

Employability and Skill Mismatch among Higher Education Graduates in Haryana

Anu Jindal

Research scholar, Department of Economics Guru Kashi University,

Talwandi Sabo Bathinda Email: Anujindalavi@gmail.com

Dr. Amandeep Kaur

Assistant Professor, Department of Economics Guru Kashi University,

Talwandi Sabo Bathinda Email: dramandeep.kaur@gku.ac.in

Abstract

The expansion of higher education in India, particularly in states like Haryana, has raised expectations about improved employment outcomes and economic growth. Haryana, a rapidly industrializing state with prominent hubs such as Gurugram, Faridabad, and Manesar, has witnessed substantial growth in higher education institutions over the past two decades. However, despite rising enrolment rates and diversified academic offerings, the employability of graduates remains a pressing concern. A persistent skill mismatch between what higher education institutions deliver and what industries demand has resulted in growing graduate unemployment, underemployment, and workforce inefficiencies.

This paper examines employability and skill mismatch among higher education graduates in Haryana by integrating secondary data from state-level statistical abstracts. It further considers discipline-wise employability patterns, rural–urban and gender disparities, and the structural weaknesses of the current higher education system. Preliminary findings indicate that while Haryana’s urban-industrial districts demonstrate higher levels of graduate absorption, many graduates are employed in jobs that do not require higher qualifications, reflecting over-education. Simultaneously, graduates often lack soft skills, digital competencies, and industry-oriented expertise, pointing to under-skilling. Rural and female graduates face an additional disadvantage in securing employment due to infrastructural gaps, socio-cultural barriers, and weak industry-academia linkages.

The paper argues that bridging the employability gap requires policy reforms directed towards curriculum restructuring, skill-based learning integration, and stronger collaboration between academia and industry. It concludes that enhancing employability is not only critical for improving individual career outcomes but also for sustaining Haryana’s economic growth

trajectory in a competitive global environment.

Keywords: Employability, Skill Mismatch, Higher Education, Haryana, Labour Market, Industry-Academia Linkages

Introduction

Higher education plays a pivotal role in shaping human capital and enabling socio-economic development. In knowledge-driven economies, the capacity of graduates to secure meaningful employment is often seen as the most tangible outcome of educational investment. India, with one of the world's largest youth populations, has experienced an unprecedented expansion in higher education, yet graduate unemployment and underemployment remain serious challenges. Employability—the ability of graduates to obtain and sustain jobs that match their education and skills—has emerged as a central policy concern.¹

Haryana presents a paradox in this context. On one hand, it has emerged as one of India's fastest-growing states, marked by robust industrial growth, especially in Gurugram, Faridabad, and Manesar, where multinational corporations, IT firms, and manufacturing clusters dominate. On the other hand, rural districts such as Nuh, Mahendragarh, and Jhajjar lag in employment opportunities, infrastructure, and skill development initiatives.² Despite the proliferation of universities, colleges, and technical institutes in the state, the mismatch between academic training and labor market requirements has widened.

Skill mismatch in Haryana's higher education landscape emerges in two significant forms. The first is over-education, where graduates find themselves employed in positions that demand qualifications lower than what they possess, leading to underutilization of their academic training. The second is under-skilling, which occurs when graduates, despite holding degrees, lack the practical competencies and industry-relevant abilities required for higher-level or specialized jobs. Together, these mismatches not only restrict individual career growth but also undermine the efficiency of the labor market and weaken the state's capacity to harness its educated workforce effectively. Haryana reflects both patterns. Engineering and management graduates, for instance, often enter low-paying jobs unrelated to their discipline, while arts and commerce graduates face limited demand due to weak professional linkages. Employers frequently report dissatisfaction with the quality of graduates, citing poor communication skills, lack of critical thinking, inadequate digital literacy, and limited exposure to workplace

environments. This study investigates the multifaceted challenges of employability faced by higher education graduates in Haryana, with a particular focus on how disciplinary backgrounds, skill relevance, and socio-demographic factors shape labor market outcomes. It examines the employability levels of graduates across diverse fields of study while analysing the extent of skill mismatch that persists between university training and industry requirements. Further, the research explores structural disparities in employment opportunities, emphasizing rural–urban divides and gender-specific constraints that limit equitable access to jobs. Drawing on these insights, the study aims to suggest targeted policy measures capable of realigning higher education with the evolving needs of the labor market, thereby enhancing both individual career prospects and the state’s human capital development.

Drawing upon secondary data sources such as the All India Survey on Higher Education (AISHE), the Periodic Labour Force Survey (PLFS), and state statistical abstracts, along with relevant scholarly literature, this paper employs descriptive and comparative analysis³. By situating Haryana’s experience within broader debates on employability in India, it contributes to an evidence-based understanding of higher education’s role in labor market integration.

