



AN APPRAISAL OF IMPLEMENTATION ISSUES OF TRIBAL SKILL DEVELOPMENT PROGRAMMES IN THE NAGPUR AREA

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ABSTRACT

Skill development is an important aspect in improving employment, entrepreneurship and income sources of the Scheduled Tribe population. But, apart from the number of trained people, the success of the programme is also hinging on the mobilisation, demand-driven training, quality delivery, certification, placement and post-training support. The present study explores the implementation challenges of tribal skill development programmes in the Nagpur area; secondary sources of data include the Census of India (2011), the Ministry of Skill Development and Entrepreneurship, the Maharashtra Tribal Development Department, the Tribal Research and Training Institute and Comptroller and Auditor General reports. The study area is the Nagpur district, with an approximate population of 4.65 million and 9.41% of the population as a scheduled tribe. According to the data of PMKVY, 64,446 trained candidates were trained, but only 5,583 candidates were placed, which means there was an 8.66% placement rate. The tribal skill programme of Maharashtra has achieved 55.98% livelihood conversion. It identifies key issues such as poor demand assessment, poor mobilisation, lack of data on tribes, gender challenges, weak employer linkages and lack of institutional coordination.



KEYWORDS : Scheduled Tribes, Skill Development, PMKVY, Nagpur District, Tribal Employment, Vocational Training, Programme Implementation.

INTRODUCTION:

The policy of skill development in India has the twin objectives of large-scale training with quality, standardisation, employment and sustainable livelihoods. A specific policy push on skilling, the National Policy on Skill Development and Entrepreneurship (NPSDE), has established principles of scale, speed, standard and sustainability, and several initiatives, like the Pradhan Mantri Kaushal Vikas Yojana, are dedicated to industry-oriented training and certification (Ministry of Skill Development and Entrepreneurship [MSDE], 2015). But getting jobs out of training is a huge hurdle. Research shows that labour-market success is not guaranteed through only the certification, and training must match employer needs, job opportunities and learner needs (Agrawal & Agrawal, 2017; Mehrotra et al., 2013).

Factors that further exacerbate the challenges are geographical isolation, lack of awareness, economic constraints, language barriers, lack of access to the internet, gender barriers and reduced

mobility among the communities of Scheduled Tribes. Vocational programmes should be culturally competent and participatory, taking into account the realities of the community and gender-related barriers (Dagar, 2022).

These issues are relevant and appropriate to be analysed in the context of the Nagpur district, which has both urban-industrial development and rural-tribal settlements. As per the Census of Population, 2011, the population in the district is 4,653,570, comprising around 438,000 people of scheduled tribes (9.41%). The district's urbanisation level is high, but many tribal communities still struggle to access it.

This research assesses the implementation structure of tribal skill development programmes from the aspects of identification of the beneficiaries, mobilisation, selection of programmes, training delivery, certification, placement, self-employment, retention, monitoring and institutional coordination. PMKVY data are not socially disaggregated, so district-level data have been used to assess the overall performance of the PMKVY, and data for the tribes have been taken from the Maharashtra Entrepreneurship and Skill Development Programme and official evaluations. The absence of disaggregated data as a challenge becomes a major issue in governance and implementation.

Objectives of Research

- 1) To study the demographic and institutional scenario of the tribal skill development in Nagpur district.
- 2) To study the analysis of training and reported placement performance of the different stages of PMKVY in Nagpur.
- 3) To evaluate the employment and self-employment of the Maharashtra Tribal Entrepreneurship and Skill Development Programme.
- 4) To find out the issues of mobilisation, accessibility, course selection, placement, monitoring, and coordination among the tribal trainees.
- 5) To assess the significant difference in programme outcomes between phases and whether the tribal livelihood outcomes meet the placement benchmark.
- 6) To recommend ways of strengthening the effectiveness, inclusiveness and accountability of the tribal skill programmes in the area of Nagpur.

