ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

Socio-Economic Aspects and Effectiveness of Skill Development Training Programmes in India: A Case Study of Bihar

Deepak Kumar Behera[1], Randhir Pratap Singh[2], Ajeet Kumar[3]

[1]Associate Professor, Dept. Of HSS, NIT Patna , Bihar, India

[2,3]Field Investigator, Dept. of HSS, NIT Patna, Bihar, India

DOI: https://doi.org/10.51244/IJRSI.2025.120800274

Received: 23 Sep 2025; Accepted: 29 Sep 2025; Published: 04 October 2025

ABSTRACT

India, with its demographic advantage of a youthful population, stands at a crucial point in its developmental journey, yet faces a persistent challenge of low formal skill training among its workforce. Despite government efforts through flagship initiatives such as Skill India Mission, PMKVY, and Digital India, only about 2.5–3% of the workforce has received formal vocational or technical training, far behind international counterparts like South Korea (96%) and Germany (75%). This skills deficit has constrained employability, with labour market studies consistently highlighting a mismatch between industry demands and available skill sets. Consequently, sectors including engineering, healthcare, IT, and manufacturing face shortages of job-ready candidates despite high vacancies. The issue is particularly acute in Bihar, one of India's fastest-growing yet economically lagging states, where agricultural employment is declining but non-farm job creation remains limited. To address this, the present study investigates the effectiveness of skill development programmes under the Aspirational District Programme in Muzaffarpur and Aurangabad. A total of 600 trainees across training institutes such as Kushal Yuva Programme and Kaushal Vikas Centres were surveyed. The respondents largely belong to rural, socially disadvantaged, and low-income groups, yet possess sufficient educational backgrounds to benefit from structured training. Findings reveal the need for stronger industry alignment, updated curricula, digital literacy integration, and enhanced job placement mechanisms. The study recommends targeted outreach in rural areas, improved monitoring frameworks, employer partnerships, gender-inclusive policies, and localized training models. Additionally, strengthening ICT skills and Recognition of Prior Learning (RPL) can significantly boost employability. By bridging the demand–supply skill gap and tailoring programmes to regional labour market needs, Bihar has the potential to transform its youth into a competitive workforce. Ultimately, sustained investment in vocational education and entrepreneurship-oriented training can help reduce unemployment, enhance productivity, and contribute to inclusive economic growth.

Keywords: Skill Development, Vocational Training, Employability, Bihar

INTRODUCTION

India stands at a critical juncture in its journey toward becoming a global economic powerhouse, but one of its most pressing challenges is the low level of formal skill training among its workforce. Despite having one of the youngest populations in the world, the percentage of skilled workers in India remains alarmingly low. As of the latest data available through 2024, only around 2.5% to 3% of the Indian workforce has received formal vocational or technical training, a figure that lags far behind international benchmarks. In contrast, countries like the United Kingdom (68%), Germany (75%), Japan (80%), South Korea (96%), and the United States (52%) have much higher proportions of skilled workers. This discrepancy has serious implications for India's economic competitiveness, particularly as the global demand for skilled labour continues to rise. With millions entering the workforce each year, India faces the dual challenge of providing not just employment but also ensuring that workers possess the right set of skills required by modern industries. According to the Twelfth Five-Year Plan of the erstwhile Planning Commission, a majority of India's labour force remains educationally underprepared. Nearly 85% of the workforce has completed education only up to the secondary level, while over 55% have education only up to the primary level. Furthermore, only about 2% have

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

undergone any form of formal vocational training, and a similarly small percentage have access to skill certification mechanisms.

This skill deficit directly impacts employability. The India Skills Report (2015 and later editions) highlights that only about one-third of job seekers possess the necessary skills required by employers. Despite a large pool of human resources, many of India's youth lack the practical knowledge, communication skills, technical expertise, and problem-solving abilities that modern employers demand. As a result, sectors like core engineering, banking and finance, retail, hospitality, e-commerce, and healthcare are witnessing a shortage of job-ready candidates, even though vacancies exist. The government has launched several flagship initiatives, including: Skill India Mission, Pradhan Mantri Kaushal Vikas Yojana (PMKVY), National Apprenticeship Promotion Scheme (NAPS), Start-Up India, Digital India, Make in India.

These initiatives aim to boost vocational training, promote entrepreneurship, and strengthen industry-academia partnerships. Yet, the implementation challenges remain significant. Many vocational training centres face issues such as outdated curricula, lack of qualified trainers, inadequate infrastructure, and limited alignment with market needs.

