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Revisiting Higher Education in India (Post-Independence to NEP 2020): Growth, Policy, and Persistent Gender Inequality

Sugeeta Upadhyay[1]

Abstract

This study examines the evolution of higher education in India from Independence to the National Education Policy (NEP) 2020, with a focus on expansion, governance, gender equity and financing. It reviews major education policies and regulatory reforms since 1947, including the University Grants Commission framework, National Policies on Education (1968, 1986), and recent structural changes culminating in NEP 2020. The analysis draws on secondary data from national sources such as the All-India Survey on Higher Education (AISHE), UDISE+, Census of India, NSSO, and official policy and budget documents. The findings highlight a dramatic expansion of the system, with enrolment rising from 1.7 million in 1950–51 to over 43 million by 2021–22, alongside growth in institutions from 28 universities in 1947 to more than 1,100 today. Key governance outcomes of this expansion include increased institutional diversification, a gradual shift toward greater institutional autonomy, and the emergence of accreditation- and outcome-based quality assurance mechanisms. Gender parity has improved substantially, with the female Gross Enrolment Ratio approaching parity in recent years, though disparities persist across disciplines and social groups, with the GPI for STEM beats the global standards the woman representation in the technological field needs to be improved. Despite expansion, public expenditure on education has remained below 4% of GDP compared to the suggestion of 6% by the Kothari commission, raising concerns about quality, equity, and governance as India moves toward multidisciplinary and inclusive higher education reforms under NEP 2020.

Keywords: Higher Education. India, Gender Equity, National Education Policy (NEP) 2020, *Institutional* Expansion and Labour Market Alignment

1. Introduction

At Independence India had only ~20 universities and 500 colleges. The first University Education Commission (UEC, 1948–49) under S. Radhakrishnan laid the foundation of postcolonial higher education (Mohammad Ghulam Ali, 2025). Its report ("Education and National Development") reviewed all levels of education and led to creation of the University Grants Commission (UGC) (set up in 1953, statutory from 1956) to coordinate and maintain standards. The Planning Commission (est. 1950) integrated higher education in national plans, spurring the creation of new institutions (e.g. five Indian Institutes of Technology, 1950–61). By 1960, expansion was modest: only 25 universities in 1951, growing slowly under Nehru's industrialization focus (Damayanti Sen, 2016).

- *Key reforms:* UEC (Radhakrishnan) report (1949); UGC Act (1956); first Five-Year Plans emphasized technical institutes (IITs).

[1] Professor of Economics and Public Policy, School of Economics and Commerce, Dr. Vishwanath Karad MIT World Peace University, Pune, Maharashtra. Email:sugeeta_u@yahoo.co.in

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- *Access & growth***:** Higher education capacity began from a low base (25 universities, 700 colleges in 1951) and grew steadily.
- *Governance:* Higher education was a state subject initially; the 42nd Constitutional Amendment (1976) later made education concurrent (central–state responsibility) (Damayanti Sen, 2016).

The *Kothari Commission* (Indian Education Commission 1964–66) produced the landmark report *Education and National Development*, after extensive nationwide consultation. It recommended a national plan linking education to economic development, research promotion and curriculum modernization (GoI, MoE 1966).

6% GNI on Education, Key Recommendation by Kothari Commission

The Education Commission (1964-66) (commonly known as the Kothari Commission) recommended that 6 % of national income (GNP/GNI) should be devoted to education. The Commission undertook a detailed review of post-Independence trends in education financing, projected the future resource requirements of India's education system up to 1985-86, and concluded that: "if education is to develop adequately, … the proportion of national income devoted to education will rise … to 6.0 percent in 1985-86" (Tilak, 2007; p. 873).

The Government of India accepted this recommendation in its National Policy on Education (1968), which resolved "to increase the investment in education so as to reach a level of expenditure of 6 per cent of the national income as early as possible" (Government of India, 1968). Later, the revised policy of 1986 reaffirmed the target by stating that from the Eighth Five-Year Plan onwards the outlay on education "will uniformly exceed … 6 per cent of the national income" (Government of India, 1986).

Over the years, efforts were made in committee reports and budgets to redefine the target for example by including private expenditure or by interpreting "national income" in different ways and critics such as J. B. G. Tilak argues these reinterpretations dilute the original spirit of the target, which focused primarily on public expenditure (Tilak, 2007).

The target of 6 % is somewhat arbitrary in that it is not derived from a fully dynamic microsimulation of all costs; rather it's a rounded figure based on broad assumptions and international standards. Methodologically, the Commission based the 6 % target on three considerations: (i) an estimate of India's resource requirements over the next 20 years, assuming economic growth of approximately 5-7 % per annum, population growth of about 1.5-2.5 % per annum, rising enrolments and increasing unit-costs; (ii) comparisons with advanced countries noting that countries such as the US, USSR and Japan were already spending more than 6 % of GNP on education; and (iii) a normative principle that, in the early stages of educational expansion, expenditure on education should grow at roughly twice the rate of economic growth (Tilak, 2018). We may argue the commission's assumptions (economic growth, population growth, unit cost escalation) may have been optimistic and uniform across states.

The National Policy on Education (1968) India's first comprehensive education policy was formulated in response to the Kothari Commission (1964–66), it aimed at national integration, equal access, and compulsory schooling for ages 6–14. It promoted regional languages, recognized Hindi as

the national language, supported Sanskrit, and recommended raising education spending to 6% of national income (Tilak, 2007). The National Policy on Education (1986) focused on equity and inclusion, especially for SCs, STs, OBCs, and women (MHRD, 2013). It aimed for universal access, better quality, adult education, and expansion of technical/vocational education. It established IGNOU, encouraged decentralisation, and supported using technology in education. The Revised Programme of Action (1992) updated the 1986 NPE based on recommendations from the Acharya Ramamurti Committee (1990) and the Central Advisory Board of Education (CABE). The revisions aimed to deepen reforms by emphasizing quality improvement, value-based education, and stronger national integration. Revised the 1986 policy to strengthen quality, decentralisation, and inclusive education. Key steps included Minimum Levels of Learning (MLL), DPEP for primary education, value-based learning, and expansion of vocational education. The focus was on improving outcomes and aligning education with societal needs (Kingdon, 2007).

Key Education Initiatives between NPE 1986/1992 and NPE 2020:

1. District Primary Education Programme (DPEP) (1993–94): Launched to improve primary education through district-level planning, focusing on universal enrolment, reducing dropout rates, and improving learning quality.

2. Sarva Shiksha Abhiyan (SSA) (2001): A flagship mission to universalize elementary education (Classes I–VIII) by expanding school access, teacher recruitment, and infrastructure.

3. Right to Education (RTE) Act (2009): Provided free and compulsory education for children aged 6–14 and made education a fundamental right, setting norms for schools and learning outcomes.

4. Rashtriya Madhyamik Shiksha Abhiyan (RMSA) (2009): Aimed to expand and improve secondary education (Classes IX–XII) through better access, quality enhancement, and reduced dropout rates.

5. Rashtriya Uchchatar Shiksha Abhiyan (RUSA) (2013): A reform programme for higher education focusing on quality, equity, and better funding for state universities and colleges.

6. Samagra Shiksha Abhiyan (2018): An integrated scheme covering pre-primary to Class XII, merging SSA, RMSA, and Teacher Education to provide a holistic school education framework.

7. Institutes of Eminence (IoE): Initiative to develop world-class universities with greater autonomy and international competitiveness.

8. NP-NSPE (1995) & Mid-Day Meal Scheme (2001): Nutrition programmes to improve attendance, retention, and learning by providing meals to school children.

NPE 1986 and the 1992 revisions laid the foundation for major reforms focused on access, equity, and quality. Subsequent initiatives like DPEP, SSA, RTE, RMSA, RUSA, and Samagra Shiksha built on this base, significantly expanding educational reach and improving system effectiveness, paving the way for NPE 2020.

National Policy on Education 1986: focus on equity and inclusion especially for SC, ST, OBC and Women

Unlike the 1968 NPE which was more general in tone, the 1986 policy explicitly targeted disadvantaged groups. (NEP 1968 had called for educational opportunities but did not detail caste/gender measures.) In contrast, the 1986 Policy's "Education for Equality" section systematically addressed caste and gender with affirmative actions. The 2020 National Education Policy likewise stresses inclusion (even adding Persons with Disabilities and minorities) and reaffirms quotas and support for SC/ST/OBC and girls, building on the 1986 emphasis.

The policy declared education an "agent of basic change in the status of women," with a positive interventionist approach. It set time-bound targets to eliminate female illiteracy and provided special support services (e.g. incentives, scholarships, and day-care) to boost girls' enrollment. It aimed to increase women's participation in vocational, technical and professional courses and to eliminate sex stereotyping in curricula. The core focus was equalizing SC/ST education "in all areas and in all four dimensions – rural male, rural female, urban male and urban female". Key provisions included incentives and scholarships (including pre-matric grants for "scavenging" communities), micro-planning to ensure retention/completion, and remedial support. Special hostels for SC students were to be expanded, and efforts made to recruit teachers from SC/ST communities. For STs, priorities included opening schools in tribal areas, developing curriculum/materials in tribal languages, and establishing residential/ashram schools and technical scholarships for tribal youth. The policy extended incentives to "all educationally backward sections" and pledged infrastructure for rural, hill, desert, and island communities. Although NPE 1986 did not explicitly enumerate "OBC" in its text, its mandate to support educationally disadvantaged groups encompassed these communities. In sum, the NPE's "Education for Equality" section laid out a comprehensive blueprint of support (scholarships, hostels, schools, curricular reform, teacher recruitment, etc.) targeting SCs, STs, women, minorities and other marginalized groups.

University Grants Commission Act, 1956

The *University Grants Commission Act, 1956* provides the foundational statutory framework for the coordination, determination, and maintenance of standards in university education in India. Enacted by Parliament and brought into force in 1956, the Act established the *University Grants Commission (UGC)* as a central statutory authority to oversee higher education at the national level (Government of India, 1956). The long title of the Act reflects its core purpose: ensuring coordinated development and uniform academic standards across universities.

Section 4 of the Act constitutes the UGC as a body corporate with perpetual succession and a common seal, enabling it to function autonomously within its statutory mandate (Government of India, 1956). Section 5 specifies the composition of the Commission, comprising a Chairman, Vice-Chairman, and members appointed by the Central Government from academia, public service, and related fields, ensuring expert-driven governance. Further, Section 3 empowers the Central Government, on the advice of the UGC, to declare institutions as "deemed to be universities," thereby extending the Act's applicability beyond conventional universities.

The principal powers and functions of the UGC are set out in *Section 12*, which assigns the Commission the general duty to take all necessary steps for the promotion and coordination of university education and for maintaining standards of teaching, examination, and research (Government of India, 1956). To fulfill this mandate, the UGC is authorized to assess the financial needs of universities, allocate and disburse grants, and support institutions providing common academic services. Grant allocation is guided by considerations of academic quality, financial requirements, and national development objectives, reflecting a balance between institutional autonomy and public accountability.

In addition to its developmental role, the UGC exercises advisory functions by recommending measures for improving academic standards and advising the Central and State Governments on matters relating to university education. The Act also incorporates regulatory and enforcement mechanisms. Sections 13 and 14 empower the Commission to inspect universities and to withhold grants in cases of non-compliance with prescribed standards. Sections 12A and 12B further regulate fee structures and prohibit certain practices inconsistent with academic integrity.

