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EVALUATION STUDY REPORT OF THE SCHEME PRADHAN MANTRI KAUSHAL VIKAS YOJANA (PMKVY)

2016 – 2020

सत्यमेव जयते

Goverment Of India

Submitted to

ECONOMIC &POLICY WING

MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP

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Conducted by

Indian Institute of Public Administration

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I hope that the study report would meet all the requirements envisaged in the Terms of Reference (ToR) of the third party evaluation of the Central Sector Scheme- Pradhan Mantri Kaushal Vikas Yojana (PMKVY).

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1. EXECUTIVE SUMMARY

1. Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is the flagship outcome-based skill training scheme of the Ministry of Skill Development & Entrepreneurship (MSDE) under Skill India Mission. It is India's largest skill certification scheme and the objective is to enable and mobilize a large number of Indian youth to take up outcome-based skill training and become employable and earn their livelihood. PMKVY 1.0 was launched on 15th July 2015. Based on outcome centric effectiveness of the PMKVY 1.0, the PMKVY 2.0 was approved on 15th July, 2016 with more focus on stringent quality parameters. The instrumental objective of the scheme is to enable a large number of Indian youth to take up industry-relevant skill training that would help them secure a better livelihood. The scheme aims to train them on skills based on the National Skill Qualification Framework. The institutional arrangement for the scheme comprises the Ministry of Skill Development and Entrepreneurship (MSDE), National Skill Development Cooperation (NSDC), Sector Skill Councils (SSCs), Training Providers (TP), and Assessment Agencies. However, the NCDC plays a substantial role in the implementation of the scheme. The PMKVY 2.0 has two components, namely, Centrally Sponsored & Centrally Managed (CSCM) and Centrally Sponsored State Managed (CSSM). The CSCM is implemented by NSDC and CSSM, by State Skill Development Missions (SSDMs). Moreover, the scheme has three formats, namely Short term Training, Special Projects, and Recognising Period Learning (RPL).

2. The broad vision of the scheme is to encourage and promote skill development for the youth of the country by aligning itself with the common cost norms guidelines. The assessment of trainees under the scheme is linked with 50% technical/non-technical QP for NSQF level below 3 and 70% for NSQF level above 4. The scheme is aligned with other Missions of the Government of India, such as Make in India, Digital India, Swachh Bharat, and Smart Cities, etc. The major objectives of the scheme can be classified into four parts (as mentioned in the Scheme Guidelines): (1) to enable and mobilize a large number of youth to take up industry designed quality skill training so that they become employable and earn their livelihood, (2) to increase the productivity of the existing workforce, and align skill training with the actual needs of the country, (3) to encourage the standardization of the Certification process and put in place the

foundation for creating a registry of skills, and (4) to benefit 10 million youth over the period of four years (2016-20).

3. The PMKVY 2.0 (2016-20) has consideration for social inclusivity by gearing up support to vulnerable, marginal groups and the northeast region. Out of the total expenditure incurred, 15.4% of actual expenditure has been spent on SCs, 7.9% on STs, and 6.7% on the Northeast region. Out of the total sample size studied, the scheme has covered 48.7% women, 12.43% SC, 4.8% ST, 0.9% Divyangjans, and 46.1% BPL beneficiaries. The special interventions under the scheme have been found for beneficiary women. To incentivize women, persons with disability, and transgender, post-placement support, conveyance allowance, assistive aid (in case of PwD), boarding, and lodging (whatever applicable) are provided amongst others. In addition, all candidates completing certification are given reward money of Rs. 500. To encourage and support women candidates, to take employment opportunities, Rs. 1500 is provided in the form of post-placement support (PPS) to eligible candidates within and outside the district of domicile for 2 months and 3 months, respectively.

4. The budget allocations for CSSM and CSSM are 25% and 75% respectively. The placement target set for both the components is 70%. In 2016, the target allocation to the training centres was based on a first-come, first-served basis. In 2017, the target allocation to TCs was based on first come first serve along with geographical and sectoral coverage. In 2018, the target allocation to TCs changed to (1) placement performance, (2) PMKKs, (3) request for proposal (in line with sectoral investments), (4) academic institutions. In 2019, the same was changed to: (1) employer models introduced, and (2) most training in PMKKs. The new initiative undertaken for training partner selection is also based on geographical and sectoral coverage, aggregation of sectoral demand, stress on previous experience, and financial strength of the organization to bring in more credibility. The employer-led model has been initiated to empanel industry as partners for providing training with a focus on employment and industry participation. Academic institutes have been brought in on part payment model as best in class institutes, an effort to on-board and leverage existing infrastructure/expertise of existing recognized institutes. The focus has been laid on job role level 5 and above. The scheme has aimed at covering 108 aspirational districts, 79 NE districts across 8 NE states, and 53 unserved districts.

5. For the evaluation of PMKVY 2016-20, the objectives were to assess the performance of the scheme and analyze various gaps for corrective measures with regard to improvement in market efficiency and productivity of labour while ensuring, the inclusion of women, SC, ST, Divyang, and other vulnerable groups. Another major objective of the study was to assess relevance, effectiveness, equity, and sustainability, input use efficiency related to the institutional mechanism, fund flow, effectiveness of PMKVY in skilling, up-skilling, RPL activities, certification, and placement. The other objectives of the scheme to assess the formalization of workers with social security, issues, and challenges in the implementation mechanism along with the scheme having convergence with other schemes of government/private sector/ CSR effort. As such, the central objective of the study was to gauge the impact of different components under the scheme on beneficiaries/candidates/trainees. The evaluation has also considered the insights drawn from various stakeholders regarding the current implementation of the scheme and provides feedback for further improvement.

6. The evaluation study used up a comprehensive methodology fuelled by a pragmatic approach. This consisted of the quantitative and qualitative survey with the different layers of stakeholders. The methodology under the study was designed in such a way that it took the sample size representative of the population (universe). Since the scheme has been implemented in 28 states and 7 UTs, so based on the maximum number of training partners covered under the scheme, two states were selected from each of the six NSSO classified zones. In the case of the northeastern and south zones, the state of Tripura was replaced by Manipur, and Telangana by Karnataka (the nearest TP number) due to inaccessibility owing to the Covid pandemic. As such, on the first strata, from the northeast zone, Assam and Manipur, from east Bihar and Odisha, from central Madhya Pradesh and Uttar Pradesh, from North Haryana and Rajasthan, and south, Karnataka and Tamil Nadu were selected. On the second strata, the district with more youth population, unemployment, urbanization, and socio-economic deprivation was selected after taking feedback from the Ministry on it. On the third strata, training partners were selected with the maximum number of trainees trained. On the final strata, the trainees were randomly selected to provide their feedback.

7. Using random sampling technique, a total of 86 respondents from Assam, 76 from Manipur, 97 from Bihar, 64 from Odisha, 74 from Gujarat, 76 from Maharashtra, 105 from Madhya

Pradesh, 74 from Uttar Pradesh, 94 from Haryana, 48 from Rajasthan, 61 from Karnataka and 67 from Tamil Nadu were selected. In addition, out of 36 Sector Skill Councils contacted, a total of 16 Sector Skill Councils' representatives came forward to register their views on the scheme, particularly on the roles that they played in the implementation of the scheme. The Sector Skill Councils giving feedback were: (1) Agriculture Skill Council of India, Haryana, (2) Apparel Made Ups & Home Furnishings Sector Skill Council, New Delhi, (3) Beauty & Wellness Sector Skill Council, New Delhi, (4) Domestic Workers Sector Skill Councils, New Delhi, (5) Electronics Sector Skill Council of India, New Delhi (6) Furniture and Fittings Skill Council, Haryana, (7) Handicrafts and Carpet Sector Skill Council, New Delhi (8) Indian Iron and Steel Sector Skill Council, West Bengal (9) Life Sciences Sector Skill Development Council (10) Management & Entrepreneurship and Professional Skills Council, New Delhi, (11) Media and Entertainment Skills Council, New Delhi (12) Paints and Coatings Skill Council, Maharashtra, (13) Rubber Skill Development Council, New Delhi, (14) Skill Council for Mining Sector, New Delhi (15) Skill Council for Persons with Disability, New Delhi, and (16) Textile Sector Skill Councils, New Delhi. The application of multiple segregations at different levels made the study unique and scientific.

8. The stakeholders contacted under the study were: trainees, trainers, training providers, industry partners, and Sector Skill Councils, and MSDE officials. The research tools used were: Semi-structured questionnaire, In-depth interview, Observation & Focus Group Discussion. The study has been conducted in 12 states, 38 districts, and 54 training providers. Under the coverage, the study consisted of a total of 668 trainees, 81 industry partners, 54 training providers (TPs), 119 trainers, and 16 Sector Skill Councils. Thus a total of 938 samples have been covered under the study. The study has taken into account the selection of two states from each of the NSSO classified zones. Several rounds of interaction were done with the Ministry to arrive at the sound foundation to collect information on the priority components of the scheme.

9. The PMKVY Guidelines (2016-20) document on page number 4, (sub-point-1.4.5) stipulates mobilization. It mentions that the training centres shall conduct various outreach campaigns across the districts in which they are located. The outreach campaign may comprise a combination of door-to-door visits, mobile vans, and interaction with community-based groups and local leadership. All outreach efforts are to target school dropouts and undergraduate college

dropouts. Mass enrolment of students shall not be allowed under the scheme. Kaushal Melas should be conducted in coordination with state/local representatives at least once every six months in accordance with the Kaushal and Rozgar Mela guidelines. The training centres are required to ensure that their mobilization efforts are visible on print, outdoor and digital media platforms, in accordance with the Branding and Communication Guidelines. Out of the total responses received from six NSSO classified zones, the optimum mobilization has been realized through the door-to-door campaign (25.3%), followed by Kaushal and Rozgar Melas (22.4%), community leaders (19.2%), staff of training centre (14.9%), advertisement through prints and audio-visual media (7.9%), social platforms (5.9%), and peer group (4.3%). The peer group here implies the folks and friends of beneficiaries who made trainees aware of the scheme before the mobilization. The computed mean value for the door to door campaign has scored 25.5, followed by Kaushal and Rozagar Melas (22.4), the community leaders (18.9), staff of training centre (13.5), advertisement through print and audio-visual media (8.6), social platform (6.0), and peer group (4.3).

10. Out of the 487 enrolled samples collected under the CSCM component from the sampled states, the maximum percentage of placement has occurred in the state of Gujarat (100%), Maharashtra (100%), and Manipur (100%), followed by Madhya Pradesh (91.4%), Rajasthan (87.9%), Haryana (82.4%), Odisha (81.6%), Uttar Pradesh (78.6%), Karnataka (73%), Bihar (62.8%), and Tamil Nadu (47.1%). On average, the placement under the CSCM component is 77.82%. Out of 171 sample-covered under the CSSM component, the maximum percentage of placement has been found in the state of Maharashtra (93.3%) and Gujarat (89.5%), followed by Karnataka (61.5%), Manipur (57.9%), and Assam (18%) in the sampled beneficiaries across the states. On average, the placement under the CSSM component is 58.87%.

11. Under the component of CSCM, apart from the regular Short Term Training (STT), an additional sub-component of Special Projects are also embedded for vulnerable groups like inmates of jail and juvenile homes, tribal population belonging to Bru, Katkari, Karbi Anglong tribes, etc. A number of beneficiaries are trained under the YUVA initiative of Delhi Police for skilling misguided youth, in-conflict with the law, and underprivileged candidates. Captive placements are provided to candidates certified through collaboration with industry partners. The projects under the scheme are undertaken in collaboration with Government Departments like the

Department of Women and Child Welfare, the Department of Social Welfare, etc. Additionally, demand-driven and innovative job roles like self-employed tailor, waste pickers waste segregation, loan processing officer, Solar panel installation technician are developed to impart training. Under the vertical, fresh short-term trainings are provided to candidates in NSQC approved job roles. Special projects bring in the flexibility required to cater to vulnerable populations residing in difficult-to-reach places. It also serves new requirements and innovative models etc. In other words, the Special Project component is different from the Short Term Training (STT) of PMKVY by the virtue of it being a project and need-based and comparatively a little more flexible. In the sample covered under the study, a total of 8 beneficiaries were found across the sampled states. It was found that samples collected through the survey were 100% placed. It has been found in all three states, namely Maharashtra, Manipur, and Uttar Pradesh.

12. RPL under PMKVY 2016-20 was launched with an objective to align the competencies of the pre-existing workforce to the standardized National Skills Qualification Framework (NSQF) and to enhance the employability and/or entrepreneurial opportunities of an individual. It has been found that more than 25 lakh beneficiaries have been certified under RPL across 37 diversified skill sectors. These certifications have been extended to many diverse groups including more than 8 lakh women beneficiaries and around 11 lakh beneficiaries belonging to disadvantaged categories of the society. RPL has been able to formally certify workforce participants working in the informal sectors of the economy. Over 2.70 lakh masons, plumbers, carpenters, carpet weavers, and gemstone processing workers have been certified. Formal recognition of competencies and skills also helps to enhance the self-confidence and motivation of the certification holder. The component has also undertaken up-skilling of farmers through various projects wherein more than 2 lakh farmers and cultivators have been RPL certified. Under RPL, providing bridge course training to rural masons for the construction of twin pit toilets in rural areas is one of its kind. The performance of the CSCM-RPL in the sampled states was found effective. However, the analysis is based on sample studied in two states namely, Rajasthan and Uttar Pradesh. Best-in-class employers have attracted over 600 employers including industry partners, such as UrbanClap, Paytm, IPPB, Ola, Uber, Shahi Exports, L&T, etc.

13. Skill sectors and employability have also been analysed in the study. It has been found that the agriculture sector has scored the maximum in the state of Madhya Pradesh (25%). The jobs in beauty and wellness have been recognized in the state of Maharashtra (61.5%) and Gujarat (38.5%). The capital good sector was found providing employment opportunities in the state of Gujarat (100%). The construction sector was found providing jobs in Bihar (100%). The retail sector was found leveraging employment opportunities in the state of Odisha (41.4%), followed by Rajasthan (20.7%), Haryana (17.2%), Tamil Nadu (13.8%), and Uttar Pradesh (6.9%). Apparel, made-ups & home furnishing skill sector has scored its maximum visibility in the state of Gujarat (21.9%), followed by Odisha (19.2%), Karnataka (12.3%), 11% each in Maharashtra, Manipur, Rajasthan, Haryana (6.8%), Tamil Nadu (5.5%), and Uttar Pradesh (1.4%). The electronic and IT sector has scored the maximum job holders in the state of Madhya Pradesh (29.6%), followed by Karnataka (15.7%), Rajasthan (10.2%), Haryana (9.3%), Manipur (9.3%), Bihar (8.3%), Uttar Pradesh (8.3%), Bihar (8.3%), Odisha (7.4%), 0.9% each in Assam and Gujarat. The auto and auto components have scored effective in the state of Haryana (21.2%), as compared to Gujarat (15.2%), followed by Bihar (15.2%), Karnataka (13.6%), Madhya Pradesh (10.6%), Maharashtra (10.6%), Rajasthan (7.6%), and Uttar Pradesh (8.3%). The textile sector has scored the highest in the state of Uttar Pradesh (36.4%), followed by Maharashtra (22.7%), Haryana (22.7%), and Assam (18.2%). Media and entertainment have the maximum score in the state of Gujarat (33.3%), followed by Bihar (26.7%), Haryana (20%), and Uttar Pradesh (20%). The tourism, hospitality, and travel sector have scored maximum in the state of Bihar (35.3%), followed by Maharashtra (27.5%), Uttar Pradesh (21.6%), and Haryana (15.7%). The telecommunication sector has enabled employability more in the state of Odisha (60%), followed by Manipur (20%), and 10% each in Gujarat and Haryana. As such, the maximum jobs received by the beneficiary trainees were found in Electronic and IT hardware, followed by apparel, made-ups, and home furnishing, tourism, hospitality & travel, IT & ITES, auto and auto-related components, retail, agriculture, media, and entertainment, beauty and wellness, telecommunication, construction, and capital goods.

14. Consideration of aspirations of beneficiary trainees in skill training conspicuously determines the speed and scope of learning. Under the CSSM-STT component, the states are better equipped to handle the place-specific needs of the job roles. As such the involvement of

states enables taking up specific skill development that caters to the local demand and aspirations. The aspirational and market demanded job roles require a significant correlation. The correlation coefficient calculated for both the components is +0.21 which shows a loose correlation between aspirational job roles and the job roles demanded by the market. A total of 40 job roles have been expressed by industry partners whereas, the beneficiary trainees have registered 21 aspirational job roles. The three job roles, namely Domestic Data Entry Operator (13.6%), Retail Sales Associate (12.3%), and Domestic IT Helpdesk Attendant (7.4%) have been expressed, as the most demanded, by the industry partners. In contrast, the three aspirational job roles registered by beneficiary trainees are frontline health worker (16.1%), Mobile Phone Hardware repair technician (10.6%), and self-employed tailor (10%). A total of 19 job roles expressed by the market go unescorted so far as the aspirational job roles are concerned. These are (1) Domestic IT Helpdesk Attendant (2) Animator (3) Assembly operator (4) Assistant Beauty Therapist (5) CCTV Installation Technician (6) Home Health Aide (7) Taxi Driver (8) Accessary fitter (9) Assistant Electrician (10) Bamboo Utility Handicraft Assembler (11) Broadband Technician (12) Distributor Salesman (13) Electrician Domestic Solutions (14) Gardner (15) Greenhouse Operator (16) Junior Engineer (17) Organic Grower (18) Retail Trainee Associate, and (19) Solar Panel Installation Technician. The top-rated five job roles as per the market demand are: (1) Domestic Data Entry Operator (2) Retail Sales Associate (3) Domestic IT Helpdesk Attendant (4) Retail Team Leader, and (5) Self Employed Tailor. The top five aspirational job roles registered by trainee beneficiaries are: (1) Front line health worker (2) Mobile Phone Hardware Repair Technician (3) Self Employed Tailor (4) Documentation Assistant, and (5) Retail Sales Associate.

15. Out of the total responses received from industry partners on the priority of skill sectors, it was found that the industry partners have expressed their priority on IT-ITeS (23.5%), followed by retail (18.5%), electronic and hardware (9.9%), Apparels (8.6%), Automotive (7.4%), and so on. Healthcare, Agriculture, Media & Entertainment, and Power have been found as low weightage skill sectors. The industry partners expressed their increased level of preference for job roles viz. Domestic Data Entry Operator (13.6%), followed by Retail Sales Associate (12.3%), and Domestic IT Helpdesk Attendant (7.4%). The job roles, like Retail Team Leader, and Self-employed Tailor scored 3.7% so far as the preference of industry partner was

concerned. 15 out of 16 Sector Skill Councils contacted expressed prioritization of 75 job roles. These are: Lead Carpenter, Lead Assembler, Interior Designer, Machine Operator, Cabinet Maker, Assistant Decorative painter, Decorative painter, Powder coater, Protective and Marine Painter, Shop tinting Assistant, Two Shaft Handloom Weaver, Power Loom Operator, Autoconer Tenter, Ring Frame Tenter, Jacquard weaver, Beauty Therapist, Hair Stylist, Nail Technician, Yoga Instructor, Spa Therapist , Carpenter, Ceramics , Bamboo, Handcrafted Textiles, Metalware, Field Technician Computing & Peripherals, CCTV Installation Technician, Mobile Phone Hardware Repair Technician, EMS Technician, Assembly Operator, General Housekeeper , Housekeeper cum Cook, Child Caretaker (Non-Clinical), Elderly Caretaker (Non-Clinical), Household Multipurpose Executive, Mill Operator, Compression Moulding Operator, Latex Harvest Technician, Tyre Fitter, Fitter Levelling, alignment and balancing, Fitter Electrical Assembly, Crane Operator, Conveyor Belt Operations and Maintenance, Housekeeping with Mechanised Equipment, Mining Supervisor, Mining Mate, Supervisor-Plant Operations, Dumper Tipper Operator, Mine Electrician, Production / Machine Operator – Life Sciences, Store Assistant – Life Sciences, Medical Sales Representative, Quality Control Chemist, Telesales Executive – Life Sciences, Data Entry Operator, Sewing Machine Operator, Retail Sales Associate, Customer Care Executive (Call Center), Food & Beverages Steward, Sewing Machine Operator, Sewing Machine Operator – Knits, Self Employed Tailors, Hand Embroiderer, Assistant Fashion Designer, Farm Mechanization & Precision Farming, Inland fishery, Production Horticulture (fruits and vegetables), Post-harvest supply chain management, and Agri Entrepreneurship & Rural Enterprises.

16. The study discloses that a total of 16 skill sectors were found in demand based on the information received from the industry partners. The maximum demand has been identified in IT &ITeS (23.5%), followed by Retail (18.5), Electronics & Hardware (9.9%), Apparel, make Ups & Home furnishing (8.6%), Automobile (7.4%), Logistics (7.4%), Health care (3.7%), Agriculture (3.7%), Media & Entertainment (3.7%), Power (3.7%), Tourism & Hospitality (4.9%), Agriculture (3.7%), Healthcare (3.7%), Beauty and wellness (2.5%), Telecom (1.4%), Construction (1.2%), and handicrafts (1.2%). The skill supply with trained man power has mostly been found in IT &ITeS (15.65%), followed by Electronics (14.74%), Apparel, makeups & Home furnishing (12.46%), Logistics (8.36%), Power (6.23%), Media & Entertainment

(6.08%), Automotive (5.93%), Retail (5.02%), Tourism & Hospitality (4.56%), Agriculture (3.80%), Telecom (3.34%), Aviation & Aerospace (3.19%), Textiles & Handloom (2.43%), Construction (1.98%), Beauty and wellness (1.52%), Capital goods (1.37%), Rubber (0.91%), Plumbing (0.76%), Iron & Steel (0.61%), Healthcare (0.46%), Mining (0.30%), Handicrafts (0.15%), Banking financial services and Insurance (0.15%).

17. Based on the demand and supply of skill sectors, three-level skill sectors have been classified. The classifications are related to sectors with a shortage of manpower, sectors with a medium-level shortage of manpower, and sectors with surplus manpower. Under the first category, the sectors are Electronics & hardware (4.84%), Apparel, makeups & Home furnishing (3.86%), Logistics (3.46%), Aviation & Aerospace (3.19%), Power (2.53%), Media and Entertainment (2.38%), Telecom (1.94%), Capital goods (1.37%) and Textile & handloom (1.23%) where additional skilled manpower is required. Under the second skill category, the skill sectors like Rubber (0.91%), Construction (0.78%), Plumbing (0.76%), Iron & Steel (0.61%), Mining (0.3%), Banking financial services and insurance (0.15%) & Agriculture (0.10%) require moderate number of additional skilled manpower. However, under the third category i.e. surplus manpower was found as compared to market demand. These are: retail (-13.48%), IT &ITeS (-7.85%), Healthcare (-3.24%), Automotive (-1.47%), Handicrafts (-1.05%), Beauty and wellness (-0.98%), Tourism & Hospitality (-034%).

18. Out of 664 responses shared on the component of placement, 70.5% of beneficiaries have received jobs in the same sector in which they have been trained. However, 29.6% of the beneficiaries have not received any job in their training sector. The maximum percentage of beneficiaries receiving a job in the same sector has been recorded in the state of Maharashtra (96.2%), followed by Rajasthan (93.8%), Gujarat (91.8%), Madhya Pradesh (90.1%), Haryana (82.4%) and so on. 0-50% placement has been monitored across the states by 10 training partners. 51-75% of the placement monitoring has been done by the 24 training partners. Only 15 training partners have monitored the placement of beneficiaries up to 76% to 100%. Out of the 10 training partners who shared information under the slab of 0-50%, the maximum score of 2 Training Partners has been noticed in each Assam and Maharashtra. Out of the 24 training partners who shared information under the slab of 51-75%, the maximum score has been noticed in Gujarat (4), followed by Rajasthan (3), and Odisha (3). Out of the 15 training partners who

shared information under the slab of 76-100%, the maximum score of two Training Partners was recognized each in Assam, Odisha, Rajasthan, Tamil Nadu, and Maharashtra. One training partner each has informed in the state of Manipur, Bihar, Uttar Pradesh, Karnataka and Gujarat.

19. The study has found that the maximum change in the monthly wage rate is astounding in handicraft (360%), followed by beauty and wellness (248.98%), aerospace (200%), telecom (182.48%), construction (171.60%), agriculture (163.27%), accountancy (130.77%), iron and steel (128%), healthcare (124.14%), retail (117.09%), apparel (116.33%), logistics (116.15%), rubber (111.86%) and so on. Based on the monthly changes in the wage rate, most of the changes are aligned to an additional income of Rs. 8000 (mode value=Rs. 8000).The mean change in the monthly wage rate has been accounted for Rs. 10266.64. The maximum change amount in the wage rate has been found as Rs. 21350. However, the minimum change amount in the wage rate change has been found as Rs. 4500.

20. The ecosystem of training is one of the components that the study has covered. Regarding training hall space being adequate was admitted by cent percent beneficiaries in most states except Manipur (98.7), Haryana (98%), Madhya Pradesh (83%), and Uttar Pradesh (97.1%). The seating arrangements were found satisfactory by 100% of trainees except in Haryana where 98% of respondents said so. All trainees from 9 states said training equipment and tools were available; in the remaining 3 states, the percentage of respondents saying so was less in Haryana (84%), Gujarat (98.1%) and Uttar Pradesh (97.1%). The percentages of views about training consumables being adequate were highest in Assam, Bihar, Karnataka & Tamil Nadu (100% each), followed by Manipur (98.7%), Odisha (98.5%), Gujarat (98.1%), Maharashtra (98%), Uttar Pradesh (97.1%), Haryana (96%), Rajasthan (94.4%), and Madhya Pradesh (83.7%). In states of Assam, Manipur, Bihar, Madhya Pradesh, Uttar Pradesh, Karnataka and Tamil Nadu cent percent of trainees said that audio-visual equipment was available; in this regard lesser percentage was obtained from Odisha (97.1%), Haryana (90%), Rajasthan (98.6%), Gujarat (90.4%) and Maharashtra (80.4%). Cent percent respondents from Assam, Bihar, Madhya Pradesh, Uttar Pradesh, Karnataka and Tamil Nadu reported availability of library in their training centres, whereas, in the lesser percentage of trainees from Manipur (97.4%), Odisha (97.1%), Haryana (96%), Rajasthan (87.3%), Gujarat (96.2%) and Maharashtra (98%) said so.

21. 100% of training partners were found e-enabled. Similar responses were shared by the beneficiary trainees as well. Out of the 100% response received from the trainees, it was been found that a total of 96.7% of responses were in favour of e-enablement, followed by 3.3% as improper e-enablement. 100% of the training partners have shared that their centres were fully e-enabled. It consisted of the responses on the use of digital technology tools for the beneficiary trainees and bio-matric attendance, availability of computers, sufficient IT practices, and maintenance of data bank of the trainees. As such, most of the training centres were found equipped with IT enablement across the sampled states. However, the available e-services were not aptly used by the training partners. A similar concern was reported from the working of the SSDMs as well. Leveraging technology for seamless implementation of the scheme has also been acted upon through involving citizens, national skill corporation, sector skill councils, training partners, trainers, organizations, assessment agency and Ministries and State councils. The use of Mobile App for PMKVY embedded Mobile App-based assessment management with geo-tracking have also been carried out. The provision of Digi Locker as an online repository for skill certificates are also under the e-enablement component of the scheme.

22. Under the PMKVY-2.0, more than 40% of women have been trained/oriented across various job roles and sectors. Out of the reportedly placed candidates, approximately 53% are women. With the help of the STT, SPs, and RPL, employability amongst women has been ensured, and their work participation ratio has also increased. Apart from the normal course of three pads of the training, six additional specific projects are proposed to be 100% women-oriented. The six initiatives are: (1) Hamara Bachpan Trust, (2) Youthnet Home Stay Project in North East, (3) Projects in Pradhan Mantri Mahila Kaushal Kendra, (4) women-oriented cluster artisan, (5) special training on beauty and wellness in collaboration with NIESBUD, and (6) Training for women in Shelter Homes and Juvenile Homes' inmates.

23. Women share has been found 50% in STTs, 54% in SPs, and 32% in RPL for training/orientation. The percentage of women verified varies across the pads, viz. 52% under STTs, 61% in SPs, and 33% for RPL. The percentage of women respondents placed under the pads is being highlighted through the third column where-in 52% of women placed from STTs and 68% through RPL. The mandate for the placement is not applicable in the case of the RPL pad. Overall, the percentage of women placed is higher in SPs (68%), followed by STT (52%)

but not tantamount to the 70% benchmark. The women-centric interventions are also evident under special projects. Under the special projects, a total of 76084 females received training of which 55203 got certified and 25338, placed. In other words, 72.6% of women candidates were certified of trained/oriented. 45.9% of women got placed of the certified, and 33.3% of women got placed of the total trained. Though the percentage of women has been descending as we move from training to placement, their final score in terms of number is impressive and outstanding. Thus, the special project component of the PMKVY-2.0 has profusely influenced the beneficiary women.

24. PMKVY 2.0 is in line with Common Cost Norms approved by the Cabinet for Centre Sector Schemes. The total cost of the scheme is worked out based on training targets. There is no redundant component of the scheme to be removed/reduced. Barring schemes like DDU-GKY, NULM, UDAAN, which caters to specific target groups and require special cultural or functional identification like persons with disability and minorities, the PMKVY 2.0 is designed keeping in mind its convergence with other schemes. The schemes like Integrated Skill Development Scheme (ISDS) of the Ministry of Textiles, Entrepreneurship Development Programme (EDP) of the Ministry of MSME, Hunar Se Rozgar Tak Initiative of Ministry of Tourism, scheme for financial assistance to states for skill development in Electronics System Design and Manufacturing Sector of Ministry of IT and Communication, support of training and employment programme for women of the Ministry of Women and Child Development, capacity building & technical assistance for skill development of Ministry of Development of North Eastern Region, and skill up-gradation training programme, skill development training programme under NCVT scheme, and skill development training for National Service Scheme Volunteers, etc. would also be integrated under PMKVY. The scheme is in convergence with various schemes and programmes of the Central and State governments.

25. Accessibility of training partners to the trainings and quality thereof have been assessed considering the resources available at the training centres, and the information shared on the component by the beneficiary trainees. Aadhaar Enabled Biometric Attendance Systems (AEBAS) have been mandated for trainees, trainers, and assessors. This has led to a reduction in the duplicate cases of candidates during enrolment and enabled real-time monitoring and tracking of candidates enrolled under the scheme. Further, transparency and accountability have

been maintained by linking the first tranche of payment to batch attendance records. IT-enablement has to ensure the training quality. For example, Knack is a mobile-based counselling tool that uses AI to gauge candidates' aptitude. However, under PMKVY-2.0 the empanelment of placement partners to link the aptitude, aspiration, and knowledge of the skilled workforce demands in the market. On-boarding of placement verification agencies for verification is also conducted using AI and other technological tools. Improvement has also been ensured through the implementation of informational posters at every training centre to tackle information asymmetry so that candidates may make informed career decisions. Online learning is also enabled through the e-Skill India portal, e-Book Reader application, and KITS Portal for handbook and induction kit delivery and tracking. Re-designing of certain modules to keep pace with industry and market requirements and enhance the employability potential of the PMKVY candidates.

