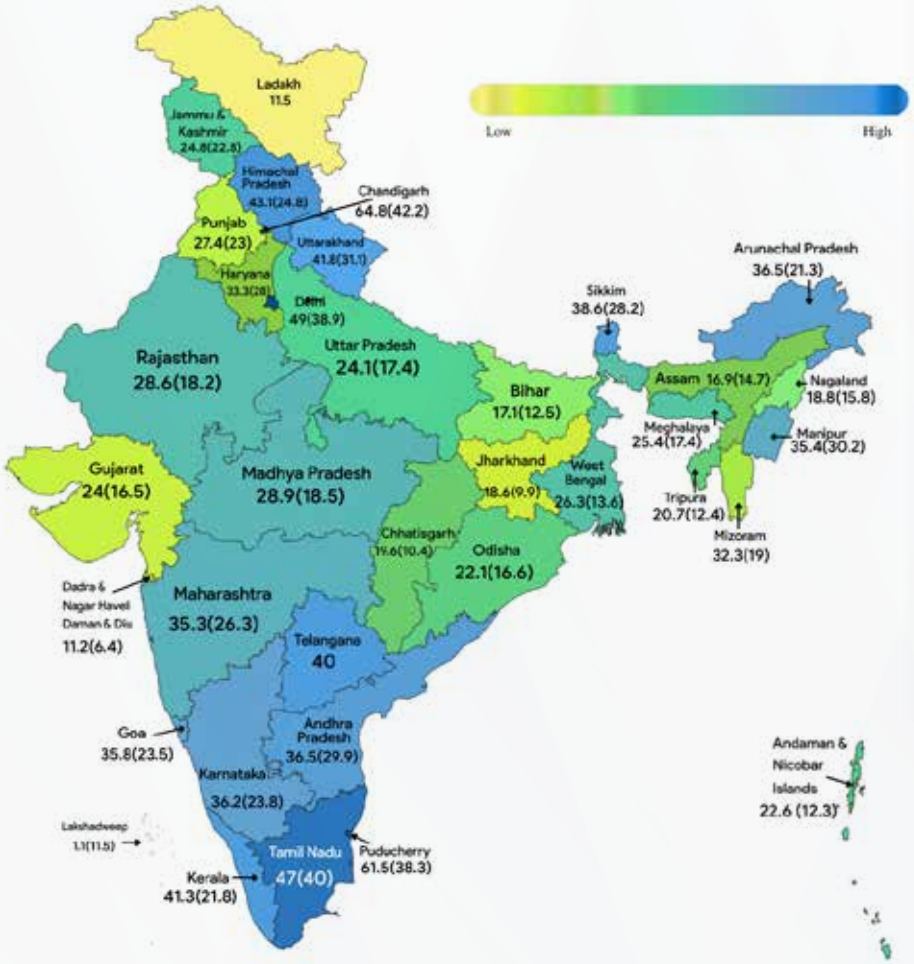


Figure 3.5 Gross Enrolment Ratio in India (1950-2022)
Source: Rashtriya Uchchatar Shiksha Abhiyan Report 2013, Statistics of Higher and Technical Education 2008-09, AISHE 11-12, 16-17, 21-22

The Gross Enrolment Ratio (GER) measures the number of students enrolled in higher education as a percentage of the eligible population in the age group of 18 to 23 years. Higher GER values indicate greater enrolment in higher education among the specified age group. Between 1950-51 and 2021-22, GER in India increased 71 times, thus demonstrating the noteworthy success in increasing student enrolments over the decades. India is also one of the best performers among developing countries. Yet around three-fourth of the total eligible population is still not pursuing higher education. However, with increasing student enrolments in HEIs, there is scope for improvement of GER in higher education. This aligns with one of the key objectives of the NEP 2020, which aims to achieve GER of 50% by 2035.

Indian Institute of Management, Kozhikode

2.3 Gross Enrolment Ratio in India across states (2011-12 & 2021-22)



Map 3.3 Gross Enrolment Ratio across states/UTs (2011-12 & 2021-22)
Source: AISHE 11-12 & 21-22
Note: Map 3.3 displays the decadal difference in GER across India from 2011-12 to 2021-22.
The numbers in the bracket denote the GER of 2011-12. The numbers outside denote the GER of 2021-22.

Though India is advancing in terms of improving the GER, the progress is not uniform across all states. The state of Tamil Nadu and UTs of Chandigarh and Puducherry have shown maximum improvement in GER. Tamil Nadu leads the country with a GER of 47%. Other states like Kerala, Telangana, Andhra Pradesh, Karnataka and Maharashtra have GERs considerably higher than the national average of 28.4. The UTs of Chandigarh, Puducherry and Delhi have notably good GER, with Chandigarh recording the highest at 64.8%. Conversely, states such as Bihar, Jharkhand, Odisha, Uttar Pradesh, Gujarat and some Northeastern States have low GERs compared to the national average. Though Bihar, Jharkhand and Chhattisgarh have the lowest GER, the ratio has significantly improved, and doubled in some cases over the last decade.

Despite having higher university densities, Meghalaya and Ladakh have lower GER as compared to the national average. States with moderate university densities like Kerala, Tamil Nadu and Telangana have a higher GER. This reveals that increasing the number of universities alone does not lead to higher student enrolment, thereby indicating a need for better utilisation of capacity and resources.

2.4 Student Enrolment across states based on Gender (2021-22)

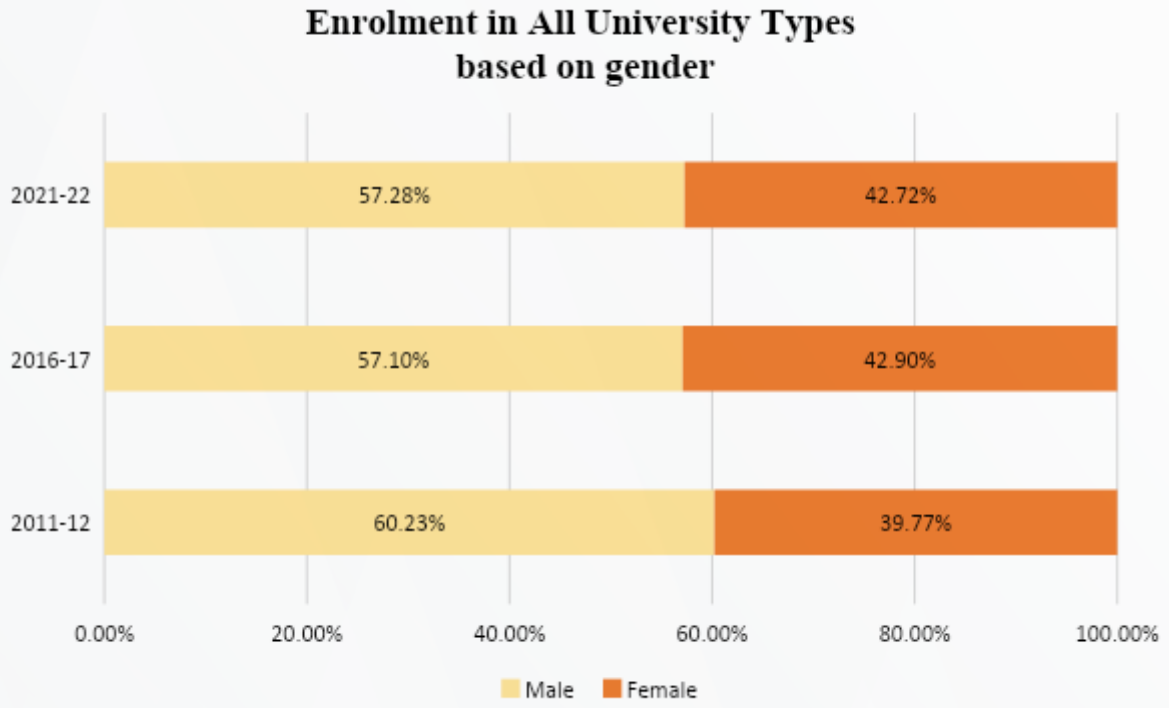


Figure 3.6: Enrolment in all university types based on gender
Source: AISHE 11-12, 16-17, 21-22

Fig 3.6 depicts a slight improvement in the overall number of female enrolments which has risen around 3% in the last decade, while the number is constantly improving in a non-uniform manner across states. The near-equal representation of both genders demonstrates India's progress towards gender parity in higher education.

Table 3.2: Student Enrolment based on Gender (in lakhs) (2021-22)

States/UTs	Male	Female	Total
Andaman and Nicobar Islands	0.05	0.06	0.11
Andhra Pradesh	10.29	9.00	19.29
Arunachal Pradesh	0.35	0.30	0.65
Assam	3.34	3.44	6.78
Bihar	14.47	11.75	26.23
Chandigarh	0.55	0.56	1.11
Chhattisgarh	2.99	3.58	6.56
Delhi	5.85	5.60	11.45
Goa	0.35	0.30	0.65
Gujarat	10.10	7.88	17.98
Haryana	5.42	5.62	11.05

Table 3.2: Student Enrolment based on Gender (in lakhs) (2021-22)			
States/UTs	Male	Female	Total
Himachal Pradesh	1.47	1.73	3.20
Jammu and Kashmir	1.93	2.07	4.00
Jharkhand	4.50	4.30	8.80
Karnataka	12.58	11.79	24.37
Kerala	5.55	7.50	13.04
Ladakh	0.02	0.03	0.04
Lakshadweep	0.00	0.00	0.00
Madhya Pradesh	15.06	12.94	28.00
Maharashtra	25.43	20.35	45.78
Manipur	0.66	0.64	1.30
Meghalaya	0.44	0.53	0.96
Mizoram	0.23	0.24	0.47
Nagaland	0.24	0.28	0.51
Odisha	5.81	4.93	10.74
Puducherry	0.45	0.50	0.95
Punjab	4.35	4.24	8.59
Rajasthan	14.30	12.59	26.89
Sikkim	0.16	0.17	0.34
Tamil Nadu	16.98	16.11	33.09
Telangana	7.93	8.03	15.97
Dadra and Nagar Haveli and Daman and Diu	0.07	0.06	0.13
Tripura	0.54	0.47	1.01
Uttar Pradesh	36.69	33.04	69.73
Uttarakhand	2.86	2.82	5.68
West Bengal	13.76	13.47	27.22
All India	225.76	206.92	432.68

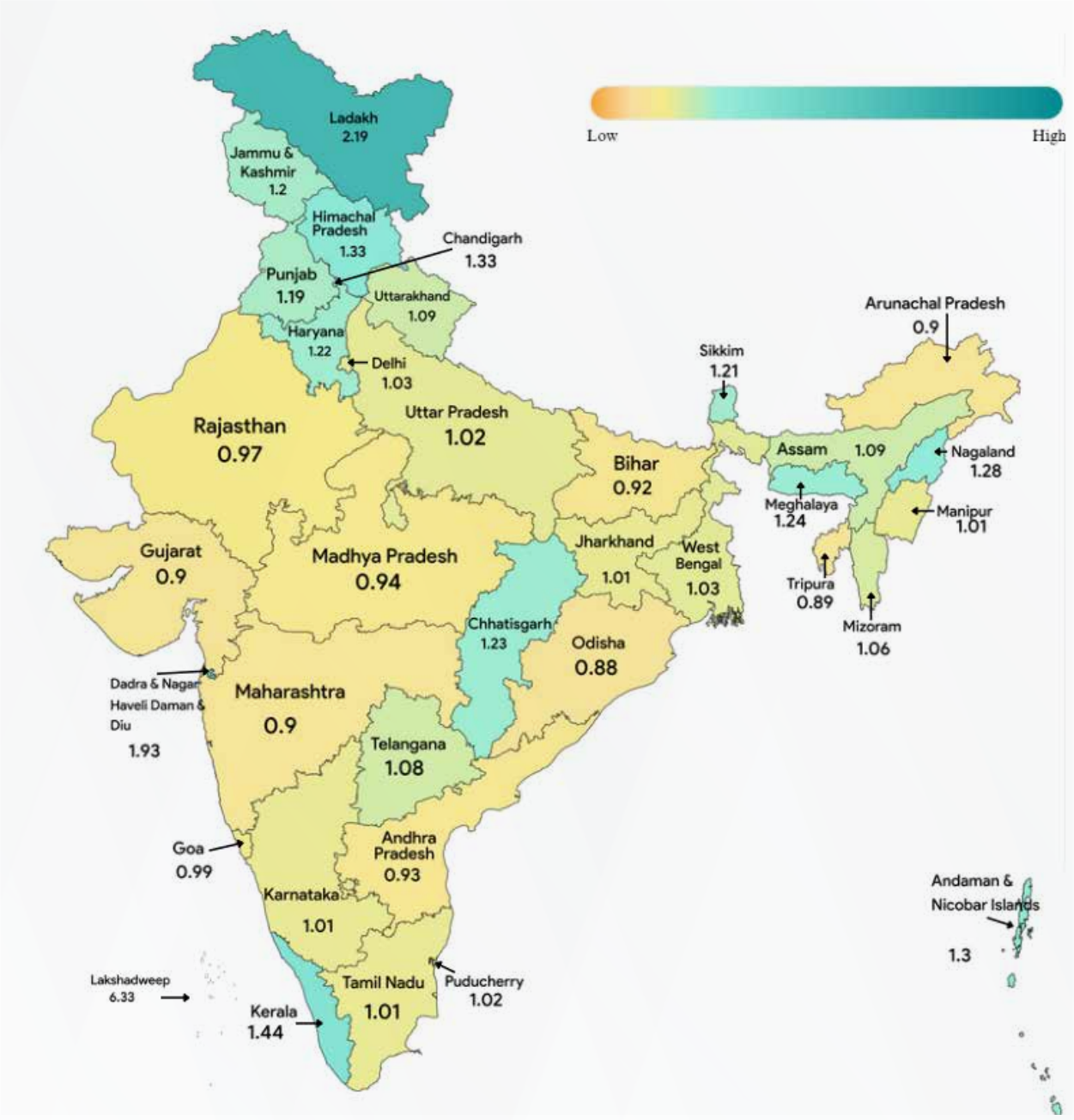
Source: AISHE 21-22

Note: Figures have been rounded off in some cases.

Table 3.2 indicates the student enrolments in universities based on gender. States like Kerala, Chhattisgarh and Himachal Pradesh have higher female enrolment rates than males, serving as models of success for greater access to higher education for women. Geographically smaller states and UTs like Chandigarh, Mizoram, and the Andaman and Nicobar Islands have relatively balanced male-female enrolments, with differences of only a few hundred students. In some states like Maharashtra, Uttar Pradesh, Bihar, Gujarat and Madhya Pradesh, there is a higher enrolment rate for males compared to females.Hence, there is a need for more targeted policies to encourage female participation in higher education as per the unique context in these states.

2.5 Gender Parity Index across states and UTs (2021-22)

The GPI in higher education across various states and UTs reveals notable differences in gender balance. It is calculated by dividing the total female student population by the total male student population in a state. The national GPI for 2021-22 was 1.01 compared to 0.87 in 2011-12, indicating a 16% increase towards gender equality over a decade.



Map 3.4 Gender Parity Index across states/UTs (2021-22)
Source: AISHE 21-22

Kerala has the highest GPI of 1.44, reflecting a strong gender balance with more female students relative to male students. Himachal Pradesh follows with a GPI of 1.33, indicating a favourable gender parity. Among UTs, Lakshadweep stands out with an exceptionally high GPI of 6.33, indicating a very strong female representation in higher education. Ladakh, Dadra and Nagar Haveli and Daman and Diu also have a high GPI of 2.19 and 1.93 respectively, reflecting substantial gender inclusivity in the higher education systems of these UTs. Odisha and Tripura have the lowest GPIs at 0.88 and 0.89 respectively, indicating the need for focused policies and initiatives to enhance female participation in higher education.

3. QUALITY

Access to quality education is a primacy of NEP 2020. Every HEI must constantly strive to maintain and upgrade its quality standards to meet this vision. To measure the quality of institutions, four broad parameters have been analysed: Faculty and Teachers, Pupil Teacher Ratio, Research and Publications, and Innovation.

3.1 Faculty and Teachers

NEP 2020 places teachers and faculty at the centre of the teaching-learning process . It emphasizes the importance of prioritising the recruitment of teachers, providing continuous professional development, and ensuring positive working environments and service conditions for them. Their expertise, teaching methodologies and ability to engage students are vital to ensuring quality education. Investing in faculty development, ensuring favourable pupil-teacher ratio, and the presence of well-qualified, motivated and experienced teachers directly influences learning outcomes, student satisfaction and overall institutional reputation.

3.1.1. Teachers across academic positions at All-India level (2021-22)

Table 3.3: Teachers across academic positions at All-India level (in thousands) (2021-2022)

States/ UTs	Professor & Equivalent	Reader & Associate Professor	Lecturer/ Assistant Professor	Demo-nstrator/ Tutor	Temporary Teacher etc.	Visiting Teacher	All teachers
Andaman and Nicobar Islands	0.03	0.06	0.15	0.02	0.16	0.03	0.45
Andhra Pradesh	9.65	9.41	77.79	5.45	4.11	0.13	106.54
Arunachal Pradesh	0.23	0.27	1.61	0.09	0.10	0.01	2.29
Assam	1.57	3.30	15.90	1.01	1.52	0.04	23.34
Bihar	2.72	3.69	27.19	2.58	1.70	0.27	38.15
Chandigarh	0.75	0.60	2.07	0.02	0.27	0.02	3.73
Chhattisgarh	1.97	1.67	14.59	2.40	2.85	0.12	23.60
Delhi	4.08	4.57	12.03	0.52	1.58	0.17	22.93
Goa	0.31	0.61	2.61	0.08	0.22	0.08	3.90
Gujarat	5.75	7.62	37.35	6.09	2.72	2.28	61.80
Haryana	3.74	4.20	28.76	1.68	2.24	0.47	41.10

Table 3.3: Teachers across academic positions at All-India level (in thousands) (2021-2022)							
States/ UTs	Professor & Equivalent	Reader & Associate Professor	Lecturer/ Assistant Professor	Demo-nstrator/ Tutor	Temporary Teacher etc.	Visiting Teacher	All teachers
Himachal Pradesh	1.13	1.18	7.24	0.98	0.33	0.05	10.90
Jammu and Kashmir	1.10	1.03	6.96	0.88	1.33	0.06	11.36
Jharkhand	1.10	1.18	10.75	0.96	0.99	0.10	15.09
Karnataka	17.64	16.16	89.03	15.21	11.35	1.50	150.89
Kerala	5.21	5.66	44.80	3.13	3.96	0.10	62.86
Ladakh	0.01	0.00	0.20	0.01	0.05	0.00	0.27
Lakshadweep	0.00	0.00	0.01	0.00	0.00	0.00	0.01
Madhya Pradesh	8.92	7.34	53.71	6.56	5.41	0.53	82.46
Maharashtra	16.19	18.27	111.65	7.99	10.00	3.60	167.69
Manipur	0.39	0.73	4.61	0.22	0.26	0.06	6.27
Meghalaya	0.28	0.43	2.84	0.15	0.09	0.02	3.81
Mizoram	0.19	0.48	1.13	0.15	0.26	0.01	2.21
Nagaland	0.16	0.17	2.04	0.10	0.05	0.02	2.54
Odisha	3.52	4.42	29.66	3.89	1.99	0.25	43.73
Puducherry	1.08	0.85	3.79	0.77	0.11	0.00	6.59
Punjab	4.15	4.27	35.61	4.74	1.73	0.50	50.99
Rajasthan	7.75	7.29	62.71	4.12	1.04	0.30	83.19
Sikkim	0.11	0.17	1.15	0.07	0.02	0.00	1.51
Tamil Nadu	18.29	21.06	154.01	8.95	5.92	0.50	208.74
Telangana	7.54	8.12	61.93	3.71	2.65	0.14	84.09
Dadra & Nagar Haveli and Daman & Diu	0.04	0.04	0.39	0.08	0.07	0.02	0.64
Tripura	0.16	0.26	1.35	0.46	0.21	0.06	2.51
Uttar Pradesh	17.13	16.25	125.90	7.71	10.70	0.52	178.19
Uttarakhand	2.57	2.12	12.63	1.04	1.11	0.06	19.52
West Bengal	5.99	7.28	42.41	3.94	13.28	0.93	73.82
All India	151.41	160.73	1086.53	95.75	90.37	12.90	1597.69

Source: AISHE 2021-22

Table 3.3 highlights the distribution of university teachers across different academic positions. India has approximately 16 lakh teachers in HEIs, with the majority (68%) being Lecturers/Assistant Professors. Readers/Associate Professors represent around 10% of the total faculty, followed by Professors & equivalent at 9.5%, Demonstrators/Tutors at 6%, Temporary Teachers at 5.7%, and Visiting Teachers at 0.8%.

Tamil Nadu leads with around 2 lakh teachers, particularly in the Lecturers/Assistant Professors

category. Uttar Pradesh and Maharashtra follow closely. Smaller states and UTs such as Lakshadweep, Ladakh, and Dadra & Nagar Haveli and Daman & Diu have less than 1,000 teachers, mainly due to fewer HEIs. Larger states such as Tamil Nadu, Karnataka and Maharashtra have a balanced distribution across senior and junior faculty. States like Uttar Pradesh and Bihar have a higher concentration of teachers in junior positions.

3.2 Overall Pupil Teacher Ratio (PTR) in India (2012-2022)

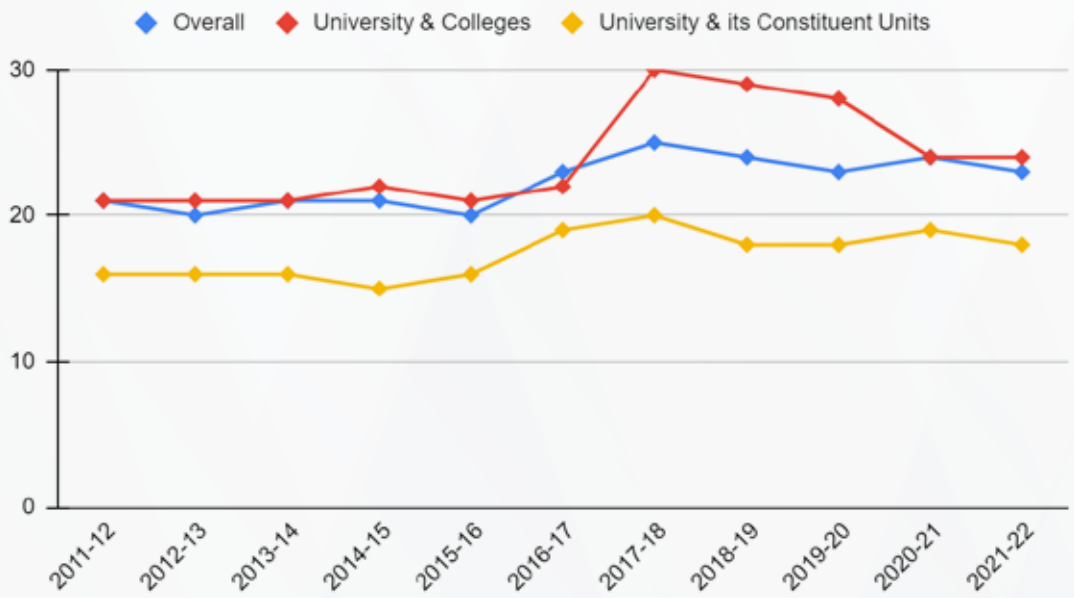
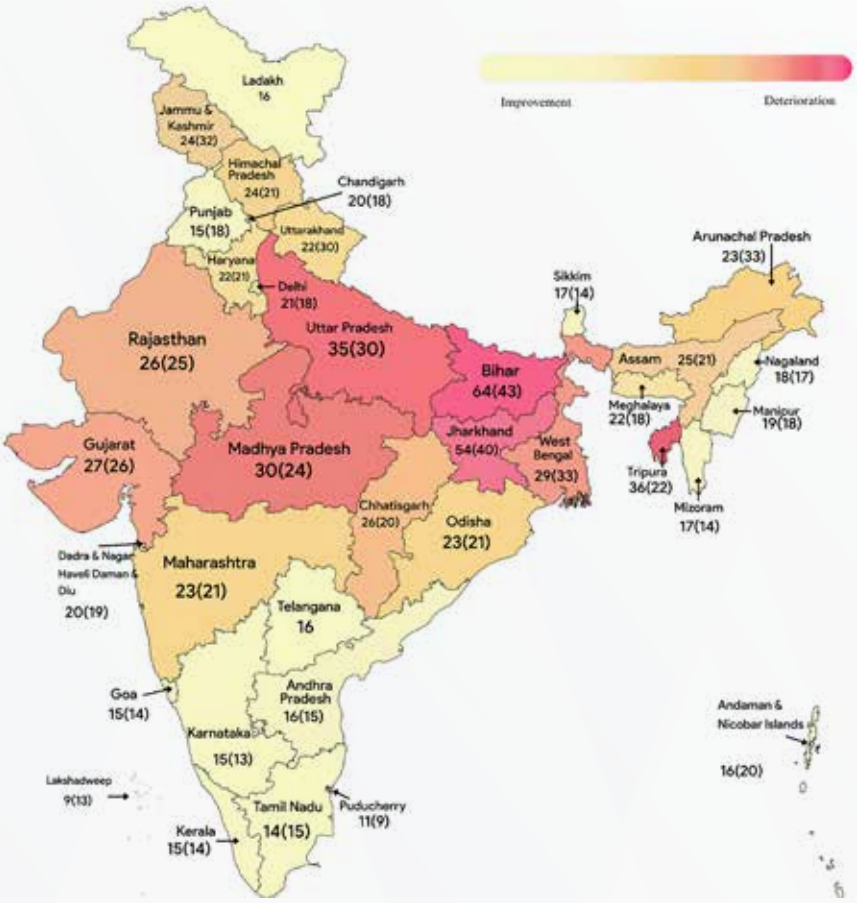


Figure 3.7 Overall Pupil Teacher Ratio in India (2012-22)
Source: AISHE 11-12, 16-17, 21-22

PTR is a significant indicator of educational quality, calculated by dividing the total number of students enrolled by the total number of teachers at a particular level of education. The overall PTR at the national level has been constant at 23 over the last 4-5 years. However, it varies across states, with some achieving ideal PTR while others facing challenges in maintaining a basic standard.

Indian Institute of Technology, Delhi

3.2.1. Pupil Teacher Ratio across states and UTs in India (2011-12 & 2021-22)



Map 3.5: Pupil Teacher Ratio across states/UTs (2011-12 & 2021-22)
Source: AISHE 11-12 & 21-22 (Teachers in Regular Mode)
Note: Map 3.5 indicates teachers in Regular Mode. It represents a decadal difference in PTR, with figures in brackets denoting the PTR for 2011-12, and figures outside denote PTR for 2021-22.

In 2021-22, Tamil Nadu led with a PTR of 14, significantly higher than the national average of 23. Goa, Karnataka, Kerala, and Punjab also rank high with PTR of 15. States like Bihar, Jharkhand, Madhya Pradesh and Chhattisgarh have seen a lower PTR in 2021-22 when compared to 2011-12. These states have experienced an increase in the number of students without a rise in the number of teachers, leading to the declining PTR. These differences reiterate the necessity for targeted policies to recruit and train more educators, especially in lagging states, to ensure equitable access to quality education.

3.3 Research and Publications

As institutions serving a large and diverse student population, HEIs in India have the potential to contribute significantly to the nation's intellectual and economic growth by investing in research and development (R&D). HEI's research output can strengthen academia-industry collaborations, influence policy-making, and promote sustainable development. By focusing on R&D, Indian HEIs can contribute to advancements in science, technology, and society, while also building a skilled and competitive workforce.

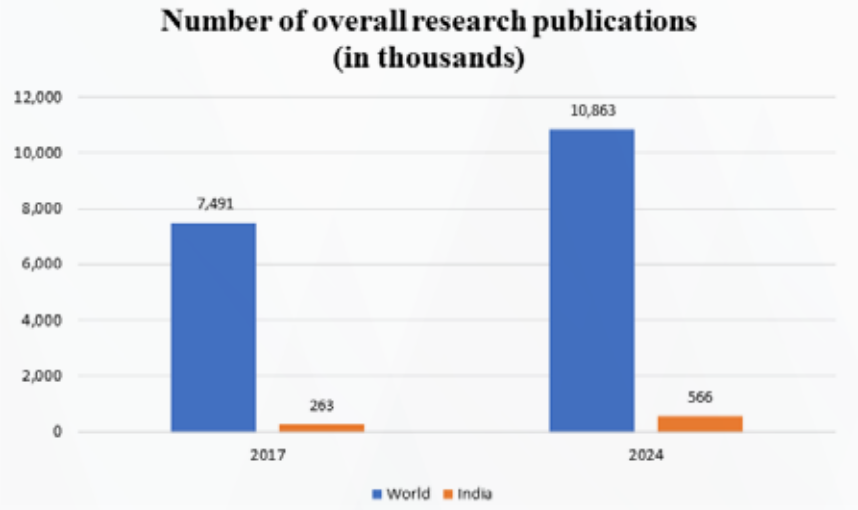


Figure 3.8 Number of overall research publications as per NIRF (2011-12 & 2021-22)
Source: NIRF Rankings Report 2017, 2024

India's contribution to global research publications has increased from 3.5% in 2017 to 5.2% in 2024. However, the share of higher education in the total research publications of India is just 10%. India's research environment is rapidly evolving, with increasing global recognition of its contributions across multiple disciplines. The doubling of total research output from 2017 to 2024 reflects the country's commitment to strengthening its academic and research infrastructure, driving both national development and international collaborations. However, the number of researchers in India remains smaller than countries like the United States, China, Japan, Russia and Germany. The academic institutions in India are often under-resourced, presenting a challenge that needs to be addressed for India to compete globally in research and innovation (Rao et al., 2015).

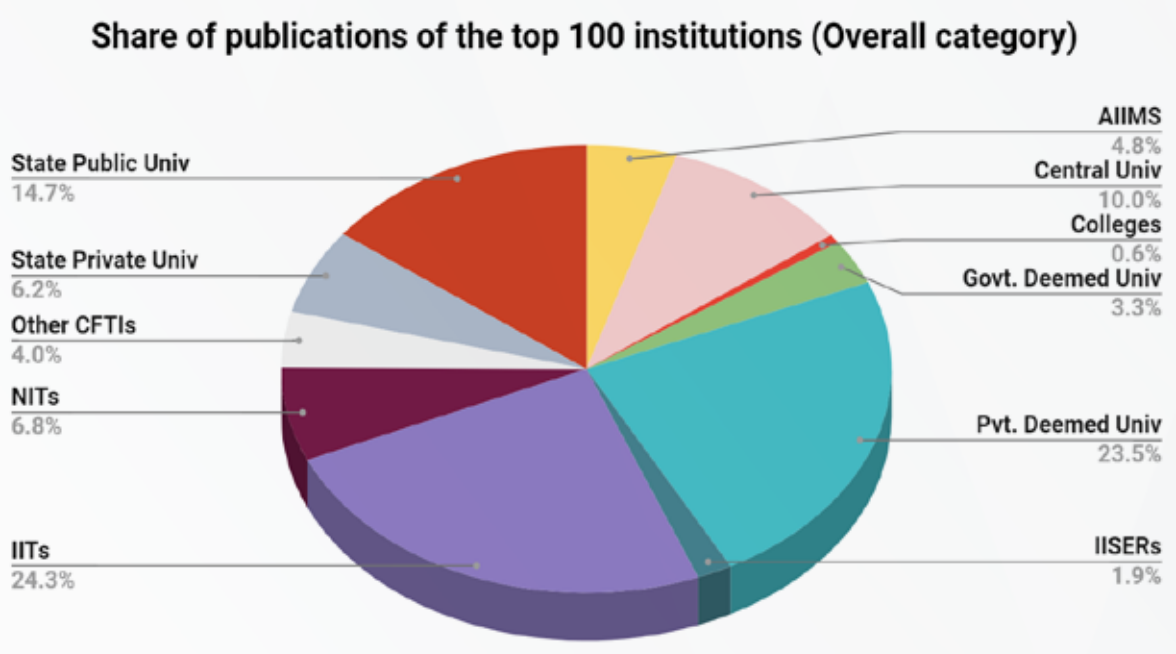


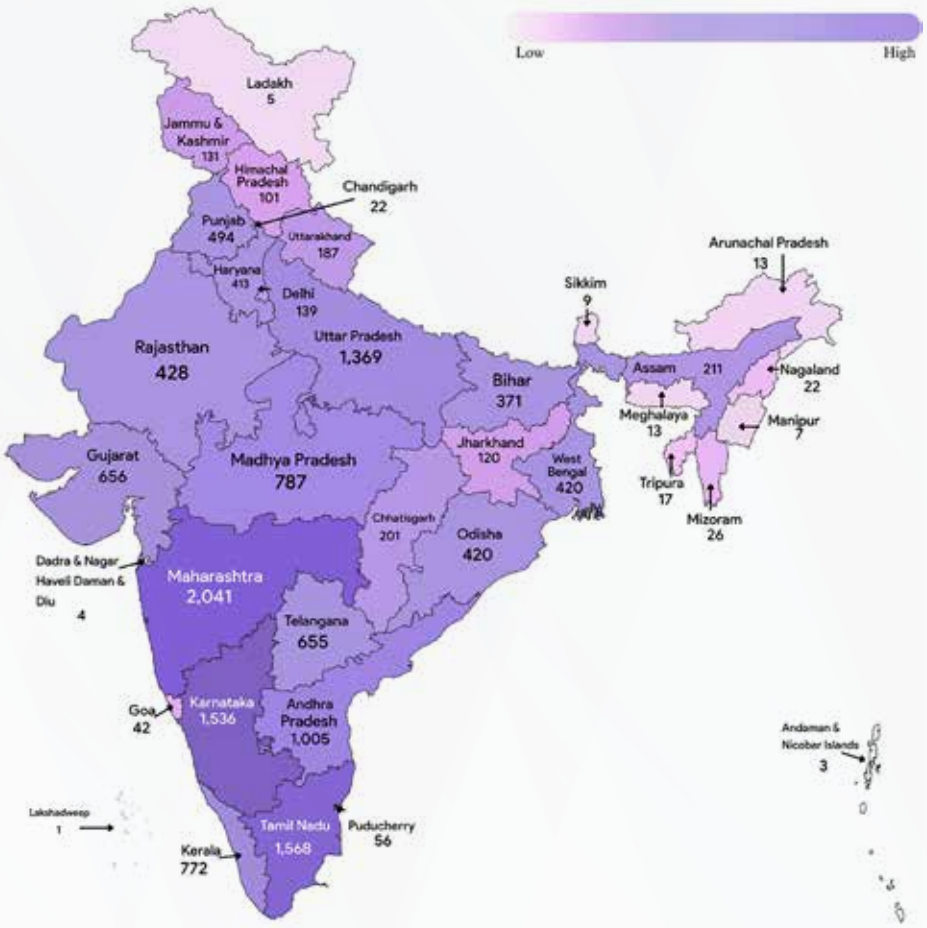
Figure 3.9: Share of publications of the top 100 institutions (Overall Category)
Source: NIRF Rankings, 2024

In the NIRF 2024 rankings for the overall category, the IITs lead in research output, with 16 institutions contributing over 24% of total publications. Private Deemed Universities follow closely with 22 institutions accounting for approximately 23.5% of total publications. Despite having 23 institutions in the top 100, State Public Universities contribute only 14.7% of the total publications, highlighting significant room for improvement in their research performance.

