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## Mapping the Trajectory of Skill Development in India: The Precursor to Leverage the Demographic Dividend

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### Abstract

India, is a young country with 62 per cent of population aged between 20 and 59, stands at the brink of harnessing the world largest human resource pool. Despite the demographic advantage, the nation faces a substantial skill gap, with only 4.7 per cent of the workforce having received formal skill training as compared to higher percentages in developed nations. The establishment of skill development frameworks and institutions, alongside initiatives like the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), SANKALP, STRIVE, and the integration of the National Skill Development Agency (NSDA) into the National Council for Vocational & Education Training (NCVET), marks significant efforts towards closing this gap. However, challenges such as high ITI seat vacancy rates, policy uncertainties, and over-reliance on district committees for skill development persist. The corporate sector's engagement through CSR initiatives and international projects like TEJAS indicates a recognition of the need for skilled human capital for sustainable growth. Despite these efforts, there is an urgent need for a more aggressive, coordinated, and inclusive approach to skill development, focusing on quality, relevance, accessibility, and alignment with global standards to fully leverage India's demographic dividend and secure its position as a global talent hub.

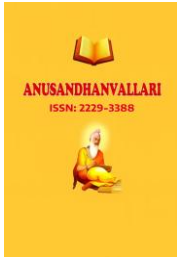
**Keywords:** Skill, gap, human resource, demographic dividend, alignment

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### Introduction

As of April 19, 2023, a report from the United Nations Population Fund, previously known as the United Nations Fund for Population Activities (UNFPA), highlighted that India has surpassed China in terms of population, marking a significant demographic milestone. India's population now stands at approximately 1.4386 billion, edging out China's 1.4257 billion. This shift places India at the forefront of a global demographic transition, characterized by a rapidly aging global population, projected to include 1.3 billion individuals over the age of 65 by 2040. Major global economies, including Germany, France, and the United States, face the looming challenge of a skilled labor shortage. India, with its vast working-age population, holds the potential to meet this global demand for skilled labor through its demographic advantage and emphasis on vocational training and skill development.

India's demographic profile presents a unique opportunity, often referred to as the demographic dividend. Approximately two-thirds (66%) of its population falls within the working age bracket of 15 to 59 years, with more than half of the total population under the age of 25. This youthful demographic distinguishes India from countries with aging populations, like Japan, where the balance is shifting toward an older generation that requires care and support. India's demographic advantage could serve as a catalyst for economic growth, provided there is a robust system for education, skill development, and job creation in place.



The concept of skill encompasses the ability, competency, and talent necessary for performing tasks efficiently within a specified timeframe. However, there is a growing concern that the current educational output does not align with industry expectations, leading to a gap between the skills acquired through formal education and those required in the workforce. Addressing this gap is crucial for India to harness its demographic potential and achieve sustainable economic growth. The government has committed to training over 400 million individuals by the end of 2022, with the formation of sector skill councils aimed at tailoring training programs to the specific needs of various industries, thereby benefiting both job seekers and the sectors themselves. This commitment is part of a broader initiative, Skill India, which seeks to transform India into a global hub for skilled manpower through comprehensive reforms and policy initiatives.

### **Objective of the study**

The primary aim of this research is to study in-depth the Skill Development Movement within India, scrutinizing the array of opportunities it unveils as well as the hurdles it encounters. This analysis is intended to gauge India's capacity to harness its substantial demographic dividend by fostering a cadre of professionals who are not only skilled but can also compete on the global stage. Through this lens, the study endeavors to outline strategic pathways for India to transform its demographic boon into a reservoir of world-class skilled labor, thereby contributing significantly to its socio-economic advancement

### **Literature Review on Skill Development**

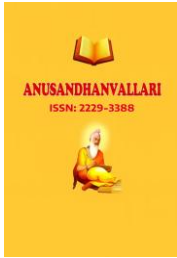
The literature on skill development is extensive and multidisciplinary, spanning across cognitive science, education, psychology, and workforce development. It fundamentally addresses the mechanisms of skill acquisition and enhancement, while also considering the impact of technological innovations and changing economic landscapes on the nature of skill demands. Notably, the research underscores India's pivotal role in potentially becoming the world's largest provider of skilled labor amidst technological disruptions and international workforce mobility.

Empirical and theoretical research, including works by Mishra (2015), Josh & Pandey (2018), and Sekhar Dash (2020), emphasizes the necessity for India to proactively map both domestic and global manpower requirements. This involves continuously updating training programs to align with the latest technological and industry standards, thereby ensuring the youth are adequately prepared for the evolving job market. Moreover, the government's role in promoting apprenticeships and entrepreneurship emerges as crucial in preparing for future demands.