The Act establishes robust accountability provisions. Sections 16 to 19 require the preparation of budgets, maintenance of accounts, auditing by the Comptroller and Auditor-General of India, and submission of annual reports to Parliament (Government of India, 1956). Importantly, the Act restricts the power to confer degrees exclusively to universities established by law or institutions deemed to be universities, thereby safeguarding the credibility of academic qualifications.

All India Council for Technical Education Act, 1987

The *All-India Council for Technical Education Act, 1987* constitutes the primary legislative framework governing technical and professional education in India. Enacted to address unregulated expansion and uneven quality in engineering and technical institutions, the Act converted AICTE from an advisory body into a statutory regulator with binding authority (Government of India, 1987). Its objective is to ensure proper planning, coordinated development, and maintenance of norms and standards in technical education.

Section 3 of the Act establishes AICTE as a body corporate, while Section 4 prescribes its composition, including representatives from the Central and State Governments, universities, industry, professional bodies, and technical institutions (Government of India, 1987). This structure is intended to integrate academic expertise with policy and labour-market considerations.

The core powers of AICTE are enumerated in *Section 10*, which mandates the Council to plan and coordinate the development of technical education, promote quality improvement, and regulate standards. AICTE is authorized to prescribe norms for infrastructure, curriculum, faculty qualifications, student intake, and evaluation systems. A critical regulatory function of the Council is its power to grant approval for the establishment of new technical institutions and the introduction of new courses or programs, enabling control over both quantitative growth and qualitative standards (Government of India, 1987).

The Act also confers inspection and enforcement powers. AICTE may inspect institutions, conduct inquiries, and withdraw approval from institutions failing to meet prescribed norms. Section 23 authorizes the Council to frame regulations, subject to publication and parliamentary oversight, ensuring procedural transparency and legal accountability.

AICTE plays a significant advisory role within India's federal structure. It advises the Central and State Governments on technical education policy, manpower planning, and institutional development. Section 20 empowers the Central Government to issue policy directions to AICTE on matters of national importance, embedding the Council within the broader executive framework.

While AICTE regulates standards and approvals, it does not confer degrees. Degree-awarding authority remains vested in universities established under central or state legislation or deemed universities under the UGC Act, 1956. Thus, the AICTE Act operates in coordination with the UGC Act, creating a layered regulatory regime for technical education that combines academic standard-setting with professional oversight (Government of India, 1987).

Contemporary Reconfiguration of Higher Education Regulation under the VBSA Bill, 2025

India's higher education regulatory framework is presently undergoing a significant restructuring with the introduction of the *Viksit Bharat Shiksha Adhishthan Bill, 2025 (VBSA Bill)*, which proposes to subsume existing statutory regulators including the *University Grants Commission (UGC)* and the *All India Council for Technical Education (AICTE)* into a single unified authority (Government of India, (Press Information Bureau [PIB], 2025; PRS Legislative Research, 2025). This legislative initiative operationalizes the *National Education Policy (NEP) 2020* vision of a streamlined, transparent, and functionally differentiated regulatory regime.

Under the proposed framework, the UGC's historically consolidated role in regulation, standard-setting, accreditation influence, and funding is dismantled and redistributed among specialized councils within the new Adhishthan. These include separate bodies for regulation, accreditation, and academic standards, thereby addressing long-standing criticisms of role overlap and conflicts of interest inherent in the UGC's design (PRS Legislative Research, 2025). A particularly consequential change is the explicit removal of grant-allocation powers from the higher education regulator, with funding responsibilities to be exercised independently by the Ministry of Education or designated agencies (Government of India, PIB, 2025). While the government has justified this decoupling to enhance institutional autonomy and reduce regulatory leverage, it has also raised concerns regarding the fiscal stability of public universities, especially state institutions with declining budgetary support (Business Standard, 2025).

The restructuring also extends to *technical and professional education*, with the proposed dissolution of AICTE as an independent statutory authority. Its regulatory and standard-setting functions are to be absorbed within the unified regulator, thereby eliminating parallel approval regimes that historically burdened institutions with overlapping compliance requirements (Indian Express, 2025; PRS Legislative Research, 2025). Consistent with the UGC transition, the new framework removes fee-regulation and funding powers from the regulator, reflecting NEP 2020's emphasis on separating academic oversight from financial control.

Judicial intervention has further shaped the current regulatory landscape. In January 2026, the Supreme Court of India placed newly notified UGC equity-related regulations in abeyance, citing concerns regarding vagueness and potential misuse, and directed that earlier regulations would continue to operate pending further review (Supreme Court Observer, 2026; Times of India, 2026). This episode underscores the judiciary's continuing role in mediating higher education reforms, particularly where regulatory initiatives intersect with constitutional principles and institutional autonomy.

Taken together, the VBSA Bill represents not merely administrative consolidation but a fundamental reordering of authority, accountability, and federal balance in Indian higher education governance. Its long-term impact will depend on the effectiveness of the new institutional design, the sustainability of alternative funding mechanisms, and the extent to which regulatory simplification translates into genuine academic autonomy.

On Education and Higher Education

Research on higher education in India since Independence portrays a complex and evolving system shaped by state-led expansion, regulatory reforms, liberalization, and persistent social inequalities. Early scholarship concentrated on institution-building and governance challenges in the newly independent nation. Schenkman (1954) documented the administrative and financial constraints faced by the Indian state in expanding higher education amid competing developmental priorities.

Subsequent critiques highlighted systemic weaknesses. Mathur (1992) described Indian universities as a "functioning anarchy," emphasizing fragmented governance and weak institutional coordination, while Srivastava (1994) argued that post-Independence reforms largely reproduced colonial Anglicist structures rather than initiating a decisive structural transformation.

Historical and policy-oriented analyses trace the long-term trajectory of state involvement in higher education. Sharma (2002) and Kumar and Sharma (2003) observed that the liberalization era coincided with declining fiscal priority for higher education and widening regional disparities. Singh (2004) critically evaluated the University Grants Commission (UGC), contending that bureaucratic constraints, limited institutional autonomy, and political interference undermined its ability to effectively implement the National Policy on Education (NPE) 1986 and its subsequent Program of Action. These structural constraints, he argued, weakened both equity and quality outcomes.

Debates surrounding globalization further shaped academic discourse in the early 2000s. Sahni and Kale (2004) cautioned that India's engagement with the General Agreement on Trade in Services (GATS) risked commodifying higher education if pursued without a coherent regulatory framework. Evaluations of the National Knowledge Commission by Anandakrishnan (2007), Joseph (2007), and Tilak (2007) similarly identified governance deficits, regulatory fragmentation, and tensions between rapid expansion and quality assurance. Agarwal (2009) provided a comprehensive synthesis of regulatory complexity and institutional diversification, while Hatekar (2009) warned that the rapid expansion of central universities could marginalize state universities, which continue to enroll most students.

Later studies deepened the analysis of institutional design and reform implementation. Kolhatkar (2012) highlighted the role of federalism in producing uneven reform outcomes across states due to differences in administrative capacity. Tilak (2013) and Sharma (2013) emphasized the persistent gap between policy intent and implementation despite decades of reform efforts. Pathak (2014) critiqued the technocratic and committee-driven nature of reforms, arguing that they often overlooked institutional realities, while Padmanabhan (2014) pointed to inconsistencies between the stated objectives and design of the Rashtriya Uchchatar Shiksha Abhiyan (RUSA). Collectively, this literature underscores a recurring pattern in Indian higher education: ambitious policy frameworks frequently confront constraints in governance, financing, and institutional capacity.

Sen (2016) offers one of the most comprehensive historical syntheses of higher education policy since Independence. She identifies a transition from the nation-building phase of the 1950s–1970s—characterized by public-sector expansion, regional balancing, and equity-oriented planning—to the post-1991 period marked by privatization, self-financing institutions, and diversification of providers. Despite substantial quantitative expansion, Sen argues that governance deficits, uneven financing, and concerns regarding academic quality continued to shape the policy landscape leading up to the National Education Policy (NEP) 2020.

Empirical scholarship provides a quantitative lens through which to assess expansion and inequality. Mahalakshmi (2023) documents a dramatic increase in total enrollment alongside a steady rise in the Gross Enrolment Ratio (GER), reflecting sustained policy efforts to broaden access. Women's participation has expanded significantly, approaching parity in aggregate enrollment. However, aggregate gains mask persistent disparities across states and social groups, particularly among Scheduled Tribes, whose GER remains well below the national average.

Micro-level analyses reinforce these patterns. Using multiple rounds of National Sample Survey data, Desai et al. (2008) estimate logistic regression models of school enrollment and grade transition probabilities, finding significantly lower odds of progression for historically marginalized communities,

including Scheduled Castes, Scheduled Tribes, and Muslims. Importantly, the authors document a gradual narrowing of these gaps over time, suggesting that targeted policy interventions have generated measurable, though incomplete, progress.

Affirmative action has played a critical role in expanding access to higher education. Weisskopf (2004) shows that reservation policies increased representation among Scheduled Castes and Scheduled Tribes while also redistributing students upward within the institutional quality hierarchy. Nearly half of the beneficiaries accessed programs they would likely not have entered in the absence of reservations, indicating that such policies influence not only participation but also institutional stratification.

Gender remains a central axis of educational inequality. Historical evidence shows extremely low female literacy at Independence (Ghosh, 2003), prompting policy recognition of women's education as a catalyst for social transformation. The National Policy on Education (1986) explicitly framed education as an instrument of women's empowerment and introduced targeted interventions such as scholarships, hostels, and recruitment of female teachers (Mohanty, 2004). These initiatives contributed to substantial improvements in female participation over subsequent decades.

Nevertheless, micro-econometric evidence suggests that gender disparities persist. Kingdon et al. (2002), applying Oaxaca–Blinder decompositions to urban data from Uttar Pradesh, identifies a substantial unexplained gender gap even after controlling for household income and parental education, pointing toward intra-household discrimination in resource allocation. More recent longitudinal analyses by Singh, Mukherjee, and Kumar (2025) confirm that young women remain less likely than men to complete higher education. Their findings indicate that differences in mathematics achievement and school quality explain a significant portion of the gender gap, highlighting the cumulative nature of educational disadvantage.

Recent scholarship increasingly adopts an intersectional perspective. Gopinath, Kumar, and Banerjee (2025) demonstrate that rural women face some of the most severe barriers to entering and completing STEM programs, with gender disadvantages often exceeding rural–urban divides. Similarly, Mrutyunjay (2025), drawing on AISHE, MHRD, and UGC data, documents continued enrollment growth alongside enduring regional, social, and gender disparities. These studies collectively suggest that inequalities in higher education are multidimensional, shaped by the interaction of gender, caste, geography, and socioeconomic status.

Policy debates preceding NEP 2020 foregrounded the urgency of governance reform, multidisciplinary education, and quality enhancement. Subramanian (2016) characterized the system as being in "disarray," emphasizing the need to address accumulated inequities, while Deshpande (2016) criticized early policy drafts for ambiguity and internal inconsistency. Financing remains a persistent concern: despite longstanding recommendations to allocate 6 percent of GDP to education, public expenditure has consistently fallen short, constraining institutional capacity and reform implementation.

Taken together, the literature reveals a paradoxical trajectory. India's higher education system has achieved remarkable expansion and diversification, yet structural inequalities remain deeply embedded. While policy interventions have improved aggregate participation—particularly for women and historically marginalized groups—significant disparities persist in access, completion, institutional quality, and field of study. Moreover, the recurring gap between policy ambition and implementation highlights the importance of examining higher education not merely through enrollment statistics but through the broader institutional and social structures that shape educational opportunity.