As of 2025, the skills gap continues to be a major concern, particularly with the increasing adoption of automation, AI, and emerging technologies in industries. According to projections by the National Skill Development Corporation (NSDC) and other labour market studies, there is likely to be a substantial skills shortfall in key sectors, including: Infrastructure and construction, Automotive and auto components, IT and digital services, Healthcare and allied services, Green energy and sustainability etc.

For instance, the Make in India campaign, which aims to transform India into a global manufacturing hub, demands a highly skilled and adaptable workforce. However, without widespread skilling and upskilling, the campaign risks falling short of its potential.

In response to these challenges, several state governments have also stepped up their efforts by launching regional skill development missions, setting up Skill Universities, and offering digital learning platforms to make training more accessible. Moreover, the government has started emphasizing Recognition of Prior Learning (RPL), which allows informal workers to have their existing skills assessed and certified. In recent years, the focus has also shifted toward future-proofing the workforce by integrating 21st century skills such as digital literacy, communication, problem-solving, and adaptability into vocational training programs. Initiatives like Skill India Digital, launched in 2023, aim to bring online learning modules, interactive simulations, and industry-certified assessments to rural and urban learners alike. It is expected that skill development will play a major role in tackling the problem of unemployment and poverty in rural areas by inculcating the desirable skills and develops entrepreneurial ability through various skill trainings.

There are many studies which give important to skill development as one of the essential factors for the economic development. Pandey's (2013) study found that youths have to develop life skills of how to cope up with the loss and stress and at the same time should develop their critical thinking to sustain with their employability. Khulji, Kakar & Subhan (2012) study asserted that vocation training improves the productivity and enhances the efficiency of the labour for better participation in economic development. In their study they tried to determine the impact of vocational training on economic growth of Pakistan between 1980 and 2010. Diaz & Rosas (2016) study on Peru economy found that skill development has a high long-term positive impact on formal employment. An evaluation of the skill training and employment placement services of projects under Employment Fund (EF) in Nepal by Chakravarty, Lundberg, Nikolov & Zenker (2016) was done by comparing outcomes of participants to a control group of individuals who had applied but were not selected for a course. The findings showed significant positive effect on employment rates, earnings, and finding employment related to skill learnt. Xia L., Ali A., Wang H., Wu X. and Qian D. (2022) suggests that economic prosperity can be achieved by encouraging higher vocational education and the equal development of high-tech industries in all regions along the modern industrial innovation and upgrading through higher vocational education, improve productivity, and promote the country's intensive development. Bakule & et al (2016) describe the importance of skills anticipation. They argue that skills contribute to the growth of economy either by increase in productivity or by development in the capacity of workers and firms to adopt

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

changes in technologies, way of workings and innovations in business world. With this view, skills anticipation is important because it gives warnings about evolving skill mismatches well in advance which provides sufficient time to design and implement planning to overcome the issue of skill mismatches. According to Mitra and Verick (2013), the mismatch between skill demand and supply is what causes India's extremely high unemployment rates. People who enter the workforce early typically have low skill as they usually drop out of school and don't have access to vocational training. Thus, it becomes challenging for individuals to secure desired work, particularly in the beginning of their careers when they also lack the necessary expertise. On the other hand, Mehrotra (2014) believed that India has an opportunity of demographic dividend as well as the challenge of skill demand supply gap. Vocational education and training have therefore been recommended by him as one of the primary routes to overcome the persistent skill gap and pursue inclusive growth in India in order to gain the benefit and address the issue. Satya, Y (2015) evaluated the changes in employment avenues observed in the predominantly rural North-Eastern hill-state of Meghalaya and found that considerable skill gaps exist when the local youth adopted a new skill in pursuit of alternative sources of livelihood. The main reason for unemployment is not because of the lack of jobs but because of the lack of employability skills possessed by the job seekers (Rahmat et.al, 2018). The Government of India is hugely investing in the skill development programs, it should ensure that there exists a proper alignment between the Government efforts and industry needs, to pave a way for the successful implementation of the skilled manpower for the nation (Anbuthambi and Chandrasekaran, 2017)

However, there is lack of studies that look at the employment status of trained skilled labour in India with vocational training, especially in Bihar. As Bihar one of the fastest growing States of India in recent times remained stuck in the grim of backwardness. Its agricultural workforce has significantly decreased but the non-farm sector employment has increased only to a limited extent. To reduce the burden of unemployment and under employment, there is a need in Bihar to prepare the labour supply as per the demand for labour in the market. Hence, inculcating the desirable skills and develops entrepreneurial ability through various skill trainings is need for the state. More specifically, the assessment report on aspirational district programme reported that skill development requires a greater attention in the aspirational districts (Michel et al., 2020). Hence, in the present study is an attempt to assess the socio-economic of trainee and their effectiveness of skill development training programmes through aspirational district programme in Bihar.