Studies by Krishnamoorthy and Srimathi (2019) advocate for a meticulous analysis of global workforce requirements, suggesting that a careful alignment of skill-based education with industry needs is essential for securing India's position in the global labor market. This approach not only supports the nation's development but also contributes to sustaining its economic growth.

Challenges persist despite commendable progress under initiatives like the Skill India Mission. Issues such as gender inequality, sectoral imbalances in skill training, and the efficacy of job placements highlight the complexity of achieving comprehensive skill development. The exploration of alternative financing models for skill development, as discussed in 'Skill Financing in India,' calls for diversification beyond government funding to include private sector partnerships and international collaborations.

Emerging trends point to a shift from physical to mental skills, underscoring the importance of mindset and educational content in skill development. This aligns with the perspective that skill acquisition is not just about



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technical proficiency but also about cultivating the right educational ethos, as inspired by Swami Vivekananda's vision of "Man Making Education."

Recent studies, such as those by Lodha & Balwant (2023), highlight the necessity for professionals, particularly in accounting and auditing, to adapt to technological advancements like blockchain. This reflects a broader need for continuous skill upgrading in response to technological innovation.

The launch of the Skill India Digital (SID) platform marks a significant step towards integrating digital infrastructure with skill development efforts, aiming to reach millions of students and support entrepreneurship across India. This initiative exemplifies the government's commitment to leveraging technology for education and skill enhancement, providing personalized learning opportunities through advanced technological means.

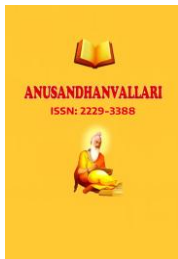
In conclusion, the literature presents a nuanced understanding of India's skill development challenges and opportunities. It calls for a collaborative, strategic approach that aligns educational and training initiatives with global and domestic.

## **Background**

The enhancement of skills and knowledge plays a pivotal role in the economic advancement and societal progress of any nation. Countries that possess higher skill levels and uphold superior standards in this arena are more adept at navigating the complexities and seizing the opportunities presented by both the domestic and global labor markets. The inaugural industrial policy of the nation was unveiled in 1948, followed by the Science and Technology policy in 1958, the Housing Policy in 1988, and the National Labour Policy in 1966. The genesis of a formal National Policy on Skill Development occurred in 2009. Subsequent to this development, the National Skill Development Corporation (NSDC) was founded in the same year to foster private sector engagement through novel financial models. The NSDC has forged partnerships with over 211 training entities, several of which have amplified their operations, providing brief training sessions. Furthermore, it has facilitated the creation and support of 37 Sector Skills Councils (SSCs), designed to galvanize industry engagement and ensure the delivery of training programs that are aligned with actual needs. The National Skills Development Agency (NSDA), established in June 2013, collaborates with state governments to bolster skilling initiatives across the states. The forthcoming two decades will have a significant demographic shift, with the labor force in industrialized nations projected to shrink by 4%, in stark contrast to India's expected surge of 32%. This demographic dynamism presents a formidable challenge for policymakers, who must strategize effectively to integrate this mushrooming skilled workforce into the economy. It is crucial to ensure a synchronous expansion of industries to absorb this skilled labor force. Any imbalance between the workforce and job opportunities could lead to underutilization of the skilled labor pool. Therefore, the intertwining of skill development with industrial growth is fundamental in achieving the country's economic objectives.

## **Demographic Shifts and Skill Development Challenges**

India faces a significant hurdle in skill development, with only 4.69% of its workforce having received formal skill training. This figure stands in bare contrast to other countries, such as 68% in the UK, 75% in Germany, 52% in the USA, 80% in Japan, and 96% in South Korea. According to a skill gap analysis by the National Skill Development Corporation (NSDC) from 2010 to 2014, there is a projected need for an additional 120.79 million skilled workers by 2022 across 24 key sectors. Despite these projections, as of December 2022, only 11 million individuals have been trained under the Pradhan Mantri Kaushal Vikas Yojana (PMKVY). This underscores the



urgent need to accelerate the establishment of more skill development centers that not only provide formal certification but also align with international quality standards.

The table below outlines the additional manpower requirements across various sectors, highlighting the sectors with the highest demand for skilled labor.