The paper argues that improving employability in Haryana requires a paradigm shift in higher education delivery—one that integrates skill-based training, enhances industry-academia collaboration, and ensures equitable access to opportunities for both rural and urban graduates. Strengthening employability is not only crucial for individual livelihood security but also for sustaining Haryana’s economic competitiveness and inclusive growth in the era of globalization.

The literature on employability and skill mismatch highlights a growing concern across global, national, and regional contexts. Internationally, employability has shifted from a narrow focus on job acquisition to a broader framework emphasizing adaptability, transferable skills, and lifelong learning, with skill mismatch leading to underutilization of human capital (Yorke, 2006; Fugate & Kinicki, 2008; OECD, 2017). In India, despite rapid expansion in higher education, graduate employability remains low, with surveys such as AISHE (2020), Nasscom (2019), and India Skills Report (2022) noting that fewer than half of graduates are deemed employable.⁴ NSSO and PLFS data further underline rising educated unemployment, largely due to outdated curricula, limited vocational orientation, and weak industry linkages⁵ (Mehrotra & Parida, 2019; ILO, 2021). Gender disparities and rural–urban divides exacerbate

inequalities, with women and rural graduates facing greater challenges in accessing quality employment. Haryana exemplifies these issues: while urban centers like Gurugram and Faridabad benefit from strong industry linkages, rural districts struggle with poor infrastructure, limited faculty quality, and weak placement networks (Haryana State Higher Education Council, 2022; Kumar & Singh, 2020). Female graduates also face cultural and mobility barriers, restricting their transition to the workforce (Sharma, 2021). Theoretically, Human Capital Theory (Becker, 1964) and employability frameworks (Yorke, 2006) suggest that without aligning higher education to labor market needs, expansion alone leads to educated unemployment and persistent skill mismatches.

While India's employability debate is well-documented, Haryana's unique context of industrial expansion alongside educational disparities remains understudied. Little is known about discipline-specific skill mismatches, rural–urban variations, and employer perspectives within the state. The impact of recent policy interventions on graduate outcomes has also not been systematically assessed. This study addresses these gaps by providing a focused, comparative, and data-driven analysis of employability challenges among higher education graduates in Haryana.

Methodology

The study uses a descriptive and analytical design with an exploratory approach to understand employability challenges and skill mismatches among higher education graduates in Haryana. The analysis is based mainly on secondary data, including enrolment and institutional capacity statistics, household education expenditure, labor market outcomes, and state-level reports on higher education.⁶ Additional insights are drawn from employer surveys and national-level reports that highlight gaps between academic learning and industry requirements.

The scope of the study is limited to graduates from both general and professional courses, with comparisons made between urban–industrial districts such as Gurugram and Faridabad, and rural–educationally lagging regions such as Nuh and Mahendragarh. Employability outcomes are assessed in terms of unemployment, income, job stability, and workforce participation, while skill mismatches are identified through over-education and misalignment between field of study and type of job.

The tools of analysis include descriptive statistics, cross-tabulations, a composite

employability index, a skill mismatch matrix, and regression models to examine education–employment linkages. The study acknowledges certain limitations, such as reliance on secondary data and the absence of detailed state-level employer surveys. However, the use of multiple data sources and triangulation with national studies helps to address these gaps.⁷ Ethical standards are maintained by ensuring accurate citation and careful use of all data sources.

Discipline-Wise Employability Outcomes

The evidence highlights a deep structural disconnect between higher education expansion and employment outcomes in Haryana. Despite achieving a gross enrolment ratio above the national average, employability has not kept pace, with nearly one in six graduates unemployed and less than half meeting industry expectations.⁸ The problem is not merely the quantity of graduates but the quality and relevance of their skills. Over-education has become widespread, as many degree holders accept jobs below their qualification levels, while horizontal mismatches reveal that graduates often work in sectors unrelated to their field of study. Discipline-wise outcomes further accentuate the divide: engineering and management graduates display relatively better absorption due to stronger corporate linkages, yet still struggle with practical readiness; commerce graduates face underemployment; and arts graduates remain the most vulnerable, often confined to low-paying or informal roles. Regional disparities reinforce these gaps—urban-industrial hubs like Gurugram and Faridabad offer better placements through institutional linkages, while rural districts such as Nuh and Mahendragarh are characterized by weak demand for graduate skills, pushing youth either into agriculture or low-skilled services. Gender adds another critical dimension: though women now constitute nearly half of higher education enrolments, their participation in the labor market remains alarmingly low due to mobility restrictions, cultural constraints, and a narrower spectrum of “acceptable” occupations.⁹ From the employers’ side, dissatisfaction is pervasive, with recurring complaints about weak communication, limited problem-solving ability, inadequate teamwork, and insufficient digital skills. Taken together, the findings suggest that employability in Haryana is undermined by systemic issues—imbalanced enrolment patterns, weak industry linkages, regional inequities, and gendered barriers—that prevent higher education from translating into meaningful employment opportunities.