26. On the Likert scale, the good score happens to be 2.5 as an average received on the rating scale. It has been confirmed that the overall satisfaction across the states stands out to be 4.5 which is close to the extremely satisfied. The maximum satisfaction score has been attained in the state of Madhya Pradesh (4.7), followed by Odisha (4.6), Haryana (4.6), and Uttar Pradesh.

27. The study has also found out the percentage of dropouts in the sampled training centres. As per the information shared by training partners, the maximum dropout has been reported from Madhya Pradesh (10.3%), followed by Haryana (9%), Odisha (5.8%), Assam & Gujarat (5.5% each), Karnataka (5.3%), Rajasthan (4.5%), Tamil Nadu (4.4%), Maharashtra (4.3%), Bihar (4%), and Uttar Pradesh (1.4%). The reasons identified for dropping the courses emanated from medical grounds, family issues, social problem, distance from residence to training centres, upgradation of social status as married and attached livelihood demands, accessibility to a job, and no improvement noticed on skills either from the course contents or from the training programme. A number of female candidates have reportedly left the course for reasons owing to pregnancy, marriage, short duration of the courses. In Bihar, a candidate reported to have left the course due to fever. 73 candidates in Gujarat left the course due to family issues, personal issues and ineffective skill upgradation. 84 candidates left the course due to illness and personal reasons in Haryana. Due to the inaccessibility of bus passes and distance, candidates opted out trainings in Karnataka. In Madhya Pradesh, due to outdated course material, the trainees left the course. In

Maharashtra, due to marriage and subsequent pregnancy, the candidate left the course. In Manipur, due to traveling problems and inadequate transport facilities, trainees left the training centres. In Odisha, the trainees found an ineffective window for grievance redressal with the Government and left the training. In Rajasthan, the trainees found private jobs, rent, and retail work, and left the training. No such problem has been identified in the State of Tamil Nadu and Uttar Pradesh. The maximum number registered for leaving the training programmes have been found due to the transport issue, followed by ill health, marriage, getting a private job, and social circumstances and familial pressures.

28. There are schemes like DDU-GKY, Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP), Ude Desh Ka Aam Naagrik (UDAAN), Standard Training Assessment and Reward Scheme (STAR), Polytechnic Schemes, Vocationalization of Education that are implemented to meet the challenges of skilling at scale with speed, standard, and sustainability. The aforementioned schemes intend to improve employability and productivity in paving the way forward for inclusive growth in the country. These skill strategies are complemented by specific efforts to promote entrepreneurship in order to create ample opportunities for the skilled workforce. The skill ecosystem of our country has the target to train 402.87 million people by 2022. This includes 104.62 million crore new entrants to join the existing workforce in the country who need to be skilled to meet industry requirements. In addition 298.25 million of the existing workforce need to be reskilled, upskilled, and skilled. It is concluded that skilling is a multi-pronged approach that should be aligned with critical- gaps in skilling in terms of sectors, job roles, geography, etc. If the intended goals of the skilling are reached, our country would harness the demographic dividend.

29. Social inclusiveness is one of the components that the study has covered. The female participation across the sampled states has been calculated as 48.7% which shows gender inclusivity. In the sampled respondents, SCs have been accounted for 12.43%. The representation of ST has been depicted as 4.8%. The representation of Divyangjan has been computed as 0.9% and BPL category beneficiaries are figured as 46.1%. The 73.5% of female participation in Gujarat, 23.53% of SC participation in Haryana, 19% of ST participation in Assam, 2.9% Divyangjan share in Haryana, and 91.8% of BPL share in Odisha are the information related to higher ranges. However, 32.4% female share in Rajasthan, 3.92% SC

share in Manipur, no share of ST in Tamil Nadu and Karnataka, no share of Divyangjan in Manipur, Bihar, Odisha, Uttar Pradesh, Gujarat and Maharashtra, Rajasthan and Tamil Nadu, 8.5% BPL share in Madhya Pradesh are the trends towards the lower ranges.

30. The social categories of the surveyed respondents have revealed that 44.2% in general, 38% in OBC, 12.5% in SC, 4.9% in ST and 0.5% in minorities have been found in the social category classified. In the general category, the states having more percentage are in Gujarat (73.5%), followed by 60% each in Karnataka and Tamil Nadu, Manipur (57.8), Haryana (55.9%) and Assam (53.4%). Of the total percentage of OBC, a high percentage has been found in the state of Maharashtra (78.4%), followed by Rajasthan (72.7%), Odisha (44.9%), Bihar (53.8%), Uttar Pradesh (46.4%), and Maharashtra (43.1%). Of the total SC category percentage, the highest percentage has been reported from the state of Haryana (23.5%), followed by Odisha (18.4%), Tamil Nadu (18%), Uttar Pradesh (17.9%) and Maharashtra (15.7%). In a similar vein, the ST respondents were drawn the maximum from the state of Assam (19%), followed by Rajasthan (12.1%), and Bihar (3.8%). Likewise, the maximum minority representation was found in the state of Bihar (2.6%), followed by Maharashtra (1%).

Recommendation for Scheme with reasons

PMKVY is the flagship skill training program of the Government of India and has helped many youths realize their dream of being gainfully employed. As an impact of the scheme, 118.2% change in monthly wages of beneficiary trainees has been recognized. Almost sync between demand and supply of job roles, value addition recognized through PMKVY certification, 53.8% coverage of rural areas, 48.6% women inclusion, around 18% coverage of SCs, STs, Minorities, insignificant dropouts, IT-based governance executed through NSDC, the evaluation study of Pradhan Mantri Kaushal Vikas Yojna (PMKVY) recommends for continuation. To improve the effectiveness of the scheme, the following recommendations are suggested:

1. To publicize the scheme for improved bandwidth, the Kaushal and Rozgar Melas should be integrated with cultural and national events. To improve its effectiveness, the publicity should be scaled up.
2. Target allocation to be handled centrally by SSCs based on demand and not by States as often for the manufacturing sector, the states supplying workforce are different from states offering

employment. Target allocation should be based on sector-wise demand aggregation. Targets should be reshuffled from non-performing TPs to performing TPs.

3. Quality and enduring placement criteria should be laid down, even if the 70% placement benchmark has to be simmered down.
4. If the advantage of the demographic dividend is to be taken, the entire scheme should be structured in such a way that attracts youth to undertake skill training. Training centres need to be set up in and around the village clusters. Flexibility needs to be incorporated in terms of training infrastructure, existing farms may be declared/used as training centres. Residential training should be encouraged. Industry setting up training Centres in rural areas be given additional tax benefits including permission to deploy their CSR funds for all training aspects.
5. The district skill officers may be deployed to monitor the overall ecosystem under PMKVY. Under the pool of assessment and certification, reputed academic institutions, industry bodies, Government ITIs, Government Polytechniques, etc. may be brought in to improve the quality of assessment and certification.
6. The dedicated district-level committee may be brought in under the ecosystem of training and skill-gap assessment, as skill gap assessment-based training was not provided, rather imposed on the TPs. The emerging demand in the sunrise sectors may be identified through a robust skill gap survey. The committee should also be entrusted to oversee the work from trainee-mobilization to placement.
7. The scheme needs to be decentralized to the block level to ensure its outreach and effective coverage. It would help optimally harness the demographic dividend.
8. The officials of SSDMs should be given customized training on the latest guidelines of PMKVY and e-handling because the SSDMs were reported to have not sent timely compliance to TPs.
9. Most of the TPs have complaints about short target allocation in comparison to their sanctioned strength. Complaints about the delay in allocation of the next targets were also noticed. This situation is resulting in the underutilization of capacities, wastages of resources, and de-motivation of TPs. The presence of industry should also be considered in target allocation. As such, the target allocation should be as per sanctioned capacities of TPs, provided all other conditions are duly met.

10. The aspirational job roles should be prioritized at the time of enrolment. The inventory of training seats should be filled in considering the aspirational skills of beneficiary trainees.
11. The candidates dropping out the courses should be provided additional opportunities to re-join the courses giving due considerations to their critical social circumstances. Also, women dropping the course due to pregnancy or otherwise should be provided special consideration to complete the courses.
12. The sufficient top-us for the candidates in difficulty, particularly for commutation to TCs, should be integrated within the scheme framework. States may also be requested to gear up such facilities on priority.
13. Programme Implementing Agency (PIA) should be entrusted to prepare home and professional videos on different job roles for demonstrating during the training. A digital repository for such videos may be created.
14. Parents of trainees should be counseled to encourage their wards to take the trainings seriously. That would help the candidates to feel motivated and attend the training with zeal and enthusiasm.
15. Training Kits' should timely be provided in vernacular languages so that language barrier does not come in the way and trainees prepare themselves well in time.
16. The certificate given to successful candidates after the assessment should be made equivalent to the academic certificates so that candidates get loans, enjoy improved employability, and become entrepreneurs through moratorium-based micro crediting.

OVERVIEW OF THE SCHEME

Pradhan Mantri Kaushal Vikas Yojana (PMKVY-1.0) - the skill certification scheme was launched on 15 July 2015, on the occasion of World Youth Skills Day to address the skill gap. The scheme is being implemented under the aegis of the Ministry of Skill Development and Entrepreneurship (MSDE). The PMKVY 1.0 was initially approved for FY 2015-16. The scheme was implemented by MSDE through National Skill Development Corporation (NSDC), Sector Skill Councils, and Training Providers. Later in 2016, the PMKVY 2.0 was implemented with two components, namely Prime Minister Kaushal Vikas Yojna Centrally Sponsored and Centrally Managed (PMKVY-CSCM) and Prime Minister Kaushal Vikas Yojna Centrally Sponsored & State Managed (PMKVY CSSM) with a mandate of skilling of 1 cr. Youth of our country. The first component is implemented by NSDC whereas the second component, by State Skill Development Mission (SSDM). With the broad vision to encourage and promote skill development for the youth throughout the country by aligning itself with the Common Cost Norms guidelines. The scheme is aligned with other Missions of the Government of India, such as Make in India, Digital India, Swachh Bharat, and Smart Cities. The major objectives of the scheme can be classified into four parts (as mentioned in the Scheme Guidelines): (1) to enable and mobilize a large number of youth to take up industry designed quality skill training so that they become employable and earn their livelihood, (2) to increase productivity of the existing workforce, and align skill training with the actual needs of the country, (3) to encourage the standardisation of the certification process and put in place the foundation for creating a registry of skills, and (4) to benefit 10 million youth over the period of four years (2016-20). The PMKVY 2.0 (2016-20) encourages women participation in the scheme. Apart from the major component under the scheme i.e. Short Term Trainings, there are six Special Projects related interventions that intend to ensure 100% of women coverage. These are: (1) Humara Bachpan Trust, (2) Youthnet Home Stay Project in North East, (3) Projects in Pradhan Mantri Mahila Kaushal Kendra (PMMKK), (4) 6720 cluster artisans to be trained into Village Level Entrepreneurs in 5 States and 2 UTs (Jammu and Kashmir & Ladakh), (5) 10,000 women candidates in Beauty & Wellness and Apparel sector in collaboration with NIESBUD, (6) Training of women in Shelter Homes and Juvenile Homes' inmates in association with Department of Women and Child.

Under the scheme, the training target allocation is targeted at the Training Centre level, instead of the Training Partner level. The centres are categorized based on criteria like capacity and infrastructure availability, the geographical location of Training Centres especially in underserved areas, past performance of the centres and other relevant criteria. Guidelines have been drawn for the training targets allotted to the centres on annual basis. The number of allocations is done centrally based on the capacity of the centres and guidelines issued by PMKVY PMU. The SSCs allot the targets to the respective centres. Presently, 25% of the total funding is allocated to Prime Minister Kaushal Vikas Yojna Centrally Sponsored & State Managed (PMKVY CSSM), and 75% of the total budget to the Prime Minister Kaushal Vikas Yojna Centrally Sponsored and Centrally Managed (PMKVY-CSCM) component. The allocation of targets in 2016 was based on a first come first serve basis. In 2017, the target allocation was changed to Training Centres based on a first-come, first-served basis on geographical & sectoral coverage. In 2018, the same was changed based on: (1) placement performance, (2) PMKKs, (3) request for proposal (in line with sectoral investments), (4) academic institutions. In 2019, the same was changed to: (1) employer models introduced, and (2) Most training in PMKKs. Pradhan Mantri Kaushal Kendra (PMKK) is also aligned with state-of-the-art aspirational skill training centres across the country. The salient features are: minimum 300 sq ft, 5000 sq. ft. or 8000 sq. ft. built-up area (depending on the population of the district). Most PMKKs exceed the minimum requirement. Quality is ensured via standard external and internal branding and infrastructure guideline. Courses are determined based on district population to cater to local youth aspirations. Mandatory training in manufacturing trades are given. Mandatory industry seminars and guest lectures are organized. The scheme also stipulates about the special project that even though there may not be an existing centre at the desired location, the target for the special projects needs to be considered. The allocation would be linked availability of the placement opportunity of the trained candidates. The cycle of target has to be considered annually or longer duration. The minimum hours prescribed with respect to each job role by the SSC is defined by NSQC. The need for merging the Qualification Packs (QPs), suiting to the employment opportunities to be looked into by the SSCs. The industry-relevant content, appropriate to the learning groups, and conforming to the requirements of NSQC is used. The content is validated by the concerned SSCs. The ToT is done leading to the certification of trainers progressively. The process of trainee linkages with Aadhaar ID

continues. Training Partners are required to ensure the validation of Aadhaar ID done before enrolments. The attendance of a candidate is mandatorily prescribed at the training centres. For mobilization, the concept of Kaushal Melas has been institutionalised, and continues in coordination with the local state representatives. A communication and outreach agency would be engaged to assist. For the assessment and certification under the scheme, the assessment agencies are empanelled in the beginning of the year. The empanelment is done by the SSCs or the relevant successor in the ecosystem. The agency is in consultation with NSDC, implements communication and mobilization workshops for the key stakeholders involved in mobilization effort. The assessment agencies are empanelled in the beginning of the year. The empanelment is done by the SSCs in a relevant successor in the ecosystem. The criteria for the assessor profile, technology-enabled assessment, past performance of the assessment agency are fixed and video recording of the assessment is also ensured. For the certification, the requirement of Aadhaar ID for trainees continues to be the essential criteria. To ensure that the training partners are receiving working capital in time, the scheme has moved to a grant-based scheme.

The monitoring framework is implemented in a way that ensures greater outreach of the scheme across the country and through employer-led models. The centre validation is conditioned upon state-of-the-art infrastructure, availability of prescribed sq. ft area, availability of number of the classroom with the training partners, performance on placement, and best-in-class institutions. Moreover, for the monitoring and validation, a third-party agency looks into this matter to ensure objectivity.

2.1 Background of the scheme

a) Brief write up on the scheme including Objectives, Implementation Mechanism, Scheme architecture/Design

Pradhan Mantri Kaushal Vikas Yojna (PMKVY) scheme has been implemented, namely 1.0 and 2.0. The draft of PMKVY 3.0 is ready for approval and subsequently, will be implemented. PMKVY is a flagship scheme of government and is aligned with Skill India on a large scale with speed and high standards. It was considered under the National Policy for Skill Development-2015 that the working-age group (15-59) population of our country is 62% which needs to be equipped with employable skills and knowledge so that they can contribute substantively to the economic growth. It was also realized that the skills are germane to securing adequate economic dividends. Skills need to be an integral part of employment and economic growth strategies to

spur employability and productivity. Co-ordination with national macroeconomic paradigms and growth strategies need to be considered crucial. In this context, to meet the challenges of skilling at scale with speed, standard (quality), and sustainability, PMKVY was institutionalized. The scheme was launched on July 15, 2015 on the occasion of World Youth Skills Day by the Hon'ble Prime Minister of our country with a vision to ensure 'Skilled India'. The scheme operates under the aegis of the Ministry of Skill Development and Entrepreneurship, Government of India. The PMKVY 1.0 was initially approved for FY 2015-16. The scheme was implemented by MSDE through National Skill Development Corporation (NSDC), Sector Skill Councils, and Training Providers. Owing to its successful first year of implementation, the Union Cabinet approved the Scheme for another four years (2016-2020) to impart skilling to 10 million youth of the country which is known as PMKVY 2.0.

Objectives of the Scheme

The central objective of the scheme is to encourage and promote skill development throughout the country, focusing specifically on the followings:

(1) to enable and mobilise a large number of youth to take up industry designed quality skill training so that they become employable and earn their livelihood,

(2) to increase the productivity of the existing workforce, and align skill training with the actual needs of the country,

(3) to encourage the standardisation of the certification process and put in place the foundation for creating a registry of skills, and

(4) to benefit 10 million youth over a period of four years (2016-20).

The PMKVY 2.0 (2016-20) encourages women participation in the scheme through Special Projects with six recognized interventions. The components of the scheme under STT & Special Projects mandate the placement of the trainees. The Recognition of Prior Learning (RPL) does not mandate the placement. However, it does orient the candidates included under the scheme. The Short Term Training (STT) prescribes for 200 to 500 hour long skill-oriented training, both core and soft, at PMKVY afflicted and accredited training centres to school/college dropouts or unemployed. The RPL provides an orientation of 12 hours. Beneficiaries under the RPL are also provided bridge course training for a maximum of 68 hours wherever required. Individuals benefit by having their prior learning acknowledged through a structured, NSQF based system and gain certification by saving on time, regardless of how or where the learning occurred.

Under the special projects, short-term trainings are provided to candidates in NSQC approved job roles. Special Projects brings the flexibility required to cater to vulnerable populations residing in difficult-to-reach places. It also serves new requirements and innovative models etc. The Special project component is different from the short-term training component of PMKVY based on the component being need-based and comparatively a little more flexible.

Implementation Mechanism

PMKVY is centrally governed by the Ministry of Skill Development, Government of India through a dedicated CPMU. There are two major components under the scheme for which the customized implementation mechanism is in place. The Centrally Sponsored and Centrally Managed (CSCM) is centrally implemented through National Skill Development Corporation with the UIDAI, the Sector Skill Councils, and the employers as the stakeholders within the umbrella of NSDC. The RPL pad comes under CSCM which is also implemented by NSDC. Within the STT, there are two components namely regular Short Term Training (STT) and Special Projects that are also implemented by the NSDC. The Centrally Sponsored and State Managed component is implemented by the State Skill Development Missions. The budget allocated under the scheme is 75% for central and 25% for the state components. The target for the placement is 70% for state and central components of STT. The whole PMKVY workflow ranging from enrollment of candidates to disbursement of tranche-based payments to training providers and certificates to candidates is managed by Skill Development Management System. The platform establishes and enforces cross-sectoral, nationally, and internationally accepted standards for skill training in the country by creating a sound quality assurance framework. Various stakeholders starting from MSDE, NSDC, SSC, and trainer ecosystem to individual citizens get benefitted from NEXTGEN SDMS platforms. The platform is an integrated skilling management platform supporting various types of schemes run by NSDC, States, and Ministries. The NextGen SDMS has been designed to scale up horizontally as well as vertically using microservices architecture on the public cloud to serve as a unified skill management platform for skill ecosystem.

To ensure 70% placement under the scheme the common initiatives have been set up. These are: empanelment of placement partners with the objective of striving towards ensuring placement opportunities given to candidates trained under the scheme, NSDC has to empanel placement partners with the aim of providing employment to PMKVY certified candidates who are not

placed by training providers till 90 days from the date certification, in addition to the launch of a job portal, the NSDC has to ensure the placement of candidates especially the Blue Collared jobs. In the implementation, the NSDC focuses on the employer-led model prioritizing proposals submitted either by employers or other organizations in consortium with employers, stressing captive employment.

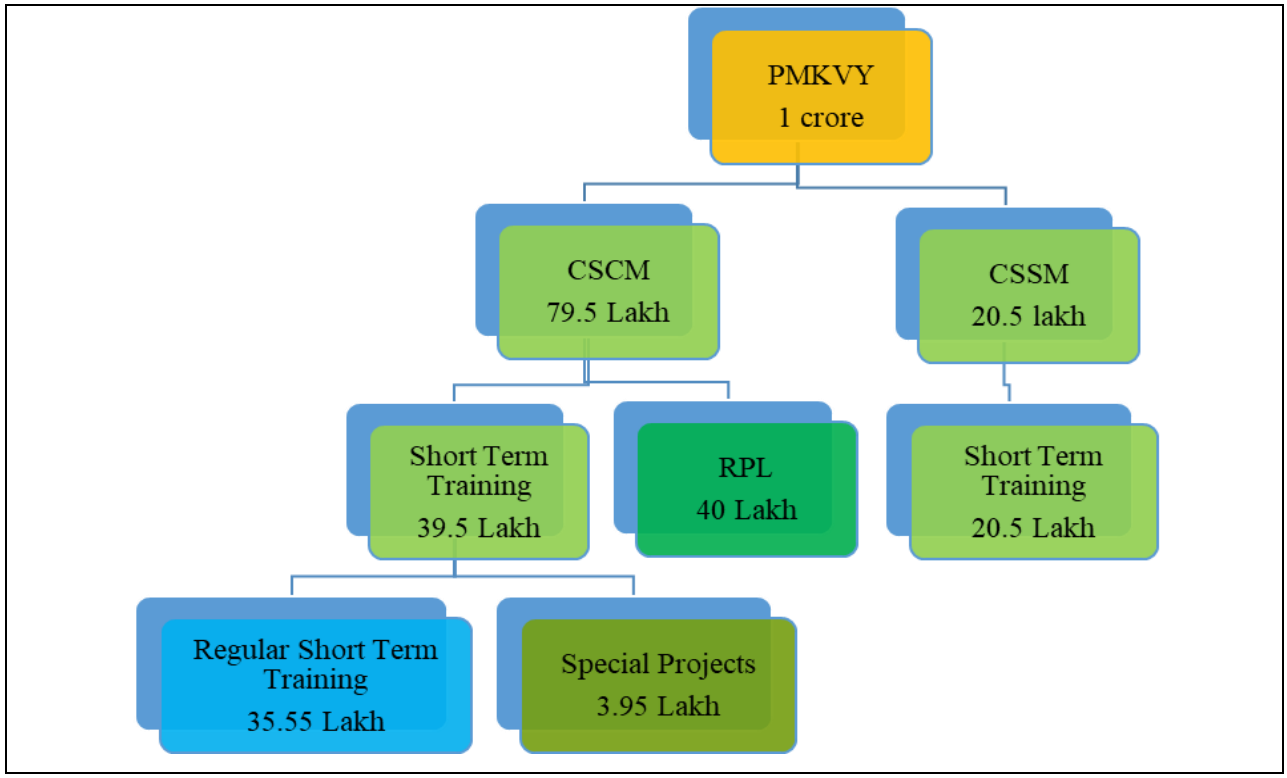

Figure 0.1: Flow-chart showing distribution of targets by PMKVY Component

b) Name of the Sub-Schemes/Components

The PMKVY 2.0 has two major components, namely Centrally Sponsored & Centrally Managed (CSCM), and Centrally Sponsored & State Managed (CSSM). There are three pads of PMKVY implemented by the National Skill Development Corporation viz. Short Term Training (STT), Special Projects (SP), and Recognition of Prior Learning (RPL). However, the state governments implement the Short Term Trainings (STT) through State Skill Development Mission. The STT has Common Cost Norms-based training, boarding and lodging, conveyance support and skill certification. The key benefits that the candidates avail are Rs. 500 reward to certified candidates, insurance benefits, placement assistance in case of STT and post-placement support.

c) Year of Commencement of Scheme

The Scheme of Pradhan mantra Kaushal Vikas Yojana was launched on 15 July 2015 on the occasion of World Youth Skills Day with the vision to create a "Skilled India". The PMKVY 1.0 was initially approved for FY 2015-16. The scheme was implemented by MSDE through National Skill Development Corporation (NSDC), Sector Skill Councils, and Training Providers. The PMKVY 2.0 was modified and was an improved version of PMKVY 1.0. PMKVY 2.0 was launched on October 2, 2016. The scheme aimed at creating Skill India on a large scale with speed and high standards.

d) Present status with Coverage of scheme (Operational/Non-Operational)

The scheme of Pradhan Mantri Kaushal Vikas Yojna (PMKVY) is implemented across 28 states and 7 UTs. The CSCM-SP is non-existent in the UTs of Andaman Nicobar Island, Dadra, Nagar Haveli, and Lakshadweep. The CSCM-RPL is non-functional/not available in the UT of Lakshadweep. However, the component of CSSM-STT is functional across the states and UTs.

e) Sustainable Development Goals (SDG) Served

PMKVY is aligned with the objectives of the 2030 Agenda for Sustainable Development Goal number 4.3 (By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university) and goal number 8.2 (achieve higher levels of economic productivity through diversification, technological upgradation and innovation, including through a focus on high-value added and labour-intensive sectors). PMKVY is aligned with goal number 4.3 to the extent that it intends to provide benefits to candidates who are either school/college dropouts or unemployed with no gender-based discrimination. The scheme also intends to align the competencies of the unregulated workforce of the country to the National Skill Qualification Framework (NSQF) and industry-led standards. SDG number 8.2 is addressed to the extent that branding is an important aspect of communicating the scheme accurately. All the training centres under the scheme are branded and promotional activities in accordance with PMKVY guidelines are conducted to ensure that high-value is added and labour-intensive sectors are catered to. As such, PMKVY is aligned with SDG goals number 4.3 and 8.2.

f) National Development Plan Served

To rapidly scale up skill development efforts in India, by creating an end-to-end, outcome-focused implementation framework, which aligns demands of the employers for a well-trained

skilled workforce with aspirations of Indian citizens for sustainable livelihoods is one of the central objectives of the Government of India. The policy framework has been developed to accomplish the vision of Skill India by adhering to the objectives laid down in national development priorities through National Policy for Skill Development and Entrepreneurship 2015. The policy framework outlines eleven major paradigm enablers to achieve the objectives of skilling India. These are (1) Aspiration and Advocacy (2) Capacity (3) Quality (4) Synergy (5) Mobilization and Engagement (6) Promotion of Skilling among women (7) Global partnership, (8) Outreach (9) ICT enablement (10) Trainers and Assessors and (11) Inclusivity. The PMKVY scheme has prescribed the inclusion of Sector Skill Councils (SSCs), as industry-led bodies as a quality assurance arm for UIDAI and employers. The SSCs ensure training providers /centres and trainers as implementing agency to ensure quality in the skill training programmes. It also ensures assessment agencies and assessors ensure the quality components. There are three pads of PMKVY implemented by National Skill Development Corporation viz. Short Term Training (STT), Special Projects (SP), and Recognition of Prior Learning (RPL). However, the state government also implements the Short Term Trainings (STT) through State Skill Development Mission. The STT, RPL and SP have Common Cost Norms based training, boarding and lodging, conveyance support and skill certification. The key benefits that the candidates avail are Rs. 500 reward to certified candidates, insurance benefits, placement assistance in case of STT and post-placement support.

However, the National Skill Development Mission consists of seven sub-missions under its purview. Each mission will act as a building block for achieving the overall objectives of the Mission. Key focus areas of the sub-mission include: (1) addressing the long-term and short-term skilling needs through revamping of existing institutional training framework and establishing new institutions; (2) undertake sector-specific skill training initiatives; (3) ensure convergence of existing skill development programmes; (4) leverage existing public infrastructure for skilling; (5) focus on training of trainers, (6) facilitate overseas employment, and (7) promote sustainable livelihoods. Keeping in view the above sub-missions, one of the underlying postulates of the scheme is to revise and revamp the skill in light of the Goals of Skill India. Hence, the scheme with its integrated approach comprehensively enables and mobilizes a large number of Indian Youth to take up skill training to become employable and earn a livelihood.

2.2 Budgetary allocation and Expenditure Pattern of the Scheme (Rs. crore)

Table 0.1: Budgetary allocation and expenditure pattern of the PMKVY

Financial Years	Budget Estimate	Revised Estimate	Actual Expenditure
2016-17	1100	1249.99	699.99
2017-18	1300	1723.19	1721.18
2018-19	1984.34	1946.45	1909.19
2019-20	2116	1749.22	1648.25
2020-21	1350.5	0	279.88

The table above presents the budget estimate, revised estimate, and actual expenditure in the above-mentioned financial years. The table shows the fluctuation in the actual expenditure across the years. However, the minimum expenditure in the year 2010-21 may be driven by reasons related to the Covid pandemic. It shows that in 2016-17, the revised estimate has escalated to 13.64% of the budget estimate. The actual expenditure has gone down to 44% of the revised expenditure which shows a fathomless underutilization of funds for the FY 2016-17. In the year 2017-18, the revised estimate is 32.6% more than the budget estimate. However, the utilized expenses have been recorded as 99.9%. In the year 2018-19, the revised expenditure is 1.9% less than the budget estimate. The actually utilized expenses has been recorded as 98.1%. In the year 2019-20, the revised estimate is less than 17.3% and the actually utilized expenses are 94.23%. Overall, in the last four years, the revised estimate is 2.6% more than the budget estimate. However, 89.7% of the revised estimate has been utilized.

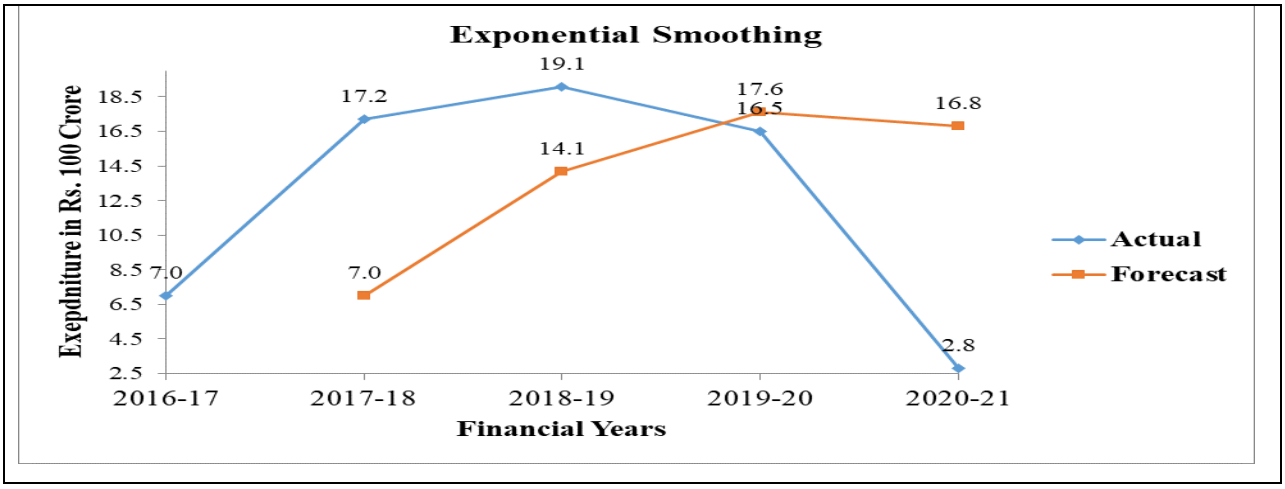

Figure 0.2: Line graphs showing exponential smoothing of expenditure pattern

The 'exponential smoothing' presented in the diagram above shows the actual expenditure and forecasted expenditure for the PMKVY scheme. In 2016-17, against actual incurred expenditure,

the forecasted expenditure shows less. For 2017-18, the forecasted actual expenditure is less than the actual expenditure incurred. In 2018-19, the actual expenditure is more than the forecasted expenditure. However, in 2019-20 and 2020-21, the actual expenditure should have been more. It has also been shared that over the years the cost incurring in trainings has gone down therefore the actual expenditure curve descends in the exponential smoothing diagram. Overall, the scheme seems to have taken the major initiative from the year 2017-18 to expand its outreach and coverage based on the available financial details.