**TABLE: 1**

**ADDITIONAL MANPOWER REQUIREMENTS ACROSS KEY SECTORS**

S N	Sector	Employment base 2013 (Millions)	Projected Employment by 2022 (Millions)	Incremental Human Resource Requirement (2013-22) Millions
1	Auto and Auto Components	1.098	1.488	0.39
2	Beauty and Wellness	0.421	1.427	1.006
3	Food Processing	0.698	1.138	0.44
4	Media and Entertainment	0.04	0.13	0.09
5	Handlooms and Handicrafts	1.165	1.779	0.614
6	Leather and Leather Goods	0.309	0.681	0.372
7	Domestic Help	0.610	0.088	0.488
8	Gems and Jewellery	0.464	0.823	0.359
9	Telecommunication	0.208	0.416	0.208
10	Tourism, Hospitality & Travel	0.696	1.344	0.648
11	Furniture and Furnishing	0.411	1.129	0.718
12	Building, Construction and Real Estate	4.542	7.655	3.113
13	IT and ITES	0.296	0.512	0.216
14	Construction Material and Building Hardware	0.83	1.1	0.27
15	Textile and Clothing	1.523	2.154	0.631
16	Healthcare	0.359	0.739	0.38
17	Security	0.711	0.83	0.483
18	Agriculture	24.04	21.56	(2.48)



19	Education/ skill development	1.302	1.731	0.429
20	Transportation and Logistics	1.674	2.84	1.166
21	Electronic and IT Hardware	0.433	0.894	0.461
22	Pharma and Life Sciences	0.186	0.358	0.172
23	BFSI	0.255	0.425	0.17
24	Retail	3.86	5.595	1.735
	Grand Total	46.11	58.189	12.079

The examination of the supply side, informed by data from the 66th and 68th rounds of the National Sample Survey Office (NSSO), is detailed in Table 2. This analysis reveals that the current total workforce in India is estimated to be 48.70 crore.

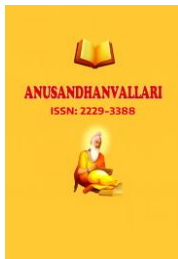
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**SKILLING REQUIREMENTS BY 2023**

Workforce	Time Period	For All Age Groups & for All the Education categories ( Crores)	For All Age Groups and higher education without VET category ( Crores)	Proportion of workforce with Higher education without VET
66th Round	1st January, 2010	46.32	43.39	6.33%
68 <sup>th</sup> Round	1st January, 2012	47.29	44.05	6.85%
Estimated based on linear trend	1st January, 2015	48.70	45.04	7.52%

**Source:** Adapted from the National Policy for Skill Development and Entrepreneurship 2015 report.

The data indicates that excluding those with higher education but lacking vocational education and training (VET), the workforce is estimated at 45.04 Crores. This segment of the workforce requires a systematic approach for skill recognition, followed by the necessary skill development, reskilling, and upskilling initiatives to enhance productivity and facilitate sustainable employment opportunities.



### Demographic Shifts and Skill Development Challenges

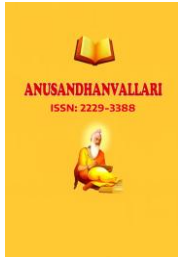
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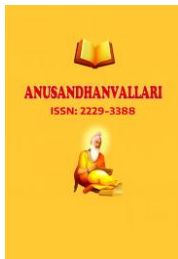
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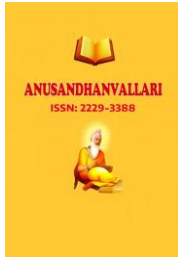
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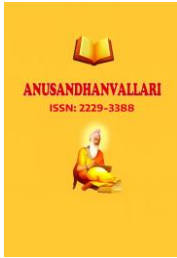
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### **Overburdened Responsibility in Skill Development Initiatives**

The Pradhan Mantri Kaushal Vikas Yojana (PMKVY), inaugurated by the Ministry of Skill Development & Entrepreneurship (MSDE) and executed by the National Skill Development Corporation in 2015, stands as the cornerstone initiative aimed at empowering a substantial segment of the Indian youth. This skill certification scheme is designed to facilitate industry-relevant skill training, enabling participants to secure enhanced livelihood opportunities. Furthermore, the program offers assessment and certification for individuals possessing prior learning experience or skills through the Recognition of Prior Learning (RPL) mechanism.

