INDO-MIM®
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CSR Impact Assessment
Apprenticeship Training

Independent Assessment by

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ADVISORY • RESEARCH • TRAINING

Citation

CSR Impact Assessment Report
An Initiative of INDO-MIM Limited

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About this Report

Established in 1996, INDO-MIM has grown to become a leading global supplier of components using various technologies such as Metal Injection Molding (MIM), Investment Casting, Precision Machining, 3D Printing, etc. INDO-MIM has been a world leader in the MIM field and is a proven supplier of components to customers in more than 45 countries in the Americas, Europe and Asia.

INDO-MIM is a fully integrated component supplier with proven proficiency in design, tooling, materials, finishing and assembly operations. The state-of-the-art manufacturing facility of INDO-MIM is spread over more than one million square feet of manufacturing floor space and houses the world's largest installed capacity for metal injection molding. Headquartered in Bengaluru, India, the Company's modern facilities have a combined strength of over 2500 skilled engineers, technicians, and manufacturing associates. The organisation is certified with ISO 9001:2015, IATF 16949:2016, ISO 13485:2016, ISO 14001:2015, AS 9100:2016 and ISO 45001:2018 standards. INDO-MIM has the expertise to provide a one-stop solution for manufacturing complex, precision-shaped components and sub-assemblies.

APPRENTICESHIP TRAINING - AN OVERVIEW

INDO-MIM, a global leader in Metal Injection Molding (MIM), has integrated apprenticeship training as a core pillar of its Corporate Social Responsibility (CSR) and skill development strategy. The Apprenticeship Training Programme is designed to bridge the gap between formal education and industrial requirements, specifically focusing on precision engineering and manufacturing. The programme is primarily centered on their major manufacturing hubs in Bengaluru (Hoskote and Doddaballapur) and Tirupati.

By integrating skill development with industrial operations, the programme serves as a bridge between formal education and employability for underprivileged youth.

To make the INDO-MIM Apprenticeship Training Programme a success, the company employs a high-touch, structured strategy that integrates trainees into the core of their precision manufacturing operations. The success is driven by a blend of technical rigour, psychological integration, and continuous monitoring.

Success is ultimately measured by permanent absorption. INDO-MIM treats the apprenticeship as a year-long extended assessment. High-performing trainees are identified early and groomed for specific Junior Engineer or Technician roles, providing a clear "light at the end of the tunnel."

Project Objectives & Scope

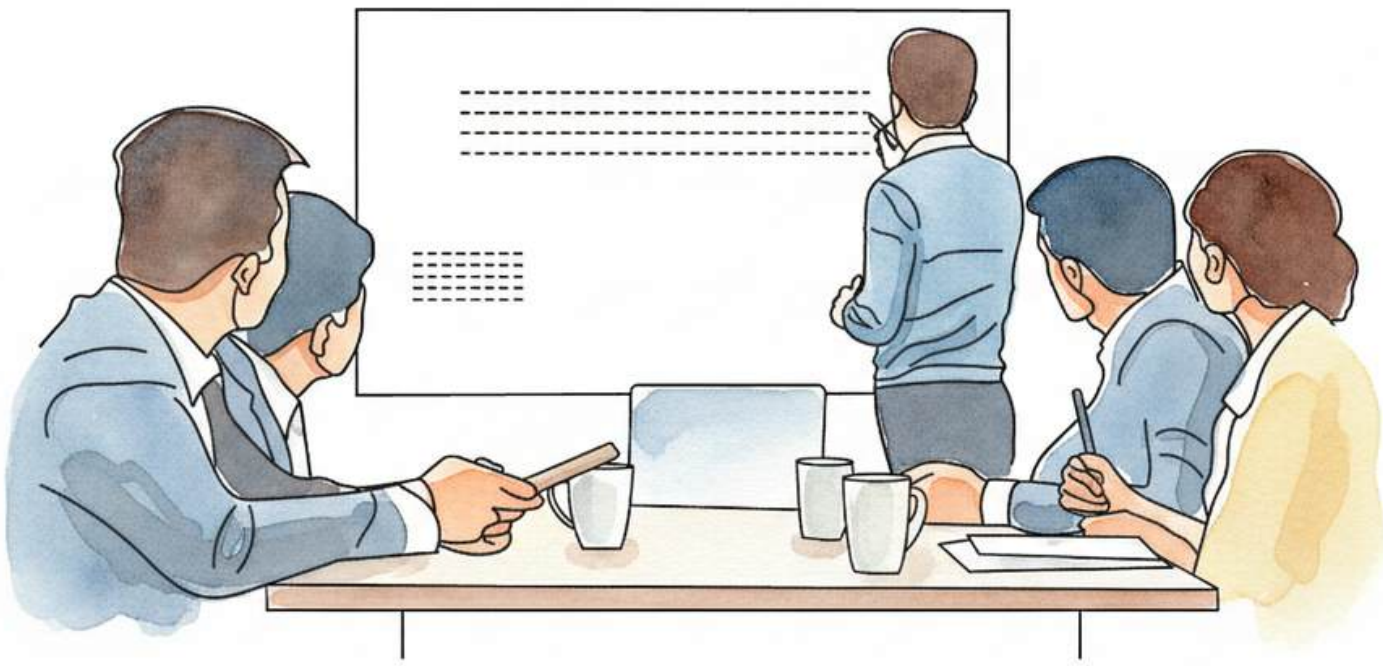
The apprenticeship programme at INDO-MIM is a cornerstone of its Corporate Social Responsibility (CSR) initiative, specifically aligned with the objective of "Promoting Education and Livelihood Enhancement." The programme is designed to transform "raw" talent from rural and economically weaker sections into highly skilled technicians for the precision manufacturing industry.

Target Group: Primarily youth from underprivileged backgrounds - Trade Apprentices of ITI (Industrial Training Institute), Engineering Graduates, and Diploma holders.

Focus Area: Vocational training in precision manufacturing, including MIM technology, investment casting, and aerospace component production.

Geographic Focus: In alignment with the policy, preference is given to communities in and around the states where manufacturing hubs are located (Karnataka and Andhra Pradesh).

Successful completion of the apprenticeship often leads to a permanent absorption as a Junior Engineer or Technician, depending on performance and vacancy. Even if not absorbed, the certification from an NADCAP and IATF-certified global leader like INDO-MIM is highly valued in the aerospace and automotive sectors.



