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BRIDGING THE SKILL GAP: AN ANALYSIS OF YOUTH EMPLOYABILITY AND INDIA'S ECONOMIC TRANSFORMATION (2021–2025)

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Abstract: India is currently experiencing a significant demographic shift, with a median population age of 28.This study evaluates the Skill India Mission's impact on youth employability and the broader Indian economy between 2021 and 2025. Adopting an exploratory-cum-descriptive research design, the study utilizes secondary data sourced from the India Skills Reports (ISR) and contemporary academic literature to analyze talent supply and industrial demand.

The findings reveal a consistent upward trajectory in national employability, which rose from 45.9% in 2021 to 54.81% by 2025. However, a persistent 75% skill gap remains a formidable hurdle, particularly as technological advancements in sectors like IT outpace the supply of qualified experts. Despite higher female employability (51.44%) compared to males (45.97%), workforce participation remains imbalanced, with women constituting only 33–36% of the organized sector. Furthermore, the study identifies structural challenges, including the concentration of 93–94% of the workforce in the informal sector and low placement rates in certain vocational programs.

The research underscores that achieving India's $7 trillion economic target by 2030 is contingent upon bridging these gaps through AI integration, which could contribute 1.4 percentage points to real GDP growth. The study concludes that while skilling initiatives have enhanced youth preparedness, sustained economic leadership requires stronger industry-academia linkages, localized curriculum development, and a strategic focus on global talent mobility to realize the vision of a developed nation by 2047.

Keywords: Employability, Skill India Mission, Demographic Dividend, Economic Growth, Artificial Intelligence (AI).

I. INTRODUCTION

India is currently positioned at a pivotal "turning point" in its quest for long-term economic prosperity, driven by a profound demographic dividend. With a median population age of 28 and over 600 million individuals under the age of 25, the nation is emerging as a global centre for talent mobility. However, this potential is challenged by the structural reality of the labour market, where approximately 93% to 94% of the workforce operates in the informal sector, often lacking the formal certifications required to navigate modern industrial shifts.

Data from various editions of the India Skills Report (ISR) indicates a positive trajectory in youth readiness, with national employability rising from 45.9% in 2021 to 54.81% by 2025. While this suggests a strengthening skilling ecosystem, a significant "skill gap" persists. Currently, 75% of corporate leaders identify a mismatch between talent supply and industry needs, especially as technological advancements in the IT sector occur nearly twice as fast as the supply of qualified experts.

The post-pandemic recovery has been marked by a robust resurgence in corporate hiring. Following a 37% positive hiring intent in 2021, the market anticipated a 17.70% increase in new hires by 2024. There is a visible shift toward value-based hiring that prioritizes digital dexterity, critical thinking, and problem-solving over traditional credentials. By 2025, mid-level professionals with one to five years of experience are expected to constitute 47% of all new hires, highlighting a demand for adaptable, early-career talent.

These labour trends are foundational to India's broader economic ambitions, including the goal of a $2 trillion skill-based economy by 2030 and a total GDP target of $7 trillion within the same decade. Strategic pillars of this growth include the IT and Business Process Management sector, which contributes 8% to the national GDP, and the manufacturing sector, which contributes 17% and employs over 27.3 million people. Additionally, the integration of Artificial Intelligence (AI) is forecasted to contribute 1.4 percentage points to real GDP growth.

A critical factor for sustained leadership is the integration of women into the formal workforce. Although female employability (51.44%) consistently outpaces male employability (45.97%), women only represent 33–36% of the organized workforce. Increasing this participation is regarded as the "secret sauce" for rapid economic expansion. Furthermore, as India enhances its global talent footprint, foreign remittances are projected to exceed $150 billion by 2030.

Ultimately, India's success in this "borderless, AI-powered workforce" depends on the synergy between technical mastery and human-centric soft skills. By addressing structural imbalances and refining its vocational training to match market needs, India aims to realize its vision of becoming a developed nation by 2047.

II. LITERATURE OF REVIEW

Archana (2025) examined the effectiveness of the Skill India Campaign in promoting youth self-development and employable skills in Haryana. Using primary data from 400 respondents, the study identified a strong positive perception of the campaign regarding its ability to improve self-confidence, technical competence, and personality development. The research

concluded that by shifting the focus from purely academic qualifications to skill-based training, the initiative has contributed significantly to job creation and a reduction in unemployment, serving as a vital tool for harnessing India's demographic dividend.