Despite extensive scholarship on policy evolution and access, relatively fewer studies adopt an integrated perspective linking historical reforms, gender disparities, and structural inequalities across the post-Independence period. Addressing this gap is essential for understanding how long-term institutional trajectories continue to influence contemporary outcomes, particularly in the context of ongoing reforms under NEP 2020.

2. Research Objective

This research aims to critically examine the evolution, implementation, and impact of higher education policies in India from Independence to the National Education Policy (NEP) 2020, with a specific focus on gender equity. Adopting a descriptive-cum-analytical framework, the study integrates historical, statistical, and policy-based perspectives to trace major reforms and their outcomes in higher education. The analysis draws extensively on secondary data from peer-reviewed literature, government policy documents (including NPE 1968, 1986/92, and NEP 2020), and national datasets such as AISHE, UGC, MHRD/MoE, NITI Aayog, Census of India, and NSSO. These sources are used to examine long-term trends in enrolment, public expenditure, institutional expansion, gender parity, and social-group disparities. Key dimensions such as excess enrollment beyond labour market absorption capacity, inter-disciplinary mismatches, delayed completion, and regional or social disparities in student retention have not been adequately quantified. Moreover, existing analyses rarely integrate administrative datasets such as AISHE with labour market outcomes, limiting their explanatory and predictive power, incorporating this the research seeks to provide a comprehensive and policy-relevant assessment of gender equity and structural challenges in Indian higher education.

3. Results

Expansion of Education System in India

Enrolment Growth: India's higher education system has expanded dramatically. Enrolment rose from just 1.73 lakh students in 1950–51 to about 41.3 million by 2020–21. In concrete terms, AISHE data show total higher-education enrolment at 43.3 million (4.33 crore) in 2021–22, up 26.5% from 34.2 million in 2014–15. Female enrolments grew even faster (from 15.7 million to 20.7 million, a 32% rise). This expansion corresponds to sustained growth of several percent per year. For example, an analysis notes a historical CAGR of ~3.5% (2014–21. (By contrast, achieving NEP targets would require ~4–5% annual growth.) In sum, higher-education enrolment has increased roughly 24-fold since 1950, reflecting steady policy focus on universal access (Mahalakshami, 2023).

Gender Parity Index (GPI) Gains by Stage

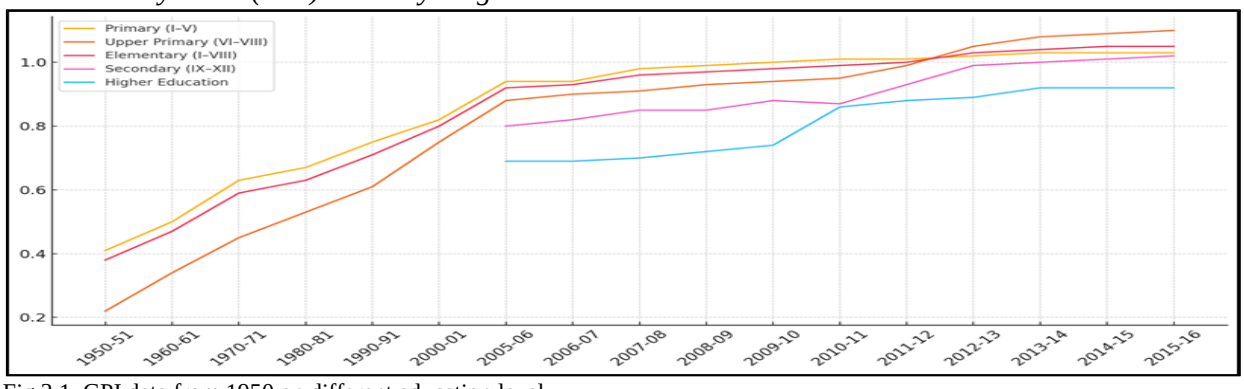


Fig 3.1. GPI data from 1950 on different education level

Source: Ministry of Human Resource Development, Government of India / National Institute of Educational Planning & Administration, New Delhi. Note: Data from 2012-13 are provisional

India has closed gender gaps at all levels of schooling and higher education. For instance, in 1950 only 39 girls were enrolled per 100 boys in primary school; by 1980 this was 63, and by 2011–12 about 93. Similar gains occurred at upper-primary and higher levels (Table 3.1). At secondary level, female parity was virtually zero in the 1970s but reached parity by 2010s (the female: male ratio rose from ~0.42 in 1971 to ~1 by 2024 (UDISE+, 2024). By 2024, female-to-male ratio in higher education was ~1 (100 girls per 100 boys). Overall, India achieved near-equal enrolment: e.g. primary GPI (girls per boy) went from 0.39 to ~1.0. These trends reflect targeted policies on girls' education and are documented in official statistics (UDISE+, 2024).

Table 3.1: Female enrolment per 100 males (i.e. 100×GPI) by level and period.

Level	(1950–51)	(1980–81)	(2011–12)
Primary (I–V)	39	63	93
Upper Primary (VI–VIII)	19	49	90
Secondary (IX–X)	–	–	84
Senior Secondary (XI–XII)	15	45	81
Higher Education	13	36	80

Source: For School Education: (i) figure from 1950-51 to 2011-12: Ministry of Human Resource Development, Government of India (website: http://mhrd.gov.in/statist). For Higher Education: Ministry of Human Resource Development, Government of India (website: http://mhrd.gov.in/statist).

By the mid-2010s, female parity in higher education was essentially reached. As figure shows, the female: male ratio in tertiary education climbed from only ~0.29 in 1971 to about 0.92 by 2016. This mirrors similar trends at the school level: The Gender Parity Index (GPI) for higher education exceeded 0.9 from the mid-2000s and reached ~1.03 by 2015–16, reflecting near-equal numbers of men and women in college.

The number of STEM graduates over the last three years and whether there are more men than women in STEM, the Ministry of Education shared the All India Survey on Higher Education (AISHE) data for the past three years, which show that while the number of males has decreased from nearly 12.9 lakh in 2017–18 to almost 11.9 lakh in 2019–20, the number of females grew from 10 lakhs to almost 10.6 lakh during the same period.

Table 3.2.a Graduates in STEM at Various Levels (UG, PG, MPhil & PhD) Last 3 Years (AISHE)

Year (AISHE)	Male	Female	Total
2017–18	12,48,056	10,02,707	22,50,763
2018–19	11,92,611	10,22,747	22,15,358
2019–20	11,88,900	10,56,095	22,44,995

Source: All India Survey on Higher Education (AISHE)

Table 3.2.b Share of Female Graduates in STEM at the Tertiary Level (%)

Year	India	Germany	United States	United Kingdom	France
2023	44.1%	28.1%	38.5%	34.6%	34.5%
2021	45.8%	27.7%	38.1%	34.1%	32.0%
2019	46.0%	25.8%	35.5%	40.5%	31.4%

2017	43.9%	27.6%	N/A	N/A	N/A
2015	42.1%	26.8%	33.4%	38.0%	31.2%
2013	42.1%	N/A	31.6%	37.3%	30.8%

Source: World bank data

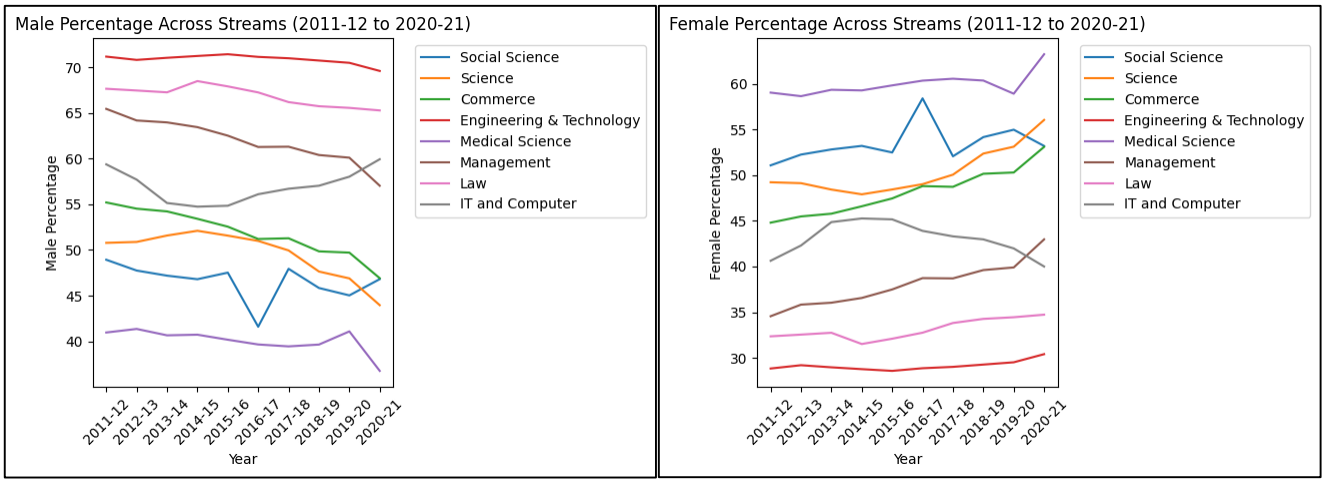


Fig 3.2 Gender parity index over year for different disciplines in higher education in India
Source: National Journal of Education Vol. XXII No. (1) January 2024 pISSN 0972-9569, eISSN 2584-2595

In India's higher education, women's share varies sharply by field. In *Engineering & Technology*, women remain a minority: AISHE data shows just 29.1% of B.Tech/B.E. enrollees in 2021-22 were female (virtually unchanged from ~28% in 2014-15) (MOE, 2022). By contrast, *Medical/Health Sciences* have the most women, e.g. 57.6% female in "Medical Science" undergraduate fields in 2021-22 (60.6% in 2014-15). *Management* (business administration) shows intermediate parity: about 36.6% women at the UG level in 2014-15, rising to 41.9% in MBA/MBA-level (PG) programs by 2021-22. *Legal education* has approached parity: AISHE 2014-15 reported ~31.2% female in UG law courses, but leading law colleges now admit roughly half women (MOE, 2022). An analysis of gender parity in higher education disciplines in India from 2011–12 to 2020–21 reveals significant variations across fields, reflecting broader socio-cultural and economic dynamics as in Fig 3.2.

*Social Sciences***:** Female enrollment in Social Sciences consistently surpassed male enrollment throughout the decade. In 2011–12, females constituted 51.07% of enrollments, increasing to 53.19% by 2020–21, indicating a steady rise in female participation in this field.

Science: The Science stream witnessed a notable shift, with female enrollment overtaking male enrollment over the years. Starting at 49.22% in 2011–12, female participation rose to 56.04% by 2020–21, highlighting a growing interest and inclusion of women in scientific disciplines.

Commerce: Initially male-dominated, the Commerce stream achieved gender parity by 2018–19. Female enrollment increased from 44.8% in 2011–12 to 53.09% in 2020–21, reflecting successful efforts to balance gender representation in commerce education.

Engineering & Technology: Despite slight improvements, Engineering & Technology remained male-dominated. Female enrollment marginally increased from 28.84% in 2011–12 to 30.41% in 2020–21, indicating persistent gender disparities in this technical field.

Medical Sciences: Contrastingly, Medical Sciences consistently exhibited higher female enrollment, rising from 59.03% in 2011–12 to 63.23% in 2020–21. This trend underscores the strong presence and growing dominance of women in medical education.