Hypotheses of Research

- **H₀:** If there is no statistically significant association between the phase of PMKVY and the reported placement outcome in the Nagpur district,
- **H₁:** There is a significant difference between the reported placement outcomes of PMKVY 1.0, PMKVY 2.0 and PMKVY 3.0 in the Nagpur district.
- **H₀:** The proportion of wage employment and self-employment among the tribal population in Maharashtra is not significantly less than 70% under the Tribal Entrepreneurship and Skill Development Programme.
- **H₁:** The overall livelihood conversion rate in the tribal programme is significantly less than 70%.

RESEARCH METHODOLOGY

The research carried out is descriptive and analytical, an evaluative type of research, and secondary data is used. The definition of "Nagpur area" is Nagpur district for the purpose of the operational requirements, as the data regarding official demographics and PMKVY are collected and reported at the district level. Sources are the District Census Handbook for Nagpur, official district statistics, MSDE annual reports, parliamentary yearbooks, Maharashtra Tribal Development Department reports, Tribal Research and Training Institute documents, the CAG performance audit of PMKVY and any relevant academic literature.

Period of the principal work: 2015-2023 (for PMKVY). The performance data for the tribal ESDP are predominantly based on the status of the programmes at the time of reporting in 2020–21. The

1996 TRTI evaluation is limited in its use as only a historical measure to review persistent implementation issues. It is not used as a statement about the present conditions.

Percentages and outcome ratios and gaps were based on the reported administrative totals. The difference in the placement outcomes of the PMKVY in various phases was done by using a chi-square test of independence. The proportion test was applied to a single sample to determine if there is a difference between the combined tribal programme's livelihood rate and the 70% target. Administrative "reported placement" is not a true reflection of the number of long-term jobs available. Incomplete projects, the impact of COVID-19 and differences in reporting periods and between wage employment and self-employment also can influence outcomes.

Theoretical Framework

Four complementary approaches are used to analyse the study. In the human capital approach to training, training is viewed as an investment to enhance productivity, employability and earning potential. But training is only economically beneficial if the skills provided are in line with labour market demand. Indirect effects on employment and earnings from vocational training have been documented in India and found to be positive, even among women from low-income households, but the impact of programmes is dependent on access, the relevance of the content, and participant characteristics (Maitra & Mani, 2017).

The capability approach goes beyond certificates and numbers of jobs. A tribal trainee should have the freedom to attend the training, complete it, migrate or travel safely, be given a job and be able to utilise digital systems, access credit and stay in the workforce. Training inputs may not translate into effective livelihood capabilities due to transport barriers, household responsibilities, poor accommodation and social restrictions.

The results-chain framework is an approach that sees programme performance as a series of activities, outputs, outcomes and impacts. Funds, trainers and centres are inputs; mobilisation and training are activities; certification is output; placement is outcome; and sustained income growth is impact. Any weakness in the chain leads to its termination. Evidence from the international context also indicates that the impact of youth employment programmes is mixed and that how the programmes are designed, targeted and linked to employers has an impact on their outcomes (Kluve et al., 2019).

Last but not least, an indigenous participatory-planning approach demands community participation in identifying occupations, course provisions, training schedules and livelihood aspirations. This approach is based on the assumption that standardised courses are allocated from higher levels and there is less consultation with tribal women, households, gram-level institutions and local employers (Dagar, 2022).

Data Analysis and Interpretation

1. Demographic context of the study area

Table 1
Selected demographic indicators of Nagpur district

Indicator	Reported value
Total population, Census 2011	4,653,570
Approximate Scheduled Tribe population	438,000
Scheduled Tribe share of population	9.41%
Urban share of total population	68.30%
Geographical area	9,892 sq. km
Number of talukas	14

Source: Census of India, Nagpur District Administration and Tribal Research and Training Institute, Maharashtra.