2.3 Summary of past evaluation since the inception of scheme

The past evaluation of PMKVY-2.0 was conducted by the National Skill Development Corporation (NSDC) in the year 2018-19. The recommendations were given into two parts, namely (1) Policy, and (2) Operational recommendations. The recommendations are said to have selectively been accepted by the Skill Development Wing, Ministry of Skill Development and Entrepreneurship, Government of India. The policy recommendations given by the NSDC is as under:

Policy Recommendations

- Sector Skill Councils have suggested that they should be involved hands-on in allocating sector and job role wise training targets in each geography. This would be helpful in matching the supply and demand of a skilled workforce while ensuring minimum migration.
- It is important to ensure coordination between different skill development programmes, to ensure effective utilization of resources and business viability for training partners. Currently, multiple training providers from different skill development programmes are operating in the same geographies, leading to inefficiency and resource duplication. Target allocation should be looked at from a macro level across different programmes, as it will help to match the demand and supply of skilled labor more effectively.
- To improve the value of RPL certification, policy support should be provided to make NSQF level certification mandatory for its contractors and tenders. In case making skill certification completely mandatory is not feasible, having a certain percentage of certified workers should be made mandatory for government projects and tenders. Also, as being provided earlier, the certified candidates should be given skill cards, which would help in attaching more value to the RPL certification.

- For RPL, more focus should be given on bridge training courses by identifying the job role wise gap areas as compared to the current job requirements. This will provide an upskilling opportunity to the existing workforce. Also, as it is difficult to enroll candidates in long-duration bridge-training courses, specific and medium duration bridge training courses need to be formulated.
- Partial contribution to the training cost should be taken from the trainees. This will help in ensuring the financial sustainability of the PMKVY programme. It will also help in ensuring that state of art and quality training is provided to the candidates and they take the training program more seriously.
- Training payouts for on-demand job roles that have an intensive practical component should be reviewed. This will help to make these job roles more attractive for the training partners.
- Considering that the scale of the programme has substantially increased, a stronger role of State Skill Development Missions is required in ensuring effective implementation and sustainability of the scheme.

Operational Recommendations

- Pre-screening of candidates should be done rigorously, and appropriate processes or formats should be developed for the same. Also, it needs to be ensured that the trainees can understand the job requirements and expectations before enrolling in a training program. Rigorous pre-screening is also critical to ensure that only eligible candidates participate in the program. The evaluating findings suggest that currently, almost 33 percent of the STT trained candidates were not looking for employment as a substantial percentage of trainees were currently studying.
- One of the key reasons for non-participation by eligible respondents was a lack of awareness about PMKVY and other skill development programs (28 percent of Arm 3 respondents were not aware of any skill training program). It is suggested to focus more on information platforms such as advertisements on TV/radio, door to door campaigning and board/hoardings to reach out to eligible non- participant population.
- Although the key reason for participating in PMKVY training program (as stated by Arm 1 and Arm 2 respondents in STT) was that the program would help them in getting employment. However, the satisfaction with the placement assistance was found to be low and only 17 and 8 percent of Arm 1 and Arm 2 respondents have reported that their employment post their training was facilitated through PMKVY. Though the trained candidates were satisfied with the benefits

gained from the program in terms of improvement in self-confidence, technical knowledge, entrepreneurial attitude etc but the ultimate purpose of participating in the program, i.e. getting employment is not getting served. It is thereby, suggested that the placement assistance being provided under the program should be strengthened.

- Stronger facilitation and implementation support are required to ensure that PMKVY certified candidates are able to avail MUDRA loan as currently, not many certified candidates are able to avail the same.
- Innovative mechanisms need to be explored to leverage technology for the monitoring of programme implementation as it is very difficult to monitor a large-scale program like PMKVY physically. Real-time visual monitoring systems need to be developed, though it is realized that such monitoring system are difficult to implement and have a very high cost of implementation. If feasible to be developed, they can enable the policy makers and project management teams to centrally monitor the project implementation on a real-time basis.
- SDMS portal needs to be made more robust to reduce its downtime occurrences. On this the NSDC team had responded that the next version of SDMS that will be launched soon will be more robust. Also, for ensuring that the candidates can be tracked post-training, there should be an option to update the contact details of the candidates on SDMS.
- Considering that the scale of implementation of PMKVY has exponentially increased in the last few years, the resources and manpower requirement for project management should be reassessed and provisioned accordingly.
- It has been shared by training providers that with the current documentation requirement, it is difficult for them to prove the self-employment of many trained candidates. Innovative solutions need to be adopted to address this challenge.
- Trainer development and certification should be focused under the program with an objective of creating a pool of good quality trainers or instructors for imparting training under PMKVY.
- TPs have suggested that the job role wise infrastructure requirement for training centers should be allowed to be changed only after a fixed time period. This is because it becomes financially unviable for the training centers to change the required infrastructure frequently.
- Support should be provided to ensure that training handbooks are available for candidates in regional languages, as it has been shared that many trainees are not comfortable with English.

- To ensure good results in assessment tests, processes need to be formalized to ensure that trainees are assessed regularly during the course of their training. Though many training providers are following this, mechanisms need to be implemented to ensure it is followed by all training partners.
- Some of the good performing training partners have suggested that parents of the candidates should be counseled too as it is helpful in ensuring that the candidates take the training seriously. This approach can be replicated by other training partners to ensure that candidates take the training more seriously.

The quick assessment of PMKVY was also conducted by NITI Aayog in the year 2019. The quick assessment was based on a survey of 5 states and nearly 350 interactions. The study report recommended to have a detailed full-scale evaluation to develop clear actionable recommendations for course correction by the Ministry. However a set of intersection across one or two aspects were made which are as under:

1. Ensure TCs are not withholding certificates of students in place of post-placement information. The practice must be strictly controlled by the Sector Skill Councils and NSDC. Training centres undertaking this practice should be debarred from the scheme for a suitable period.

2. Mandate NSQF certification in government contracts and jobs, wherever possible: this measure would increase the value of NSQF certification and therefore of PMKVY course, also addressing the issue of trainees' seriousness about the courses.

3. Include compulsory on-the-job training of other industry exposure as a part of the courses similar to Apprenticeship scheme: strengthening of industry linkages ensure that trainees receive more relevant training, improve their employability, and are more likely to find employment.

4. Strengthen the inspection and monitoring systems with in-person verification and data validation: data inconsistencies can be corrected and avoided in the future if more frequent in-person verification visits are made a part of the regular internal monitoring process. Data validation can be used to highlight major inconsistencies, and therefore analysis of the SDMS data should be undertaken regularly.

5. Allow online access to course material at a specified price by state, for printing at the state level: it was found that TCs were often unable to provide course material on time as printing was being undertaken in a different location and transport times would cause further delays. If state

machinery is allowed to purchase online access to the course material, decentralized printing can take place and smoothen the flow of resources.

6. Strengthen utilization of alumni networks: existing word-of-mouth networks are a strong source of outreach for TC, but alumni can also be used to conduct expectation-setting discussions with potential recruits. They can provide placement and post-placement support, such as referring other trainees to their current workplace, assisting with migration pressures etc. Finally, they can provide feedback to TCs, SSCs, and NSDC on the industry relevance of their course curriculum and training methods, and help to ensure these are up to date.

These specific intersections in the form of recommendations given by the quick assessing agency are supposedly accepted by the Ministry for the further improvement of the scheme. Side by side, convergence enablement, regular update of curriculum and learning tools, the inclusion of courses above NSQF level 4, particularly for up-skilling, establishment of a system for assessing demand and supply, and introduction of region-specific courses based on demand-supply data have been accepted.

2. METHODOLOGY

The approach for the study took cognizance of the objectives, processes, and outcomes of the scheme. Parameters were designed to quantitatively and qualitatively assess the objectives of the scheme. The objective-based approach measured if the initially set goals of the scheme were duly met. Apart from the evaluation of the objectives of the scheme, its process, and its outcomes were also studied. Attempts were also made to assess whether the process of the scheme has been instrumental in achieving the desired objectives. Finally, the outcomes of the scheme, in addition to the objectives, were evaluated to understand the impact of the scheme on the trainees receiving skill training in their states from the respective TPs. The evaluation strategy made use of both primary and secondary data for the assessment of the scheme's goals, processes, and outcomes. Secondary information in the form of scheme budget, particularly the actual budget from the MSDE (SDW) was obtained.

One of the instruments for obtaining primary data was a questionnaire. They were made available to the direct beneficiaries of the scheme to understand the effectiveness and gauge the overall success of the scheme. The evaluation of the study was conducted across six NSSO classified zones. From each of the zones, two states were selected based on the maximum number of training partners (TCs) covered across two components and three pads of CSCM-STT. Overall, the evaluation of the scheme involved a holistic approach to evaluate the benefits of the scheme and collated suggestions and recommendations received in the form of responses obtained from the candidates who received the trainings.

The sample selection under any study is a crucial part of the evaluation strategy. The sample under study was selected based on the maximum number of training partners (TCs) covered across six NSSO zones. While selection, the number of trainees receiving training was also given importance. In the last four years i.e. 2016-19 under CSCM-STT, 37.2 lakh individuals were enrolled, 34.3 lakh received training, 31.5 lakh assessed, 28.1 lakh certified, and 15.6 lakh reported to have been placed. Likewise, under CSSM-STT, 7.8 lakh youths were enrolled, 5.9 lakh trained, 4.9 lakh assessed, 4.3 lakh certified and 1.4 lakh reportedly placed. For the above years under CSCM-RPL, 50.4 lakh candidates were enrolled, 49.1 lakh oriented, 39.3 lakh assessed, and 28.8 lakh certified. For the same duration under CSCM-SPs, 1.9 lakh candidates

were enrolled, 1.8 lakh trained, 1.4 lakh assessed, 1.2 lakh certified and 0.6 lakh reportedly placed.

A total of 938 sample-size was covered consisting of five specific stakeholders, namely trainee, trainer, training partners, representatives of sector skill councils, and industry partners. Also, information from Ministry officials was obtained that helped to lay a sound foundation for the evaluation study. In accordance with the provision and guidelines set out by the Ministry for conducting the evaluation study, and taking into account the set of key objectives of the scheme, semi-structured questionnaires were prepared by the study team. The questionnaires were duly sent to the Ministry for approval before administering it to the respondents.

Subsequent telephonic follow-ups were conducted with the beneficiaries at several stages of the evaluation study to mitigate concerns of attrition bias- a typical factor that tends to undermine the focussed results of the scheme evaluation study. The several interaction rounds proved to be significantly effective in obtaining the feedback in terms of existential challenges faced by the stakeholders of the scheme under study. Telephonic conversation and video conferencing were commenced with many beneficiaries to arrive at precise findings. While interacting with the beneficiary trainees, the observations were made. As such, the study has used research tools like observation, questionnaires, focus group discussions, and in-depth interviews. While conducting focus group discussions with a mixed group of stakeholders, the same was also recorded by the study team. In primary sources, the study consisted of a questionnaire, key-informant interviews, and focus group discussions. The key-informant interviews included questionnaire-based interaction with trainers, training partners, industry partners, and Sector Skill Councils. The questionnaire was sent to NSDC and subsequently many telephonic and email requests to receive the feedback. We found resounding silence on the part of NSDC. However, the unfriendly and unbecoming attitude of NSDC speaks volume about their disinterestedness in the scheme implementation. In this connection, the Ministry officials were duly informed. The study team made a number of efforts to get the views of SSDMs on the CSSM-STT components, most of them declined and the Ministry support system was also found to be reluctant. The field staff deployed to collect the primary information took also possible challenges owing to the Covid pandemic. The IIPA administration took all possible efforts to provide handholding support in accessing the training centres across the sampled states. The field staff was also made

quarantined for a day in Assam causing the timeline to be straddled. Finally, the circumstances were managed by IIPA, and our field staff was freed after one day of quarantine in some of the states.

However, the collected information in the excel sheet was sorted and objective-based findings were brought out. The measure of central tendency, regression analysis, t-test, z-test, & Anova have been used in data analysis to arrive at conclusive findings. The focus group discussion has served as a great help in reflecting micro nuances of scheme design, implementation mechanism, and quality of scheme's outreach. The observation-based intricacies have been placed in the report appropriately. The study is also backed with extensive meta-analysis to ensure objective and evidence-based findings.

3.1 Approach, Division of the country into 6 Geographical Regions/zones as classified by NSSO

With the comprehensive methodology, and pragmatic approach, the evaluation of the PMKVY scheme was conducted. The methodology under the study was designed in such a way that it took the sample size representative of the population (universe). Since the scheme has been implemented in 28 states and 7 UTs, so based on the number of the maximum number of trainees partners (TCs) covered under the scheme, two states were selected from each of the six NSSO classified zones. In the case of the northeastern and south zones, the state of Tripura was replaced by Manipur, and Telangana by Karnataka (the nearest TP number) due to inaccessibility owing to the Covid pandemic. As such, on the first strata, from the northeast zone, Assam and Manipur, from east Bihar and Odisha, from central Madhya Pradesh and Uttar Pradesh, from North Haryana and Rajasthan, and south, Karnataka and Tamil Nadu were selected. On the second strata, the district with more youth population, unemployment, urbanization, and socio-economic deprivation was selected after taking feedback from the Ministry on it. On the third strata, training partners were selected with the maximum number of trainees trained. On the final strata, the trainees were randomly selected to provide their feedback. As such, a total of 86 respondents from Assam, 76 from Manipur, 97 from Bihar, 64 from Odisha, 74 from Gujarat, 76 from Maharashtra, 105 from Madhya Pradesh, 74 from Uttar Pradesh, 94 from Haryana, 48 from Rajasthan, 61 from Karnataka and 67 from Tamil Nadu were selected. In addition, out of 36 Sector Skill Councils contacted, a total of 16 Sector Skill Councils' representatives came forward to register their views on the scheme, particularly on the roles that they play in the

implementation of the scheme. The Sector Skill Councils gave their feedback were (1) Agriculture Skill Council of India, Haryana, (2) Apparel Made Ups & Home Furnishings Sector Skill Council, New Delhi, (3) Beauty & Wellness Sector Skill Council, New Delhi, (4) Domestic Workers Sector Skill Councils, New Delhi, (5) Electronics Sector Skill Council of India, New Delhi (6) Furniture and Fittings Skill Council, Haryana, (7) Handicrafts and Carpet Sector Skill Council, New Delhi (8) Indian Iron and Steel Sector Skill Council, West Bengal (9) Life Sciences Sector Skill Development Council (10) Management & Entrepreneurship and Professional Skills Council, New Delhi, (11) Media and Entertainment Skills Council, New Delhi (12) Paints and Coatings Skill Council, Maharashtra, (13) Rubber Skill Development Council, New Delhi, (14) Skill Council for Mining Sector, New Delhi (15) Skill Council for Persons with Disability, New Delhi, and (16) Textile Sector Skill Councils, New Delhi. Though the sample size for the evaluation of the scheme is small, looking at the number of beneficiaries covered, the selection of beneficiaries has been done in such a way that the findings of the scheme turned out to be more focused and inclusive. However, the sample size covered under the study is largely aligned with the sample size approved in the inception report. The sample selection for the evaluation of the scheme by the state are as under:

Table 2.1: Sample-size covered under the study

NSSO Zone	States	Labour Survey (Trainees)	Trainer (Informant)	Training Partners (Informant)	Enterprise Survey (Industry Partners)	Total
North East	Assam	58	17	6	5	86
	Manipur	51	13	6	6	76
East	Bihar	78	14	3	2	97
	Odisha	49	5	5	5	64
West	Gujarat	49	9	6	10	74
	Maharashtra	52	6	6	12	76
Central	Madhya Pradesh	71	20	4	10	105
	Uttar Pradesh	58	7	3	6	74
North	Haryana	68	14	3	9	94
	Rajasthan	34	4	4	6	48
South	Karnataka	50	4	3	4	61
	Tamil Nadu	50	6	5	6	67
Sector Skill Councils						16
Total		**668**	**119**	**54**	**81**	**938**

The table above shows the respondents that have been covered under the study. A total of 938 responses have been registered. It also shows the number of beneficiaries being covered in each of the NSSO classified zones. The study has taken into account the selection of two states from each of the NSSO classified zones.

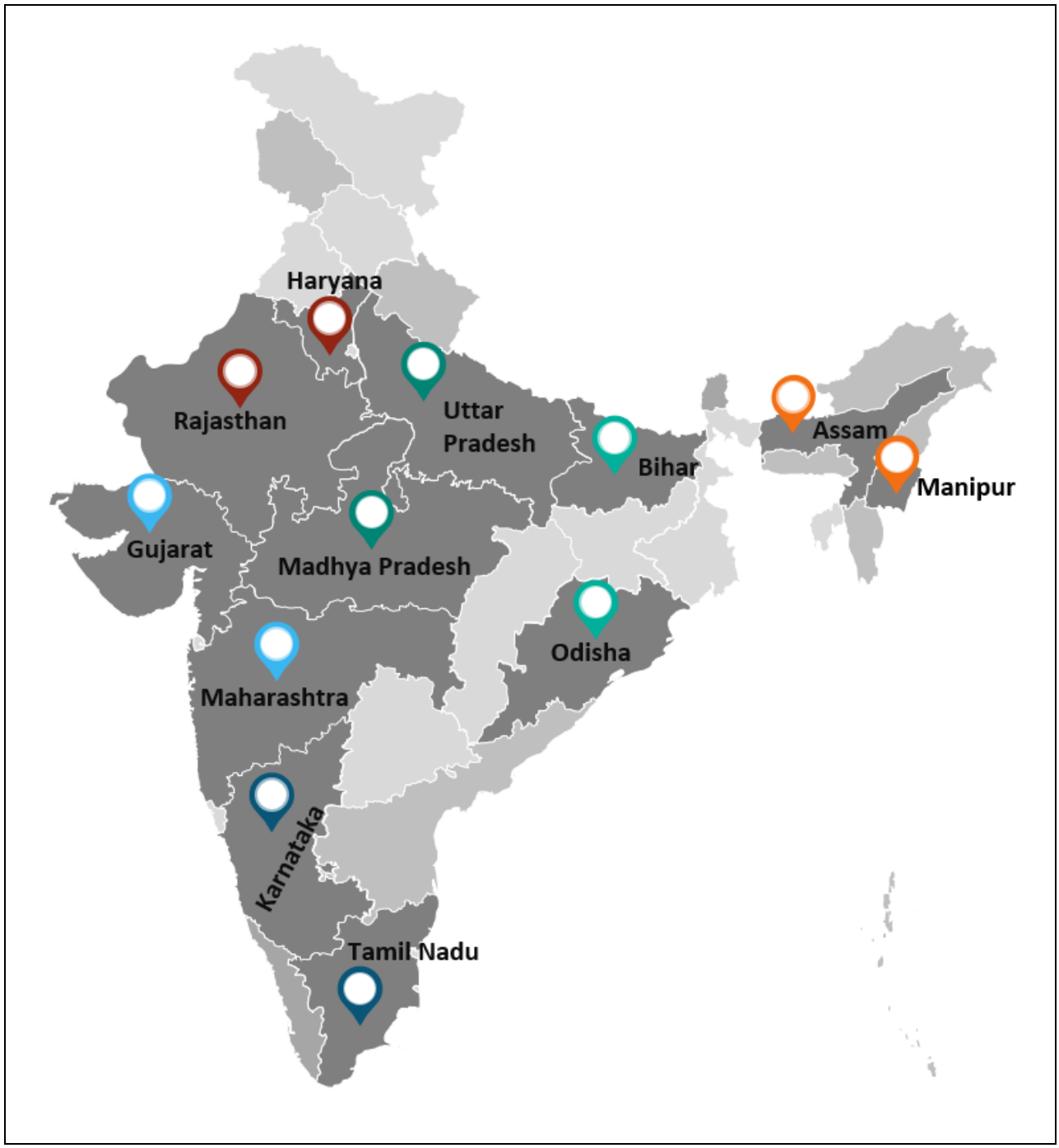

Figure 2.1: Showing sampled states through India's map

3.2 Sample Size and Sample Selection process, Tools Used

In the first stage, the total number of TPs to be covered across states in the year 2020-21 were considered. Based on the demographic profile of the states, three districts from each of the states were selected. Furthermore, the total number of TPs covered under the study is 54. In the third stage, based on the sample size finalized for the PMKVY, the proportional spread of beneficiary trainees was calculated so that the sample size remains realistic. Under the study, a total of 668 beneficiary trainees, 119 trainers, 54 training partners, 81 industry partners, and 16 Sector Skill Councils have been covered. The covered Sector Skill Councils are: were (1) Agriculture Skill Council of India, Haryana, (2) Apparel Made Ups & Home Furnishings Sector Skill Council, New Delhi, (3) Beauty & Wellness Sector Skill Council, New Delhi, (4) Domestic Workers Sector Skill Councils, New Delhi, (5) Electronics Sector Skill Council of India, New Delhi (6) Furniture and Fittings Skill Council, Haryana, (7) Handicrafts and Carpet Sector Skill Council, New Delhi (8) Indian Iron and Steel Sector Skill Council, West Bengal (9) Life Sciences Sector Skill Development Council (10) Management & Entrepreneurship and Professional Skills Council, New Delhi, (11) Media and Entertainment Skills Council, New Delhi (12) Paints and Coatings Skill Council, Maharashtra, (13) Rubber Skill Development Council, New Delhi, (14) Skill Council for Mining Sector, New Delhi (15) Skill Council for Persons with Disability, New Delhi, and (16) Textile Sector Skill Councils, New Delhi. Thus, a total of 938 respondents formed the entire sample size for the evaluation study. The details are presented in the table above.

Table 2.2: Evaluation study research tools

Trainee, trainer, training partners, industry partners, and Sector Skill Councils	• Questionnaire • In-depth interview • Observation • Focus Group Discussion
MSDE	• In-depth Discussion

a. Questionnaire

The study team prepared questionnaires for seven stakeholders, namely (1) NSDC, (2) Skill Development Missions, (3) Sector Skill Councils, (4) Training Partners, (5) Industry Partners (6) Trainees, and (7) Trainer. To get the information, relevant questions aligned with the study

objectives were designed. Except for NSDC and SSDMs, the responses were received from all five stakeholders. A total of 19 questions were designed for Skill Development Missions, particularly to comprehend the implementation of the CSSM-STT. The Missions were found almost silent to respond to the study team by taking the excuse of Covid-19. A total of 47 questions were posed to Sector Skill Councils. Out of the total targeted 36 Sector Skill Councils, a total of 16 responses from 16 Sector Skill Councils were received, information pertaining to identification and retirement of job-roles, the process of course design, accreditation of training partner, assessment and accreditation, industry linkage, and placement, and other important dimensions. A total of 66 questions were asked to Training Partners on issues, such as setup of the training centre, training infrastructure, selection of skill sector and job roles, target setting and training, trainee assessment and certification, counselling and placement, industry partner linkages, and trainer. A total of 67 questions related to household information, trainer effectiveness, quality of training, assessment, counselling and placement, were asked to the prime stakeholder of the scheme viz. beneficiary trainee. A total of 42 questions were posed before the trainer relating to training details, training method, training facilities, trainees and industry partners.

b. In-depth Interview

The study team individually interacted with PMKVY training partners, Ministry officials, Sector Skill Councils, and trainers to elicit responses relating to the overall achievement of the scheme. The instrument provided qualitative information to the evaluation study. The in-depth interview helped the study team to identify implicit bottlenecks that have been used in the recommendation part of the evaluation study report.

c. Observation

Observation as a research tool was used in understanding the issues and challenges of the scheme. It involved three processes, i.e. (i) sensation (ii) attention (iii) perception. The sensation was gained through the idea pre-conceived through secondary information. The attention was paid to the way stakeholders were found responding. The perception comprises the interpretation of benefits vis-à-vis the way PMKVY was catering to the target group. Thus, the observation served the purpose of (i) studying collective behaviour and complex situations; (ii) following up of individual units composing the situations; (iii) understanding the whole and the parts in their interrelation; (iv) getting out of the way details of the situation.

d. Focus Group Discussion

The focus group discussions were conducted with multiple stakeholders. It consisted of five trainees, two trainers, and one training partner. Thus a total of 8 respondents were included in each of the focus group discussions. The focus group discussions involved gathering important information gaps on qualitative issues. The different nuances of the schemes were discussed to arrive at precision. The perceptions of both demand and supply-side stakeholders were received and responses were documented in the research dairy. The participants were given full freedom to explain the issues and concerns in detail. The discussion under FGD was moderated by the study team. One of the objectives of the FGDs was to cross-check the claims of the institutes and actual amenities that were available for the beneficiary trainees. It was also intended to know the efficacy of job roles in demand and aspired. The focus group discussion has immensely helped in developing the qualitative evaluation report. Thus, the study has used research tools like questionnaires, in-depth discussions, interviews, focus group discussions (FGDs), and observations to document the overall performance of the scheme.

3. OBJECTIVE OF THE STUDY

The objectives of the evaluation study as per the ToR are as under:

A. Performance analysis

1. To assess the performance of the scheme and analyze various gaps for corrective action:

(a) Improving market efficiency and productivity of labor while ensuring, the inclusion of women, SC, ST, Divyang, and other vulnerable groups,

(b) Formalization & social security of labor force,

(c) Building a skilled quality manpower pool by enabling fresh skilling, multi-skilling, up-skilling, and re-skilling for enhanced employability, including entrepreneurship, and self-employment, and

(d) Labour force aspirations

B. Assess Relevance, Effectiveness, Equity, and Sustainability of the Scheme

1. To analyze the input use efficiency of the PMRPY and PMKVY schemes including the National Career Service (NCS) projection terms of aspects like institutional mechanism, fund flow (adequacy and timeliness) & utilization through public expenditure, etc.,

2. To look at the effectiveness of PMKVY in skilling, up-skilling, RPL activities, certification, and placements,

3. To assess the coverage of the scheme in terms of levels of formalization of workers by getting them into social security and to look at the overall outcomes linked to the schemes,

4. To identify the key bottlenecks/issues and challenges in the implementation mechanisms (governance mechanism, stakeholder engagement & their roles & responsibilities, process & resource flow, capacities to report on the efficacy of these schemes towards job creation and sustainable employment for all, and

5. To assess the intended and actual convergence of the scheme to other developmental programmes of the Central and State Governments as well as with private sector/CSR effort.

4.1 Performance of the scheme based on the output/outcome indicators

Based on the feedback received from Skill Development Wing, MoSD & E, and subsequently, the inception report accepted, the output/outcome indicators spelled out in the light of objectives of the study are as under:

1. Awareness about the PMKVY in the target group

2. Number of candidates enrolled, trained, assessed, certified, and placed under CSCM-STT

3. Number of candidates enrolled, trained, assessed, certified and placed under CSSM-STT

4. Number of candidates enrolled, oriented, assessed and certified under the CSCM-RPL

5. Number of candidates enrolled, trained, assessed certified and placed under the CSCM-SPs

6. Impact of skills received on employability

7. Aspirations of the target group and job-roles demanded by the market,

8. Infrastructure, accessibility and the use of IT by the of Training Centres

9. Sectoral skill demand & supply

10. Inclusiveness of the scheme with regard to women, SCs, STs, 'Divyangjan' and other vulnerable groups

11. Convergence with other central/state government schemes

12. Accessibility of training partners to the trainings and quality thereof

13. Identification of reasons for beneficiaries' dropping out

14. Identification of problems faced by beneficiary trainee from enrolment to certification

15. Placement of beneficiaries in the same sector where the training received

16. Effectiveness of monitoring the placement

17. Best practices in skilling

1 Awareness about the PMKVY in the target group

Social and community mobilization is extremely critical for the success of any skill development initiative. It fosters a bottom-up approach not only in effective planning and implementation of interventions in the space but also in effective monitoring, evaluation and ownership of the scheme. The active participation of the community ensures transparency and accountability and helps in leveraging the cumulative knowledge of the community for better functioning. It has been mandated under the scheme that proper awareness needs to be spread, identify suitable beneficiaries, enrollment of beneficiaries under the courses best matched, and dovetail PMKVY with other national missions. The mobilization process under the scheme proceeds with the preparation of a specific resource mobilization strategy, identification of the broad stakeholder

group, developing the key messaging and selecting the right information disseminating vehicles, and preparing for enrollment. Apart from other leveraging information channels, Mass-Media, Small-Media and Kaushal Mela.

The PMKVY Guidelines (2016-20) document on page number 4, (sub-point-1.4.5) stipulates mobilization. It mentions that the training centres shall conduct various outreach campaigns across the districts in which they are located. The outreach campaign may comprise a combination of door-to-door visits, mobile vans, and interaction with community-based groups and local leadership. All outreach efforts are to target school dropouts and undergraduate college dropouts. Mass enrollment of students shall not be allowed under the scheme. Kaushal Melas should be conducted in coordination with state/local representatives at least once every six months in accordance with the Kaushal and Rozgar Mela guidelines. The Training Centres are required to ensure that their mobilization efforts are visible on print, outdoor and digital media platforms, in accordance with the Branding and Communication Guidelines. The mobilization strategy involves the allocation of targets, followed by communication to dignitary, update to SDMS with relevant details, and finally mobilization camps. The responses received on the component from the beneficiary trainees are as under:

Table 3.1: Channels of mobilization across the sampled states

States	Door to Door Campaign	Community Leaders	Kaushal and Rozagar Melas	Peer group	Staff of Training Centre	Advertisement through print and Audio, visual media	Social Platforms	Total
Assam	8 (7.2)	41 (36.9)	27 (24.3)	5 (4.5)	15 (13.5)	5 (4.5)	10 (9)	111 (100)
Manipur	17 (20.2)	22 (26.2)	19 (22.6)	0 (0)	10 (11.9)	14 (16.7)	2 (2.4)	84 (100)
Bihar	32 (29.9)	5 (4.7)	42 (39.3)	0 (0)	19 (17.8)	9 (8.4)	0(0.0)	107 (100)
Odisha	21 (31.3)	14 (20.9)	4 (6)	0 (0)	0(0.0)	13 (19.4)	15 (22.4)	67 (100)
Haryana	31 (26.5)	37 (31.6)	14 (12)	16 (13.7)	18 (15.4)	0(0.0)	1 (0.9)	117 (100)
Rajasthan	21 (23.1)	22 (24.2)	11 (12.1)	11 (12.1)	11 (12.1)	10 (11)	5 (5.5)	91 (100)
Madhya Pradesh	41 (25.2)	9 (5.5%)	35 (21.5)	0 (0)	44 (27)	14 (8.6)	20 (12.3)	163 (100)
Uttar Pradesh	29 (36.7)	18 (22.8)	19 (24.1)	4 (5.1)	5 (6.3)	4 (5.1)	0(0.0)	79 (100)
Tamil Nadu	12 (16)	14 (18.7)	26 (34.7)	3 (4)	9 (12)	11 (14.7)	0(0.0)	75 (100)
Karnataka	20 (24.7)	10 (12.3)	20 (24.7)	4 (4.9)	10 (12.3)	8 (9.9)	9 (11.1)	81 (100)
Gujarat	29 (31.9)	8 (8.8)	25 (27.5)	4 (4.4)	13 (14.3)	4 (4.4)	8 (8.8)	91 (100)
Maharashtra	39 (32.8)	27 (22.7)	24 (20.2)	4 (3.4)	23 (19.3)	2 (1.7)	0(0.0)	119 (100)
Total	300 (25.3)	227 (19.2)	266 (22.4)	51 (4.3)	177 (14.9)	94 (7.9)	70 (5.9)	1185 (100)
Average	25.5	19.6	22.4	4.3	13.5	8.6	6.0	100.0

The mobilization channels like door-to-door campaign, community leaders, Kaushal & Rozagar Melas, Peer group, staff of the training centres, advertisement through audio-visual media, and social platforms have been reflected by the beneficiary trainees. The multiple options have been selected by 668 beneficiary trainees across the sampled States. Thus a total of 1185 responses on the various options were received from the beneficiary trainees.