Data Sources and Methodology

The proposed study was conducted in Bihar. Two aspirational districts of Bihar namely Muzaffarpur and Aurangabad have been selected purposively. 300 each attender in both the district’s training institute were chosen.

In Aurangabad district, five blocks were selected and each block one training institute were identified for the data collection. Five blocks are Barun, Rafiganj, Daudnagar, Goh and Aurangabad. Training institutions are Kushal Yuva Programme (Barun), Kaushal Vikas Centre (Goh), Kushal Yuva Programme (Rafiganj), Kushal Yuva Programme (Daudnagar), Kaushal Vikas Centre (Aurangabad). In Muzaffarpur, Minapur, Mushari, Kudhani, Kanti blocks are chosen for the study. Skill Development Center, Khemaipatti (Minapur), Skill Development Centre, Gannipur (Mushari), Learnet Institute of Skills, Madhopur Road (Kudhani), Skill Development Centre, Bariya (Kanti) are considered for the data collection.

The research centers on the Aurangabad and Muzaffarpur districts, located in the heart of Bihar, India. These areas have been chosen due to their diverse economic activities and varying levels of vocational training infrastruce.

RESULT DISCUSSION

Socio-Economic Aspects of Trainees Involved in Skill Development Training programmes

Age Distribution

A striking majority, accounting for approximately 85% of the respondents, fall within the vibrant 16–25 year

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

age bracket. Specifically, around 278 individuals are in the 16–18 years category, while an additional 188 participants are aged between 19 and 25 years. Conversely, the representation of other age groups is minimal, with those aged below 16 and above 35 making up less than 5 % each. This demographic clearly indicates a youth-centric cohort, presenting a prime opportunity for targeted employability training and skill development programs. The predominance of respondents in this age group suggests they are either currently navigating their academic journeys or have recently graduated from formal education, making them especially receptive to initiatives aimed at enhancing their career readiness.

Gender Representation Analysis

The gender distribution within this sample demonstrates a fairly balanced representation, marked by a substantial presence of females, accounting for approximately 44% of the total. This figure is particularly noteworthy in rural or traditional environments where women often face barriers to accessing training opportunities. The inclusion of a significant number of female participants is indicative of progress towards gender equity and suggests potential for fostering positive developments within the context of skill development and employability within the state.

Marital Status

The analysis indicates that a predominant majority of the group, accounting for 92%, is unmarried. This demographic trend underscores the concept of youth dependency, suggesting that young individuals in this cohort are likely influenced by familial guidance when making career decisions. The comparatively low number of married participants, at only 39, along with a solitary individual categorized as "Others," further highlights the youthful nature of this group and reinforces the potential role of family in shaping their professional choices.

Relationship to Household Head

The study indicates a significant proportion of dependent family members, namely sons and daughters, within the population. This implies that the decision to engage in a training program is frequently influenced or facilitated by parents or guardians. Such a dynamic underscores the importance of familial support in facilitating educational and professional development opportunities for younger individuals.

Caste and Social Category

The demographic analysis indicates that a substantial proportion of the population, exceeding 70%, comprises individuals from socially disadvantaged groups, specifically OBC, SC, ST, and EBC categories. This demographic insight underscores the necessity for focused and inclusive skill development initiatives in India, such as the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) and the Pradhan Mantri Kaushal Vikas Yojana (PMKVY). These programs aim to enhance the skill sets of these marginalized communities, thereby facilitating improved economic opportunities and fostering social mobility.

Religion

The respondent pool comprises 527 individuals identifying as Hindu, accounting for 93.5% of the total participants. In contrast, 39 individuals, or 6.9%, identify as Muslim, while 2 respondents identify with other religious affiliations. This distribution indicates a significant predominance of Hinduism among the respondents, which is consistent with the demographic trends observed in the rural areas of Bihar. Such a concentration reflects the entrenched cultural and religious landscape of the region, highlighting the lack of religious diversity in this population sample.