Mishra and Mishra (2025) investigated the effectiveness of the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) in enhancing employability among youth in the socio-economically backward Devipatan region of Uttar Pradesh. While findings indicated that participants gained relevant vocational skills and were satisfied with trainer quality, the program fell short in ensuring consistent long-term employment outcomes. The study recommended stronger industry linkages and localized curriculum development to address regional disparities and infrastructure limitations that hinder the program's success in rural areas.

Mahto (2025) examined the role of the Skill India Mission in driving inclusive economic development and manufacturing growth. The research highlighted that digital platforms like SWAYAM have expanded access to quality training, although technical hurdles such as cybersecurity and inadequate infrastructure remain challenges. The study concluded that the mission has improved the competitiveness of Indian enterprises and has the capacity to boost the economy by providing large-scale employment for the youth.

Latiyan (2025) explored the impact of Skill India on employability with a specific focus on Uttar Pradesh. The findings indicated that while over 50 million individuals have been trained nationwide, the actual placement rates remain a significant concern, with only 20-40% of PMKVY trainees securing jobs. The study identified low placement rates and skill-job mismatches as primary hurdles and called for enhanced industry partnerships to bridge the gap between training and employment.

Mohapatra et al. (2024) utilized an exploratory-descriptive design to critically analyze 20 leadership training programs for health researchers and service providers offered by Indian institutions between 2013 and 2018. The study identified significant heterogeneity in the aim, scope, and content of these programs, noting that they infrequently addressed critical domains such as soft skills, mentoring, risk mitigation, and personal well-being. By adapting the International Clinical Epidemiology Network (INCLEN) model, the researchers highlighted a vital need to develop context-tailored leadership curricula that align with local socio-economic realities and the requirements of a globally connected research ecosystem.

Ahamad and Kesari (2023) explored the impact of vocational education on employment outcomes in India, asserting that such programs are critical for bridging the gap between labour force qualifications and industry demands. Their analysis demonstrated that vocational training significantly boosts income levels—sometimes 20-30% higher than those with general education—and enhances job stability in sectors like IT and healthcare. However, the study also identified persistent barriers, including social stigma and outdated curricula that limit the widespread adoption of vocational training.

Rashmi (2023) investigated the link between the Skill India Program and economic sustainability, finding that the program has positively impacted beneficiaries by bridging the gap between the demand and supply of skilled workers. The research indicated that the program increased income levels and improved the standard of living for participants, thereby contributing to long-term economic stability. However, the paper also called for better industry participation and improved infrastructure to overcome current challenges.

Singh and Goel (2022) conducted a conceptual study to evaluate the role of the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) in generating employment in India. The research is exploratory-cum-descriptive in nature, notes that while various government initiatives were launched to reduce unemployment, their effectiveness diminished over time, leading to the introduction of the skill-based PMKVY program. The authors found that the scheme has been successful in rendering employment opportunities, achieving nearly a 50% placement rate at its training centres. However, the study concludes that the Government of India must intensify its efforts to further upgrade youth skills to meet evolving industrial requirements.

Dr. S. C. Patil & Prof. Amaresh B Charantimath (2021) conducted a study on "Employability through Skill Development Programmes - an overview of significance of Employability skills". The objective of the study was to comprehend the need of employability skills and to study the skill gap - desired vs possessed. The study concluded that the skill gaps can be bridged with training, education and short-term courses. In spite of the efforts there is still a great scope in transformation of abandoned knowledge into skills. Various ambitious missions of Government of India i.e. make in India, Atmanirbhar Bharat, 5 trillion economy dreams etc can come true with collective effort.

Dash and Dash (2020) examined the skill landscape of India within the context of emerging technological disruptions, global transformation, and international talent mobility. Their empirical study identifies that while the Skill India Mission possesses commendable features, significant challenges persist regarding sectoral imbalances and gender inequality in workforce participation. They argue that the current skilling ecosystem must address these inequalities to effectively utilize India's human capital. Furthermore, the study highlights that the integration of research-based learning into engineering education is essential for developing the problem-solving and ethical skills required for the modern industrial era.