Executive Summary

INDO-MIM, a global leader in Metal Injection Molding (MIM), has established its Apprenticeship Training Programme as a high-impact cornerstone of its Corporate Social Responsibility (CSR) and workforce development strategy. Focused on bridging the gap between formal education and industrial requirements, the programme transforms "raw" talent from underprivileged backgrounds into specialised technicians for the precision manufacturing sector.

1. Programme Overview & Strategy

The programme operates primarily in Bengaluru (Hoskote and Doddaballapur) and Tirupati, targeting ITI graduates, Diploma holders, and B.E./B.Tech graduates.

The Model: A 12-month on-the-job training (OJT) framework combining classroom theory with hands-on practice.

The Strategy: A "Master-Apprentice" model where senior engineers transfer tacit knowledge to trainees on industry-standard machinery.

Financial Support: Trainees receive ₹14,500 – ₹16,000 stipend, subsidised meals, transport facilities, and often shared accommodation, removing financial barriers to entry.

Amount of CSR spend:

~₹9.7 Crore

on the apprenticeship programme over the three financial years, i.e., FY23, FY24, and FY25.

Schedule VII (iii)
It is mentioned under “Promoting education, including special education and employment enhancing vocational skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.”

2. Key Findings & Performance Metrics

The Impact Assessment conducted by Consultivo Business Solutions reveals "Gold Standard" performance across several critical domains:

Category	Key Metric / Result
Operational Efficiency	Competency speed reduced from 4–6 weeks to 1–2 weeks.
Quality Control	Trainee defect rates capped at 5% by the final month.
Safety Adherence	100% usage of PPE and a 5/5 trainer rating for safety protocols.
Success Rate	100% completion rate and 100% external certification.
Job Readiness	77.8% of trainees secured job offers before or immediately upon completion.

3. Core Impacts

A Socio-Economic Empowerment

The programme acts as a "Great Equaliser," providing livelihood enhancement for rural and underprivileged youth. By focusing on the 20–28 age bracket, it effectively addresses "Graduate Unemployment" and provides a 3–5% salary premium over regional averages for entry-level roles.

B Technical & Behavioural Transformation

Autonomy: 75% of trainers report trainees are "mostly ready" for independent work, reducing the supervisory burden on senior staff.

Psychological Shift: 88.9% of trainees report a "competitive advantage" over peers, moving from passive observers to proactive problem-solvers.

Diversity: There is a strategic push to include female participants in traditionally male-dominated technical roles.

C Strategic Value to INDO-MIM

While being a CSR initiative, the programme also serves as a vetted talent pipeline. Though 10–15% are absorbed internally, the high external placement rate (50%) bolsters INDO-MIM's reputation as an industry leader and contributor to the global manufacturing ecosystem.

4. Conclusion & Recommendations

The assessment concludes that the programme is exceptionally robust, successfully converting academic theory into industrial workmanship. The "Real Work Situation"—learning on live, modern machinery—is the primary success factor.

Key Recommendations:

Digital Integration: Implement a digital dashboard for real-time progress reporting to partners (addressing the minor 4/5 rating in data sharing).

Internal Retention: Evaluate the internal hiring strategy to retain a higher percentage of the "top-tier" talent developed through the programme.

Soft Skills Enhancement: Increase focus on global employability skills and advanced market technologies to bridge the remaining gap between technical mastery and leadership.

Methodology

We at Consultivo Business Solutions partnered with Team INDO-MIM to conduct a comprehensive impact assessment of the apprenticeship training programme. The primary objective was to evaluate the programme's effectiveness and the social value generated relative to the resources invested.

The collection of quantitative and qualitative data was made through field surveys, focus group discussions, key informative interviews and other suitable methods. However, hybrid mode (partial data collection through tele-calls, video meets, etc.) was also used. This was done in consultation with both the INDO-MIM management and CSR teams.

The study follows a structured approach to assess impacts typically anticipated at multiple levels. It includes the preparation of data collection tools, assessment frameworks, and a review of available secondary data; the identification of measurable indicators to determine whether impact has been achieved; and the identification of appropriate information sources for measuring these indicators. The assessment covers impacts on beneficiaries, namely trainee apprentices, as well as on the relevant value chains and markets, including key stakeholders such as facilitators from INDO-MIM CSR and trainers.

Consultivo facilitated the surveys and interviews. The beneficiaries provided feedback using a standardised questionnaire focused on assessing the outcomes and benefits received. An independent end-term evaluation and impact assessment process was conducted through desktop or secondary research and collection and onsite verification of survey data. Here, a cross-sectional survey research was conducted to collect insights from a target population consisting of Trainee Apprentices, KII of the Implementing Partners and Trainers. Feedback was sought from primary beneficiaries individually and focused groups consisting of 5 to 6 members in each.

Input

1 **Target Demographics:** Young adults aged 20–28 (average age ~24).

The programme is strategically positioned at the "transition phase" of the workforce.

Youth Empowerment: By focusing on this age bracket, INDO-MIM is addressing the "graduate unemployment" gap. This is the stage at which academic theory is most likely to be lost if not quickly converted into practical or technical skills.

Workforce Longevity: Training younger individuals ensures a longer "return on investment" for the industry, as these trainees have 30+ years of career potential ahead of them.

2 **Educational Profile:** A mix of Bachelor's Degree holders (44%), vocational/ITI graduates (33%), and those pursuing advanced diplomas post vocational training.

The programme serves as a great equaliser between formal education and vocational trade.

Bridging the "Prestige Gap": By training Bachelor's Degree holders (44.4%) alongside ITI/vocational students (33.3%), the programme creates a collaborative environment. It suggests that in a high-tech machine shop, "hands-on competence" is the primary currency, regardless of the degree held.

Trainers manage a wide spectrum of candidates, from **school pass-outs (SSLC) and ITI trade apprentices to Graduate Apprenticeship trainees.** This is a testimony of high flexibility in training delivery.

Hybrid Skillsets:

- **For Graduates:** The input addresses the lack of practical "shop-floor" experience often missing in university curricula.
- **For ITI/Diploma:** The input delivers the high-end industrial context that basic vocational schools often lack.