From the table above, out of the total responses received, the optimum mobilization has been realized through door to door campaign (25.3%), followed by Kaushal and Rozgar Melas (22.4%), community leaders (19.2%), staff of the training centre (14.9%), advertisement through prints and audio-visual media (7.9%), social platforms (5.9%), and peer group (4.3%). The computed mean value for the door to door campaign has scored 25.5, followed by Kaushal and Rojagar melas (22.4), the community leaders (18.9), staff of training centre (13.5), advertisement through print and audio-visual media (8.6), social platform (6.0), and peer group (4.3).

The states having above the mean score on the component of the door to door campaign has been found in the state of Madhya Pradesh (41), followed by, Maharashtra (39), Bihar (32), Haryana (31), Uttar Pradesh (29), and Gujarat (29), below the mean score, are Odisha (21), Rajasthan (21), Karnataka (20), Manipur (17), Tamil Nadu (12), and Assam (8). The states having above than the mean score on the component of Community Leaders have been found in the state of Assam (41), followed by Haryana (37), Maharashtra (27), Rajasthan (22), and Manipur (22), below the mean score, are Uttar Pradesh (18), Tamil Nadu (14), Odisha (14), Karnataka (10), Madhya Pradesh (9), Gujarat (8), Bihar (5).

The community leaders as the channels for mobilization have worked above the average in the state of Assam (41), Haryana (37), Maharashtra (27), Rajasthan (22), and Manipur (22). The Kaushal and Rojgar Melas have worked effectively (above the average) in the state of Bihar (42), Madhya Pradesh (35), Assam (27), Tamil Nadu (26), Gujarat (25), and Maharashtra (24). The role of the peer group in mobilizing the beneficiaries is evident in the state of Haryana (16), followed by Rajasthan (11) and Assam (5). The significance of the staff of training centres has been found above the average responses in the state of Madhya Pradesh (44), followed by Maharashtra (23), Bihar (19), Haryana (18), and Assam (15). The advertisement through print and audio-visual media has been recognized above the average in the state of Manipur (14), Madhya Pradesh 914), Odisha (13), Tamil Nadu (11), Karnataka (8), Bihar (9), and Karnataka (8). The importance of social platforms has been recognized as one of the important channels in beneficiary mobilization. Its score has been found above average in the state of Madhya Pradesh (20), followed by Odisha (15), Assam (10), Karnataka (9), and Gujarat (8).

2 Number of candidates enrolled, trained, assessed, certified and placed under CSCM-STT

The Centrally Sponsored and Centrally Monitored (CSCM) component of the scheme is implemented through the NSDC that envisages insurance of 70% placement of the total certified candidates by the training centres. NSDC had laid focus on ensuring target re-allocation only to centres with high placement performance. In addition, the employer-led model are also being focused on the current model of partner selection prioritizing proposals submitted either by employers or other organizations in consortium with employers, stressing captive employment. Thus, the benchmark fixed by the scheme guidelines is 70% for employment against the trainees certified. To facilitate it, the NSDC has also empanelled placement partners, with the aim of providing employment to PMKVY certified candidates unplaced by training providers till 90 days from the date of certification. The training centres exceeding 70% of the set benchmark, 2 bonus marks receive for every 5% increment in placement performance (over and above 70%). There exist four key parameters to be monitored under PMKVY which are: (1) considerable percentage of trainees enrolled are not aware of their enrollment, (2) Considerable percentage of trainees are found to be pursuing education from school, college, or other educational institutions, (3) If the enrolled trainees never got trained, and (4) During the surprise visit, the accredited training centre was not found at its address. In other words, the enrolled trainees need to be trained. After the training, the trainee needs to be assessed. After the assessment, the qualified trainees get the certification. Of the total number of trainees certified, 70% of them should be placed, and the same to be uploaded on the website. Based on the information shared by the Ministry, a simple linear regression is run to find out the significance of enrolled, trained, assessed, and certified is affecting the reported placed.

$$\mathbf{Y} = \boldsymbol{\alpha} + \boldsymbol{\beta}_1 X_1 + \boldsymbol{\beta}_2 X_2 + \boldsymbol{\beta}_3 X_3 + \boldsymbol{\beta}_4 X_4 + \mathbf{e}$$

Where Y = Reported placed and X1= enrolled, X2= trained, X3= assessed, X4= certified

The results are given in the table given below:

Table 3.2: Regression model for scheme's achievement

Summary of Regression Output	
Multiple R	0.99984
R Square	0.99968

Adjusted R Square	0.99964					
Standard Error	4777.47					
Observations	37					
ANOVA						
	df	**SS**	**MS**	**F**	**Sign. F**	
Regression	4	*2344097973805.09*	*586024493451*	*25675*	*0.00*	
Residual	32	730377418.9	*22824294.34*			
Total	36	2344828351224				
Reported Placed	**Coeff**	**Standard Error**	**t Stat**	**P-value**	**Lower 95%**	**Upper 95%**
Intercept	-0.806	829.278	-0.001	0.999	-1689.991	1688.378
Enrolled	-0.284	0.281	-1.013	0.319	-0.856	0.287
Trained	0.683	0.580	1.177	0.248	-0.498	1.863
Assessed	-1.282	0.672	-1.909	0.065	-2.651	0.086
Certified	1.533	0.479	3.204	0.003*	0.558	2.508

R- Square (0.99) which means that the independent variable explaining the dependent variable by 99%. It is found that the change in certified trainee has got a positive influence on reported placed trainee. Certified trainee increases by 1 percent lead to reported placed trainee rise by 1.53% with vary a significant coefficient. The significance of the impact is visible on certified with a P-value of 0.003. Based on primary information, the enrolled, trained, assessed, certified and placed trainees are under:

Table 3.3: Performance of CSCM-STT across sampled states

States	**Enrolled**	**Trained**	**Certified**	**Placed**	**Placement percentage**
Assam	8	8	8	0	0.0
Bihar	78	78	78	49	62.8
Gujarat	11	11	11	11	100.0
Haryana	68	68	68	56	82.4
Karnataka	37	37	37	27	73.0

Madhya Pradesh	70	70	70	64	91.4
Maharashtra	36	36	36	36	100.0
Manipur	7	7	7	7	100.0
Odisha	49	49	49	40	81.6
Rajasthan	33	33	33	29	87.9
Tamil Nadu	34	34	34	16	47.1
Uttar Pradesh	56	56	56	44	78.6
Total & average	**487**	**487**	**487**	**379**	**77.82**

The table above shows that the maximum percentage of placement has occurred in the state of Gujarat (100%), Maharashtra (100%), and Manipur (100%), followed by Madhya Pradesh (91.4%), Rajasthan (87.9%), Haryana (82.4%), Odisha (81.6%), Uttar Pradesh (78.6%), Karnataka (73%), Bihar (62.8%), and Tamil Nadu (47.1%). The table reveals the optimum performance of the CSCM –STT component in the western zone, followed by central zone, eastern zone, southern zone, and north eastern zone. Overall, the performance of the component under the PMKVY 2.0 has been found higher in the state of Gujarat, Maharashtra, and Manipur in the sampled states. On average, the placement under the CSCM component is 77.82%.

Under the component of CSCM, apart from the regular short-term training, an additional sub-component of Special Projects is also embedded for vulnerable groups like inmates of jail and juvenile homes, tribal population belonging to Bru, Katkari, Karbi Anglong tribes etc. A number of beneficiaries are trained under the YUVA initiative of Delhi Police for skilling misguided youth, in-conflict with the law, and underprivileged candidates. Captive placements are provided to candidates certified through collaboration with industry partners. The projects under the scheme are undertaken in collaboration with Government Departments like the Department of Women and Child Welfare, the Department of Social Welfare, etc. Additionally, demand-driven and innovative job roles like staff employed e-tailer, waste pickers waste segregation, loan processing officer, futuristic solar charkha are developed to impart training. . Under the vertical, the fresh short term trainings are provided to candidates in NSQC approved job roles. Special projects bring in the flexibility required to cater to vulnerable populations residing in difficult-to-reach places. It also serves new requirements and innovative models etc. In other words, the Special Project component is different from the short-term training of PMKVY by the virtue of it being a project and need-based and comparatively a little more flexible. In the sample covered under the study, a total of 8 beneficiaries were found across the sampled states. It was found that

samples collected through the survey were 100% placed. It has been found in all three states, namely Maharashtra, Manipur, and Uttar Pradesh.

Table 3.4: Performance of CSCM-SPs across sampled states

States	Enrolled	Trained	Certified	Placed
Maharashtra	1	1	1	1
Manipur	6	6	6	6
Uttar Pradesh	1	1	1	1
Total	8	8	8	8

As per the table above, the 100% enrolled, trained, and subsequently certified beneficiaries received in the state of Maharashtra, Manipur and Uttar Pradesh. Overall, the component of CSCM-SP has been found doing optimum across the states mentioned above.

3 Number of candidates enrolled, trained, assessed, certified and placed under CSSM-STT

The component is Centrally Sponsored and State Managed. Out of the total financial outlays, 25% is spent on the component. The component under PMKVY-2.0 is implemented by State Skill Development Missions. 70% of the pass percentage of certified beneficiary trainees are to be ensured. The performance of the scheme on the component clearly indicates that 30.3% of certified trainees have been placed through the CSSM-STT. The state of Maharashtra and Gujarat have performed as per the target set under the scheme. In the case of other sampled states, the performance of the component is as per the set benchmark. The objective of PMKVY also gets enabled by enabling a large number of Indian youth to take up industry-relevant skill training that helps secure better livelihood and a sustainable future. The information shared by beneficiary trainees from the sampled states are as under:

Table 3.5: Performance of CSSM-STT across sampled states

States	Enrolled	Trained	Certified	Placed	Placement percentage
Assam	50	50	50	9	18.0
Gujarat	38	38	38	34	89.5
Karnataka	13	13	13	8	61.5
Madhya Pradesh	1	1	1	0	0.0
Maharashtra	15	15	15	14	93.3
Manipur	38	38	38	22	57.9
Tamil Nadu	16	16	16	0	0.0
Total & average	**171**	**171**	**171**	**87**	**58.87**

The table above presents the number of candidates enrolled, trained, assessed, certified and placed across the sampled states for the CSSM component. It has been found that the maximum percentage of placement has been found in the state of Maharashtra (93.3%) and Gujarat (89.5%), followed by Karnataka (61.5%), Manipur (57.9%), and Assam (18%) in the sampled beneficiaries across the states. On average, the placement under the CSSM component is 58.87%.

If we compare the CSSM with CSSM with regard to placement, the CSSM outperforms. It was observed during the visits to training partners that CSSM trainings were better equipped, guided, and monitored.

4 Number of candidates enrolled, oriented, assessed and certified under the CSCM-RPL

Under Recognition for Prior Learning (RPL) individuals with prior learning experience or skills are assessed and certified. It focuses on the individuals engaged in unregulated sectors. The objectives of RPL are primarily three-fold (i) to align the competencies of the unregulated workforce of the country to the standardized National Skills Qualification Framework (NSQF); (ii) to enhance the career/employability opportunities of an individual as well as provide alternative routes to higher education; and (iii) to provide opportunities for reducing inequalities based on privileging certain forms of knowledge over others. The project title, name of the project implementing agency, name of the Sector Skill Council (SSC), name of the mobilization agency, name of the RPL facilitators, name of assessing agencies, project location, proposed start date, proposed end date, project duration (max 1 year), total target required and job roles are essentials for the RPL centres. The RPL process comprises five steps, namely mobilization, counselling and pre-counselling, orientation, final assessment and certification & pay-outs. The RPL projects are evaluated through field visits by the NSDC or a designated agency on the parameters like branding and appropriateness of the RPL venue, publicity of the project, mobilization process, counselling and pre-screening process, orientation process, assessment process, achievement on target utilization, and adherence to prescribed timelines and other parameters in the sanctioned project proposal.

The RPL enables a large number of Indian youth to take up industry-relevant skill training that helps them improve their socio-economic conditions. Recognition of existing skills and prior experience of the beneficiaries by providing orientation of 12 hours. Beneficiaries are also

provided bridge course training for a maximum of 68 hours wherever required. Individuals benefit by having their prior learning acknowledged through a structured, NSQF based system and gain certification by saving on time, regardless of how or where the learning occurred. The RPL has been able to formally certify workforce participants working in the informal sectors of the economy. The RPL is supporting various government schemes by taking up projects with Government Organizations, involving up-skilling and certifications. Initiatives have been undertaken to provide bridge course training to rural masons for the construction of twin pit toilets in rural areas. The project is implemented along with the Ministry of Drinking Water and Sanitation to support the "Swachh Bharat Mission". Projects have also been undertaken to upskill the construction workers at the worksite itself through bridge training and has focused mainly on assistant masons, bar-benders etc. Armed forces personnel who are to retire in the upcoming 2-3 months are also being provided with bridge training to align the skills learned during the service with industry standards under MoU signed with the Ministry of defense. Another initiative has been undertaken in PMKVY along with the Ministry of Environment, Forest, and Climate Change (MoEF &CC) for up-skilling of AC field technicians. Additionally, service staff, cooks, and supervisors associated with IRCTC are also being provided bridge course training in the RPL projects so that services can be improved. The RPL is also covering women beneficiaries to learn the food processing sector for pickle-making technicians, banking operative, etc. job roles. Number of candidates enrolled, trained, assessed certified and placed under the CSCM-SPs are as under:

Table 3.6: Performance of CSCM-RPL across sampled states

States	Enrolled	Oriented	Certified	Placed
Rajasthan	1	1	1	1
Uttar Pradesh	1	1	1	1
Total	2	2	2	2

The above table indicates the number of candidates enrolled, oriented, certified, and placed. The achievement of the CSCM-RPL in the sampled states were found very effective across the two states where the sample of the RPL was found. In Rajasthan and Uttar Pradesh, the RPL component of CSCM seems to have performed well.

5 Impact of skills received on employability

PMKVY has been designed as a skill certification and reward scheme with an aim to enable and mobilize a large number of Indian youth to take up skill training and become employable for sustainable livelihood. To keep the trainings imparted in the scheme market-relevant, a total of 252 job roles were taken up for implementation in the first two years of PMKVY 2.0. The trainings have been found mostly imparted in 198 job roles out of 252 job roles applicable in the scheme. The job roles are defined and refined in the light of market demand. A total of 13 skill sectors with which beneficiaries are bestowed were found in the study sample that also informs the overall impact on employability. The information collected from the beneficiary trainees informed that a total of 70.1% employment has been calculated across 13 skill sectors. The table given below presents the skill sectors that have helped the beneficiary getting a job.

Table 3.7: Skill sector and employability across sampled states

Sector/ States	Assam	Bihar	Gujarat	Haryana	Karnataka	Madhya Pradesh	Maharashtra	Manipur	Odisha	Rajasthan	Tami Nadu	Uttar Pradesh	Grand Total
Agriculture	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	25 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	25 (100)
Beauty and Wellness	0 (0)	0 (0)	5 (38.5)	0 (0)	0 (0)	0 (0)	8 (61.5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	13 (100)
Capital Goods	0 (0)	0 (0)	7 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (100)
Construction	0 (0)	8 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	8 (100)
Retail	0 (0)	0 (0)	0 (0)	5 (17.2)	0 (0)	0 (0)	0 (0)	0 (0)	12 (41.4)	6 (20.7)	4 (13.8)	2 (6.9)	29 (100)
Apparel, Made-Ups & Home Furnishing	0 (0)	0 (0)	16 (21.9)	5 (6.8)	9 (12.3)	0 (0)	8 (11)	8 (11)	14 (19.2)	8 (11)	4 (5.5)	1 (1.4)	73 (100)
Electronic and IT Hardware	1 (0.9)	9 (8.3)	1 (0.9)	10 (9.3)	17 (15.7)	32 (29.6)	(0)	10 (9.3)	8 (7.4)	11 (10.2)	0 (0)	9 (8.3)	108 (100)
IT and ITES	(0)	10 (15.2)	10 (15.2)	14 (21.2)	9 (13.6)	7 (10.6)	7 (10.6)	1 (1.5)	0 (0)	5 (7.6)	0 (0)	3 (4.5)	66 (100)
Auto and Auto Components	8 (18.2)	0 (0)	0 (0)	10 (22.7)	0 (0)	0 (0)	10 (22.7)	(0)	0 (0)	0 (0)	0 (0)	16 (36.4)	44 (100)
Textiles	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (15.8)	8 (42.1)	0 (0)	0 (0)	8 (42.1)	(0)	19 (100)
Media and Entertainment	0 (0)	4 (26.7)	5 (33.3)	3 (20)	0 (0)	0 (0)	(0)	(0)	0 (0)	0 (0)	0 (0)	3 (20)	15 (100)
Tourism, Hospitality & Travel	0 (0)	18 (35.3)	0 (0)	8 (15.7)	0 (0)	0 (0)	14 (27.5)	0 (0)	0 (0)	0 (0)	0 (0)	11 (21.6)	51 (100)
Telecommunication	0 (0)	0 (0)	1 (10)	1 (10)	0 (0)	0 (0)	0 (0)	2 (20)	6 (60)	0 (0)	0 (0)	0 (0)	10 (100)
Grand Total	9 (1.9)	49 (10.5)	45 (9.6)	56 (12)	35 (7.5)	64 (13.7)	50 (10.7)	29 (6.2)	40 (8.5)	30 (6.4)	16 (3.4)	45 (9.6)	468 (100)

The table above presents that the jobs in the agriculture sector was noticed maximum in the state of Madhya Pradesh (25%). The jobs in beauty and wellness has been recognized in the state of Maharashtra (61.5%) and Gujarat (38.5%). The capital good sector was found providing employment opportunities in the state of Gujarat (100%). The construction sector was found providing jobs in Bihar (100%). Retail sector was found leveraging employment opportunities in the state of Rajasthan (41.4%), followed by Rajasthan (20.7%), Haryana (17.2%), Tamil Nadu (13.8%), and Uttar Pradesh (6.9%). Apparel, made-ups & home furnishing skill sector has scored its maximum visibility in the state of Gujarat (21.9%), followed by Odisha (19.2%), Karnataka (12.3%), 11% each in Maharashtra, Manipur, Rajasthan, Haryana (6.8%), Tamil Nadu (5.5%), and Uttar Pradesh (1.4%). The electronic and IT sector has scored the maximum job holders in the state of Madhya Pradesh (29.6%), followed by Karnataka (15.7%), Rajasthan (10.2%), Haryana (9.3%), Manipur (9.3%), Bihar (8.3%), Uttar Pradesh (8.3%), Bihar (8.3%), Odisha (7.4%), 0.9% each in Assam and Gujarat. The auto and auto components has scored effective in the state of Haryana (21.2%), as compared to Gujarat (15.2%), followed by Bihar (15.2%), Karnataka (13.6%), Madhya Pradesh (10.6%), Maharashtra (10.6%), Rajasthan (7.6%), and Uttar Pradesh (8.3%). The textile sector skill has scored the highest in the state of Uttar Pradesh (36.4%), followed by Maharashtra (22.7%), Haryana (22.7%) and Assam (18.2%). Media and Entertainment has the maximum score in the state of Gujarat (33.3%), followed by Bihar (26.7%), Haryana (20%), and Uttar Pradesh (20%). The tourism, hospitality and travel sector has scored maximum in the state of Bihar (35.3%), followed by Maharashtra (27.5%), Uttar Pradesh (21.6%) and Haryana (15.7%). The telecommunication sector has enabled employability more in the state of Odisha (60%), followed by Manipur (20%), and 10% each in Gujarat and Haryana. As such, the maximum jobs received by the beneficiary trainees are in Electronic and IT hardware, followed by Apparel, made-ups and home furnishing, Tourism, hospitality & travel, It & ITES, Auto and auto-related components, Retail, Agriculture, Media and Entertainment, Beauty and wellness, telecommunication, construction, and capital goods.

A regression analysis to assess the impact of total trained on total placed has been done. The regression analysis primarily shows an effective correlation between both variables. It has been revealed that the total trained has an indelible impact on the total placed. This also explains the effectiveness of the PKKVY-STT on the employability of the beneficiaries receiving skill training. The summary of the regression analysis is presented below:

Table 3.8: Regression analysis based impact of total trained on total placed beneficiaries

Summary of Regression Output						
Multiple R	0.99271					
R Square	0.98549					
Adjusted R Square	0.98506					
Standard Error	6083.836					
Observations	36					
ANOVA						
	df	SS	MS	F	Sign. F	
Regression	1	85475585268	85475585268	2309	0.00	
Residual	34	1258444448	37013071.9			
Total	35	86734029717				
Total Placed	Coeff	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-298.463	1200.14280	-0.248	0.80	-2737.44	2140.52
Total Trained	0.48473	0.01008699	48.055	0.00	0.46423	0.5052

In the table above, the regression model has Multiple R/correlation coefficient value of 0.99 that measures the strength of the linear relationship between the Total Placed and Total Trained. The score of Multiple R under regression shows an almost perfect linear relationship between Total Placed and Total Trained. The R square is also known as the coefficient of determination which is the proportion of the variance in the response variables that can be explained Total Placed and Total Trained. The R-squared is 0.99 which indicates that 99.3% of the variance in the Total Placed can be explained by the Total Trained. The standard error of the regression is the average distance that the observed values fall from the regression line. In this case, the observed values fall an average of 6083.8 units from the regression line. The number of observations in the dataset is 36. The ANOVA table explains the regression model's degrees of freedom which is equal to the number of regression coefficients – 1. In this case, we have an intercept term and one predictor variable, so we have two regression coefficients total, which means the regression degrees of freedom is 2 – 1 = 1. The total degrees of freedom are equal to the number of

observations – 1. In this case, we have 36 observations, so the total degrees of freedom is 36 – 1 = 35. The Residual degrees of freedom are equal to the total df – regression df. In this case, the residual degrees of freedom is 35-1 = 34.

The f statistic is calculated as regression MS / residual MS. This statistic indicates whether the regression model provides a better fit to the data than a model that contains no independent variables. In essence, it tests if the regression model as a whole is useful. Generally Total Placed if none of the predictor variables in the model are statistically significant, the overall F statistic is also not statistically significant.

In this example, the F statistic is 2309. The last value in the table is the p-value associated with the F statistic. To see if the overall regression model is significant, we have calculated the p-value to a significance level of 0.05.

If the p-value is less than the significance level, there is sufficient evidence to conclude that the regression model fits the data better than the model with no predictor variables. This finding is good because it means that the predictor variable in the model is the actual total placed that indicates a fit regression model.

In this case, the significance F is 0.00, which is less than the common significance level of 0.05. This indicates that the regression model as a whole is statistically significant, i.e. the model fits the data better than the model with no predictor variables.

Now, we have interpreted the coefficient estimates, the standard error of the estimates, the t-stat, p-values, and confidence intervals for each term in the regression model.

The coefficients give us the numbers necessary to write the estimated regression equation:

Yhat = b0 + b1x1.

In this case, the estimated regression equation is:

Yhat= -298.46+ {0.48473* (total trained)}

Each coefficient is interpreted as the average increase in the response variable for each one-unit increase in a given predictor variable, assuming that all other predictor variables are held constant. In this case, 1% change in the total trained is expected to bring about 48.47% of change in the total placed.

The intercept is interpreted as the expected total placed with zero increase in the total trained. In this case, the total placed is expected to be -298.463 irrespective of any change in the total trained.

The standard error is a measure of the uncertainty around the estimate of the coefficient for each variable. The t-stat is simply the coefficient divided by the standard error. For example, the t-stat for total trained is 48.05.

The next column shows the p-value associated with the t-stat. This number tells us if a given response variable is significant in the model. In this case, we see that the p-value for total trained is 0.00. This indicates that total trained is a significant predictor of the total placed.

The last two columns in the table provide the lower and upper bounds for a 95% confidence interval on the coefficient estimates.

For example, the coefficient estimate for total trained is 0.4847, but there is some uncertainty around this estimate. We can never know for sure if this is the exact coefficient. Thus, a 95% confidence interval gives us a range of likely values for the true coefficient.

In this case, the 95% confidence interval for total trained is (0.46423, 0.5052). Notice that this confidence interval does not contain the number "0", which means we're quite confident that the true value for the coefficient of total trained is non-zero, i.e. a positive number.

Table 3.9: Sector-wise placement of beneficiary trained

Sector	Total Trained	Total Placed	Placed Percentage
Rubber	700	526	75.14
Domestic worker	5585	3428	61.38
Furniture and fittings	6700	4071	60.76
Leather	4939	2877	58.25
Aerospace and aviation	1131	648	57.29
Apparel	354697	197027	55.55
Power	45131	25017	55.43
Handicrafts and carpet	4604	2528	54.91
Food processing	7611	4026	52.90
Media and entertainment	25293	13279	52.50
Agriculture	52010	27187	52.27
Construction	92198	47994	52.06
Tourism & hospitality	52926	27457	51.88
Beauty and wellness	131313	67812	51.64
Textiles and handlooms	2089	1075	51.46
Telecom	162000	80554	49.72
Retail	218876	106726	48.76
Iron and steel	17594	8474	48.16
Automotive	32998	15807	47.90

Sector	Total Trained	Total Placed	Placed Percentage
Logistics	171575	81735	47.64
Green jobs	25260	12009	47.54
Healthcare	51561	24172	46.88
Management	4256	1964	46.15
Plumbing	16421	7393	45.02
Electronics and hardware	460797	205248	44.54
Sports	2084	898	43.09
Security	12584	5380	42.75
IT-ITES	137270	55583	40.49
BFSI	85676	32380	37.79
Capital goods	30370	10954	36.07
Mining	13812	4934	35.72
Gems and jewelry	19249	6856	35.62
Persons with disability	27818	9595	34.49
Life sciences	13674	4332	31.68
Infrastructure equipment	571	20	3.50
Paints and coatings	0	0	0.00
Total	**2291373**	**1099966**	**48.00**

The sector-wise interpretation of beneficiaries trained and received placement has been accounted for 48%. As per the tabular information, three slabs may be classified to assess the percentage of placement trainees received after the training sector-wise. These classifications are: placement above 60%, placement above 50%, placement above 40%, and below 40%. In the above 60%, the major sectors scored are: rubber (75.14%), domestic worker (61.38%), and furniture and fittings (60.76%). In the placement slab of 50% and above, the sector are: leather (58.25%), aerospace and aviation (57.29%), apparel (55.55%), power (55.43%), handicrafts and carpets (54.91%), food processing (52.90%), media and entertainment (52.50%), agriculture (52.27%), construction (52.06%), tourism and hospitality (51.88%), beauty and wellness (51.64%), and textile and handlooms (51.46%). In the placement slab of 40% and above, the sectors are: telecom (49.72%), retail (48.76%), iron and steel (48.16%), automotive (47.90%), logistics (47.64%), green jobs (47.54%), health care (46.88%), management (46.15%), plumbing (45.02%), electronics and hardware (44.54%), sports (43.09%), security (42.75%), IT-ITES (40.49%). In the final placement slab of below 40%, the sectors are: BFSI (37.79%), capital goods (36.07%), mining (35.72%), gems and jewelry (35.62%), persons with disabilities (34.49%), life sciences (31.68%), and infrastructure equipment (3.50%). Overall, rubber in the

first slab, leather in the second slab, telecom in the third slab, and BFSI in the fourth slab for the placement have pioneered the sector chain. It further indicates that rubber has profuse potential to provide a placement that has been accounted for 75.14% aligned with the target placement of the PMKVY. The employability is largely driven by the sectoral demand as per the information documented in the table above. However, the other sectors may be in demand, as times and need change.

Table 3.10: Changes in the monthly wages of the trainees (before and after the coverage under the scheme)

Sector/Job-role	Avg. Monthly Wage Rate - Before the training	Avg. Monthly Wage Rate - After the training	Change amount	Percentage Change
Handicraft	2500	11500	9000	360.00
Beauty And Wellness	5444.44	19000	13555.56	248.98
Aero Space	10000	30000	20000	200.00
Telecom	11700	33050	21350	182.48
Construction	10562.5	28687.5	18125	171.60
Agriculture	9800	25800	16000	163.27
Accountancy	6500	15000	8500	130.77
Iron & Steel	6250	14250	8000	128.00
Healthcare	9666.67	21666.67	12000	124.14
Retail	7857.14	17057.14	9200	117.09
Apparel	6538.55	14144.58	7606.03	116.33
Logistics	8205.68	17736.84	9531.16	116.15
Rubber	9833.33	20833.33	11000	111.86
IT-ITeS	7991.59	16289.72	8298.13	103.84
Automobile	8700	16975	8275	95.11
Capital Goods	8333.33	16000	7666.67	92.00
Electronics & Hardware	8737.11	16340.21	7603.1	87.02
Media & Entertainment	8637.5	15975	7337.5	84.95
Power	9206.67	16955.56	7748.89	84.17
Tourism & Hospitality	9740.74	17888.89	8148.15	83.65

Management & Entrepreneurship	10000	18000	8000	80.00
Textiles and Handlooms	7250	11937.5	4687.5	64.66
Mining	7500	12000	4500	60.00
Total	**8422.64**	**17871.26**	**9448.62**	**112.18**

In the table above, the total percentage change in the wages has been accounted for 112.18%, as a result of coverage under the scheme. The maximum change in the monthly wage rate is astounding in handicraft (360%), followed by beauty and wellness (248.98%), aerospace (200%), telecom (182.48%), construction (171.60%), agriculture (163.27%), accountancy (130.77%), iron and steel (128%), healthcare (124.14%), retail (117.09%), apparel (116.33%), logistics (116.15%), rubber (111.86%) and so on. Based on the monthly changes in the wage rate, most of the changes are aligned to an additional income of Rs. 8000 (mode value=Rs. 8000).The mean change in the monthly wage rate has been accounted for Rs. 10266.64. The maximum change amount in the wage rate has been found as Rs. 21350. However, the minimum change amount in the wage rate change has been found as Rs. 4500.

Table 3.11: t-Test: Two-Sample assuming unequal variances regarding average monthly wage rate

Particulars	Avg. Monthly Wage Rate - Before the training	Avg. Monthly Wage Rate - After the training
Mean	8302.40	18569.04
Variance	3939706.83	33200598.26
Observations	23	23
Hypothesized Mean Difference	0	
df	27	
t Stat	-8.08	
P(T<=t) one-tail	0.00	
t Critical one-tail	1.70	
P(T<=t) two-tail	0.00	
t Critical two-tail	2.05	

To assess the accurate change in the monthly wage rate, the before and after wages have been processed through t-test for two-sample assuming unequal variances. The P-value of 0.00 shows a highly significant change in the monthly wage rate before and after the coverage under the scheme. In addition to this, the observed absolute value of t Stat is 8.08 which is higher than t Critical two-tail 2.05. This implies that it fails to accept the null hypotheses. This is to say that there is a significant difference in wage rates before and after the coverage under the scheme.