Table No. 1 Discipline-wise Employability Outcomes of Graduates in

Haryana

Discipline	Employability Rate (%)	Nature of Employment Outcomes
Engineering & Technology (B.E./B.Tech)	57.44%	Mixed outcomes; many graduates migrate to NCR; local absorption weak; lack of practical exposure limits industry readiness.
Management (MBA)	60.10%	Strong outcomes in urban hubs (Gurugram, Faridabad) due to corporate linkages; underemployment persists for Tier-2 colleges.
Commerce (B.Com)	60.62%	Highest employability among disciplines; but ~30% still enter generic customer service/clerical roles rather than finance.
Science	45%	Many shift to teaching, civil service prep, or migrate for lab/research jobs; industry absorption in Haryana remains limited.
Arts & Humanities	35–40%	Weakest outcomes; over 60% unemployed or in low-paying informal jobs; skills too generalist for specialized market demand.
Overall (All Streams)	50.3%	National-level benchmark; Haryana aligns closely but shows sharper rural–urban disparities.

Critical Analysis of Employability and Skill Mismatch

The discussion of findings highlights a fundamental paradox in Haryana’s higher education landscape: despite a substantial expansion in enrolments, the expected gains in employability and income generation have not materialized for a large section of graduates. While the state has invested heavily in building institutional capacity and increasing access, unemployment and underemployment remain widespread. Youth aged 15–29 who comprise the largest cohort of fresh graduates, experienced elevated jobless rates: unemployment rose to **9.5%** in early 2024, with a significant spike among women (from **5.4%** to **13.9%**).¹⁰ Many graduates are compelled to accept jobs below their qualifications, while others struggle to find opportunities aligned with their fields of study. This indicates that educational attainment, though important, is not sufficient on its own to guarantee productive employment outcomes. This disconnect is further highlighted by the overwhelming response to low-skilled job openings. For instance, more than **46,000 graduates and postgraduates** applied for sanitation worker roles offering just ₹15,000 per month¹¹ —a clear indicator of graduate desperation, skill mismatch, and absence of suitable employment options.

A key challenge lies in the skill gap that persists between what higher education delivers and

what employers expect. Graduates often demonstrate strong theoretical knowledge but fall short in practical competencies such as communication, teamwork, problem-solving, and digital literacy. Employers, particularly in industrial hubs like Gurugram and Faridabad, frequently emphasize the need for adaptable, job-ready workers, yet institutions continue to prioritize rote learning and examination-based evaluation. As a result, even when graduates are recruited, they require additional training to meet workplace standards, raising costs for employers and reducing job stability for employees. This disconnect underscores the weak industry–academia linkages that limit the ability of higher education to translate into employable skills.

The regional divide further compounds these challenges. Urban–industrial districts benefit from proximity to corporations, better placement networks, and greater exposure to internships and skill development programs. In contrast, rural and educationally backward regions such as Nuh and Mahendragarh face infrastructural constraints, weaker institutional quality, and limited demand for graduate skills. This imbalance channels opportunities disproportionately toward urban graduates, while rural youth are often absorbed into informal work or subsistence-level employment. Such disparities reinforce structural inequalities and undermine inclusive development in the state.

Gender is another dimension where higher education has not fully delivered on its promise. Women now make up nearly half of higher education enrolments in Haryana, yet their participation in the labor market remains strikingly low. However, the **worker population ratio among female graduates** has seen a slight upward trend—from **19.2% in 2023 to 22.3% in 2024¹²**—with rural female graduate participation moving from **10.3% to 17% in 2023.¹³** Cultural barriers, mobility restrictions, and concerns about workplace safety reduce their ability to convert educational gains into economic opportunities. The result is a gendered disconnect between education and employability, highlighting the need for targeted interventions such as mentorship schemes, safe transport facilities, and flexible work arrangements to improve women’s labor market participation.

The overall picture points to the paradox of educational expansion without commensurate employability outcomes. Rapid growth in enrolments has focused on quantity rather than quality, leading to a mismatch between the supply of graduates and the demand for skilled labor. Degrees are produced in large numbers, but without the competencies that employers

value, creating a surplus of educated youth who remain underemployed. This situation is further aggravated by limited collaboration between higher education institutions and industries, especially in fast-changing sectors like IT and manufacturing where skills need continuous updating.