With an assessment load ranging from **25 to 150 trainees per year per trainer,** the human capital input is significant.

It is also ensured that **experienced technicians and mentors are provided for one-on-one guidance; as well as specialised trainers for CNC and PLC programming.**

Versatility of Curriculum: The fact that both groups find value indicates that the "input design" is modular—sophisticated enough for engineers but accessible enough for tradespeople.

According to the key informants of the implementation team, the rating is at 4 on a 5 point scale of the **curriculum alignment**, indicating that the training content is well-synced with current market needs for machine tool roles.

Curriculum & Materials: The apprentice trainees are provided with the requisite engineering blueprints, customer drawings, material feedstock (stainless steel, carbide), and measuring instruments (vernier calipers, micrometers) which are used to prepare the machine tools.

3 **Infrastructure:** Usage of industry-standard machine tools, specialised departments (aerospace quality, heat treatment, CNC), and mentorship resources.

100% of **trainers** agree that materials, tools, and training jigs are "completely sufficient," indicating a well-funded CSR budget.

This is the most critical "enabling input." Satisfaction at 100% is rare in survey data and points to two specific strengths:

The "modern machinery" input ensures that trainees are not learning on obsolete equipment. This makes the training **future-proof**. If they learn on a high-end CNC machine at INDO-MIM, they are immediately employable at any global aerospace or automotive firm.

The **focused group of apprentice trainees** highlighted that they have access to **high-end machine tools (milling, grinding, wire-cutting), special process machines (SPM), and tool rooms.**

The key informant of the implementation team rated physical resources at full 5 for the accessibility and quality of machinery, technical documents, and tools.

Institutional Memory Transfer: High satisfaction with mentorship indicates that "tacit knowledge" (the "tricks of the trade" that aren't in books) is being successfully passed from senior employees to apprentices. This builds a strong safety culture and quality mindset right at the entry level.

4 **Programme Structure:** Primarily a 12-month (1 year) on-the-job training (OJT) model.

The 12-month OJT model signifies a structured, long-term commitment. For the impact assessment, it justifies the "direct spend" category often seen in INDO-MIM's CSR filings (like their FY 2024-25 plans) by showing a sustained investment in skill development rather than a short-term workshop.

Instructional quality has been given a full 5 rating by the key informant of the implementation partners. This indicates high mentor competency and effective teaching methods.

Training Structure & Domains

The programme generally follows a structured curriculum that combines classroom-style "basic training" with "on-the-job" practical experience.

Domain Areas: Focuses on professional skills and technical knowledge specific to the trade, such as **PLC programming, quality assurance**, and **production control**.

Core Skills: Includes workshop calculation, engineering drawing, and essential employability skills like safety rules and accident prevention.

Specialised Training: Trainees will receive specific instruction in advanced manufacturing technologies, including **metal injection molding (MIM)** processes like injection molding, debinding, and sintering.

5 Compensation and Benefits

CSR Integration: INDO-MIM uses its CSR (Corporate Social Responsibility) wing to fund specific educational and vocational modules, ensuring the programme remains high-quality and free for the candidates.

Feature	Details
Stipend	Typically ranges from ₹14,500 to ₹16,000 per month (varying by qualification and location).
Food and Transport	Subsidised or free meals during shift hours and company transport facilities.
Accommodation	Shared accommodation is often provided for outstation candidates (especially at the Bangalore/Tirupati sites).
Other Perks	Attendance bonuses, medical insurance, and term insurance.

Activities

Apprenticeship Training is the course of training at INDO-MIM under a contract of apprenticeship which consists of:
a) Basic training component
b) On-the-job-training (OJT)/practical training at the workplace

Selection Process

The company typically offers three primary categories of apprenticeship:

- Graduate Apprenticeship Training (GAT): For candidates with a B.E./B.Tech degree (primarily Mechanical, Mechatronics, or EEE).
- Diploma/Technician Apprenticeship Training (DAT): For candidates with a Diploma or ITI certification (Machinist, Turner, Tool & Die Making, or Mechanical).
- ITI and below ITI Apprenticeship Training (comes under NAPS – National Apprenticeship Promotion Scheme): (Qulf: SSLC, PUC, ITI - Mechanical trades like Fitter, Turner, Machinists, Electronic Mechanic, Electrician, etc.)

Due care is taken to ensure focused hiring from top-tier Industrial Training Institutes (ITIs) and Diploma colleges, specifically targeting disciplines like Mechanical, Tool & Die, and Mechatronics.

Dual screening is done utilising a two-tier assessment consisting of an aptitude test (logic and numerical skills) and a technical test (domain knowledge) to ensure candidates can handle the complexities of metal injection molding (MIM).

Eligibility and Requirements:

- Education: 10th/SSLC, ITI, Diploma, or B.Tech graduates. Candidates are often required to have a minimum academic score (typically 60% and above) with no active backlogs.
- Age Limit: Generally 20-28 years age group.
- Attributes: High discipline, willingness to work in rotational shifts (8-hour shifts), and a strong interest in precision manufacturing.

Apprentices who are engaged at the establishment have completed 1-4 years of basic training or education at colleges as per the act and they are enrolled in on-the-job training (OJT).

For OJT, they are assigned to a particular department where they start the activity as helpers/trainees and advance in skill set during the OJT for one year.

They also get theoretical inputs such as workshop calculations, engineering drawing reading, measuring instruments, etc. during the OJT.

The aim of the OJT is to enable him/her work independently at the end of the training

The Company also sponsors ITI apprentices to pursue a Diploma programme post apprentice training, based on the interest of the candidate.

During interviews, the focus is not just on skills but also on the "temperament for precision" — the patience and discipline required for micro-component manufacturing. This serves as a behavioural assessment of the candidates.

Onboarding Process

The first few weeks are critical for "social integration," ensuring the apprentice feels like a part of the workforce rather than a temporary trainee:

Cultural Orientation: Training was provided on the company's "Winnovation" philosophy and adherence to global quality standards like IATF 16949 and AS 9100.

Safety Immersion: Given the high-temperature sintering and chemical debinding processes involved, rigorous safety training is the first non-negotiable activity.

Safety Gear: The trainees are provided with the appropriate PPEs (safety shoes, goggles, gloves, earplugs) and trained on LOTO (Lockout-Tagout) protocols.