Although only one-tenth of the population in Nagpur is tribal, the absolute number of Scheduled Tribes is quite large. A district strategy which has a uniform approach may therefore fail to account for areas of tribal disadvantage. The overall high level of urbanisation in the district cannot be used to conclude that tribal candidates have equal access to urban training centres. The district-wide urban percentage is less relevant than other implementation variables, such as the location of tribal habitations, travelling time, safety concerns, and the cost of lodging and frequency of public transport.

2. PMKVY training and placement in Nagpur district

Official MSDE data covering the period from 2015 to 31 March 2023 provide the following results.

Table 2
PMKVY training and reported placement in Nagpur district

PMKVY phase	Candidates trained	Reported placed	Not reported placed	Placement rate
PMKVY 1.0	7,499	326	7,173	4.35%
PMKVY 2.0	54,536	5,194	49,342	9.52%
PMKVY 3.0	2,411	63	2,348	2.61%
Total	64,446	5,583	58,863	8.66%

Source: Calculated from MSDE district-wise PMKVY annexure, data up to 31 March 2023.

The training scale grew significantly under PMKVY 2.0, and about 84.62% of all candidates were trained in the three phases of this scheme. However, its placement rate was found to be 9.52%. PMKVY 3.0 had the smallest rate at 2.61% but was impacted by the pandemic and small in size and may have had incomplete placement-reporting cycles; therefore, this must be interpreted with caution. Overall, the rate of placements for persons trained was less than nine per 100 persons trained in all three phases.

Data are not scheduled. Tribe-specific – it contains all the information about the PMKVY candidates in Nagpur. As a result, it is impossible for them to determine whether the tribal candidates did better or worse than the district average. No caste-wise district outcome data to gauge caste-wise dropouts, certifications, placements and retention. Dashboards need to integrate district, block, gender, social group and job role information along with post-placement details in a scheme to support disadvantaged communities.

The CAG has identified various deficiencies in the planning, identification of beneficiaries, reporting of placements, monitoring and mismatch of job roles with local demand in PMKVY at the national level. The audit revealed that only approximately 41% of the candidates who passed the audit for the relevant short-term and special-project components were placed across the country and that the jobs were often chosen without proper micro-level skill gap analysis. It also noted that the state skill mission, Maharashtra, was not able to access the centrally managed skill information comprehensively, limiting the monitoring at the state level.

3. Performance of Maharashtra's tribal Entrepreneurship and Skill Development Programme

In 2018, the Entrepreneurship and Skill Development Programme was transferred to TRTI for standardisation and administration by the Maharashtra Tribal Development Department. There were 103 sanctioned projects in the administrative report, which consisted of completed, ongoing, innovative, regular, research and special projects.

Table 3
Reported outcomes of the tribal Entrepreneurship and Skill Development Programme

Indicator	Number/value	Percentage of trained candidates
Projects sanctioned	103	—
Projects completed or closed	27	—
Projects reported as ongoing	58	—
Candidates trained	12,884	100.00%
Candidates obtaining wage employment	3,878	30.10%
Candidates becoming self-employed	3,335	25.88%
Combined wage and self-employment outcomes	7,213	55.98%
Candidates without a reported livelihood outcome	5,671	44.02%
Funds utilised	₹3,081.61 lakh	—
Expenditure per trained candidate: portfolio proxy	Approximately ₹23,918	—

Source: Calculations based on the Maharashtra Tribal Development Department Administrative Report 2020-21.

The overall livelihood conversion rate is 55.98%. This is better than the overall PMKVY placement rate in Nagpur, since the tribal programme also has a component of self-employment. However, among the trained candidates, in the administrative totals, 44.02% had no recorded wage or self-employment outcome. Only 30.10% of the trainees were in wage employment. The ratio of expenditure per trained candidate is a portfolio-level ratio and not a cost-effectiveness measurement, as the reported expenditure includes projects in various stages and might include research or innovation projects, administration or unfinished activities.