Vidhyadhar T. Banajawad & Dr.Mukta S. Adi (2020) conducted a study on "A study on skill development programmes for rural youth in India" with the objective to ascertain the current status, challenges and the Government initiatives for the skill development in India. The study concluded that skill development is currently gathering momentum and it is now evident that education and skills are fundamental in bettering employment opportunities, shrinking poverty, boosting productivity, and promoting environmentally sustainable rural development. The immediate need is assimilating skills, policies and strategies on rural development. Incorporation of skill-based training and industry link placement facility in education is indispensable. Skill

development is need of the hour to adapt and match the current requirements for youth in rural India for rural development in real sense. Thus, education / skill development is an immediate and important requirement for developing countries with large youth population such as India.

Anita Swain &Sunita Swain (2020) conducted a study on "Skill Development in India: Challenges & Opportunities". The study intended to analyze the data sourced from National Skill Development Corporation. It concluded that India, the 2nd populous country in the world with around 60% youth population, has a 'demographic dividend' and need capitalize on it for reaping the benefit which can add value to the economy of the country and also support 'Make in India' campaign by providing the skilled workforce in the country. The 'Skill India' mission requires more focus on entrepreneurship skills for enhancing job generation in the country.Indian youth should be aware of such schemes, get required training and make themselves employable.

Arora and Chhadwani (2018) analyzed the impact of the Skill India Mission as a tool for reshaping the Indian economy toward becoming a "knowledge economy". The study emphasized that economic strengthening can only be achieved by shifting the current educational mechanism from a focus on academic skills to one focused on generating employable skills. They concluded that while the government has established a policy framework, industries must participate via public-private partnerships to ensure skills remain pertinent to the emerging economic environment.

Chawla and Singh (2016) explored the concept of "Skill Space" and its critical impact on India's economic goals. Their research emphasizes that technology transitions occur at such a rapid pace that vocational training must be adjusted annually to remain relevant to market needs. They advocate for the international validation of India's TVET (Technical and Vocational Education and Training) policies through global bodies like UNEVOC to ensure that Indian human capital remains competitive for global foreign remittances and international mobility. The study concludes that creating a scalable and comprehensive vocational system is necessary to capitalize on the demographic dividend.

Saini (2015) highlighted the urgent need for standardized skill-based institutions, particularly in backward districts where formal training remains scarce. The study revealed that approximately 38% of the Indian workforce was not literate at the time of the program's launch, underscoring the massive scale of the skilling challenge facing the nation. Saini argues that the demographic dividend could easily become a "demographic nightmare" if the government fails to implement block-level mapping of employment demand and local economic activities. The research suggests that a multifaceted and efficient skill development system is imperative for sustaining an 8% to 9% economic growth rate.

III. RESEARCH GAP

The sources provide extensive longitudinal data on urban employability and corporate hiring intent, a critical research gapremains regarding the rural talent landscape, which is explicitly noted as underrepresented. Additionally, although nearly 93% of India's workforce operates in the informal sector, there is a profound lack of certainty and granular data concerning the specific skill competencies and economic transitions within this demographic. Furthermore, existing research primarily tracks academic graduates, leaving a void in longitudinal studies that follow individual career trajectories to assess the long-term efficacy of vocational training against the rapid**.**

IV. OBJECTIVES OF THE STUDY

- To analyze the impact of skill development initiatives on national employability and workforce participation rates.
- To evaluate the contribution of a skilled workforce toward achieving India's $7 trillion economic growth target by 2030.

V. RESEARCH METHODOLOGY

This study is based on secondary data. This research is completely exploratory cum descriptive in nature, as it seeks to investigate the emerging trends of the job market while simultaneously providing a detailed description of the current talent supply and demand landscape in India.The data is collected from articles, journals, websites and The India Skills Report (ISR) editions from 2021 to 2025.

VI. ANALYSIS AND INTERPRETATION

The India Skills Report (ISR) offers important insights into the changing dynamics of India's workforce, with a strong emphasis on skill development, employability, and their role in driving economic growth. This analysis reviews key trends, patterns, and future projections highlighted in the ISR editions from 2021 to 2025.