Safety & Discipline: Daily "**Toolbox Talks**" and rigorous adherence to delivery schedules and '**5S' standards** is a mandatory task.

Daily Training

INDO-MIM structures its daily training activities into three distinct growth domains:

Area	Activity	Outcome
Knowledge	Classroom-based instruction on engineering concepts and MIM technology	Theoretical foundation
Skills	Hands-on practice in tool rooms, production lines, and QC labs	Exceptional technical execution
Behaviour	Workshops on teamwork, EQ (emotional intelligence), and time management	Effective team collaboration

Mentorship and Real-Time Feedback

A "Master-Apprentice" model is used to ensure the transfer of tacit knowledge:

Experienced Mentors: Apprentices are paired with senior engineers who provide real-time corrections and explain the "why" behind specific precision parameters.

Monthly Evaluations: Regular assessments of both theoretical and practical progress are carried out. If a trainee struggles, they are reassigned to a different department or provided with additional support rather than being dismissed.

Immediate Feedback Loop: In-house training allows for "on-the-spot" error correction, which significantly reduces the learning curve compared to external programmes.

Practical/Theory Balance: Rated 5/5. This indicates that there is a perfect perceived balance between classroom learning and shop-floor experience.

Specialised Training: Implementation partners conduct full-day specialised training twice a month focusing on high-value skills like CNC programming and advanced diagnostics.

Mentorship: Active involvement of experienced technicians who supervise trainees on live machinery.

Analysis of Training Activities

Customised Pedagogy - Activities are stratified by educational level:

- **SSLC/ITI:** Focus on machine operation, safety (5S), and measurement
- **Diploma/Graduates:** Focus on supervisory skills, calibration, and production management

Comprehensive Curriculum: Key activities include shop floor discipline, SOP adherence, precision measurement (micrometers/calipers), and basic machine maintenance.

Innovative Practices: Trainers utilise brainstorming exercises and real-world shop-floor "events" where trainees run machines under timed/quality-controlled conditions.

Output

The intervention resulted in the following outputs:

- **Skilled Workforce:** Generation of "industry-ready" technicians capable of troubleshooting and quality control.
- **Certification/Experience:** Completion of 12 months of documented OJT in high-precision areas like Aerospace and Product Engineering.
- **Career Progression:** 22% of participants have already transitioned into permanent roles at INDO-MIM or are continuing higher education (Diploma) integrated with their work.
- **Completion Rate & Duration:** 100% of the respondents completed or is currently in a structured 12-month programme.
- **Departmental Exposure:** Trainees were distributed across critical high-tech areas including Product Development (22.2%), Quality Control (22.2%), Aerospace Quality, and CNC Machining.
- **Skill Clusters:** The immediate "product" of the training includes proficiency in:
  - Operating machine tools (77.8% high proficiency).
  - Safety protocols (88.9% high proficiency).
  - Interpreting engineering drawings.

Key Outputs of Training (High Proficiency)

The focused group of trainees expressed their views on the key takeaways from the training:

- **Skill Certification:** Practical proficiency in reading complex engineering blueprints.
- **Independent Operation:** Trainees capable of performing "part setting" and tool modifications (e.g., sliding pin adjustments) without constant supervision.
- **Safety Compliance:** 100% usage rate of PPE and adherence to pre-operation machine checklists.
- **Workforce Readiness:** A cohort of trainees with specialised knowledge in material science (Carbide/SS) and machine diagnostics.

The immediate direct results from the Apprenticeship Training Programme have been highlighted by the KII of the Implementation Team. They are as follows:

- **External Certification: 100%** of trainees receive a recognised external certification, a critical output for labour market mobility.
- **Technical Proficiency:** Trainees reached a level where the defect rate was capped at 5% by the final month.
- **Competency Speed:** Trainees become independent within 1–2 weeks, significantly faster than the 4–6 weeks required for non-OJT hires.

Analysis of Trainers

In the whole exercise of the apprenticeship training, possibly the key role is played by the trainers. The feedback can be summarised as follows:

- **Competency Benchmarks:** Trainers report an average rating of **4.75/5** for improvements in CNC operation, blueprint reading, and quality output.
- **Safety Excellence:** A perfect **5.00/5** score in safety protocol adherence (PPE/LOTO) has been achieved, which is a critical industrial output.
- **Reduced Supervision:** 75% of trainers report that trainees are "mostly ready" for independent work, significantly reducing the "burden of supervision" on senior staff.

Interpretation of the Outputs

1 Accelerated Competency & Operational Efficiency

The most striking takeaway is the **speed of integration**. By reducing the "competency speed" from 4–6 weeks to just 1–2 weeks, the programme effectively triples the onboarding efficiency.

Autonomy: With 75% of trainers reporting trainees are "mostly ready" for independent work, the programme solves a common industrial bottleneck: the "burden of supervision." This allows senior engineers to focus on high-level tasks rather than basic oversight.

Precision and Quality: A defect rate capped at 5% by the final month is a significant achievement for trainees in high-precision sectors like Aerospace. This suggests that the "industry-ready" label is backed by measurable performance, not just time spent on the floor.

2 Technical Specialisation & Workforce Depth

The distribution of trainees across **product development (22.2%)** and **quality control (22.2%)** indicates that the programme isn't just producing labourers; it is cultivating technical specialists.

High-Value Skills: Mastery of "part setting," tool modifications, and interpreting complex blueprints moves these trainees beyond "operators" into the realm of "technicians."

Material Science Literacy: Exposure to specific materials like carbide and stainless steel (SS) indicates a sophisticated curriculum tailored to the specific needs of advanced manufacturing companies like INDO-MIM.

3 Safety Culture as an Industrial Output

Safety metrics are often treated as "soft" data, but here they are presented as a rigorous output.

The "Perfect" Score: A **5.00/5 rating in safety protocol (PPE/LOTO)** is rare in industrial training. This implies that safety has been internalised as a reflex rather than a rule.

Risk Mitigation: 100% adherence to pre-operation checklists significantly lowers the liability and equipment damage risks for the company, making the programme a form of insurance for the shop floor.

4 Career Mobility and Retention (the ROI)

The programme serves as a powerful **recruitment and retention engine**.