3.4 Innovation

In 2018, the Ministry of Education, through its Innovation Cell and in collaboration with AICTE, launched the Institution's Innovation Council (IIC) programme to promote innovation and entrepreneurship in HEIs. IICs aim to engage faculty, students and staff in activities like ideation, problem-solving, design thinking and project management at the pre-incubation/incubation stages. The programme addresses challenges such as uncoordinated innovation activities, limited leadership involvement, and underutilized youth potential, aiming to build a robust innovation ecosystem in HEIs.

As of September 2024, there were 14,269 IICs (707 Universities, 9,533 Colleges and 2,901 Standalone Institutions) with 91,552 faculty members associated, 2,849 Incubation centres and 4,969 start-ups/ventures established/supported.



Map 3.6 Institution's Innovation Councils across states/UTs (September, 2024)
Source: Institution Innovation Councils Website

Map 3.6 represents the distribution of IICs across states and UTs. States like Maharashtra, Tamil Nadu, Karnataka and Uttar Pradesh have the highest number of IICs, while Lakshadweep, Ladakh, Andaman and Nicobar Islands, Dadra & Nagar Haveli and Daman & Diu, and Manipur have the lowest number of IICs. Ten states account for 83.3% of the total 14,269 IICs in India. Given the many positive outcomes of investing in innovation, there is a need for the other states to focus on Innovation in a much greater measure.

4. FUNDING & FINANCING

Higher Education enables the beneficiaries to obtain sufficient knowledge and skill so as to function as a productive member of society. Hence, investments in higher education are crucial, both nationally and internationally. This section discusses the international scenario of financing followed by investments at the national level.

Despite having one of the largest education budgets among emerging economies, India faces challenges in adequately financing HEIs. The combined expenditure by the Centre and States on university and higher education (as a percentage of GDP) is 0.62% and on technical education is 0.95%. (Analysis of Budgeted Expenditure on Education 2018-19 to 2020-21, 2022). Overall expenditure on education is higher at 4.64%, but still falls short of the 6% target set by NEP 2020. Addressing this financing gap is crucial for improving the quality and accessibility of higher education.

4.1 India's expenditure on Higher Education in comparison with other countries

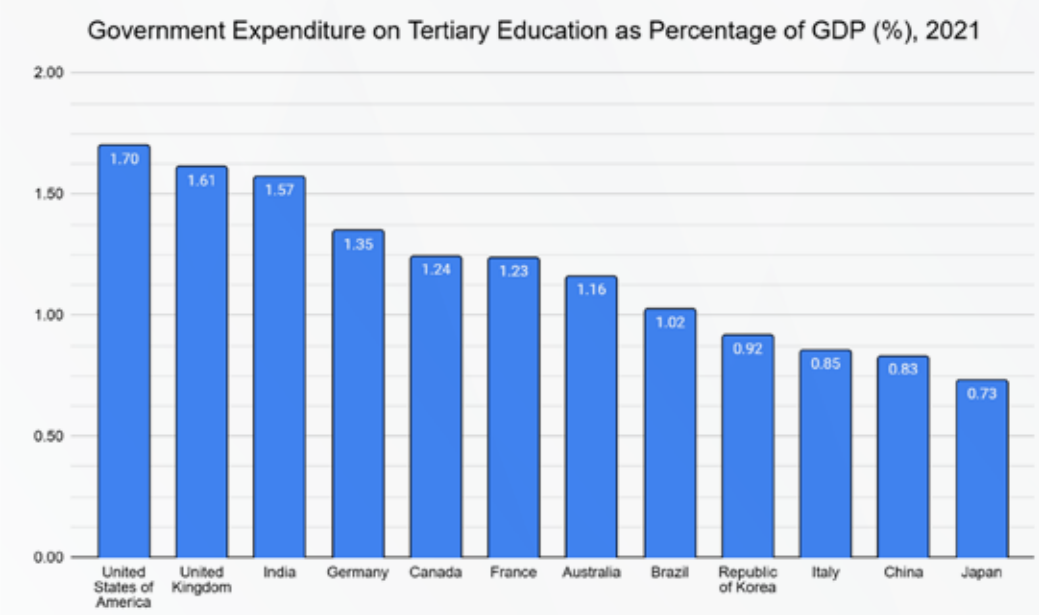


Figure 3.10: Government Expenditure on Tertiary Education as % of GDP (2021)
Source: UNESCO Institute for Statistics
Note: The chart represents the top countries by GDP. Russian Federation is not included due to the unavailability of data.

India was at par with all leading nations of the world by investing 1.57% of its Gross Domestic Product (GDP) on tertiary education in 2021. It outperformed most European nations, slightly trailing the USA and the UK.

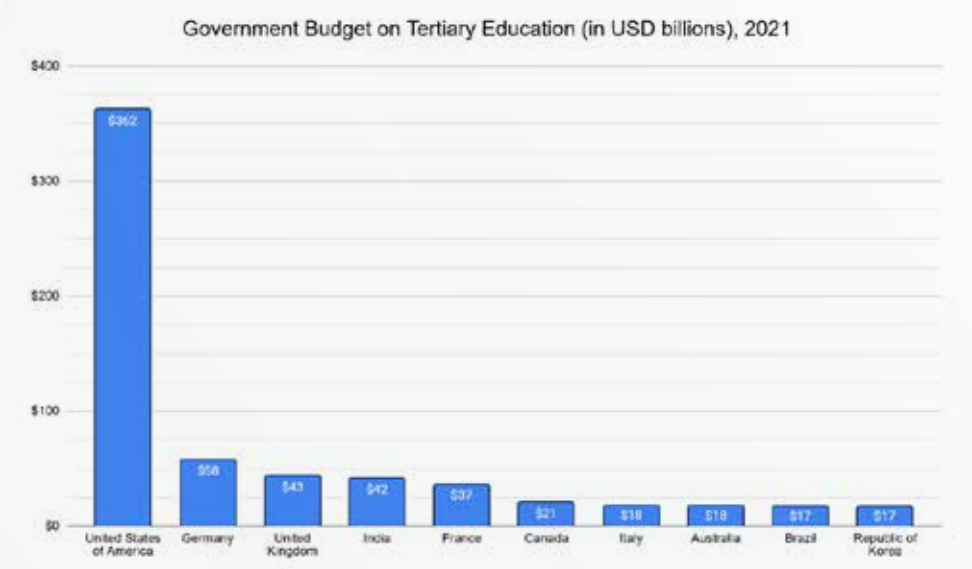


Figure 3.11 Government Budget on Tertiary Education (2021)
Source: UNESCO Institute for Statistics
Note: The chart represents the top countries by GDP. Russian Federation, China, and Japan are not included due to the unavailability of data.

With a budget of around US$362 billion, the USA leads global spending on tertiary education. India has the fourth-largest tertiary education budget, comparable to the UK and surpassing many other developed countries. India's spending is more than that of Canada and Italy put together, demonstrating significant investment in the sector.

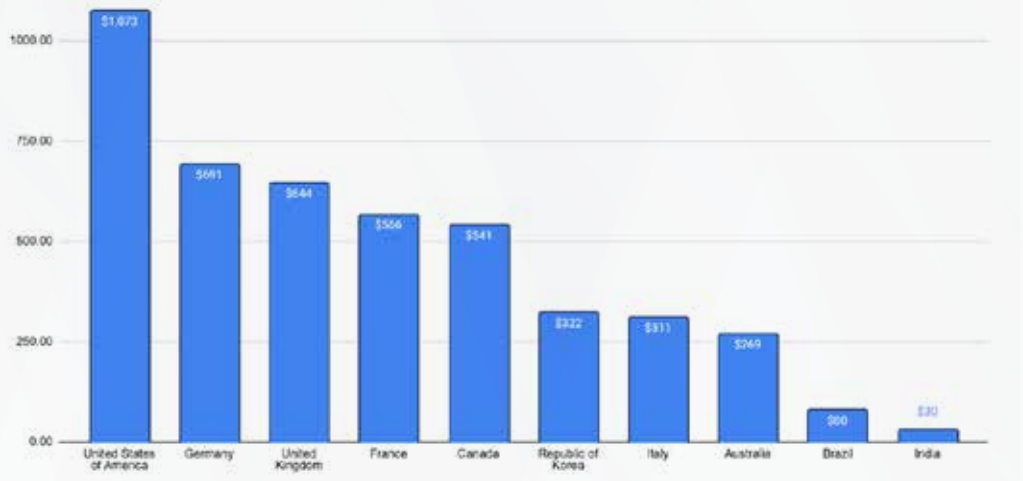


Figure 3.12 Government Expenditure on Tertiary Education per capita (2021)
Source: UNESCO Institute for Statistics, and The World Bank
Note: The chart represents the top countries by GDP. Russian Federation, China, and Japan are not included due to the unavailability of data.

While India performs well internationally in terms of overall tertiary education budget, its per capita government expenditure on tertiary education is only about US$30, which is lower than most developed and emerging countries. The per capita expenditure of the USA is over 35 times that of India, while Brazil, a peer BRICS nation, is 2.6 times that of India. Hence, there is a need to look at greater investments in higher education to ensure access to quality education in the world's most populous country.

5. GOVERNANCE

It is imperative that accountability and autonomy go hand-in-hand. Thus, institutions like the National Assessment and Accreditation Council (NAAC) and mechanisms like the National Institutional Ranking Framework (NIRF) have been established to ensure quality of educational governance in thereby enabling Indian HEIs.

The NEP 2020 prioritizes improving the quality of educational outcomes at all levels through effective governance. The quality of HEIs and student learning are crucial focus areas, especially in light of the annual global university rankings. Efforts to create world-class universities in India, such as the establishment of 20 Institutions of Eminence (10 public and 10 private), aim to secure top positions for Indian universities in global rankings. Since 2015, India has been conducting its own national rankings through the NIRF, with results published annually from 2016. The NEP 2020 also aims to reform accreditation processes by emphasizing the need for robust external quality assurance mechanisms and effective internal quality assurance systems (Varghese, 2022).

5.1 NAAC Accreditation

NAAC was established in 1994 as an autonomous institution under the UGC, in response to the recommendations of the National Policy on Education (NPE, 1986) and the Programme of Action (PoA, 1992). NAAC aims to make quality assurance centrestage in HEIs. It has established seven criteria for its assessment procedures, tailored to three types of HEIs: Universities, Autonomous Colleges, and Affiliated/Constituent Colleges. These criteria include:

i. Curricular Aspects
ii. Teaching-Learning & Evaluation
iii. Research, Innovations & Extension
iv. Infrastructure & Learning Resources
v. Student Support & Progression
vi. Governance
vii. Leadership & Management
viii. Institutional Values & Best Practices

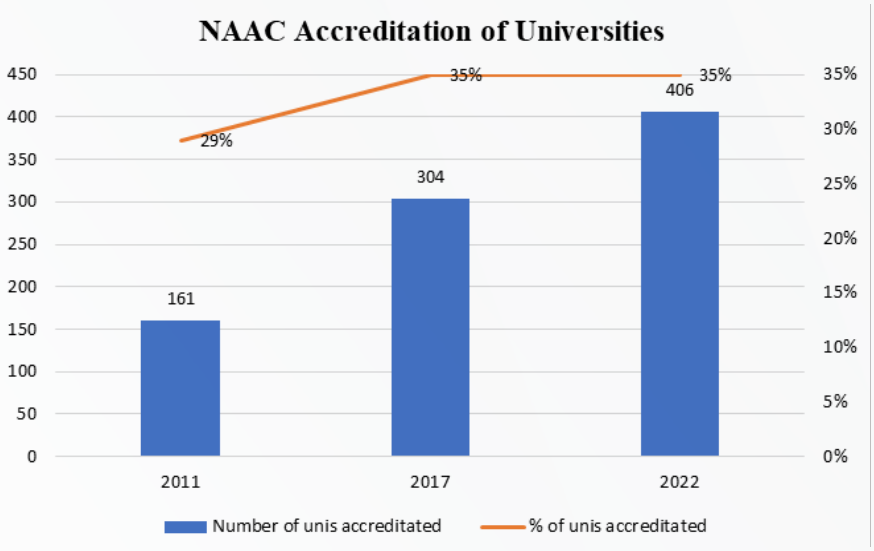
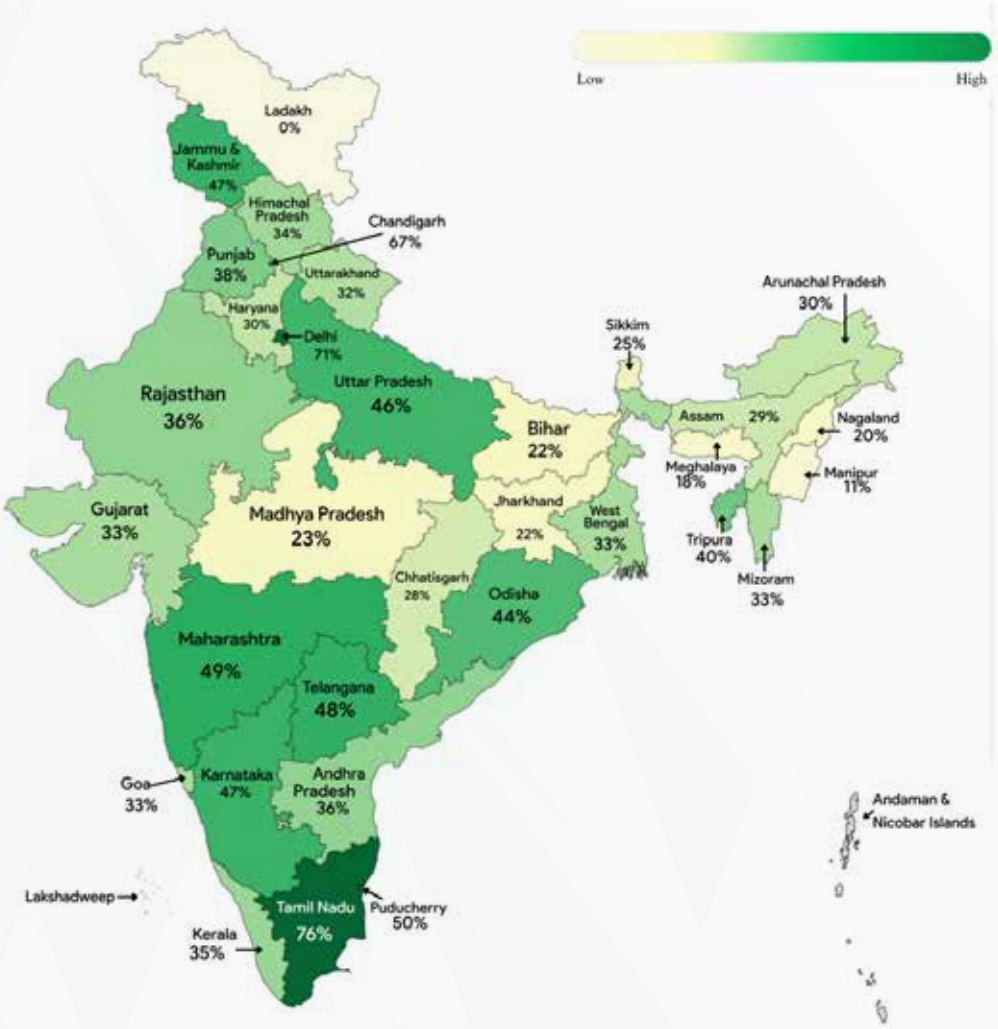


Figure 3.13 NAAC Accreditation of Universities
Source: NAAC, AISHE 10-11, 16-17, 21-22



Map 3.7 Percentage of Accredited Universities across states/UTs (2022)
Source: NAAC Accreditation Report, May 2023
Note: In the UTs of Andaman and Nicobar Islands, Dadra & Nagar Haveli and Daman & Diu, Ladakh and Lakshadweep, there is no University, hence they are left blank on the map.

After almost 35 years of the introduction of the NAAC accreditation system, less than 39% of universities nationwide have been accredited. While this is a function of a rapid rise in the number of HEIs, it is also indicative of the need to prioritise governance at the HEI level. Tamil Nadu leads with 76% of its universities accredited, followed by Delhi and Chandigarh. In contrast, Meghalaya and Manipur have the lowest accredited universities (below 20%).

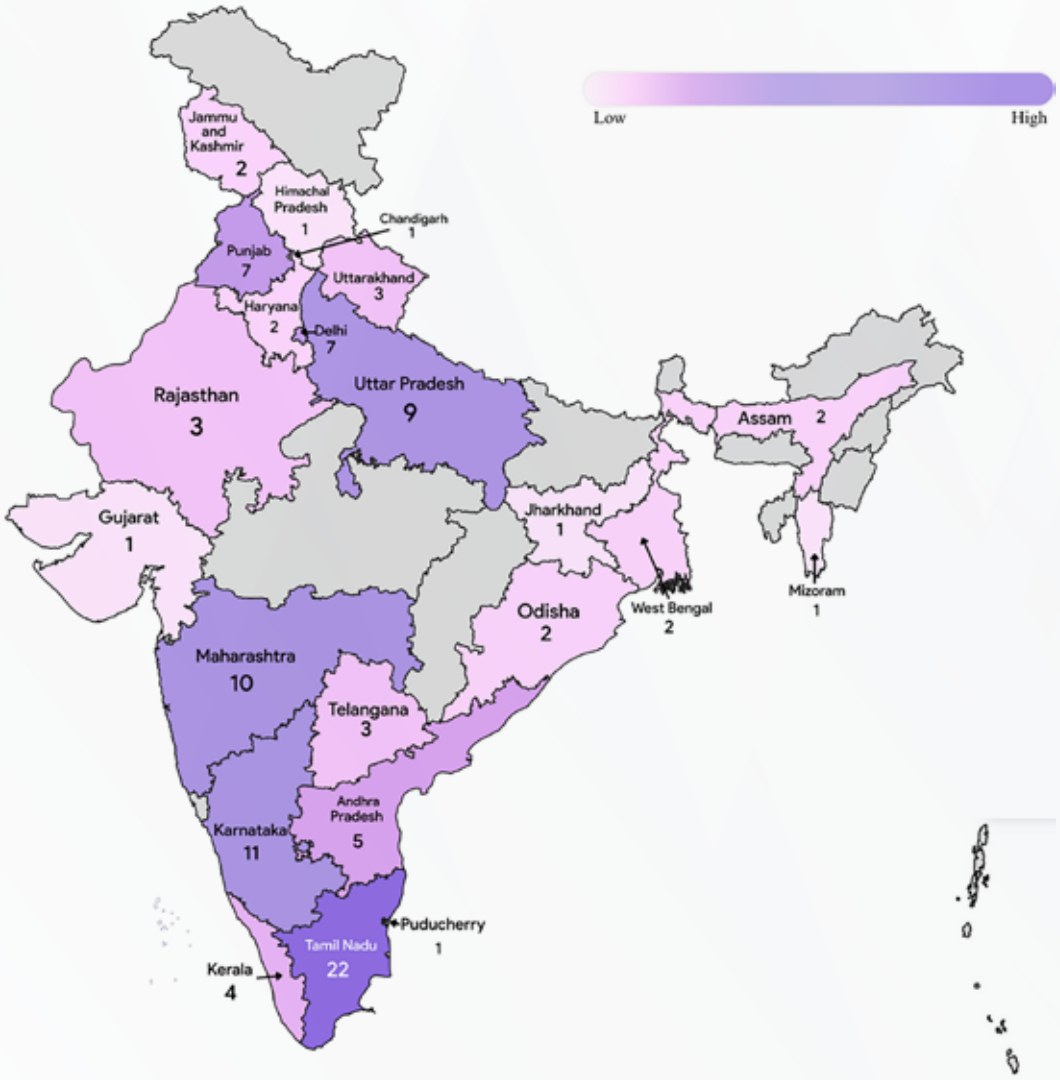
5.2 NIRF Rankings

NIRF was launched on 29th September 2015 by the Department of Higher Education and provides a standardized methodology to rank HEIs across India. It evaluates institutions based on parameters including:

i. Teaching
ii. Learning, and Resources
iii. Research and Professional Practice

iv. Graduation Outcomes
v. Outreach and Inclusivity
vi. Perception

NIRF ranks institutions across multiple categories, including Overall, Universities, Colleges, Research Institutions, and specialized fields such as Engineering, Management, Pharmacy, Medical, Dental, Law, Architecture, Agriculture, and Allied Sectors. In recent years, it has also included rankings for Innovation, Open Universities, Skill Universities, and State Public Universities.



Map 3.8 State-wise distribution of the Top 100 universities across India (Universities category)

Source: NIRF India Rankings Report, 2024
Note: Only those states that have Universities among the top 100 as per NIRF rankings are represented

Map 3.8 represents the distribution of Top 100 Universities ranked in the Universities' category of the NIRF rankings 2024. The data reveals a concentration of highly ranked universities in specific states such as Tamil Nadu (22% of the top 100 universities), Karnataka (11%), Maharashtra (10%) and Uttar Pradesh (9%). Delhi and Punjab, each have 7% of the top-ranked universities in India.

Uttar Pradesh, the most populous state in India ranks among the Top 5 states, thereby indicating potential for growth in quality HEIs. Assam and Mizoram are the only two north-eastern states in the rankings, with 2% and 1% of the top universities respectively. Several states and UTs, including Chandigarh, Puducherry, Himachal Pradesh, Jharkhand and Gujarat, contribute minimally to the top-ranking institutions. This distribution highlights the need for more focused development of high-quality HEIs across all states and UTs.

CONCLUSION

Higher education in India plays a crucial role in driving economic growth and fostering research and innovation. It equips individuals with advanced skills and knowledge, essential for enhancing workforce productivity and innovation. By promoting knowledge creation, HEIs serve as hubs for technological advancement, contributing to new ideas and incubating start-ups that fuel the economy. Furthermore, a skilled and educated workforce attracts foreign investment, boosting employment generation and increasing tax revenues. Higher education also promotes social mobility, providing opportunities for individuals from diverse socio-economic backgrounds to improve their economic status, thereby reducing inequality. Despite challenges such as access and quality, the potential of higher education to drive sustainable economic growth and advance knowledge creation remains significant; making it a cornerstone of India's development strategy.

CHAPTER-IV

STATE PUBLIC UNIVERSITIES: OVERVIEW & DECADAL TRANSFORMATION

1. GROWTH OF STATE PUBLIC UNIVERSITIES

India has a large number of State Public Universities (SPUs). The AISHE Report 2021-22 highlights that they account for 81% of the total student enrolment among Indian HEIs. Hence, they have a crucial role to play in fostering local talent and driving regional development, which are essential for India's overall growth.

The nationwide growth and expansion of SPUs has been driven by initiatives aimed at increasing access to affordable higher education, particularly in remote and underserved regions. This has been essential in meeting the rising demand for higher education and addressing regional imbalances in educational access. These institutions have been largely successful in enhancing access in the hinterland. This is evident in their significant student enrolment figures, which have been analysed in detail throughout this chapter.

The growth of SPUs can be quantified through three key metrics:

i. Increasing number of SPUs across different states,

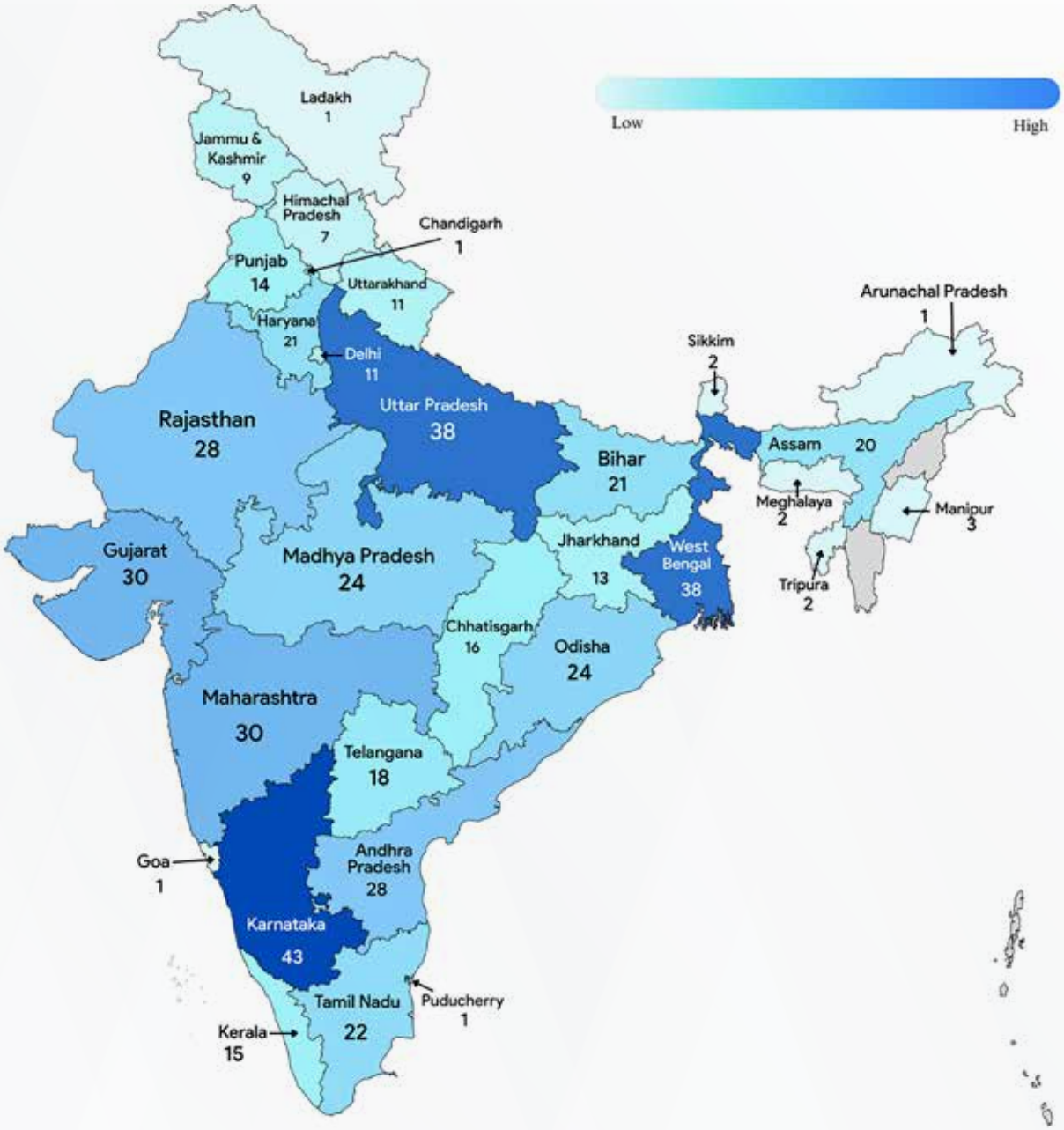
ii. Diversity of SPUs, and

iii. Density of SPUs relative to each state's population and geographical area.

While this expansion has undoubtedly improved access to higher education, there is an urgent need for maintaining a balance between access and quality.

Tamil Nadu Agricultural University, Coimbatore

1.1 Distribution of SPUs across states



Map 4.1 State-wise numbers of SPUs
Source: University Grants Commission, January 2025
Note: In the States and UTs of Mizoram, Nagaland, Andaman & Nicobar Islands, Lakshadweep, Daman and Diu, and Dadra and Nagar Haveli, there are no SPUs.

As per latest data on the UGC website in January, 2025, India has 495 SPUs with Karnataka leading at 43, followed by West Bengal and Uttar Pradesh with 38 each. Over the last 14 years, the growth of SPUs stands at over 50%.

1.2 Institutional Diversity within SPUs

SPUs encompass a variety of affiliated institutions. According to AISHE Reports, Colleges are institutions established or maintained by or admitted to the privileges of the University and can be broadly divided into:

i. University/Constituent College: These are maintained directly by the University.

ii. Affiliated College: These institutions are granted privileges by the University.

iii. Off-Campus Centre/ PG Centre: University-operated centres that are established outside the main campus.

iv. Recognised Centre: These are institutions affiliated with the university for degree-awarding purposes.

Table 4.1: Number of different types of institutions associated with SPUs (2021-22)

State/UT	Affiliated College	Constituent / University College	PG Center / Off-Campus Center	Recognized Center	TOTAL	Average No. of Affiliated Colleges per SPU
Andhra Pradesh	2,542	58	7		2,607	106
Assam	537	6		1	544	36
Bihar	811	273		28	1,112	48
Chandigarh	26				26	26
Chhattisgarh	876	41	1	4	922	63
Dadra and Nagar Haveli and Daman and Diu	19			1	20	
Delhi	98	12		2	112	11
Goa	61	1	2	8	72	61
Gujarat	2,314	80	25	41	2,460	89
Haryana	1,074	15		1	1,090	54
Himachal Pradesh	341	8	1	7	357	49
Jammu and Kashmir	317	22	10	1	350	35

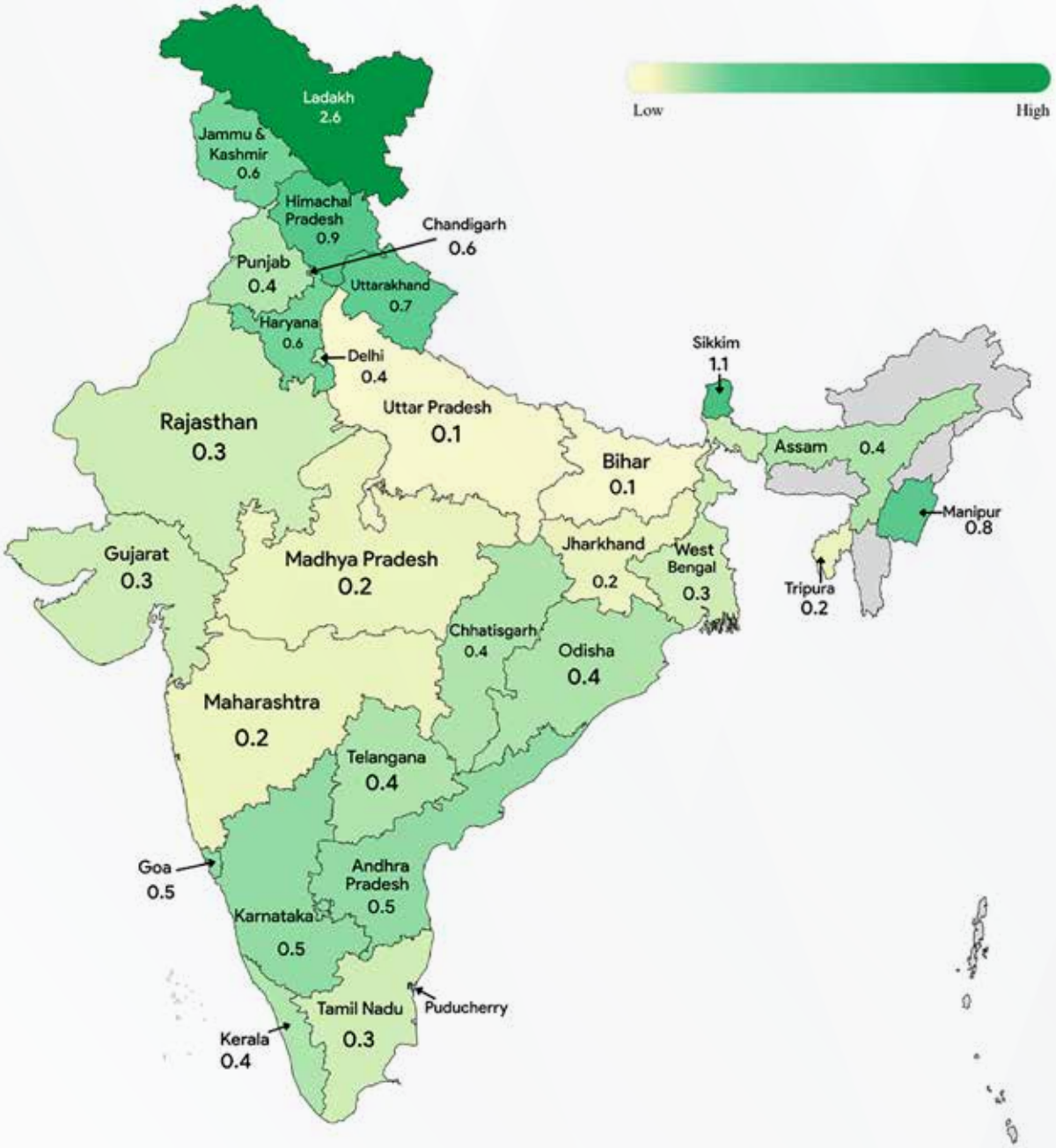
State/UT	Affiliated College	Constituent / University College	PG Center / Off-Campus Center	Recogn-ized Center	TOTAL	Average No. of Affiliated Colleges per SPU
Jharkhand	284	82			366	26
Karnataka	4,350	78	31	54	4,513	132
Kerala	1,394	66	6	63	1,529	100
Ladakh	5	1	2		8	5
Madhya Pradesh	2,672	37		911	3,620	116
Maharashtra	4,604	82	2	127	4,815	200
Meghalaya	1			3	4	
Nagaland				2	2	
Odisha	1,273	26	1	1	1,301	67
Punjab	995	49	17		1,061	83
Rajasthan	3,887	47		78	4,012	150
Sikkim	3				3	3
Tamil Nadu	2,740	86	5	1	2,832	130
Telangana	2,042	40	5		2,087	136
Tripura	1				1	1
Uttar Pradesh	8,332	23		45	8,400	260
Uttarakhand	401	16	2	3	422	40
West Bengal	1,467	44	1	16	1,528	42
GRAND TOTAL	43,467	1,193	118	1,398	46,176	

Source: AISHE 21-22

Note: Dadra and Nagar Haveli and Daman and Diu, Meghalaya, and Nagaland have associated institutions but no SPUs. Manipur has 3 SPUs but no associated institutions. Andaman & Nicobar Islands, Arunachal Pradesh, Lakshadweep, Puducherry, and Mizoram have no SPUs and no institutions associated with SPUs.