**Table: 3 - Phase-wise Achievements under PMKVY (Figures in Lakhs)**

<b>PHASE</b>	<b>TARGET</b>	<b>CANDIDATES TRAINED / ORIENTED</b>
PMKVY 1.0 (Phase- I) (2015-16)	24.00	19.86
PMKVY 2.0 (Phase -II) ( 2016-20)	100.00	109.98



PMKVY 3.0 (Phase -III ) (2020-22)	8.00	4.45
<b>Total</b>	<b>132.00</b>	<b>134.29</b>

Source: Compiled from [pmkvyofficial.org](https://pmkvyofficial.org)

The third phase of PMKVY (2020-22), launched in the fiscal year 2020-21, aimed to extend skill development opportunities to over 800,000 individuals. As of December 31, 2021, the scheme has benefitted 1.34 Crore candidates nationwide. However, the program achieved only 56 percent of its target in this phase, primarily due to an excessive dependence on District Skill Development Committees (DSDCs). Chaired by district collectors, these committees have struggled to prioritize skill development initiatives, likely owing to their preoccupation with other administrative duties and responsibilities.

To narrow the gap between the set targets and actual achievements, it has become apparent that there needs to be a reassignment of responsibilities. The introduction of a dedicated role, such as a skill development officer at the district level, is suggested to ensure focused attention and accountability in the execution of skill development programs. This step is seen as crucial for enhancing the effectiveness of India's skill development efforts and meeting the ambitious goals set forth by initiatives like PMKVY.

### Policy Implementation Challenges

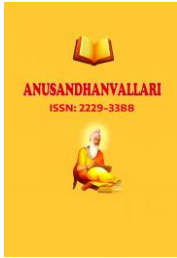
The establishment of the National Skill Development Agency (NSDA) in 2013 aimed to address the issues of inter-ministerial and inter-departmental overlap and fragmentation within the skill development ecosystem. The subsequent integration of NSDA with the National Council for Vocational Training (NCVT) into the National Council for Vocational Education and Training (NCVET) illustrates a significant shift in policy implementation. This transition not only marks a discontinuity in the policy execution but also introduces complexities in policy formulation. There is a critical need for a seamless and coherent policy framework to ensure effective implementation.

### Employer Hesitancy and Skill Gap

The disconnect between the skills imparted through academic training and the actual requirements of employers has widened significantly. Employers often struggle to find candidates with the appropriate skills, while many youths are unable to secure the jobs they desire. This skill mismatch poses a formidable challenge, particularly for India's unemployed or underemployed youth. With India hosting a large population of young individuals deemed unemployable by several companies, including multinational corporations (MNCs), there's a risk of this demographic succumbing to drug addiction and other antisocial behaviors if their potential remains untapped. Ensuring investment security, standardizing skill programs, developing a flawless policy framework, and coordinating implementation efforts are crucial for harnessing the potential of India's youth and shaping the nation's future.

### Workforce Skill Shortage

Transforming India's abundant human resources into human capital requires a dedicated and continuous effort. Data from the Periodic Labour Force Survey (PLFS) for April to June 2022 indicates that 86.1% of individuals



aged 15 to 59 years had not received any vocational training, leaving only 13.9% who had undergone training through various formal and informal channels

### Increasing Demand for Skilled Workforce

With India's economy on an upward trajectory and projections to become the world's third-largest economy by 2030, the demand for skilled workers is set to surge. This economic growth, coupled with an expanding middle class expected to reach over 550 million people, underscores the increasing need for a skilled workforce. The government's National Skill Development Mission and other initiatives are pivotal in augmenting the supply of skilled labor. However, reports from the National Skill Development Corporation highlight a looming challenge where the demand for skilled workers may outstrip the supply, emphasizing the urgency for enhanced skill development programs. The Pradhan Mantri Kaushal Vikas Yojana (PMKVY) represents a significant initiative by the Indian government to empower the country's youth with the necessary skills to enhance their employability and ability to participate actively in the economy. It's designed to be a comprehensive approach to skill development, aligning with the nation's broader goals such as increasing manufacturing, promoting digital literacy, and encouraging entrepreneurship.

### Overview of PMKVY Initiatives

The progressive evolution of the PMKVY from its inception in 2015 to its current fourth iteration highlights the Indian government's commitment to not only enhancing the skills of its youth but also ensuring these skills are relevant to the demands of both the local and global economy.