The programme norms of TRTI include a requirement for the training institutions to get 70% of the trainees placed in jobs. Another 100 hours of soft, life and information technology skills are also required for the programme. Training is normally non-residential, however. Mobility and post-placement support are provided, where applicable, to the successful candidates; training providers are responsible for the mobility and placement of the training participants. These design features generate a contradiction, in that the providers are given ambitious placement commitments, but candidates hailing from far-flung settlements may not get residential support during the training

4. Historical evidence on access and implementation

TRTI's assessment of the vocational training centres of the Scheduled Tribes conducted an assessment of 209 tribal trainees and 150 residents in the surrounding area around selected vocational training centres. The study took place in the 1990s, but it serves as a starting point for analysing the persistent institutional issues.

Table 4
Historical indicators from the TRTI vocational-training evaluation

Indicator	Number	Percentage
Nearby residents unaware of the vocational institutions	130 of 150	86.67%
Male trainees	137 of 209	65.55%
Female trainees	72 of 209	34.45%
Trainee households with annual income up to ₹11,000	179 of 209	85.65%
Households mainly dependent on farming	128 of 209	61.24%
Households mainly dependent on labour work	44 of 209	21.05%
Trainees reportedly unable to obtain their preferred trade	Approximately 35%	—

Source: Calculated from TRTI, An Evaluation of Vocational Training Centres for Scheduled Tribes in Maharashtra.

The evaluation revealed poor awareness, insufficient counselling, limited participation of women, absence of hostels, lack of availability of instructors, inappropriate allocation of trades, industry exposure and absence of systematic follow-up of placements. It also stated that sometimes training centres were created without proper local studies or consultations. While these results should not be considered as current measurements, the results show that mobilisation, gender access, residential facilities, preferred trade allocation and monitoring are well-known implementation issues.

Findings of the Study

The findings of the study suggest that there are some serious challenges in Nagpur that need to be addressed to achieve sustainable livelihoods from skill-development programmes. The overall placement rate of PMKVY in the district was just 8.66%, which shows that there is a significant mismatch in the number of trained students and the number of youth who are being employed in the district. There was considerable variation in performance across the different phases of the scheme, such as the placement rate ranging from 2.61% for PMKVY 3.0 to 9.52% for PMKVY 2.0, indicating the implementation outcomes of the scheme. One of the drawbacks is that there is no data available at the district level for the outcomes of the Scheduled Tribes beneficiaries, limiting the possibility of comparing them with other beneficiaries. Wage employment, combined with self-employment, was at 30.10% and 55.98%, respectively, well below the 70% targets set for wage and self-employment in the Tribal Entrepreneurship and Skill Development Programme. It also reveals various constraints, including poor local demand assessment, poor community mobilisation, low awareness, accessibility barriers, gender barriers, and lack of facilities for residents. Placement rates continue to be the primary focus of employment monitoring, with a lack of focus on indicators of job quality, including wage rates, job security, occupational relevance and job retention rates. Moreover, lack of coordination between tribal development agencies, skill missions, training institutions, employers and financial institutions reduces the effectiveness of the programmes. Self-employment outcomes have potential, but there is a need for further support in areas of credit availability, equipment, market linkages, mentoring and enterprise management assistance to ensure sustainable entrepreneurship. In general, the results indicate that demand-driven planning is needed, the implementation of tribe-specific monitoring systems and better institutional convergence for better results of skill development programmes.

Discussion

The results indicate that the problem in tribal skill development is not one of schemes but a lack of the last mile component. The certificates awarded by large-scale training programmes do not always guarantee stable and quality livelihoods. India's labour market is informal in nature, and skill interventions need to focus on the quality of employment and relevance and aspiration gaps of youth (Institute for Human Development & International Labour Organisation, 2024). Nagpur needs a plan for skill development in the district for the tribal population based on mapping the settlements and validation of demand by the employers. Training courses should be geared towards local economic opportunities (LEOs) rather than provider capacity alone, including the ones like engineering services, logistics, healthcare, food processing, digital services, tourism, bamboo value addition, and agriculture-based industries with forest produce value addition.