Of the 46,176 institutions associated with SPUs, 43,467 are affiliated colleges, thereby highlighting the predominance of the Affiliated College Model in the Indian higher education system. Additionally, there are 1,193 constituent or university colleges, 118 PG centres/off-campus centres and 1,398 recognized centres, reflecting a diverse range of specialized and supportive HEIs.

1.3 SPU Density across states/UTs



Map 4.2 SPU Density across states
Source: AISHE 2021-22
Note: In the States and UTs of Arunachal Pradesh, Mizoram, Nagaland, Andaman & Nicobar Islands, Lakshadweep, Puducherry, Daman and Diu, and Dadra and Nagar Haveli, there are no SPUs. Hence SPU density is not presented and they are left blank on the map.

SPU density is defined as the number of SPUs per lakh eligible population (aged 18-23), and varies significantly across states. As depicted in Map 4.2, Ladakh has the highest SPU density at 2.6, followed by Sikkim, Himachal Pradesh, Manipur and Uttarakhand. Due to their large populations, Bihar, Uttar Pradesh, Jharkhand, Madhya Pradesh and Maharashtra record the lowest densities despite having a higher absolute number of SPUs. Hence, states with a lower population tend to have a higher density of SPUs.

2. ACCESS & INCLUSION

Ensuring equitable access and fostering inclusion within SPUs is paramount for democratizing higher education opportunities across all societal strata. SPUs serve a significant proportion of students from rural, economically disadvantaged, and socially marginalized backgrounds, necessitating the implementation of inclusive policies to mitigate entry barriers for these underrepresented groups. Central and State Governments have introduced several measures like fee waivers, scholarships and reservation policies to promote greater participation from socially and economically disadvantaged groups (SEDGs) This section evaluates access and inclusion in SPUs based on the following 5 parameters:

i. Student enrolment at different levels

ii. Comparison with other types of HEIs

iii. Gender

iv. SEDGs

v. Divyangjan (Persons with Disabilities - PwD)

2.1 Level-wise Student Enrolment in SPUs

Table 4.2: Level-Wise Student Enrolment In SPUs (in lakhs)

	2011-12	2016-17	2021-22
Ph.D.	0.42	0.58	0.77
M. Phil.	0.25	0.32	0.07
Post Graduate	26.27	30.13	35.01
Under Graduate	202.43	246.31	277.35
PG Diploma	1.19	1.13	1.03
Diploma	2.89	4.97	6.93
Certificate	0.52	0.76	0.47
Integrated	0.43	1.04	3.19
TOTAL	234.40	285.24	324.82

Source: AISHE 11-12, 16-17 & 21-22

Student enrolment data from SPUs in 2021-22 reveals a significant increase to over 3.24 crore students, up from 2.34 crores in 2011-12. Undergraduate programmes consistently outnumber other categories, which shows a trend of students preferring employment to postgraduate studies. Postgraduate enrolments demonstrated a steady growth of 15% from 2011-12 to 2016-17, followed by a marginally higher rate of 16% from 2016-17 to 2021-22, suggesting sustained interest in advanced studies.

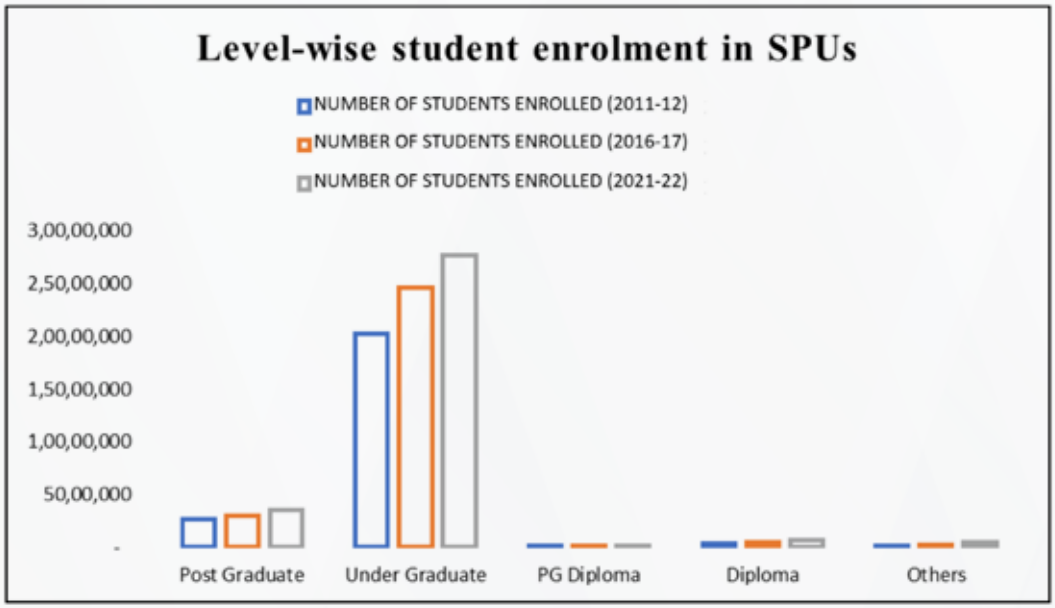


Figure 4.1 Level-wise Student Enrolment in SPUs
Source: AISHE 11-12, 16-17, 21-22
Note: The 'Others' category includes Ph.D., M.Phil., Certificate and Integrated level students, they have been clubbed for representation purposes.

Undergraduate enrolments exhibited a robust growth rate of 22% between 2011-12 and 2016-17, but this pace decelerated to 13% in the following five years (2016-17 to 2021-22). This slowdown may be attributed to increasing access to alternate career paths, vocational training opportunities, and evolving employment landscapes.

Postgraduate Diploma programmes faced a consistent decline throughout the decade, with a 5% fall in enrolments between 2011-12 and 2016-17, followed by a steeper 9% drop from 2016-17 to 2021-22. This trend may signal waning interest due to limited industry demand or perceptions of diminished competitive edge compared to full-fledged postgraduate degrees.

Diploma programmes demonstrated the most dynamic enrolment trends, with a 72% surge from 2011-12 to 2016-17, reflecting strong demand for technical or skill-based education after Class XII. However, growth moderated to 39% in the subsequent five-year period, potentially signalling the emergence of alternative training and certification pathways outside the formal higher education system.

PhD enrolments witnessed a 38% growth between 2011-12 and 2016-17, and a 33% growth between 2016-17 to 2021-22. While the trend of growth is promising, a deceleration in growth rate may indicate a declining interest in pursuing doctoral research as a career option.

2.2 Student Enrolment in SPUs vis-à-vis other types of Higher Education Institutions

An examination of student enrolment across various HEIs from 2011-12 to 2021-22 reveals distinct growth patterns, with State Public and Private Universities showing notable trends. State Public Universities (Teaching departments and Constituent Units/Off-campus Centres) maintain the largest share of enrolments, growing from 24.5 lakhs in 2011-12 to nearly 29.8 lakhs in 2021-22, marking a decadal increase of 21.8%. However, the growth rate was gradual at 7.9% from 2016-17 to 2021-22. State Private Universities (Teaching departments and Constituent Units/ Off-campus Centres) experienced the most significant growth, with enrolments soaring from 2.7 lakhs in 2011-12 to 16.2 lakhs in 2021-22 — an astonishing 497% increase. This rapid expansion particularly the 110.3% rise between 2016-17 and 2021-22 reflects the growing prominence of private institutions in the higher education landscape. Central Universities (Teaching departments and Constituent Units/Off-campus Centres) saw a moderate growth of 26.4% over the decade, rising from 5.55 lakhs in 2011-12 to 7.01 lakhs in 2021-22. However, a 2.5% decline from 2016-17 to 2021-22 suggests potential shifts in student preferences or institutional capacity constraints. Private Deemed Universities have shown consistent growth with enrolments rising by 54.5% over the decade, from 5.52 lakhs in 2011-12 to 8.53 lakhs in 2021-22. The 39.3% growth from 2016-17 to 2021-22 indicates steady expansion. The 'Others' category, encompassing various institutional types, experienced an increase of 106.1% in enrolments over the decade, with a 57.7% rise from 2016-17 to 2021-22 signalling a shift towards these types of institutions.

This comparative analysis underscores the dynamic nature of India's higher education landscape, with State Public Universities maintaining dominance in absolute enrolment figures, while State Private Universities exhibiting the most rapid growth trajectory.

2.3. Gender-based Enrolment and Gender Parity Trends in SPUs

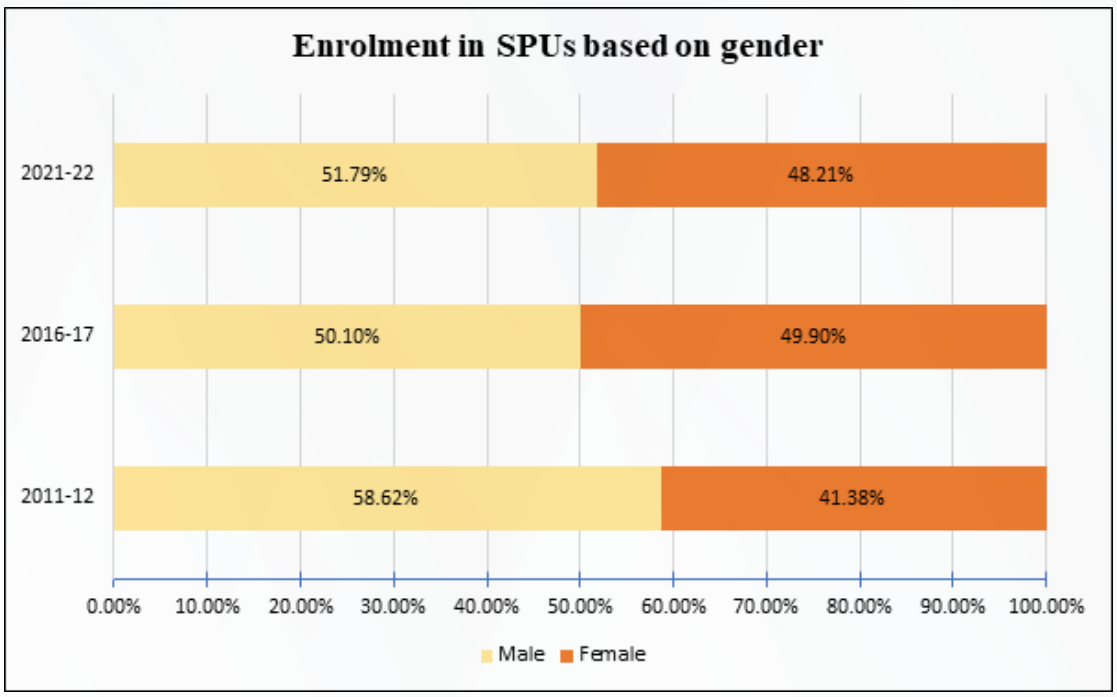
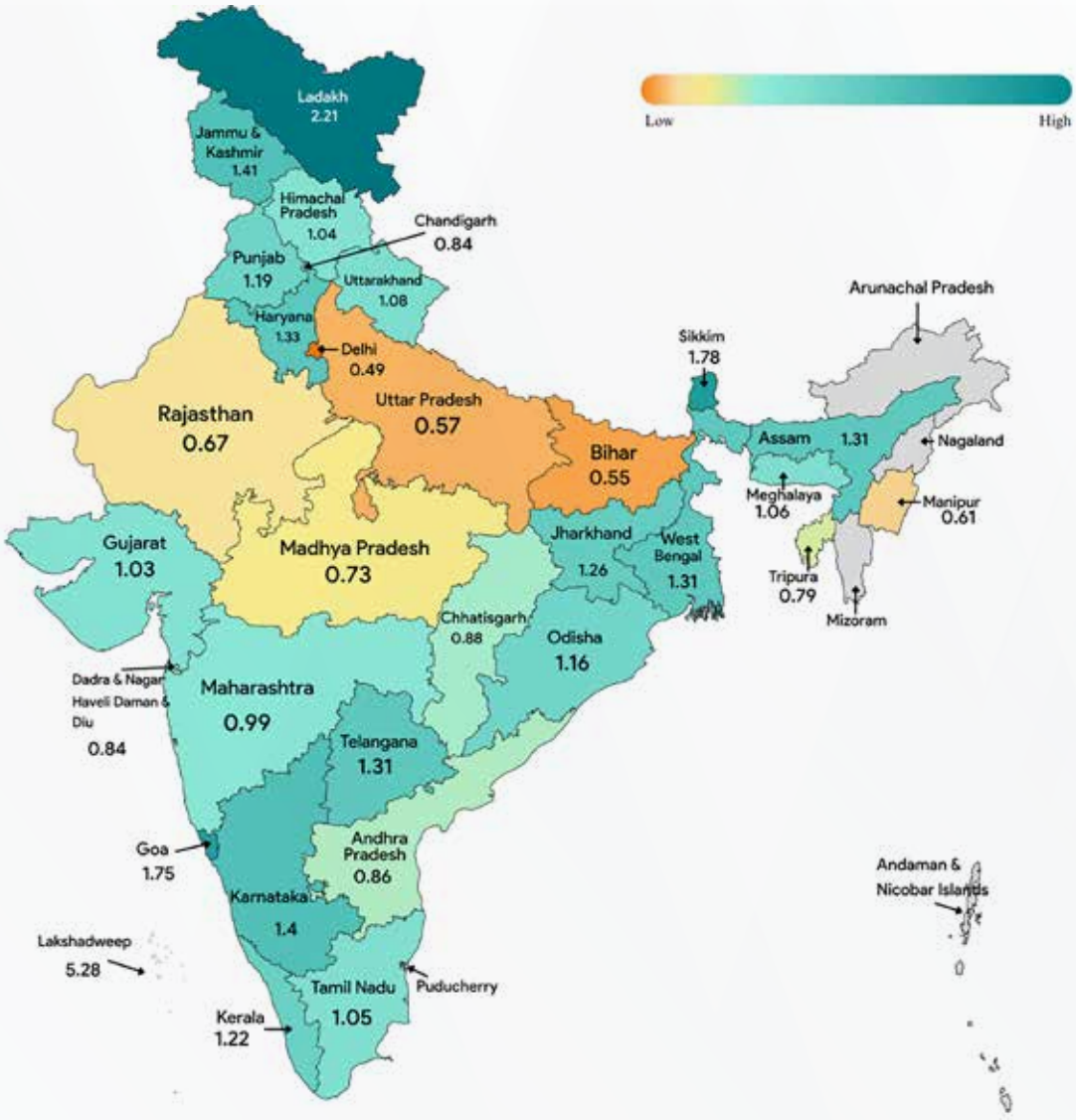


Figure 4.2 Enrolment in SPUs based on gender
Source: AISHE 11-12, 16-17, 21-22

Recent data indicates progress towards gender parity in SPU enrolment, with 51.79% male and 48.21% female enrolment nationally. However, significant inter-state variations persist. States such as Kerala, Telangana, Haryana, West Bengal, Karnataka and Tamil Nadu demonstrate higher female enrolment rates, while substantial gender disparities favouring male enrolment are evident in Madhya Pradesh, Rajasthan, Uttar Pradesh, Bihar, Delhi and Andhra Pradesh.



Map 4.3 Gender Parity Index in SPUs (2021-22)
Source: AISHE 21-22
Note: Constituent Colleges of SPUs are not included.

The Gender Parity Index (GPI) in SPUs varies significantly across states, reflecting disparities in gender balance across the higher education landscape. The national GPI for SPUs stands at 0.93. As indicated in Map 4.3, Sikkim leads with a GPI of 1.78, indicating a higher proportion of female students in the SPUs. Goa and Haryana follow closely with GPIs of 1.75 and 1.33 respectively, surpassing the national average. Among UTs, Lakshadweep reports an exceptionally high GPI at 5.28, followed by Ladakh (2.21) and Jammu and Kashmir (1.41).

Uttar Pradesh (0.57), Bihar (0.55) and Delhi (0.49) show the lowest GPI values, indicating a gender imbalance and a need for targeted interventions to improve gender parity in these states/UT. Notably, the GPI in SPUs, though lower than the national average of GPI across HEIs, has shown a

31% improvement over the past decade, thereby indicating a notable increase in female enrolment in the hinterland.

2.4 Student Enrolment From SEDGs in SPUs:

Table 4.3: Student Enrolment from SEDGs in SPUs (in lakhs)

Years	SC	ST	OBC	Muslim	Other Minorities	EWS
2011-2012	29.11	9.26	72.71	10.34	4.29	-
2016-2017	41.55	13.25	103.38	15.15	5.85	-
2021-2022	51.34	19.15	131.51	16.60	6.57	4.54

Source: AISHE 11-12, 16-17, 21-22

The enrolment of students from SEDGs in SPUs has seen notable growth over the past decade. Significant increase has been observed among Scheduled Castes (SCs), Scheduled Tribes (STs) and Other Backward Classes (OBCs), reflecting broader efforts towards providing access to higher education. From 2011 to 2022, OBC enrolment has shown a substantial 80.9% increase, while SC enrolment has grown by 76.3%. In 2011-12, 15% of the eligible SC students (aged 18-23 years) were enrolled in HEIs across India which increased to nearly 26% by 2021-22. Similarly, ST enrolment also doubled, rising by 106.8%, with the percentage of eligible ST students in higher education increasing from 11 to 21% over the decade. Enrolment among Muslims and Other Minorities has experienced an increase, growing by 60.6% and 53.2% respectively over the decade. While the growth is positive, it is slower compared to SC, ST, and OBC categories.

The introduction of the Economically Weaker Sections (EWS) category in 2021 marks a new shift in the representation of SEDGs in higher education. This trend underscores the growing focus on inclusivity in SPUs, particularly for underrepresented social groups. However, the varying rates of growth across different SEDGs suggest that further efforts are needed to ensure equitable access to higher education for all.

2.5 PWD Student Enrolment in SPUs

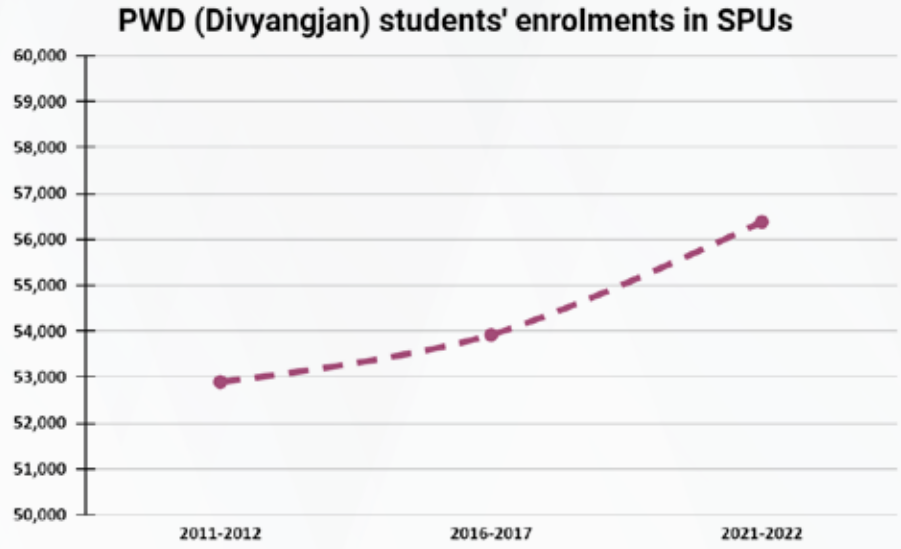


Figure 4.3 PWD Student Enrolments in SPUs
Source: AISHE 11-12, 16-17, 21-22

The enrolment of students in the PwD category in SPUs has shown steady growth over the past decade. In 2011-12, there were 52,894 students enrolled which slightly increased to 53,921 by 2016-17, reflecting a marginal growth of nearly 2%. By 2021-22, this figure reached 56,379, representing a 4.6% increase from 2016-17 and a 6.6% rise from 2011-12. While the growth has been modest, it indicates a gradual improvement in the inclusion of students with disabilities in HEIs.

3. QUALITY

Ensuring the quality of higher education provided by SPUs is pivotal for enhancing the value of degrees and the employability of graduates. While SPUs play a crucial role in democratizing access to higher education, their quality often varies due to insufficient funding, administrative inefficiencies, and inadequate faculty training. A robust framework is necessary to standardize and elevate the quality of education across SPUs, ensuring graduates are competitive in the global job market. This section analyses quality of SPUs based on data available on two available indicators:

i. Faculty composition

ii. Student Residential facilities

3.1 Faculty Composition across SPUs

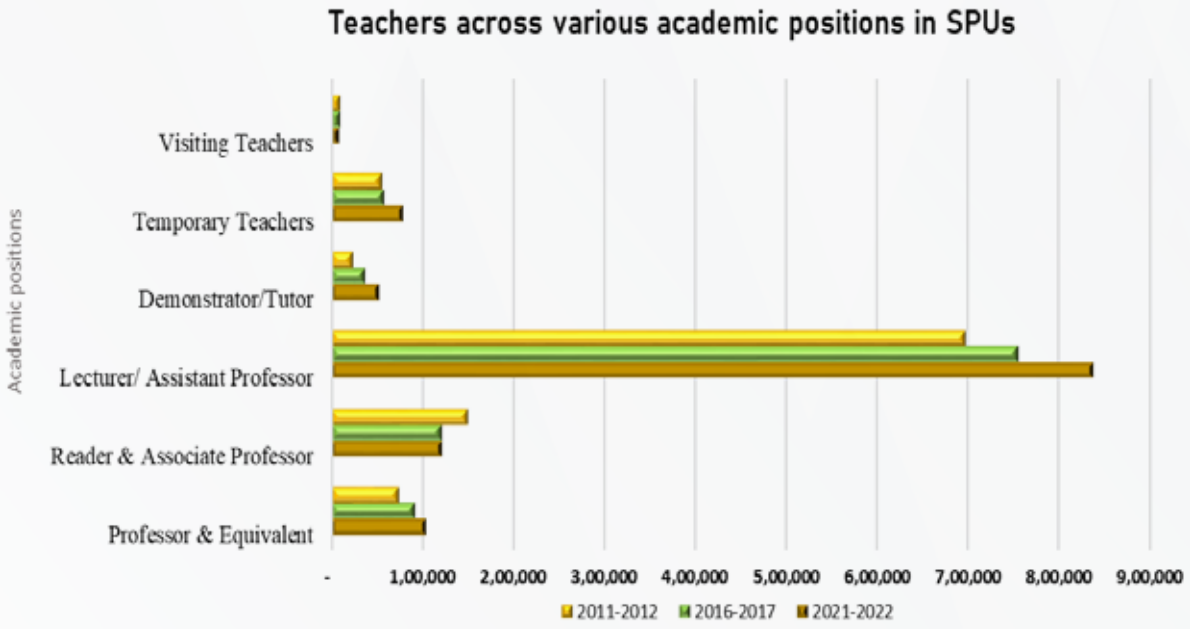


Figure 4.4 Teachers across academic positions in SPUs
Source: AISHE 11-12, 16-17, 21-22

As depicted in Figure 4.4, Lecturers and Assistant Professors form the largest proportion of teaching staff in SPUs, accounting for 69.5% of all faculty, while visiting teachers and Demonstrators/Tutors represent just 0.8% and 4.4% respectively. Over the past decade, the proportion of Readers and Associate Professors has declined from 14.8% in 2011-12 to 10% in 2021-22, while the number of Professors has marginally increased. As depicted in Figure 4.5, gender disparities are evident in faculty positions, with male staff significantly outnumbering females, especially in higher academic

ranks, except in the Demonstrator/Tutor category. This imbalance highlights the need for concerted efforts to promote gender diversity, particularly in senior academic positions.

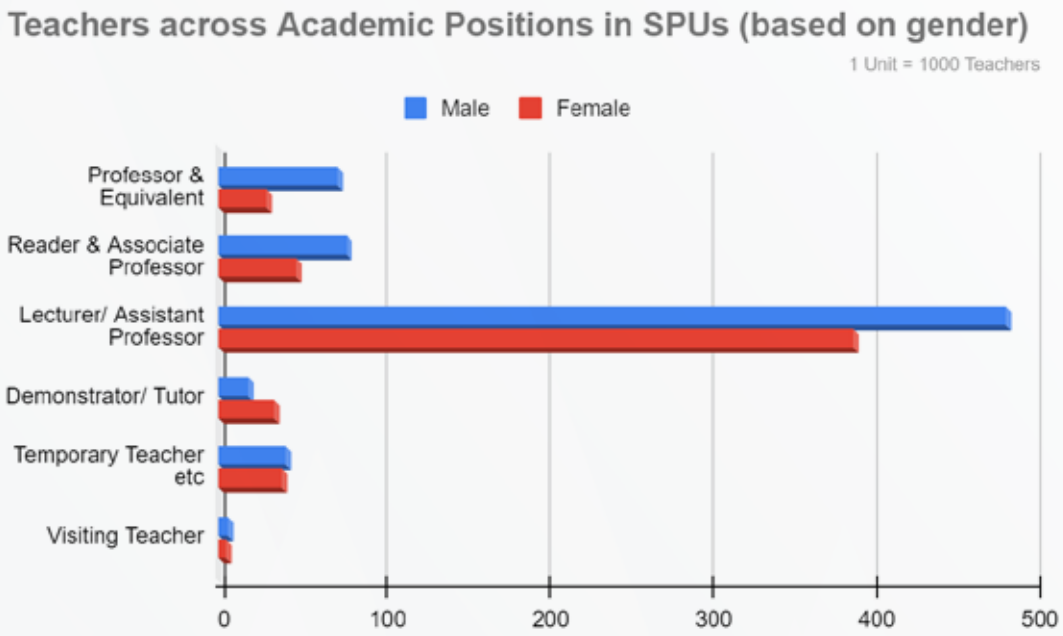


Figure 4.5 Teachers across academic positions in SPUs based on gender (2021-22)
Source: AISHE 21-22

3.2 Residential Accommodation in SPUs

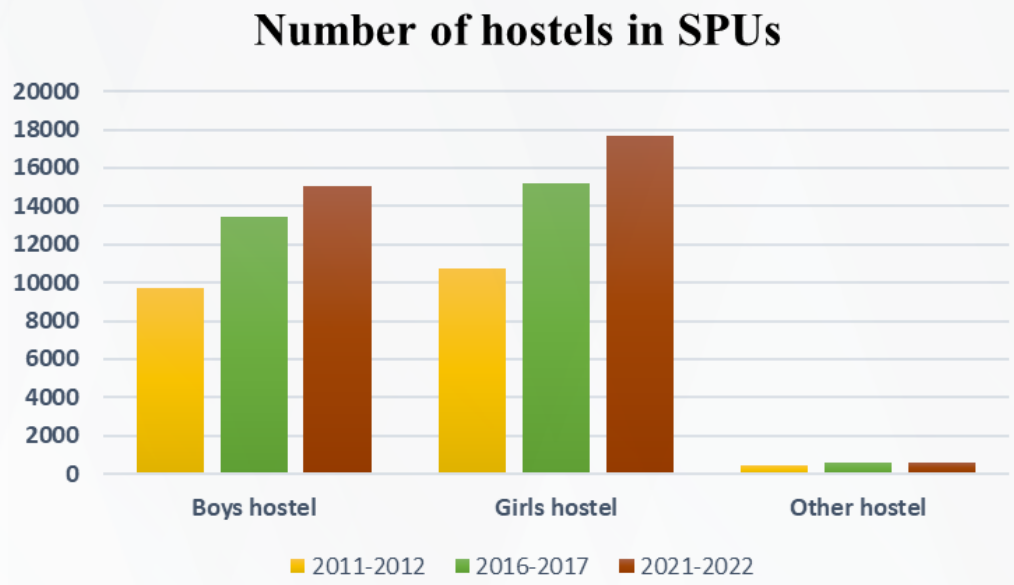


Figure 4.6 Number of Hostels in SPUs
Source: AISHE 11-12, 16-17, 21-22

The number of student hostels in SPUs has increased steadily over the past decade, with boys hostels growing by 54.4% and girls hostels by 64.4%. The significant growth in girls hostels reflects efforts to provide safe and adequate residential facilities for female students, a key factor in

promoting gender equity in higher education. However, the growth in 'other' hostel categories has stagnated, indicating a potential need for specialized accommodations to address the evolving needs of students, particularly as overall enrolment continues to rise.

4. FUNDING & FINANCING

The 14th Finance Commission (2015-2020) recommended higher share of tax devolution to the states from 32% to 42%. This was the biggest increase in tax devolution and provided the states larger fiscal space to spend on social sectors. However, this has not translated into increase in spending on education across states. There has also been a decline in the growth of expenditure in higher education, and fall in share of education spending by the states as percentage of GSDP between 2005-06 and 2019-20.

There has also been a fall in average growth rates in higher education expenditure in states during 2015-20, i.e., the 14th Finance Commission cycle, with the median value coming down to 6.6% in 2015-20 compared to 10% in 2005-10 and 2010-15. There are states with negative growth rates in spending on higher education. Mean per youth expenditure on higher education rose from ₹2,174 to ₹4,921 between 2005-06 and 2019-20. However, within this increase, the divergence between states has risen significantly. Kerala, Tamil Nadu, Maharashtra, Andhra Pradesh, and Telangana continue to be the top spenders on per youth spending on higher education, with states like Rajasthan, Punjab and Chhattisgarh lagging. (Bose et al, 2022)

4.1 State-wise expenditure on Education as percentage of GSDP (2020-21)

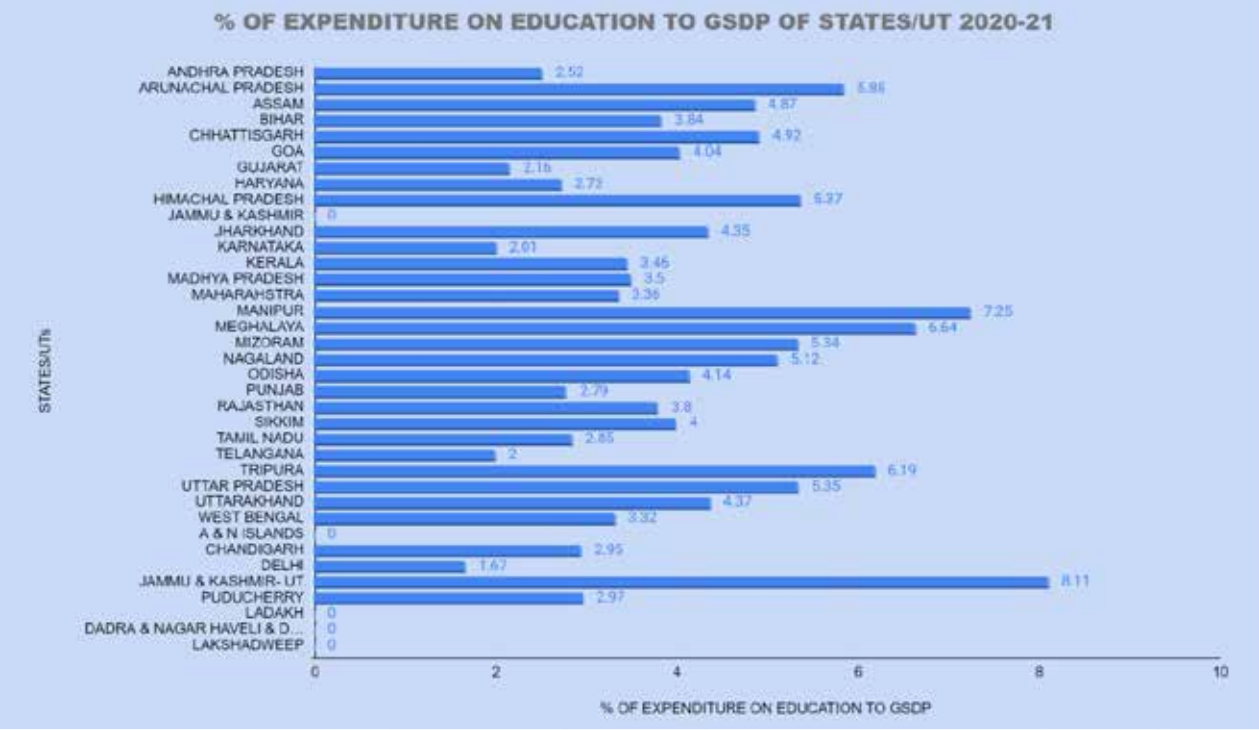


Figure 4.7 State-wise expenditure on Education as percentage of GSDP (2020-21)
Source: Analysis of Budgeted Expenditure on Education 2018-19 to 2020-21, Ministry of Education, Government of India

Among all states and UTs, Jammu & Kashmir leads with the highest education expenditure as a percentage of GDP at 8.11%, followed by Manipur (7.25%), Meghalaya (6.64%), and Tripura (6.19%). In contrast, Delhi (1.67%), Telangana (2%), and Karnataka (2.01%) allocate significantly less.