*Management***:** While male enrollment remained higher, the gender gap in Management studies narrowed over the decade. Female participation increased from 34.56% in 2011–12 to 42.97% in 2020–21, indicating progress towards gender balance in business education.

Law: The Law discipline saw gradual improvements in female enrollment, which rose from 32.36% in 2011–12 to 34.73% in 2020–21. Despite these gains, the field remains predominantly male.

Information Technology and Computer Science: Female enrollment in IT and Computer Science experienced fluctuations, peaking at 45.26% in 2014–15 before declining to 40% by 2020–21. This decline suggests challenges in sustaining female participation in these rapidly evolving fields.

Overall, the data indicates significant strides towards gender parity in several disciplines, notably in Social Sciences, Science, Commerce, and Medical Sciences. However, fields like Engineering, Law, and IT continue to exhibit gender imbalances, highlighting the need for targeted interventions to promote inclusivity and equal opportunities across all areas of higher education.

Graduate vs. Secondary-Level Enrolments

The expansion of higher education in India has not only outpaced upper-secondary enrolment but also deepened in its internal composition. Back in 1950–51, only 0.15 million students were enrolled in Classes XI–XII, compared with just 0.04 million in college or university education. At that time, the tertiary sector was very small and selective: there were around 28 universities and 578 colleges, which limited access. Over the decades, both capacity and participation soared. By 2012–13, senior-secondary enrolment had reached 1.98 million, while higher-education enrolment had climbed to 2.96 million, supported by a vastly expanded system of 628 universities and over 35,500 colleges. The growth continued into 2014–15, when there were about 2.35 million students in Classes XI–XII and nearly 3.42 million in higher education, with the institutional base reaching 711 universities and ~38,500 colleges. By 2017–18, India had 851 universities and over 41,000 colleges, signalling a structural shift in which higher-education enrolment consistently outstrips school-leaving numbers.

This quantitative expansion is matched by diversification across education levels. In 2010–11, there were 77,844 Ph.D. students, 3.27 million postgraduates, roughly 21.97 million undergraduates, 1.81 million enrolled in diploma programs, and only 57,065 in integrated courses. Over the next decade, enrolment grew significantly: by 2017–18, Ph.D. students rose to 161,412, postgraduate numbers to 4.11 million, and undergraduates to 29.02 million. Diploma enrollment climbed to 2.71 million, while integrated programs surged to 195,777. Projections suggest this upward trend has continued: by 2021–22, Ph.D. enrollment was expected to hit 212,568, postgraduates 5.22 million, undergraduates 34.14 million, diplomas about 2.92 million, and integrated courses 460,579. The compound annual growth rates (CAGR) over this period are estimated at ~11.3% for Ph.D., ~4.5% for postgraduate, ~3.7% for undergraduate, ~4% for diploma, and a remarkable ~22.1% for integrated courses.

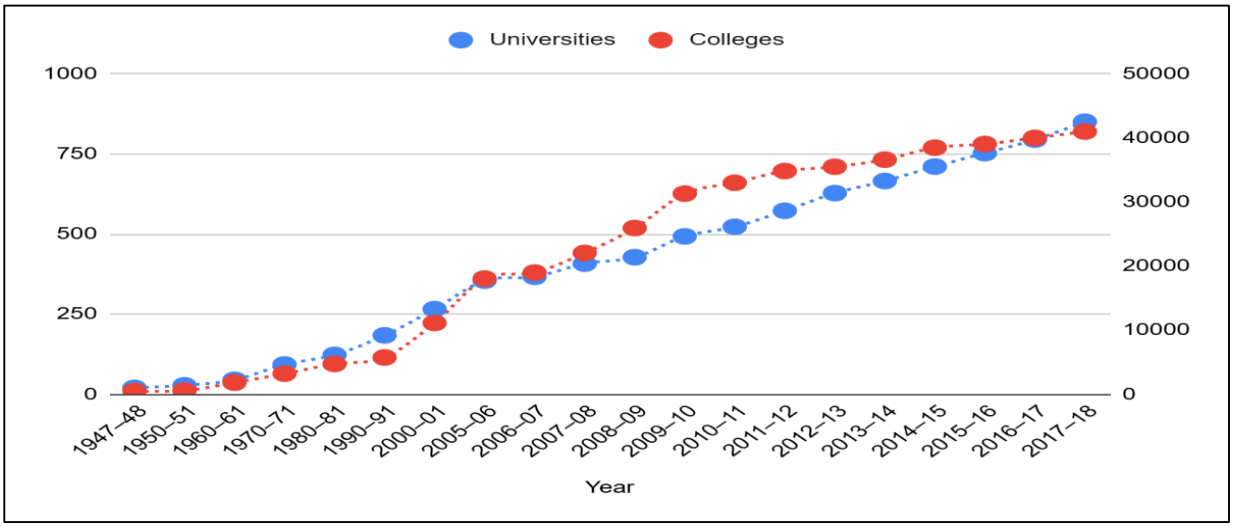
Taken together, the data show not just a surge in total enrolment, but a deliberate broadening of the higher education system: more students are entering advanced (Ph.D.) and integrated programs, while diploma and undergraduate streams continue to scale. This reflects both the expansion of institutional capacity and a shifting student demand driven by rising aspirations, more varied program offerings, and a belief in higher education as a pathway to opportunity.

Table 3.3: Total enrolment in higher secondary vs. higher education (selected years).

Year	Senior Secondary (XI–XII)	Higher Education
1950–51	0.15 million	0.04 million
2012–13	1.98 million	2.96 million

Source: Ministry of Human Resource Development, Government of India / National Institute of Educational Planning & Administration, New Delhi

Fig 3.3. Numerical status of Universities and Colleges all over India during the years 1947-48 to 2017-18



Source: 1. UGC and higher education in India. Annual reports; 2. FICCI & EY: Higher Education in India: Twelfth Five Year Plan (2012- 2017).

Social Injustice Barrier

The caste-disaggregated data on enrolment over time strongly highlight entrenched inequalities in education for *Scheduled Castes (SC)* and *Scheduled Tribes (ST***)** in India. For instance, SC male and female enrolment in primary education (Classes I–V) climbed from 72 % and 38 % in 1980–81 to 140 % and 129 % by 2010–11, yet their representation in higher education remains disproportionately lower. Likewise, ST enrolment increased from 31 ‰ (male) / 15 ‰ (female) to 77 ‰ and 72 ‰ during the same period, but their secondary and tertiary-level participation continues to lag as shown in the appendix table. Research underscores that students from SC/ST communities confront multi-layered structural barriers including poverty, social stigma, and limited school infrastructure (e.g., inadequate sanitation, libraries, and safe learning spaces) that adversely affect retention and progression (Ghosh & Chatterji, 2025; Ray Chaudhury, Das & Sarkar, 2023). Furthermore, a recent study using intersectional analysis reveals that dropout propensities are especially high for SC/ST girls, rooted in intersecting caste, gender, and economic disadvantages (NSS data; see Discover Education, 2025). Despite overall gains in enrolment, the sluggish upward mobility into higher education for SC/ST students suggests that historical caste inequities continue to restrict equitable access, demanding more robust policy interventions to address both demand- and supply-side constraints.

Table 3.4: Level-wise Enrolment and its Compound Annual Growth Rate from 2010-11 to 2020-21

Level	Ph.D.	Postgraduate (PG)	Undergraduate (UG)	Diploma	Integrated
2010-11	77,844	32,69,669	2,19,72,260	18,13,353	57,065
2011–12	81,430	36,71,908	2,31,74,950	20,71,609	74,122
2012–13	95,425	34,48,151	2,38,90,309	22,07,551	94,664
2013-14	1,07,890	38,22,219	2,55,00,325	22,85,576	1,25,002
2014-15	1,17,301	38,53,438	2,71,72,346	25,07,694	1,41,870
2015-16	1,26,451	39,17,156	2,74,20,450	25,49,160	1,55,422
2016-17	1,41,037	40,07,570	2,83,48,197	26,12,209	1,73,957
2017-18	1,61,412	41,14,310	2,90,16,350	27,07,934	1,95,777
2018-19	1,69,170	40,42,522	2,98,29,075	26,99,395	2,41,126
2019-20	2,02,550	43,12,535	3,06,47,287	26,72,562	3,00,373
2020-21	2,11,852	47,16,649	3,26,57,509	29,79,320	3,85,541
2021-22	2,12,568	52,17,753	3,41,39,233	29,16,445	4,60,579
CAGR (p.a.)	~ 11.3%	~ 4.5%	~ 3.7%	~ 4.0%	~ 22.1%

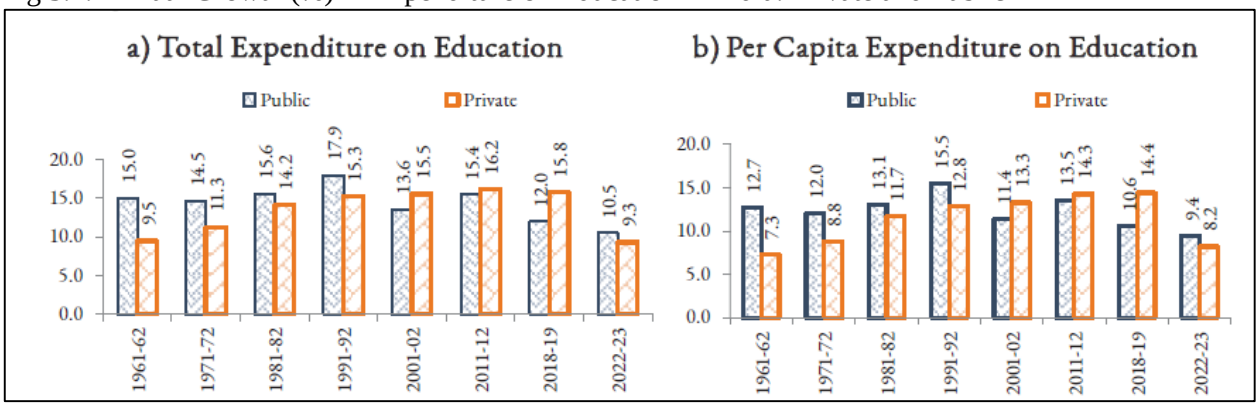
Source: Various reports from AISHE, CAGR: Author Calculation. Note: ~ indicate approx. value

Expenditure on Education

Over the past seven decades, both public and private expenditure on education in India have grown remarkably, underlining the massive expansion of the education system. According to Motkuri & Revathi (2024), per capita public spending on education rose from just ₹ 1.8 in 1951–52 to ₹ 5,555.8 in 2018–19, and is projected to reach ₹ 7,954.9 by 2022–23, during the same period, per capita private (household) expenditure surged from ₹ 2.4 to ₹ 3,805.7, and is expected to climb to ₹ 5,221.9 by 2022–23. This reflects not only the rising importance of education in household budgets but also its increasing privatization. Indeed, while public education spending grew faster than private education until the 1980s, after economic liberalization in the 1990s private expenditure began to outpace public investment. By 2018–19, public education expenditure amounted to about 3.9 % of GDP, and private spending contributed another 2.7 %, combining to 6.6% of GDP allocated to education. The declining ratio of public to private spending over time suggests that households are increasingly bearing the financial burden of education, a trend with serious implications for equity, access, and the affordability of education.