**Table: 4**

**Pardhan Mantri Kaushal Vikas Yojna**

Scheme	Launched on	Coverage	Enrolled Candidates as on 28/04/2023	Trained Candidates
PMKVY 1.0	15th July 2015	To encourage and promote skill development in the country by providing free short duration skill training and incentivizing this by providing monetary rewards to youth for skill certification.	19,86,016	19,86,016



PMKVY 2.0	2016-20	Alignment with other missions of the Government of India like Make in India, Digital India, Swachh Bharat, etc.	1,14,84,724	1,10,00.708
PMKVY 3.0	2020-21	Launched in 717 districts, 28 States/eight UTs a step towards 'Atmnanirbhar Bharat'.	7,94,941	7,37,502
Total			1,42,65,681	1,37,24,226
PMKVY 4.0	2022-26	Vocational Training and skill development to Indian youth	Aims to skill 80 Lakhs youth	

Data Compiled from *PMKVY Dashboard reported on 28/04/2023*

### Key Takeaways

**Adaptive Strategies:** Each reiteration of PMKVY has been adapted based on the learning's from its predecessors, showing an evolving approach to skill development that seeks to better match the changing needs of the Indian economy and its workforce.

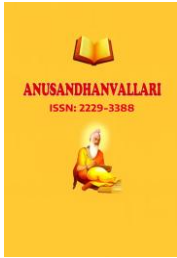
**Decentralization:** The move towards a more decentralized approach in PMKVY 3.0, with the formation of District Skill Committees, indicates a shift towards addressing local skill gaps and requirements more effectively.

**Integration with National Goals:** The scheme's alignment with other national initiatives underscores the government's integrated approach to development, where skill development is seen as a crucial enabler for other sectors.

**Emphasis on New Technologies:** PMKVY 4.0's focus on new-era skills reflects the government's recognition of the importance of keeping the workforce updated with the latest technological advancements, ensuring India's competitiveness on the global stage.

**Digitalization:** The continuous push towards leveraging digital platforms for skill development, culminating in the establishment of a unified Skill India Digital platform in PMKVY 4.0, demonstrates a commitment to using technology to enhance accessibility and efficiency in skill training.

The Indian government, recognizing the critical role of skill development in promoting sustainable economic growth and reducing poverty, has launched several initiatives aimed at enhancing the skills of its workforce. Among these initiatives, the Skills Acquisition and Knowledge Awareness for Livelihood (SANKALP) and Skills



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Strengthening for Industrial Value Enhancement (STRIVE) schemes stand out for their targeted approach and significant financial outlays. Both schemes are designed to complement each other while focusing on different aspects of the skill development ecosystem.

### **SANKALP Scheme**

**Objective:** SANKALP aims to implement the mandate of the National Skill Development Mission (NSDM) through its focus on district-level skilling ecosystems. The program is designed to enhance institutional mechanisms for skill development and increase access to quality and market-relevant training for the workforce.

**Funding and Implementation:** With an outlay of ₹4455 Crore, SANKALP is a substantial investment by the Ministry of Skill Development & Entrepreneurship (MSDE). The program is outcome-oriented, emphasizing decentralized planning and the improvement of training quality.

**Key Features:** SANKALP prioritizes the establishment of robust district and state-level skill development management mechanisms, aiming to ensure greater decentralization in skill planning. By doing so, it seeks to address the unique skill gaps and market demands at the local level, thereby enhancing the employability of the youth.

### **STRIVE Scheme**

**Objective:** The STRIVE scheme is focused on improving the relevance and efficiency of vocational training provided in India, particularly through Industrial Training Institutes (ITIs) and apprenticeships. It targets the enhancement of the quality and market-relevance of skill development programs.

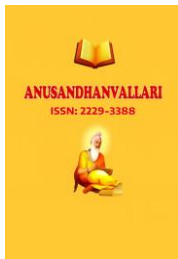
**Funding and Implementation:** Supported by a ₹2200 Crore fund, STRIVE is a World Bank-assisted project. This financial backing underscores the importance of the scheme in the broader context of India's skill development goals and its commitment to improving the vocational education and training system.

**Key Features:** it aims to strengthen the delivery mechanisms of ITIs, fostering increased industry involvement and upgrading the skills training framework to align with the needs of the industry. A significant aspect of STRIVE is its focus on apprenticeship training, aiming to bridge the gap between education and employment by providing hands-on experience and exposure to real working conditions.

SANKALP and STRIVE are significant milestones in India's journey towards achieving a skilled and employable workforce. Their success will play a crucial role in enhancing the country's global competitiveness and achieving inclusive growth and development.