4.2 Higher Education budgets of States

Table 4.4: Analysis of Expenditure by States/UTs on Higher Education (2020-21)

States/UTs	Higher Education Budget (in ₹crores) (A)	Higher Education Budget as % of Total Expenditure on Education & Training by Education & other Departments (B)	Total Expenditure on Education & Training by Education & other Departments as % of GSDP (C)	Higher Education budget as % of GSDP (D)
Andaman and Nicobar Islands	104	14.12	N.A.	N.A.
Andhra Pradesh	3,490	13.66	2.52	0.34
Arunachal Pradesh	155	8.93	5.85	0.52
Assam	3,488	18.80	4.87	0.92
Bihar	9,666	40.70	3.84	1.56
Chandigarh	318	25.89	2.95	0.76
Chhattisgarh	1,377	7.99	4.92	0.39
Dadra and Nagar Haveli and Daman and Diu	130	33.55	N.A.	N.A.
Delhi	2,077	15.84	1.67	0.26
Goa	874	27.59	4.04	1.12
Gujarat	3,792	10.60	2.16	0.23
Haryana	3,682	17.75	2.73	0.49
Himachal Pradesh	874	10.39	5.37	0.56
Jammu & Kashmir	2,679	18.85	8.11	1.53
Jharkhand	2,381	17.25	4.35	0.75
Karnataka	5,129	14.72	2.01	0.30
Kerala	4,225	15.29	3.46	0.53
Ladakh	663	51.07	N.A.	N.A.
Lakshadweep	3	2.38	N.A.	N.A.
Madhya Pradesh	3,389	9.92	3.50	0.35
Maharashtra	11,421	12.53	3.36	0.42
Manipur	496	20.07	7.25	1.45
Meghalaya	446	20.10	6.64	1.33
Mizoram	343	22.02	5.34	1.18

Nagaland	167	11.02	5.12	0.56
Odisha	2,614	11.63	4.14	0.48
Puducherry	277	25.01	2.97	0.74
Punjab	1,283	8.50	2.79	0.24
Rajasthan	2,307	5.99	3.80	0.23
Sikkim	142	10.88	4.00	0.44
Tamil Nadu	7,237	13.37	2.85	0.38
Telangana	1,751	9.01	2.00	0.18
Tripura	194	5.31	6.19	0.33
Uttarakhand	872	8.77	4.37	0.38
Uttar Pradesh	4,775	5.20	5.35	0.28
West Bengal	5,534	12.81	3.32	0.43

Source: Analysis of Budgeted Expenditure on Education 2018-19 to 2020-21, Ministry of Education, Government of India

Note: Data is unavailable for certain UTs, hence those columns are left blank.

Column A is the Higher Education Budget of States/UTs for 2020-21, calculated by adding the Budgeted Expenditure (Revenue Account, Capital Account, and Loans and Advances Account) across university and higher education, adult education, technical education, general education, and language education.

Maharashtra leads in higher education funding with a budget of ₹11,421 crore, followed by Bihar (₹9,666 crore) and Tamil Nadu (₹7,237 crore). States like Sikkim (₹142 crore), Arunachal Pradesh (₹155 crore), and Nagaland (₹167 crore) have the lowest higher education budgets. When considering higher education expenditure as a percentage of Gross State Domestic Product (GSDP), Bihar ranks highest at 1.56%, followed by J&K at 1.53% and Manipur at 1.45%. Telangana has the lowest percentage at 0.18%, while Gujarat and Rajasthan allocate 0.23% each.

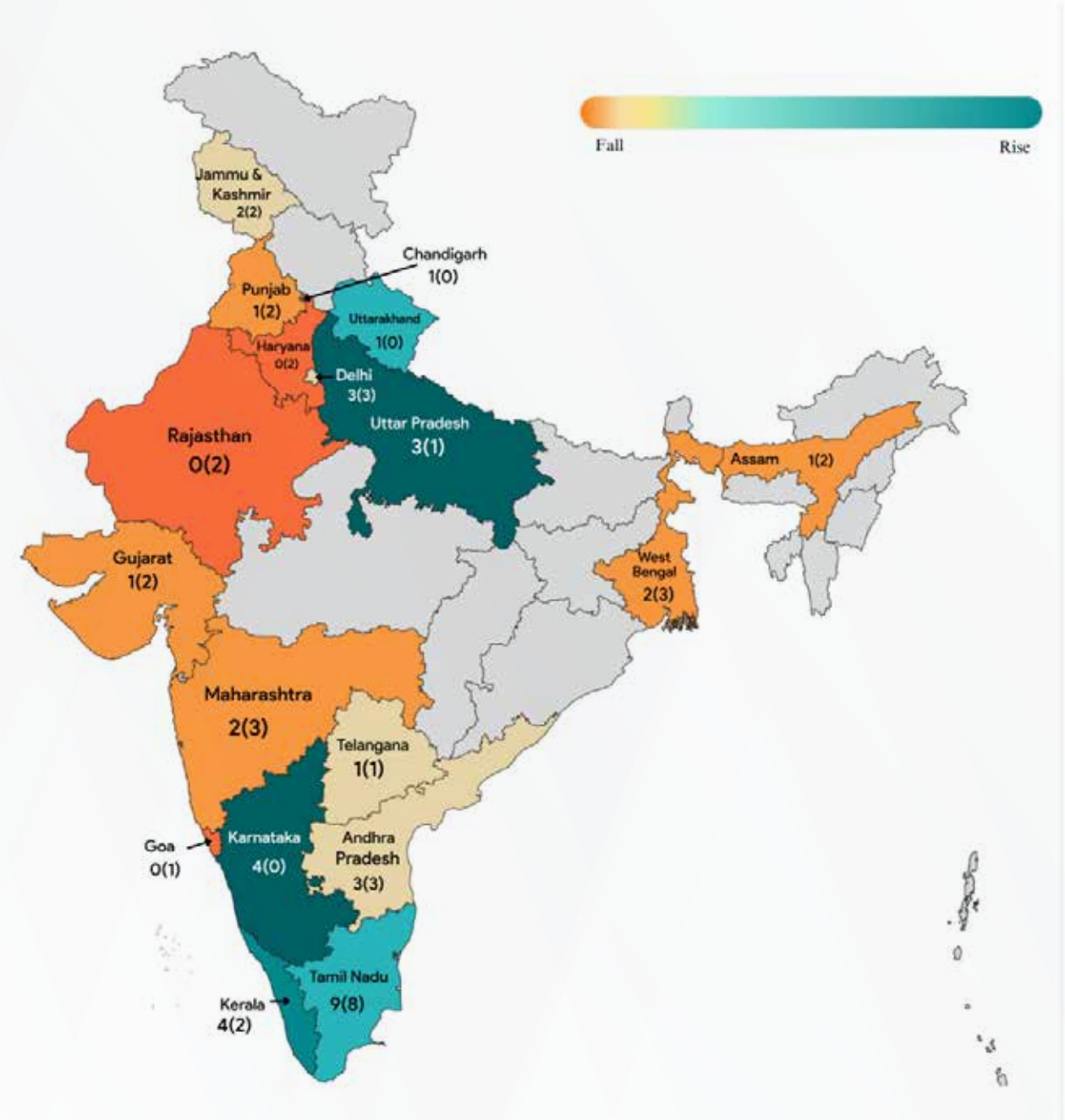
5. GOVERNANCE

Governance is the unseen glue that enables institutions to deliver on key priorities. To implement effective policies within institutions and make them the best versions of themselves, periodic evaluations provide the right impetus for high standards of governance. This can be tangibly measured through achieving high ranks on various national and international platforms. India has been ahead of the curve in this regard. The National Institutional Ranking Framework (NIRF) was introduced in 2016 to identify high quality institutions based on parameters and criteria relevant to the Indian context. In its 2024 report, NIRF introduced a new category for ranking: State Public Universities (SPUs). Until then, SPUs were ranked along with other HEIs, though they operate in a very different context. The introduction of this new category enabled a realistic comparison among SPUs across states.

In Map 4.4, 37 State Public Universities appeared in the top 100 institutions (university category) as per NIRF rankings in 2016, while 38 appeared in the top 100 institutions (university category) in 2024. Southern states have been consistent in ensuring quality of education in SPUs. Tamil Nadu has the highest share of 8 and 9 SPUs in 2016 and 2024 respectively. SPUs in the UTs of Delhi and Jammu & Kashmir have maintained

their ranks in the top 100. Notable decadal progress can be observed in the SPUs of Kerala, Karnataka and Uttar Pradesh. The share of SPUs from Gujarat, Maharashtra, Punjab, and West Bengal has dropped over the decade, while Haryana and Rajasthan has reduced to 0.

5.1 Number of SPUs in the top 100 universities category as per NIRF, 2016 & 2024 (Universities Category)



Map 4.4 Number of SPUs in the top 100 universities across India (2016 & 2024) (Universities category)
Source: NIRF India Rankings Report, 2016 & 2024
Note: This map displays the difference in the number of SPUs among the Top 100 universities across states between 2016 and 2024. The number in the bracket denotes the number of SPUs among the Top 100 in the State in 2016. The number outside indicates the number in 2024. Only those states are represented which have the NIRF ranked SPUs among the top 100 universities.

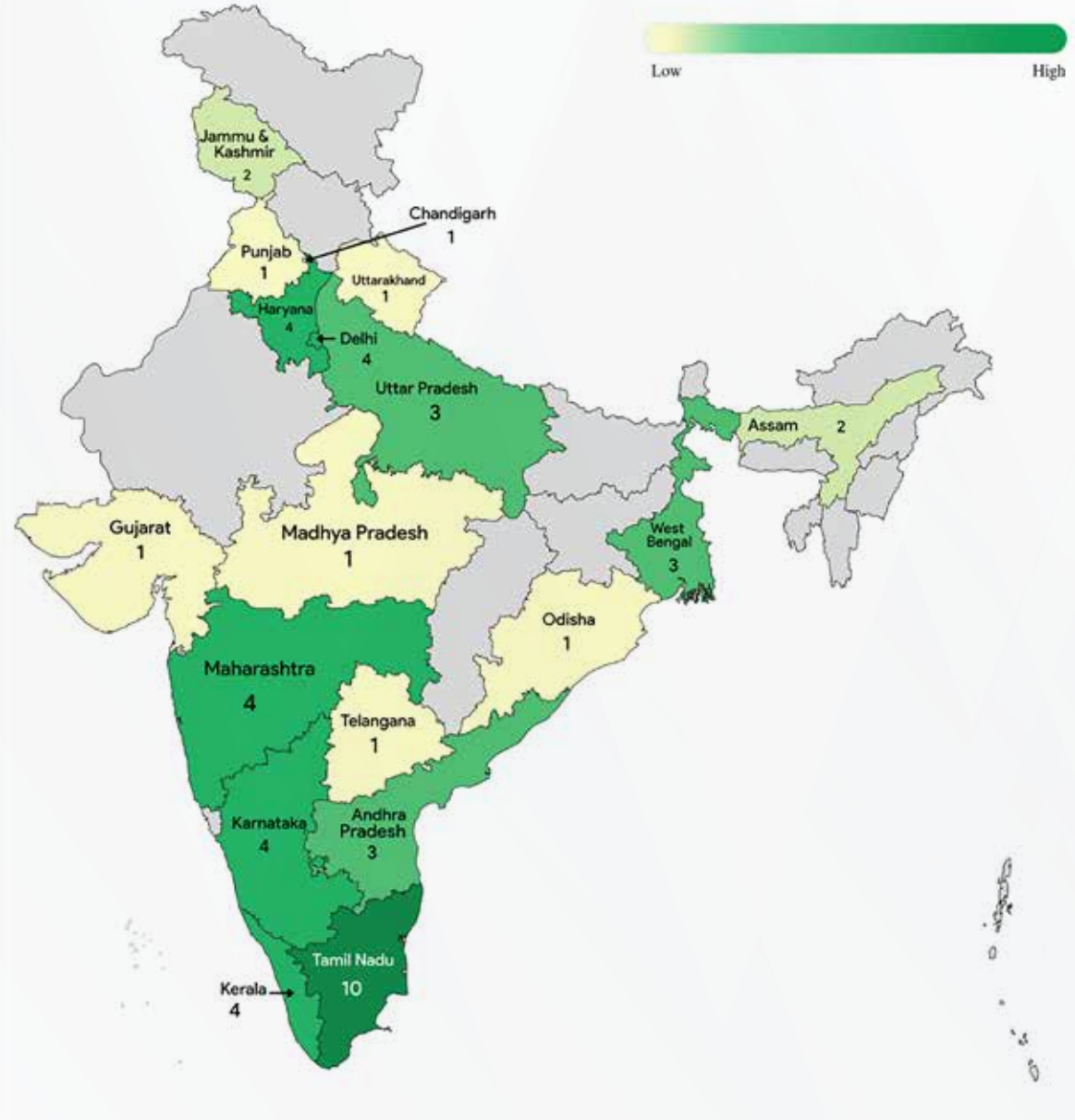
5.2 Number of top SPUs in each state as per NIRF Rankings 2024 (SPU Category)

Table 4.5 lists the first set of Top 50 SPUs ranked in the NIRF 2024 (SPU category). Map 4.5 provides state-wise distribution. Throughout this report, these have been referred to as Leading SPUs.

Table 4.5: List of Top 50 SPUs in NIRF 2024

Sr. No.	Name	City	State	Rank
1	Anna University	Chennai	Tamil Nadu	1
2	Jadavpur University	Kolkata	West Bengal	2
3	Savitribai Phule Pune University	Pune	Maharashtra	3
4	University of Calcutta	Kolkata	West Bengal	4
5	Panjab University	Chandigarh	Chandigarh	5
6	Osmania University	Hyderabad	Telangana	6
7	Andhra University	Visakhapatnam	Andhra Pradesh	7
8	Bharathiar University	Coimbatore	Tamil Nadu	8
9	Kerala University	Thiruvananthapuram	Kerala	9
10	Cochin University of Science and Technology	Cochin	Kerala	10
11	Mahatma Gandhi University	Kottayam	Kerala	11
12	University of Madras	Chennai	Tamil Nadu	12
13	Gauhati University	Guwahati	Assam	13
14	University of Kashmir	Srinagar	Jammu and Kashmir	14
15	Delhi Technological University	New Delhi	Delhi	15
16	Bharathidasan University	Tiruchirappalli	Tamil Nadu	16
17	Alagappa University	Karaikudi	Tamil Nadu	17
18	University of Mumbai	Mumbai	Maharashtra	18
19	University of Mysore	Mysuru	Karnataka	19
20	Acharya Nagarjuna University	Guntur	Andhra Pradesh	20
21	Guru Gobind Singh Indraprastha University	New Delhi	Delhi	21
22	Visvesvaraya Technological University	Belgaum	Karnataka	22
23	University of Jammu	Jammu	Jammu and Kashmir	23
24	Bangalore University	Bangalore	Karnataka	24
25	Periyar University	Salem	Tamil Nadu	25
26	Madurai Kamaraj University	Madurai	Tamil Nadu	26
27	King George's Medical University	Lucknow	Uttar Pradesh	27

28	Dibrugarh University	Dibrugarh	Assam	28
29	Gujarat University	Ahmedabad	Gujarat	29
30	Punjab Agricultural University	Ludhiana	Punjab	30
31	Annamalai University	Annamalainagar	Tamil Nadu	31
32	University of Lucknow	Lucknow	Uttar Pradesh	32
33	COEP Technological University	Pune	Maharashtra	33
34	Netaji Subhas University of Technology (NSUT)	South West	Delhi	34
35	Maharshi Dayanand University	Rohtak	Haryana	35
36	University of Burdwan	Bardhaman	West Bengal	36
37	Manonmaniam Sundaranar University	Tirunelveli	Tamil Nadu	37
38	G.B. Pant Universtiy of Agriculture and Technology, Pantnagar	Pantnagar	Uttarakhand	38
39	Sri Venkateswara University	Tirupati	Andhra Pradesh	39
40	Madan Mohan Malaviya University of Technology	Gorakhpur	Uttar Pradesh	40
41	Kurukshetra University	Kurukshetra	Haryana	41
42	Utkal University	Bhubaneswar	Odisha	42
43	Calicut University	Malappuram	Kerala	43
44	University of Agricultural Sciences	Bangalore	Karnataka	44
45	Indraprastha Institute of Information Technology	New Delhi	Delhi	45
46	Dr. Babasaheb Ambedkar Marathwada University	Aurangabad	Maharashtra	46
47	Guru Jambheshwar University of Science and Technology	Hisar	Haryana	47
48	Chaudhary Charan Singh Haryana Agricultural University	Hisar	Haryana	48
49	Tamil Nadu Agricultural University	Coimbatore	Tamil Nadu	49
50	Devi Ahilya Vishwavidyalaya	Indore	Madhya Pradesh	50



Map 4.5 Number of top 50 SPUs in India as per NIRF (SPU Category)
Source: NIRF India Rankings Report, 2024
Note: Only those states are represented which have the top-ranked SPUs as per NIRF.

5.3 Criteria for NIRF Rankings 2024

Table 4.6 lists the broad common criteria for NIRF Rankings 2024 for the 'Universities' and 'SPU' categories. as discussed in sections 5.1 and 5.2 respectively.

Table 4.6 Criteria for NIRF Rankings 2024		
S. No.	**Parameters**	**Marks**
1.	Teaching, Learning & Resources (TLR) Ranking weight: 0.30	100
	Student Strength including Doctoral Students(SS): 20 marks Faculty-student ratio with emphasis on permanent faculty (FSR): 25 marks Combined metric for Faculty with PhD (or equivalent) and Experience (FQE): 20 marks Financial Resources and their Utilization (FRU): 20 marks Online Education: Online Completion of Syllabus & Exams and Swayam (OE): 10 marks Combined metric for Multiple Entry/Exit, Indian Knowledge System and Regional languages (MIR): 5 marks	
2.	Research and Professional Practice (RP) Ranking weight: 0.30	100
	Combined metric for Publications (PU): 30 marks Combined metric for Quality of Publications (QP): 30 marks IPR and Patents: Published and Granted (IPR): 15 marks Footprint of Projects and Professional Practice (FPPP): 15 marks Combined metric for Publications & Citations in SDG's (PSDGs): 10 marks	
3.	Graduation Outcomes (GO) Ranking weight: 0.20	100
	Metric for University Examinations(GUE): 60 marks Metric for Number of Ph.D. Students Graduated (GPHD): 40 marks	
4.	Outreach and Inclusivity (OI) Ranking weight: 0.10	100
	Percentage of Students from Other States/Countries (Region Diversity RD): 30 marks Percentage of Women (Women Diversity WD): 30 marks Economically and Socially Challenged Students (ESCS): 20 marks Facilities for Physically Challenged Students (PCS): 20 marks	
5.	Perception (PR) Ranking weight: 0.10	100
	Peer Perception: Academic Peers and Employers/NAAC Accreditation (PR): 100 marks	

Conclusion

As highlighted in the Report of the Education Commission (1968), there is a close relationship not only between education and individual growth, but also national development as a whole. Quality higher education has shaped world powers, thus making it important for India to focus on harnessing the potential of this sector through strong HEIs, especially SPUs that account for over 80% of all students in Indian higher education. However, there are several challenges faced by SPUs while expanding access to quality education. The subsequent chapters delve into greater details on the challenges and provide detailed recommendations that have been designed based on extensive multi-stakeholder consultations.

CHAPTER-V

STAKEHOLDER CONSULTATIONS

As part of the study, a series of consultations were undertaken with Central and State Government Officers, Heads of State Higher Education Councils, and Vice Chancellors and Senior Academicians from State Public Universities. The sectoral challenges and policy recommendations provided in this report are substantively based on these consultations.

1. Pilot Consultation with State Government Officers and Vice Chancellors of SPUs

The pilot consultations with select State Government Officers heading Higher Education Departments and Vice Chancellors of SPUs were held on July 31 and August 2, 2023 under the chairpersonship of Shri Rajib Sen, Senior Adviser (Education). The primary objective was to understand the landscape of Higher Education in States and SPUs, and their challenges and opportunities to achieve the targets envisioned in the NEP 2020. The four major themes that emerged during the discussions were:

i. Financing: Institutional, Student and Infrastructure, and Accountability

ii. Governance: Administration, Capacity Building and Autonomy

iii. Faculty Recruitment

iv. Industry Collaboration, Internships and Apprenticeships

Based on the insights gained during the pilot consultations, two sets of detailed consultations were held subsequently.

2. Consultation with Central and State Government Officers

The second set of consultations were held under the chairpersonship of Dr. Vinod Kumar Paul, Member (Education), NITI Aayog, on September 15, 2023 at NITI Bhavan. Principal Secretaries and Secretaries of Higher and Technical Education Departments of State and Union Territory Governments and other senior officers from over 20 States and Union Territories, Joint Secretary from the Department of Higher Education, Government of India, Secretary General of the Association of Indian Universities (AIU), among many others participated in these consultations.

The discussions focused on the following nine thematic areas with respect to SPUs:

i. Improving Quality of Higher Education and Research

ii. Challenges of Expanding Higher Education

iii. Funding and Financing of SPUs and Future Focus Areas for RUSA (PM-USHA)

iv. Improving Governance and Autonomy

v. Recruitment and Capacity Building of Faculty and Administrators

vi. Skilling and Employability Enhancement for Students across Streams

vii. Digitalisation of Higher Education

viii. Promoting Internationalisation of Higher Education

ix. Academia-Industry Collaboration

3. Consultation with Vice-Chancellors of Leading and Aspirational SPUs and Chairpersons of State Councils for Higher Education

The third set of consultations were held in the form of a National Conference at the Dr. Ambedkar International Centre, New Delhi on November 2, 2023. Over 50 Vice Chancellors and Senior Academicians from Leading and Aspirational SPUs from 20 States and Union Territories across India and Chairpersons of several State Councils for Higher Education participated in the daylong conference. Shri Suman Bery, Vice Chairman, NITI Aayog, Dr. Vijay Kumar Saraswat and Dr. Vinod Kumar Paul, Members, NITI Aayog, Prof. M. Jagadeesh Kumar, Chairman, University Grants Commission, and Prof. G.D. Sharma, President, AIU addressed the distinguished gathering during the Inaugural Session. The daylong discussions focused on four thematic areas: Quality, Funding and Financing, Governance, and Employability.

CHAPTER-VI

KEY CHALLENGES

The thematic challenges listed in this chapter are a collation of challenges faced by SPUs and identified during the consultations held with State and Central Government Officers, Vice-Chancellors and Senior Academicians from SPUs, and Heads of State Higher Education Councils.

1. Quality

A. Improving Quality of Research

1. **Dearth of good quality Infrastructure:** An overarching challenge facing institutions across States is the lack of high-quality infrastructure. Insufficient research facilities, laboratories, and equipment pose challenges to conducting experiments and gathering data effectively. A key contributing factor identified is the constraint in funding. This shortfall encompasses both physical and digital infrastructure, exacerbating the challenges faced by SPUs.

2. **Shortage of Faculty and Staff:** SPUs are confronted with a shortage of personnel, exacerbated by the non-finalization of Recruitment Rules, thereby posing a significant challenge in maintaining the pupil teacher ratio. Additionally, there is an urgent need to foster accountability for underperformance and establish incentives to motivate existing staff to excel.

3. **Structural Limitations:** SPUs lack the necessary infrastructure and framework for engaging effectively in research activities, highlighting a misalignment between their structure and the requirements for research.

4. **Insufficient Expenditure on R&D:** Limited financing options result in inadequate expenditure on research and development, negatively impacting infrastructure development and the quality of research conducted in SPUs.

5. **Dissonance in Faculty Recruitment and Roles:** Faculty members are primarily recruited for teaching roles rather than research responsibilities, leading to a deficiency in research capacity within SPUs. Evaluation criteria for faculty members prioritize teaching during appointments but heavily emphasize research in subsequent evaluations, causing dissonance and stress among faculty members.

6. **Low Enrolment in Advanced Degrees:** There is a low enrolment of students at the MTech and Ph.D. levels, presenting a significant challenge in fostering advanced research and academic growth.

7. **Need for Advanced Research Instruments:** Universities need an expansion in their array of modern and advanced research instruments. This includes both increasing the

quantity of these instruments and incorporating newer technologies to enhance the research environment.

8. **Lack of Faculty Expertise in Advanced Research:** There is a lack of significant expertise among faculty in advancing research to higher Technology Readiness Levels (TRL). There is a critical need for a dedicated fund designated for scaling up projects from TRL 3 to 6 to facilitate the commercialization of research endeavours.

9. **Limited Access to High-Quality Journals:** Limited access to high-quality journals and frequent changes to the UGC Journal list add layers of difficulty for researchers in accessing consistent and reliable academic resources.

10. **Deficiency of Expertise in Writing Research Proposals:** A deficiency in faculty expertise in writing research proposals leads to difficulties in obtaining approvals for government projects.

11. **Need for change in Faculty Research Mindset:** The prevailing mindset of faculty members with respect to research, with many tending to prioritize teaching or publishing papers over conducting substantial research, presents a challenge.

12. **Delayed Disbursal of Sanctioned Grants:** Delay in disbursing sanctioned research project grants disrupts research continuity, affecting the progress of ongoing projects.

13. **Absence of Provisions for Recurring Grants:** Maintenance and operation of modern research facilities pose challenges due to the absence of provisions for recurring grants, hindering the sustainability of research activities.

14. **Limited Collaboration:** SPUs' collaboration with premier institutes is often limited, hindering progress in research projects due to resource and communication constraints.

15. **Scarcity of Incentives:** Researchers lack incentives such as funding, recognition, and career advancement opportunities, affecting motivation and commitment to high-quality research.

16. **Inadequate Dissemination of Findings:** Insufficient mechanisms for sharing research findings restrict the impact and real-world application of research projects.

B. Improving Quality of Pedagogy and Curriculum

1. **Courses, syllabus, curriculum not being industry-ready:** In response to the dynamic shifts in technology, industry demands, and societal changes, government colleges must undertake a comprehensive reassessment and restructuring of their course offerings. This entails updating curricula to reflect the latest knowledge, skills, and technologies relevant to contemporary job markets, while also emphasizing critical thinking, creativity, and adaptability. Moreover, integrating digital literacy and technology-based learning into course content is essential to equip students with the necessary skills for the digital age. The lack of these is a major challenge.

2. **Absence of robust Framework and Policy Provisions for Multidisciplinary Education and Research Universities (MERUs):** The lack of frameworks and policy guidelines for establishment of MERUs hampers Leading SPUs from transitioning to MERUs.

3. **Insufficient Flexibility in Designing Innovative Curriculum and Pedagogy:** Lack of flexibility to high potential affiliated colleges to design innovative curriculum and pedagogical methods in line with the needs of emerging and sunrise industries and social sectors is a challenge.

4. **Lack of Performance Systems to Measure Teaching Quality:** There are limited established metrics or performance systems in place to measure the quality of teachers and teaching methods.

C. Digitalisation of Higher Education

1. **Infrastructure Shortfalls for Digital Learning:** The shortfall in infrastructure, especially the absence of adequate conference rooms conducive to digital learning and engagement, poses a significant challenge to the effective implementation of digital learning initiatives.

2. **Scarcity of Capacity-Building Programmes in Digital Learning for Teachers:** Scarcity of capacity-building programmes aimed at enhancing teachers' skills and proficiency in online and digital learning methodologies is a critical concern.

D. Internationalisation of Higher Education

1. **Need for revision of Selection Criteria for Internationalization:** Nodal agencies responsible for overseeing the internationalization of universities should establish clear and inclusive selection criteria. These criteria should ensure that smaller high potential institutions are also considered for international partnerships and collaborations, thereby providing them with opportunities for global engagement.

2. **Underfunding of Research:** Research funding from the State Government remains relatively low, with a significant portion of funds being allocated towards salaries. As a result, research initiatives are underfunded, impacting the internationalization of higher education. International students seek institutions with robust research programmes and opportunities, emphasizing the necessity for increased investment in research to attract and retain a diverse student body. Addressing these challenges requires concerted efforts towards research funding.

II. Funding and Financing

A. Government Funding

1. **Limited Government Funding for CapEx and OpEx:** SPUs face financial constraints due to inadequate State Government grants covering only a fraction of operational expenses and falling short even for salaries. This affects their capacity to deliver quality education and infrastructure. Additionally, limited funding constraints faculty recruitment, innovative programme implementation, and development of industry-relevant curricula.

2. **Diminished Opportunities for External Research Grants:** The diminished opportunities for securing external research grants, particularly noticeable in recent years with Central Government agencies granting a significantly limited number of research projects, pose a challenge. The notable absence of specific R&D cells for SPUs compounds

the challenges faced by researchers. Research funding from central agencies is often directed towards Institutes of National Importance and Central Universities, thereby neglecting Leading SPUs.

3. **Faulty Funding Mechanism:** Performance-linked funding exacerbates disparities between universities of varying quality.
4. **Challenges in implementing Humanities and Social Science Programmes:** Self-financing universities offering humanities and social science programmes face challenges, especially because students from economically disadvantaged backgrounds often choose these disciplines. Augmenting state grants-in-aid is essential to ensure the smooth operation of these programmes.
5. **Administrative Delays in Fund Sanctioning:** Administrative delays in sanctioning funds for maintenance and campus construction hinder timely progress in these crucial areas, affecting the overall functioning of the universities.
6. **Lack of Structured Framework for Availing Bank Loans:** The process of availing loans from banks lacks a structured framework, highlighting the need for comprehensive reforms to involve banks in streamlining the loan application and approval process.
7. **High Education Costs in Rural Areas:** Rural education costs are prohibitively high, and a one-size-fits-all financing approach proves ineffective.
8. **Need for diversity in Funding Mechanisms:** Funding mechanisms lack responsiveness to SPUs' diverse needs and priorities, hindering their ability to address critical areas such as infrastructure development, research initiatives, and faculty recruitment.
9. **Absence of dedicated funding for Medical Universities:** Medical universities lack dedicated funding sources and support mechanisms, with no specific grant commission like the UGC.
10. **Non-existance of a dedicated Infrastructure Finance Agency for SPUs:** There is no infrastructure finance agency dedicated specifically to SPUs, like HEFA for Central Universities and Institutions of National Importance.
11. **Funding hindrance in Faculty Recruitment and Retention:** Funding shortages hinder faculty recruitment and promotions, affecting education and research quality. Allocation for new positions is inadequate, leading to reluctance in filling critical positions at Associate Professor and Professor levels. Highly qualified teachers prefer private colleges or overseas opportunities for better incentives.

B. Diversification of Revenue Sources

1. **Over-reliance on Traditional Revenue Streams:** Reliance on traditional revenue sources like admission fees, college affiliation fees, and state grants presents challenges to SPUs amid changes in admission processes and educational landscapes, such as the transition to centralised admissions and encouragement for autonomous colleges.

C. Fee Autonomy

1. **Need for Autonomy to Raise Funds and Increase Fees:** SPUs lack the autonomy to raise funds and increase fees within reasonable limits to meet their expenditure requirements and ensure financial sustainability.

D. Taxation and Utility Payments

1. **Taxation Issues:** Financial hurdles arise due to taxation on revenue of SPUs, including CSR grants, and commercial rates for utilities. These impact their financial sustainability by reducing disposable income and elevating operational costs.

III. Governance

A. Improving Governance and Autonomy

1. **High Costs of Accreditation:** Multiple colleges remain unaccredited due to the costs associated with the accreditation process. There is a need for the NAAC to undertake a comprehensive restructuring of their fees and costs for accreditation, with the aim of reducing financial barriers and facilitating greater participation.

2. **Inefficiencies in Affiliation Process:** The affiliation process for colleges is plagued by inefficiencies, leading to significant delays and challenges for private colleges. Sanctioning new and emerging tech courses often encounters lengthy delays, impacting the timely implementation of educational programmes. Additionally, the examination procedures in private colleges are marred by inefficiencies. Furthermore, the lack of clarity in the legislative framework for de-affiliation and degree-awarding institutions impedes efforts to increase the GER, as outlined in the NEP.

3. **Day-to-day Governance Issues:** Administrative and bureaucratic hurdles related to admissions and examinations, financial constraints on infrastructure augmentation, compliance with state and central regulations, etc., pose ongoing governance challenges for SPUs. The lack of robust governance structures has led to issues in administrative control, resulting in inefficiencies and inconsistencies in these critical processes.

4. **Governance Structure and Autonomy Issues:** SPUs face a lack of administrative autonomy, impacting decision-making and hindering innovation. Affiliated colleges struggle to achieve true autonomy as administrative control often remains centralized with the State Government, limiting their ability to adapt and thrive independently.

5. **Need for Synergy between State Technical and Higher Education Departments:** In instances where the Departments of Technical Education and Higher Education are segregated, which is commonplace across most states, fostering greater collaboration, connectivity, and synergy becomes imperative. It is essential for these parallel departments to engage in dialogue and coordinate efforts to work harmoniously, a facet that is often lacking.

6. **Need for Mentoring Support:** There is need for handholding and mentoring support for SPUs to achieve higher rankings from various accreditation agencies.

7. **Frequent Leadership Changes:** Frequent changes in the position of the Vice Chancellor (VC) lead to a lack of continuity in leadership, impacting the strategic direction and stability of SPUs.

8. **Underrepresentation of Academicians in Key SPU Bodies:** There is a lack of representation of academicians in SPU administrative positions, which hampers the academic functions of the university.

B. Recruitment and Capacity Building of Faculty and Administrators

1. **Lack of Transparency in Appointment Processes:** The lack of transparency in the appointment process for both teaching and non-teaching staff poses significant concerns. This undermines the credibility of the selection process and raises questions about fairness and integrity. To rectify this issue, there is an urgent need for transparent and merit-based appointment procedures that prioritize qualifications, experience, and suitability for the role.