Skilled/Employable Workers

The percentage of employable youth has shown a steady improvement over the years, reflecting positive outcomes of skill development initiatives. The data shows a consistent upward trend:

2021: 45.9%
2022: 46.2%
2023: 50.03%

2024: 51.25%
2025: 54.81%

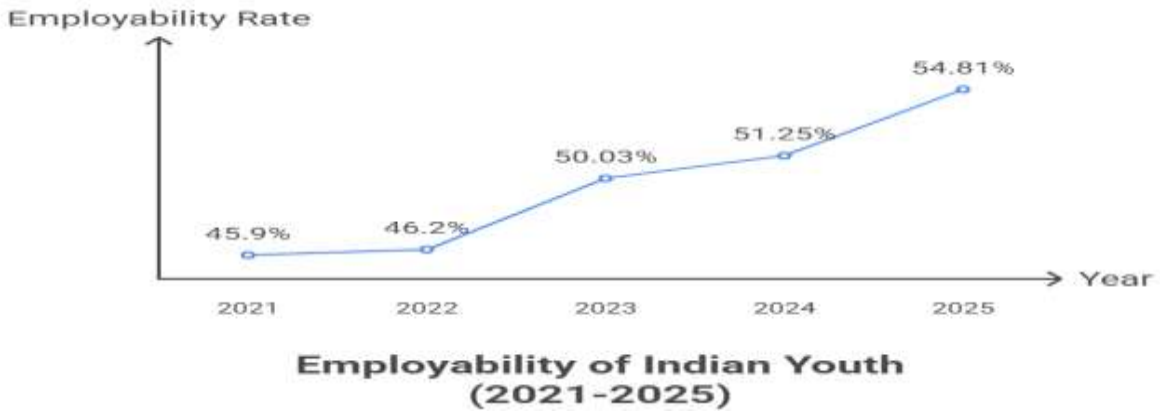

Fig:1

Source:-The ISR editions spanning 2021 to 2025.

This growth indicates better alignment between youth capabilities and industry needs, especially after 2022. However, the progress also reveals a critical concern. According to the 2023 report, only 21.2% of currently employed Indians are classified as "skilled," highlighting a significant gap between rising youth employability and the skill levels within the existing workforce, underscoring the need for continuous upskilling.

Working Population

The ISR highlights key aspects of the composition and dynamics of India's working population. A dominant share of the workforce remains in the informal sector, with around 400 million individuals employed informally in 2021 and nearly 93% of the total workforce continuing in this sector in 2022. The report also notes that 10 to 13 million people are added to the workforce each year as of 2023, underscoring the urgent need for sustained job creation and skill development. By 2024, men accounted for about 67% of the workforce, while women represented only 33–36%, reflecting persistent gender disparities. Looking ahead, India seeks to harness its demographic dividend to achieve a $7 trillion economy by 2030, highlighting the critical role of its young population.

Fig:2

Source:-The ISR editions spanning 2021 to 2025.

Hiring Trends

The ISR provides valuable data on hiring intent and trends across various sectors:

- **Positive Hiring Intent:** In 2021, there was an overall 37% positive hiring intent across diverse sectors. This positive trend continued, with a slight increase of 0.125% forecasted in 2023.
- **Sector-Specific Growth:** In 2022, hiring for fresher's in IT, E-commerce, and BFSI was expected to increase by 20%, indicating specific sectors driving employment growth.

- **New Hires Increase:** In 2024, an average increase of 17.70% in new hires (ranging from fresher to experienced) was anticipated, reflecting a growing demand for skilled professionals.
- **Experience-Based Demand:** In 2025, hiring for candidates with 1–5 years of experience showed a 38% positive intent, highlighting the demand for mid-level professionals.