6 Aspirations of target group and job-roles demanded by market

Consideration of aspirations of beneficiary trainees in skill training conspicuously determines the speed and scope of learning. Under the CSSM-STT component, the states are better equipped to handle the place-specific needs of the job roles. As such the involvement of states enables taking up specific skill development that caters to the local demand and aspirations. In an endeavor to improve the information flow and bridge the demand-supply gap in the skilled workforce market, PMKVY has the vision to give due weightage to the aspirational skills of the potential beneficiaries. Apart from recruiting a skilled workforce that spurs business competitiveness and economic growth, the Artificial Intelligence-based platform may strengthen the career pathways to attain industry-relevant skills and explore emerging job opportunities, especially in the post COVID era. The aspirational job roles of beneficiary trainees have been compared with the job roles offered by industry partners. The findings on the above component are as under:

Table 3.12: Aspirations of target group vis-à-vis job roles demanded by market

Sr. No.	Job-roles	Job roles offered by Industry Partners	Aspirational Job role frequency	Percentage of job roles offered by Industry Partner	Percentage of aspirational job roles
1	Domestic Data Entry Operator	11	39	13.6	5.9
2	Retail Sales Associate	10	43	12.3	6.5
3	Domestic IT Helpdesk Attendant	6	0	7.4	0.0
4	Retail Team Leader	3	6	3.7	0.9
5	Self Employed Tailor	3	66	3.7	10.0
6	Animator	2	0	2.5	0.0
7	Assembly operator	2	0	2.5	0.0
8	Assistant Beauty Therapist	2	0	2.5	0.0
9	Automotive Service Technician	2	19	2.5	2.9
10	CCTV Installation Technician	2	0	2.5	0.0
11	Counter Sales Executive	2	36	2.5	5.5
12	Courier Delivery Executive	2	40	2.5	6.1
13	Documentation Assistant	2	46	2.5	7.0
14	Field Technician Computing and Peripherals	2	37	2.5	5.6
15	Front Office Associate	2	7	2.5	1.1

16	Home health Aide	2	0	2.5	0.0
17	Sewing Machine Operator	2	4	2.5	0.6
18	Taxi Driver	2	0	2.5	0.0
19	Accessary fitter	1	0	1.2	0.0
20	Assistant Electrician	1	0	1.2	0.0
21	Bamboo Utility Handicraft Assembler	1	0	1.2	0.0
22	Broadband Technician	1	0	1.2	0.0
23	Chauffeur	1	6	1.2	0.9
24	CRM Domestic Voice	1	11	1.2	1.7
25	Distribution Lineman	1	24	1.2	3.6
26	Distributor Salesman	1	0	1.2	0.0
27	Electrician Domestic Solutions	1	0	1.2	0.0
28	Fabric Checker	1	13	1.2	2.0
29	Front Line Health Worker	1	106	1.2	16.1
30	Gardner	1	0	1.2	0.0
31	Greenhouse Operator	1	0	1.2	0.0
32	Hairdresser	1	25	1.2	3.8
33	Hand Embroiderer	1	11	1.2	1.7
34	Junior Engineer	1	0	1.2	0.0
35	Junior Software Developer	1	27	1.2	4.1
36	Mobile Phone Hardware Repair Technician	1	70	1.2	10.6
37	Organic Grower	1	0	1.2	0.0
38	Powerloom Operator	1	22	1.2	3.3
39	Retail Trainee Associate	1	0	1.2	0.0
40	Solar Panel Installation Technician	1	0	1.2	0.0
Total		**81**	**658**	**100**	**100.0**

The table above represents the aspirational and market demanded job roles. A total of 40 job roles have been expressed by industry partners whereas, the beneficiary trainees have registered 21 job roles. The three job roles, namely Domestic Data Entry Operator (13.6%), Retail Sales Associate (12.3%), and Domestic IT Helpdesk Attendant (7.4%) have been expressed, as the most demanded, by the industry partners. In contrast, the three aspirational job roles registered by beneficiary trainees are frontline health worker (16.1%), Mobile Phone Hardware repair

technician (10.6%), and self-employed tailor (10%). The tabular information shows variation in the aspirational job roles and the market demanded job roles. A total of 19 job roles expressed by the market go unescorted so far as the aspirational job roles are concerned. These are (1) Domestic IT Helpdesk Attendant (2) Animator (3) Assembly operator (4) Assistant Beauty Therapist (5) CCTV Installation Technician (6) Home Health Aide (7) Taxi Driver (8) Accessary fitter (9) Assistant Electrician (10) Bamboo Utility Handicraft Assembler (11) Broadband Technician (12) Distributor Salesman (13) Electrician Domestic Solutions (14) Gardner (15) Greenhouse Operator (16) Junior Engineer (17) Organic Grower (18) Retail Trainee Associate, and (19) Solar Panel Installation Technician. The top-rated five job roles as per the market demand are: (1) Domestic Data Entry Operator (2) Retail Sales Associate (3) Domestic IT Helpdesk Attendant (4) Retail Team Leader, and (5) Self Employed Tailor. The top five aspirational job roles registered by trainee beneficiaries are: (1) Front line health worker (2) Mobile Phone Hardware Repair Technician (3) Self Employed Tailor (4) Documentation Assistant, and (5) Retail Sales Associate.

Table 3.13: z-Test of job roles offered and aspirational job roles of beneficiary trainees

z-Test: Two-Sample for Means		
Instruments	**Percentage of job roles offered by Industry Partner**	**Percentage of aspirational job roles**
Mean	2.49	2.5
Known Variance	7.082	13.131
Observations	40	40
Hypothesized Mean Difference	0	
z	-0.014	
P(Z<=z) one-tail	0.494	
z Critical one-tail	1.644	
P(Z<=z) two-tail	0.988	
z Critical two-tail	1.959	

The z-test as a statistical tool has been used to determine whether the two sets of responses are different when the variances are known and the distribution is large. The z-test has been conducted after converting the available scores in percentage for both the variables to know the intensity to which they share a commonality. It has been found that against the computed z-Stat of 0.014 (absolute value), the z critical two-tail has scored 1.959 which is more. In this case, the

hypothesis gets accepted with considered mean difference of 0 referring to similarity in both the variables. As such, the statistical analysis posits that there is a higher degree of similarity between skills offered by industry partners and aspirational skills of the target group. Overall, both job roles offered by industry partners and aspirational are similar statistically. The above analysis is based on 40 job roles expressed by industry partners as market-oriented in sharp contrast with the aspirational job roles of the beneficiary trainees. The study reveals that aspirational job roles are largely guided by market forces. The beneficiary knows which job roles are marketable. However, the intensity varies because some people are not abreast of market movement.

The study has documented the responses received from industry partners to gauge the priority of skill sectors. The preference received on the component helps understand the priority of skills to be given in the next phase of the PMKVY roll-out.

Table 3.14: Skill-sectors preferred by industry partners in sampled states

Skill Sector (Trained)	Skill preferred by Industry Partners (N=81)
IT &ITeS	23.5
Retail	18.5
Electronics & Hardware	9.9
Apparel, Makeups & Home Furnishing	8.6
Automotive	7.4
Logistics	4.9
Tourism and Hospitality	4.9
Power	3.7
Media & Entertainment	3.7
Agriculture	3.7
Healthcare	3.7
Others	7.5
Total	**100**

The table above discloses the skill sector preferred by industry partners. Out of the total responses received from industry partners, it was found that the industry partners have expressed their priority on IT-ITeS (23.5%), followed by retail (18.5%), electronic and hardware (9.9%), Apparels (8.6%), Automotive (7.4%), and so on. Healthcare, Agriculture, Media & Entertainment, and Power have been found as low weightage skill sectors. Looking at the market demand for the IT &ITeS sector, the focus of the PMKVY skilling programme may require little shift towards the sector.

To shift our focus from macro to micro, the feedback of industry partners were also complied on their preferences of job roles. The responses are placed in the table given below:

Table 3.15: Job-roles preferred by industry partners in sampled states

Sr. No.	Job-roles	Frequency	Percentage
1	Domestic Data Entry Operator	11	13.6
2	Retail Sales Associate	10	12.3
3	Domestic IT Helpdesk Attendant	6	7.4
4	Retail Team Leader	3	3.7
5	Self Employed Tailor	3	3.7
6	Animator	2	2.5
7	Assembly operator	2	2.5
8	Assistant Beauty Therapist	2	2.5
9	Automotive Service Technician	2	2.5
10	CCTV Installation Technician	2	2.5
11	Counter Sales Executive	2	2.5
12	Courier Delivery Executive	2	2.5
13	Documentation Assistant	2	2.5
14	Field Technician Computing and Peripherals	2	2.5
15	Front Office Associate	2	2.5
16	Home health Aide	2	2.5
17	Sewing Machine Operator	2	2.5
18	Taxi Driver	2	2.5
19	Accessary fitter	1	1.2
20	Assistant Electrician	1	1.2
21	Bamboo Utility Handicraft Assembler	1	1.2
22	Broadband Technician	1	1.2
23	Chauffeur	1	1.2
24	CRM Domestic Voice	1	1.2
25	Distribution Lineman	1	1.2
26	Distributor Salesman	1	1.2
27	Electrician Domestic Solutions	1	1.2
28	Fabric Checker	1	1.2
29	Front Line Health Worker	1	1.2
30	Gardner	1	1.2
31	Greenhouse Operator	1	1.2
32	Hairdresser	1	1.2
33	Hand Embroiderer	1	1.2
34	Junior Engineer	1	1.2
35	Junior Software Developer	1	1.2
36	Mobile Phone Hardware Repair Technician	1	1.2

Sr. No.	Job-roles	Frequency	Percentage
37	Organic Grower	1	1.2
38	Powerloom Operator	1	1.2
39	Retail Trainee Associate	1	1.2
40	Solar Panel Installation Technician	1	1.2
Total		**81**	**100.0**

To gauge the demand from industry partners' perspectives, they were asked to share the most important job roles that they required to cater to the market demand. A total of 40 job-roles, namely (1) Domestic Data Entry Operator, (2) Retail Sales Associate (3) Domestic IT Helpdesk Attendant, (4) Retail Team Leader, (5) Self Employed Tailor, (6) Animator, (7) Assembly Operator, (8) Assistant Beauty Therapist, (9) Automotive Service Technician, (10) CCTV Installation Technician, (11) Counter Sales Executive, (12) Courier Delivery Executive, (13) Documentation Assistant, (14) Field Technician Computing and Peripherals (15) Front Office Associate, (16) Home Health Aide, (17) Sewing Machine Operator, (18) Taxi Driver (19) Accessary Fitter, (20) Assistant Electrician, (21)Bamboo Utility Handicraft Assembler, (22) Broadband Technician, (23) Chauffeur, (24) CRM Domestic Voice, (25) Distribution Lineman, (26) Distributor Salesman, (27) Electrician Domestic Solutions, (28) Fabric Checker, (29) Frontline Health Worker, (30) Gardner, (31) Greenhouse Operator, (32) Hairdresser, (33) Hand Embroiderer, (34) Junior Engineer, (35) Junior Software Developer, (36) Mobile Phone Hardware Repair Technician, (37) Organic Grower (38) Powerloom operator (39) Retail Trainee Associate, and (40) Solar Panel Installation Technician.

Out of the total job roles preferred by the industry partners, the highest frequency count has been found for Domestic Data Operator (11), followed by retail Sales Associate (10), and so on. One each industry partner has preferred 22 Job-roles mentioned in the above table. In other words, the industry partners expressed their increased level of preference for Domestic Data Entry Operator (13.6%), followed by Retail Sales Associate (12.3%), and Domestic IT Helpdesk Attendant (7.4%). The job-roles, like Retail Team Leader, and Self-employed Tailor scored 3.7% so far as the preference of industry partner was concerned. 2 preferences each have been given to Animator, Assembly Operator, Assistant Beauty Therapist, Automotive Service Technician, CCTV Installation Technician, Counter Sales Executive, Currier Delivery Executive, Documentation Assistant, Field Technician Computing and Peripherals, front office Associate,

Home Health Aide, Sewing Machine Operator, and Taxi Driver by the industry partners. It was observed that in most of the sampled states, the IT-ITeS skill sector gained considerable preference from the industry partners. The industry partners shared their job-role preferences considering the market demand. Their preference of job roles was matched with job roles given in the final list of PMKVY 2.0. However, the information shared by the industry partners has been kept intact in the best possible way.

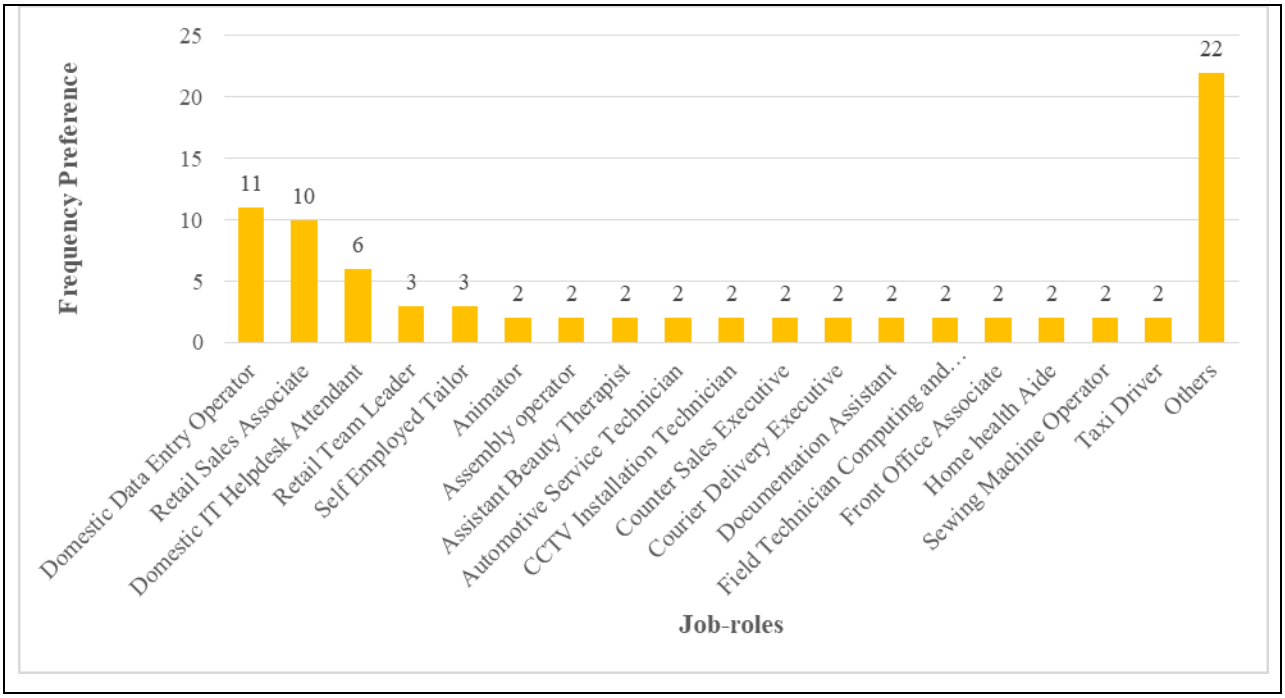

Figure 3.1: Bar diagram showing job-role preference by industry partners

The bar drawn above shows the job-role preference of the industry partners (N=81). The bar for 'others' consists of a total of 22 job roles. The study discloses that though 198 job roles out of the 252 job roles applicable to the scheme are in place, domestic data entry operator, retail sales associate, and domestic IT-help desk attendant are the most preferred job roles by the industry partners.

Sector Skill Councils (SSCs play a vital role in bridging the gap between what the industry demands and what the skilling requirements ought to be. The National Occupational Standard has been made possible by the SSCs. The SSCs bring all the stakeholders together viz. industry, labour, and academia. The job roles preferred by the Sector Skill Councils have also been listed in the table given below.

Table 3.16: Prioritised job roles by Sector Skill Councils (SSCs)

Sector Skill Councils	Prioritized job roles
Furniture and Fittings Skill Council (FFSC)	Lead Carpenter
	Lead Assembler
	Interior Designer
	Machine Operator
	Cabinet Maker
Paints and Coatings Skill Council	Assistant Decorative painter
	Decorative painter
	Powder coater
	Protective and Marine Painter
	Shop tinting Assistant
Textile Sector Skill Council	Two Shaft Handloom Weaver
	Power Loom Operator
	Autoconer Tenter
	Ring Frame Tenter
	Jacquard weaver
Beauty & Wellness Sector Skill Council	Beauty Therapist
	Hair Stylist
	Nail Technician
	Yoga Instructor
	Spa Therapist
Handicrafts and Carpet Sector Skill Council	Carpenter
	Ceramics
	Bamboo
	Handcrafted Textiles
	Metalware
Electronics Sector Skills Councils of India	Field Technician Computing & Peripherals
	CCTV Installation Technician
	Mobile Phone Hardware Repair Technician
	EMS Technician
	Assembly Operator
Domestic Workers Sector Skill Council	General Housekeeper
	Housekeeper cum Cook
	Child Caretaker (Non-Clinical)
	Elderly Caretaker (Non-Clinical)
	Household Multipurpose Executive
Rubber Skill Development Council	Mill Operator
	Compression Moulding Operator
	Injection Moulding Operator
	Latex Harvest Technician

	Tyre Fitter
Indian Iron and Steel Sector Skill Council	Fitter Levelling, alignment and balancing
	Fitter Electrical Assembly
	Crane Operator
	Conveyor Belt Operations and Maintenance
	Housekeeping with Mechanised Equipment
Skill Council for Mining Sector	Mining Supervisor
	Mining Mate
	Supervisor-Plant Operations
	Dumper Tipper Operator
	Mine Electrician
Life Sciences Sector Skill Development Council	Production / Machine Operator – Life Sciences
	Store Assistant – Life Sciences
	Medical Sales Representative
	Quality Control Chemist
	Telesales Executive – Life Sciences
Skill Council for Persons with Disability	Data Entry Operator
	Sewing Machine Operator
	Retail Sales Associate
	Customer Care Executive (Call Center)
	Food & Beverages Steward
Apparel Made Ups & Home Furnishings Sector Skill Council	Sewing Machine Operator
	Sewing Machine Operator – Knits
	Self Employed Tailors
	Hand Embroiderer
	Assistant Fashion Designer
Agriculture Skill Council of India	Farm Mechanization & Precision Farming
	Inland fishery
	Production Horticulture (fruits and vegetables)
	Post-harvest supply chain management
	Agri Entrepreneurship & Rural Enterprises
Management & Entrepreneurship and Professional Skills Council	No Response

The table above has depicted the job roles prioritized by Sector Skill Councils (SSCs). A total of 15 out of 16 SSCs have responded to the component. Only the Management & Entrepreneurship and Professional Skills Council has not responded on the component. Overall, the job roles demanded by industry partners are identical to QP expressed by SSCs.

7 Infrastructure, accessibility and the use of IT by Training Centres

It is expected from the training centres that they must meet the infrastructure standards set by the guidelines of the scheme. The infrastructure of the training centres were assessed in terms of responses received from the beneficiary trainees on adequate space of training hall, satisfactory seating arrangement, proper training equipment & tools, adequate training consumables, audio-video equipment, availability of library, light arrangement, electricity back-up, drinking water, toilet facilities proper ventilation and proper hygiene and sanitation.

The table given below shows 'yes' views indicating satisfactory availability of the facilities. Regarding, training hall space being adequate was admitted by cent percent beneficiaries in most states except Manipur (98.7), Haryana (98%), Madhya Pradesh (83.7%), and Uttar Pradesh (97.1%). The seating arrangements were found satisfactory by 100% of trainees except in Haryana where 98% of respondents said so. All trainees from all most 9 states said training equipment and tools were available; in the remaining 3 states, the percentage of respondents saying so was less with Haryana (84%), Gujarat (98.1%), and Uttar Pradesh (97.1%). The percentages of views about training consumables being adequate were highest in Assam, Bihar, Karnataka & Tamil Nadu (100% each), followed by Manipur (98.7%), Odisha (98.5%). Gujarat (98.1%), Maharashtra (98%), Uttar Pradesh, (97.1%), Haryana (96%), Rajasthan (94.4%), and Madhya Pradesh (83.7%).In states of Assam, Manipur, Bihar, Madhya Pradesh, Uttar Pradesh, Karnataka, and Tamil Nadu cent percent trainees said that audio-visual equipment was available; in this regard, lesser percentages were obtained from Odisha (97.1%), Haryana (90%), Rajasthan (98.6%), Gujarat (90.4%) and Maharashtra (80.4%). Cent percent respondents from Assam, Bihar, Madhya Pradesh, Uttar Pradesh, Karnataka, and Tamil Nadu reported availability of library in their training centres, whereas, in the lesser percentage of trainees from Manipur (97.4%), Odisha (97.1%), Haryana (96%), Rajasthan (87.3%), Gujarat (96.2%) and Maharashtra (98%) said so.

Table 3.17: Feedback on infrastructure by beneficiary trainees-STT

State	Training Hall	Seating	Equipment and Tools	Training Consumable	Audio-Visual	Library	Light	Elect. Backup	Drinking water	Toilet Facility	Adequate Lighting	Ventilation Sufficient	Hygiene and sanitation
Assam	58 (100)	58 (100)	58 (100)	58 (100)	58 (100)	58 (100)	58 (100)	57 (98.3)	58 (100)	58 (100)	58 (100)	58 (100)	58 (100)
Manipur	77 (98.7)	78 (100)	78 (100)	77 (98.7)	78 (100)	76 (97.4)	78 (100)	78 (100)	78 (100)	78 (100)	78 (100)	77 (98.7)	77 (98.7)
Bihar	49 (100)	49 (100)	49 (100)	49 (100)	49 (100)	49 (100)	49 (100)	49 (100)	49 (100)	49 (100)	49 (100)	49 (100)	49 (100)
Odisha	68 (100)	68 (100)	68 (100)	67 (98.5)	66 (97.1)	66 (97.1)	68 (100)	68 (100)	68 (100)	68 (100)	68 (100)	68 (100)	67 (98.5)
Haryana	49 (98)	49 (98)	42 (84)	48 (96)	45 (90)	48 (96)	48 (96)	49 (98)	50 (100)	49 (98)	48 (96)	50 (100)	47 (94)
Rajasthan	71 (100)	71 (100)	71 (100)	67 (94.4)	70 (98.6)	62 (87.3)	71 (100)	71 (100)	71 (100)	71 (100)	71 (100)	71 (100)	66 (93)
Gujarat	52 (100)	52 (100)	51 (98.1)	51 (98.1)	47 (90.4)	50 (96.2)	51 (98.1)	50 (96.2)	52 (100)	52 (100)	52 (100)	52 (100)	52 (100)
Maharashtra	51 (100)	51 (100)	51 (100)	50 (98)	41 (80.4)	50 (98)	51 (100)	51 (100)	51 (100)	51 (100)	51 (100)	51 (100)	51 (100)
Madhya Pradesh	41 (83.7)	49 (100)	49 (100)	41 (83.7)	49 (100)	49 (100)	49 (100)	49 (100)	49 (100)	48 (98)	49 (100)	49 (100)	49 (100)
Uttar Pradesh	33 (97.1)	34 (100)	33 (97.1)	33 (97.1)	34 (100)	34 (100)	34 (100)	34 (100)	34 (100)	34 (100)	34 (100)	34 (100)	34 (100)
Karnataka	50 (100)	50 (100)	50 (100)	50 (100)	50 (100)	50 (100)	50 (100)	50 (100)	50 (100)	50 (100)	50 (100)	50 (100)	50 (100)
Tamil Nadu	58 (100)	58 (100)	58 (100)	58 (100)	58 (100)	58 (100)	58 (100)	58 (100)	58 (100)	58 (100)	58 (100)	58 (100)	57 (98.3)
Total	657 (98.4)	667 (99.9)	658 (98.5)	649 (97.2)	645 (96.6)	650 (97.3)	665 (99.6)	664 (99.4)	668 (100)	666 (99.7)	666 (99.7)	667 (99.9)	657 (98.4)

All trainees from most states said that lighting arrangements were available in their centres except Haryana and Gujarat where percentages such students were 96% and 98.1% respectively. All-time electrical backup available was reported by 100% trainees from Manipur, Bihar, Odisha, Rajasthan, Maharashtra, Madhya Pradesh, Uttar Pradesh, Karnataka & Tamil Nadu followed by Assam (98.3%), Haryana (98%), and Gujarat (96.2%). One hundred percent of trainees from all sample states reported drinking water being available. In 10 sample states, cent percent trainees were of the view that toilet facility was available in their centres and 98% trainees each from Haryana & Madhya Pradesh held such views. Except for Haryana where the percentage was 96%, in the remaining 11 states 100% of trainees said that lighting arrangements were adequate. Except for Manipur where 98.7% of trainees said that ventilation was proper in their centre, in the remaining states this percentage was cent percent. The last item under facilities was proper hygiene and sanitation in the centres. All students from 7 states said that hygiene & sanitation was proper but a lesser percentage of students said so from Manipur (98.7%), Odisha (98.5%), Tamil Nadu (98.3%), Haryana (94%), and Rajasthan (93%). Among 13 items of infrastructure facilities, Drinking Water Availability received highest response percentage (100%), followed by Seating Arrangements & Ventilation (99.9% each), Toilet Facility & Adequate Lighting (99.7% each), Audio Visual Equipment & Lighting Available (99.6%), Electricity Backup (99.4%), Training Equipment & Tools (98.5%), Training Hall (98.4%), Availability of Library (97.2%) & Adequate Training Consumables (97.2%). Overall, it may be inferred that situation of infrastructure facilities was satisfactory in training centres across the sample states.

The building of future growth and prosperity is largely based on the possession of market-oriented skills that STTs are addressing. Paving the path to growth and prosperity hinges upon developing skills that are relevant to the industry demand and the job market. The IT enablement is one of the key items through which a maximum degree of transparency and accountability are maintained in the scheme implementation. IT enablement ensures the effective monitoring of the scheme. During the study visit, it was observed that the payout to the staff of training partners are paid in cash which indicates the black economy to grow. However, the number of beneficiary trainees enrolled, trained, certified, and placed are e-enabled.

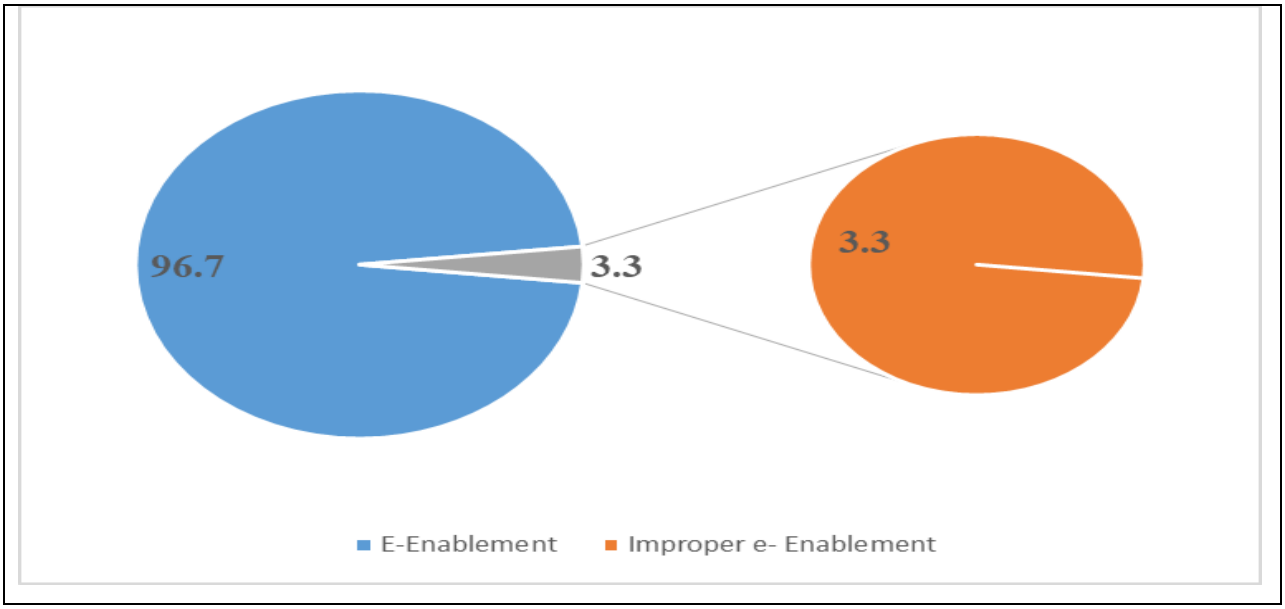

Figure 3.2: Pie chart showing the responses of stakeholders on 'e-Enablement'

The diagram above informs that 100% of training partners are e-enabled. The same responses have also been shared by the beneficiary trainees. Out of the 100% response received from the trainees, it has been found that a total of 96.7% of responses are in favor of e-enablement, followed by 3.3% as improper e-enablement. 100% of the training partners have shared that their centres are fully e-enabled. It consisted of the responses on the use of digital technology tools for the beneficiary trainees and bio-matric attendance, availability of computers, sufficient IT practices, and maintenance of data bank of the trainees. As such, most of the training centres were found equipped with IT enablement across the sampled states. However, the available e-services are not aptly used by the training partners. A similar concern was reported from the working of the SSDMs as well.

Leveraging technology for seamless implementation of the scheme have also been acted upon through involving citizens, national skill corporation, sector skill councils, training partners, trainers, organizations, assessment agency and Ministries and State councils. The use of Mobile App for PMKVY embedded Mobile App-based assessment management with geo-tracking have also been carried out. The provision of Digi Locker as online repository for skill certificates are also under the e-enablement component of the scheme. The eLearning Aggregator Platform has been introduced which is first of its kind in eSkilling platform that leverages the skilling opportunities by combining e-content from various players across the ecosystem, thus bridging the gap between the supply and demand. It brings online courses curated from leading

knowledge partners, speeding up making India a Skilled Nation. The English, Employability and Entrepreneurship (EEE) module has been introduced in the form of blended learning Module on English, Employability and Entrepreneurship (EEE). An additional 155 learning hours have been included under PMKVY on a pilot basis across 9 job roles to gauge the impact on employability.