2. **Faculty Shortage for Postgraduate Courses:** An acute shortage of faculty members to manage postgraduate-level courses across universities poses a significant challenge.

3. **Rigid Faculty Recruitment Process:** The retirement of teaching faculty and the requirement for State Government approval for each new recruitment is a significant challenge. Additionally, lack of active involvement by guest faculty members in research endeavours exacerbates this issue.

4. **Heavy Reliance on Contractual Positions:** Faculty recruitment heavily leans towards contractual positions, leading to a substantial proportion of faculty members occupying temporary positions. This precarious employment situation hampers the establishment of a stable academic environment. Strategies should be implemented to address the issue of overreliance on contractual faculty within academic institutions by creating pathways for contractual faculty to transition into permanent positions, providing professional development opportunities, and ensuring equitable treatment in terms of pay and benefits.

IV. Employability

A. Skilling and Employability Enhancement for Students across Streams

1. **Talent Outflow from states due to lack of relevant employability skills:** In many states, the talent pool and resources employed in local industries predominantly originate from outside the state. A significant contributing factor to this trend is the inadequate English language proficiency among local youth. Consequently, one of the primary focal points for the State Governments is to address this challenge. There is also a pressing need to enhance the employability skills of students, thereby encouraging them to remain within the state and contribute to its growth and development, not only at a regional but also a national level.

2. **Outdated Curriculum and Limited Adaptability:** Lack of revision and curricular updates to meet industry demands and technological advancements is a major challenge.

This is coupled with a lack of balance in academic rigour with practical applicability while fostering self-learning and lifelong learning skills.

3. **Disparity in Sports Education Eligibility Criteria:** There exists a disparity in the eligibility criteria for teaching in Physical Education compared to other courses. For Physical Education, the eligibility for teaching is 3+2+2 (3-year undergrad, 2 years of B.P.Ed + 2 years of M.P.Ed.), whereas for other courses it is 3+2 (Undergrad + Masters) years. This requires rectification for consistency and fairness.

B. Academia-Industry Interface

1. **Limited Industry-Academia Collaboration:** Limited engagement with the private sector hampers opportunities for collaborative research, skill development, and revenue generation, limiting SPUs' ability to meet industry demands and enhance student employability.

2. **Need for Industry Mentorship for Student and Faculty-led Entrepreneurship:** There is a lack of industry mentorship for student and faculty-led entrepreneurship ideas with high potential for commercialization.

3. **Insufficient Uptake of Professor of Practice positions:** There is inadequate uptake of Professor of Practice positions by high quality industry professionals and practitioners.

4. **Inadequate Industry Participation in Curriculum and Pedagogical Development:** The participation of industry partners in curriculum and pedagogical development and revision is limited, which impedes the relevance of the content and pedagogical methods.

University of Mumbai, Maharashtra

CHAPTER-VII

POLICY RECOMMENDATIONS WITH IMPLEMENTATION ROADMAP AND PERFORMANCE SUCCESS INDICATORS

The recommendations detailed in this chapter have emerged from the challenges identified in Chapter VI and solutions proposed during the consultations held with State and Central Government Officers, Vice-Chancellors and Senior Academicians of State Public Universities, and Heads of State Higher Education Councils. The recommendations have been categorised under the four focus areas i.e., Quality, Funding and Financing, Governance, and Employability. Several good practices by States and initiatives of the Central Government have also been highlighted.

A lot of recommendations have financial implications. Hence, their implementation will substantially depend on the following three prerequisites:

1. Increasing the combined investment of Centre and States on education to 6% of GDP as recommended in NEP 2020

2. Increasing the R&D Investment (public and private) to 2% of GDP as recommended in the Economic Survey 2017-18

3. State Governments utilising significant portion of the increased funds devolved under the 14th and 15th Finance Commissions towards education, especially higher education and research.

Throughout this chapter, SPUs have been frequently referred to as Leading SPUs and Aspirational SPUs. Leading SPUs are those which feature in the top 50 ranked SPUs in the NIRF Rankings 2024. Aspirational SPUs are those which do not feature in the top 50 ranked SPUs in NIRF Rankings 2024. Also, all recommendations made in this chapter with respect to SPUs may be appropriately applied to the affiliated colleges.

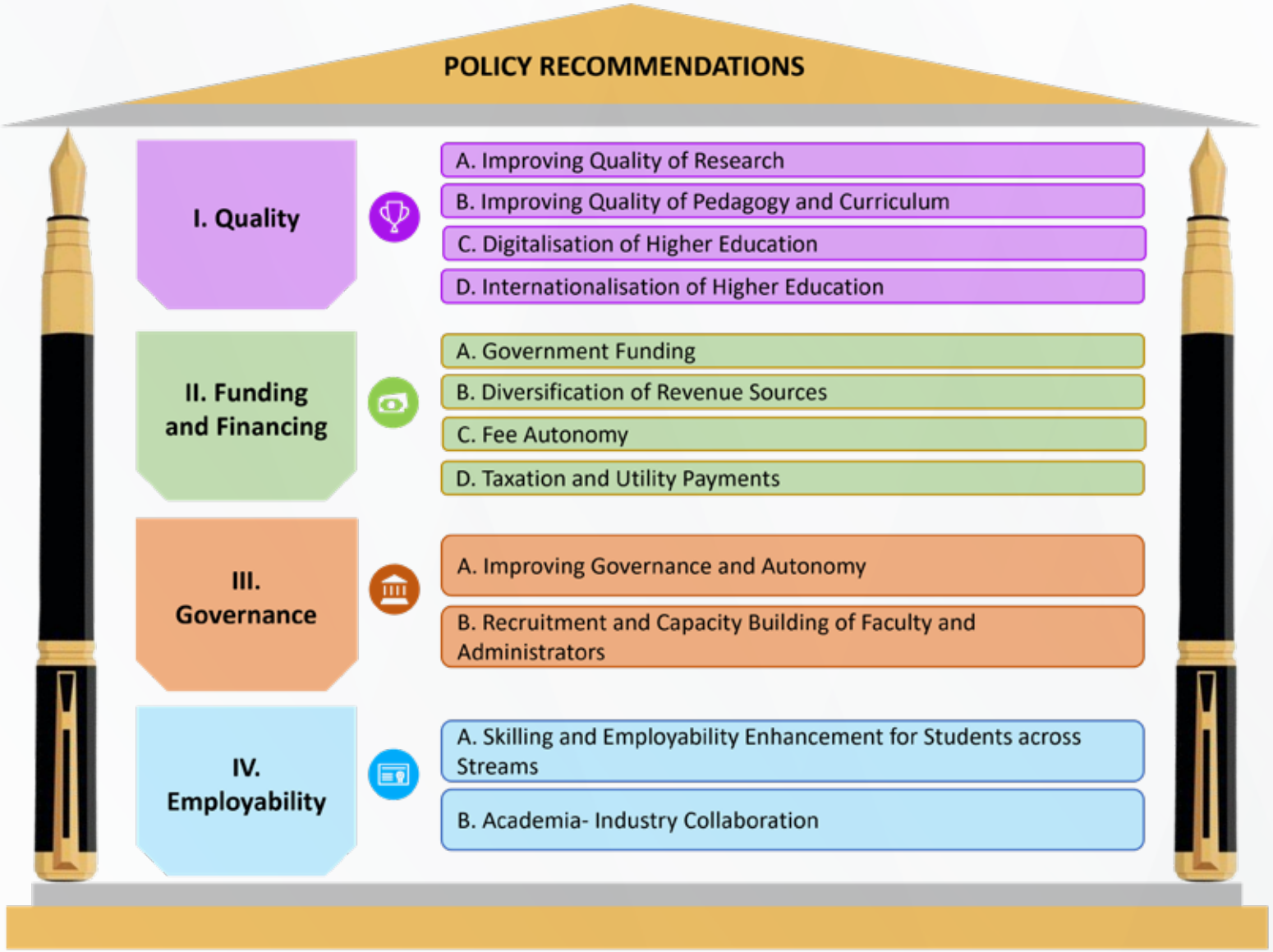


Figure 7.1: Summary of Policy Recommendations

1. QUALITY

A. Improving Quality of Research

Figure 7.2: Recommendations for Improving Quality of Research

1. Introduce a National Research Policy: A comprehensive National Research Policy that acknowledges and addresses diverse structural and functional needs of universities across the country may be introduced. This policy should provide guidelines and frameworks for promoting research activities, allocating resources, and fostering collaboration between universities, research institutions, industries, and government bodies. The policy should cover the entire spectrum of STEM and non-STEM fields of study. *(NEP Clause: 17.6)*

1.1 Implementation Roadmap

Short-Term (0-2 Years)

» Develop a draft National Research Policy in alignment with the Anusandhan National Research Foundation outlining funding, collaboration, and performance metrics.

Medium-Term (2-5 Years)

» Finalize and implement the National Research Policy.

» Establish mechanisms to monitor and evaluate the Policy's impact.

1.2 Actors Responsible

- Ministry of Education
- Ministry of Science & Technology
- Ministry of Health
- Ministry of Agriculture
- NITI Aayog
- Anusandhan National Research Foundation

1.3 Performance Success Indicator

- Mechanism for regular Monitoring and Evaluation of Policy is in place.

2. Promote Collaborative and Interdisciplinary Research

2A. Establish Dedicated Research Hubs: Promote the creation of dedicated Research Hubs within cluster of SPUs, focusing on specific areas of study or interdisciplinary research themes. These hubs can serve as focal points for collaborative research initiatives, bringing together faculty members, students, and external partners to address complex challenges and pursue cutting-edge research projects in STEM and non-STEM areas. *(NEP Clause: 11.12; Chapter-3, S.No.-5,6; Chapter-6, S.No.-12; Chapter-7, Component-1, RUSA)*

2A.1 Implementation Roadmap

Short-Term (0-2 Years)

- Identify and establish Research Hubs in cluster of SPUs, based on core competencies of identified universities.

2A.2 Actors Responsible

- Ministry of Education
- Ministry of Science & Technology
- Ministry of Health
- All Regulatory Bodies (including UGC/AICTE/NCTE/PCI /BCI/NCTE/NMC/DCI/ICAR)
- State Governments
- SPUs
- NITI Aayog

2A.3 Performance Success Indicator

- Establishment of dedicated Research Hubs focusing on specific research themes developed in SPUs across all geographies.
- Number of clusters in Global Innovation Index's S&T clusters.
- Allocation of grants within state budgets for R&D activities as well as higher education development initiatives.

2B. Provide R&D Advisory to Cluster Universities: Establishing an R&D Advisory Committee is critical for providing guidance and support in fostering R&D within the cluster. This Committee can comprise experts from academia, industry, and research bodies, offering valuable insights and recommendations to facilitate the growth of R&D activities. Their expertise can help SPUs identify research priorities, navigate funding opportunities, and establish collaborative partnerships to advance R&D initiatives.

2B.1 Implementation Roadmap

Medium-Term (2-5 Years)

» Establish R&D Advisory Committees for SPUs.

2B.2 Actors Responsible

» SPUs

» State Governments

» Ministry of Education

2B.3 Performance Success Indicator

» R&D Advisory Committees for cluster and other SPUs are in place.

2C. Foster Collaborative Partnerships: Facilitate university partnerships with research institutions, industries, and government bodies to leverage their resources, expertise, and infrastructure. Collaborative research initiatives can enhance the quality and impact of research conducted in SPUs, leading to innovative solutions and knowledge transfer for real-world applications *(NIRF Clause: 2D)*.

2C.1 Implementation Roadmap

Short-Term (0-2 Years)

» Setup/establish an industry/government/community outreach/engagement centre in every SPU.

Medium-Term (2-5 Years)

» Facilitate collaborative research partnerships with other universities, research institutions, industries, and government bodies through organizations like AIU, CII, and FICCI.

2C.2 Actors Responsible

» SPUs

» All Regulatory Bodies

» AIU

» CII/FICCI/ Local industry bodies/chapters

» MSME Associations

» District Innovation Councils

» State Governments

2C.3 Performance Success Indicator

» Number of industry/government/community outreach/engagement centres established and number of MoUs signed with other universities, research institutions, industries, and government bodies.

2C.3 Central Government Initiative

2C.3.1 Impacting Research Innovation and Technology (IMPRINT) Scheme

Launched in 2015 by the Department of Higher Education and the Department of Science and Technology to address critical engineering challenges and translating academic research into practical technologies. Coordinated by leading institutions like the IITs and IISc, the scheme addressed societal issues across 10 domains, including healthcare, energy, sustainable habitat, advanced materials, and water resources, fostering collaboration between academia, industries, and government bodies to drive innovation. Between 2015 and 2018, IMPRINT 1.0 supported 142 research projects with a total funding of ₹320.78 crores, resulting in 42 prototypes and significant technological advancements. Building on this success, IMPRINT 2.0 was launched in 2018 with a multi-partner funding model to enhance academia-industry collaboration. By January 2025, 176 projects were sanctioned with an average cost of ₹2 crores per project. It had seen active participation from 172 Lead Principal Investigators (PI), 303 Co-Principal Investigators (Co-PI), 214 collaborators, 179 industry partners, and supported by 41 lead institutions and 82 partner institutions. This extensive network benefitted thousands of researchers and institutions, promoting indigenous development and self-reliance in research. With its focus on pressing national priorities, IMPRINT established itself as a key driver of innovation, bridging the gap between academic research and industry requirements while contributing significantly to India's socio-economic growth.

3. Create Research Support and Capability Building Ecosystem

3A. Create Research Support Offices: Establish dedicated Research Support Offices within SPUs to assist faculty members and researchers in various aspects of research, including grant writing, project management, and accessing research funding opportunities. These offices can provide valuable guidance, resources, and training to faculty members and researchers, facilitating their research endeavours and increasing their competitiveness for external funding in STEM and non-STEM areas. *(NEP Clause: 11.12)*

3B. Implement Comprehensive Research Training Programmes for Faculty: Develop and implement comprehensive training programmes and workshops aimed at enhancing research skills among faculty members. These programmes should cover various aspects of research methodology, grant writing, publication ethics, and research project management. By providing

opportunities for continuous learning and professional development, universities can foster a culture of research excellence and innovation. *(NEP Clause: 24.4)*

3.1 Implementation Roadmap

Short-Term (0-2 Years)

- Establish Research Support Offices in SPUs.
- Training and capacity building programmes to be conducted for faculty members to effectively utilise the services of Research Support Offices.

3.2 Actors Responsible

- Ministry of Education
- Ministry of Science & Technology
- Ministry of Health
- All Regulatory Bodies
- Capacity Building Commission
- State Governments
- SPUs

3.3 Performance Success Indicator

- Number of Research Support Offices established in SPUs.
- Dedicated budgets allocated towards research and research infrastructure in SPUs.
- Number of training programmes per university for faculty on research methodology, grant writing, and publication ethics designed and implemented.

4. Enhance Research Funding

4A. Upgradation of Infrastructure: Allocate adequate resources to upgrade infrastructure and establish dedicated research spaces within SPUs, especially in hilly and North Eastern States. Enhancing facilities such as laboratories, libraries, and research centres will significantly improve their research capabilities and foster a conducive environment for innovation and discovery. Moreover, it will attract skilled researchers and retain local talent *(NEP Clause: 17.9,NIRF Clause: 1D)*

4A.1 Implementation Roadmap

Short-Term (0-2 Years)

- Allocate resources to SPUs for upgrading research facilities.

4A.2 Actors Responsible

- State Governments
- Ministry of Education
- Ministry of Science & Technology

» Ministry of Health

» Ministry of Development of North Eastern Region

» All Regulatory Bodies

» Industry Partners

4A.3 Performance Success Indicator

» Dedicated budget allocated towards research facilities and their maintenance and upgradation at the SPU level.

» Dedicated budget at government level for upgradation of research facilities in SPUs in Hilly and North Eastern States.

» Well defined mechanism/ confirmed process in place for regularly providing adequate resources for upgrading research facilities and infrastructure in SPUs.

4B. State Grants for R&D Activities: Allocate state grants specifically dedicated to R&D activities to address the issue of insufficient funding in SPUs *(NEP Clause: 17.3)*.

4B.1 Implementation Roadmap

Short-Term (0-2 Years)

» Allocate earmarked grants for R&D activities in STEM & non-STEM areas in SPUs and higher education development in the state budgets and through the Anusandhan National Research Foundation.

4B.2 Actors Responsible

» Central Government

» State Governments

» Anusandhan National Research Foundation (ANRF)

4B.3 Performance Success Indicator

» Allocation of adequate funds for R&D activities and higher education development as a specific % of the state budgets and ANRF.

4C. Faculty Incentives and Rewards: Provide performance-based incentives and rewards to encourage faculty engagement in research activities. This may include offering research grants, sabbaticals, travel funds for conferences, and recognition schemes for outstanding research achievements. By recognizing and rewarding faculty contributions to research, universities can motivate and incentivize their active participation in advancing knowledge and addressing societal challenges. Streamlining administrative processes and providing support for research-related activities will empower faculty members and researchers to focus on advancing knowledge and addressing critical societal challenges *(NEP Clause: 13.5)*

4C.1 Implementation Roadmap

Short-Term (0-2 Years)

» SPUs to chart out an action plan in the Institutional Development Plan to offer and implement performance-based incentives to the faculty for research.

» Implement flexible administrative policies to prioritize research and reduce the administrative workload of teachers.

4C.2 Actors Responsible

» Ministry of Education

» Ministry of Science & Technology

» Ministry of Health

» All Regulatory Bodies

» State Governments

4C.3 Performance Success Indicator

» List of performance-based incentives for research to the faculty are finalised and implemented at the SPUs.

» Revision of administrative policies for teachers to facilitate prioritisation of research activities.

5. Support Research Commercialization and Start-ups: Provide comprehensive support for the commercialization of research and start-ups in SPUs. This support should encompass patenting, marketing, and establishing connections with investors to facilitate the transition of research findings into viable commercial ventures *(NEP Clause: 11.12) (NIRF Clause: 2D)*

5.1 Implementation Roadmap

Short-Term (0-2 Years)

» Establish Patent Cells in all SPUs to create awareness and for handholding.

Medium-Term (2-5 Years)

» Setup incubators to provide comprehensive support for research commercialization and start-ups in all Leading SPUs.

5.2 Actors Responsible

» Ministry of Education

» UGC/AICTE

» Leading SPUs

» State Governments

5.3 Performance Success Indicator

» Dedicated incubator to provide comprehensive support for research commercialization and start-ups in every district.

» Number of research findings commercialized and number of start-ups established every year.

5.4 Central Government Initiative

5.4.1 Setting up of Research Parks in IITs

To foster innovation and collaboration between academia and industry, and providing a platform for startups and researchers to develop cutting-edge technologies, the Central Government initiated the setting up of 9 Research Parks, one each at IIT Madras, IIT Kharagpur, IIT Bombay, IIT Gandhinagar, IIT Delhi, IIT Guwahati, IIT Kanpur, IIT Hyderabad, and IISc Bangalore in 2016. The key objective was to facilitate knowledge transfer between academia and industry, support startups, and foster technology-based ventures, and also develop world-class R&D infrastructure in HEIs.

6. Create Centres of Excellence to Address Local Challenges: Cluster of SPUs should identify 2 to 3 local issues and establish Centres of Excellence dedicated to addressing these challenges. These centres can serve as hubs for interdisciplinary research, collaboration with local communities, and development of innovative solutions tailored to regional needs *(NEP Clause 17.4)*.

6.1 Implementation Roadmap

Long-Term (5+ Years)

» Create Centres of Excellence in cluster of SPUs to address local challenges.

6.2 Actors Responsible

» All Regulatory Bodies

» State Governments

» State Councils for Higher Education

6.3 Performance Success Indicator

» Dedicated Centres of Excellence established in cluster of SPUs to address local challenges.

» Special grants provided by the funding agencies for establishing such Centres of Excellence.

6.4 State Good Practices

27.4.1 Odisha: Odisha Higher Education Programme for Excellence and Equity (OHEPEE)

Launched in 2017, OHEPEE was a transformative initiative aimed at enhancing the quality

and accessibility of higher education in Odisha. Supported by a substantial investment of ₹1,030 crores, the programme covered over 850 colleges across the state, focusing on uplifting educational standards and infrastructure. OHEPEE directly benefited 1000+ students by providing improved educational resources and opportunities. Faculty members gained access to enhanced training and professional development programmes. As many as 11 research centres of excellence (CoEs) of five public universities were given sustainability grants to further their work and provide research internships to UG and PG students. The research CoEs, operational at Sambalpur, Berhampur, Fakir Mohan, Utkal, and Rama Devi Women's Universities conducted Odisha-centric applied research in areas of natural sciences, engineering, humanities, and social sciences. The Odisha State Higher Education Council and a panel of experts from various fields evaluated the research work of the CoEs and provided them a sustainability grant of around ₹61.5 lakh under Mukhyamantri Research and Innovation Fellowship programme for both 2023-24 and 2024-25 academic sessions.

7. Designate Leading SPUs as Research and Knowledge Partners: Designate Leading SPUs as research and knowledge partners in government initiatives. This recognition can enrich academia, stimulate research-driven solutions, and potentially generate revenue through consultancies.

7.1 Implementation Roadmap

Short-Term (0-2 Years)

» Designate Leading SPUs with an established track record in research and policy/project evaluation as Research and Knowledge Partners for projects of the Central and State Governments.

7.2 Actors Responsible

» State Governments

» Central Government

7.3 Performance Success Indicator

» Dedicated number of research projects undertaken per year in collaboration with Leading SPUs as a fixed % of total number of projects by State Governments and Central Government.

8. Provide Handholding Support to Aspirational SPUs to apply for ANRF and other research grants: Provide handholding to Aspirational SPUs to apply and benefit from ANRF research grants.

8.1 Implementation Roadmap

Short-term (0-2 years)

» Provide handholding to Aspirational SPUs to apply and benefit from ANRF and other research grants.

8.2 Actors Responsible:

- State Governments
- All Regulatory Bodies
- Aspirational SPUs

8.3 Performance Success Indicator:

- Number of Aspirational SPUs provided handholding support to apply for ANRF and other research grants.

9. Provide Dedicated Funding for Humanities and Fundamental Research

9A. Proivde Support for Humanities Research: Humanities departments in SPUs require support to enhance teaching and research. Strengthening collaboration with organizations like ICHR, ICSSR, ICPR, NTM, and Sahitya Akademi would also bolster research in these fields *(NEP Clause: 17.5)*.

9A.1 Implementation Roadmap

Medium-Term (2-5 Years)

- Strengthen support for humanities research through infrastructure and collaborations of SPUs with research organisations.

9A.2 Actors Responsible

- UGC/AICTE
- ICSSR/ICHR/ICPR
- SPUs
- Anusandhan National Research Foundation (ANRF)
- Central Government
- State Governments

9A.3 Performance Success Indicator

- Dedicated funding towards humanities research in SPUs as a fixed % of total R&D funding.

9B. Fundamental Research: Increase research funding to support fundamental research in higher education *(NEP Clause 17.3)*.

9B.1 Implementation Roadmap

Long-Term (5+ Years)

- Enhance research funding for fundamental research and attract diverse students from India and abroad.

9B.2 Actors Responsible

- Ministry of Education
- Ministry of Science & Technology
- Ministry of Health
- All Regulatory Bodies
- State Governments
- Anusandhan National Research Foundation (ANRF)

9B.3 Performance Success Indicator

- Dedicated funding towards fundamental research in SPUs as a fixed % of total R&D funding.

10. Promote State Universities Consortia and Networking: Promote networking and consortia among SPUs to ensure access to research infrastructure, including laboratories, libraries, and computational resources. Facilitating collaboration in this manner will enhance research capabilities and foster innovation within SPUs. *(NEP Clause: 12.1)*

10.1 Implementation Roadmap

Medium-Term (2-5 Years)

- Promote SPU consortia and networking by creating a platform to share best practices, solutions to problems, innovations, resource mobilization mechanisms and sharing of resources.

10.2 Actors Responsible

- SPUs
- State Governments

10.3 Performance Success Indicator

- SPU consortia are in place for networking and to ensure access to research infrastructure to share best practices, solutions to problems, and innovations.

11. Ensure Ease of Regulation for R&D Equipment Procurement

11A. Grant Tax Exemptions for R&D Equipment: Grant exemptions from taxes for equipment procured for R&D activities in SPUs.

11A.1 Implementation Roadmap

Short-Term (0-2 Years)

- Grant exemptions for taxes on R&D equipment for SPUs.

11A.2 Actors Responsible

» Ministry of Finance

11A.3 Performance Success Indicator

» Enabling provisions to grant tax exemptions on R&D equipment are in place.

11B. Implement Single-Window Clearances for Research and Testing Facilities: Implement 'single-window' clearances for medical and engineering research and testing facilities in SPUs to simplify and expedite administrative processes, enabling efficient and seamless access to necessary approvals and permissions.

11B.1 Implementation Roadmap

Short-Term (0-2 Years)

» Implement 'single-window' clearances for research and testing facilities for SPUs.

11B.2 Actors Responsible

» Ministry of Finance

» Ministry of Education

» Ministry of Science & Technology

» Ministry of Health

» All Regulatory Bodies

» State Governments

11B.3 Performance Success Indicator

» Implementation of 'single-window' clearances mechanism for research projects submitted by SPUs.

12. Provide Technical Support to Ensure Maintenance of high-end Research Equipment: Provide technical support staff to maintain and operate sophisticated equipment in all Leading SPUs, facilitating smooth functioning of high-end research laboratories and facilities.

12.1 Implementation Roadmap

Short-Term (0-2 Years)

» Provide dedicated funding to hire technical support staff for research laboratories in Leading SPUs for efficient utilisation and maintenance of research infrastructure.

» Grant allocation for the maintenance of research equipment.

12.2 Actors Responsible

- All Regulatory Bodies
- State Governments

12.3 Performance Success Indicator

- Dedicated technical support staff employed in research laboratories in all Leading SPUs.
- Allocation of grants specifically designated for the maintenance of research equipment.

13. Encourage Student-Faculty Collaboration in Research

13A. Implement Student-Faculty Research Programmes: Establish student-faculty pairing programmes where students are matched with faculty members to assist them in research projects. These programmes provide students with hands-on research experience and exposure to the research process, while also providing faculty members with valuable assistance and support in their research endeavours. This initiative can promote collaboration and knowledge sharing between students and faculty, enriching the research environment within the SPUs *(NEP Clause: 17.8)*.

13A.1 Implementation Roadmap

Short-Term (0-2 Years)

- Implement student-faculty research pairing programmes.

13A.2 Actors Responsible

- SPUs

13A.3 Performance Success Indicator

- Number of active student-faculty research pairing programmes per SPU.

13B. Establish Researcher Mentorship Programmes: Develop mentorship programmes that pair experienced researchers with junior faculty members. These mentorship relationships can provide invaluable guidance, support, and professional development opportunities to junior faculty members, helping them navigate the complexities of academic research and advance their careers *(NEP Clause: 17.11)*.

13B.1 Implementation Roadmap

Short-Term (0-2 Years)

- Establish researcher mentorship programmes.

13B.2 Actors Responsible

- SPUs

13B.3 Performance Success Indicator

» Number of active researcher mentorship programmes per SPU.

14. Create Career Pathways in Research

14A. Provide Post-doctoral Fellowships: Provide sufficient post-doctoral fellowships to support R&D developments and substantial research initiatives in STEM and non-STEM areas, encouraging advanced studies and innovations at the SPU level.

14A.1 Implementation Roadmap

Short-Term (0-2 Years)

» Enhance funding for post-doctoral fellowships, especially for women in SPUs.

14A.2 Actors Responsible

» Central Government

» State Governments

14A.3 Performance Success Indicator

» Dedicated number of fellowships awarded for post-doctoral research, especially to women, Economically and Socially Challenged Students (ESCS) and Physically Challenged Students in SPUs (NIRF Clause: 4 B,C,D). (Quantum of fellowship to be at par with remuneration to Assistant Professors in order to encourage career pathways in research.)

14B. Develop Dedicated Schemes for Students and Teachers with Research Potential: Design and implement tailored schemes aimed at identifying and nurturing students and teachers with research potential. These schemes can include scholarships, fellowships, research internships, and other opportunities to engage students and teachers in research activities, fostering a culture of research excellence within the SPU community *(NEP Clause: 17.11)*.

14B.1 Implementation Roadmap

Short-Term (0-2 Years)

» Develop and offer scholarships and fellowships for students and teachers from SPUs with research potential.

» Consolidated information on available scholarships/fellowships from Central Government (available on NSP Portal), State Governments, international institutions, other councils and agencies, and those given by individual universities to be provided on a single platform.

14B.2 Actors Responsible

» Ministry of Education

» Ministry of Science & Technology

» Ministry of Health

» State Governments

» SPUs

» All Regulatory Bodies

14B.3 Performance Success Indicator

» Provision of sufficient numbers of scholarships and research fellowships for students and teachers of SPUs.

» Sufficient funds have been arranged for this purpose.

» Consolidated information is available on single platform.

14B.4 Central Government Initiative

14B.4.1 Prime Minister's Research Fellows (PMRF) Scheme

Launched in 2018 by the Ministry of Education, Government of India, PMRF Scheme aimed to support India's brightest talents in doctoral research. With a focus on building world-class research ecosystems, the scheme encouraged scholars to tackle challenging and innovative research problems. It aligned with the vision of retaining top talent and fostering indigenous research excellence in critical areas such as AI, clean energy, and healthcare. The fellowship provided ₹70,000 per month for the first two years, ₹75,000 in the third year, and ₹80,000 for the fourth and fifth years. Additionally, a research grant of ₹2 lakhs per year was provided. It has been implemented across premier institutions, including IITs, IISc, IISERs, and select Central Universities and NITs offering science and technology programmes. Between May 2022 and December 2024, the scheme benefited 7,079 scholars, many of whom published groundbreaking research in high-impact journals. Union Budget 2025 made a provision for 10,000 fellowships over the next 5 years at IITs and the Indian Institute of Science (IISc) under the PMRF scheme. Allocation for the scheme has been increased from ₹350 crores in 2024-25 to ₹600 crores in 2025-26.

14B.5 State Good Practices

14B.5.1 Tamil Nadu: Chief Minister Research Fellowship (CMRF)

It was launched in 2022 by the Government of Tamil Nadu with the aim of turning the state into a 'Research Hub'. The objective of the scheme was to create a research platform for meritorious economically backward postgraduates and develop professional/academic research careers under the mentorship of an established researcher. It had an estimated budget outlay of ₹12.31crores in 2023. The monthly fellowship amount for the first two years under the scheme was ₹25,000 and ₹28,000 for the third year.

14B.5.2 Jharkhand: Student-Centric Schemes

To provide support to students pursuing their higher and technical education, Government of Jharkhand initiated three student-centric schemes in 2022. The Guruji Student Credit Card Scheme (GSCCS) with education loans up to ₹15 lakhs at a concessional 4% annual interest rate for students from economically weaker sections to pursue higher education. The Eklavya Prashikshan Yojana, with free coaching for competitive exams and a ₹2,500 monthly stipend for 27,000 students annually. The Mukhyamantri Shiksha Protsahan Yojana with annual support for 8,000 students for free coaching and ₹2,500 monthly assistance for careers in engineering, medicine, law, fashion, hotel management, and accountancy.

15. Provide Access to Research Journals and Databases through INFLIBNET and ONOS: There is a need for increased support from INFLIBNET and ONOS to provide access to research journals and databases like Science Direct, Springer, Scopus and Web of Science to SPUs.

15.1 Implementation Roadmap

Short-Term (0-2 Years)

» Increase INFLIBNET and ONOS support for free access to research resources in all SPUs.

15.2 Actors Responsible

» Ministry of Education

» UGC/AICTE

15.3 Performance Success Indicator

» Dedicated financial support extended to INFLIBNET and ONOS for providing free access to research resources.

15.4 Central Government Initiative

15.4.1 One Nation One Subscription (ONOS) Scheme

Launched in November 2024, ONOS aimed to democratize access to high-quality scholarly research in India. With a budget allocation of ₹6,000 crores for three years, ONOS provided comprehensive access to over 13,000 e-journals from 30 leading international publishers to nearly 1.8 crore students, faculty, and researchers across 6,300 government-managed HEIs and Central Government R&D institutions, including numerous SPUs. By offering centralized access to a vast array of international journals, ONOS aimed to bridge existing knowledge gaps, particularly benefiting institutions in tier 2/3 cities. This equitable distribution of resources aligned with the NEP 2020 and the ANRF, fostering a culture of research and innovation nationwide. The Information and Library Network (INFLIBNET) coordinated the implementation of ONOS, ensuring a user-friendly experience for all beneficiaries through a unified digital portal.

16. Create a Curated List of high quality Journals: Create a curated list of high-quality journals to guide faculty members in their research endeavours. The list should exclusively include journals indexed in the Science Citation Index (SCI) to maintain high standards for faculty promotion, aligning with the guidelines set by regulatory bodies such as the UGC.

16.1 Implementation Roadmap

Short-Term (0-2 Years)

» Create curated list of high-quality journals in STEM and non-STEM areas. (UGC CARE list to be regularly updated).

16.2 Actors Responsible

» UGC

16.3 Performance Success Indicator

» Curated list of high-quality journals is prepared (UGC CARE list regularly updated).