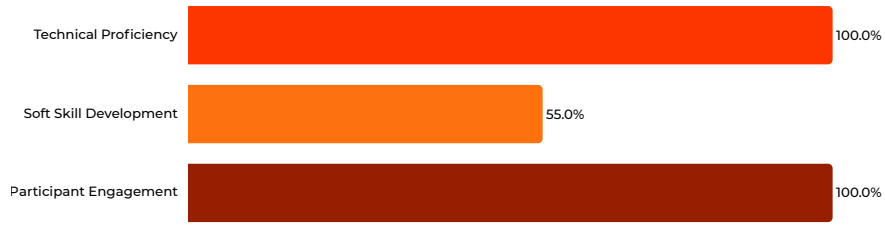
Immediate Transition: The fact that **22% of participants** have already transitioned into permanent roles or higher education shows a clear "career ladder" effect. This reduces external recruitment costs for INDO-MIM.

Labour Market Value: The 100% external certification rate ensures that trainees have "portable" skills. Paradoxically, by making employees more employable elsewhere, companies often increase internal loyalty by providing a clear path to professional growth.

Outcome

The outcomes of the programme are listed below:

- **Technical Proficiency:** 100% of respondents rated their technical skill improvement at a 4 or 5 out of 5. Significant gains were noted in machine operation, safety protocols, and reading engineering drawings.
- **Soft Skill Development:** Improvement in leadership, communication, and teamwork, though the rating for soft skills (55% giving a top score) was slightly lower than technical skills.
- **Participant Engagement:** 100% participation and completion rate among the surveyed group, with all respondents willing to recommend the programme to others.



- **Job Readiness:** There is a near-unanimous increase in confidence. 88.9% of trainees feel they have a "competitive advantage" over peers.
- **Market Alignment:** 100% of trainees believe their skills are transferable and that the tasks were relevant to real-world industry demands.
- **Employability:** 77.8% of respondents (7 out of 9) **already have job offers** before or immediately upon completion.
- **Salary Expectations:** 100% believe the OJT will result in a higher starting salary, indicating perceived economic value.

Based on the detailed feedback from the focused group of trainees, the outcomes can be summarised as follows:

- **Bridged Theory-Practice Gap:** Transformation of abstract college concepts into tangible practical applications.
- **Problem-Solving Autonomy:** Shift from "observing" experienced technicians to "independently troubleshooting" malfunctions.
- **Enhanced Employability:** High confidence levels (rating 8–10) in securing full-time roles in the machine tool industry.
- **Career Pivot:** Expansion of career goals from simple maintenance to high-value areas like new product development (NPD), design, and R&D.

The analysis integrates feedback from OJT trainers to assess the CSR Apprenticeship Training Programme at INDO-MIM. While the previous analysis focused on the beneficiaries (trainees), this perspective evaluates the **operational efficiency, pedagogical quality, and institutional impact** of the programme.

- **Measurable Productivity:** One trainer reported a **reduction in defects from 7% to 3%**—a direct commercial and operational benefit.
- **Confidence & Self-Reliance:** 50% of trainers noted "significant improvement" in trainees' ability to handle complex tasks independently.
- **Behavioural Shift:** Trainers observed a transition from passive learning to a **proactive approach** in tool maintenance and fire safety/emergency response (e.g., the thermocole fire incident).

The Key Informant Interview **(KII)** feedback from implementation partners to evaluate the INDO-MIM Apprenticeship Training Programme reflects a high-performing CSR initiative with strong operational metrics.

- **Market Employability: 50%** of trainees secured jobs in similar industries within 6 months.
- **Economic Value:** Graduates earn a **3–5% salary premium** compared to the regional average for entry-level technicians.
- **Internal Retention: 10–15%** of trainees are absorbed internally by INDO-MIM.
- **Soft Skills & Confidence:** Partners gave a **5/5 rating** for improvements in professionalism, teamwork, and trainee confidence.

The findings correlate the focus from "what was learnt" to the **economic and psychological value** of the training. It demonstrates that the programme is not just a technical workshop, but a high-impact **Corporate Social Responsibility (CSR)** initiative that provides a measurable Return on Investment (ROI) for both the company and the community.

1. The "Confidence-Competence" Loop

A standout feature of this data is the psychological transformation of the trainees.

- **Competitive Advantage:** The **88.9%** confidence rating suggests that trainees don't just feel "trained"—they feel "superior" to their peers from traditional academic backgrounds.
- **From Passive to Proactive:** Trainers noted a shift from "observing" to "independently troubleshooting." This indicates a move up **Bloom's Taxonomy** of learning - from mere comprehension to synthesis and evaluation.
- **Problem-Solving Autonomy:** The transition to handling "complex tasks independently" (noted by 50% of trainers) is the threshold where a trainee stops playing a cost-bearing role and starts being a profit-generator for the factory.

2. Commercial & Operational ROI

While CSR is often viewed through a social lens, these findings highlight direct business benefits for INDO-MIM.

- **Defect Reduction:** One trainer's report of reducing defects from **7% to 3%** is a massive operational win. In high-precision manufacturing, a 4% swing in quality can equate to significant annual savings in scrap and rework costs.
- **Pipeline Strategy:** By absorbing **10–15%** of trainees internally, INDO-MIM has created a "vetted" talent pool. This eliminates the high costs and risks associated with external hiring and cultural misfit.
- **Safety as a Reflex:** The mention of the "thermocole fire incident" proves that the safety training wasn't just theoretical. The ability of trainees to apply protocols during a real emergency validates the **5/5 safety rating** mentioned in the previous data.

3. Market Alignment and Economic Mobility

The programme acts as a powerful engine for social mobility, which is the "Gold Standard" for CSR initiatives.

- **The Salary Premium:** A **3–5% salary premium** over the regional average is a significant metric. It confirms that the labour market recognises the "INDO-MIM brand" of training as superior.
- **Immediate Employability:** With **77.8%** of trainees securing job offers before completion, the programme has effectively achieved "zero-day" unemployment for its graduates.
- **Career Pivot (NPD/R&D):** Perhaps the most sophisticated outcome is the shift in trainee aspirations from "maintenance" to **new product development (NPD) and design**. This indicates that the programme is producing thinkers and innovators, not just machine operators.