These expenditure patterns also tie into how education investment has translated into broader economic growth. Ghosh Dastidar & Chatterji (2015), in their MPRA study, use time-series econometric analysis (1951–2011) to examine how public spending in primary, secondary, and tertiary education affects India's GDP. They find that since the 1980s, all sectors of public education spending began contributing positively to economic growth, coinciding with India's shift away from a state-led growth model toward a more market-oriented regime. Before this structural shift, they argue, the effectiveness of public education investment was limited because much of the skilled labour went into bureaucratic, rent-seeking jobs rather than being productively absorbed into the economy. With economic reforms, the expansion of industry and services allowed a better utilization of educated labour, making human-capital investments more fruitful for growth.

Fig 3.4. Annual Growth (%) in Expenditure on Education in India: Private and Public



Note:1. Compound Annual Growth Rate (CAGR in %); 2. Growth of Expenditure in current prices; 3. Till 2018-19 figures are actuals, revised estimates for 2019-20, budget estimates for 2020-21and for the years 2021-22 and 2022-23 figures are projected/extrapolated (forward) based on the past growth.
Source: Motkuri & Revathi (2024)

Expenditure on Higher Education

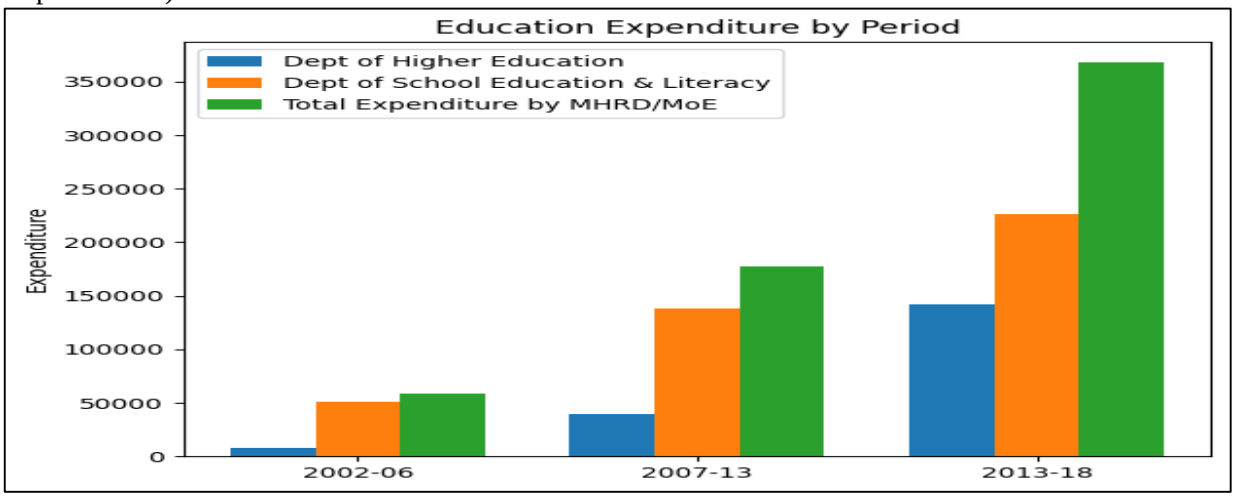
Public expenditure on education under the Ministry of Human Resource Development (now the Ministry of Education) expanded significantly between the 10th and 11th Plan periods, with a further rise in the years after 2013, although at a slower pace. During 2002–06, spending on the Department of Higher Education stood at ₹8,227 crores, which increased almost fivefold to ₹39,646 crores by 2007–08. A substantial rise continued in the post-plan period (2013–18), with higher education expenditure reaching ₹1.42 lakh crore, reflecting the expansion of central universities, IITs, and technical institutions. School education also saw a significant increase over these phases. Expenditure rose from ₹50,590 crores in 2002–06 to ₹1.38 lakh crore in 2007–13, driven by flagship programs such as Sarva Shiksha Abhiyan and the Mid-Day Meal Scheme. By 2013–18, this further increased to ₹2.26 lakh crore, though the pace of growth slowed relative to the earlier decade. Overall, the total expenditure by MHRD/MoE expanded sharply from ₹58,817 crores (2002–06) to ₹1.77 lakh crore (2007–08). Post-2013, total spending rose to ₹3.68 lakh crore, indicating continued investment but at a more moderate growth trajectory. These patterns, consistent with the trends shown in Figure 3.5 and 3.6, highlight a period of rapid expansion in the mid-90s followed by consolidation and slower growth in the subsequent years.

The expansion in expenditure aligns closely with the remarkable growth in the higher education ecosystem over the last two decades, as shown in Fig 3.5. The total number of universities increased more than fourfold from 266 in 2000–01 to 1,168 in 2021–22 reflecting a steady CAGR of 6.9%. Institutions of National Importance (INIs), which often demand higher per-student investment, grew at an even faster rate (CAGR 12.1%), rising from just 12 in 2000–01 to 149 by 2021–22. Similarly, specialized institutions such as agriculture, law, and oriental learning colleges expanded significantly, indicating a broadening of disciplinary offerings and a deepening of higher education capacity across states. General degree colleges also grew consistently, from 11,146 to 34,187 during the same period, reinforcing the increasing demand for tertiary education and the push for greater accessibility.

When situated within a longer historical trajectory, as depicted in Figure 3.5 and Table 3.5, this growth is part of a sustained expansion of educational investment that began in the early planning era. Total education expenditure rose steadily from the 1st to the 9th Five-Year Plan from ₹153 crores in 1951–56 to ₹53,524 crore in 1997–2002 with both school and higher education allocations increasing manifold. While school education has traditionally received the dominant share of funding, higher education spending also expanded significantly from the Sixth Plan onwards, coinciding with the establishment of new universities, technical institutes, and national-level institutions. This long-term rise

in expenditure laid the foundation for the rapid institutional expansion observed in the 2000s and 2010s. Together, the expenditure trends and institutional growth data underscore a structural shift in India's education system moving from foundational expansion in elementary education to capacity enhancement and diversification in higher education.

Fig 3.5 Total Expenditure on Education by MHRD/MoE during 9th, 10th and 11th plan (Values in Rupees in CR).



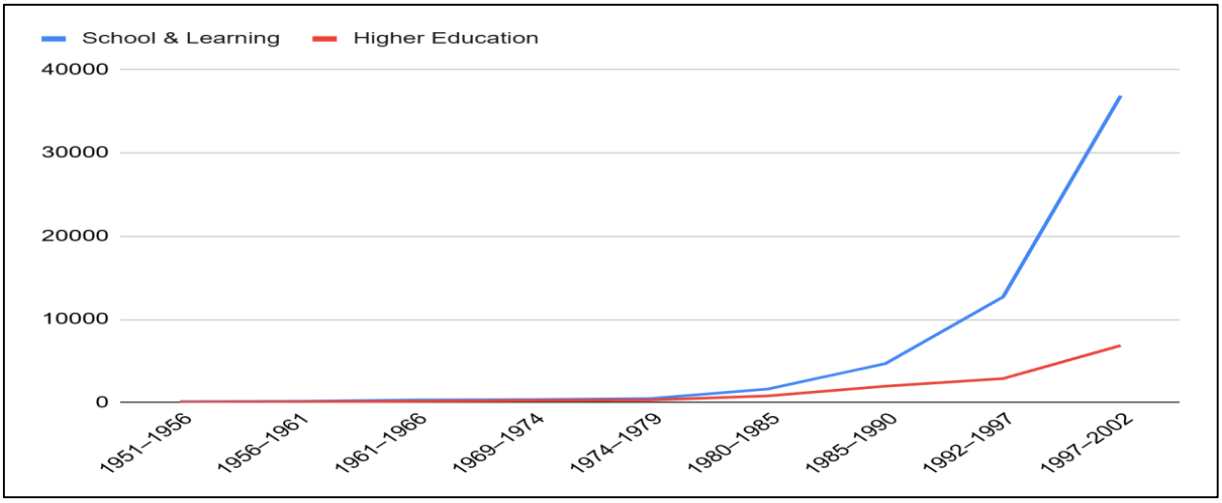
Source: Expenditure data took from various report on Analysis of Expenditure on education, GOI, (MHRD)

Table 3.5 Increase in the higher education institutions over the last two decades

Year	Universities (Total)	Institutions Deemed to be Universities	Institutions of National Importance (INI)	Arts, Science & Commerce Colleges (General Education)	Oriental Learning Colleges	Agriculture Colleges	Law Colleges
2000-01	266	46	12	11,146	1,446	455	420
2005-06	355	102	13	14,352	1,873	550	590
2010-11	523	110	33	21,392	2,100	725	875
2015-16	753	122	75	24,948	2,410	1,010	1,070
2019-20	1,043	125	135	31,390	3,124	1,698	1,402
2021-22	1,168	126	149	34,187	3,250	2,200	1,720
CAGR	0.069	0.046	0.121	0.052	0.037	0.074	0.066

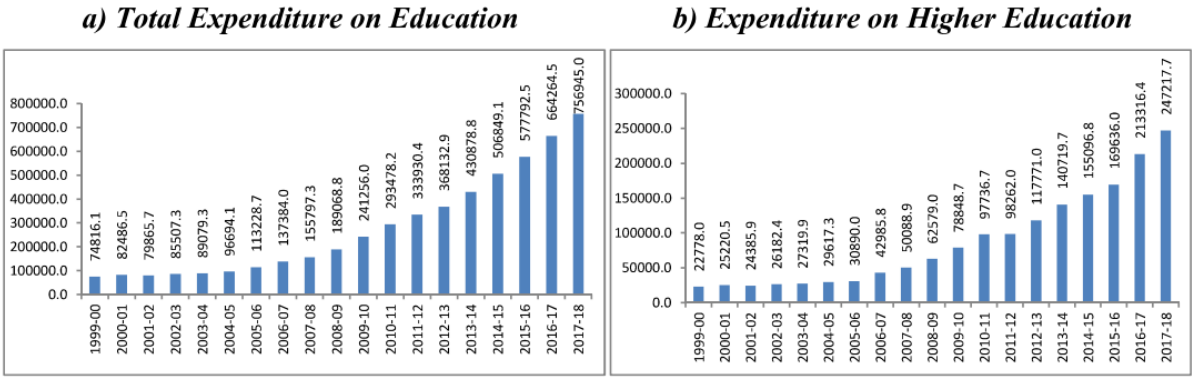
Source: 2000–2010 Data: "Selected Educational Statistics" (Annual Reports), published by the Ministry of Human Resource Development (MHRD). 2011–2022 Data: "All India Survey on Higher Education (AISHE)", published by the Ministry of Education (MoE).

Fig 3.5 MHRD Spending on Education over 1st to 9th five year plans (Values in Rupees in CR)



Source: Ministry of Human Development (now the Ministry of Education) and the Central Statistical Organization (CSO)

Fig 3.6 Total Expenditure on Education and Higher Education.
Source: Motkuri & Revathi (2024)



***Notes**: 1. Values are Rupees in Crores and in Current Prices; 2. Revenue Account of the Budgeted expenditure; 3. In respect of Expenditure on Higher Education for the period between 1999-2000 and 2004-05 the figures are Authors estimates and for the rest, they are actuals; 4. Expenditure on Higher Education consisting that of University and Higher education along with that of Technical education.*

***Source**: Ministry of Education, Govt. of India.*

Policy Insights: These data show rapid, long-term growth in tertiary enrolment alongside major gender convergence. The key messages are: (a) India's higher education sector must continue scaling up – it grew ~4-fold in the last two decades (PIB, 2024) and annual increases of ~4–5% are needed to meet ambitious GER targets (Mehta, 2025). (b) Gender gaps have closed; female students now constitute almost half of college enrolments, a success that should be consolidated (PIB, 2024). (c) Enrollment in higher education now rivals or surpasses that in Classes XI–XII, indicating a strong transition pipeline. This underscores the importance of expanding college capacity and ensuring quality secondary schooling to sustain higher-education growth.