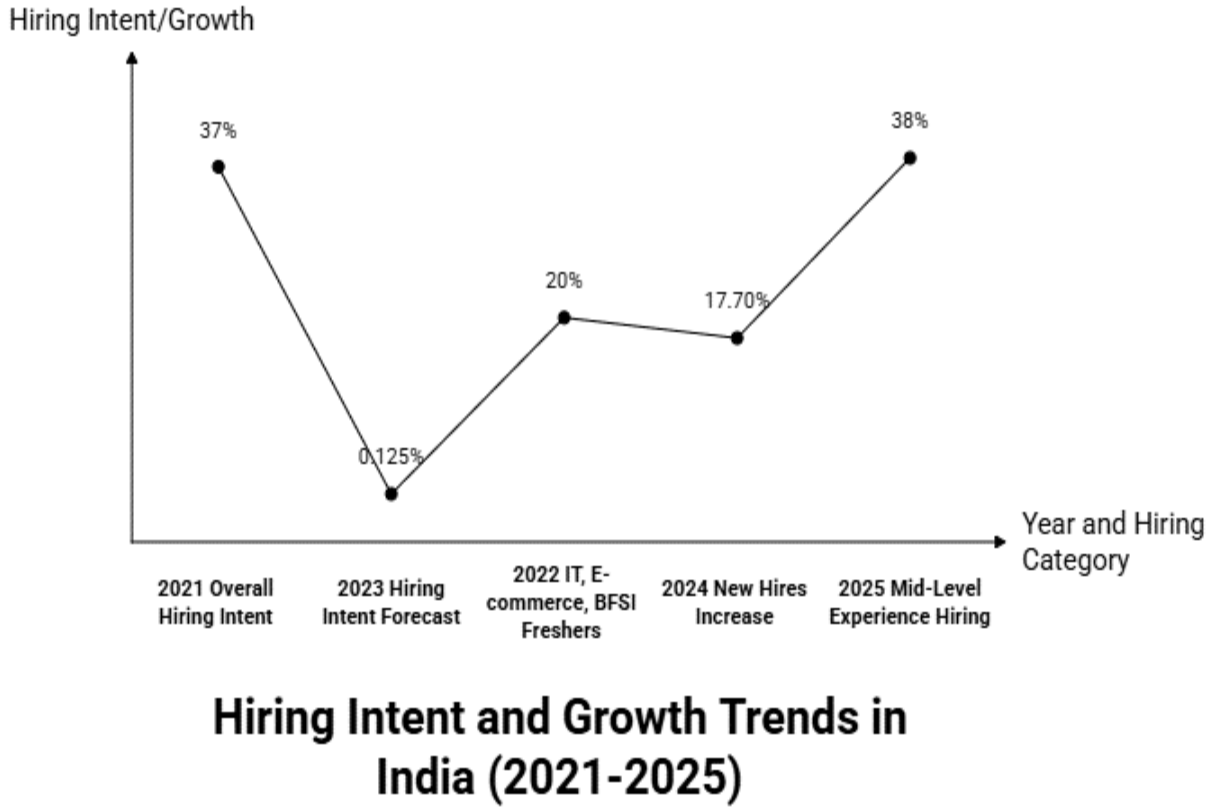

Fig:3

Source:-The ISR editions spanning 2021 to 2025.

Impact on the Indian Economy

The ISR emphasizes the significant impact of skill development and workforce dynamics on the Indian economy:

- **IT Sector Contribution:** The IT sector contributes up to 8% of the total national GDP (as of 2021), underscoring its importance as a key economic driver.
- **Skilled Workforce Requirement:** The government predicts that 109+ million skilled workers are required to fill vacancies in 24 key sectors (as of 2022), highlighting the need for targeted skill development programs.
- **Skill-Based Economy Target:** India aims for a $2 trillion skill-based economy by 2030 (as of 2023), emphasizing the importance of skill development in achieving economic goals.
- **AI Integration Impact:** Successful AI integration could contribute approximately 1.4 percentage points to real GDP growth (as of 2024), highlighting the potential of technology to drive economic growth.
- **Economic Growth Target:** India aims to achieve a $7 trillion economy by 2030, driven by its demographic dividend (as of 2025), emphasizing the importance of leveraging its young population.
- **Foreign Income Transfers:** Foreign income transfers (remittances) are projected to exceed $150 billion by 2030 (as of 2025), indicating the significant contribution of the Indian diaspora to the economy.

Fig: 4

Source:-The ISR editions spanning 2021 to 2025.

VII. CONCLUSION

The India Skills Report (ISR) editions from 2021 to 2025 highlight a generally positive trajectory in youth skill development and employability in India. Over this period, employability levels among young people have steadily improved, reflecting the growing impact of education reforms, vocational training, and industry-aligned skilling initiatives. These trends indicate better preparedness of new entrants for the evolving job market. However, the reports also draw attention to persistent structural challenges within the workforce. A large proportion of employment continues to be concentrated in the informal sector, limiting access to stable jobs, social security, and formal skill recognition. Additionally, despite improvements among the youth, a significant skills gap remains within the existing workforce, where many employed individuals lack formal or industry-relevant skills.

The ISR consistently emphasizes the need for targeted and demand-driven skill development programs that align training with sector-specific requirements. It also underscores the growing role of technology, including digital tools and emerging technologies, in enhancing productivity and employability. Equally important is the promotion of inclusive policies aimed at increasing workforce participation among women and underrepresented groups. By addressing these challenges and strategically investing in human capital, India can effectively leverage its demographic dividend, strengthen its workforce, and progress toward long-term economic growth and national development goals.

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