Card Ownership (Identity/Benefit Access)

In this study, we found that a significant portion of respondents, accounting for 52.5%, reported having no official identification cards at all, represented by card number 307. Meanwhile, responses regarding ownership of essential documents such as Aadhar, Ration cards, PAN, and KYP were varied, though

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

generally minimal, indicating a lack of consistency in availability or accessibility. Additionally, we identified a troubling data quality issue, with over 250 entries left blank or recorded inconsistently. The implications of these findings are noteworthy. The low levels of ownership of official identification cards point to a broader issue of limited access to formal identity verification, essential benefits, and digital services. This situation appears to be particularly acute among females and individuals from economically disadvantaged backgrounds, highlighting a pressing need for targeted interventions to improve access and inclusion in these vital areas.

Geographical Spread

Aurangabad account 55% of respondents and Muzaffarpur account 45% of respondents Both are predominantly rural and semi-urban districts located in Bihar, characterised by a substantial youth population. However, these regions experience considerable deficiencies in job opportunities, which significantly impede the employment prospects for their young residents. This context elucidates the pronounced interest in employability training initiatives, as young individuals endeavour to augment their skills and enhance their competitive advantage in the labour market. Such training programs are essential for fostering economic development and addressing the urgent need for skilled labour in these areas.

Income Levels

The majority of respondents come from low-income households, with monthly earnings generally falling below ₹5,000. This financial constraint significantly impacts their lives, as employment opportunities among those surveyed are minimal, with only a small fraction serving as household heads. This situation highlights a profound economic dependency within families, where limited income forces the youth to pursue vocational skills and job readiness programs. Such initiatives become crucial pathways for enhancing their prospects and breaking the cycle of poverty.

Employment Status

The majority of the individuals in this cohort are either unemployed or currently engaged in academic pursuits. A limited number are actively employed or earning an income. This indicates that the training intervention is aimed at addressing the needs of NEET (Not in Education, Employment, or Training) youth, as well as those who are underemployed, thereby equipping them with essential skills and opportunities for career advancement.

Educational Attainment

The majority of individuals have attained completion of secondary education or, in certain instances, higher secondary education, while a minority may have prematurely exited the educational system prior to reaching these levels of achievement. The educational qualifications possessed by these individuals are typically adequate for vocational training or entry-level employment opportunities. However, it is critical to underscore that continuous upskilling is essential for individuals to enhance their career prospects and maintain a competitive edge in the evolving job market.

Access to Government Schemes

The remarkably low levels of access to critical identity documents such as Aadhar, KYP, and Ration cards reveal a troubling disparity in social inclusion, particularly for individuals who, despite being eligible, remain unconnected to these essential services. This gap not only hinders their ability to seek employment and access basic necessities but also reflects broader systemic issues of awareness and accessibility. Therefore, it is crucial to develop comprehensive programs that integrate targeted employability training with robust initiatives aimed at raising awareness about these welfare entitlements. By doing so, we can ensure that all eligible individuals are empowered to navigate and utilize the social support systems designed to assist them, thereby fostering greater social equity and inclusion.

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

Household Asset Ownership

Mobile phones have become nearly ubiquitous in contemporary society, with an impressive 538 families owning two or more devices, underscoring their essential role in facilitating communication, social interaction, and access to information. The prevalence of televisions, computers, and two-wheelers reflects a widespread integration of digital technology and mobility within households, enabling families to stay informed and connected while also providing essential transportation options for daily activities. Internet access is notably high, with 543 families enjoying the benefits of at least one connection, allowing them to tap into a wealth of online resources for education, entertainment, and socialization, thereby enriching their overall quality of life. The ownership of washing machines and refrigerators is moderate, signifying a growing yet still evolving access to fundamental domestic amenities that contribute to convenience and improved living standards in everyday household management. In contrast, the ownership of four-wheelers and multiple computers remains relatively scarce, indicating that a significant portion of households operates within a lower to mid-income spectrum, which influences their ability to invest in more advanced technologies and larger vehicles.

The majority of individuals fall within the 16–25 age range, representing a youthful demographic eager for opportunities. This group is ideally positioned for entry-level training and job placements, emphasising the need to tailor programs that cater specifically to their skill development and career initiation. Approximately 44% of the population is women, indicating a significant female presence. There is a compelling opportunity to design and implement women-centric initiatives that empower and support female participants in the workforce.