Impact

The impact of INDO-MIM's apprenticeship initiatives can be categorised into six primary areas:

1. Socio-Economic Empowerment

- **Livelihood Enhancement:** The programme focuses on "Learn and Earn" models, providing a monthly stipend to trainees. This allows youth from economically weaker backgrounds to support their families while gaining a professional qualification.
- **Targeting Underprivileged Youth:** A significant portion of the CSR budget is directed towards candidates from rural and tribal areas (e.g., partnerships with the **Deenabandhu Trust**), promoting dignity and self-reliance.
- **Financial Inclusion:** By providing a steady income during training, the programme helps reduce the debt burden often associated with traditional vocational schooling.

2. Employability and Skill Transformation

- **Closing the Skill Gap:** The training covers specialised technical trades such as fitter, precision machining, and injection molding. These are high-demand skills in the aerospace, medical, and automotive sectors.
- **Confidence Building:** Beyond technical skills, the programme emphasises behavioural changes and emotional intelligence, preparing candidates for the corporate environment.
- **Placement Success:** Historical data from similar industrial apprenticeship impact studies indicate that over 65–70% of participants secure immediate placement in manufacturing firms upon completion of the training.

3. Strategic Growth and Diversity

- **Programme Expansion:** According to the Sustainability Report 2024, INDO-MIM saw a **74.21%** increase in apprenticeship engagement over the previous year, reflecting a massive scale-up in social investment.
- **Inclusion Efforts:** While manufacturing is traditionally male-dominated, the company's CSR policy explicitly aims to promote gender equality by encouraging female participation in vocational skills like sewing, stitching, and increasingly, technical floor roles.

4. Economic Empowerment

By facilitating immediate employment (88.9% expect a job "immediately"), the programme reduces youth unemployment and increases the earning potential of the local workforce.

5. Industry Contribution

The programme acts as a pipeline for high-precision sectors like Aerospace and CNC machining, filling the critical "skills gap" in the manufacturing industry.

6. Educational Laddering

At least one respondent is using the OJT as a bridge to a higher Diploma (completing in 2027), showing the programme promotes a culture of continuous learning.

Further analysis reveals the following impacts:

- **Industry-Ready Workforce:** The programme successfully transforms "raw" graduates into specialised technicians capable of training others (e.g., the case of Ravi, the GET who now trains operators).
- **Economic Mobility:** Trainers believe trainees are "very much competent" to be absorbed not just by INDO-MIM, but by the wider global machine tools industry.
- **Institutional Reputation:** The high success rate in "Final Inspection" and "Customer Support" improvements bolsters INDO-MIM's reputation for quality.

Conclusion

The assessment draws the following conclusions:

- **High Programme Efficacy:** The OJT is exceptionally successful in its core mission. It provides "hands-on" experience that trainees value more than theoretical observation.
- **Mentor Excellence:** The 100% satisfaction rate regarding supervisor guidance suggests a very strong mentorship culture within INDO-MIM.
- **Confidence Booster:** The programme's greatest psychological impact is "confidence"—trainees feel fully prepared for technical interviews and entry-level responsibilities.
- **Exceptional Execution:** The programme is perceived as "gold standard" by partners, evidenced by the consistent 5/5 ratings across instruction, resources, and professionalism.
- **The "INDO-MIM Advantage":** The primary success factor (Best Practice) is the "Real Work Situation." Learning on the same machines as experienced operators ensures there is zero "shock" when transitioning to full-time employment.
- **Efficiency:** The programme significantly reduces the "learning curve" (from 1.5 months down to 2 weeks), providing a high Return on Investment (ROI) for the training hours spent.
- **Market Catalyst:** With a 50% external placement rate and external certifications, this programme acts as a significant social contribution to the regional engineering ecosystem, not just a private recruitment drive.

From the **trainers**' perspective, the programme is **exceptionally robust**. It is not merely a "social service" but a high-value technical intervention that improves shop-floor metrics (like defect reduction and speed). The trainers are well-prepared and the infrastructure is industry-standard. However, there is a recognised gap between **technical mastery** and **global employability** (specifically regarding soft skills and exposure to the latest market technologies).

The INDO-MIM Apprenticeship programme is a **highly successful CSR initiative**. It effectively converts academic knowledge into industrial "workmanship." The programme's greatest strengths are its **relevance to industry standards** and the **high quality of equipment/mentorship**. It has achieved its primary goal of making trainees "job-ready," evidenced by the high percentage of existing job offers.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Recommendations

The following areas present opportunities for improvement:

- **Standardise Data Reporting:** While overall satisfaction is high, "Data Sharing and Progress Reporting" received a 4/5 (the only non-5 rating in the latter half). Implementing a digital dashboard for partners to track trainee progress in real time could bridge this small gap.
- **Internal Retention Strategy:** If the goal is to build an internal pipeline, the **10–15% retention rate** might be considered low. INDO-MIM could evaluate if they are "exporting" too much of their best talent to competitors and consider more aggressive internal hiring.
- **Salary Benchmarking:** The **3–5% salary increase** for graduates is modest. To further enhance the programme's prestige, the organisation could work with industry partners to better communicate the value of the "INDO-MIM Certified" technician to command higher market premiums.
- **Scaling the "Real-World" Model:** Since the most valued aspect is practicing on live, high-standard machines, any future expansion or satellite programmes must ensure they do not substitute this with "simulators" or outdated equipment.

Based on the qualitative feedback regarding "areas for improvement," the following actions are suggested:

- **Digitalisation & Software:** Integrate training on internal company softwares and ERPs, as trainees identified this as a gap.
- **Language Skills:** Introduce "Functional English" or "Spoken English" modules to help trainees communicate more effectively in professional settings.
- **Structured Learning:** Transition from an organic OJT to a more structured schedule/module. Trainees requested clearer guidelines on the "progression" of their learning path.
- **Emerging Tech:** Update the curriculum periodically to include "New Technologies" (Industry 4.0, advanced CAD/CAM) to ensure the training remains cutting-edge.

Recommendations (Based on Trainers' Feedback)

A

Curriculum Enhancements

Digitalisation & Updation: Integrate modules on the **latest machinery and upgraded equipment** available in the global market, moving beyond just internal INDO-MIM machines.

Software Proficiency: Increase focus on VMS (Video Measuring Systems) and command-based inspection tools.

B Soft Skills & Communication

Language Bridge: Trainers identified a "language problem" for local trainees. A recommendation is to hire **external faculty** for Spoken English and Professional Communication.