The implications of these challenges are significant. At the individual level, graduates face lower income-earning capacity and weaker job security, which reduces the returns on household investments in higher education. At the macro level, the state risks underutilizing its human capital, as firms increasingly turn to external labor markets to meet their skill needs. Moreover, rural and female graduates, already at a disadvantage, face compounded barriers, which could entrench social and economic inequalities if left unaddressed.

Addressing these issues requires a rethinking of how employability is defined and pursued. It must go beyond mere job acquisition to emphasize adaptability, lifelong learning, and alignment with the evolving needs of the labor market. Embedding vocational training, entrepreneurship education, and digital skills into mainstream curricula can help bridge the gap between degrees and jobs. Policy initiatives such as the National Education Policy (NEP) 2020 provide a framework for reform, but their successful implementation in Haryana will depend on strengthening institutional capacity, building sustainable industry partnerships, and ensuring inclusivity across regions and gender groups.

Policy Implications and Recommendations

The analysis of employability and skill mismatch among higher education graduates in Haryana reveals systemic challenges that require multidimensional policy interventions. While the state has made commendable progress in expanding higher education access, the mismatch between graduate skills and labour market needs underscores the urgent need for reforms. The following policy implications and recommendations are proposed:

1. Align curricula with industry needs by embedding employability skills, vocational modules, and continuous curriculum updates.
2. Strengthen industry–academia linkages through mandatory internships, advisory boards, and campus–industry hubs.

3. Promote regional and gender equity via rural skill clusters, digital infrastructure, safe mobility, and women-focused career support.
4. Enhance faculty and pedagogy with training in outcome-based education, industry exposure, and entrepreneurship mentoring.
5. Leverage digital platforms and technology through MOOCs, AI-driven career guidance, and centralized employability portals.
6. Foster entrepreneurship and lifelong learning via incubation centers, start-up funding, modular learning, and global collaborations.

Conclusion

The study of employability and skill mismatch among higher education graduates in Haryana underscores the complex interplay between educational expansion, labor market transformation, and socio-economic disparities. While the state has successfully widened access to higher education through a network of public and private universities, the findings demonstrate that mere expansion of enrolment has not translated into proportional employability outcomes. A significant share of graduates remains either unemployed or underemployed¹⁴, reflecting both structural inefficiencies in the higher education system and a persistent misalignment between graduate competencies and labor market requirements.

The analysis reveals several key insights. First, there is a clear mismatch between the skills imparted in higher education institutions and the expectations of employers. Graduates often lack not only technical expertise but also transferable skills such as communication, problem-solving, and adaptability¹⁵. Second, the employability gap is not uniform across the state. Industrially advanced regions like Gurugram and Faridabad provide better employment prospects, while districts such as Nuh, Mahendragarh, and Jhajjar lag behind, reflecting entrenched regional disparities in educational infrastructure and industry linkages. Third, gender disparities remain a pressing concern. Despite a steady rise in female enrolments in higher education, their transition to gainful employment is hindered by cultural constraints, mobility barriers, and limited availability of women-friendly job opportunities.

These challenges indicate that the problem is not simply one of unemployment but of underutilized human capital. Haryana's higher education system is producing graduates in large

numbers, yet many of them are unable to integrate into the formal labor market in roles that match their qualifications. This skill mismatch has broader economic implications, leading to wasted resources, lower productivity, and heightened social frustration. For a state aspiring to position itself as a knowledge and innovation hub, this disconnect poses a serious policy challenge.

At the same time, the study highlights opportunities for reform. Initiatives such as the National Education Policy (NEP 2020), which advocates for vocational integration, flexible curricula, and stronger industry partnerships, provide a framework for addressing these issues¹⁶. Haryana can leverage its strategic industrial base in Gurugram-Manesar, IT clusters, and logistics corridors to create robust academia–industry linkages. Likewise, the state’s investment in digital infrastructure can support blended learning, reskilling, and entrepreneurship pathways for graduates across rural and urban areas.

The findings also stress the importance of adopting a holistic approach to employability. Beyond curricular reforms, emphasis must be placed on experiential learning through internships and apprenticeships, targeted skill-development programs for women and rural youth, and faculty capacity-building in outcome-based pedagogy. Equally important is the promotion of entrepreneurship as an alternative career pathway, enabling graduates to contribute to the economy as job creators rather than job seekers.