Table.1. Combined Insights And Implications

Indicator	**Key Observation**	**Implication for Programs**
Age	Mostly 16–25 years	Best suited for entry-level training/jobs
Gender	44% female	Opportunity for women-centric interventions
Caste/Religion	Mostly OBC/SC; Hindu majority	Needs inclusive approach and social sensitization
Marital Status	90% unmarried	More flexibility in migration/job choices
Household Role	Dependents	Family involvement in career decisions
Income & Employment	Very low income, high unemployment	Strong need for placement-linked training
Education	Secondary and above	Capable of vocational skill adoption
Card Ownership	Inconsistent,	Urgent need to link with digital identity

Source: Authors Calculation

The demographic is predominantly composed of OBC (Other Backward Classes) and SC (Scheduled Castes) individuals, with a Hindu majority. Programs must adopt an inclusive approach that fosters awareness and sensitivity towards the diverse backgrounds of participants to ensure equitable access and representation. A staggering 90% of this group is unmarried, highlighting a particular stage in life. This unmarried status provides an advantageous flexibility in their migration and job choices, allowing programs to encourage exploration of diverse career paths. Most individuals play a dependent role within their households. Career decisions are often influenced by family input, suggesting that programs should consider family involvement and support in career guidance initiatives. The community experiences exceedingly low income levels and high rates of unemployment. There exists a critical need for training programs linked to employment

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

opportunities, focusing on enhancing skills that directly contribute to job placements. Many participants have completed secondary education or higher, indicating a level of academic competence. This educational background suggests that they are well-equipped to adopt vocational skills, and programs should build on their existing knowledge to facilitate skill development. Ownership of important identification cards is inconsistent, often lacking altogether. This situation signals an urgent necessity for initiatives aimed at ensuring that participants have access to essential identification, as it plays a crucial role in accessing various employment opportunities and services.

Training Course Analysis

The primary source of information regarding the course is overwhelmingly derived from personal referrals from friends and family, which constitute a significant majority at 61.8%. This underscores the importance of personal relationships in the decision-making process. In comparison, online sources and advice from teachers have a moderate impact, yet they do not match the persuasive power of recommendations from close acquaintances. Traditional media outlets, such as newspapers and pamphlets, play a minimal role in disseminating information about the course, indicating a shift towards more personal and direct forms of communication in today's information landscape.

The survey results reveal that a substantial majority of the respondents, specifically 53.8%, are primarily driven by a personal interest in the field they are pursuing. This finding highlights a strong intrinsic motivation among the participants, suggesting that their passion for the subject matter significantly influences their educational choices. Furthermore, peer influence plays a notable role in their decision-making process; approximately 29% of respondents indicated that they chose this course of study because a friend is currently enrolled in the same program.

Table.2. Social Aspects of Sample Districts

Components	Number		Components	Number
Age			**Do you have any Card**	
16–18	278		No	307
19–25	188		Aadhar	26
26–34	95		Ration Card	22
Relation to Household Head			Pan Card	4
Daughter	195		KYP	3
Son	273		Learner Facilitator ID	1
Wife	8		KYP Card	1
Brother	5		1, 2, 0 (coded)	12
Father	27		No Response	251
Mother	3		**District**	
Servant	0		Aurangabad	313
Other	4		Muzaffarpur	251

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

Not Respond	59		**Education Level**	
Marital Status			Uneducated	3
Unmarried	513		Primary	13
Married	39		Secondary	273
Others	1		Intermediate	110
No Response	21		Graduation	136
Gender			Post-Graduation	35
Male	322			
Female	248		**Religion**	
Other	1		Hindu	527
Category			Muslim	39
OBC	279		Christian	1
SC	118		Others	1
General	95			
ST	35			
Extremely BC	29			
Not reported	2			

Source: Authors calculation

Table.3. Household Asset Ownership Summary

Item	**Not Owned**	**Owned**	**Owned Multiple**
TV	1	55	514
Refrigerator	1	274	295
Washing Machine	1	406	163
Two-wheeler	1	358	211
Four-wheeler	1	173	396
Mobile Phone	1	31	538
Computer	1	130	439
Internet	1	543	26

Source: Authors calculation

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

This underscores the importance of social connections in shaping academic pathways. In contrast, factors such as the availability of seats in the program and external pressures—whether from counseling services or family expectations—appear to have a considerably lesser impact on the students' decisions regarding their education. The opportunity to enroll in a tuition-free course appeals to 12.8% of respondents, indicating that financial considerations play a significant role in their decision-making process. This suggests that the elimination of costs can be a compelling motivator for individuals seeking educational opportunities. In contrast, only a small fraction of respondents, at 2.5%, report that family pressure influenced their choice to enroll. This low percentage implies that the majority of enrollment decisions are more self-directed and personal, rather than being shaped by external familial expectations. The analysis reveals that personal relationships significantly influence course selection, serving as a key factor both in the discovery of various courses and in the decision-making process to enroll. These interpersonal connections—whether from friends, family, or mentors—can provide recommendations, encouragement, and firsthand insights that greatly impact students' choices. In addition to relational influences, intrinsic motivation stemming from a genuine interest in the subject matter emerges as a crucial determinant in course selection. Students who are passionate about a topic are more likely to pursue related courses, driven by their desire to deepen their understanding and engage with the material.