### **Role of Corporate Social Responsibility (CSR)**

The task of achieving comprehensive livelihood goals while ensuring the quality and sustainability of initiatives presents a significant opportunity for both private and public sector entities to contribute through their Corporate Social Responsibility (CSR) efforts. The commitment of businesses to invest in the skill development of their workforce is not only a strategic business decision but also a pivotal factor in driving the nation's long-term economic prosperity. The corporate sector possesses a unique set of assets including financial resources, infrastructure, equipment, and specialized knowledge that can significantly influence the skill development landscape. Moreover, companies have access to experienced professionals whose expertise can be instrumental in advancing these objectives.



Highlighting the substantial involvement of companies in CSR activities, the Union Finance Minister Nirmala Sitharaman disclosed in the Lok Sabha in December 2022 that corporations have contributed significantly to CSR, with expenditures amounting to ₹17,672.40 crore in the fiscal year 2020-21 and ₹18,473.41 crore in 2019-20. This level of investment underscores the vital role of the business sector in supporting community development and skill enhancement initiatives.

By leveraging their CSR programs, companies not only foster a skilled workforce that benefits their operations but also contribute to the broader societal good by enhancing employability and promoting sustainable economic growth. This synergy between corporate success and social progress underscores the importance of CSR in the contemporary economic and social landscape.

### **Skilling India's Youth for overseas workforce**

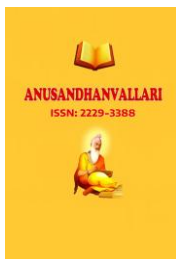
NSDC International Ltd., a wholly-owned subsidiary of the National Skill Development Corporation (NSDC), has initiated project TEJAS (Training for Emirates Jobs and Skills) with the aim of equipping Indian workers with globally benchmarked skills, thereby facilitating their employment opportunities in the United Arab Emirates (UAE). Project TEJAS seeks to train, certify, and subsequently place 10,000 Indian workers in the UAE during its initial year, collaborating with top employers in the region including EFS, DulSCO, TASC, Lulu Finance, among others. Since its inception on March 28, 2022, the project has already facilitated the placement of 25 workers in Dubai. These individuals are being trained for roles that are highly sought after in the market, such as electricians, plumbers, welders, car drivers, IT professionals, and retail service assistants.

The ambition of project TEJAS is to expand its reach, aiming to place 100,000 Indian workers throughout the Gulf Cooperation Council (GCC) region over the next five years. This initiative is poised to equip these workers with vital skills and certifications aligned with international standards. According to estimates, the International Workforce Mobility (IWM) market could present opportunities for up to 3.6 million Indians in the coming five years, with 2.6 million potential placements in GCC countries across various sectors, and the remainder finding opportunities in Europe, Australia, Canada, Japan, the Far East, Russia, and Malaysia.

To ensure the program's success, TEJAS is designed to integrate with India's existing skill development initiatives, utilizing the infrastructure of India International Skill Centers (IISCs), Pradhan Mantri Kaushal Kendras (PMKKs), Industrial Training Institutes (ITIs), and other skill training institutions operated by central and state governments. This strategic approach aims to harness and mobilize the best talent from India's network of skill development institutions, ensuring that only the most skilled and certified workers are placed in the UAE. The program underscores a commitment to enhancing the employability of Indian workers on a global scale, thereby contributing to their personal development and the broader economic ties between India and the GCC countries.

### **Education and skill development in the light of NEP 2020**

India is home to the largest youth population in the world, yet it struggles to be recognized as a skilled economy. This gap undermines the country's growth and hampers its ambition to match the global standards of development. The prevailing higher education framework in India emphasizes grades over skill development, fostering an environment where academic scores are valued more than practical abilities. Despite continuous updates to the education system by regulatory bodies such as the University Grants Commission (UGC) and the All India Council for Technical Education (AICTE), a significant shift from a grade-centric to a skill-focused education system remains elusive. To address this, the National Education Policy (NEP) 2020 advocates for the



establishment of a unified regulatory body, the Higher Education Commission of India (HECI), which aims to standardize, assure quality, and foster innovation in higher education.

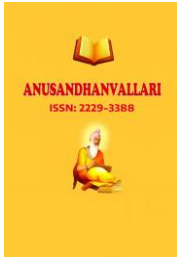
Introduced by the Government of India and approved by the Union Cabinet on July 29, 2020, the NEP 2020 seeks to overhaul the Indian education system, positioning India as a global knowledge superpower. This policy, which replaces the last major education policy revision from 1992, is built on the pillars of accessibility, equity, quality, affordability, and accountability. It aims to prepare students for the dynamic demands of both the economy and society, emphasizing the importance of practical skills alongside traditional textbook learning.