8 Sectoral skill demand and supply

The sectoral skill demand has been analyzed based on the feedback received from the industry partners. The supply part has been considered taking into account beneficiaries trained in skill sectors. Based on information shared by beneficiary trainees (feedback on the skill training) and demand raised by industry partners (required skills), converted into percentage points, the sectoral skill demand and supply have been documented. The details are tabulated as under:

Table 3.18: Sectoral demand and supply of the skills in percentage

Skill Sector (Trained)	Skill sector of Trainees (N=658)	Skill Demand by Industry Partners (N=81)	Skill Supply by Training Partner (N-54)
IT &ITeS	15.65	23.5	7.4
Electronics & Hardware	14.74	9.9	9.1
Apparel, Makeups & Home Furnishing	12.46	8.6	13.0
Logistics	8.36	4.9	7.4
Power	6.23	3.7	3.7
Media & Entertainment	6.08	3.7	3.7
Automotive	5.93	7.4	9.3
Retail	5.02	18.5	7.4
Tourism and Hospitality	4.56	4.9	7.4
Agriculture	3.80	3.7	0.0
Telecom	3.34	1.4	1.9
Aviation & Aerospace	3.19	0.0	3.7
Textiles & Handloom	2.43	1.2	3.7
Construction	1.98	1.2	1.9
Beauty and wellness	1.52	2.5	3.7
Capital Goods	1.37	0.0	1.9
Rubber	0.91	0.0	1.9
Plumbing	0.76	0.0	3.7
Iron & Steel	0.61	0.0	0.0
Healthcare	0.46	3.7	5.6
Mining	0.30	0.0	0.0
Handicrafts	0.15	1.2	1.8
Banking Financial Services and	0.15	0.0	1.8

Insurance			
Total	**100.00**	**100.0**	**100.0**

The table above indicates the sector-wise demand & supply of the skills. A total of 16 skill sectors in demand were recognized based on the information received from the industry partners. The maximum demand has been identified in IT &ITeS (23.5%), followed by Retail (18.5), Electronics & Hardware (9.9%), Apparel, make Ups & Home furnishing (8.6%), Automobile (7.4%), Logistics (7.4%), Health care (3.7%), Agriculture (3.7%), Media & Entertainment (3.7%), Power (3.7%), Tourism & Hospitality (4.9%), Agriculture (3.7%), Healthcare (3.7%), Beauty and wellness (2.5%), Telecom (1.4%), Construction (1.2%), and handicrafts (1.2%). The skill supply with trained man power has mostly been found in IT &ITeS (15.65%), followed by Electronics (14.74%), Apparel, makeups & Home furnishing (12.46%), Logistics (8.36%), Power (6.23%), Media & Entertainment (6.08%), Automotive (5.93%), Retail (5.02%), Tourism & Hospitality (4.56%), Agriculture (3.80%), Telecom (3.34%), Aviation & Aerospace (3.19%), Textiles & Handloom (2.43%), Construction (1.98%), Beauty and wellness (1.52%), Capital goods (1.37%), Rubber (0.91%), Plumbing (0.76%), Iron & Steel (0.61%), Healthcare (0.46%), Mining (0.30%), Handicrafts (0.15%), Banking financial services and Insurance (0.15%).

Based on the above information, three-level skill sectors have been classified. The classifications are related to sectors with a shortage of manpower, sectors with a medium-level shortage of manpower, and sectors with surplus manpower trained. Under the first category, the sectors are Electronics & hardware (4.84%), Apparel, makeups & Home furnishing (3.86%), Logistics (3.46%), Aviation & Aerospace (3.19%), Power (2.53%), Media and Entertainment (2.38%), Telecom (1.94%), Capital goods (1.37%) and Textile & handloom (1.23%). Under the second category, the skill sectors are Rubber (0.91%), Construction (0.78%), Plumbing (0.76%), Iron & Steel (0.61%), Mining (0.3%), Banking financial services and insurance (0.15%) & Agriculture (0.10%). Under the third category i.e. surplus manpower as compared to market demand are: retail (-13.48%), IT &ITeS (-7.85%), Healthcare (-3.24%), Automotive (-1.47%), Handicrafts (-1.05%), Beauty and wellness (-0.98%), Tourism & Hospitality (-034%).

The diagram below shows the requirement and fulfillment of the skills across the identified sectors.

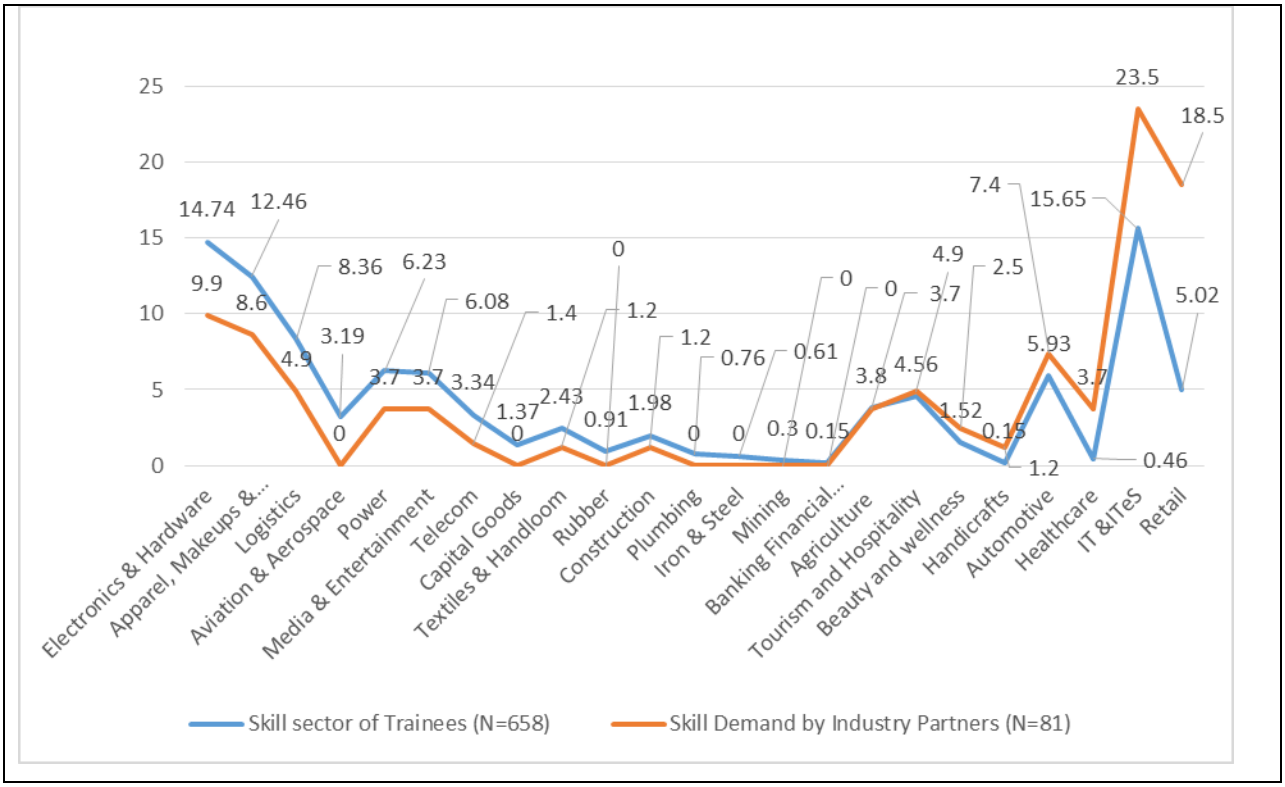

Figure 3.3: Line graphs showing the difference based demand and supply of skill sectors

The figure above shows the requirement and fulfillment of the skill sectors across 12 sampled states drawn from six NSSO classified zones. The line graphs inform the market demand of skill sectors and that is fulfilled by human resources trained.

9 Inclusiveness of the scheme with regard to women, SC, ST, 'Divyangjan' and other vulnerable groups

Under the PMKVY-2.0, more than 40% of women have been trained/oriented across various job roles and sectors. Out of the reportedly placed candidates, approximately 53% are women. With the help of the STT, SPs, and RPL, the employability amongst women have been ensured, and their work participation ratio, increased. Apart from the normal course of three pads of the training, six additional specific projects are proposed to be 100% women-oriented. The six initiatives are: (1) Hamara Bachpan Trust, (2) Youthnet Home Stay Project in northeast, (3) Projects in Pradhan Mantri Mahila Kaushal Kendra, (4) women-oriented cluster artisan, (5) special training on Beauty and Wellness in collaboration with NIESBUD, and (6) Training for women in Shelter Homes and Juvenile Homes' inmates. The percentage of women trained through STT, SP, and RPL are as under:

Table 3.19:Share of beneficiary women in PMKVY during 2016-20

Pads	Percentage of women trained/Oriented	Percentage of women certified	Percentage of women Placed
STT	50	52	52
SP	54	61	68
RPL	32	33	N/A

The table presents the percentage of women trained oriented, certified, and placed across the pads. It is evident that women share has been found 50% in STTs, 54% in SPs, and 32% in RPL for training/orientation. The percentage of women verified varies across the pads, viz. 52% under STTs, 61% in SPs, and 33% for RPL. The percentage of women respondents placed under the pads is being highlighted through the third column where-in 52% of women placed from STTs and 68% through RPL. The mandate for the placement is not applicable in the case of the RPL pad. Overall, the percentage of women placed is higher in SPs (68%), followed by STT (52%) but not tantamount to the 70% benchmark. The women-centric interventions are also evident under Special Projects. Under the Special Projects, a total of 76084 female received training of which 55203 got certified and 25338, placed. In other words, 72.6% of women candidates were certified of trained/oriented. 45.9% of women got placed of the certified, and 33.3% of women got placed out of the total trained. Though the percentage of women has been descending as we move from training to placement, their final score in terms of number is more impressive and outstanding. Thus, the special project component of the PMKVY-2.0 has profusely influenced the beneficiary women.

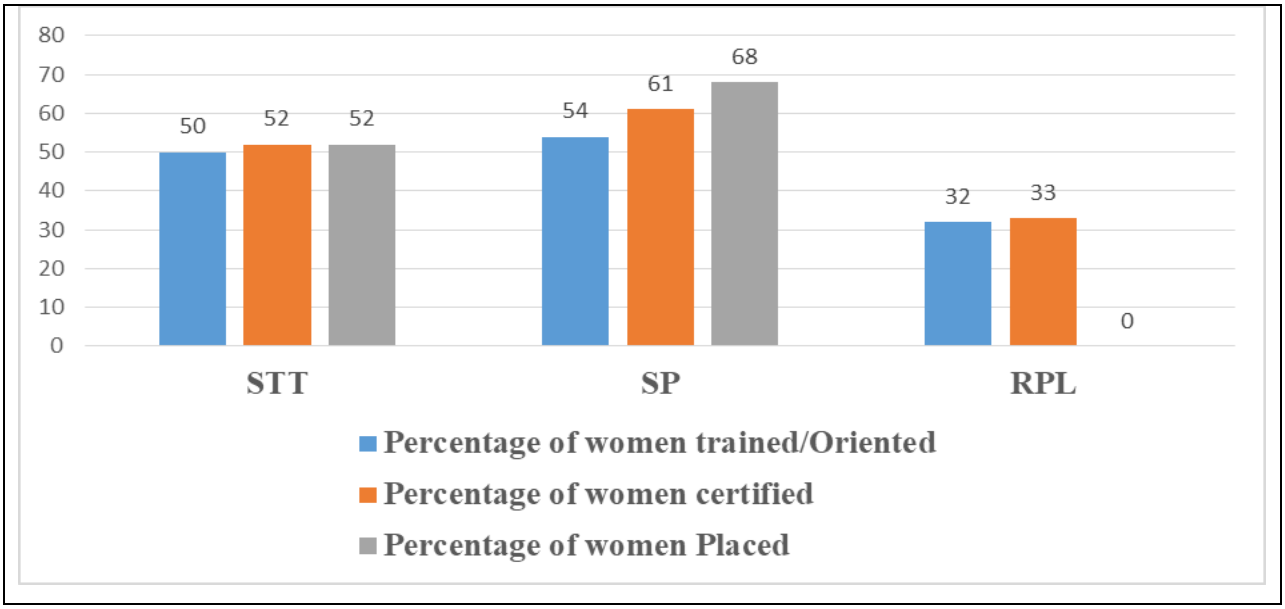

Figure 3.4: Bar-diagram showing percentage of women trained/oriented, certified and placed

The diagram above indicates that the percentage of women candidates trained/oriented, the percentage of women who got certified, and the percentage of women who got placed under three pads of the PMKVY-2.0. It is evident that the maximum percentage of women have received placement through Special Projects, followed by STTs. The information on the component is not mandated under RPL.

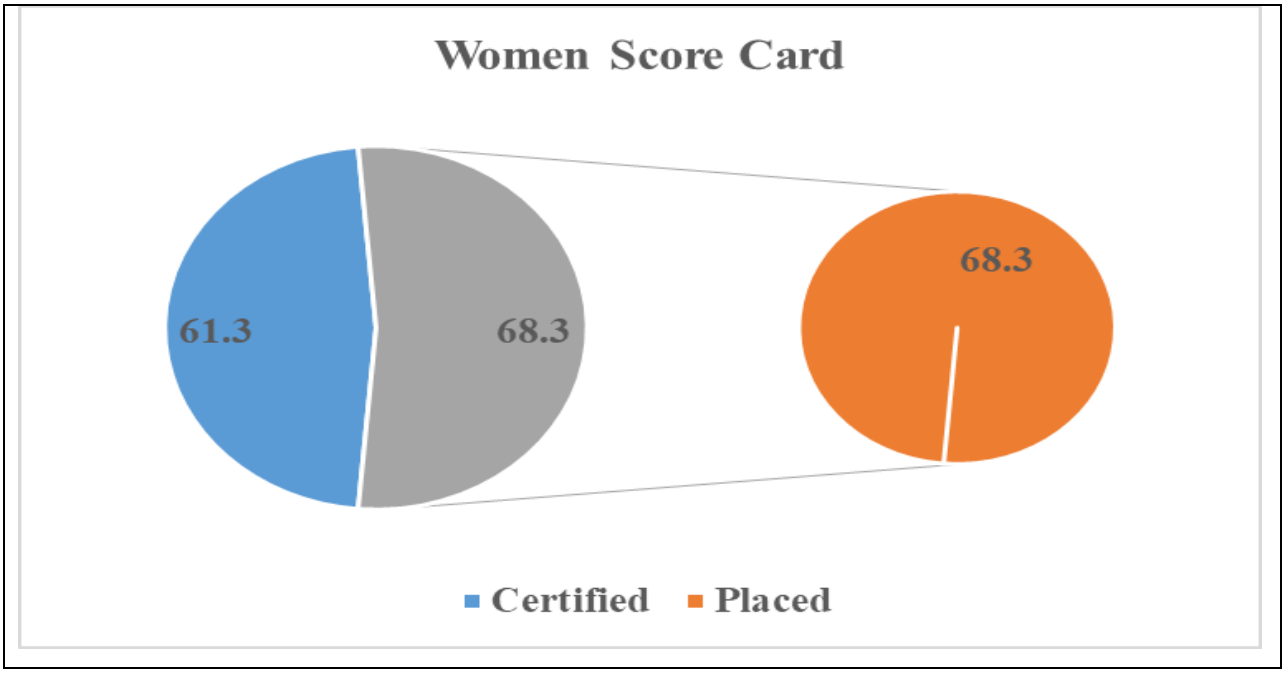

Figure 3.5: Pie chart showing women placement through special projects

The diagram above shows that 61.3% of women got certified, of which 68.3% got placed. The placement of 68.3% of women between the male and female genders shows significant value. The same is evident in the diagram above. The special projects also serve the vulnerable populations of our country. It has been found that 1000 ex-Gorkhaland personnel for social inclusion have been considered. 6034 jail inmates have been trained so far in 51 Jails. 400 candidates from Bru tribes have been trained. The captive employment has been largely covered by Arvind Mills, Muthoot Fincorp Ltd, GMR Varalakshmi Foundation, Indian Texprenuers federation, Maruti Suzuki India Ltd. An astoundingly high number of trained people (14643) are placed out of 1636 certified. Job roles like Safai Karamchari, waste Picker, Loan Processing officer, Futuristic Solar Charkha have been identified. In collaboration with Government Departments, initiatives have been taken with YUVA with Delhi Police to train 13700 poor and needy youth. The training of women in shelter homes and Juvenile Homes' inmates have been done with the Department of Women and Child Development. The Skilling initiatives under the scheme has also covered Bru tribes in 12 districts of 6 States. Out of 1164 trained, 120 have been placed with KPR mills in Tamil Nadu.

In Maharashtra, Khatkari, Chakma, Kurku, and Gonds were trained for the job roles of the assistant electrician, craft baker, domestic data entry operator, medicinal plants grower, and self-employed tailor.178 beneficiaries have been trained. For the training and employment of PwD candidates, an exclusive Sector Skill Council for people with disabilities have been set up. In the ambit of the council, over 150 exclusive PwD centres have been established across India under Short term Training. Special Projects for PwD candidates like the project on intellectual disability in coorgs have been considered. A total of over 37 thousand plus PwD candidates have been trained and over 10 thousand, placed. The initiative for the PwD targets intellectually disabled, visually impaired, orthopedically challenged, hearing impaired, and other disabilities. The job roles like Sakhta Saaz, handloom weaver carpet, F & B services, and Retails sales associates have been prioritized. However, under the scheme, job-role-wise informational posters for mass awareness have also been in place.

Table 3.20: Inclusiveness of the scheme with regard to the weaker section

States	Female	SC	ST	Divyangjan	BPL
Assam	44.8	12.07	19.0	1.7	55.2
Manipur	52.9	3.92	2.0	0.0	80.4
Bihar	41	6.41	3.8	0.0	69.2

Odisha	51	18.37	10.2	0.0	91.8
Madhya Pradesh	45.1	9.86	1.4	2.8	8.5
Uttar Pradesh	43.1	17.24	3.4	0.0	53.4
Gujarat	73.5	10.20	2.0	0.0	18.4
Maharashtra	53.8	15.38	1.9	0.0	30.8
Haryana	33.8	23.53	4.4	2.9	10.3
Rajasthan	32.4	5.88	11.8	0.0	8.8
Tamil Nadu	62	18.00	0.0	0.0	72.0
Karnataka	58	6.00	0.0	2.0	56.0
Total	**48.7**	**12.43**	**4.8**	**0.9**	**46.1**

The table above presents the inclusiveness of the scheme in terms of the coverage beneficiaries from different socio-economic categories. The female participation across the sampled states has been calculated as 48.7% which is remarkably shows its gender inclusivity. In the sampled respondents, SCs have been accounted for 12.43%. The representation of ST has been depicted as 4.8%. The representation of Divyangajan has been computed as 0.9% and BPL category beneficiaries are figured as 46.1%. The 73.5% of female participation in Gujarat, 23.53% of SC participation in Haryana, 19% of ST participation in Assam, 2.9% Divyangjan share in Haryana, and 91.8% of BPL share in Odisha are the information related to higher ranges. However, 32.4% female share in Rajasthan, 3.92% SC share in Manipur, no share of ST in Tamil Nadu and Karnataka, no share of Divyangjan in Manipur, Bihar, Odisha, Uttar Pradesh, Gujarat and Maharashtra, Rajasthan and Tamil Nadu, 8.5% BPL share in Madhya Pradesh are towards the lower ranges.

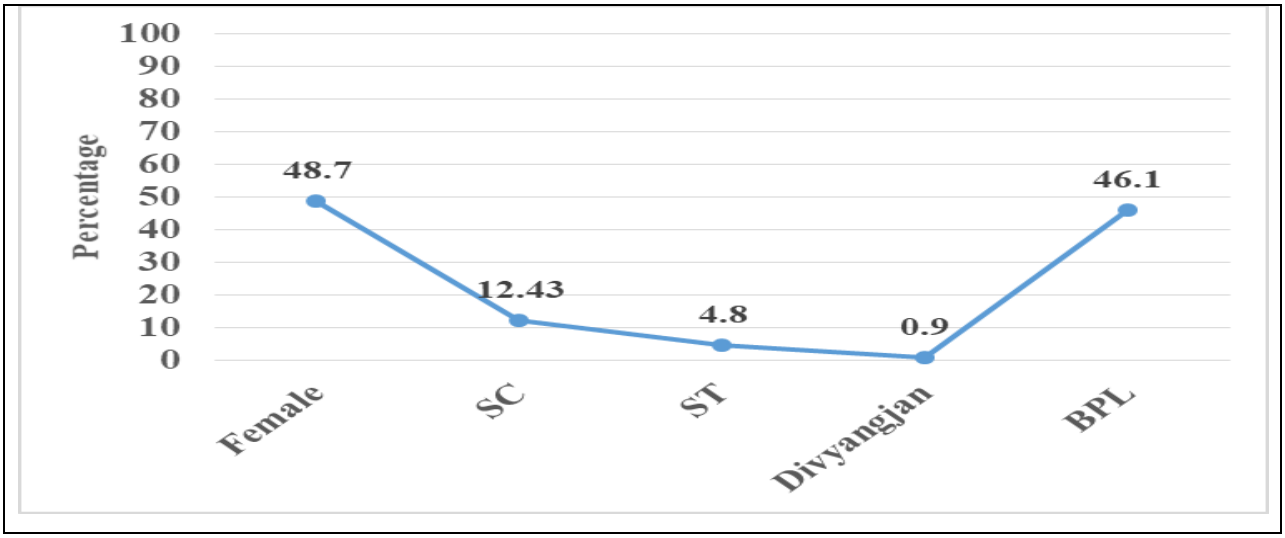

Figure 3.6: Line graph showing inclusiveness of the PMKVY scheme across the sampled states

The diagram above indicates the participation of different socio-economic categories across the states. It has been found that out of the categories plotted, the maximum share of women (48.7%), followed by BPL (46.1%), SC (12.43%), ST (4.8%) and Divyangjan (0.9%) have been found in the sample studied. It shows an overall trend of the inclusiveness of the PMKVY 2.0 scheme.

10 Convergence with other central/ state government schemes

PMKVY 2.0 is in line with Common Cost Norms approved by the Cabinet for Central sector schemes. The total cost of the scheme is worked out based on training targets. There is no redundant component to the scheme to be removed/reduced. Barring schemes like DDU-GKY, NULM, UDAAN, schemes catering to specific target groups requiring special cultural or functional identification like persons with disability and minorities, the PMKVY2.0 is in convergence with other schemes. The schemes like Integrated Skill Development Scheme (ISDS) of the Ministry of Textiles, Entrepreneurship Development Programme (EDP) of the Ministry of MSME, Hunar Se Rozgar Tak Initiative of Ministry of Tourism, Scheme for financial assistance to States for skill Development in Electronics System Design and Manufacturing Sector of Ministry of IT and Communication, Support of Training and employment programme for women of the Ministry of Women and Child Development, capacity Building & technical Assistance for Skill development of Ministry of development of North Eastern Region, and Skill up gradation Training programme, Skill Development training programme under NCVT scheme, and Skill development training for National Service Scheme Volunteers, etc. would also be integrated under PMKVY. The scheme is in convergence with various schemes and programmes of the Central and State Government.

The Ministries to meet specialized requirements linked to new investments or initiatives in their sector viz. Make in India, Swachh Bharat, Digital India, and Smart Cities. These demands are addressed either through regular PMKVY being implemented by NSDC or through Special Projects by training partners. A project-based approach is promoted for skilling initiatives in traditional skills that need to be nurtured and promoted. The financial and physical allocation to the tune of 20% of the scheme budget is made for the special projects including projects for unorganized and traditional jobs. Further, the concerned administrative Ministries can also contribute funds for these special projects aimed at particular sectors, geographies, and target

segments through National Skill Development Fund (NSDF), to be implemented under the overall umbrella of PMKVY.

The RPL under PMKVY2.0 is supporting various government schemes by taking up projects with government organizations involving up-skilling and certifications. Initiatives have been undertaken to provide bridge course training to rural masons for the construction of twin pit toilets in rural areas. This project is being implemented along with the Ministry of Drinking Water and Sanitation to support the 'Swachh Bharat Mission'. Projects have also been undertaken to upskill the construction workers at the worksite itself through bridge training and has focused mainly on assistant masons, bar-benders etc. Armed forces personnel who are to retire in the upcoming 2-3 months are also being provided with bridge training to align the skills learned during the service with industry standards under MoUs signed with the Ministry of Defense. Another initiative has been undertaken in PMKVY along with the Ministry of Environment, Forest, and Climate Change (MoEF & CC) for up-skilling of AC field technicians. Additionally. Service Staff, Cooks, and Supervisors associated with IRCTC are also being provided bridge course training in one of the RPL projects so that their services can be improved. Projects targeting women beneficiaries have also been approved in the food processing sector for pickle-making technician, baking operative, etc. job roles.

11 Accessibility of training partners to the trainings and quality thereof

Accessibility of training partners to the trainings and quality thereof have been assessed considering the resources available at the training centres, and the information shared on the component by the beneficiary trainees. Aadhaar Enabled Biometric Attendance System (AEBAS) Aadhaar Enabled Biometric Attendance System (AEBAS)has been mandated to trainees, trainers, and assessors. This has led to reduction in the duplicate cases of candidates during enrollment and enabled real-time monitoring and tracking of candidates enrolled under the scheme. Further, transparency and accountability have been maintained by linking the first tranche of payment to batch attendance records. The IT-enablement has to ensure the training quality. For example, Knack is a mobile-based counselling tool that uses AI to gauge candidates' aptitude. However, under PMKVY-2.0 the empanelment of placement partners to link the aptitude, aspiration, and knowledge of the skilled workforce demands in the market. Onboarding of placement verification agencies for verification is also conducted using AI and other technological tools. Improvement has also been ensured through implementation of

informational posters at every training centre to tackle information asymmetry so that candidates may make informed career decisions. Online learning is also enabled through e-Skill India portal, e-Book Reader application, and KITS Portal for handbook and induction kit delivery and tracking. Re-designing of certain modules to keep pace with industry and market requirements and enhance the employability potential of the PMKVY candidates. The component has been assessed based on the feedback shared by the beneficiary trainees. The summarize form of the findings which are as under:

Table 3.21: Status of beneficiaries before and after the coverage under the Scheme

States	Unemployed		Daily Wager		Seasonal Employment		Stability in Job		Self Employed (including family trade)		Unskilled	
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
Assam	58	0	1	0	0	0	0	2	1	5	25	0
Manipur	51	1	8	0	6	2	0	17	0	11	21	0
Bihar	78	13	1	0	0	1	0	11		16	37	1
Odisha	49	0	1	0	1	0	0	22	0	6	23	0
Haryana	68	5	16	1	10	0	0	21	2	32	6	2
Rajasthan	34	12	8	6	1	4	3	10	3	12	17	0
Madhya Pradesh	71	0	0	0	0	0	0	20	26	25	43	0
Uttar Pradesh	58	9	25	3	24	17	1	27	18	9	39	0
Tamilnadu	50	0	4	1	3	5	1	7	1	2	31	0
Karnataka	50	1	0	7	0	3	2	3	1	19	14	1
Gujarat	49	2	3	11	4	1	2	24	9	2	28	2
Maharashtra	52	3	12	0	5	1	2	28	0	12	37	3
Total	**668**	**46**	**79**	**29**	**54**	**34**	**11**	**192**	**61**	**151**	**321**	**9**

The table indicates the impact of the scheme after the coverage of the beneficiary trainees. It informs that after the coverage under the scheme the unemployment status has drastically been reduced from 668 to 46. The number of daily wagers has descended from 79 to 54. The seasonal employment has gone down from 54 to 34. The number of candidates with a stable job (11) before the scheme has changed to 192 after the coverage under the scheme. The self-employed candidates were 61 before the coverage under the scheme and the same has increased to 151 after the coverage under the scheme. Very significantly a total of 321 candidates were unskilled before the coverage under the scheme and their number has gone down to 9. It shows the improvement in the skill development inter alia components picked up.

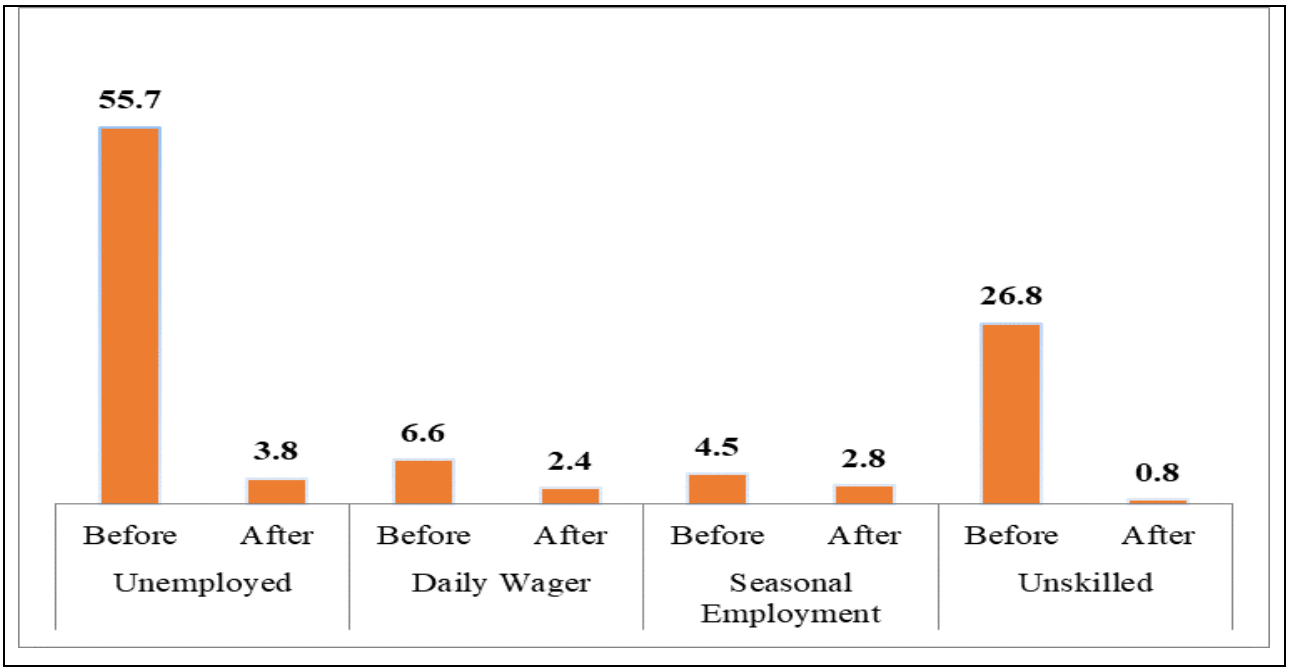

Figure 3.7 Bar diagram showing changes in employment before and after the coverage under scheme

It shows improvement based on the feedback received from the sampled states.

Table 3.22: Details regarding the efficacy of the scheme

State	Overall Satisfaction	Placement
Assam	4.3	54
Manipur	3.9	50
Bihar	4.5	72
Odisha	4.6	48
Haryana	4.6	67
Rajasthan	4.4	34
Madhya Pradesh	4.7	66
Uttar Pradesh	4.6	55
Tamilnadu	4.4	50
Karnataka	4.3	50
Gujarat	4.8	39
Maharashtra	4.8	46
Total	**4.5**	**631**

The table above presents the overall satisfaction received by the beneficiary trainees using the Likert Scale where one stands for being extremely unsatisfied and 5 stands for extremely satisfied. The good score happens to be 2.5 as an average received on the rating scale. It has been confirmed that the overall satisfaction across the states stands for 4.5 which is close to the extremely satisfied.

The maximum satisfaction score has been attained by the state of Madhya Pradesh (4.7), followed by Odisha (4.6), Haryana (4.6), and Uttar Pradesh.

12 Identification of reasons for Beneficiaries' dropping out

Identification of reasons for beneficiaries dropping out has resulted in one of the critical concerns of the scheme implementation. The information on the component was shared by the training centres. In Assam, three training centres for 0-5%, 1 training centre for 6-10%, and 1 training centre in 11-15% have informed beneficiaries dropping the courses. Similar identification details are placed against other states in the study. However, the beneficiaries dropping out of the course has been limited to 20% of the beneficiaries enrolled. The maximum number of beneficiaries in the range of 0-5% have dropped the course across the sampled training centres of 12 states.