Conversely, external factors such as cost and familial expectations appear to play a lesser role in shaping course decisions. While these considerations can certainly affect choices to some extent, they are overshadowed by personal interests and relationships.

This nuanced understanding of the factors at play can prove invaluable for course marketers and educators, allowing them to tailor their outreach strategies more effectively. By prioritizing relationship-building and highlighting the intrinsic value of courses, they can better connect with potential students and meet their educational needs.

Table. 4. Information about the Skill Development Course

Number	**Source**
10	pamphlet
31	If any other
66	From the internet
19	newspaper
371	Friend/Family
69	Teacher
3	Self
	Reason for Opted the Course
172	My Friend joined this course
18	Centre employee force
34	Through Counselling
22	Seats were available
323	Interested in this field

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

	Reason for Course Enrolment
77	Because it is charge-free
15	Due to family pressure
164	Peer influence
310	To get an employment opportunity

Source: Authors calculation

Assess the Effectiveness of Skill Development Training Programmes

A substantial majority of respondents, totaling 562, confirmed their participation in certification courses, indicating a strong presence of formal recognition within the training landscape. This reflects a favorable environment for professional validation and skill accreditation. Encouragingly, 441 respondents reported that the training courses they attended were offered free of charge. This statistic underscores a commitment to inclusivity and accessibility, ensuring that individuals from diverse backgrounds can engage without financial barriers. The duration of most courses was primarily three months, with 371 respondents identifying this as the typical length. However, notable discrepancies were observed regarding duration entries, with some indicating lengths such as "2 Months" and "1.5 Months." These irregularities highlight a concerning lack of standardization in training program structures, which could lead to confusion and inconsistent learning experiences. A striking 493 respondents noted that they did not receive any financial benefits from the courses they completed. This suggests a deficiency in tangible incentives or ongoing support mechanisms that could enhance the appeal and perceived value of these training opportunities for participants. Additionally, 437 respondents indicated that they did not possess full residential status during their training, revealing potential challenges faced by learners who reside at a distance. This limitation raises significant questions regarding accessibility and the ability of remote participants to fully engage in the educational experience.

While the coverage of certification programs is robust, many training initiatives fall short by not offering post-training incentives, which can significantly influence learner motivation and ultimately affect job placement opportunities. Furthermore, there is an urgent need to standardize the duration of courses and thoroughly track the tangible benefits experienced by participants after obtaining their certification. Additionally, the non-residential nature of these programs may pose barriers to access for individuals living in remote villages, thereby hindering equitable reach and support for all potential learners.

Impact of Training on the Workforce and Identify Challenges

A significant number of participants, totaling 308, have attended three or more training sessions. This trend reflects a pattern of repeat participation, which may be attributed to dissatisfaction with post-training outcomes or an ongoing difficulty in securing employment despite their efforts in training.

An evaluation of work experience reveals concerning insights, as 134 responses were left blank, indicating either a lack of reporting or a possible reluctance to share this information. Remarkably, only one individual rated their experience as "Excellent," and only a few provided specific employment durations. This suggests that the training program is not effectively leading to meaningful job experience or professional growth for participants.

The connection between training programs and real-world employment outcomes is notably weak, indicating significant gaps in effective job placement opportunities. Moreover, the repetitive nature of training sessions, which lacks a clear framework for skill advancement or pathways to employment, highlights fundamental inefficiencies within the system. Additionally, the data collected is often fragmented and inconsistent, complicating efforts to assess the true impact of these programs. This situation underscores the urgent need

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

for enhanced tracking, follow-up, and reporting mechanisms to provide a clearer understanding of outcomes and foster improvements in workforce development.

Understanding Impact on Demand Creation for Trained Workforce

There are notably limited references to financial advantages or connections with employers, suggesting a gap in the perceived value of training programs. - The skill categories identified tend to be overly broad or frequently reiterated, which constrains the ability to stand out in a competitive job market. - Many respondents have engaged in training programs, yet the absence of data indicating employment outcomes after training points to a troubling issue of inadequate demand for skilled labor.