Dropout Rates

The analysis of dropout and non-completion patterns using NSS and MHRD/UDISE+ data reveals critical transition points in India's education system. NSS 75th Round (2017–18) data in table 3.7 show that non-completion is particularly high at early schooling levels for example, 38–46% of students enrolled in primary (Class I–V) and 34–36% in upper primary did not complete their last enrolled level, while non-completion drops sharply to just 8.3% among graduates and 4.3% for postgraduate students. Similar patterns appear in the NSS 71st Round (2014–15), where 43% at the primary level and 38% at upper primary did not complete their enrollment, compared with only 5–6% at the postgraduate level, signalling strong attrition in basic education relative to higher education.

The stage-wise dropout rates from UDISE+ further illustrate long-term trends. For the transition from primary to upper primary/secondary, dropout rates were extremely high in the early decades, reaching 61% (total) in 1955–56 for Classes I–V, but gradually declined to 21% in 2015–16, indicating steady improvement. In the secondary to senior secondary transition, dropout remained substantial, fluctuating between 32% and 40% between 2007–08 and 2019–20, with the highest total dropout recorded in 2016–17 at 40.93%.

Class-wise year-on-year dropout patterns show sharp spikes during critical transition years. For instance, in 2016–17, dropout in Class 11 reached 37–38% for both boys and girls, making it the most vulnerable stage. Earlier classes show much lower attrition for example, only 2–4% dropout in Classes 2–5 in most years highlighting that the system struggles most during the shift to higher secondary education. These dropout indicators are computed using a cohort comparison method:[2]

Collectively, these statistics emphasize persistent challenges at key educational transitions especially from primary to upper primary, and from secondary to senior secondary despite overall improvements. Strengthening support during these critical years is essential for reducing dropout and improving educational continuity.

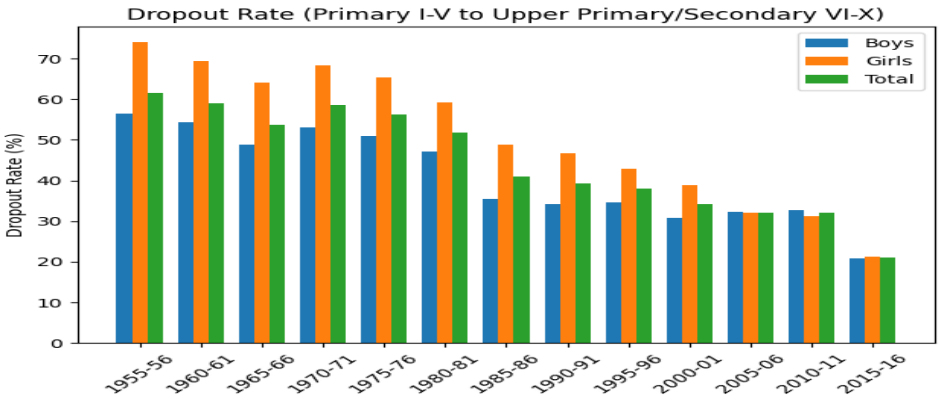
The cohort-based estimation of educational attrition in higher education (Upadhyay, 2007, Tables 3, 5 and 6) complements and sharpens the picture emerging from our UDISE+/NSS progression-based dropout estimates. While our method measures dropout as the share of students enrolled in a given grade or level in year X who do not appear in the next appropriate grade or level in the following progression years (showing long-term improvements at early grades e.g. primary-level dropout falling from over 60% in the 1950s to about 21% by 2015–16 but persistent attrition at the secondary→senior-secondary transition at roughly 32–40% in recent years and especially high loss around Class 11 where rates often exceed 28–37%), her Table 3 shows that nearly half of those "ever enrolled but currently not completed" left at or below primary level (20.5% below-primary + 28.5% primary = 49.0%) and that by the middle level cumulative non-completion reaches 77.1% a finding that corroborates our conclusion that the bulk of non-completion is concentrated in early and middle schooling[3]. At the fiscal end, Upadhyay's (2007) cohort calculations make the losses concrete: she estimates about Rs. 305.66 crore lost to dropout at graduate-and-above levels in 1995–96 (roughly 8% of public higher-education expenditure that year). Her capacity-utilisation evidence (Table 5 for graduate courses and Table 6 for postgraduates) further shows that undergraduate programmes suffered larger per-student fiscal inefficiencies (A/(3B) ratios in the ~1.1–1.7 range and capacity utilization commonly between 58% and 91% across sessions) while postgraduate cohorts were consistently better utilised (A/(2B) ≈ 1.1–1.2 and

[2] [Enrolled in Class/Level A in Year X – Enrolled in Class/Level A+1 in Year X+1] / Enrolled in Class/Level A in Year X, which captures the proportion who fail to appear in the subsequent class or stage.

[3] Upadhyay translates cohort shortfalls directly into student- and expenditure-attrition using Ws = (3B − C)/3B and WE = (3B − C) ·A/3B (and the 2-year analogue for postgraduates).

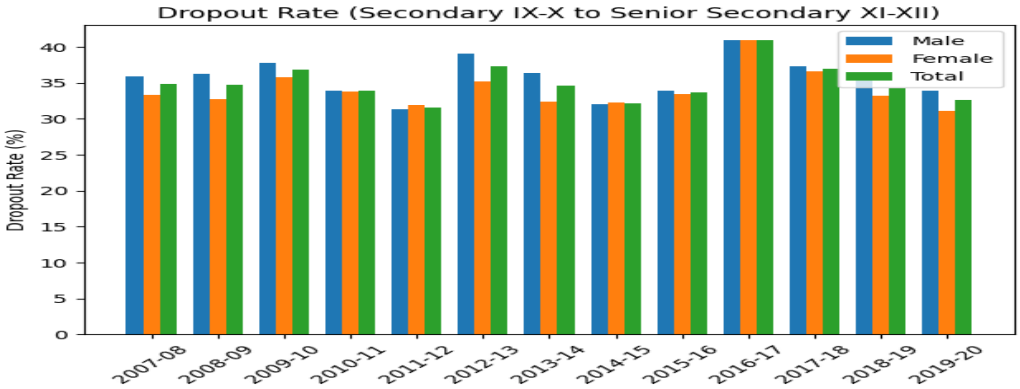
capacity utilisation ≈ 84–90%). Taken together, the two approaches tell a unified story: numerically, most attrition (and therefore headcount-related wastage) arises in early grades and middle school (Upadhyay's NSSO Table 3 and our NSSO/UDISE+ results), but the monetary consequences are concentrated where cohort shortfalls meet high unit costs notably at the undergraduate level (Upadhyay's Tables 5–6 and her Rs.305.66 crore estimate). This combined evidence argues for a two-pronged policy response: redouble efforts to reduce early-grade and middle-level dropout to address the largest headcount losses and simultaneously improve capacity utilization and labour-market alignment at the undergraduate level (including expansion of relevant vocational and technical alternatives) to cut per-student fiscal waste and raise post-completion employability.

Fig 3.7.a Dropout rate calculated as for the students Primary (I-V) did not show up for the Upper Primary and Secondary (VI-X).



Source: Author Calculation, Data Source: Ministry of Human Resource Development, Government of India / National Institute of Educational Planning & Administration, New Delhi,
2013 onward, UDISE+ data[4]

Fig 3.7.b Dropout rate calculated as for the students Secondary Education (IX-X) did not show up for the Senior Secondary (XI-XII).



Source: Author Calculation, Data Source: Ministry of Human Resource Development, Government of India / National Institute of Educational Planning & Administration, New Delhi, 2013 onward, UDISE+ data[5]

[4] Method: [Enrolled in group A in year X - Enrolled in proceeding group in year (X+number of year in group)]/Enrolled in group A in year X

[5] Method: [Enrolled in group A in year X - Enrolled in proceeding group in year (X+number of year in group)]/Enrolled in group A in year X

Table 3.6 Class Wise Dropout rate (Person enrolled in previous class does not show up in preceding)

BOYS											
Year	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12
2013-14	6.15	2.46	3.42	3.31	9.83	0.90	1.19	2.61	2.76	30.28	-2.49
2014-15	5.28	2.32	3.10	2.90	10.04	1.87	1.87	2.70	8.64	31.38	0.75
2015-16	4.52	1.92	3.06	3.12	9.82	1.49	2.01	4.26	8.13	30.46	-0.62
2016-17	7.23	3.88	4.79	5.47	11.23	3.80	4.23	4.32	10.71	37.38	12.63
2017-18	2.91	1.57	2.53	2.81	9.04	2.35	2.63	5.43	10.38	32.39	-4.34
2018-19	4.06	2.77	3.77	3.58	9.24	2.12	2.58	5.52	9.36	31.14	-0.62
2019-20	1.02	-0.38	0.42	0.96	6.83	-0.33	0.68	4.03	8.70	28.83	1.54
Girls											
	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12
2013-14	5.48	2.40	3.76	3.89	9.47	1.19	1.79	7.34	3.47	29.71	-2.52
2014-15	4.20	1.88	3.01	2.99	9.57	1.69	1.86	7.52	8.62	31.36	1.20
2015-16	3.51	1.42	2.82	3.04	9.20	1.26	1.81	8.42	7.97	29.85	-0.87
2016-17	6.72	3.84	4.95	5.68	10.95	3.62	4.10	9.47	10.22	37.86	12.68
2017-18	2.08	1.29	2.41	2.82	8.45	2.22	2.68	9.07	9.95	31.59	-5.54
2018-19	3.21	2.61	3.82	3.52	8.70	1.93	2.52	8.77	8.50	28.81	-2.08
2019-20	0.04	-0.73	0.19	0.66	6.29	-0.79	0.42	7.20	7.33	26.08	1.25
	Total										
	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12
2013-14	5.83	2.43	3.59	3.59	9.66	1.04	1.48	4.91	3.09	30.01	-2.50
2014-15	4.76	2.11	3.05	2.94	9.81	1.78	1.86	5.05	8.63	31.37	0.96
2015-16	4.04	1.68	2.95	3.08	9.52	1.38	1.91	6.28	8.06	30.17	-0.74
2016-17	6.98	3.86	4.87	5.57	11.09	3.71	4.17	6.83	10.48	37.61	12.65
2017-18	2.51	1.43	2.47	2.81	8.75	2.29	2.66	7.20	10.18	32.01	-4.91
2018-19	3.65	2.70	3.79	3.55	8.98	2.03	2.55	7.10	8.95	30.03	-1.32
2019-20	0.55	-0.55	0.31	0.82	6.57	-0.55	0.55	5.56	8.05	27.51	1.40

Source: Author Calculation, raw data sourced from UDISE+[6]

Table 3.7.a Percentage of ever-enrolled persons, who did not complete the last enrolled level of education, by level and gender, NSS 75th Round (2017-18).