In an era of rapid global change, it is crucial for Indian students to enhance their adaptability and skill acquisition to maintain visibility on the international stage. The NEP 2020 places a strong emphasis on vocational education and skill development, recognizing the critical role of hands-on experience in fostering success in the professional world. It proposes the creation of a National Skills Qualification Framework (NSQF) to facilitate vocational skill acquisition within college and university settings.

Although the NEP 2020 has achieved notable progress in the past two and a half years, it calls for a more vigorous effort to overhaul the education system comprehensively. Despite incremental increases in budget allocations for higher education and skill development aimed at bridging the skill gap, investment remains below the targeted 6% of GDP. This shortfall highlights a significant challenge in fully realizing the policy's objectives and underscores the need for enhanced investment in India's education and skill development sectors.

### Findings

- ❖ India, with 62% of its population aged between 20 and 59, stands as one of the youngest nations globally, potentially offering the largest pool of human resources.
- ❖ A comparison made in the 2015 National Policy on Skill Development and Entrepreneurship highlighted that only 4.7% of India's workforce received formal skill training, significantly lower than figures in the US (52%), Japan (80%), and South Korea (96%).
- ❖ To fulfill the objectives of the national skill development mission, it was projected that an additional 12.079 crore individuals across 24 key sectors, totaling 45.04 crore Indians, needed to acquire skills by 2023.
- ❖ The Indian skilling ecosystem, established since 1956, has developed a comprehensive institutional framework for training and skills development. Transforming this demographic advantage into human capital necessitates a dedicated approach towards enhancing education and skilling, positioning India as a global talent and skill provider in an evolving technological landscape.
- ❖ The establishment of the National Skill Development Agency (NSDA) in 2013, which later merged into the National Council for Vocational & Education Training (NCVET), aimed to streamline efforts and reduce policy overlap, yet it revealed some uncertainties in policy direction.
- ❖ India's unemployment issue is not solely due to a skills gap but is also affected by businesses' reluctance to hire. The Periodic Labour Force Survey (PLFS) indicated that 86.1% of individuals aged 15 to 59 lacked vocational training, highlighting a pressing need for enhanced skill training and certification infrastructure.
- ❖ Launched in 2015, the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) aimed to train one crore youth with a budget of ₹12,000 crore. Despite establishing a Kaushal Kendra in every parliamentary constituency and training nearly 1.34 crore candidates by 2022, the program's effectiveness was hindered by an over-dependence on skill development committees led by District Collectors, who were often preoccupied with other duties.



- ❖ The SANKALP and STRIVE initiatives, with investments of ₹4,455 crore and ₹2,200 crore respectively, along with the expansion of ITI seats from 15.8 lakh to 24.92 lakh (yet with a 44.37% vacancy rate), represent significant efforts in skill development.
- ❖ Following the enforcement of mandatory CSR spending under the Companies Act of 2013, corporations in India have allocated over ₹55,000 crore to various social initiatives.
- ❖ The TEJAS project, initiated in Dubai on March 28, 2022, as part of Skill India's international projects, focuses on training, certifying, and placing Indian workers abroad, specifically in the UAE, to align with the skill demands in that region.

The findings underscore India's pivotal role as one of the youngest nations globally, harboring a vast pool of human resources capable of driving substantial economic and social transformation. However, the challenge of harnessing this demographic dividend lies in bridging the significant skill gap that currently exists within the workforce. The stark contrast between India's skilled workforce percentage and those of developed nations such as the US, Japan, and South Korea highlights the urgency of enhancing India's skill development infrastructure and policy framework. The establishment and evolution of institutions like the National Skill Development Agency (NSDA), now part of the National Council for Vocational & Education Training (NCVET), and initiatives such as the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), SANKALP, and STRIVE, signify concerted efforts toward this goal. Yet, the persistence of high vacancy rates in ITI seats and the over-reliance on district-level committees for skill development indicate that there are significant hurdles to overcome in making India's workforce globally competitive. Moreover, the commitment shown by the corporate sector through CSR initiatives, investing over ₹55,000 Crore in social projects, demonstrates recognition of the role that skilled human capital plays in sustainable economic growth. The launch of international projects like TEJAS further reflects the potential of Indian talent on a global stage, provided they are equipped with the requisite skills and certifications.

In conclusion, while India has made notable strides in skill development and education reform, particularly with the introduction of the NEP 2020, there remains a critical need for a more aggressive, coordinated, and inclusive approach to skill development. This involves not only expanding access to quality vocational training and education but also ensuring that skill development initiatives are aligned with the changing dynamics of the global job market. By addressing these challenges, India can not only fulfill its mission of becoming a skilled economy but also secure its position as a global leader in providing a talented and skilled workforce.