Table.5. Name and Type of Centres in Sample Districts

Name of Centre	**Number**
Navyug Kaushal Yuva Programe Rafiganj	103
BSDC Aurangabad Sadar	70
Skill Development Center	57
Skill Development Center, Baria, Muzaffarpur	56
Rajesh Kumar Sinha	50
VIT IT KYP Center	45
Vagisha Educational Trust	35
Rajnath Chauldhery ITI College	34
Skill Development Center, Khemaipatti, Minapur	22
SSRES, Muzaffarpur	17
Skill Development Center Khemaipatti Minapur	17
Orian Public School	11
Pradhan Mantri Kuahsal Kendra	9
Skill Development Center, Azad Colony, Muzaffarpur	9
LIS, Muzaffarpur	5
BSDC Barun	5
ARCC Rafiganj	5
Skill Development Center, New Police Line Chauk	5
No Response	4
Skill Development Center, Baliya, Muzaffarpur	3
Skill Development Center, Khanpatti, Minapur, Muzaffarpur	3
Lernant Muzaffarpur	2

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

Skill Development Center Azad Colony Rd-4	1
Skill Development center	1
Maripur Tilak Nagar, Muzaffarpur	1
LIT Lernet Muzaffarpur	1
Solar PV Instoller	1
skill Development center Azad Colony Rd-4	1
Skil Development Center	1
Type of Center	**Number**
PPP	348
Private	195
Government	24
No Response/NaN)	6

Source: Authors calculation

The demand for trained workers seems to be quite low for several reasons: - The skill offerings provided in training programs are often repetitive and lack differentiation, making it challenging for potential employees to stand out in a competitive job market. - There is a noticeable absence of direct engagement with employers who could provide valuable insights and opportunities for trainees, limiting the effective alignment of skills with industry needs. - Furthermore, the mechanisms for job placement following training are insufficient, leaving graduates without the essential support they need to transition smoothly into the workforce.

Table.6. Duration, Type and Number of Training, Skill Category and Experience about the Course

Duration of Training	**Number**	**Skill Category Name**	**Number**
3 Month	372	CIT, CLS, CSS	303
2 Month	150	Dresser (Medical)	54
No Response	19	BS,CIT	43
64 Days	9	Associate (Front Office)	38
4 Month	10	Housekeeping	30
1.5 Month	6	No Response	28
45 Days	3	Certificate in Lang (Eng)	24
65 Days	3	Certificate in Languare (Rng)	23
7 Days	1	Solar	17
8 Hours	1	KYP	5
Type of Skill Training		BSDM	5

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

General	335	NO	1
Vocational	223	PMKK	1
Blank	10	Guest Service Associate	1
Technical	5	GSA	1
Vocational4	1	**Work Experience**	
Training Program attended		Good	369
3	308	No Response	134
No Response	116	Satisfaction	43
1	106	Very Good	12
2	39	Satisfied	8
Type of Skill Category		Yes	2
Medium	508	7 Days	2
High Medium	31	0	1
No Response	18	Excellent	1
low	13	NO	1
High Skill	4	8 Days	1
Distance to Training		**Is Paid Course**	
2 KM	51	NO	441
5 KM	72	Yes	128
3 KM	69	No Response	5
10 KM	53	**Is Certification Course**	
8 KM	27	Yes	562
6 KM	47	NO	7
1 KM	21	No Response	5
4 KM	48	**Financial Benefit Response**	
No Response	20	NO	493
15 KM	17	Yes	76
12 KM	15	No Response	5
		Is Fully Residential	
		NO	437

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue IX September 2025

		Yes	131
		No Response	6

Source: Authors calculation

CONCLUSION AND RECOMMENDATION

The respondent population comprises rural, low-income individuals, primarily comprised of socially disadvantaged youth, many of whom are grappling with unemployment. Despite facing socio-economic challenges, this group demonstrates a commendable level of education, which positions them advantageously for various developmental programs. They are an exemplary target group for initiatives aimed at skill development, where practical training and mentorship can pave the way for enhanced employability. Additionally, programs focused on digital literacy can empower these young individuals with essential technological skills, enabling them to navigate today's digital landscape confidently. Financial inclusion efforts can provide them with crucial access to financial services, helping to foster economic independence. Furthermore, job placement programs tailored to meet their specific needs can connect them with meaningful employment opportunities. It is essential to emphasize gender equality within these initiatives, ensuring that both young men and women receive equal support and opportunities, ultimately contributing to their social upliftment and the creation of a more equitable community.