C Structural Adjustments

Extended Duration: Consider extending the OJT beyond 12 months for specific high-tech modules to allow for deeper "self-directed" operation.

Interim Assessments: Implement **quarterly examinations** to identify lagging trainees earlier and apply remedial training before the final certification.

D Employability Support

Market Guidance: Include a module on "Career Pathways," helping trainees understand how to leverage their OJT experience to find opportunities in the broader aerospace and manufacturing sectors.

While the feedback is overwhelmingly positive, the following adjustments could elevate the programme from "Excellent" to "Industry-Leading":

- **Communication & Language Training:** Several trainees mentioned "Spoken English" and "Communication" as areas for improvement. Incorporating a dedicated module for professional communication would enhance their confidence in technical interviews and corporate environments.
- **Software Integration:** Trainees requested more exposure to "internal softwares" and new technologies (CAD/CAM/Industry 4.0). Updating the curriculum to include these digital tools will future-proof the participants.
- **Structured Learning Path:** One respondent noted the need for "structured guidelines on how to proceed." Providing a clear "Syllabus Map" at the start of the 12 months would help trainees track their own progress.
- **Soft Skills for Leadership:** As some trainees transition into permanent roles, training in teamwork and leadership (requested in the qualitative feedback) will prepare them for future supervisory positions.

Linkage to SDGs

The apprenticeship training initiative at **INDO-MIM** (a global leader in Metal Injection Molding) is a core component of its Corporate Social Responsibility (CSR) and sustainability framework. By providing technical training and employment-enhancing skills, the programme directly aligns with several **United Nations Sustainable Development Goals (SDGs).**

Quality Education

The programme focuses on **Target 4.4**, which aims to increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment and entrepreneurship.

- **Implementation: INDO-MIM** provides "employment-enhancing vocational skills" through structured on-the-job training (OJT) and classroom learning.
- **Focus:** It bridges the gap between theoretical academic knowledge and industrial application, particularly for students from ITIs (Industrial Training Institutes) and diploma colleges.

Decent Work and Economic Growth

This initiative supports **Target 8.5** (full and productive employment) and **Target 8.6** (reducing the proportion of youth not in employment, education, or training).

- **Stipends & Employment:** Apprentices receive a stipend during their training, and many are absorbed into the permanent workforce, ensuring economic stability.
- **Engagement Growth:** In the 2023-24 reporting period, INDO-MIM saw a **74.21% increase** in overall apprenticeship engagement and a **50.60% increase** in the National Apprenticeship Promotion Scheme (NAPS).

Gender Equality

INDO-MIM actively integrates women into technical roles that were traditionally male-dominated.

- **Equal Opportunity:** The company emphasises equal salary and opportunities on the shop floor for both male and female apprentices.
- **Empowerment:** By training women in high-precision engineering (MIM technology), they contribute to reducing gender disparities in the manufacturing sector.

Reduced Inequalities

The programme targets "socially and economically backward groups" and rural students to ensure inclusive growth.

- **Social Mobility:** By providing high-tech skill training to underprivileged youth, the initiative enables them to enter higher-income brackets and improves their social standing.

OECD-DAC Evaluation

The INDO-MIM Apprenticeship Training Programme can be seen through the lens of the six OECD-DAC evaluation criteria as outlined below:

1. Relevance: Is the intervention doing the right thing?

- **Alignment with Needs:** The programme addresses the critical "skills gap" in India's high-precision manufacturing sector. By targeting ITI and Diploma students from rural and underprivileged backgrounds, it fulfills a direct socio-economic need.
- **Strategic Fit:** It aligns with the Government of India's **Skill India** mission and the **National Apprenticeship Promotion Scheme (NAPS),** making it highly relevant to national development priorities.

2. Coherence: How well does the intervention fit?

- **Internal Coherence:** The programme is seamlessly integrated into INDO-MIM's production cycle. It doesn't exist in a silo; it feeds the company's internal talent pipeline while fulfilling CSR mandates.
- **External Coherence:** It complements other technical education initiatives in Karnataka and across India, ensuring there is no duplication of effort but rather an "add-on" of high-tech MIM (Metal Injection Molding) specialisation that standard government colleges cannot provide.

3. Effectiveness: Is the programme achieving its objectives?

- **Skill Acquisition:** Success is measured by the transition of raw trainees into skilled technicians. INDO-MIM reported a **74.21% increase** in apprenticeship engagement in the 2023-24 period, signaling high programme uptake.
- **Certification:** Trainees gain industry-recognised certifications, significantly increasing their market value even if they choose not to stay with INDO-MIM.