B. Improving Quality of Pedagogy and Curriculum

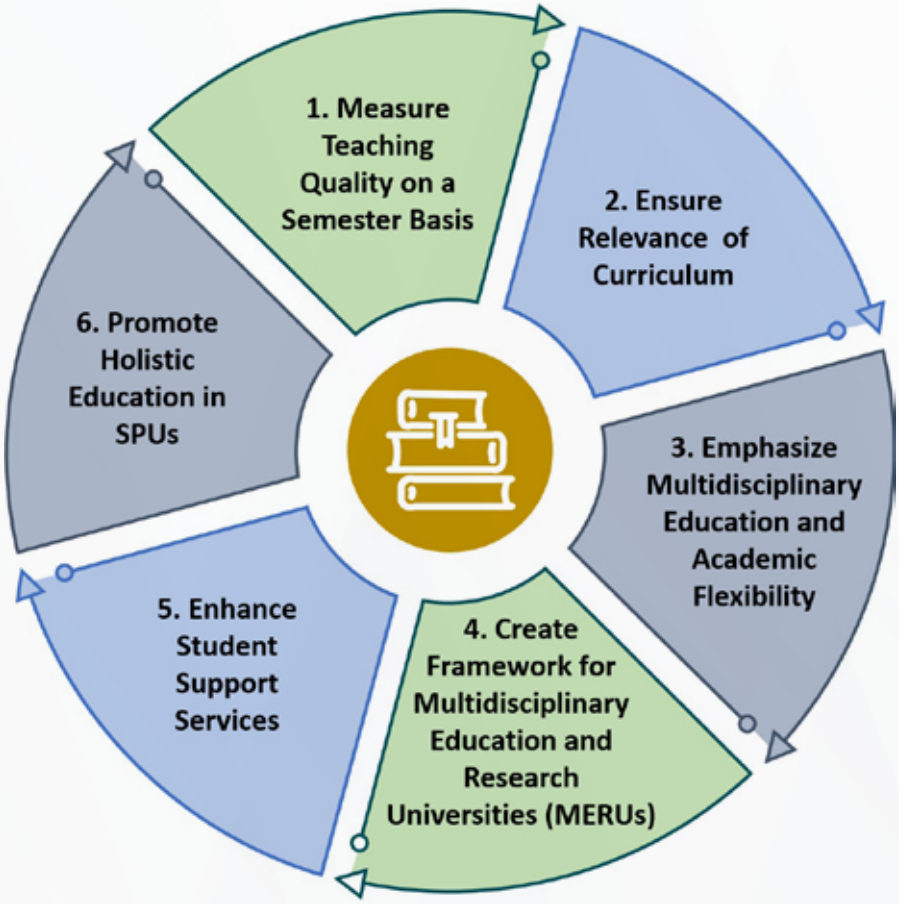


Figure 7.3: Recommendations for Improving Quality of Pedagogy and Curriculum

1. Measure Teaching Quality on a Semester Basis: Implementing a system to measure the quality of teaching on a semester basis can provide valuable insights into the effectiveness of teaching practices at SPUs. This could involve ranking SPUs based on their teaching performance, with established parameters to gauge the quality of teachers and teaching methods. Regular evaluations promote continuous improvement and accountability in the delivery of educational services *(NEP Clause 23.5)*.

1.1 Implementation Roadmap

Short-Term (0-2 Years)

- Develop a framework with clear parameters to evaluate teaching effectiveness. This may include student feedback, peer evaluations, classroom observations, and course completion rates.
- Implement this framework to measure the quality of teaching on a semester basis in SPUs.
- Utilize evaluation results to provide constructive feedback to faculty for continuous improvement. Consider using the evaluation system for performance-based incentives or recognition programmes for outstanding teachers.

Medium-Term (2-5 Years)

» Analyse the results of the semester-based teaching quality evaluations across all SPUs and refine the framework, if necessary.

Long Term (5+ Years)

» Regularly review and refine the teaching quality measurement system based on new developments in higher education.

» Encourage faculty participation in research and professional development opportunities to stay updated in their fields.

» Foster a culture of innovation in curriculum design by encouraging faculty to develop new courses and teaching methods.

1.2 Actors Responsible

» All Regulatory Bodies

1.3 Performance Success Indicator

» Implementation of regular surveys or feedback mechanisms to collect student perceptions of teaching quality at the end of each semester.

» Implementation of performance-based incentives or recognition programmes for outstanding teachers and those making substantial improvements.

2. Ensure Relevance of Curriculum

2A. Ensure Regular Review of Curriculum: Establish committees to regularly review and update curricula to ensure alignment with industry standards and job market demands *(NEP Clause 12.2)*.

2 B. Identify Emerging Sectors and Courses: Identify emerging sectors and introduce relevant courses to attract student interest and enhance admission rates *(NEP Clause: 20.6)*.

2B.1 Implementation Roadmap

Short-Term (0-2 Years)

» Establish curriculum review committees within each SPU to review and update existing curricula across various disciplines on a regular basis.

» Partner with industry experts to identify current job market needs and emerging skills requirements.

» Update curricula to reflect industry standards and integrate emerging fields of study

Medium Term (2-5 Years)

» Introduce new courses related to identified emerging and sunrise sectors.

2B.2 Actors Responsible

» SPUs

» State Governments

2B.3 Performance Success Indicator

» Regular revision and updation of curriculum

» Regular introduction of new courses in emerging areas and sunrise sectors.

3. Emphasize Multidisciplinary Education and Academic Flexibility: Emphasize a multidisciplinary approach in higher education as envisaged in NEP 2020 to broaden students' knowledge beyond their specific fields of study, promoting holistic learning and skill development. Embracing multidisciplinary approaches and fostering cross-disciplinary collaboration can further enhance students' understanding of complex issues and prepare them for diverse career pathways. By prioritizing relevance, inclusivity, flexibility, and innovation, SPUs can effectively equip students with skills and knowledge needed to thrive in the rapidly changing world. *(NEP Clause: 11.3)(NIRF Clause: 1F)*

3.1 Implementation Roadmap

Short-Term (0-2 Years)

» Offer electives and minor programmes that complement students' major fields of study.

» Align with Academic Bank of Credits and multiple entry-multiple exit system.

3.2 Actors Responsible

» SPUs

» State Governments

» All Regulatory Bodies

3.3 Performance Success Indicator

» Onboarding all students on the Academic Bank of Credits.

» Implementation of credit transfer system.

4. Create Framework for Multidisciplinary Education and Research Universities (MERUs): Create policy framework and guidelines for MERUs and enable the transition of leading SPUs to MERUs. *(NEP Clause: 17.6, 20.2)*

4.1 Implementation Roadmap:

Long-Term (5+ Years)

» Create a world-class framework for establishment of MERUs.

» Handhold and finance Leading SPUs to transition to MERUs.

4.2 Actors Responsible:

» Central Government

» All Regulatory Bodies

» State Governments

4.3 Performance Success Indicator:

» Creation of framework for establishment of MERUs.

» Number of Leading SPUs that have transitioned/are in the process of transitioning to MERUs.

5. Enhance Student Support Services: Enhance support services for students facing academic challenges, such as tutoring, counselling, and academic advising, to ensure their success and retention *(NEP Clause: 12.4, 12.9) (Chapter 6: Activities under Components of PM USHA, S.No. 44).*

5.1 Implementation Roadmap

Short Term (0-2 Years)

» Enhance support services for students facing academic challenges, such as tutoring, counselling, and academic advisory services to guide students in course selection and academic planning to ensure their success and retention.

» Develop and implement mental health and wellness programmes for students and research scholars.

5.2 Actors Responsible

» SPUs

5.3 Performance Success Indicator

» Implementation of student support services systems and access to mental health and wellness programmes for students, scholars and faculty in all SPUs.

6. Promote Holistic Education in SPUs: Ensure that Higher Education curricula focus on providing Holistic Education that would focus on Environment Education, Values-based Education and Global Citizenship Education. *(NEP Clause 9.1.1, 9.1.2, 11.8)*

A. Environment Education must include areas such as climate change, pollution, waste management, sanitation, conservation of biological diversity, management of biological resources and biodiversity, forest and wildlife conservation, and sustainable development and living.

B. Values-based Education must focus on the development of humanistic, ethical, Constitutional, and universal human values of truth (Satya), righteous conduct (Dharma),

peace (Shanti), love (Prem), nonviolence (Ahimsa), scientific temper, citizenship values, and also life-skills. Lessons in service (Seva) and participation in community service programmes must be considered an integral part of a holistic education.

C. Global Citizenship Education must focus on empowering learners to become aware of and understand global issues and become active promoters of more peaceful, tolerant, inclusive, secure, and sustainable societies.

6.1 Implementation Roadmap

Short-Term (0–2 Years):

- Integrate thematic focus areas of Holistic Education from the UGC National Higher Education Qualifications Framework (NHEQF) into the curricula and co-curricular activities of HEIs.
- Establish partnerships between HEIs and community organisations to promote community engagement and service.
- Integrate sustainability concepts and themes across core and elective courses.
- Develop specialized courses or programmes in sustainability-related fields.
- Partner with NGOs or organizations working on SDGs to offer internship opportunities for students.
- Organize workshops and seminars to raise awareness about the SDGs among students and faculty.

Medium-Term (3–5 Years):

- Introduce interdisciplinary courses focused on environmental sustainability, universal human values, and multicultural competence.
- Establish dedicated units or cells within all SPUs to facilitate and monitor the implementation of holistic education initiatives.
- Develop SPU-level strategies to integrate UNSDGs with the teaching-learning and research ecoystems.

Long-Term (5+ Years):

- Institutionalize holistic education as a core philosophy of all SPUs through policy frameworks.
- Ensure all HEIs adopt measurable indicators of holistic education to monitor planetary, societal, community, and individual contributions.
- Facilitate global collaborations to share innovations and best practices in holistic education.

6.2 Actors Responsible

- SPUs
- All Regulatory Bodies
- State Governments
- Ministry of Education

6.3 Performance Success Indicators

- Number of SPUs implementing thematic areas (planetary, societal, community, and individual) of holistic education in their core curriculum and pedagogical processes.
- Percentage of curricula mapped with the aforementioned four thematic areas across HEIs.
- Number of students participating in community service and environmental sustainability projects.
- Surveys measuring improvements in emotional quotient (EQ), spiritual quotient (SQ), and human values inculcation among students.
- Organisation of workshops and seminars on SDG themes.
- Collaborations with NGOs and multilateral institutions.

6.4 Central Government Initiative

6.4.1 Bharatiya Gyan Parampara

The Indian Knowledge System (IKS) initiative, a division of the Ministry of Education was established in October 2020 to integrate India's rich traditional knowledge into the modern education framework. As of January 2025, 51 IKS centres had been established across India to catalyze original research on IKS, and over 5,200 internships offered on the same. These centers benefited numerous students and researchers across SPUs by fostering a deeper understanding of India's cultural heritage and its contemporary applications. By incorporating IKS into curricula, these institutions enhanced academic diversity, promoted interdisciplinary studies, and enhanced a sense of pride and awareness about India's rich culture and civilisational heritage.

C. Digitalization of Higher Education

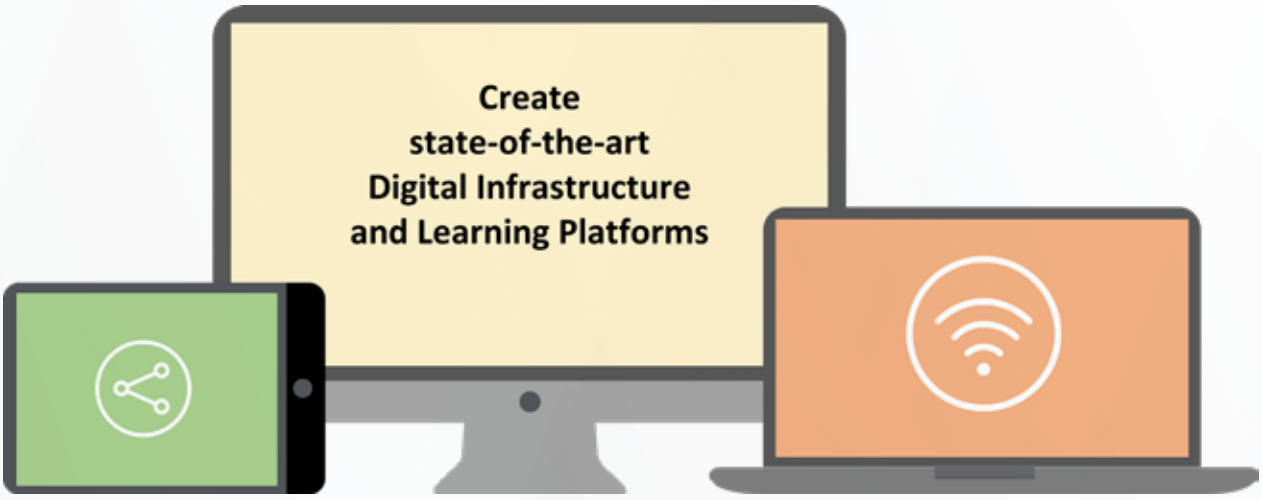


Figure 7.4: Recommendations for Digitalization of Higher Education

1. Create state-of-the-art Digital Infrastructure and Learning Platforms

1A. Invest in Infrastructure for Digital Learning: To address infrastructure gaps, it is essential to invest in suitable facilities tailored for digital learning. This includes creating conducive environments equipped with the necessary technology and resources to support effective educational delivery in online and blended learning formats. Upgrading existing infrastructure and establishing new facilities in SPUs designed specifically for digital learning can help ensure seamless integration of technology into the educational environment *(NEP Clause: 12.5) (NIRF Clause: 1E)*

1B. Adopt Digital Platforms for Student Life Cycle Management: Adopt digital platforms for admissions, student management, pedagogy and examination processes to streamline operations and enhance efficiency (NEP Clause: 12.6, NIRF Clause: 3A).

1.1 Implementation Roadmap

Short Term (0-2 Years)

- Conduct a thorough assessment of existing IT infrastructure in SPUs and identify universities with the most significant infrastructure gaps for initial upgrades.
- Invest in high-speed internet connectivity across campuses to support digital learning initiatives.
- Upgrade classrooms and labs with technology conducive to online and blended learning. This may include interactive whiteboards, projectors, and video conferencing equipment.
- Establish dedicated digital learning centres or computer labs equipped with necessary software and hardware.
- Integrate credits and curricula to utilize existing online and digital platforms of the Ministry of Education, Government of India.

» Adopt digital platforms for admissions, student management, pedagogy and examination processes to streamline operations and enhance efficiency.

Medium Term (2-5 Years)

» Continue upgrading IT infrastructure across all SPUs based on the initial assessment.

» Provide technical support staff for maintaining and troubleshooting technology issues within universities.

» Bridge the digital divide by providing affordable access to laptops, tablets, or other necessary devices for students from underprivileged backgrounds.

» Identify and adopt digital platforms for student lifecycle management which includes admissions, registration, fee payment, academic records, and course management.

» Train faculty, staff, and students on using new platforms.

Long Term (5+Years)

» Foster collaboration between SPUs, technology companies, and educational technology experts to develop innovative digital learning solutions.

» Offer training and support programmes to enhance digital literacy among students and faculty.

1.2 Actors Responsible

» Central Government

» State Governments

» All Regulatory Bodies

» SPUs

1.3 Performance Success Indicator

» Availability of state-of-the-art digital infrastructure in all SPUs.

» Dedicated digital learning centres/ computer labs established in every SPU and accessible to students.

» Implementation of digital platform for student life cycle management in all SPUs.

1.4 Central Government Initiative

1.4.1 Online Learning Initiatives: NPTEL and SWAYAM

Digital initiatives like National Programme on Technology Enhanced Learning (NPTEL) launched in 2003 and Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM) launched in 2017 revolutionized Indian higher education. NPTEL, a collaboration of IITs and IISc, offered free access to a vast repository of high-quality e-learning courses in various

disciplines, making it the world's largest such repository. SWAYAM, a platform for MOOCs, garnered over 4.6 crore student enrollments, with over 37 lakh learners earning certifications. These initiatives enhanced the quality and reach of education by providing flexible learning opportunities to students in SPUs. The UGC allows up to 20% of a programme's courses to be fulfilled through SWAYAM, promoting a blended learning model. By embracing these digital initiatives, SPUs can provide inclusive, flexible, and high-quality education, preparing students for the demands of the global knowledge economy. Additionally, the SWAYAM Plus platform launched in 2024 provided applied education and improve employability, entrepreneurship, job-centric and hands-on training for the youth through partnerships with corporates such as HCLTech, Intel, Microsoft, TCS. The portal offered courses such as Applied AI, App development, Data Science and Accounting, among 300 others.

1.4.2 National Digital Education Architecture (NDEAR)

Launched by the Ministry of Education in July 2021, NDEAR established a comprehensive digital infrastructure for educational innovation. The framework supporting both school and higher education, was founded on 10 core principles, including ecosystem-driven development, open standards, and privacy by design, aiming to create a unified yet flexible digital learning environment. It served students, parents, teachers, administrators, and community members through learning and administrative interactions. Operating via 36 building blocks across 12 categories, NDEAR enabled stakeholders to develop compatible educational platforms and solutions that align with its standards. Since launch, NDEAR has achieved significant milestones: 60 crore energized textbooks, 1,200 crore QR codes, 500 crore learning sessions, and 1,500+ micro courses. The platform has issued over 10 crore verifiable credentials, maintains 110 crore assessment records, and engages 20,000+ ecosystem participants. With 150+ registrations on NDEAR-DIKSHA sandbox and 10 Vidya Samiksha Kendras, it has demonstrated substantial progress in digitalizing India's education system.

1.5 State Good Practices

1.5.1 Kerala: 'Let's Go Digital' Initiative

In 2021, the Government of Kerala initiated digital learning initiatives through ICT-based teaching methods, providing Moodle-based LMS training to faculty, and digital course content to students to bridge the digital divide. It introduced schemes like 'Let's Go Digital' through the Kerala State Higher Education Council and the Digital University of Kerala, offering training on model-based development and content creation. Furthermore, through the Digicol project, customized syllabi were provided to colleges trained under this scheme, promoting a tech-driven pedagogical approach.

D. Internationalization of Higher Education

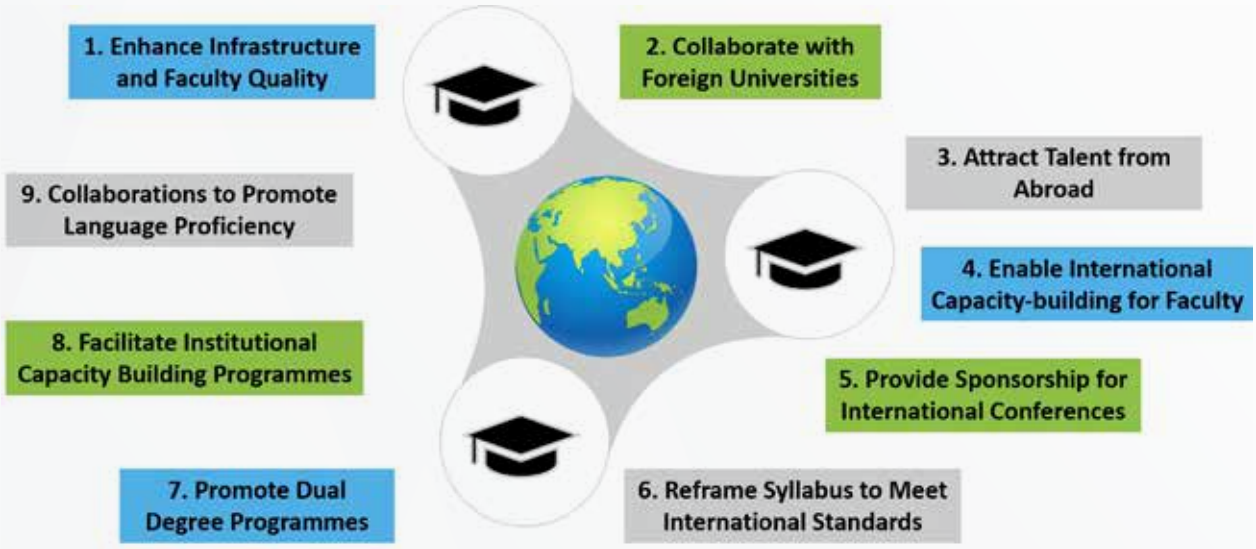


Figure 7.5: Recommendations for Internationalization of Higher Education

1. Enhance Infrastructure and Faculty Quality: Enhance infrastructure and recruit quality faculty to attract foreign students to Leading SPUs, promoting diversity, inclusion, and internationalization. *(NEP Clause: 12.7) (NIRF Clause: 4A, 4D)*

1.1 Implementation Roadmap

Short Term (0-2 Years)

- Identify and prioritize Leading SPUs with existing infrastructure suitable for international students.
- Allocate resources for necessary upgrades to classrooms, laboratories, and student accommodation facilities.
- Enhance campus Wi-Fi connectivity and provide access to international academic databases.
- Develop an international marketing strategy to promote Leading SPUs abroad.
- Enable Leading SPUs to participate in international education fairs and conferences.
- Establish dedicated International Student Support Offices to guide overseas students through the application process and address their needs on campus.
- Offer scholarship programmes for deserving international students pursuing courses in Leading SPUs.

Long Term (5+ Years)

- Encourage and handhold Leading SPUs to participate in international university rankings to improve their global visibility

» Continue international collaborations and faculty development programmes to establish a strong reputation for research and education excellence.

1.2 Actors Responsible

» State Governments

» All Regulatory Bodies

» Leading SPUs

1.3 Performance Success Indicators

» Upgraded infrastructure in all Leading SPUs, including improvements to classrooms, laboratories, and student accommodation facilities.

» Participation of Leading SPUs in international education fairs, conferences, and recruitment events.

» Establishment of dedicated International Student Support Offices in all Leading SPUs.

2. Collaborate with Foreign Universities: Foster collaborations with foreign universities to offer students a global perspective and enrich their educational experience through cultural and academic exchanges. Establish partnerships for joint research projects, faculty exchanges, and student mobility programmes to facilitate cross-cultural learning and collaboration *(Chapter 6: Activities under Components of PM USHA, S.No. 13)(NEP Clause: 12.8).*

2.1 Implementation Roadmap

Medium Term (2-5 Years)

» Establish long-term partnerships of Leading SPUs with identified foreign universities.

» Develop mechanisms for smooth student mobility between Leading SPUs and partner universities abroad.

2.2 Actors Responsible

» SPUs

» State Governments

2.3 Performance Success Indicators

» Implementation of partnerships with foreign universities for joint research projects, faculty exchange programmes, and student exchange programmes.

2.4 State Government Good Practice

2.4.1 Foreign Universities in GIFT City

Gujarat International Finance Tec-City (GIFT City), located in Gandhinagar, Gujarat, India's first operational smart city and international financial services centre. allowed world-class

foreign universities to establish campuses within its boundaries as announced in the Union Budget 2023. These institutions can offer programmes in areas like Financial Management, FinTech, and STEM disciplines, and are exempt from domestic regulations, except those mandated by the International Financial Services Centers Authority (IFSCA). This initiative aimed to foster a skilled workforce for the financial services and technology sectors. Foreign Institutions like Deakin University, Australia, ranked among the Top 1% Universities worldwide, would be offering their flagship courses - Master of Business Analytics and Master of Cyber Security on their GIFT City campus. The University of Wollongong, Australia, would also be establishing an International Branch Campus in GIFT City. As of December 2024, institutions such as the Queen's University Belfast, Ireland, University of Surrey and Coventry University, UK, have also partnered with GIFT City.

3. Attract Talent from Abroad: Address the challenges faced by experts working in reputed institutions abroad and make efforts to attract them to India through fellowship programmes and support mechanisms to Leading SPUs *(NEP Clause: 12.8)*.

3.1 Implementation Roadmap

Short Term (0-2 Years)

- Conduct outreach programmes to identify Indian scientists, professors and researchers working abroad.
- Develop fellowship programmes and faculty development opportunities tailored to attract them back to Leading SPUs on sabbaticals.

3.2 Actors Responsible

- Central Government
- State Governments
- All Regulatory Bodies
- Leading SPUs

3.3 Performance Success Indicators

- Dedicated % of Indian scientists and researchers from overseas participating in fellowship programmes in Leading SPUs.

3.4 Central Government Initiative

3.4.1 Scheme for Promotion of Academic and Research Collaboration (SPARC)

Launched in 2018 by the Ministry of Education, Government of India, SPARC aimed to promote high-quality research and academic excellence through international collaboration, by facilitating partnerships between top-ranked Indian HEIs and globally recognized foreign institutions. This was achieved through joint research projects, faculty and student mobility

programmes, and the exchange of knowledge and expertise. Beneficiaries of the scheme included faculty and students from both Indian HEIs and their global partner institutions. The initial phase of the scheme received an estimated budgetary allocation of ₹418 crores to support its implementation by the Department of Higher Education.

4. Enable International Capacity-building for Faculty: Facilitate international exposure and capacity-building programmes for faculty members to enhance their teaching methodologies and research capabilities, thereby contributing to overall academic improvement.

4.1 Implementation Roadmap

Short Term (0-2 Years)

- Develop training programmes on internationalization for faculty members of Leading SPUs to provide them international exposure and to enhance their teaching methodologies and research capabilities, covering topics like cross-cultural communication, global perspectives in teaching, and international student support.
- Organize webinars and workshops for the staff of International Student Support Offices on various aspects related to internationalization and collaborations.

4.2 Actors Responsible

- All Regulatory Bodies
- AIU
- SPUs
- Capacity Building Commission

4.3 Performance Success Indicators

- Participation of faculty members in training programmes on internationalization.
- Participation of staff of International Student Support Office in webinars and workshops.

5. Provide Sponsorship for Presentations at International Conferences: Reinstate sponsorship programmes for SPUs, such as those previously offered by UGC, to enable faculty members to attend international conferences to present their research findings.This reinstatement will encourage researchers and enhance their engagement with the global scientific community.

5.1 Implementation Roadmap

Short Term (0-2 Years)

- Implement faculty exchange programmes for Leading SPUs with select foreign universities for short-term visits.
- Identify and support faculty participation for research presentations in international conferences and research collaborations.

5.2 Actors Responsible

» All Regulatory Bodies

» SPUs

5.3 Performance Success Indicators

» Participation of faculty members of Leading SPUs in exchange programmes with select foreign universities for short-term visits.

» Sponsorship programmes to enable faculty members to present their research findings at international conferences.

6. Reframe Syllabus in Leading SPUs to Meet International Standards: Revise the existing syllabus in Leading SPUs to align with international standards and enhance its recognition globally. *(NEP Clause: 12.7)*

6.1 Implementation Roadmap

Short Term (0-2 Years)

» Conduct a review of existing model curricula to identify areas needing adjustments to align with international standards.

6.2 Actors Involved

» Leading SPUs

» All Regularoty Bodies

6.3 Performance Success Indicators

» Implementation of mutual recognition of degrees/qualifications with select countries.

7. Promote Dual Degree Programmes in Leading SPUs: Promote dual degree programmes wherein students complete coursework locally and conduct research at prestigious international universities. Such programmes provide exposure to cutting-edge technologies and global best practices *(NEP Clause: 12.8)*.

7.1 Implementation Roadmap

Short Term (0-2 Years)

» Identify foreign universities for long-term partnerships for joint research projects, faculty exchange programmes, and student exchange programmes.

Medium Term (2-5 Years)

» Establish mechanisms for long-term partnerships between Leading SPUs and partner universities abroad.

7.2 Actors Responsible

» Leading SPUs

7.3 Performance Success Indicators

» Implementation of long-term partnerships with foreign universities for joint research projects, faculty exchange programmes, and student exchange programmes.

8. Facilitate Institutional Capacity Building Programmes: All granting schemes including FIST, PURSE, SAIF, SATHI, and STUTI should consider Leading SPUs at par with national premier institutes, facilitating institutional capacity building.

8.1 Implementation Roadmap

Short Term (0-2 Years)

» Include Leading SPUs alongside national institutes in existing funding schemes for capacity building initiatives.

8.2 Actors Responsible

» Ministry of Education

» Ministry of Science & Technology

» Ministry of Health

» All Regulatory Bodies

8.3 Performance Success Indicators

» Dedicated % of funding schemes for Leading SPUs.

9. Collaborations to Promote Language Proficiency: Collaborate with international organisations or councils to enhance language proficiency and prepare students for global opportunities.

9.1 Implementation Roadmap

Short Term (0-2 Years)

» Partner with international language organisations to offer English and other foreign language proficiency programmes for students.

» Encourage foreign language learning by offering additional language courses and exchange programmes.

9.2 Actors Responsible

» SPUs

» State Governments

9.3 Performance Success Indicators

» Implement partnerships, including agreements with renowned language institutions, organisations, or language testing agencies.

9.4 State Good Practices

9.4.1 Punjab: English Language Proficiency

Recognizing the importance of English language proficiency, Government of Punjab embarked on a collaborative effort with the British Council in 2023. A pilot project involved 5,000 government college students with a focus on enhancing English language skills by conducting an intensive 18-session course spanning six months. This initiative focused on equipping students with the necessary linguistic abilities to thrive in an increasingly globalized world.

9.4.2 Karnataka: English Skills for Youth

The Government of Karnataka launched four programmes in 2024, aimed at advancing higher education, enhancing language proficiency, and improving employability for students while fostering their seamless transition into the workforce. The 'English Skills for Youth' programme, in partnership with Microsoft India, targeted 5,795 students across 16 government engineering colleges, enhancing their English proficiency and workplace readiness through blended learning modules. The initiatives included the 'Scholars for Outstanding Undergraduate Talent (SCOUT)' programme which offered international exposure through a two-week immersive learning experience at the University of East London for deserving students from six universities, focusing on UNSDGs, critical thinking, and innovation. Additionally, the Capacity Building for International Officers programme supported internationalisation efforts in 28 universities, and the Freemium Digital Library Wall at Bengaluru City University which expanded access to digital learning resources.

II. FUNDING AND FINANCING

A. Government Funding

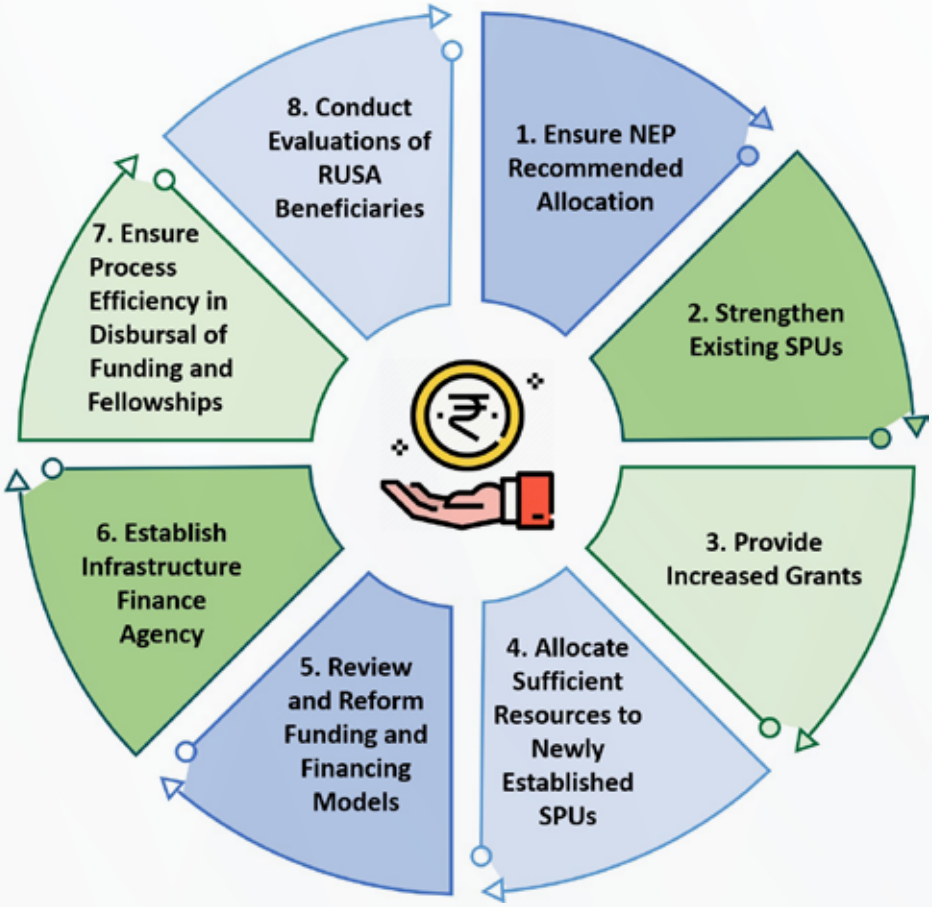


Figure 7.6: Recommendations for Government Funding

1. Ensure NEP Recommended Allocation: Allocate at least 6% of GDP towards education, following recommendations from various commissions such as the Kothari Commission in 1964 to NEP in 2020. *(NEP Clause: 26.1, 26.2) (NIRF Clause: 1D)*

1.1 Implementation Roadmap

Short-Term (0-2 Years)

» Increase Central and State Government's allocation towards education, aiming to reach the NEP-recommended 6% of GDP.

1.2 Actors Responsible

» Central Government

» State Governments

1.3 Performance Success Indicator

» Track increase in budget allocation to higher education as a % of GDP.

1.4 State Good Practices

1.4.1 Uttar Pradesh: Uttar Pradesh Higher Education Incentive Policy 2024

The Policy aimed at elevating the state's academic landscape by attracting top private, foreign, and high-ranking Indian universities to underserved districts. The policy provided substantial financial incentives, including stamp duty exemptions and capital subsidies, to institutions establishing Multidisciplinary Educational and Research Universities (MERUs) in unserved areas, with enhanced benefits for those investing in Aspirational Districts. By offering a 20% capital subsidy capped at ₹100 crore and full stamp duty exemptions to globally ranked foreign universities and top NIRF-ranked Indian institutions, the policy fostered educational equity, encouraged global academic collaboration, and enhanced local opportunities. This approach has the potential to create hubs for academic excellence, aligning with national goals while driving regional development.

2. Strengthen Existing SPUs: Prioritize the strengthening of existing SPUs. This approach can ensure optimal utilization of resources and focus on enhancing the quality of education and research outputs.

2.1 Implementation Roadmap

Short-Term (0-2 Years)

» Prioritize allocating resources to strengthen existing SPUs.

2.2 Actors Responsible

» Central Government

» State Governments

2.3 Performance Success Indicator

» Dedicated % of financial resources to be allocated for infrastructure development projects, faculty recruitment, and other investments in existing SPUs.

3. Provide Increased Grants: SPUs may be provided increased government grants to adequately cover operational expenses and drive infrastructural investments.