Based on the conclusion drawn from the findings, several strategic suggestions can be put forth to enhance the skill development ecosystem in India and leverage its demographic dividend effectively:

- **Integrated Policy Framework:** Develop an integrated policy framework that aligns the efforts of various government initiatives like PMKVY, SANKALP, STRIVE, and the NEP 2020. This would ensure a cohesive approach to skill development across different sectors and levels of education.
- **Focus on Quality and Relevance:** Shift the focus towards enhancing the quality and relevance of vocational training and education. Curriculum should be regularly updated to reflect the current and future needs of the industry, incorporating advancements in technology and emerging sectors.
- **Public-Private Partnerships (PPPs):** Strengthen Public-Private Partnerships to leverage the strengths of both the government and the private sector. This could include collaboration in setting up training centers, curriculum development, and providing apprenticeship opportunities.
- **Increase Accessibility:** Make skill development programs more accessible to a broader segment of the population, including rural areas, women, and marginalized communities. Use technology-driven solutions like online and mobile platforms to reach a wider audience.



- **Enhance Employment Linkages:** Strengthen the link between skill training programs and employment opportunities. This could involve closer collaboration with industries to ensure placements for trained individuals and the development of entrepreneurship programs to encourage self-employment.
- **Global Skill Alignment:** Align India's skill development programs with international standards to ensure that the workforce is globally competitive. This includes not only technical skills but also soft skills and language proficiency.
- **Leverage CSR for Skill Development:** Encourage more corporations to invest their CSR funds in skill development projects. This could be facilitated by providing guidelines or incentives for CSR contributions that specifically target skill training and education.
- **Focus on Continuous Learning and Upgradation:** Promote the concept of lifelong learning and continuous skill upgradation among the workforce. This is crucial in a rapidly changing technological environment where new skills become relevant in a short period.
- **Decentralization and Localized Planning:** Adopt a more decentralized approach to skill development, allowing for localized planning and implementation that takes into account the specific needs and opportunities of different regions.
- **Monitoring, Evaluation, and Feedback Mechanisms:** Implement robust monitoring and evaluation mechanisms to assess the effectiveness of skill development programs. Feedback from stakeholders, including trainees and employers, should be used to make continuous improvements.
- The possession of relevant skills is pivotal for employability, transcending mere educational qualifications. The quality of education, coupled with the integration of technical expertise, is crucial in today's rapidly evolving job market. India's demographic advantage necessitates a sustained investment in skill development and apprenticeship programs to meet the dynamic demands of various industries. The National Education Policy (NEP) 2020 represents a transformative step towards reshaping the Indian educational landscape, transitioning towards a skill-oriented model that aligns with market needs and employer expectations. Despite these advancements, challenges persist, including traditional perceptions towards skill development, the alignment between industry requirements and the curriculum offered by educational institutions, and limited interaction between industry professionals and academia. These gaps hinder the translation of trained talent into a workforce that meets the precise needs of employers.

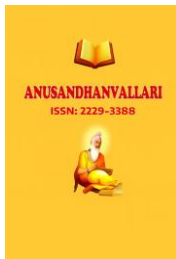
### Suggestions

Addressing the skills gap in a digitized economic environment is imperative for reducing unemployment and enhancing productivity across sectors. Corporate entities are uniquely positioned to bridge this gap by imparting contemporary skills to job seekers, entrepreneurs, and experienced professionals. Revitalizing traditional skill sets and strengthening industry-academia connections through Corporate Social Responsibility (CSR) initiatives could further enrich the talent pool. A concerted effort to shift the mindset of the youth towards valuing skill-based education is essential, requiring comprehensive awareness campaigns. The successful implementation of the NEP 2020 demands substantial commitment from the government and all stakeholders to revolutionize India's educational system and skill development landscape. Encouraging corporations to allocate a significant portion of their CSR budget towards practical industrial training for a substantial number of skill learners could enhance the quality of the workforce. Industry collaboration to offer sector-specific training would not only yield a high social return on investment but also ensure a steady supply of skilled labor for the industry. Moreover, fostering partnerships between educational institutions and businesses to create training programs aligned with current market demands would bridge the gap between the skills taught and those required in the workplace. A collective effort from government bodies, the private sector, educational institutions, and learners is essential to leverage India's demographic dividend and transform it into a global talent hub.



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