Level Enrolment (Category)	Male (%)	Female (%)	Total (%)
enrolled in NFEC*	0	80	66.67
enrolled in TLC/AEC	100	100	100
other non-formal	25	50	44.44
below primary (nursery/kindergarten/preparatory)	45.63	46.1	45.89
primary (class I–V)	37.8	38.83	38.36
upper primary/middle	34.34	35.66	34.98
secondary	33.94	32.15	33.09
higher secondary	16.72	16.58	16.66
diploma/certificate (up to secondary)	32.2	37.5	34.1
diploma/certificate (higher secondary)	22.08	23.98	22.68
diploma/certificate (graduation & above)	14.26	9.88	12.6
graduate	8.38	8.33	8.36
post graduate & above	4.89	3.7	4.28

*NFEC: Non Formal Education Course, TLC/AEC: Total Literacy Campaign or Adult Education Centre

[6] Method: [Enrolled in class A in year X - Enrolled in class (A+1) in year (X+1)]/Enrolled in class A in year X

Source: Author Calculation, NSS (MOSPI), 2018

Table 3.7.b Percentage of ever-enrolled persons, who did not complete the last enrolled level of education, by level and gender, NSS 71st Round (2014-15).

Level Enrolled	Male (%)	Female (%)	Total (%)
enrolled in NFEC	0	0	0
Postgraduate & above	5.36	5.96	5.69
below primary	5.97	5.42	5.71
diploma/certificate (up to secondary)	8.62	13.48	10.46
diploma/certificate (higher secondary)	11.28	15.38	12.8
diploma/certificate (graduation & above)	15.22	18.4	16.11
graduate	10.31	10.3	10.3
primary	43	42.86	42.93
secondary	42.19	38.41	40.32
Higher Secondary	25.03	21.66	23.39
upper primary/middle	38.16	37.65	37.91
other non-formal	0	0	0

Source: Author Calculation, NSS (MOSPI), 2015

Probability of Finding job

The statistics demonstrate a consistent and robust positive association between educational attainment and the probability of employment across census years. The probability measure is defined as:

Probability of finding a job = Main Workers / (Main Workers + Marginal Workers + Persons Seeking Employment).

Certain methodological features of the data warrant careful interpretation. The 1961 census did not clearly distinguish between technical and non-technical diplomas, and the 1961 and 1971 rounds did not report marginal workers, which requires cautious comparison across time. The observed decline in the number of rural illiterate female workers between 1961 (552.4 lakhs) and 1971 (258 lakhs) reflects an important improvement in definitional precision. The 1961 census adopted a broader definition of "worker," including unpaid family farm helpers, whereas subsequent rounds applied more refined criteria, enhancing data consistency in later years.

Within this framework, the long-term trend is encouraging. Between 1961 and 1991, the highest employment probabilities are consistently observed among Technical Diploma holders and Graduates, frequently exceeding 80–90 percent for males in both rural and urban areas. This highlights the strong labour-market value of higher and technical education. Although rural illiterate females record comparatively lower probabilities, this underscores the transformative potential of educational expansion for improving employability in this segment. Urban–rural differentials further illustrate the dynamism of urban labour markets, while also indicating the scope for rural development initiatives to yield substantial gains.

In the post-2000 period, the 2001–2011 comparison reflects structural adjustments accompanying rapid educational expansion. For example, among individuals classified as "Matric/Secondary but below Graduate," total probability moderates slightly from 0.75 (2001) to 0.73 (2011), suggesting evolving labour-market requirements and highlighting the increasing importance of advanced and specialized skills. Notably, higher and technical education categories maintain strong

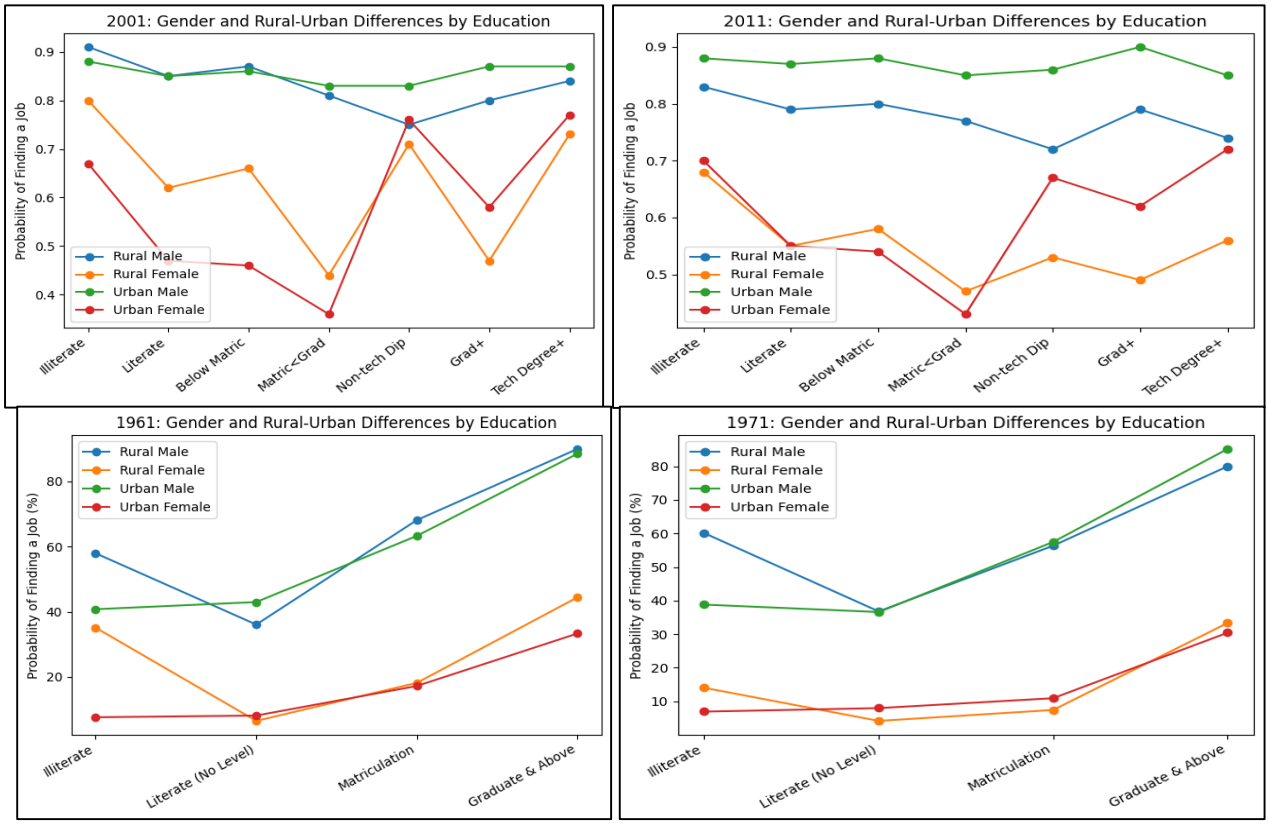
employment probabilities—generally around 0.78–0.84—demonstrating the sustained returns to specialized qualifications even amid changing economic conditions.

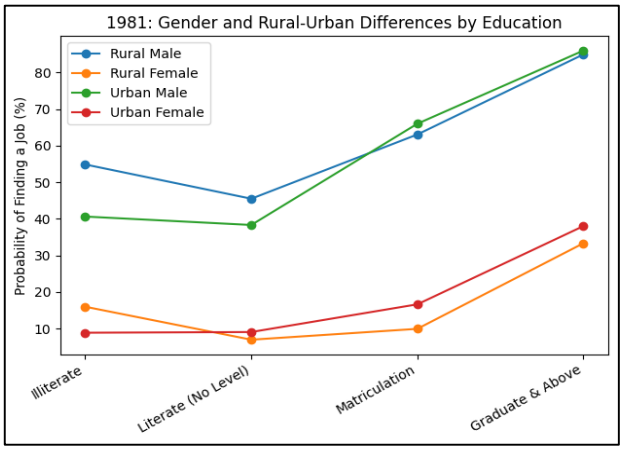
Gender differentials, while present across periods, also point to significant opportunities for inclusive growth. Even at graduate and technical levels, the persistence of gaps indicates untapped potential that can be leveraged through supportive labour-market and social policies. Urban labour markets offer relatively stronger outcomes, and this experience can inform strategies to enhance employment prospects across regions.

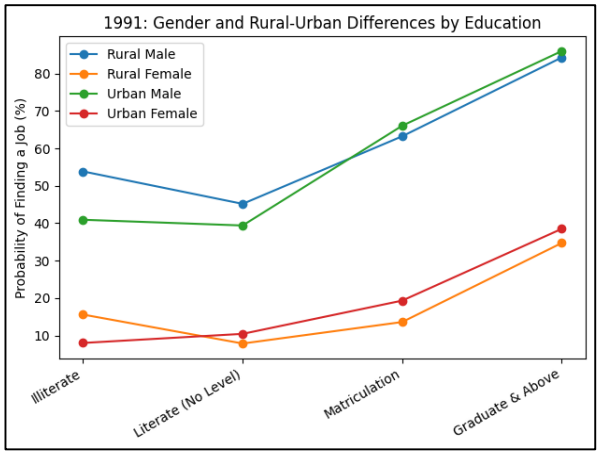
Overall, after accounting for definitional refinements and data features in earlier census rounds, four key patterns emerge:

i) higher education, particularly technical qualifications, is strongly associated with enhanced employability;
ii) the persistence of gender differentials highlights substantial scope for expanding women's economic participation;
iii) urban labour markets demonstrate comparatively strong employment absorption, offering replicable models for broader development; and
iv) evolving employment patterns at intermediate education levels emphasize the growing premium on advanced and specialized skills in a modernizing economy.

Fig 3.8 Probability of finding a job.







Source: Author calculation based on the different census data.
*1961 the division of technical and non-technical diplomas was not distinct.
* 1961 and 1971 do not have data on the marginal worker
"The" "Worker"" Inflation: You will notice that Female Rural Illiterate Workers in 1961 were 552.4 lakhs.
In 1971, this number dropped to 258 lakhs. This wasn't because women stopped working, but because the 1961 definition was very liberal, counting anyone who helped in family farms as a worker."
*1981 census data excludes Assam and Jammu, while till 1981 census excluded Jammu

4. Conclusion

This paper examined the long-term evolution of higher education in India from Independence to the National Education Policy (NEP) 2020, with emphasis on expansion, governance reform, financing, and gender equity. Using secondary data from AISHE, Census of India, NSSO, and official policy documents, the analysis shows substantial growth alongside continuing structural and equity-related considerations.

The expansion has been notable. Enrolment increased from about 1.7 million in 1950–51 to over 43 million in 2021–22, nearly a 24-fold rise (AISHE, 2022). Universities expanded from 28 in 1947 to more than 1,100, and colleges from around 500 to over 43,000. The Gross Enrolment Ratio (GER) rose from below 1 percent in the early 1950s to about 28 percent by 2020–21, indicating sustained broadening of access, though participation remains below that of many middle- and high-income countries.

Gender outcomes reflect steady improvement. Female GER has approached parity with males, and women now constitute nearly half of total enrolment (AISHE, 2022). While representation has strengthened at the undergraduate level, disciplinary imbalances persist, with lower participation in engineering and technology. NSSO-based evidence suggests that socio-economic status, parental education, and household income continue to shape women's access, underscoring the relevance of intersectional inequalities.

Governance structures evolved alongside system growth. The creation of the UGC and AICTE established a centralized regulatory framework; however, regulatory overlap has at times constrained institutional autonomy. NEP 2020 proposes regulatory consolidation and outcome-based oversight, aiming to enhance coherence and academic flexibility.

Financing remains a key policy variable. Public expenditure on education has generally remained below the long-standing 6 percent GDP target, with higher education receiving a modest share.

Although aggregate spending has increased, rapid enrolment growth has moderated per-student expenditure, raising quality-related concerns.