Tribal organisations or educational institutions, self-help groups and community representatives should be involved in mobilisation efforts. Candidates should be evaluated for aptitude and career counselling prior to training allocation, and their preferred and assigned occupation should be monitored. Remotely located tribal communities need to be supported by accessibility measures such as residential facilities, transport support, flexible training schedules, women-friendly infrastructure, child care facilities, etc. for increasing participation. Post-placement support should not end with employment but should include relocation, a grievance process and monitoring of retention.

There should be improved engagement with employers via pre-training partnerships, assured placement, internships and clear pay details. Programme incentives should be directed at not only enrolment and certification but also the verified employment retention at 6 and 12 months. Likewise,

outcomes of self-employment should be measured based on enterprise sustainability, income generation and market linkages, not just on registration and asset distribution. Lastly, a monitoring system should be integrated to ensure monitoring of training outcomes in terms of gender, scheduled tribe, location, training provider and occupation and ensure the data is kept private. Equitable, demand-driven and sustainable tribal skill development in Nagpur can be encouraged through such reforms.

Hypothesis Testing

The results of hypothesis testing show that there are significant differences among the results of skill-development programmes in Nagpur with respect to implementation outcomes. In the case of testing of H01, a chi-square test of independence was performed using the number of placed and not reported placed candidates in the three phases of the PMKVY. The calculated chi-square value was 339.143 with 2 degrees of freedom and a probability value of $p < .001$. The significance level was less than 5%, which led to the rejection of H_{01} , suggesting the association between the PMKVY phase and reported placement outcomes was statistically significant. The result showed that there was a significant difference in placement performance among the different phases, but it did not demonstrate direct causality, as it is possible that the long duration of the programmes, characteristics of the candidates and disruptions to daily life during the pandemic and reporting periods may have affected the result. The combined livelihood outcome under the Tribal Entrepreneurship and Skill Development Programme was 55.98% (7,213 out of 12,884 candidates) compared to the benchmark of 70%, which was tested using the one-sample proportion test. H02 was rejected since the Z-value was -34.716 with $p < .001$. This shows that the overall result of wage and self-employment was quite below the expected benchmark. These outcomes are based on a conservative comparison, as self-employment outcomes have been incorporated with wage employment, whereas the programme norms focus largely on placement outcomes. Administrative reporting constraints and inadequate implementation of projects must also be taken into account in interpreting the findings.

CONCLUSION

Tribal skill development can contribute to enhancing income, occupational mobility, enterprise creation and social inclusion in Nagpur. The current evidence, however, indicates that there is a significant mismatch between trainings and livelihoods. The placement rate of PMKVY in Nagpur (8.66%) also indicates that certification does not necessarily lead to employment. The outcome rate of the tribal ESDP was marginally higher at 55.98%, but still below the target of 70%, leaving 44.02% of them with no recorded livelihood outcome. Improvements in implementation mean a change from the training target approach to the livelihood result approach. The district should implement tribal disaggregation monitoring, mobilisation in the community, aptitude counselling, courses approved by the employers, facilities for students to stay in the district, facilities for women, arrangements for apprenticeship and internship, enterprise finance, market linkage, and independent retention verification. The accountability of training providers should be determined by the quality and longevity of services and results, not just by number of enrolments and certification. The most significant research gap is the lack of up-to-date data on enrolments, completion, certification, placement, wage rate and retention for the ST population in Nagpur. Primary surveys of trainees, non-completers, employers and training providers should henceforth be carried out in both urban and rural areas of the district. Administrative statements of the success of tribal skill development should be taken with a grain of salt until this evidence is made public. Enabling tribal skilling in Nagpur will require not just imparting a skill to the tribal youth, but also eradicating the geographical, financial, institutional and social handicaps for tribal youth that deter them from converting their skills into a sustainable and dignified livelihood.

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