3.1 Implementation Roadmap

Short-Term (0-2 Years)

» Analyze funding gaps of existing SPUs and allocate increased grants to address immediate needs and operational expenses. Ensure timely release of allocated funds for smooth financial functioning.

3.2 Actors Responsible

» Central Government

» State Governments

3.3 Performance Success Indicator

» Dedicated % of government grants to be allocated to SPUs.

4. Allocate Sufficient Resources to Newly Established SPUs: Committed resources may be allocated to newly established SPUs for the initial 8 to 10 years of operation.

4.1 Implementation Roadmap

Medium-Term (2-5 Years)

» Provide dedicated funding for newly established universities during their initial years of operation.

4.2 Actors Responsible

» State Governments

4.3 Performance Success Indicator

» Dedicated funding earmarked and regularly released for newly established SPUs during their first decade of operation.

5. Review and Reform Funding and Financing Models: Government authorities may review funding models to ensure equitable distribution of resources and address SPUs' financial needs.

5.1 Implementation Roadmap

Short-Term (0-2 Years)

» Conduct a comprehensive review of existing funding and financing models for SPUs.

» Develop a new funding model based on a combination of factors like student enrolment, faculty strength, and research output.

5.2 Actors Responsible

» Central Government

» State Governments

5.3 Performance Success Indicator

» Dedicated funding to ensure equitable distribution of resources to SPUs.

6. Establish Infrastructure Finance Agency: States may consider establishing a finance agency similar to the Higher Education Financing Agency (HEFA), dedicated specifically to SPUs. This agency should focus on bolstering infrastructure and research facilities, thereby enabling SPUs to compete nationally and globally.

6.1 Implementation Roadmap

Short-Term (0-2 Years)

» Establish a dedicated infrastructure finance agency specifically for SPUs. This agency should focus on providing loans and grants for infrastructure development, state-of-the-art research facilities, and student, scholar, and faculty accommodation.

6.2 Actors Responsible

» State Governments

» State Councils for Higher Education

6.3 Performance Success Indicator

» Establishment of a dedicated finance agency specifically for SPUs for providing loans and grants for infrastructure development and research facilities.

6.4 Central Government Initiative

6.4.1 Revitalising Infrastructure and Systems in Education (RISE) under HEFA

The Higher Education Financing Agency (HEFA) was established in May 2017 as a joint venture between the Ministry of Education, Government of India, and Canara Bank. It was set up to provide financing for the creation of capital assets such as setting up research labs and academic blocks, libraries and auditoriums, sports facilities and smart classrooms, student hostels and faculty/staff residences, to create state-of-the art infrastructure that fosters learning and innovation in premier educational institutions like IITs, NITs, and IISERs across India. To support the RISE initiative launched in 2018, HEFA's scope was expanded to include Kendriya Vidyalayas, Navodaya Vidyalayas, and educational institutions under the Ministry of Health. The goal was to improve academic and infrastructure quality, enabling these institutions to achieve global rankings. Initially set with an authorized capital of ₹2,000 crores, HEFA's capital was expanded in 2018 to ₹10,000 crores, with the Government contributing ₹6,000 crores. As of 31st December 2024, HEFA had sanctioned ₹43,000 crores and disbursed over ₹21,590 crores to 106 HEIs.

7. Ensure Process Efficiency in Disbursal of Funding and Scholarships: Ensure timely funding allocations and disbursal of student fellowships and scholarships to meet immediate needs and foster sustainable growth.

7.1 Implementation Roadmap

Short-Term (0-2 Years)

» Ensure timely release of allocated funds and disbursal of student fellowships and scholarships for smooth financial functioning.

7.2 Actors Responsible

» Central Government

» State Governments

7.3 Performance Success Indicator

» Regularly monitoring the timeliness of fund disbursement to SPUs and disbursement of fellowships and scholarships to students by tracking the duration between budget approval and actual fund allocation/scholarship disbursal.

7.4 Central Government Initiative

7.4.1 PM-Vidyalaxmi

The scheme was approved in 2024 to support meritorious students by providing financial assistance for quality higher education. It offered collateral free, guarantor free education loans for students admitted to the top 860 HEIs across India, benefiting over 22 lakh students each year. With budget allocation of ₹3,600 crore from 2024-25 to 2030-31, the scheme aimed to assist an additional 7 lakh students with an annual family income of up to ₹8 lakhs and not having eligibility for benefits under any other government scholarship or interest subvention schemes. Implemented through a fully digital, transparent, and student-centric platform, PM-Vidyalaxmi ensured easy access and smooth interoperability for students nationwide. The Department of Higher Education has built a unified portal "PM-Vidyalaxmi" on which students will be able to apply for the education loan as well as interest subvention, through a simplified application process to be used by all banks where payment of interest subvention will be made through E-voucher and CBDC wallets.

8. Conduct Evaluations of RUSA (PM-USHA) Beneficiaries: Conducting evaluations of Rashtriya Uchchatar Shiksha Abhiyan (RUSA) beneficiaries and scrutinizing the utilization of its funds is essential for ensuring accountability and effectiveness in resource utilization. These evaluations can assess the impact of RUSA initiatives on SPUs, identify areas for improvement, and optimize resource allocation to enhance the quality and accessibility of higher education.

8.1 Implementation Roadmap

Short-Term (0-2 Years)

» Conduct audits and evaluations of existing RUSA (PM-USHA) projects in SPUs.

Identify areas where RUSA funds were effectively utilized and where improvements are needed.

» Based on the evaluation results, recommend adjustments to PM-USHA guidelines and resource allocation strategies.

8.2 Actors Responsible

» Central Government

8.3 Performance Success Indicator

» Periodic audits and evaluations of existing RUSA projects in SPUs.

B. Diversification of Revenue Sources

Figure 7.7: Recommendations for Diversification of Revenue Sources

1. Expand Self-Financed Programmes: Encourage SPUs to expand self-financed programmes to generate additional revenue streams.

1.1 Implementation Roadmap

Short-Term (0-2 Years)

» Conduct market research to identify areas of high demand for specialized courses.

» Develop and launch self-financed programmes in these areas, catering to industry needs and professional skill development. Ensure high-quality standards for self-financed programmes to maintain student enrolment and reputation.

Medium-Term (2-5 Years)

» Analyze the performance and profitability of self-financed programmes.

» Continuously update curriculum and course offerings to maintain relevance and attract students for UG, PG, and mid-career programmes.

» Explore offering online or blended learning formats for self-financed programmes to reach a wider audience.

1.2 Actors Responsible

» State Government

» State Councils for Higher Education

» SPUs

1.3 Performance Success Indicator

» Increase in number of self-financed programmes offered by SPUs.

2. Promote Consultancy Services: Leverage Leading SPUs' expertise to offer consultancy services to industries and government agencies.

2.1 Implementation Roadmap

Short-Term (0-2 Years)

» Establish dedicated consultancy units within Leading SPUs to connect faculty expertise with industry and government needs.

» Develop a database of faculty expertise and research capabilities across various disciplines.

» Proactively market consultancy services to potential clients through industry outreach programmes.

2.2 Actors Responsible

» Leading SPUs

2.3 Performance Success Indicator

» Establishment of consultancy units within Leading SPUs.

3. Encourage Alumni Engagement: Encourage development of robust alumni engagement programmes within SPUs to encourage financial contributions and support.

3.1 Implementation Roadmap

Short-Term (0-2 Years)

» Conduct outreach programmes to reconnect with alumni and build a strong alumni network.

» Establish online alumni portals for communication, career mentoring, and fundraising opportunities.

» Explore creating alumni chapters and associations in every major country/region to foster a sense of community and encourage financial contributions.

3.2 Actors Responsible

» SPUs

» State Governments

3.3 Performance Success Indicator

» Increase in participation and engagement of alumni in the SPU.

» Increase in financial contribution and support from alumni.

3.4 State Good Practices

3.4.1 Odisha: "Mo College" initiative

The Government of Odisha's "Mo College" initiative aimed to transform the state's higher education landscape by engaging alumni. The state allocated an initial budget of ₹2 crores for the campaigning and branding of this programme to ensure that resources are available for institutional development. As part of this initiative, the government issued clear guidelines for colleges and universities to actively involve alumni in contributing financial resources, mentorship, and expertise to improve infrastructure, provide scholarships, and promote research. It also acted as a platform for the alumni to offer their services on a voluntary basis for the betterment of the college ecosystem.

4. Leverage CSR Funds: Encourage mobilization of Corporate Social Responsibility (CSR) funds towards higher education and research sectors, ensuring contributions for R&D activities in SPUs and state research institutes.

4.1 Implementation Roadmap

Short-Term (0-2 Years)

» Partner with industry bodies and encourage mobilization of CSR funds towards R&D infrastructure in SPUs.

» Develop clear proposals outlining the research/infrastructure project's objectives, potential impact, and how it aligns with the CSR priorities of the target companies.

» Establish dedicated teams within universities to manage and report on CSR-funded projects.

4.2 Actors Responsible

» Central Government

» SPUs

4.3 Performance Success Indicator

» Increase in the engagement of SPUs with corporate partners to promote CSR funding for higher education and research activities.

5. Explore Public-Private Partnerships (PPPs): Explore innovative funding models and PPPs to supplement government funding and support initiatives aimed at enhancing employability.

5.1 Implementation Roadmap

Short-Term (0-2 Years)

» Develop innovative PPP models for infrastructure development, research collaboration, and skill development programmes.

» Develop clear legal frameworks and transparent partnership structures to ensure accountability and mutual benefit.

5.2 Actors Responsible

» State Governments

» SPUs

5.3 Performance Success Indicator

» Undertaking PPP opportunities for infrastructure development, research collaboration, and skill development programmes by SPUs.

C. Fee Autonomy (Pilot Mode Test)

Figure 7.8: Recommendation for Fee Autonomy

Important Caveats:

- *The decision to grant fee autonomy is complex and requires careful consideration of its potential impact on various stakeholders.*
- *Concerns regarding affordability and potential exclusion of underprivileged students from higher education must be addressed.*
- *Alternative funding mechanisms, such as scholarships and financial aid programmes, should be strengthened alongside any fee autonomy initiatives.*

1. Enhance Antonomy in Financial Decision Making

1A. Support Decentralized Decision-Making and Autonomy: Support increased autonomy in financial decision-making in SPUs to explore innovative funding and financing models.

1 B. Grant Autonomy to Increase Fees: Grant SPUs the autonomy for inflation-adjusted fees within reasonable limits (e.g., around 5-10% annually) to meet various expenditure requirements, while providing scholarships and fee waivers for the socio-economically disadvantaged students. This flexibility can help address financial challenges and maintain operational efficiency. *(NEP Clause 18.14)*

1.1 Implementation Roadmap:

Short-Term (0-2 Years)

» Identify a group of Leading SPUs with strong financial management practices to pilot a programme with limited fee autonomy.

» Establish clear guidelines for fee adjustments within the pilot programme, considering factors like inflation, programme costs, and student affordability.

» Monitor the pilot programme closely to assess its impact on university finances, student enrolment, and educational quality.

» Implement a reasonable fee structure with merit-cum-means scholarships.

Medium-Term (2-5 Years)

» Analyze the results of the pilot programme on fee autonomy, considering both financial and educational outcomes.

» Based on the evaluation, determine the effectiveness of fee flexibility in addressing financial challenges and maintaining quality education.

» Refine the fee autonomy framework based on the pilot's learnings, considering potential adjustments to eligibility criteria, fee adjustment limits, or transparency measures. If the pilot programme proves successful, consider expanding fee autonomy to a wider range of SPUs with robust financial management and transparency systems.

1.2 Actors Responsible:

» State Governments

» State Councils for Higher Education

1.3 Performance Success Indicator:

» Implementation of reasonable fee structure with merit-cum-means scholarships for need-blind admissions.

» Implementation of the pilot programme on fee autonomy.

D. Taxation and Utility Payments

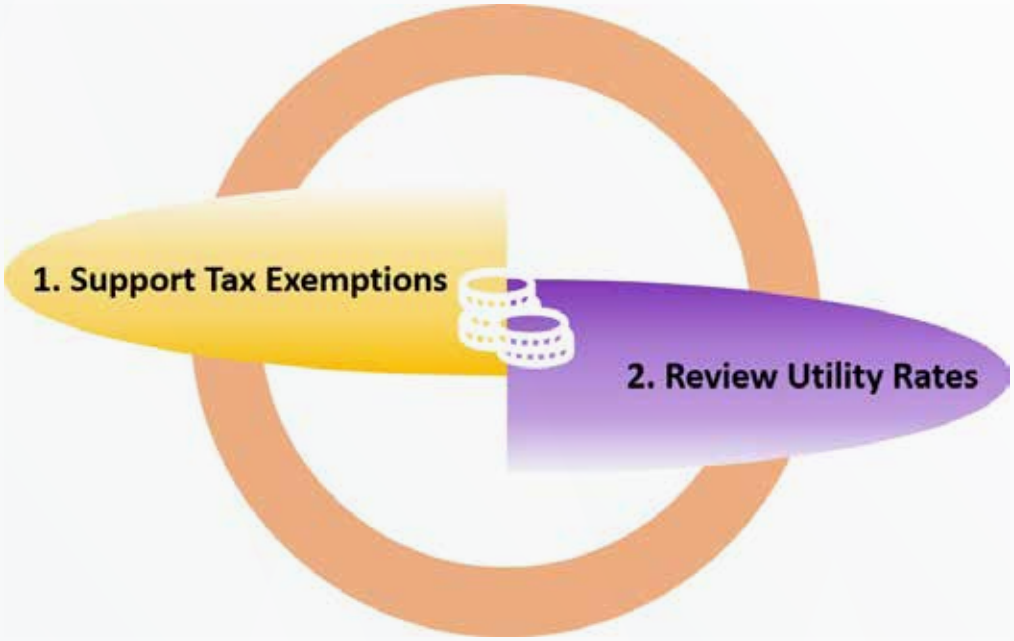


Figure 7.9: Recommendations for Taxation and Utility Payments

1. Support Tax Exemptions: Support tax exemptions for SPUs operating on self-sustaining models, particularly for revenue from CSR grants and educational and research activities.

1.1 Implementation Roadmap:

Short-Term (0-2 Years)

» Implement policy changes at the State and Central Government levels to grant tax exemptions on revenue from CSR grants and educational and research activities.

1.2 Actors Responsible:

» Central Government

» State Governments

1.3 Performance Success Indicator:

» Implementation of enabling tax exemptions.

2. Review Utility Rates: Review and adjust commercial rates for utilities like water and electricity to reduce operational costs in SPUs.

2.1 Implementation Roadmap:

Short-Term (0-2 Years)

» Conduct a comprehensive analysis of current utility bills for SPUs. Identify areas where commercial rates are applied to essential utilities like water and electricity.

» Negotiate with utility providers for special discounted rates or establish separate categories for educational institutions, especially SPUs.

2.2 Actors Responsible:

» State Governments

2.3 Performance Success Indicator:

» Appropriate exemption(s) for utility rates for water and electricity for all SPUs in place.

III. GOVERNANCE

A. Improving Governance and Autonomy

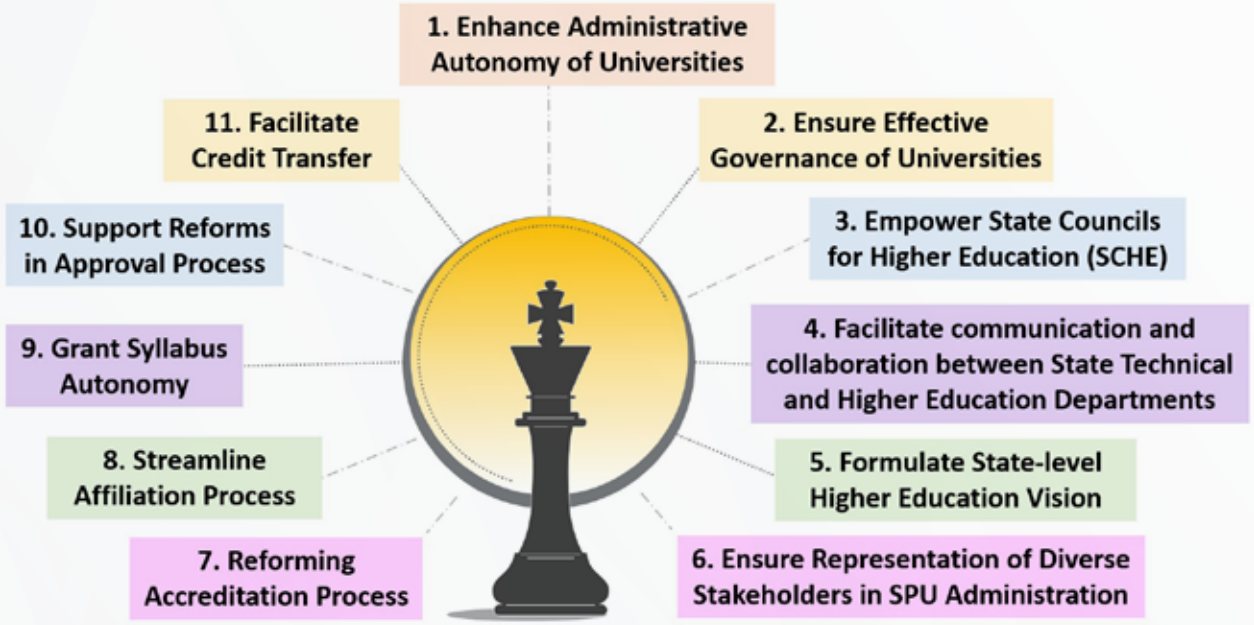


Figure 7.10: Recommendations for Improving Governance and Autonomy

1. Enhance Administrative Autonomy of Universities: Adopt a 'regulatory-facilitator model' where the State Government provides enhanced autonomy to SPUs. Reform governance structures through transformative acts and policies to grant SPUs greater administrative autonomy while maintaining transparency and accountability. *(NEP Clause: 18.4, 19.2)*

1.1 Implementation Roadmap

Short-Term (0-2 Years)

» Enable a shift towards a 'regulatory-facilitator' model for SPUs and implement policy changes at the State Government level to grant SPUs greater autonomy in areas like curriculum development, faculty recruitment, and financial management.

» Establish clear guidelines and performance indicators to ensure universities exercise autonomy responsibly and transparently.

1.2 Actors Responsible

» State Governments

1.3 Performance Success Indicator

» Implementation of transformative acts and policies along with detailed guidelines and performance indicators aimed at reforming governance structures to provide SPUs with greater administrative autonomy.

1.4 State Good Practices

1.4.1 Gujarat: Public Universities Act 2023

The Government of Gujarat spearheaded the Public Universities Act, aimed at revolutionizing governance and autonomy within SPUs. This Act which came into effect on October 9, 2023, sought to overhaul the governance structure of SPUs by adopting a management process akin to that of prestigious institutions like IITs and IIMs for appointing vice-chancellors. By eliminating previous impediments to professional management, the Act promised to usher in a new era of efficiency and effectiveness. Central to this transformation was the abolition of traditional bodies such as the Senate and Syndicate, with a renewed emphasis on orientation, professionalization, and standardization. Furthermore, the Act granted full autonomy to SPUs, with minimal interference from Principal Secretaries and Secretaries in governance matters. However, the State retained the prerogative to intervene in cases where the quality of education was compromised.

2. Ensure Effective Governance of Universities: Establish Management and Academic Councils for effective governance. Implement integrated management systems to ensure transparency and accountability in decision-making processes. Outline transparent processes for rule amendments in SPUs. *(NEP Clause: 19.5)*

2.1 Implementation Roadmap

Short-Term (0-2 Years)

- Establish effective Management and Academic Councils with clearly defined roles and responsibilities.
- Develop and implement integrated management systems to promote transparency and accountability in financial and administrative processes.
- Model Act in every state for all SPUs to offer ease of governance may be drafted and released.

2.2 Actors Responsible

- State Governments

2.3 Performance Success Indicator

- Preparation of Model Act for all SPUs to offer ease of governance.
- Establishment of Management and Academic Councils within SPUs to facilitate effective governance.
- Implementation of integrated management systems in all SPUs.

3. Empower State Councils for Higher Education (SCHE): Empower SCHEs to sanction posts and allocate funds instead of the State Government.

3.1 Implementation Roadmap

Short-Term (0-2 Years)

» Empower SCHE to have greater control over sanctioning posts and allocating funds to SPUs. Facilitate SCHE to take forward the initiatives of UGC in the state.

3.2 Actors Responsible

» State Governments

» State Councils for Higher Education

» UGC

3.3 Performance Success Indicator

» Empowerment of SCHE for sanctioning posts and allocating funds to SPUs.

4. Facilitate communication and collaboration between State Technical and Higher Education Departments: Facilitate communication and collaboration between State Technical and Higher Education Departments to optimize resources and streamline initiatives.

4.1 Implementation Roadmap

Short-Term (0-2 Years)

» Establish mechanisms for regular communication and collaboration between Technical and Higher Education Departments of the State Governments.

Medium-Term (2-5 Years)

» Develop joint initiatives to optimize resource allocation, streamline approvals for new courses and programmes, and ensure alignment between Technical and Higher Education Departments of State Governments.

4.2 Actors Responsible

» State Governments

4.3 Performance Success Indicator

» Establishment of formal communication channels between State Technical and Higher Education Departments.

» Implementation of joint initiatives to optimize resource allocation.

5. Formulate State-level Higher Education Vision: Support the formulation of State-level Higher Education Vision and Policies to cater to the specific needs of SPUs within each State. This policy should be tailored to address the unique educational requirements, rather than adopting a generalized approach. Encourage states to develop micro visions of policies to ensure effective evaluation of quality metrics and promote targeted initiatives for educational enhancement.

5.1 Implementation Roadmap

Short-Term (0-2 Years)

» Each state to develop a unique Higher Education Vision and Policy framework through SCHE by consultative process with stakeholders (universities, industry, policymakers). This framework should consider the specific needs and priorities of SPUs within the states. NITI Aayog and the State Institutions for Transformation (SITs) established on the lines of NITI Aayog may be knowledge collaborators in this process.

Medium-Term (2-5 Years)

» Develop micro-level policy frameworks for individual universities based on the overall state-level vision.

5.2 Actors Responsible

» State Governments

» State Councils for Higher Education

» State Institutions for Transformation (State NITI Aayog)

» NITI Aayog

5.3 Performance Success Indicator

» Creation of State-level Higher Education Vision and Policy Framework and Implementation Roadmap.

» Creation of SPU-level policy frameworks in alignment with overall State-level Vision.

6. Ensure Representation of Diverse Stateholders in SPU Administration

6A. Increase participation of Academicians and Alumni in University Administration: Ensure increased participation of academicians in SPU administration. *(NEP Clause: 19.4)*

6B. Adequate Representation to Humanities disciplines in decision-making: Ensure inclusion of academicians from Humanities disciplines in decision-making processes.

6.1 Implementation Roadmap

Short-Term (0-2 Years)

» Increase representation of academicians and alumni in decision-making bodies of university administration.

» Ensure inclusion of academicians from Humanities disciplines besides STEM areas in decision-making processes and providing values- based education.

6.2 Actors Responsible

- UGC
- State Governments
- State Councils for Higher Education
- SPUs

6.3 Performance Success Indicator

- Adequate representation from Humanities disciplines in decision-making processes.

7. Reform Accreditation Process

7A. Localize Accreditation and Assessment: Support the development of localized accreditation and assessment frameworks that align with India's unique needs and priorities. Encourage the establishment of quality benchmarks based on local, national, and global requirements to ensure relevance and effectiveness in evaluating the performance of SPUs. *(NIRF Clause: 5A)*

7A.1 Implementation Roadmap

Medium-Term (2-5 Years)

- Implement localized accreditation and assessment frameworks for SPUs and their affiliated colleges considering local needs, industry requirements, and national priorities while maintaining global relevance.

7A.2 Actors Responsible

- Ministry of Education
- UGC/ AICTE
- NAAC/ NBA

7A.3 Performance Success Indicator

- Creation and implementation of localized accreditation and assessment frameworks for SPUs and their affiliated colleges.

7B. Restructure Accreditation Fees: Support restructuring of accreditation fees to make the process more accessible and affordable for colleges.

7B.1 Implementation Roadmap

Short-Term (0-2 Years)

- Restructure accreditation fees to make the accreditation process more affordable for Aspirational SPUs and their affiliated colleges.
- Provide mentoring/handholding support to new and Aspirational SPUs.

7B.2 Actors Responsible

- Ministry of Education
- UGC/AICTE
- NAAC/NBA

7B.3 Performance Success Indicator

- Affordability of accreditation fees for SPUs.
- Handholding support extended to new and Aspirational SPUs.

8. Streamline Affiliation Process: Support the streamlining of the affiliation process by regulatory bodies, reduce delays in course sanctioning, and provide clarity on de-affiliation procedures. *(NEP Clause: 10.12)*

8.1 Implementation Roadmap

Short-Term (0-2 Years)

- Enable regulatory bodies to streamline the affiliation process, reduce delays in course approvals, and establish clear de-affiliation procedures for SPUs and their affiliated colleges.
- Create a roadmap for de-affiliation of high potential affiliated colleges while ensuring adequate and one-time compensation to SPUs for loss of affiliation fees.

Medium-Term (2-5 Years)

- Implement roadmap for de-affiliating high potential affiliating colleges and creating autonomous degree granting institutions or cluster universities.

8.2 Actors Responsible

- All Regulatory Bodies
- State Governments
- State Councils for Higher Education

8.3 Performance Success Indicator

- Number of colleges de-affiliated
- Number of autonomous degree granting institutions and cluster universities created

9. Grant Syllabus Autonomy: Regulatory bodies like AICTE/PCI/BCI/NCTE should grant autonomy to SPUs to upgrade/change syllabi by at least 30% to incorporate local/regional/state needs, avoiding contradictions with ranking/grading organisations like NAAC/NIRF. *(NEP Clause: 11.6, 12.2, 13.3)*

9.1 Implementation Roadmap

Short-Term (0-2 Years)

» Grant autonomy to SPUs to update and modify syllabi to address local needs, avoiding contradictions with ranking /grading organisations like NAAC/NIRF.

9.2 Actors Responsible

» All Regulatory Bodies

9.3 Performance Success Indicator

» Grant of autonomy to SPUs to update and modify syllabi upto 30%.

10. Support Reforms in Approval Process: Grant autonomy to SPUs to transfer vacant seats to other branches or open new specializations while maintaining the total number of sanctioned seats. Streamline approval processes by regulatory bodies to prevent delays in admissions and ensure timely commencement of academic sessions. Accord approval to universities and government colleges for a period of 5 years at a stretch to eliminate the need for yearly approval for renewal and streamline administrative processes. *(NEP Clause: 10.12)*

10.1 Implementation Roadmap

Short-Term (0-2 Years)

» Grant flexibility to SPUs with respect to admissions, seat transfer, and course approval processes.

10.2 Actors Responsible

» All Regulatory Bodies

» State Governments

10.3 Performance Success Indicator

» Grant of flexibility to SPUs with respect to admissions, seat transfer, and course approval processes.

11. Facilitate Credit Transfer: Establish committees to streamline educational systems and facilitate credit transfers between universities. (RUSA/PM USHA Mapping Chapter 6: Activities under Components of PM USHA, S.No. 2) *(NEP Clause: 11.7)*

11.1 Implementation Roadmap

Medium-Term (2-5 Years)

» Streamline credit transfer procedures between SPUs through Academic Bank of Credits, ensuring clarity and consistency in the credit evaluation.

11.2 Actors Responsible

- Ministry of Education
- UGC
- State Governments
- State Councils for Higher Education
- SPUs

11.3 Performance Success Indicator

- Streamlined credit transfer procedures between universities.

11.4 Central Government Initiative

11.4.1 Academic Bank of Credits (ABC) and the National Credit Framework (NCrF)

Launched on May 11, 2023, NCrF was a comprehensive system introduced under NEP 2020 to integrate academic learning with vocational and experiential education. It facilitated the accumulation and transfer of credits earned through various learning avenues, promoting multidisciplinary education and lifelong learning. This framework empowered students to tailor their educational journeys by enabling seamless mobility between general and vocational education streams. As of January 2025, over 2,300 universities and HEIs had registered with the Academic Bank of Credit, a digital storehouse that contained the information of the credits earned by individual students throughout their learning journey which was launched in July 2021. The framework's integration of vocational courses and internships ensured that students gained practical skills alongside theoretical knowledge, preparing them for the dynamic demands of the modern workforce.

B. Recruitment and Capacity Building of Faculty and Administrators

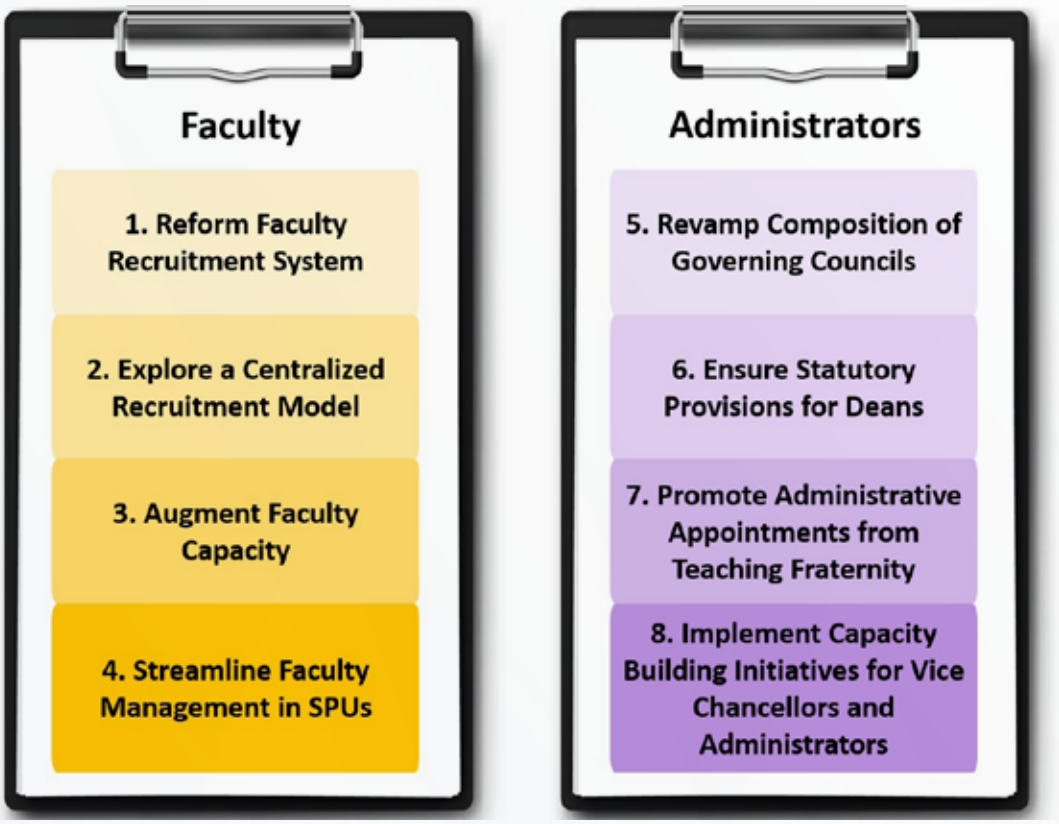


Figure 7.11: Recommendations for Recruitment and Capacity Building of Faculty and Administrators

FACULTY

1. Reform Faculty Recruitment System

1A. Streamline Faculty Recruitment: Simplify recruitment processes by reducing bureaucratic hurdles and expediting administrative approvals for faculty appointments. *(NEP Clause: 13.6)*

1A.1 Implementation Roadmap

Short-Term (0-2 Years)

- Review and simplify faculty recruitment processes and expedite approval timelines.
- Develop online application portals and e-verification systems to streamline application processing.
- Establish dedicated recruitment committees with clear timelines and a merit-based selection process.

1A.2 Actors Responsible

- All Regulatory Bodies
- State Government
- State Councils for Higher Education

1A.3 Performance Success Indicator

- Establishment of dedicated faculty recruitment committees.
- Development of online application portals and e-verification systems to streamline recruitment.
- Assessment of the efficiency of the faculty recruitment process by tracking the time taken from job advertisement to appointment.

1B. Prioritize Recruitment of Full-time Faculty Members: Prioritize the recruitment of full-time faculty members in SPUs to ensure stability and continuity within the academic workforce. Full-time faculty members are better positioned to contribute to research activities and provide mentorship to students, thereby fostering a culture of academic excellence within SPUs. *(NEP Clause: 13.1, 13.6)*

1B.1 Implementation Roadmap

Short-Term (0-2 Years)

- Finalize recruitment rules to address staff shortages and streamline the hiring process in SPUs.

Medium-Term (2-5 Years)

- Prioritize the recruitment of full-time faculty members in SPUs to ensure stability and continuity within the academic workforce.

1B.2 Actors Responsible

- All Regulatory Bodies
- State Governments
- State Councils for Higher Education
- SPUs

1B.3 Performance Success Indicator

- Increase in the proportion of full-time faculty members across all SPUs.

2. Explore a Centralized Recruitment Model: A centralized recruitment model rather than individual universities handling recruitment exercises, can streamline the hiring process. This approach can enhance efficiency and transparency in faculty recruitment, ensuring merit-based selections and reducing administrative burdens associated with decentralized recruitment processes. *(NEP Clause: 13.6)*

2.1 Implementation Roadmap

Short-Term (0-2 Years)

- Create a centralised recruitment model for faculty positions across SPUs in the state, ensuring merit-based selection and fair opportunities for candidates.

Medium-Term (2-5 Years)

» Implement a centralized recruitment model for faculty positions across SPUs.

2.2 Actors Responsible

» State Governments

» State Council for Higher Education

2.3 Performance Success Indicator

» Implementation of a centralized recruitment model for faculty positions across SPUs.