Based on this current study and analysis of primary and secondary data it is recommended various point on skill development in Bihar:

1. Expand the range of skill offerings to encompass training that is specifically tailored to meet current market demands and align with the needs of various sectors. This approach ensures that participants gain relevant and applicable skills crucial for today's workforce.
2. Elevate the quality of data collected during the registration process and subsequent feedback sessions. By doing so, we can facilitate more accurate tracking and comprehensive evaluation of training programs, ultimately leading to improved outcomes for participants.
3. Implement standardized monitoring frameworks that rigorously assess critical elements such as training duration, financial benefits achieved, and overall employment outcomes. This structure will provide valuable insights into the effectiveness and impact of the training initiatives.
4. Forge strong connections with employers and establish robust job placement support systems. This strategy aims to significantly enhance the perceived value of training by ensuring that graduates have direct pathways to employment opportunities.
5. Initiate targeted outreach programs in rural areas, utilizing innovative residential or mobile training models. By bringing training directly to remote communities, we can increase accessibility and support skill development where it is most needed.
6. Tailor academic curricula in collaboration with employers from aspiring districts to ensure that educational programs are directly aligned with industry needs and emerging job markets.
7. Enhance job matching platforms and integrate comprehensive digital job search training, enabling students to navigate the contemporary employment landscape effectively and secure suitable positions.
8. Address the critical issue of under-skilling by reinforcing foundational abilities and Information and Communication Technology (ICT) skills, particularly for marginalized groups who often face barriers to access and training.
9. Implement awareness campaigns and provide incentives designed to mitigate the apprehension many individuals feel about relocating to outer regions. Highlight these areas as having promising job opportunities, thereby widening the potential for career advancement.
10. Employ real-time, localized data to dynamically adjust training focus and course offerings, ensuring that educational programs remain responsive to the evolving demands of the job market.

REFERENCES

1. Anbuthambi, B., & Chandrasekaran, N. (2017). Impact of Skill India on rural youth – A perspective.

ICTACT Journal on Management Studies, *3*(1), 457–460. https://doi.org/10.21917/ijms.2017.0062

1. Bakula, M., Thomas, R., et al. (2016*).* Developing skills foresights, scenarios and forecasts: Guide to anticipating and matching skills and jobs (Vol. 2). International Labour Organization.
2. Chakravarty, S., Lundberg, M., Nikolov, P., & Zenker, J. (2016). The role of training programs for youth employment in Nepal: Impact evaluation report on the employment fund (Policy Research Working Paper No. 7656). World Bank. http://hdl.handle.net/10986/24232
3. Díaz, J. J., & Rosas, D. (2016). Impact evaluation of the Job Youth Training Programme Projoven (IDB Working Paper Series No. IDB-WP-693). Inter-American Development Bank.
4. Khulji, M., Kakar, R., & Subhan, M. (2012). Skill development in India: Challenges and opportunities. Journal of Education and Work, *27*(6), 629–650.
5. Mehrotra, S. (2014*).* India's skills challenge: Reforming vocational education and training to harness the demographic dividend. Oxford University Press.
6. Michael E. Porter, & Stern, S. (2020). An assessment of Aspirational Districts Programme. The Institute for Competitiveness, Haryana. https://socialprogressdotblog.files.wordpress.com/2020/08/an-assessment-of-adp-single-page-view-20-aug-2020.pdf
7. Mitra, A., & Verick, S. (2013). Youth employment and unemployment: An Indian perspective. International Labour Organization, DWT for South Asia and Country Office for India.
8. Pandey, N. A. (2013). Awareness of life skills for job sustainability amongst management students. Apotheosis: Tirpude's National Journal of Business Research (TNBJR), *4*(1), 149–155.
9. Rahmat, N., Buntat, Y., & Ayub, A. R. (2018). Employability skills based on polytechnic graduate job role: Immediate supervisor perception. Asian Social Science, *14*(11), 30–40.
10. Satya, Y. (2015). Skills development and employability in India: Challenges and strategies. International Journal of Research in Economics and Social Sciences, *5*(3), 1–10.
11. Xia, L., Ali, A., Wang, H., Wu, X., & Qian, D. (2022). A dynamic analysis of the asymmetric effects of vocational education and training on economic growth: Evidence from China. Frontiers in Psychology, *13*, 888969. https://doi.org/10.3389/fpsyg.2022.888969

ACKNOWLEDGMENT

1. This article is part of ICSSR sponsored project. This is to acknowledge the Indian Council of Social Science Research (ICSR), New Delhi for providing financial support to undertake the research.
2. An AI tool was employed to enhance grammatical correctness and the overall flow of language in the work.