Table 3.23: Details shared by TPs (N=54) on enrollment & dropout of beneficiary trainees

State	Sampled Training Centres	Number of Batches	Number of enrolment	Number of dropouts	Number of trainees	Dropout percentage
Madhya Pradesh	4	26	720	74	646	10.3
Haryana	3	32	930	84	846	9.0
Odisha	5	32	840	49	791	5.8
Assam	6	52	1498	82	1416	5.5
Gujarat	6	47	1332	73	1259	5.5
Karnataka	3	47	1368	73	1295	5.3
Rajasthan	4	13	330	15	315	4.5
Maharashtra	6	52	1470	63	1407	4.3
Tamil Nadu	5	6	160	7	153	4.4
Bihar	3	37	1068	43	1025	4.0
Manipur	6	47	1340	54	1286	4.0
Uttar Pradesh	3	22	581	8	573	1.4
Total/Average	**54**	**413**	**11637**	**625**	**11012**	**5.3**

The table above informs the number of sampled training centres, number of batches, number of enrolment, number of drop out, and dropout percentage. The maximum dropout has been reported from Madhya Pradesh, followed by Haryana (9%), Odisha (5.8%), Assam & Gujarat (5.5% each), Karnataka (5.3%), Rajasthan (4.5%), Tamil Nadu (4.4%), Maharashtra (4.3%), Bihar (4%), and Uttar Pradesh (1.4%). The reasons identified for dropping the courses emanated from medical grounds, family issues, social problem, distance from residence to training centres, upgradation of social status as married and attached livelihood demands, accessibility to a job, and no improvement noticed on skills either from the course contents or from the training programme. A

number of female candidates have reportedly left the course for reasons owing to pregnancy, marriage, short duration of the courses. In Bihar, a candidate reported to have left the course due to fever. 73 candidates in Gujarat left the course due to family issues, personal issues and ineffective skill upgradation. 84 candidates left the course due to illness and personal reasons in Haryana. Due to inaccessibility of bus passes and distance, candidates opted out the training in Karnataka. In Madhya Pradesh, due to outdated course material the trainees left the course. In Maharashtra, due to marriage and subsequent pregnancy, the candidate left the course. In Manipur, due to traveling problems and inadequate transport facilities, trainees left the training centres. In Odisha, the trainees found an ineffective window for grievance redressal with the Government and left the training. In Rajasthan, the trainees found private jobs, rent, and retail work, and left the training. No such problem has been identified in the State of Tamil Nadu and Uttar Pradesh. The maximum number registered for leaving the training programmes have been found due to the transport issue, followed by ill health, marriage, getting a private job, and social circumstances and familial pressures.

13 Identification of problems faced by beneficiary trainees from enrolment to certification

The mobilization of beneficiaries for the enrollment starts with the different publicity measures. The Kaushal and Rozgar Melas, social sites, community leaders are the major channels of beneficiary mobilization. Based on the aptitude of the beneficiary and availability of sector skill with the Training Centres, unemployed youth or school/college dropouts having an Aadhaar card and bank account, verifiable alternate ID such as PAN or Voter ID, and other criteria, as defined by Sector Skill Council/s for the respective job roles, potential trainees are inducted. However, in the case of corporate or factory premises, candidates cannot be their employees or daily wagers. The mobilization process under the PMKVY2.0 starts with the preparation of a specific resource mobilization strategy that follows the identification of the broad target group, developing the key messaging and selecting the right information disseminating vehicles, and preparing for enrolment. After the enrolment, the beneficiary trainee is put to training as per the stipulated scheme guidelines. After the completion of the training/orientation, the candidates are assessed by the approved assessors. After the assessment, the candidate is certified and placed (placement is not mandated under RPL) through the online portal where industry partners are also registered. The benchmark for the placement is laid down as 70% of the total trainees certified. During the focus group discussions, it was reported that some of the beneficiaries did not continue due to reasons owing to personal, social, health, and commutation facilities. Second, the proper information about

the PMKVY 2.0 enrollment was not accessible to the uncovered beneficiaries. Third, the classes were found to be conducted but not upto to the expectation level creating a roadblock in skill upgradation. The unavailability of quality trainer was expressed as one of the critical concerns because many of the tools and equipment required for the training was not properly handled by the trainers. Even if the tools and equipment were handled, the same was not accessible for optimum hours for the beneficiary trainees. Some of the assessors were found to be biased while conducting the assessments. The assessors-training partner nexus was found in several cases. Fourth, the Programme Implementing Agencies (PIA) were found playing marginal role in conducting surprise visits to ensure the quality of training. Finally, the certification was not considered as accrued credentials in the open job market. Based on the responses received from the trainees (N=668), a total of 582 trainees registered their problems which are as under:

Table 3.24: Problems expressed by beneficiary trainees across the sampled states

Sr. No.	Problems	Frequency	Percentage
1	Short duration of the courses	368	63.2
2	Lack of quality trainers and outdated course contents	53	9.1
3	Training material not available in vernacular	51	8.8
4	Accommodation & Transport	37	6.4
5	Insufficient number of practical classes	24	4.1
6	Certificate not issued in time	12	2.1
7	Employment not assured	12	2.1
8	No online classes	10	1.7
9	Lack of computers & connectivity	8	1.4
10	Problem in timely assessment	4	0.7
11	Training materials not received timely	3	0.5
Total		**582**	**100**

Problems faced by beneficiary trainees were collated through open-ended questions. A total of 38 problems were expressed by the beneficiary trainees across the sampled states. The problems received were classified into 12 categories which are (1) Short duration of the courses, (2) Lack of quality trainers and outdated course contents, (3) Training materials not available in vernacular, (4) Accommodation and Transport, (5) Insufficient number of practical classes, (6) Certificate not issued in time (7) Employment not assured, (8) No online classes (9) Lack of computers and connectivity, (10) Problem in timely assessment, and (11) Training materials not supplied in time.

Based on views collated, 87.1% of beneficiaries reported some problem or the other whereas, 12.9% expressed no problems. Out of the total views expressed on the problems, the maximum number of responses were received on the short duration of the courses (63.2%), followed by Lack of quality trainers and outdated course contents (9.1%), Training material not available in vernacular (8.8%), Accommodation & Transport (6.4%), Insufficient number of practical classes (4.1%), Certificate not issued in time (2.1%), Employment not assured (2.1%), No online classes (1.7%), Lack of computer and connectivity (1.4%), Problem in timely assessment (0.7%), and training material not received timely (0.5%). It was found during the focus group discussions that placement assistance provided under the programme was not impactful and the same needed additional strengthening. Also, the quality trainers or instructors needed to be integrated with the pool of resources, based on the feedback of both trainees and training partners.

The study has also covered the problems being faced by beneficiary trainees employing trainers' optics. The responses received by trainers were classified into eight categories, namely accommodation & low wage rate for employment, non-seriousness about training, entry behaviour, inability to face interview, lack of prior work experience, language barrier, industry partners out of the states, and lack of marketable skills in the courses. The responses have been summarised in the table given below:

Table 3.25: Problems expressed by trainers across the sampled states

Sr. No.	Problems	Frequency	Percentage
1	Accommodation & low wage rate for employment	76	63.9
2	Non-seriousness about training	12	10.1
3	Entry behaviour	10	8.4
4	Inability to face interview	5	4.2
5	Lack of prior work experience	5	4.2
6	Language barrier	5	4.2
7	Industry partners out of the states	3	2.5
8	Lack of marketable skills in the courses	3	2.5
Total		**119**	**100.0**

The question was posed to trainers (N=119) with regard to problems being faced by trainees. The study has revealed that the maximum frequency has been found against the problem of accommodation & low wage rate for employment (63.9%), followed by non-seriousness about training (10.1%), entry behaviour (8.4%), inability to face interview, lack of prior work experience

&language barrier (4.2% each), industry partners out of the states & lack of marketable skills in the courses (2.5% each). It was found during the focus group discussions that industry partners are reluctant to come to training centres at least for two reasons. First, shortage of time, and second, the training centres not necessarily located in their proximity. The trainees coming for the training are insufficiently conversant with the language used in training delivery. Some of the trainees were found to be non-serious about the trainings, as they were not sure whether they get a job thereafter. Their absence from the household was also costing, as they had to bear an opportunity cost. The beneficiary trainees were not found equipped with communication skills to perform better at the interviews for placements.

The problems faced by training partners have also been documented in the study. The problems identified by training partners have been classified into 12 categories.

Table 3.26: Problems expressed by training partners across the sampled states

Sr. No.	**Problems**	**Frequency**	**Percentage**
1	Unavailability of contents in vernacular	12	22.2
2	Difficulty in placement support	9	16.7
3	Delay in training fee disbursal	8	14.8
4	Target Allocation	6	11.1
5	Unrevised course contents	5	9.3
6	Communication gap between TP and PIA	4	7.4
7	Difficulty in district based job-roles identification	4	7.4
8	Interference of State Govt. in CSSM Target	2	3.7
9	Commutation of trainees	1	1.9
10	SSC not arranging timely assessment and certification	1	1.9
11	Unavailability of ToT in online mode	1	1.9
12	Unrealistic Placement Proof within 3 months	1	1.9
Total		**54**	**100.0**

The table above has depicted 12 problems informed by training partners during the implementation of the PMKVY trainings and certification. The major problem informed by training partners (N=54) in the sampled states is the unavailability of contents in vernacular (22.2%), followed by difficulty in placement support (16.7%), delay in training fee disbursal (14.8%), target allocation (11.1%), unrevised course contents (9.3%), communication gap between TP and PIA (7.4%), difficulty in district-based job-roles identification (7.4%), interference of State Governments in CSSM target (3.7%), and 1.9% each for commutation of trainees, SSC not arranging timely assessment and certification, unavailability of ToT in online mode & unrealistic placement proof within 3 months. It was found during the in-depth interview and focus group discussions that the training materials

were not available in vernacular. The placement support needs to be provided by state governments and district administrations.

Overall, out of the problems expressed by stakeholders, the central problem that stays in the expressions of all the stakeholders is unrevised course contents. The course contents should dovetail the market demand.

The assessments are conducted by the empaneled Assessment Agencies (AAs), identified by respective SSC. For the job roles that are not defined by SSCs, PIA identified the competent non-empaneled AA wherever empaneled agencies are not identified by SSCs. The respective SSC issues the certificates to the successful candidates. The PIA identifies the competent Certification Agency wherever QPs/job roles are not identified by SSCs. Considering 30 days required after assessment till upload online, the delay in receiving the certificate has been calculated. Based on the feedback received from the beneficiary trainees, an average delay of 21 days has been found. The delay has been further classified into four categories, namely certificates delayed within a week, certificates delayed within two weeks, certificates delayed within three weeks, and certificates delayed over three weeks. It has been found that job roles, like assistant electricity Meter reading, billing & Cash collector, Electrician, Field Technician-Computing and peripherals, automotive service technician, dealership Telecaller technicians, and field technician have been received over delayed by the beneficiary trainees. The table given below details the delay in receiving the certificate by job-role.

Table 3.27: Delay in receiving certificates by job role

Certificates delayed within a week	**Certificates delayed within two weeks**
Warehouse Packer	Accounts Executive
Documentation Assistant	Airline Reservation Agent
Junior Software Developer	Assistant Beauty Therapist
CRM Domestic Voice	Counter Sales Executive
Customer Care Executive	Dairy Farmer
Retail Sales Associate	Domestic IT Helpdesk Attendant
In-line Checker	Fitter
Fashion Designer	General Duty Assistant
Mobile Phone Hardware Repair Technician	Green House Operator
Certificates delayed within two weeks	Handloom Weaver (Carpets)

Ring Frame Tenter	LED Light Repair Technician
CRM Domestic Non-Voice	Machine Operator Assistant Injection Moulding
Automotive Service Technician	Machine Operator Assistant Plastics Processing
Domestic Data Entry Operator	Machine Operator CNC Milling
Courier Delivery Executive	Meet and Greet Officer
Distribution Lineman	Micro-Irrigation Technician
Hair Stylist	Organic Grower
Makeup Artist	Tractor Operator
Self Employed Tailor	Warehouse Picker
Certificates delayed within three weeks	**Certificates delayed over three weeks**
Field Technician Networking And Storage	Assistant Electricity Meter Reader, Billing & Cash Collector
Food & Beverage Service - Steward	Electrician
Consumer Energy Meter Technician	Field Technician – Computing and Peripherals
Certificates delayed over three weeks	Automotive Service Technician
Field Technician Other Home Appliances	Dealership Telecaller Sales Executive
Sewing Machine Operator	Filed Technician
Chauffer cum Taxi Driver	

The table above represents the delay in receiving the certificates in particular job roles by beneficiary trainees.

14 Placement of beneficiaries in the same sector where the training received

The effectiveness of the scheme is considered to be reaching out to the optimum level provided the employment is received. It becomes more pertinent when employment is received in the same sector or job roles for which the beneficiary has undergone the skill development. Under PMKVY 2.0, 70% placement is prescribed. The findings on the component is summarized in the table given below:

Table 3.28: Placement of beneficiary trainees desired sector vis-a-vis other sectors

States	**Yes**	**No**	**Total**

Assam	9 (15.8)	48 (84.2)	57 (100)
Bihar	49 (62.8)	29 (37.2)	78 (100)
Gujarat	45 (91.8)	4 (8.2)	49 (100)
Haryana	56 (82.4)	12 (17.6)	68 (100)
Karnataka	35 (70)	15 (30)	50 (100)
Madhya Pradesh	64 (90.1)	7 (9.9)	71 (100)
Maharashtra	50 (96.2)	2 (3.8)	52 (100)
Manipur	29 (56.9)	22 (43.1)	51 (100)
Odisha	40 (81.6)	9 (18.4)	49 (100)
Rajasthan	30 (93.8)	2 (6.3)	32 (100)
Tamil Nadu	16 (32.7)	33 (67.3)	49 (100)
Uttar Pradesh	45 (77.6)	13 (22.4)	58 (100)
Total	**468 (70.5)**	**196 (29.5)**	**664 (100)**

The table presents that out of 664 responses shared on the component, 70.5% of beneficiaries have received a job in the same sector where they have received the training. However, 29.6% of the beneficiaries have not received a job in the same sector. The maximum percentage of beneficiaries receiving a job in the same sector has been recorded in the state of Maharashtra (96.2%), followed by Rajasthan (93.8%), Gujarat (91.8%), Madhya Pradesh (90.1%), Haryana (82.4%) and so on.

15 Effectiveness of monitoring the placement

Effective monitoring of the placement ensures not only candidates getting wage employment but also self-employment through which the socio-economic condition of skilled youths largely improves. However, PMKVY 2.0 has an online platform to capture the data and gauge the impact. A total of 49 training partners have shared their feedback on the component.

Table 3.29: Job placement/self-employment rate (%)

Job placement/self-employment rate (%)				
States	**0-50**	**51-75**	**76-100**	**Total**
Assam	2	1	2	5
Manipur	1	2	1	4
Bihar	1	1	1	3
Odisha	0	3	2	5
Haryana	0	3	0	3
Rajasthan	1	1	2	4
Madhya Pradesh	1	2	0	3
Uttar Pradesh	1	1	1	3
Tamil Nadu	0	2	2	4
Karnataka	0	2	1	3

Gujarat	1	4	1	6
Maharashtra	2	2	2	6
Total	10	24	15	49

The table above informs that 0-50% placement has been monitored across the states by 10 training partners. 51-75% of the placement Monitoring has been done by the 24 training partners. Only 15 training partners have monitored the placement of beneficiaries up to 76% to 100%. Out of the 10 training partners who shared information under the slab of 0-50%, the maximum score of 2 Training Partners have been noticed in each Assam and Maharashtra. Out of the 24 training partners who shared information under the slab of 51-75%, the maximum score has been noticed in Gujarat (4), followed by Rajasthan (3), and Odisha (3). Out of the 15 training partners who shared information under the slab of 76-100%, the maximum score of two Training Partners were recognized each in Assam, Odisha, Rajasthan, Tamil Nadu, and Maharashtra. One training partner each has informed in the state of Manipur, Bihar, Uttar Pradesh, Karnataka and Gujarat.

16 Best practices in skilling

Best practice in skilling posits out-of-the-box thinking with improved results which can be further replicated in the other areas. It has been that within the PMKVY ambit itself, focus on the PwD candidates found one the best practices. However, there are schemes like DDU-GKY, Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP), UDAAN, Standard Training Assessment and Reward Scheme (STAR), Polytechnic Schemes, Vocationalization of Education that are implemented to meet the challenges of skilling at scale with speed, standard and sustainability. The aforementioned schemes intend to improve employability and productivity in paving the way forward for inclusive growth in the country. These skill strategies are complemented by specific efforts to promote entrepreneurship in order to create ample opportunities for the skilled workforce. The skill ecosystem of our country has the target to train 402.87 million people by 2022. This includes 104.62 million crore new entrants to join the existing workforce in the country who need to be skilled to meet industry requirements. In addition 298.25 million of the existing workforce need to be reskilled, up skilled, and skilled. It is concluded that skilling is a multi-pronged approach that should be aligned with critical- gaps in skilling in terms of sectors, job roles, geography, etc. If the intended goals of the skilling is reached, our country would harness the demographic dividend.

4.2 Additional parameters

a) Coverage of Sampled Beneficiaries across States

Table 3.30: Coverage of states and districts in the study by NSSO zone

NSSO Classified Zones	State	Districts
North East	Assam	Darrang
		Dhubari
		Kamrup
		Nagaon
	Manipur	Bishnupur
		Imphal East
		Imphal West
East	Bihar	Muzafferpur
		Punia
		Samstipur
	Odisha	Cuttack
		Ganjam
		Mayurbhanj
North	Haryana	Gurgaon
		Hisar
		Panipat
	Rajasthan	Jaipur
		Jodhpur
		Nagaur
West	Gujarat	Ahmedabad
		Surat
		Vadodra
	Maharashtra	Dhule
		Nashik
		Pune
South	Karnataka	Benguluru Urban
		Dharwad
		Mysore
	Tamil Nadu	Chennai
		Erode
		Salem
		Vellore
Central	Madhya Pradesh	Indore
		Jabalpur
		Sagar
	Uttar Pradesh	Allahabad
		Bagpat
		Ghaziabad

Table 3.31: Gender distribution of sample-size

State	Male	Female	Total

Assam	32 (55.2)	26 (44.8)	58 (100)
Bihar	46 (59)	32 (41)	78 (100)
Gujarat	13 (26.5)	36 (73.5)	49 (100)
Haryana	45 (66.2)	23 (33.8)	68 (100)
Karnataka	21 (42)	29 (58)	50 (100)
Madhya Pradesh	39 (54.9)	32 (45.1)	71 (100)
Maharashtra	24 (47.1)	27 (52.9)	51 (100)
Manipur	22 (48.9)	23 (51.1)	45 (100)
Odisha	24 (49)	25 (51)	49 (100)
Rajasthan	22 (66.7)	11 (33.3)	33 (100)
Tamil Nadu	19 (38)	31 (62)	50 (100)
Uttar Pradesh	31 (55.4)	25 (44.6)	56 (100)
Total	**338 (51.4)**	**320 (48.6)**	**658 (100)**

The table above informs the gender distribution of the beneficiaries sampled. Overall, women representation has been recorded as 48.6% in the beneficiaries sampled. Above the percentage, the women representation has been recognized in the state of Gujarat (73.5%), followed by Tamil Nadu (62%), Karnataka (58%), Maharashtra (52.9%), Manipur (51.1%), and Odisha (51%).

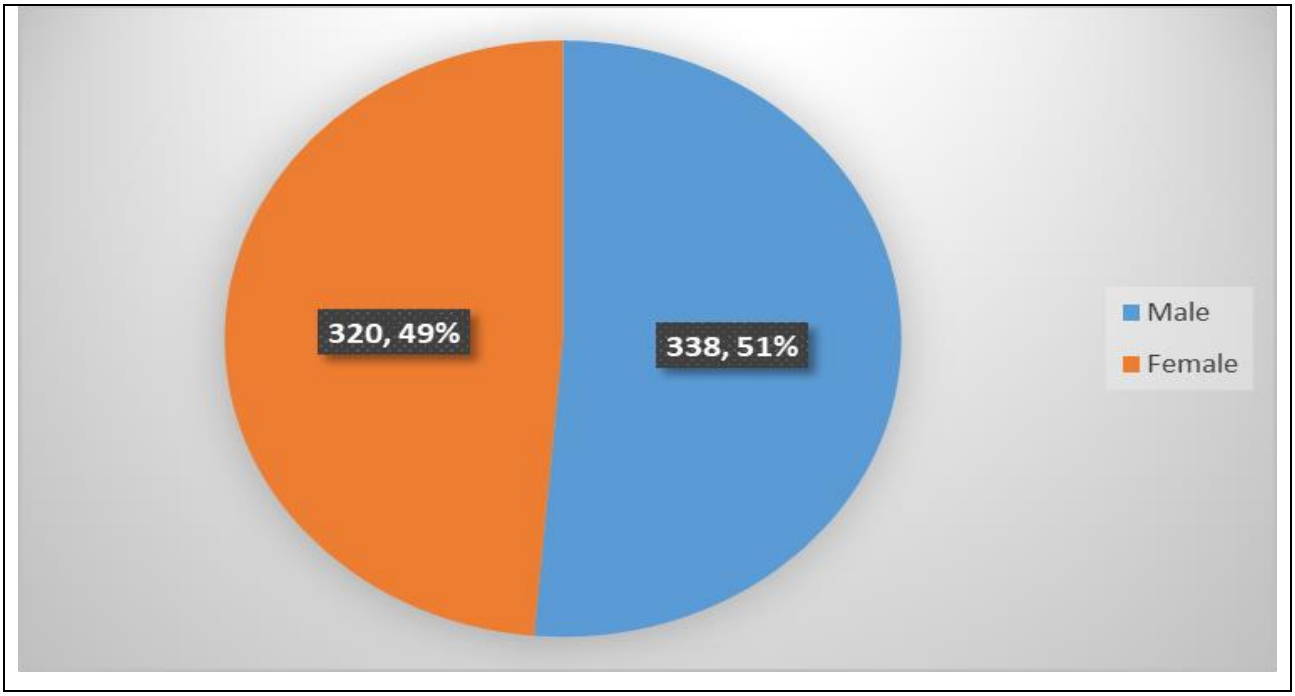

Figure 3.8: Pie chart showing distribution of sampled beneficiaries by gender

The diagram above shows the male-female distribution in the study. 49% of women and 51% of representations have been recognized in the sample covered under the study.

Table 3.32: Rural and urban location of beneficiaries sampled

State	Rural	Urban	Total

State	Rural	Urban	Total
Assam	39 (67.2)	19 (32.8)	58 (100)
Bihar	53 (67.9)	25 (32.1)	78 (100)
Gujarat	15 (30.6)	34 (69.4)	49 (100)
Haryana	33 (48.5)	35 (51.5)	68 (100)
Karnataka	13 (26)	37 (74)	50 (100)
Madhya Pradesh	48 (67.6)	23 (32.4)	71 (100)
Maharashtra	11 (21.6)	40 (78.4)	51 (100)
Manipur	28 (62.2)	17 (37.8)	45 (100)
Odisha	22 (44.9)	27 (55.1)	49 (100)
Rajasthan	32 (97)	1 (3)	33 (100)
Tamil Nadu	22 (44)	28 (56)	50 (100)
Uttar Pradesh	38 (67.9)	18 (32.1)	56 (100)
Total	**354 (53.8)**	**304 (46.2)**	**658 (100)**

The table above indicates the rural and urban locations of the beneficiaries sampled. 53.8% of beneficiary trainees belonged to rural areas whereas 46.2%, to urban areas. The state having more than the total percentage of beneficiaries in the rural area are: Rajasthan (97%), followed by 67.9% each in Bihar and Uttar Pradesh, Madhya Pradesh (67.6%), Assam (67.2%) and Manipur (62.2%). 46.2% of beneficiaries belonged to urban settings. The beneficiaries belonging to more than the total percentage from urban settings are in the state of Maharashtra (78.4%), followed by Karnataka (74%), Gujarat (69.4%), Tamil Nadu (56%), and Odisha (55.1%).

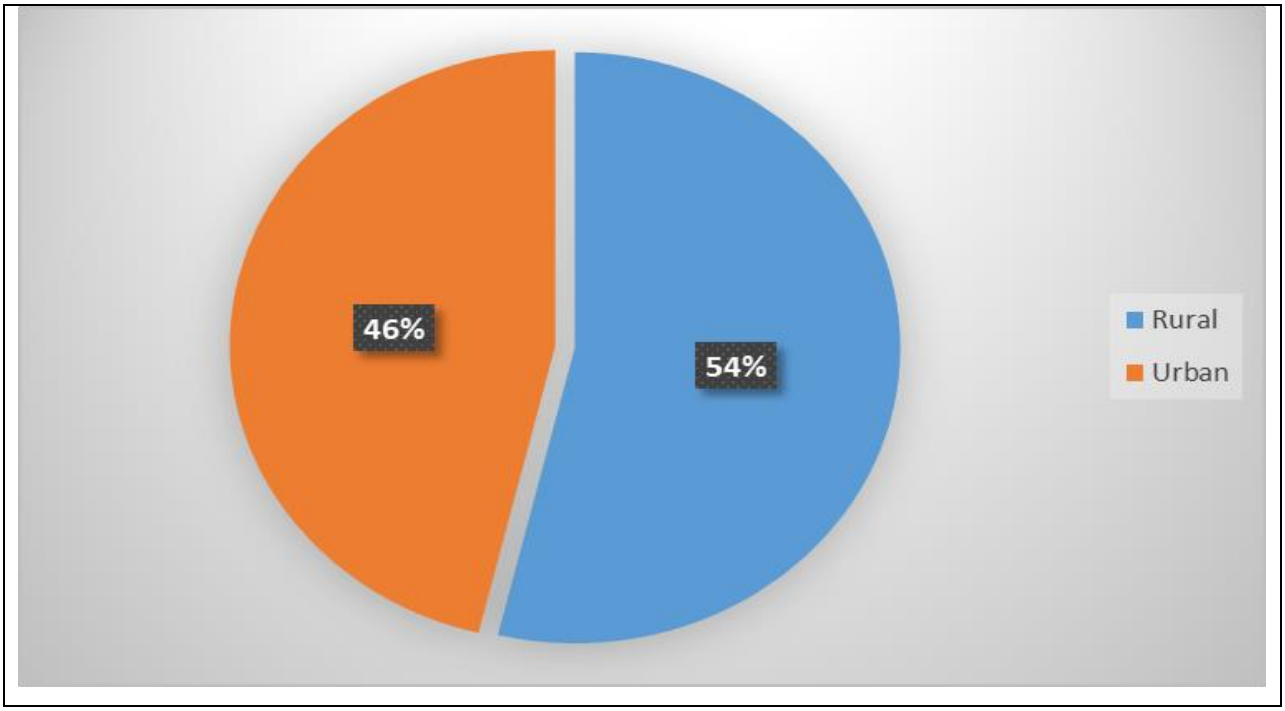

Figure 3.9: Pie chart showing distribution of beneficiaries in rural and urban areas

The diagram above shows that 54% of beneficiaries' sampled belonged to rural while 46% hailed from the urban area. Overall, the beneficiaries covered from rural areas figured little higher percentage, as compared to the beneficiaries' percentage in urban areas.

Table 3.33: Social category of respondents across the states

State	General	OBC	SC	ST	Minority	Total
Assam	31 (53.4)	9 (15.5)	7 (12.1)	11 (19)	0 (0)	58 (100)
Bihar	26 (33.3)	42 (53.8)	5 (6.4)	3 (3.8)	2 (2.6)	78 (100)
Gujarat	36 (73.5)	7 (14.3)	5 (10.2)	1 (2)	0 (0)	49 (100)
Haryana	38 (55.9)	11 (16.2)	20 (29)	0 (0)	0 (0)	68 (100)
Karnataka	30 (60)	17 (34)	3 (6)	0 (0)	0 (0)	50 (100)
Madhya Pradesh	21 (29.6)	42 (59.2)	7 (9.9)	1 (1.4)	0 (0)	71 (100)
Maharashtra	19 (37.3)	22 (43.1)	8 (15.7)	1 (2)	1 (2)	51 (100)
Manipur	26 (57.8)	17 (37.8)	1 (2.2)	1 (2.2)	0 (0)	45 (100)
Odisha	13 (26.5)	22 (44.9)	9 (18.4)	5 (10.2)	0 (0)	49 (100)
Rajasthan	3 (9.1)	24 (72.7)	2 (6.1)	4 (12.1)	0 (0)	33 (100)
Tamil Nadu	30 (60)	11 (22)	9 (18)	0 (0)	0 (0)	50 (100)
Uttar Pradesh	18 (32.1)	26 (46.4)	10 (17.9)	2 (3.6)	0 (0)	56 (100)
Grand Total	**291 (44.2)**	**250 (38)**	**86 (13.1)**	**29 (4.4)**	**3 (0.5)**	**658 (100)**

The social categories of the surveyed respondents are given in the table above. 44.2% in general, 38% in OBC, 12.5% in SC, 4.9% in ST and 0.5% in minorities have been found in the social

category classified. In the general category, the states having more number of total percentage in the column have been identified in the state of Gujarat (73.5%), followed by 60% each in Karnataka and Tamil Nadu, Manipur (57.8), Haryana (55.9%) and Assam (53.4%). Of the total percentage of OBC, above the percentage has been found in the state of Maharashtra (78.4%) followed by Rajasthan (72.7%), Odisha (44.9%), Bihar (53.8%), Uttar Pradesh (46.4%), and Maharashtra (43.1%). Of the total SC category percentage, the highest percentage has been reported from the state of Haryana (23.5%), followed by Odisha (18.4%), Tamil Nadu (18%), Uttar Pradesh (17.9%) and Maharashtra (15.7%). In a similar vein, the ST respondents were drawn the maximum from the state of Assam 919%), followed by Rajasthan (12.1%), and Bihar (3.8%). Likewise, the maximum minority representation was found in the state of Bihar (2.6%), followed by Maharashtra (1%).

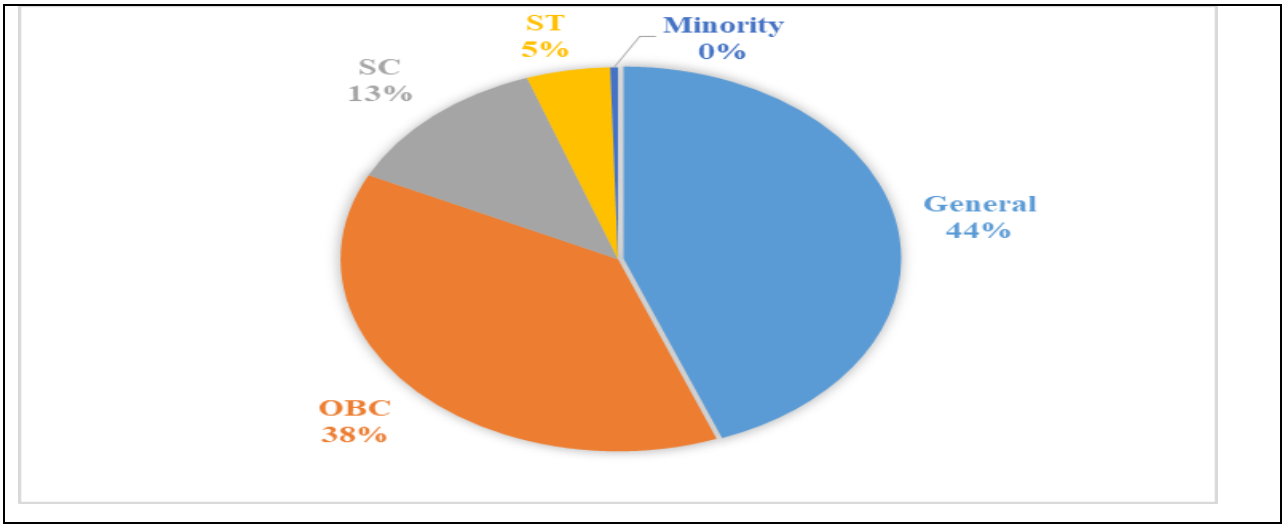

Figure 3.10: Pie chart showing distribution of sampled beneficiaries by social category

The diagram above presents the distribution of respondents across the sampled states. It has been found that the maximum share of beneficiaries are from the general category (44%), followed by OBC (38%), SC (13%), ST (5%), and an approximately negligible percentage of minority communities.