Overall, India's higher education system demonstrates sustained expansion and improved gender inclusion. Going forward, the effective implementation of NEP 2020—supported by stable financing, institutional capacity-building, and targeted inclusion strategies—will be central to strengthening equity, quality, and long-term system resilience.

References

Agarwal P. (2009). *Indian Higher Education - Envisioning the Future*. SAGE Publications Pvt. Ltd., New Delhi, India

Ali, Mohammad Ghulam. "Post-Independence Initiatives in the Education Sector in India: A Review Research." *Online Submission* (2025).

Anandakrishnan M. (2007). Critique of Knowledge Commission, *Economic and Political Weekly, 42*(7):557- 560

Béteille, A. (2002). *Caste, inequality and affirmative action*. Geneva: International Institute for Labour Studies.

Business Standard. (2025, December 16). *New higher education regulator won't have funding powers: Pradhan*. https://www.business-standard.com/education/news/vbsa-to-replace-ugc-aicte-ncte-but-will-have-no-funding-powers-pradhan-125121601284_1.html

Department of Women, Child Development (1998). *National Perspective Plan for Women 1988-2000 AD*. Ministry of Human Resources, Department of Women and Child Development.

Desai, S., & Kulkarni, V. (2008). Changing educational inequalities in India in the context of affirmative action. *Demography, 45*(2), 245-270.

Deshpande S. (2016). Higher Education an Uncertain Policy Process. *Economic and Political Weekly, L1*(35):37-43.

Deshpande, A. (2011). The grammar of caste: Economic discrimination in contemporary India. *Oxford University Press*.

European Commission. (2023). *Education and training monitor: France*. Publications Office of the European Union.

Eurostat. (2024, May 27). *43 % of EU's 25-34-year-olds have tertiary education*. European Commission. Retrieved from https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240527-1

Gandhi Kingdon, G. (2002). The gender gap in educational attainment in India: How much can be explained? *Journal of Development Studies, 39*(2), 25-53.

Ghosh AK. (2003). Female literacy and social development. *Social change,33*(4):65-72.

Government of India, Ministry of Education. (1966). *Education and national development: Report of the Education Commission (1964–1966)*. Government of India Press.

Government of India, Press Information Bureau. (2025, December 15). *Shri Dharmendra Pradhan introduces Viksit Bharat Shiksha Adhishthan Bill, 2025 in Lok Sabha today* [Press release].

Government of India. "National policy on education." *MHRD* (1986).

Government of India. (1956). The University Grants Commission Act, 1956 (Act No. 3 of 1956). New Delhi: India Code.

Government of India. (1968). National Policy on Education 1968. Ministry of Education.

Government of India. (1987). The All India Council for Technical Education Act, 1987 (Act No. 52 of 1987). New Delhi: India Code.

Hahn, Y., Islam, A., Nuzhat, K., Smyth, R., & Yang, H. S. (2018). Education, marriage, and fertility: Long-term evidence from a female stipend program in Bangladesh. *Economic Development and Cultural Change, 66*(2), 383-415.

Hatekar N. (2009). Changing Higher Education Scenario in India. *Economic and Political Weekly, XLIV* (38):22-23.

Ichino, A., Rustichini, A., & Zanella, G. (2022, June 23). *College education, intelligence, and disadvantage: Policy lessons from the UK, 1960-2004* (CEPR Discussion Paper No. DP17284). Centre for Economic Policy Research.

Indian Express. (2025, December). *'Role for states': Pradhan defends higher education regulator Bill*. https://indianexpress.com/article/education/role-for-states-pradhan-defends-higher-education-regulator-bill-10424132/

Jandhyala B. G. Tilak. (2007). The Kothari Commission and Financing of Education. *Economic and Political Weekly*, *42*(10), 874–882.

Jawli N. Major Strides in Higher Education, Employment News, 2015; XL (21):96.

Joseph T. (2007). Commission versus Commission in Higher Education. *Economic and Political Weekly*, 15:20-23.

Kingdon, G. G. (2007). The progress of school education in India. *Oxford Review of Economic Policy*, *23*(2), 168-195.

Kolhatkar MR. (2012). *Education and Federalism in India*. Rawat Publications, Jaipur, India:

Kumar TR, Sharma V. (2003). Downsizing Higher Education: An Emergent Crisis. *Economic and Political Weekly*, 15:603-607.

Mathur AB (1992). The Decline of Higher Education in India. *The Indian Journal of Political Science*, *53*(1):102-117.

Mehta, A. (n.d.). *NPE (1986), Part IV: Education for Equality*. EducationForAllInIndia. Retrieved November 20, 2025, from https://www.educationforallinindia.com/page53.html

Mehta, A. C. (2025, November 19). *Can India achieve 50% gross enrolment ratio in higher education by 2035? The critical role of school education efficiency*. Education for All in India. https://educationforallinindia.com/can-india-achieve-50-gross-enrolment-ratio-in-higher-education-by-2035/#:~:text=AISHE%202021%E2%80%9322%20reports%20a%20higher,by%202035 educationforallinindia.com

Ministry of Human Resource Development, Government of India. (2013). *Rashtriya Uchchatar Shiksha Abhiyan: Mission Document* (Final Version). Government of India. https://www.education.gov.in/sites/upload_files/mhrd/files/upload_document/RUSA_final090913.pdf

Mohanty, J. (2004). Modern trends in Indian education.

Motkuri, V., & Revathi, E. (2024). Private and Public Expenditure on Education in India: Trend over last Seven Decades and impact on Economy. Indian Public Policy Review, 5(1 (Jan-Feb)), 90-112.

Nandi, A., Haberland, N., & Ngo, T. D. (2023). The impact of primary schooling expansion on adult educational attainment, literacy, and health: Evidence from India's Sarva Shiksha Abhiyan. *International Journal of Educational Development*, *102*, 102871.

NITI Aayog. (2025). *Expanding quality of higher education through states and state public universities*. NITI Aayog, Government of India. https://www.niti.gov.in/sites/default/files/2025-02/Expanding-Quality-Higher-Education-through-SPUs.pdf

OECD. (2025). *Education at a glance 2025*. OECD Publishing. Retrieved from https://www.oecd.org/en/publications/education-at-a-glance-2025_1c0d9c79-en.html

Office of the Registrar General & Census Commissioner, India. (1983). *Census of India 1981, Series-1, India, Part II-Special: Report and tables based on 5 per cent sample data*. Controller of Publications.

Padmanabhan C. A. (2014). Mission Rebuffing a Vision Rashtriya Ucchatar Shiksha Abhiyan. *Economic and Political Weekly, XLIX*(14):19-21.

Pathak B.K. (2014). Critical Look at the Narayana Murthy Recommendations on Higher Education", *Economic and Political Weekly, XLIX* (3):72-74.

Pradhan, J.S., et.al. (2023). History of Education in India, Centre for Distance and Online Education, Fakir Mohan University, Odisha, India.

Press Information Bureau, Government of India. (2024, January 25). *Ministry of Education releases All India Survey on Higher Education (AISHE) 2021-22* (Release ID: 1999713). https://www.pib.gov.in/PressReleasePage.aspx?PRID=1999713

PRS Legislative Research. (2025). *The Viksit Bharat Shiksha Adhishthan Bill, 2025*.

Sahni, R., & Kale, S. (2004). GATS and higher education: Some reflections. *Economic and Political Weekly*, 2174-2180.

Sarma, M., & Daimary, P. (2024). Gender Disparity in Enrolment in Higher Education Institutions: Trend Analysis.

Schenkman, A. S. (1954). Higher education in India. *Far Eastern Survey*, *23*(2), 24-28.

Sen, D. (2016). Higher education policies the Indian experience since independence. *International Journal of Multidisciplinary Education and Research, 1 (10)*.

Sharma S. (2002). *History and Development of Higher Education in India*. Sarup & Sons, New Delhi, India.

Sharma, K. A. (2013). *Sixty Years of the University Grants Commission: Establishment, Growth and Evolution*. University Grants Commission.

Singh A. Challenges in Higher Education, Economic and Political Weekly, 2004, 2155-2158.

Srivastava M. A. (1994). Critique of the History of Higher Education in India. Working Paper No. 1220, IIM, Ahmedabad.

Subramanian T.S. (2016*).* Education in Disarray-Need for Quality Upgradation and Inclusivity. *Economic and Political Weekly*, 2016; L1(35):30-33.

Supreme Court Observer. (2026, January 29). *Supreme Court stays 2026 UGC equity regulations*. https://www.scobserver.in/journal/supreme-court-stays-2026-ugc-equity-regulations/

The Times of India. (2026, January). *'Vague, capable of misuse': SC stays new UGC rules amid uproar—key quotes*. https://timesofindia.indiatimes.com/india/vague-capable-of-misuse-sc-stays-new-ugc-rules-amid-uproar-key-quotes/articleshow/127763238.cms

Tilak JBG. (2013): *Higher Education in India - In Search of Equality, Quality and Quantity*. Orient Blackswan Pvt. Ltd, Hyderabad, India.

Tilak, J. B. (2003). Higher education and development. In *International Handbook of Educational Research in the Asia-Pacific Region: Part One* (pp. 809-826). Dordrecht: Springer Netherlands.

Tilak, J. B., Tilak, J. B., & Ghosh. (2018). *Education and development in India*. Palgrave Macmillan.

Upadhyay, S. (2007). Wastage in Indian higher education. *Economic and Political Weekly*, 161-168.

Weisskopf, T. E. (2004). Impact of reservation on admissions to higher education in India. *Economic and political weekly*, 4339-4349.

Appendix

Table A.1. Level Wise Enrolment Schedule Cast and Schedule Tribe

	ST						SC					
	Primary (I–V)			Higher Education			Primary (I–V)			Higher Education		
Year	M	F	Total	M	F	Total	M	F	Total	M	F	Total
1980-81	31	15	46	NA	NA	NA	72	38	110	NA	NA	NA
1983-84	37	20	57	NA	NA	NA	80	45	125	NA	NA	NA
1986-87	42	24	66	NA	NA	NA	79	46	125	NA	NA	NA
1989-90	49	29	78	NA	NA	NA	95	59	154	NA	NA	NA
1992-93	50	33	83	NA	NA	NA	103	71	174	NA	NA	NA
1995-96	56	38	94	NA	NA	NA	113	79	192	NA	NA	NA
2000-01	63	47	110	NA	NA	NA	121	91	212	NA	NA	NA
2005-06	75	66	141	4	2	6	140	113	253	10	6	16
2006-07	76	68	144	4	3	7	145	118	263	12	6	18
2007-08	77	70	147	6	3	9	137	126	263	15	9	24
2008-09	78	72	150	6	3	9	140	127	267	14	8	22
2009-10	77	72	149	7	4	11	135	125	260	15	9	24
2010-11	77	72	149	7	5	12	140	129	269	17	13	30
2011-12	79	74	153	7	6	13	148	139	287	20	16	36
2012-13*	78	74	152	7	6	13	141	132	273	21	17	38
2013-14*	76	71	147	8	7	15	136	127	263	23	19	42
2014-15*	73	68	141	9	7	16	134	126	260	25	21	46
2015-16*	71	66	137	9	8	17	133	124	257	26	22	48

Note: from 1950-51 to 1980-81, figures for Class XI-XII include Class IX-X
Data Source: Ministry of Human Resource Development, Government of India / National Institute of Educational Planning & Administration, New Delhi
* indicate provisional data
https://www.education.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf?utm_source=chatgpt.com