In conclusion, the employability and skill mismatch challenge in Haryana is not insurmountable but requires coordinated, multidimensional interventions. Policymakers, universities, industries, and communities must work in tandem to reposition higher education as a driver of human capital formation rather than a mere credentialing process. By aligning education with labor market realities, ensuring equity in access to opportunities, and promoting adaptability through lifelong learning, Haryana can unlock the potential of its graduate workforce. Doing so will not only reduce graduate unemployment but also accelerate the state’s transition towards a more inclusive, competitive, and knowledge-driven economy.

Ultimately, the study contributes to the broader debate on higher education’s role in employability by providing empirical and policy-oriented insights specific to Haryana. It reaffirms that higher education is most effective when it cultivates not only knowledge but also skills, adaptability, and confidence in graduates. Addressing the skill mismatch challenge is

therefore both an economic necessity and a social imperative for Haryana's long-term development trajectory.

References

- [1.] Agarwal, P. (2009). *Indian higher education: Envisioning the future*. Sage Publications.
- [2.] Autor, D. H. (2014). Skills, education, and the rise of earnings inequality among the "other 99 percent." *Science*, 344(6186), 843–851. <https://doi.org/10.1126/science.1251868>
- [3.] Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). University of Chicago Press.
- [4.] Confederation of Indian Industry (CII). (2021). *Employability paradox: Report on skills and industry readiness*. CII Skills Report.
- [5.] Directorate of Higher Education, Haryana. (2025). *Annual report 2024–25*. Government of Haryana.
- [6.] Government of Haryana. (2024). *Statistical abstract of Haryana 2023–24*. Department of Economic and Statistical Analysis.
- [7.] International Labour Organization (ILO). (2019). *Work for a brighter future: Global Commission on the Future of Work*. ILO.
- [8.] Ministry of Education, Government of India. (2019). *All India survey on higher education (AISHE) 2018–19*. Retrieved from <https://www.education.gov.in/>
- [9.] Ministry of Education, Government of India. (2020). *National education policy 2020*. Government of India.
- [10.] National Sample Survey Office (NSSO). (2018). *75th Round: Household social consumption on education in India*. Ministry of Statistics and Programme Implementation.
- [11.] NITI Aayog. (2020). *India's gig and platform economy: Opportunities and challenges*. Government of India.
- [12.] Planning Department, Haryana. (2023). *Economic survey of Haryana 2022–23*. Government of Haryana.
- [13.] Purkait, S., & Mandal, K. (2022). Graduate employability and skill mismatch: Evidence from India. *Indian Journal of Labour Economics*, 65(1), 89–110. <https://doi.org/10.1007/s41027-021-00358-w>
- [14.] QS World University Rankings. (2022). *Global employability survey report*. QS Intelligence Unit.
- [15.] World Bank. (2020). *The changing nature of work: World development report 2020*. Washington, DC: World Bank.

¹ Becker, G. (1964). *Human Capital: A Theoretical and Empirical Analysis*. University of Chicago Press

² Haryana State Higher Education Council (2022). *Annual Report on Higher Education in Haryana*.

³ Ministry of Education (2020). *All India Survey on Higher Education (AISHE) 2019–20*.

⁴ India Skills Report (2022). *Wheebox, CII, AICTE Collaboration*.

⁵ Mehrotra, S., & Parida, J. K. (2019). *Why is the educated unemployment rate so high in India?* ILO Report.

⁶ Ministry of Education (2020). *All India Survey on Higher Education (AISHE) 2019–20*.

⁷ OECD (2017). *Getting Skills Right: Skills for Jobs Indicators*. Paris: OECD Publishing

⁸ Periodic Labour Force Survey (PLFS), 2022–23. Government of India.

⁹ Sharma, N. (2021). *Barriers to Women's Employment in North India: A Socio-Cultural Analysis*. Journal of Labour and Development Studies, 18(2), 45–63.

¹⁰ Periodic Labour Force Survey (PLFS), Quarterly Bulletin, Ministry of Statistics and Programme Implementation, Government of India, 2024.

¹¹ *The Hindu* (2023, November). "46,000 Graduates Apply for Sanitation Jobs in Haryana."

¹² Periodic Labour Force Survey (PLFS), Annual Report 2023–24.

¹³ Haryana State Statistical Abstract (2024), Department of Economic and Statistical Analysis, Government of Haryana.

¹⁴ Periodic Labour Force Survey (PLFS), 2023–24, Ministry of Statistics and Programme Implementation (MOSPI).

¹⁵ Haryana State Statistical Abstract, 2024, Department of Economic and Statistical Analysis, Government of Haryana.

¹⁶ Ministry of Education (2020). *National Education Policy 2020*. Government of India.