Table 3.34: Feedback of trainees on the ecosystem of training conducted under STT

States	Responsiveness	Practical	Theory	Encouragement	Digital tools	Regularity	Infra	Avg.
Assam	4.50	4.62	4.62	4.60	4.53	4.60	4.29	**4.54**
Manipur	4.10	4.39	4.33	4.20	4.22	4.47	4.25	**4.28**
Bihar	4.48	4.71	4.74	4.66	4.71	4.85	4.49	**4.66**

Odisha	4.57	4.71	4.71	4.69	4.53	4.92	4.61	**4.68**
Uttar Pradesh	4.60	4.69	4.66	4.62	4.21	4.74	4.66	**4.60**
Madhya Pradesh	4.84	4.90	4.66	4.86	4.90	4.84	4.76	**4.82**
Haryana	4.44	4.76	4.78	4.51	4.66	4.81	4.51	**4.64**
Rajasthan	4.26	4.50	4.24	4.24	4.29	4.47	4.44	**4.35**
Gujarat	4.73	4.79	4.83	4.85	4.67	4.90	4.81	**4.80**
Maharashtra	4.52	4.67	4.60	4.56	4.44	4.81	4.58	**4.60**
Karnataka	3.74	3.32	3.45	3.36	3.30	3.47	4.23	**3.55**
Tamil Nadu	4.40	4.40	4.46	4.52	4.44	4.50	4.42	**4.45**
Average	**4.43**	**4.54**	**4.51**	**4.47**	**4.41**	**4.61**	**4.51**	**4.50**

The table presents the feedback of the beneficiary trainees on the different components relating to the ecosystem of the training. The feedback has been taken using the Likert scale. In the scale, the responses of beneficiaries have taken on the scale of 1-5 where-in one being poor and 5, the best/outstanding. The responsiveness of the trainers, practical sessions of the course, theory sessions, encouragement provided by trainers to trainees, usage of digital tools, the regularity of trainers, and overall usefulness of infrastructure of training centres was responded by the beneficiary trainees that the study has covered. The maximum score on the above components has been attained by the regularity of trainer (4.61), followed by practical sessions (4.54), 4.51 each for theory sessions and infrastructure, encouragement (4.47), responsiveness (4.43), and digital tools (4.41). In the responsiveness, the expressed maximum score has been found from the beneficiaries of Madhya Pradesh (4.84), followed by Gujarat (4.73), Uttar Pradesh (4.60), Odisha (4.57), Maharashtra (4.52), Assam (4.50), Bihar (4.48), Haryana (4.44), Tamil Nadu (4.40), Rajasthan (4.26), Manipur (4.10), and Karnataka (3.74). For the practical sessions, the maximum score has been found in the state of Madhya Pradesh (4.90), followed by Gujarat (4.79), Haryana (4.76), Bihar (4.71), Odisha (4.71), Uttar Pradesh (4.69), Maharashtra (4.67), Assam (4.62), Rajasthan (4.50), Tamil Nadu (4.40), Manipur (4.39), and Karnataka (3.32). For theory sessions, the maximum qualitative responses were received from the state of Gujarat (4.83), followed by Haryana (4.78), Bihar (4.74), Odisha (4.71), Uttar Pradesh (4.66), Madhya Pradesh (4.66), Assam (4.62), Maharashtra (4.60), Tamil Nadu (4.46), Manipur (4.33), Rajasthan (4.24), and Karnataka (3.45). On the encouragement, the maximum score was received from Madhya Pradesh (4.86), Gujarat (4.85), Odisha (4.69), Bihar (4.66), Uttar Pradesh (4.62), Assam (4.60), Maharashtra (4.56), Tamil Nadu (4.52), Haryana (4.51), Rajasthan (4.24), Manipur (4.20), and Karnataka (3.36). The digital tools were found being used by the training centres. Based on rating scale values, the maximum score was received from Madhya Pradesh (4.90), followed by Bihar (4.71), Gujarat

(4.67), Haryana (4.66), Odisha (4.53), Assam (4.53), Maharashtra (4.44), Tamil Nadu (4.44), Rajasthan (4.29), Manipur (4.22), Uttar Pradesh (4.21), and Karnataka (3.30). The regularity of trainer was asked to the trainees. The maximum score on the component was received from Odisha (4.92), followed by Gujarat (4.90), Bihar (4.85), Madhya Pradesh (4.84), Haryana (4.81), Maharashtra (4.81), Uttar Pradesh (4.72), Assam (4.60), Tamil Nadu (4.50), Manipur (4.47), and Karnataka (3.47). For the overall infrastructure of the training centres, the maximum score has been received from Gujarat (4.81), followed by Madhya Pradesh (4.76), Uttar Pradesh (4.66), Odisha (4.61), Maharashtra (4.58), Haryana (4.51), Bihar (4.49), Rajasthan (4.44), Tamil Nadu (4.42), Assam (4.29), Manipur (4.25), and Karnataka (4.23). On the above parameters, the average maximum score was found in Madhya Pradesh (4.82), followed by Gujarat (4.80), Odisha (4.68), Bihar (4.66), Haryana (4.66), Uttar Pradesh (4.60), Maharashtra (4.60), Assam (4.54), Tamil Nadu (4.45), Rajasthan (4.35), Manipur (4.28), and Karnataka (3.55). The scores appear better than the average of the Likert scale i.e. 2.5. The same has also been processed through Cronbach's alpha reliability test to assess the consistency of responses.

Table 3.35: Particulars of Cronbach's alpha reliability test

Number of Items/questions/components	7
Sum of the items variances	4.36
Variance of total score	19.78
Cronbach's alpha	0.909

Components:

1. Trainer-receptivity to queries
2. Trainer-practical training techniques
3. Trainer-theory teaching
4. Trainer-encouraging trainee participation
5. Trainer-use of the digital tools
6. Trainer-regularity
7. Overall rating on the infrastructure of training centre

Cronbach's alpha is used to assess the reliability or internal consistency of a scale. Suppose that we measure a quantity which is the sum of k components:

$$X = Y_1+Y_2+----------+Y_K$$

Cronbach's alpha is defined as:

$$\alpha = \frac{K}{K-1}\left(1 - \frac{\sum Var(Yi)}{Var(X)}\right) \qquad ; 0<\alpha<1$$

Where,

K = Number of components,

Var(X): Variance of the observed total,

Var(Yi): Variance of ith component.

Rule of thumb for results of Cronbach's alpha: it ranges from 0 to 1. If alpha is zero then components are not correlated with each other, if alpha is one then all the items have high correlations and if alpha is negative then it indicates that something wrong in the data.

Table 3.36: Consistency range of Cronbach's alpha

Cronbach's alpha	Internal Consistency
$\alpha>0.9$	Excellent
$0.8<\alpha<0.9$	Good
$0.7<\alpha<0.8$	Acceptable
$0.6<\alpha<0.7$	Questionable
$0.5<\alpha<0.6$	Poor
$0.5>\alpha$	Unacceptable

Thus, the result derived from the Likert scale after processing through Cronbach's alpha reliability test of the above components has been found significantly consistent (0.909).

b) Implementation Mechanism

Table 3.37: Flow chart of PMKVY implementation

<table>
<tr><td rowspan="2"></td><td colspan="4">Ministry of Skill Development and Entrepreneurship</td><td rowspan="2"></td></tr>
<tr><td colspan="4">PMKVY (2016-20)- Total Outlay Rs. 12000 Cr</td></tr>
<tr><td rowspan="2">75% Targets</td><td colspan="3">National Skill Development Corporation (Total Disbursed Rs. 5301.84 crore</td><td>Fund Disbursed to State Governments Rs. 921.65 crore</td><td rowspan="2">25% Targets</td></tr>
<tr><td>RPL(49.1L)</td><td>Spl. Proj (1.75L)</td><td>STT (34.3L)</td><td>STT (5.94 L)</td></tr>
<tr><td rowspan="2">Stakeholders</td><td>UIDAI</td><td colspan="2">Sector Skill Councils</td><td>Banks</td><td rowspan="2">Stakeholders</td></tr>
<tr><td colspan="2">Training Provider/Centers and Trainers</td><td colspan="2">Assessment Agencies and Assessors</td></tr>
<tr><td colspan="6">Candidates
  </td></tr>
</table>

The PMKVY is implemented by the National Skill Development Corporation. Under the Short Term Training, the provision of 200 to 500-hour long skill-oriented training both core and soft, at PKKVY affiliated and accredited centres to college/School dropouts or unemployed are in place. The duration of the training varies as per job roles. Upon successful completion of training and assessment, candidates are provided placement assistance by training partners. Under PKVY 2.0, the entire training and assessment fees are borne by the Government. Pay-outs are provided to the training partners in alignment with the stipulated norms. Training imparted under the short-term training component of the scheme is per the NSQF level 5. The Recognition of existing skills and prior experience of the beneficiaries are provided through the orientation of 12 hours. Beneficiaries are also provided bridge course training for a maximum of 68 hours wherever required. Individual benefit by having their prior learning is acknowledged through a structured, NSQF based system and gain certification by saving on time, regardless of how or where the learning occurred. The special project is a component under PMKVY wherein fresh short-term trainings are provided to candidates in NSQC approved job roles. Special Projects brings in the flexibility required to cater to vulnerable populations residing in difficult-to-reach places. It also serves new requirements and innovative modes etc. The component of Special Project under the scheme is different from short term training component of PMKVY by virtue of it being a project and need-based and comparatively a little more flexible.

The PMKVY-CSCM is implemented by the National Skills Development Corporation (NSDC) whereas, the PMKVY-CSSM is implemented by State Skill Development Mission. The PMKVY has two major components, namely (1) Centrally Sponsored and centrally Managed Short Term Trainings (CSCM-STT), (2) Centrally Sponsored and State Managed Short Term Trainings (CSSM-STT). Within the CSCM, there are two sub-components viz. (1) Short Term Training, and (2) Recognition of Prior learning. Within the Short Term Training, there are two pads, namely (1) Regular Short Term Training, and (2) Special Projects. The scheme aims to train the trainees based on the National Skill Qualification Framework (NSQF) and industry-led standards. The scheme is implemented by the National Skill Development Corporation under the guidance of the Ministry of Skill Development and Entrepreneurship, Government of India.

The whole PMKVY workflow ranging from enrolment of candidates to disbursement of tranche-based payments to training providers and certificates to candidates is managed by the Skill Development Management System. The Platform (IT-enabled SDMS) establishes and enforces

cross-sectoral, nationally, and internationally acceptable standards of Skill training in the country by creating a sound quality assurance framework.

c) Training/ Capacity Building of administrators/facilitators

The component of training for the different layers of stakeholders especially the implementers are not known to the study team. However, the scheme guidelines while changing should go with intelligible awareness. It was found during the study, the guidelines of the PMKVY 2.0 is not properly known to the training partners, State Skill Development Missions, and sector skill councils to some extent. The indifferent approach of NSDC implicitly speaks volumes. For such an ambitious scheme, the stakeholders should properly be aware of complete guidelines.

d) IEC Activities

Information, Education, and communication are the components that the scheme also focuses on. The CSCM and CSSM components intend to provide not only job-role-oriented trainings but soft skill-oriented as well. At the same time, social and community mobilization is extremely critical for the success of any skill development initiative. It fosters a bottom-up approach not only in effective planning and implementation of interventions in the space but also in effective monitoring, evaluation and ownership of the government programmes by the community. Active participation of the community ensures transparency and accountability and helps in leveraging the cumulative knowledge of the community for better understanding. The Kaushal and Rozagar Mela components are inbuilt with the scheme to the extent that it helps mobilize the potential pool of beneficiaries for the scheme. Under the mobilization channel, mass media, small media, and Kaushal Mela/ Mobilization camps are considered. The sequence of events in the Kaushal Melas are like briefing the PMKVY process, its features and benefits, and sharing the vision of the Hon'ble Minister is allotted 5 minutes. The insights into PMKVY is given for 15 minutes, concluded by a vote of thanks for 5 minutes. As such, the component under the scheme indicates the efficacy of Information, education, and communication.

e) Asset/ Service creation and its maintenance plan

The physical asset creation and maintenance plans were not found under the scheme. However, the huge number of beneficiaries trained and placed are the significant assets of society. However, to improve infrastructure at training centres, the Ministry may like to take a call on it after conducting a third-party independent physical verification.

f) Benefits (Individual, Community)

The scheme has benefitted across the communities. A total of Rs. 964.55 crore on SCs and Rs. 493.53 crore on STs have been paid under the scheme. Looking at the number of beneficiaries placed. Under the scheme, particularly for NER, a total of Rs. 414.9 crore has been spent. With the different components and pads, the scheme has ensured the placement of approximately 15.8 lakh individuals. Considering each household having three members along with investment in social returns, the scheme has benefitted around 60 lakh people. This comprises all communities. As such, the scheme has moved on with gross social inclusiveness.

g) Convergence with Scheme of own Ministry/Department or Other Ministry/Department

PMKVY enables a large number of Indian youth to take up industry-relevant skill training that helps them improving their socio-economic conditions. Under the scheme, initiatives have been undertaken to provide bridge course training to rural masons for the construction of twin pit toilets in rural areas. The project is implemented along with the Ministry of Drinking Water and Sanitation to support the "Swachh Bharat Mission". Projects have also been undertaken to upskill the construction workers at the worksite itself through bridge training and has focused mainly on assistant masons, bar-benders etc. Armed forces personnel who are to retire in the upcoming 2-3 months are also being provided with bridge training to align the skills learned during the service with industry standards under MoU signed with the Ministry of defense. Another initiative has been undertaken in PMKVY along with the Ministry of Environment, Forest, and Climate Change (MoEF &CC) for up-skilling of AC field technicians. Additionally, service staff, cooks, and supervisors associated with IRCTC are also being provided bridge course training in the RPL projects so that services can be improved. The RPL is also covering women beneficiaries to learn the food processing sector for pickle-making technicians, banking operative, etc. job roles. As such, the scheme has convergence with a number of Ministries.

4.3 Gaps in Achievement of Outcomes

After capturing the feedback of different stakeholders of the scheme, the following gaps have been noticed in the outcome:

1. The revised budget estimate of PMKVY 2.0 has been found relatively lagging, as compared to its actual expenditure across the FYs.

2. The number of beneficiaries enrolled and certified goes with a high incidence of difference that implicitly indicates that the scheme at every level, despite IT enablement, is not effectively executed.

3. Though the limitation of the study has highly been arrested through the Covid pandemic, the training partners were found reluctant in sharing the beneficiary details even after the apt intervention of the Ministry of Skill Development and Entrepreneurship. Some of the stakeholders took the excuse of Covid and did not provide access to them, particularly SSDMs and NSDC.

4. The Ministry itself has accepted that out of 252 job roles, a total of 198 job roles are in practice (trainings imparted on 198 job roles). Though the maximum segregation at a different level of data collection was done to arrive at conclusive findings, after conducting a study in the 12 states of the 6 NSSO classified zones, approximately 40 job roles could be found.

5. The scheme is not implemented in Lakshadweep. The coverage of the scheme was not found uniform in terms of including the beneficiaries from the different social categories, and in difficult terrains.

6. The seepage of the manipulated fund at the level of training centres was detected. Some of the TCs were not found paying out their staff online.

7. The reasons for dropping out were not minimized by conducting a baseline survey. This a major challenge that would have been addressed in time.

8. The assessors were found to be biased and the job was completely left to NSDC led SSCs. The nexus between assessors and TPs were observed and reported from the field.

9. Rightsizing the trainer's competency level through a technical score or train the trainer programme is not enough. The best trainer is one who can motivate and ensure the learning outcomes of the learner. The same would have been given a priority.

10. Target allocation methodology is largely followed by States and Center without considering the feedback of SSCs. Last few RFPs did not include the districts which had good training centers or clusters or industry demand. Manufacturing sectors are not the priority for TPs as capital cost and reoccurring cost are on the higher side. Whereas, eligibility conditions restrict the local industry to come up and apply for schemes.

11. Certain sector industries are located in specific states, for example, textile & Handlooms. But the target is allocated state-wise without judging the industry presence/employment opportunities in that state and rather by population. The states supplying workforce and employment are different.

12. Inadequate training infrastructure, lack of entrepreneurship skills, low industry interface, and low level of awareness about the programme amongst the youth dilute the bandwidth and effectiveness of the scheme.

4.4 Key Bottlenecks & Challenges

During the evolution of the scheme, the key bottlenecks and challenges identified are as under:

1 Unlike the CSCM component of PMKVY managed online, the CSSM component is still being managed offline, often resulting in delays in most of the operationalization.

2 Delays in payments especially under CSSM-STT have been noticed.

3 Allocation of targets not commiserating the sanctioned capacity is leading to wastage of resource investment by training partners and is also leading to de-motivation.

4 Candidates from poorer families are reluctant to join training in the absence of an adequate stipend to compensate for their existing earnings.

5 Training kit/resource material is available in Hindi or English languages only. The absence of the same in regional languages often poses problems for those trainees who are not familiar with Hindi or English languages.

6 The online assessment is a hurdle for candidates who are not so computer savvy.

7 Female candidates from most states (except Manipur) are reluctant to go outside the state for job placement. This was found stronger in central and some parts of eastern zones.

8 Many of the companies are not acknowledging the relevance of certificates. The present certification results either pass or fail. This was found to be creating disenchantment and disorientation among the target group. The fact that they could not want to see the same thing happening time and again.

4.5 Input Use Efficiency

Input use efficiency, also known as the productivity ratio refers to the extra unit of output generated from an additional unit of input. This indicates how efficient the input (funds disbursed in the context of the scheme evaluation) was in terms of generating the required output (the beneficiaries covered). The efficiency of input use can be computed by taking a simple ratio of output to input. A higher input use efficiency ratio indicates that output is maximized without requiring more of any input values or use of input is minimized while satisfying at least the given output levels.

Table 3.38: Input use efficiency ratio

Financial Years	Actual Expenditure (in crore)	No. of Beneficiaries	Input Use Ratio
2016-17	699.99	49973	71.39
2017-18	1721.18	1594183	926.22
2018-19	1909.19	842487	441.28
2019-20	1648.25	946359	574.16
2020-21	279.88	0	0.00

In the table above, the input use efficiency ratio has been calculated. The input-use efficiency ratio has been 71.39 in 2016-17, 926.22 in 2017-18, 441.28 in 2018-19, 574.16 in 2019-20, and 0 in 2020-21 (the value for the year 2020-21 was not shared). It shows the variation in both actual expenditure and the number of beneficiaries covered across the States/UTs. The input use efficiency graph is as under:

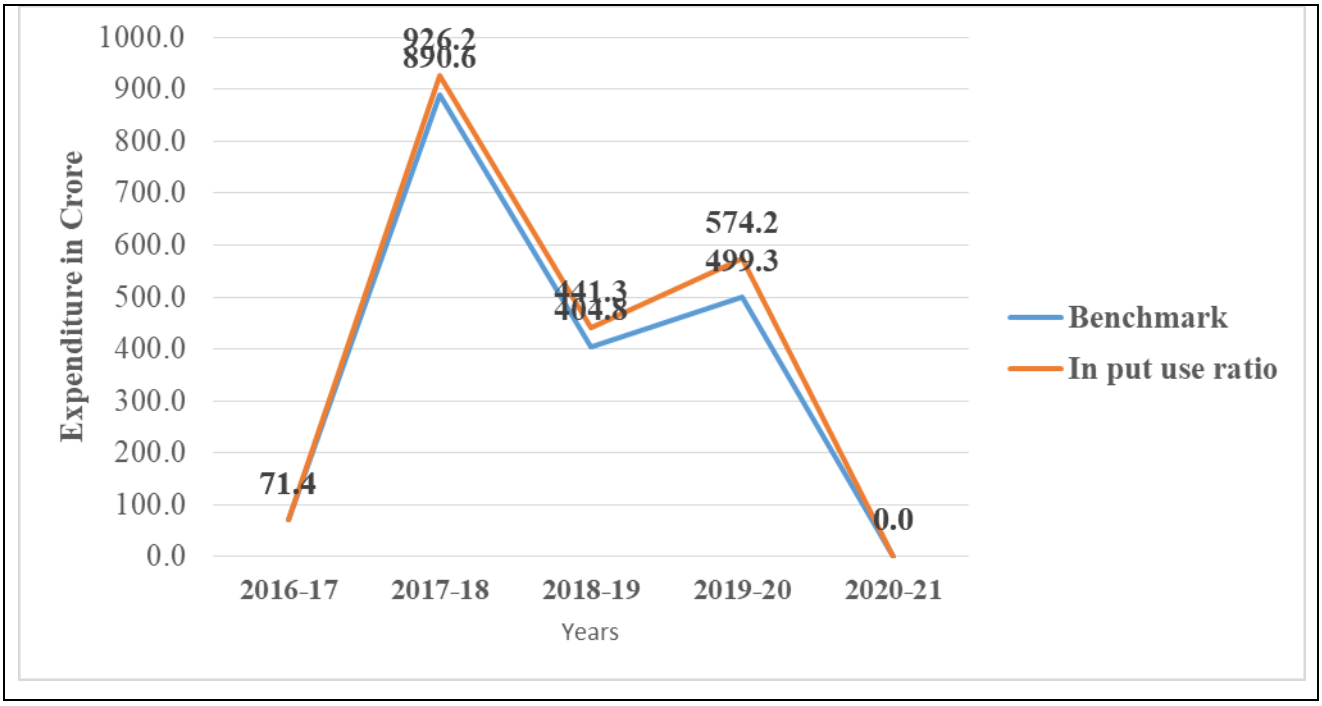

Figure 3.11: Line graphs showing input-use ratio based on GDP deflator

The line graph given above represents the input use ratio in the five years. The maximum efficiency has been detected in the year 2017-18, followed by 2019-20 and 2018-19 with respect to the amount released and the number of beneficiaries trained. As the beneficiaries trained for 2020-21 are not shared, the interpretation for the year 2020-21 is not being given. The GDP deflator-based benchmarking of the actual expenditure has been done which shows efficient actual input use in the diagram. The fund flow for 2016-20 shows an optimum utilization.

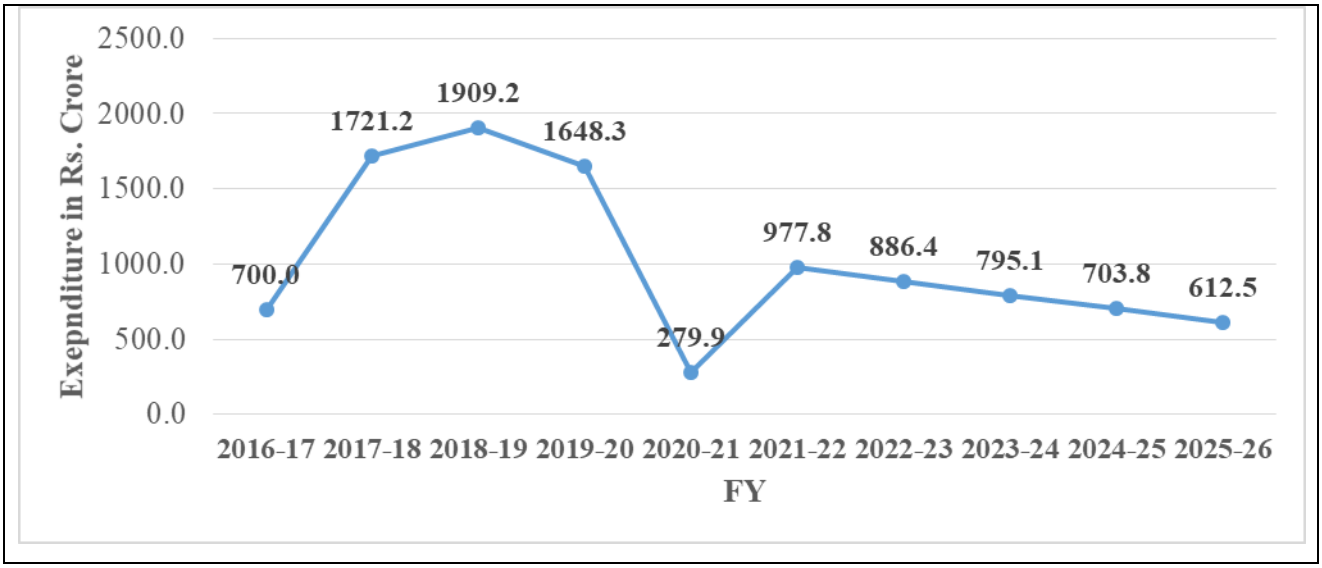

Figure 3.12:Line graph showing linear predictive analysis of expenditure for the next five years

The line graph above shows the expenditure prediction for the next five years i.e. 2022-26. The prediction is based on the expenditure of the last five years. The lowest expenditure has incurred in the year 2020-21. However, the predicted expenditure in the next years has been calculated more, as compared to the year 2020-21. This further informs that based on expenditure pattern, the scheme in the demand by the potential beneficiaries. Similar efforts are being taken to cater to those demands.

4. OBSERVATIONS AND RECOMMENDATIONS

5.1 Thematic Assessment

The scheme is having a proper system for accountability, transparency, and employment generation. The IT enablement through SDMs or NextGen SDMS platform is already embedded under the scheme. The matrix for accountability and accreditation is given under the scheme guidelines. Transparency has been activated through the inclusion of e-governance for the scheme. To ensure that high standards of quality are maintained by PMKVY TCs, NSDC and empanelled inspection agencies use various yardsticks. These involve validations, surprise visits, and monitoring through the Skills Development Management System (SDMS). These standards are intensified using the latest technologies.

To ensure it, the guidelines of the scheme also vouches for incorporating the views of different stakeholders so as to identify the issues and fix them. It was found during the study that though guidelines were put in place, most of the stakeholders were found reluctant to share their feedback on the extent to which they followed the guidelines.

The states are also empowered to monitor the scheme, the details of which are given in the Monitoring Framework of the PMKVY. However, the State officials were not aware of the tasks across the sampled states.

Grading of the TC is one of the outcomes of Continuous Monitoring to ascertain that high-quality TCs get higher targets. This process also ensures continued focus on the quality of training by the TCs. In addition to this, the TCs are required to score a minimum of 40% as per the compliance as well as the Performance Standard Matrix. It has been during the focus group discussions some of the TCs did not receive the allotment and their entire investment went wasted.

The SSCs were found not putting the right agency up for the verification and assessment of the TCs. This has been reinforced in the focus group discussion recorded.

It is prescribed that the scheme involves multi-layer checking. The inspection agency, along with the PMKVY Monitoring Team are responsible to continuously monitor all the TCs based on the Compliance and Performance Standard Matrix. Such visits have hardly been reported by TCs to the study team with the availability of Ministry officials.

5.2 Externalities

Externalities occur in a scheme when the intended outcomes are not achieved or partly achieved due to unintended or latent reasons. The identified externalities under PMKVY are as under:

1. Compliance and Performance Standard Matrix for the allotment of trainings implicitly invited induced opportunity costs to the TCs, as their resources were not properly utilized.

2. The skill development contents should have been designed in such a way that every single beneficiary trained and certified would have received placement. The placement of the beneficiaries should not be restricted to the industry partners alone. The skills would have been improved to a standard where-in the global industries, got cajoled to see the talented youth after training.

5. RECOMMENDATION FOR SCHEME WITH REASONS

PMKVY is the flagship skill training program of the Government of India and has helped many youths realize their dream of being gainfully employed. As an impact of the scheme, 118.2% change in monthly wages of beneficiary trainees has been recognized. Almost sync between demand and supply of job roles, value addition recognized through PMKVY certification, 53.8% coverage of rural areas, 48.6% women inclusion, around 18% coverage of SCs, STs, Minorities, insignificant dropouts, IT-based governance executed through NSDC, **the evaluation study of Pradhan Mantri Kaushal Vikas Yojna (PMKVY) recommends for continuation**. To improve the effectiveness of the scheme, the following recommendations are suggested:

1. To publicize the scheme for improved bandwidth, the Kaushal and Rozgar Melas should be integrated with cultural and national events. To improve its effectiveness, the publicity should be scaled up.
2. Target allocation to be handled centrally by SSCs based on demand and not by States as often for the manufacturing sector, the states supplying workforce are different from states offering employment. Target allocation should be based on sector-wise demand aggregation. Targets should be reshuffled from non-performing TPs to performing TPs.
3. Quality and enduring placement criteria should be laid down, even if the 70% placement benchmark has to be simmered down.
4. If the advantage of the demographic dividend is to be taken, the entire scheme should be structured in such a way that attracts youth to undertake skill training. Training centres need to be set up in and around the village clusters. Flexibility needs to be incorporated in terms of training infrastructure, existing farms may be declared/used as training centres. Residential training should be encouraged. Industry setting up training Centres in rural areas be given additional tax benefits including permission to deploy their CSR funds for all training aspects.
5. The district skill officers may be deployed to monitor the overall ecosystem under PMKVY. Under the pool of assessment and certification, reputed academic institutions, industry bodies, Government ITIs, Government Polytechniques, etc. may be brought in to improve the quality of assessment and certification.
6. The dedicated district-level committee may be brought in under the ecosystem of training and skill-gap assessment, as skill gap assessment-based training was not provided, rather imposed on the TPs. The emerging demand in the sunrise sectors may be identified through a robust skill gap

survey. The committee should also be entrusted to oversee the work from trainee-mobilization to placement.

7. The scheme needs to be decentralized to the block level to ensure its outreach and effective coverage. It would help optimally harness the demographic dividend.
8. The officials of SSDMs should be given customized training on the latest guidelines of PMKVY and e-handling because the SSDMs were reported to have not sent timely compliance to TPs.
9. Most of the TPs have complaints about short target allocation in comparison to their sanctioned strength. Complaints about the delay in allocation of the next targets were also noticed. This situation is resulting in the underutilization of capacities, wastages of resources, and de-motivation of TPs. The presence of industry should also be considered in target allocation. As such, the target allocation should be as per sanctioned capacities of TPs, provided all other conditions are duly met.
10. The aspirational job roles should be prioritized at the time of enrolment. The inventory of training seats should be filled in considering the aspirational skills of beneficiary trainees.
11. The candidates dropping out the courses should be provided additional opportunities to re-join the courses giving due considerations to their critical social circumstances. Also, women dropping the course due to pregnancy or otherwise should be provided special consideration to complete the courses.
12. The sufficient top-us for the candidates in difficulty, particularly for commutation to TCs, should be integrated within the scheme framework. States may also be requested to gear up such facilities on priority.
13. Programme Implementing Agency (PIA) should be entrusted to prepare home and professional videos on different job roles for demonstrating during the training. A digital repository for such videos may be created.
14. Parents of trainees should be counseled to encourage their wards to take the trainings seriously. That would help the candidates to feel motivated and attend the training with zeal and enthusiasm.
15. Training Kits' should timely be provided in vernacular languages so that language barrier does not come in the way and trainees prepare themselves well in time.
16. The certificate given to successful candidates after the assessment should be made equivalent to the academic certificates so that candidates get loans, enjoy improved employability, and become entrepreneurs through moratorium-based micro crediting.