3. Augment Faculty Capacity: Developing special training programmes aimed at enhancing faculty proficiency in conducting online classes is crucial. Implement capacity-building programmes, including workshops and induction programmes to enhance the skills of faculty. These programmes should provide faculty members with training and support to effectively leverage digital tools and platforms for teaching and learning. By equipping faculty with the necessary skills and resources, SPUs can ensure that they are well-prepared to deliver quality digital education that meets the needs of students in today's rapidly evolving educational landscape. *(NEP Clause: 24.3)*

3.1 Implementation Roadmap

Short-Term (0-2 Years)

» Develop and offer capacity-building programmes for faculty members focusing on teaching methodologies, curriculum development, and effective use of technology; partner with educational technology companies or online learning platforms to provide training on utilizing digital tools for online teaching.

3.2 Actors Responsible

» All Regulatory Bodies

» State Governments

» State Councils for Higher Education

» Capacity Building Commission

» AIU

3.3 Performance Success Indicator

» Development and delivery of training programmes covering topics such as online pedagogy, use of digital tools and platforms, effective communication in virtual environments, and student engagement strategies.

4. Streamline Faculty Managment in SPUs

4A. Review Faculty Evaluation Criteria: There is a critical need to align faculty expectations with evaluation criteria to foster a harmonious and productive academic environment. Clear and transparent evaluation criteria can help faculty members understand the expectations for career advancement and contribute to a supportive and equitable workplace culture. *(NEP Clause: 13.6)*

4A.1 Implementation Roadmap

Short-Term (0-2 Years)

- Review faculty evaluation criteria to ensure alignment with university goals and expectations.
- Clearly communicate performance expectations to faculty members and provide them with opportunities for professional development to meet those expectations.

4A.2 Actors Responsible

- SPU

4A.3 Performance Success Indicator

- Enhanced avenues for professional development of faculty members.

4B. Implement Faculty Workload Management: Addressing and optimizing faculty workload is crucial for providing the necessary time and space for meaningful engagement in research activities. Balancing teaching, research, and administrative responsibilities can ensure that faculty members dedicate sufficient time to conduct high-quality research and contribute effectively to their academic disciplines. *(NEP Clause: 13.3)*

4B.1 Implementation Roadmap

Short-Term (0-2 Years)

- Analyze and adjust faculty workloads to ensure sufficient time for research and scholarly activities in addition to teaching responsibilities.
- Develop workload management policies that prioritize a healthy work-life balance for faculty members.

4B.2 Actors Responsible

- SPUs

4B.3 Performance Success Indicator

- Implementation of workload management policies to optimize faculty workload.

4C. Optimize Faculty Resources: Optimize faculty resources through equivalence committees to address workforce challenges effectively.

4C.1 Implementation Roadmap

Short-Term (0-2 Years)

» Conduct a comprehensive assessment of faculty expertise and current utilization.

» Identify underutilized faculty and potential areas for redeployment; restructuring of departments or programmes, if needed, to create suitable roles for redeployed faculty.

Medium-Term (2-5 Years)

» Optimize faculty resources by establishing Equivalence Committees to assess faculty members' transferability across related disciplines (e.g., production engineering to mechanical engineering); and after restructuring and training, redeployment of the faculty members. (This initiative can improve resource utilization, faculty engagement, and the overall education quality.)

4C.2 Actors Responsible

» SPUs

4C.3 Performance Success Indicator

» Functional Equivalence Committees tasked with assessing and recognizing faculty qualifications, experience, and contributions.

ADMININSTRATORS

5. Revamp Composition of Governing Councils: Compose Governing Councils with top quality academicians, researchers, and administrators, excluding political members. *(NEP Clause 19.2, 19.4)*

5.1 Implementation Roadmap

Medium-Term (2-5 Years)

» Revise the composition of Governing Councils to include a majority of academicians, researchers, alumni, and administrators, with minimal or no political appointees.

5.2 Actors Responsible

» All Regulatory Bodies

» State Government

» State Councils for Higher Education

» SPUs

5.3 Performance Success Indicator

» Composition of Governing Councils of all SPUs with top quality members.

6. Ensure Statutory Provisions for Deans: Statutory provisions should be made for the posts of Dean (Academic), Dean (College Development Council), and Dean (Research) in every SPU to enhance academic and research leadership and governance. *(NEP Clause: 13.7)*

6.1 Implementation Roadmap

Short-Term (0-2 Years)

» Make statutory provisions for creating Dean positions (Academic, College Development Council, Research).

Medium-Term (2-5 Years)

» Fill the statutorily created Dean positions.

6.2 Actors Responsible

» All Regulatory Bodies

» State Governments

» State Councils for Higher Education

» SPUs

6.3 Performance Success Indicator

» Increase in number of SPUs with the set positions.

7. Promote Administrative Appointments from Teaching Fraternity: Registrars, Finance Officers, and Examination Controllers should be appointed from the teaching fraternity to ensure a visionary approach and better understanding of academic requirements. *(NEP Clause: 19.4)*

7.1 Implementation Roadmap

Short-Term (2-5 Years)

» Promote Appointments of Registrars, Finance Officers, and Examination Controllers from Teaching fraternity.

7.2 Actors Responsible

» SPUs

» State Government

7.3 Performance Success Indicator

» Increase in the proportion of Registrars, Finance Officers, and Examination Controllers appointed from the teaching fraternity.

8. Implement Capacity Building Initiatives for Vice Chancellors and Administrators: Implement capacity-building initiatives aimed at enhancing the skills and capabilities of Vice Chancellors and administrators. Offer training programmes, workshops, and seminars focused on areas such as leadership development, research methodologies, pedagogical innovations, and

emerging trends in higher education. By investing in the professional development of academic leaders and administrators, universities can better meet the evolving demands of contemporary academia. *(NEP Clause: 13.7)*

8.1 Implementation Roadmap

Short-Term (0-2 Years)

- Conduct leadership development programmes for Vice-Chancellors and administrators focusing on strategic planning, resource management, and fostering a positive academic environment.
- Launch training programmes for administrators on topics like communication skills, financial management, student support services, alumni outreach, industry collaboration, and application of Artificial Intelligence (AI) in university processes.

8.2 Actors Responsible

- All Regulatory Bodies
- State Governments
- State Councils for Higher Education
- Capacity Building Commission

8.3 Performance Success Indicator

- Annual delivery of leadership development programmes tailored for Vice-Chancellors and administrators.

8.4 State Good Practices

Maharashtra: State Faculty Development Academy

The Academy was established in 2021 as a registered Section 8 Company, to enhance faculty capabilities to serve as catalysts for transformation within the higher education sector. This initiative extended beyond traditional faculty training by also engaging academic leaders such as Registrars, Pro-Vice Chancellors, and Vice Chancellors, empowering them to navigate emerging challenges in higher education effectively. By January 2025, over 12,000 participants across 1,692 colleges and 57 programmes in Maharashtra, with 36 collaborators benefitted.

IV. EMPLOYABILITY

A. Skilling and Employability Enhancement for Students across Streams

Figure 7.12: Recommendations for Skilling and Employability Enhancement for Students across Streams

1. Enhance Employability Focus through Internships and Apprenticeships: Integrate employability-focused initiatives into SPU policies and practices, emphasizing practical skills, self-learning, and lifelong learning. Implement internship and apprenticeship programmes as integral, mandatory components of the curriculum, providing students with hands-on experience and exposure to the world of work. Create internship opportunities within the state to encourage local talent retention and economic growth. *(RUSA/PM USHA Mapping Chapter 6: Activities under Components of PM USHA, S.No. 9) (NEP Clause: 16.7,17.8)(NIRF Clause: 2D)*

1.1 Implementation Roadmap

Short-Term (0-2 Years)

- Review and revise SPU curricula to integrate employability-focused modules.
- Develop learning outcomes that emphasize practical skills, problem-solving abilities, and communication skills. Internships or apprenticeships to be made mandatory as part of the curriculum, ensuring proper credit and guidance.
- Establish dedicated "Internship Banks" within SPUs to connect students with internship opportunities. Leverage internship opportunities promoted by UGC/AICTE platforms. Partner with local industries, businesses, government agencies, and NGOs to create internship placements.
- Explore collaboration with Sector Skill Councils to develop apprenticeship programmes that bridge the gap between education and industry needs.

1.2 Actors Responsible

- SPUs
- State Governments
- State Councils for Higher Education
- Sector Skill Councils
- Industry Bodies

1.3 Performance Success Indicator

- Revision of curricula to integrate employability-focused modules.
- Creation of "Internship Banks" within SPUs to connect students with internship opportunities.
- Implementation of Apprenticeship-embedded programmes in collaboration with Sector Skill Councils.

1.4 Central Government Initiative

1.4.1 PM Internship Scheme

Launched on October 3, 2024, the scheme aimed to provide 1 crore internships over five years to enhance employability and skill development among Indian youth. The scheme's objective was to equip young individuals aged 21-24 years with real-world experience and professional skills through structured internships across 24 diverse sectors, including energy, banking, and hospitality. Beneficiaries included candidates with ITI certificates, polytechnic diplomas, or undergraduate degrees (e.g., BA, B.Sc, B.Com), as well as those pursuing online or distance education. Financial assistance under the scheme included a monthly stipend of ₹5,000, with ₹4,500 provided by the government via Direct Benefit Transfer (DBT) and ₹500 contributed by partner companies, along with a one-time joining grant of ₹6,000. Interns were insured under the Pradhan Mantri Jeevan Jyoti Bima Yojana and Pradhan Mantri Suraksha Bima Yojana, with premiums paid by the Central Government. The pilot phase for 2024-25 targeted 1.25 lakh internships, funded as part of the Union Budget 2024-25, which allocated ₹1.48 lakh crore towards education, employment, and skill development.

1.4.2 National Apprenticeship Training Scheme

The scheme was launched by the Ministry of Education and has been implemented through the provisions of the Apprentices Act, 1961 (as amended from time to time) and The Apprenticeship Rules, 1992 (as amended from time to time). The basic objective of the scheme was to bridge the gap, if any, in the practical/hands-on experience of fresh Graduate Engineers and Diploma holders, and enhance their technical skills for making them industry ready. The scope of NATS was expanded to include students from Humanities, Science and Commerce streams, besides students from the Engineering stream. On July 30th, 2024, the government launched NATS 2.0 portal, a one-stop solution integrating enrollment, certification, and

Direct Benefit Transfer (DBT) payments. Implemented through four Regional Boards of Apprenticeship Training, the scheme provided practical training opportunities across sectors including IT/ITES, manufacturing, automobile, and BFSI. With a robust budget of ₹3,054 crore allocated for FY 2021-22 to 2025-26, the scheme aimed to bridge the industry-academia gap. Apprentices received stipends through DBT, with 50% reimbursement to employers from the government. Union Budget 2025 increased the allocation for the scheme by nearly 50% to ₹1,178 crores for FY 2025-26.

1.5 State Good Practices

1.5.1 Telangana: Telangana Academy for Skill and Knowledge (TASK)

TASK was started in 2014 as a not-for-profit organisation by the Government of Telangana to bridge the gap between industry, academia, and government by offering quality human resources and services. TASK provided significant value to students by offering modules for enhancing technological, personal, and organisational skills at highly subsidized rates. It also supported colleges by fostering environments for growth through faculty development, research pilots, and systematic quality education programmes. For corporates, TASK delivered access to a skilled talent pool trained in cutting-edge technologies, facilitating their recruitment needs efficiently. In the last decade, the Academy has benefitted 761 colleges, skilled 9.84 lakh students and 18,650 faculty, partnered with 80 industries and provided over 35,000 placements.

1.5.2 Andhra Pradesh: India's First Skill Census

In January 2025, the Andhra Pradesh Government in collaboration with Infosys, embarked on India's first-ever Skill Census to assess the competencies of 3.5 crore individuals in the working-age population across the state. Spanning 1.8 crore households, this project focused on individuals aged 15 to 59 years, aiming to map their skills and aligning them with the needs of various industries. Infosys was leveraging Generative AI to assist in recording and analyzing the skill sets of participants. This census would enhance employment opportunities by identifying skill gaps and offering targeted technical assistance to empower the workforce.

2. Implement Schemes to Support Entrepreneurship and Innovation: Implement policies or schemes to support entrepreneurship and innovation, encouraging students to develop and pursue innovative ideas and become job creators. *(NEP Clause: 11.12)*

2.1 Implementation Roadmap

Short-Term (0-2 Years)

- Implement schemes or programmes to provide financial and mentoring support to student entrepreneurs.
- Organize business plan competitions and innovation workshops within SPUs.
- Attract alumni entrepreneurs to handhold high potential student and faculty entrepreneurs.

» Encourage industry mentorship for student and faculty-led entrepreneurship ideas with high potential for commercialisation.

Medium-Term (2-5 Years)

» Establish incubation centres or co-working spaces to support student-led start-ups.

2.2 Actors Responsible

» SPUs

» State Governments

» Industry Bodies

2.3 Performance Success Indicator

» Implementation of schemes to support entrepreneurship and innovation in all SPUs.

3. Focus on Language Training: Invest in language training programmes and initiatives to improve employability within the state, thereby reducing the outflow of youth. Establish Language Labs in SPUs. *(NEP Clause: 22.4)(NIRF Clause: 1F)*

3.1 Implementation Roadmap

Short-Term (0-2 Years)

» Invest in developing and launching language proficiency programmes for students.

» Establish language labs in SPUs equipped with necessary resources and technology.

» Integrate language training modules within existing curricula or offer them as elective courses.

3.2 Actors Responsible

» SPUs

3.3 Performance Success Indicator

» Establishment of language labs in every SPU.

4. Create Lifelong Education Centres: Allocate financial resources for establishing lifelong education centres in SPUs to promote upskilling and reskilling across disciplines. *(NEP Clause: 10.10)*

4.1 Implementation Roadmap

Medium-Term (2-5 Years)

» Allocate resources for establishing Lifelong Learning Centres within SPU.

4.2 Actors Responsible

» State Governments

» State Councils for Higher Education

» SPUs

4.3 Performance Success Indicator

» Establishment of Lifelong Learning Centres in every SPU.

5. Integrate Physical Education and Student Wellness: Ensure student wellness through fitness, good health, psycho-social well-being, and ethical grounding for high-quality learning, especially in the face of the growing obesity pandemic among the younger generation. *(NEP Clause 12.1)*

5.1 Implementation Roadmap

Short-Term (0–2 Years)

» Introduce mandatory physical education and wellness courses as part of the undergraduate curriculum, focusing on fitness, mental well-being, and ethical grounding to enhance Emotional Intelligence.

» Establish dedicated wellness centres in all SPUs equipped with gym facilities, yoga spaces, and mental health support services.

» Conduct annual health and fitness assessments for students and faculty, tracking key health indicators such as BMI, endurance, and mental wellness.

» Promote the importance of physical activity through fitness challenges, and inter-university sports competitions.

Medium-Term (3–5 Years)

» Develop and implement a one-year diploma in physical fitness for individuals aspiring to become gym trainers, ensuring a standardized approach to fitness education.

» Establish collaborations between SPUs and sports organisations to provide hands-on training, internships, and mentorship opportunities in fitness and wellness.

» Ensure that every SPU has trained professionals such as fitness and nutrition advisors, physiotherapists, and mental health counselors available for students.

Long-Term (5+ Years)

» Institutionalize physical education as a fundamental component of holistic student development, making participation in structured fitness programmes a credit requirement.

» Establish national accreditation for physical education programmes and fitness trainers to ensure quality standards in fitness education.

5.2 Actors Responsible

» SPUs

» UGC

» Ministry of Education

» Ministry of Youth Affairs and Sports

» State Governments

» State Councils for Higher Education

» Sports and Fitness Organisations

5.3 Performance Success Indicator

» Percentage of HEIs implementing structured physical education and wellness programmes.

» Student participation rates in fitness and wellness programmes.

» Number of students enrolled in physical fitness diploma courses.

» Number of partnerships between HEIs and sports/fitness and holistic wellness organisations.

B. Academia-Industry Collaboration

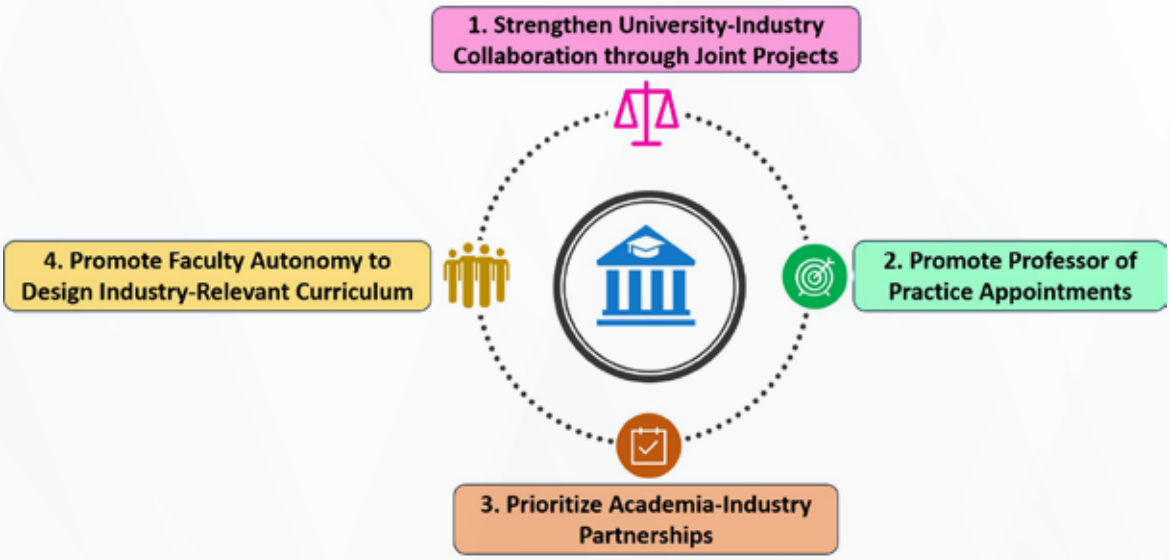


Figure 7.13: Recommendations for Academia-Industry Collaboration

1. Strengthen University-Industry Collaboration through Joint Projects: Encourage MoU with industry associations, and facilitate collaborative research and consultancy projects. Establish an Industry Relations Cell (IRC) within the SPU to liaison with industry hubs, local industries, and IRCs of other universities in the cluster. *(NEP Clause: 20.6) NIRF Clause: 2D).*

1.1 Implementation Roadmap

Short-Term (0-2 Years)

- Establish an IRC within each SPU to act as a central liaison point with industry partners. Staff the IRC with dedicated personnel responsible for identifying industry needs, facilitating collaborations, and managing communication channels.
- Develop a database of potential industry partners, focusing on local companies and industry associations within the state.
- Utilize existing industry associations platforms like CII, FICCI, ASSOCHAM to connect with industry partners for collaborative opportunities.
- Develop and sign MoUs with industry partners outlining areas for collaboration, such as joint research and consultancy projects or internship programmes.

1.2 Actors Responsible

- Ministry of Skill Development and Entrepreneurship
- Ministry of Education
- AIU
- CII/FICCI/ASSOCHAM and other Industry Bodies

» SPUs

» State Governments

1.3 Performance Success Indicator

» Establishment of Industry Relations Cell (IRC) in every SPU.

» Increase in active MoUs/collaborative research and consultancy projects with industry partners in every SPU.

1.4 Central Government Initiative

1.4.1 Future Skills Prime

Launched in 2018 as a joint initiative by Ministry of Electronics & Information Technology (MeitY) and NASSCOM, it aimed to create an upskilling /reskilling ecosystem in 10 emerging technologies, such as AI, IOT, blockchain, 3D printing, AR/VR, cyber security, and cloud computing to facilitate continuous enhancement of skills of IT professionals in line with their aspirations and aptitude. The pan-India network of C-DAC & NIELIT Centres was leveraged to extend the reach of this programme in smaller towns and remote locations through blended-learning programmes. It also provided an opportunity for training Government officials, specially the technical/scientific cadres, and making them familiar with the nuances of emerging technologies through industry-curated courses. As of January 2025, the platform had over 20 lakh registered users and nearly 9 lakh enrolments. The initiative established 13 state government partnerships, collaborated with 2,000+ academic institutions, and engaged over 160 corporates with courses that aligned with the National Occupational Standards (NOS) and the National Skills Qualification Framework (NSQF). FutureSkills Prime was ranked third among 47 digital skilling initiatives globally in the European Commission's 2024 Pact for Skills Report.

1.5 State Good Practices

1.5.1 Gujarat: Skills4Future Programme

The Gujarat Knowledge Society (Commissionerate of Technical Education, Gujarat), in collaboration with the Edunet Foundation, launched the Skills4Future Programme in 2024, to equip the state's youth with future-ready skills. Supported by Shell India, this initiative aimed to transform technical education in Gujarat by addressing critical skills gaps and equipping engineering students with expertise in cutting-edge technologies essential for driving the Industry 4.0 revolution. The programme aimed to train 10,000 students in primary skills and 2,500 students in advanced technologies annually. As part of this initiative, Digital and Electric Vehicle (EV) Training Labs would be established in select engineering colleges. These labs, supported by Shell India's CSR initiative, would serve as centres for experiential learning, hosting hackathons, innovation contests, and advanced training sessions. The programme's curriculum, aligned with the Gujarat Knowledge Society's credit-based framework, included a 50-hour Foundation Course and a 160-hour Advanced Course, with a strong emphasis on hands-on applications in AI, sustainability, and cleaner technologies.

2. Promote Professor of Practice Appointments: Promote Professor of Practice appointments to bridge the academia-industry gap, leveraging industry expertise in curriculum development and delivery. *(NEP Clause: 20.6)*

2.1 Implementation Roadmap

Short-Term (0-2 Years)

» Encourage appointment of Professors of Practice in all relevant programmes.

2.2 Actors Responsible

» SPUs

» State Governments

» Industry Bodies

2.3 Performance Success Indicator

» Dedicated funding for appointment of Professors of Practice in SPUs.

» Increase in the number of Professors of Practice appointed in SPUs.

3. Encourage Industry Skills Programmes and Certifications: Encourage corporate partners to provide professional certifications to students, enhancing their marketability and employability. Integrate Vocational Education with relevant programmes. Collaborate with industry stakeholders to provide soft skills training to improve employability. *(NEP Clause: 16.5, 16.6, 20.6)*

3.1 Implementation Roadmap

Short-Term (0-2 Years)

» Collaborate with industry partners to identify relevant industry certifications and training programmes valuable for students' future careers.

Medium-Term (2-5 Years)

» Encourage corporate partners and industry bodies to provide professional certifications to students, enhancing their marketability and employability.

» Collaborate with industry stakeholders to provide soft skills training to improve employability.

3.2 Actors Responsible

» Ministry of Skill Development and Entrepreneurship

» CII/FICCI/NASSCOM and other Industry Bodies

» SPUs

» State Governments

3.3 Performance Success Indicator

» Increase in number of Industry Skills Programmes and Professional Certifications offered in every SPU.

4. Promote Faculty Autonomy to Design Industry-Relevant Curriculum: Encourage faculty autonomy in curriculum design and revision, allowing for timely updates and alignment with industry needs. Foster collaboration between academia and industry to identify emerging trends and incorporate relevant content into the curriculum, promoting agility and relevance. *(NEP Clause: 12.2)*

4.1 Implementation Roadmap

Medium-Term (2-5 Years)

» Establish mechanisms for regular curriculum reviews and updates, incorporating feedback from industry partners and alumni.

» Develop and implement processes for incorporating emerging industry trends and technological advancements into the curriculum to ensure its continued relevance.

4.2 Actors Responsible

» Ministry of Education

» All Regulatory Bodies

» State Governments

» State Councils for Higher Education

» SPUs

4.3 Performance Success Indicator

» Creation of a pre-defined framework for faculty autonomy in curriculum design and revision.

University of Mysore, Karnataka

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ANNEXURE-I
CONSULTATIONS WITH STATE GOVERNMENT OFFICERS

Name	Designation and State
1. Shri Priyatu Mandal, IAS	Secretary (Technical Education) **Govt. of Himachal Pradesh**
2. Ms. Tanu Kashyap, IAS	Secretary (Higher Education) **Govt. of Punjab**
3. Shri S.R. Umashankar, IAS	Additional Chief Secretary Department of Higher Education **Govt. of Karnataka**
3A. Shri Jagadeesha G., IAS	Commissioner Department of Collegiate and Technical Education **Govt. of Karnataka**
4. Shri Vikaschandra Rastogi, IAS	Principal Secretary Higher & Technical Education Department **Govt. of Maharashtra**
5. Shri Mahendra Prasad Agrawal, IAS	Principal Secretary, Higher Education Dept. **Govt. of Uttar Pradesh**
5A Shri Girijesh Tyagi, IAS	Special Secretary (Higher Education) **Govt. of Uttar Pradesh**
6. Shri Mukesh Kumar, IAS	Principal Secretary (Higher & Technical Education) **Govt. of Gujarat**
6A. Shri M. Nagarajan, IAS	Director (Higher Education) **Govt. of Gujarat**
7. Thiru A. Karthik, IAS	Principal Secretary, Higher Education Department **Govt. of Tamil Nadu**
8. Shri Shailesh Bagauli, IAS	Secretary, Dept. of Higher Education **Govt. of Uttarakhand**
9. Shri Baidyanath Yadav, IAS	Secretary, Education **Govt. of Bihar**
10. Ms. V. Karuna, IAS	Secretary, Department of Education **Govt. of Telangana**
11. Shri A. Ch. Marak, IAS	Secretary, Education **Govt. of Meghalaya**
12. Sri Rahul Kumar Purwar, IAS	Secretary, Department of Higher and Technical Education **Govt. of Jharkhand**

Name	Designation and State
13. Dr. Krishan Kumar Kataria	Director, Technical Education **Govt. of Haryana**
13A. Ms. Minakshi Raj	Additional Director, Higher Education **Govt. of Haryana**
13B. Shri R. S. Sangwan	Joint Director, Technical Education **Govt. of Haryana**
13C. Shri K.K. Agnihotri	Adviser, Haryana State Higher Education Council **Govt. of Haryana**
14. Shri Sudhir K., IAS	Director of Collegiate Education **Govt. of Kerala**
14A. Dr. Jagan Sebastian	Nodal Officer, RUSA **Govt. of Kerala**
15. Dr. Anindita Ganguly	Director, Technical Education **Govt. of West Bengal**
16. Dr. Dhirendra Shukla	OSD, Higher Education Dept. **Govt. of Madhya Pradesh**
17. (Prof.) Dr. Yasmeen Ashai	Director, Colleges Higher Education Department **UT of Jammu & Kashmir**
18. Ms. Padma Angmo, IIS	Commissioner/Secretary Higher Education Department **UT of Ladakh**
18A. Dr. Sameena Iqbal	Director, Colleges **UT of Ladakh**
18B. Shri Imteeaz Kacho	Additional Secretary, Higher Education Department **UT of Ladakh**
19. Ms. Alice Vaz, IAS	Secretary, Higher and Technical Education **Govt. of NCT of Delhi**
20. Shri Aman Sharma	Director, Higher & Technical Education **UT of Puducherry**
21. Dr. Manpreet Singh	Jt. Director, Technical Education **UT of Chandigarh**

ANNEXURE-2
CONSULTATIONS WITH VICE CHANCELLORS & SENIOR ACADEMICS OF STATE PUBLIC UNIVERSITIES

Name of the Vice Chancellor / Participant	Name of University	City, State (State/UT alphabetical order)
1. Prof. K. Raja Reddy Vice Chancellor	Sri Venkateswara University	Tirupati, Andhra Pradesh
2. Prof R. C. Deka Vice Chancellor	Cotton University	Guwahati, Assam
3. Prof. Harsh Nayyar Director, R&D Cell	Panjab University	UT of Chandigarh
4. Prof. Ramesh K. Goyal Vice Chancellor	Delhi Pharmaceutical Sciences and Research University	Delhi
5. Prof. Anu Singh Lather Vice Chancellor	Dr. B. R. Ambedkar University	Delhi
6. Shri Nitin Malik Registrar	Dr. B. R. Ambedkar University	Delhi
7. Dr. Richa Awasthi Associate Professor	Dr. B. R. Ambedkar University	Delhi
8. Dr. Selvin Paul Associate Professor	Dr. B. R. Ambedkar University	Delhi
9. Dr. (Mrs.) Amita Dev Vice Chancellor	Indira Gandhi Delhi Technical University for Women	Delhi
10. Prof. Poonam Bansal Professor	Indira Gandhi Delhi Technical University for Women	Delhi
11. Prof. (Dr.) Mahesh Verma Vice Chancellor	Guru Gobind Singh Indraprastha University	Delhi
12. Dr. Gagan Deep Sharma Associate Professor	Guru Gobind Singh Indraprastha University	Delhi
13. Prof. (Dr.) G.S. Bajpai Vice Chancellor	National Law University	Delhi
14. Dr Neerja A Gupta Vice Chancellor	Gujarat University	Ahmedabad, Gujarat
15. Prof. (Dr.) Jabali J. Vora Vice Chancellor	Hemchandracharya North Gujarat University	Patan, Gujarat

Name of the Vice Chancellor / Participant	Name of University	City, State (State/UT alphabetical order)
16. Prof. Kirit Lad Coordinator, IQAC	Sardar Patel University	Anand, Gujarat
17. Prof. Sudesh Vice Chancellor	Bhagat Phool Singh Mahila Vishwavidyalaya	Sonipat, Haryana
18. Dr. Pardeep Kumar Director, Distance Education	Kurukshetra University	Thanesar, Haryana
19. Dr. Shree Prakash Singh Vice Chancellor	Deenbandhu Chhotu Ram University of Science and Technology	Sonipat, Haryana
20. Prof. B. R. Kamboj Vice Chancellor	Chaudhary Charan Singh Haryana Agriculture University	Hisar, Haryana
21. Prof. Shashi Kumar Dhiman Vice Chancellor	Himachal Pradesh Technical University	Sasan, Himachal Pradesh
22. Prof. Rajeshwar Singh Chandel Vice Chancellor	Dr Y.S. Parmar University of Horticulture and Forestry	Solan, Himachal Pradesh
23. Prof. Nilofer Khan Vice Chancellor	University of Kashmir	Srinagar, UT of Jammu & Kashmir
24. Farooq Masoodi Dean (Academic Affairs)	University of Kashmir	Srinagar, UT of Jammu & Kashmir
25. Dr. Jayakar S.M. Vice Chancellor	Bangalore University	Bengaluru, Karnataka
26. Prof Dayanand Agsar Vice Chancellor	Gulbarga University	Kalaburagi, Karnataka
27. Prof. N.K. Loknath Vice Chancellor	University of Mysore	Mysuru, Karnataka
28. Prof. Sharanappa V Halse Vice Chancellor	Karnataka State Open University	Mysuru, Karnataka
29. Prof. (Dr). Mohanan Kunnammal Vice Chancellor	University of Kerala	Thiruvananthapuram, Kerala
30. Dr. Sunil Kumar Gupta Vice Chancellor	Rajiv Gandhi Proudyogiki Vishwavidyalaya	Bhopal, Madhya Pradesh
31. Prof Satyendra Kishor Mishra, Dean of Social Sciences	Vikram University	Ujjain, Madhya Pradesh

Name of the Vice Chancellor / Participant	Name of University	City, State (State/UT alphabetical order)
32. Prof. Kapil Deo Mishra Vice Chancellor	Rani Durgavati Vishwavidyalaya	Jabalpur, Madhya Pradesh
33. Dr. Renu Jain Vice Chancellor	Devi Ahilya Vishwa Vidyalaya	Indore, Madhya Pradesh
34. Dr. Suresh Gosavi Vice Chancellor	Savitribai Phule Pune University	Pune, Maharashtra
35. Prof. Ravindra Kulkarni Vice Chancellor	University of Mumbai	Mumbai, Maharashtra
36. Dr Laishram Jimmy Assistant Professor	Manipur Technical University	Takyelpat, Manipur
37. Prof Sabita Acharya Vice Chancellor	Utkal University	Bhubaneswar, Odisha
38. Prof. Sarabjot Singh Behl former Dean, Academic Affairs	Guru Nanak Dev University	Amritsar, Punjab
39. Lt. Gen. Jagbir Singh Cheema Vice Chancellor	Maharaja Bhupinder Singh Punjab Sports University	Patiala, Punjab
40. Prof. (Dr.) Harpreet Kaur Vice Chancellor	National Law University	Jodhpur, Rajasthan
41. Prof. Sudhi Rajiv Vice Chancellor	Haridev Joshi University of Journalism and Mass Communication	Jaipur, Rajasthan
42. Prof. R. Jagannathan Vice Chancellor	Periyar University	Salem, Tamil Nadu
43. Prof. Aruna B. Venkat Associate Professor	NALSAR University of Law	Hyderabad, Telangana
44. Prof. Alok Kumar Rai Vice Chancellor	University of Lucknow	Lucknow, Uttar Pradesh
45. Prof. Rajesh Kumar Dwivedi Director, College Development Council	Chhatrapati Shahu Ji Maharaj University	Kanpur, Uttar Pradesh
46. Prof N P Melkania Dean, Academic	Gautam Buddha University	Greater Noida, Uttar Pradesh
47. Prof. Arun Kumar Tripathi	Uttarakhand Ayurved University	Dehradun, Uttarakhand
48. Prof. Pijushkanti Panigrahi Library & Information Science	University of Calcutta	Kolkata, West Bengal
49. Prof. Buddhadeb Sau Vice Chancellor	Jadavpur University	Kolkata, West Bengal

ANNEXURE-3
CONSULTATIONS WITH DIGNITARIES
(During National Conference)

Name	Designation	Institution
1. Shri Suman Bery	Vice Chairman	NITI Aayog
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5. Prof. G.D. Sharma	President	Association of Indian Universities
6. Dr. (Mrs.) Pankaj Mittal	Secretary General	Association of Indian Universities
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11. Prof.V.Venkata Ramana	Vice Chairman	Telangana State Higher Education Council
12 Prof. Kailash Chandra Sharma	Vice Chairman	Haryana State Higher Education Council
13. Ms. Rina Sonowal Kouli, IIS	Joint Secretary	Department of Higher Education, Government of India

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