4. Efficiency: How well are resources being used?

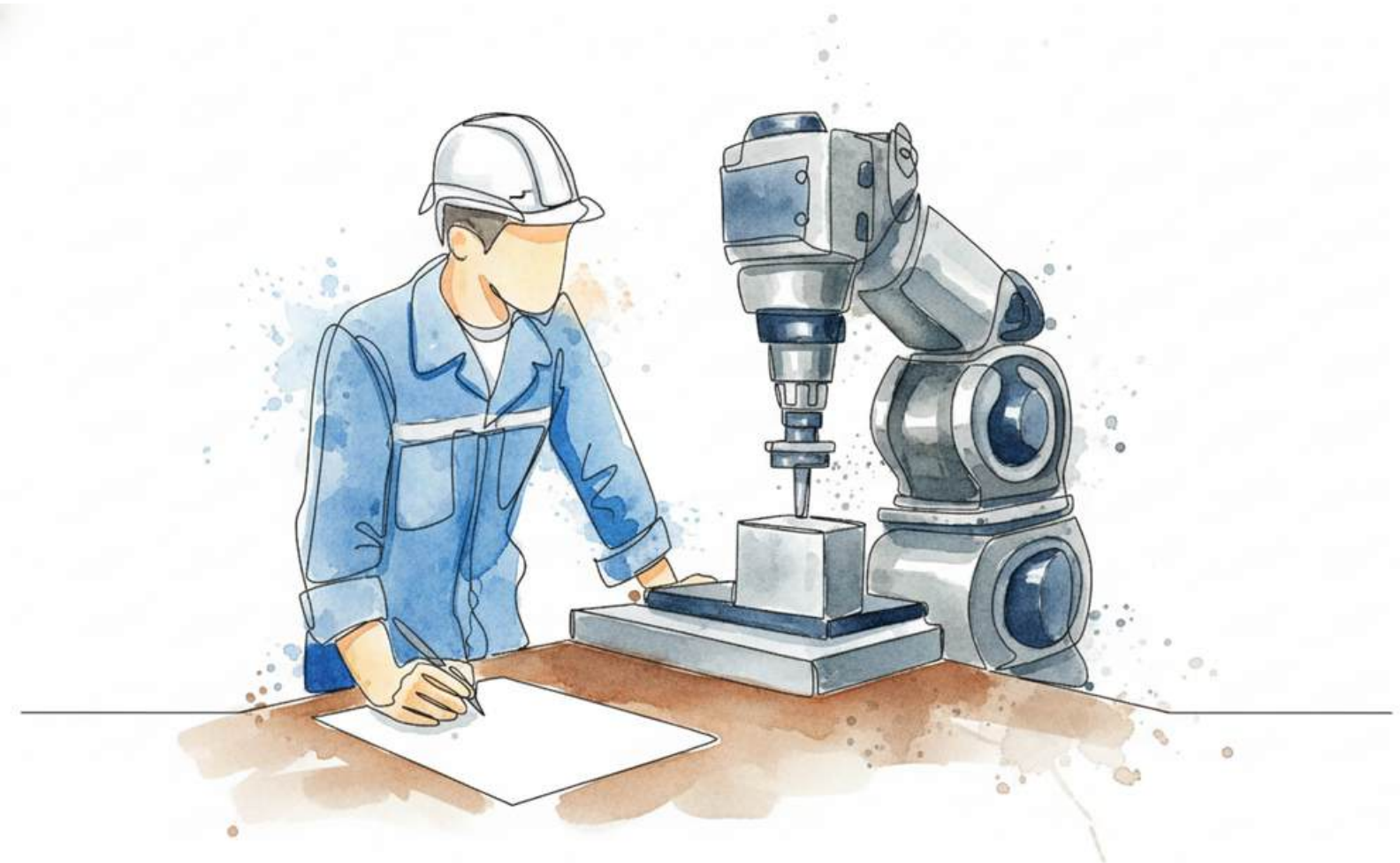
- **Resource Management:** The programme utilises INDO-MIM's existing world-class manufacturing floor space as a "living lab," which is more cost-effective than building separate training centres.
- **Output vs. Input:** By training over 400+ apprentices annually (based on 2024 data), the "cost per trainee" is optimised through scale and the use of internal subject matter experts as trainers.

5. Impact: What difference does the intervention make?

- **Economic Upliftment:** Beyond the stipend (which provides immediate financial relief to families), the long-term impact is the employability of the youth.
- **Social Empowerment:** The inclusion of women in "shop floor" roles (previously a 50.60% growth in NAPS participation included a focus on gender diversity) breaks social stereotypes in the manufacturing sector.

6. Sustainability: Will the benefits last?

- **Financial Sustainability:** Because the programme acts as a recruitment funnel for INDO-MIM, the company has a vested business interest in continuing the programme regardless of CSR mandates.
- **Individual Sustainability:** The skills learnt (CNC machining, MIM, and quality control) are "future-proof" in the Industry 4.0 era, ensuring that the benefit to the individual lasts throughout their career.



Success Stories

Apprentices

Mr. Kiran K
Engineer, US Shadow Team
INDO-MIM Ltd. - HOSKOTE

I am Kiran K. I completed BE Mechanical in 2019 at East West Institute of Technology, Bengaluru. On 1 August 2020, I joined INDO-MIM Ltd. Hoskote, Bengaluru as a Graduate Apprentice Trainee for one year through an apprenticeship programme (NATS). Initially, I worked in the Machine Shop, where I learnt turning, milling, and grinding machine setup along with programming. This training enhanced my technical skills as well as expanded my practical exposure. I am now more confident to work in the engineering industry.

Moreover, this training helped me secure a permanent job at INDO-MIM Ltd. as an Automation Engineer on 2 August 2021. I have been handling new projects, which has helped me learn new things every day and continuously improve my skills. I have successfully completed five years in the same team as a specialist. Thank you so much for helping me build my career.

Success Stories

Internal

Mr. Harshith K S
Group Leader Quality
INDO-MIM Ltd. - HOSKOTE

My name is Harshith. I completed Mechanical Engineering at Adichunchanagiri Institute of Technology, Chikkamagalur. After that I joined INDO-MIM LTD Hoskote, Bengaluru in 2021 as a Graduate Apprentice Trainee at the Quality department. During my training period, I gained practical knowledge of the end-to-end manufacturing process, including machining, sintering, heat treatment, surface finishing, and final inspection. I gained hands-on experience with quality core tools such as APQP, PPAP, FMEA, SPC, and MSA, along with exposure to control plans, gauge validation, and problem-solving techniques like 7 QC tools and 8D methodology.

After one year, INDO-MIM gave me the on-roll employment opportunity as a Quality Engineer. Here, I applied my technical expertise to ensure product quality, effective process control, and customer compliance.

Currently, I am a Group Leader in the Quality Engineering team, leading quality activities, supporting cross-functional teams, handling customer requirements, and driving continuous improvement initiatives.

Success Stories

Internal

Mr. Chethan N J
Engineer
US Shadow Team
INDO-MIM Ltd. - HOSKOTE

I am Chethan N J. I pursued my engineering from SJMIT, Chitradurga during 2015–2019, which laid the foundation for my professional journey. In August 2020, I joined INDO-MIM as a Graduate Apprentice Trainee in the Machine Shop department. This phase provided a robust platform for my career, valuable hands-on exposure, and a deeper understanding of the importance of discipline, quality, and teamwork. Working closely with experienced colleagues supported my technical and personal growth. In August 2021, I was appointed as a full-time (on-roll) Engineer.

I currently work as a Product Development Engineer in the US Shadow department. In this role, I support product development activities and provide technical support to the US plant from India. This exposure has strengthened my understanding of global manufacturing standards. Moreover, working with international teams has enhanced my communication and collaboration skills. Over time, I progressed into my current role as an Engineer.

Today, I actively contribute to development initiatives and continuous improvement activities. INDO-MIM has supported my growth both professionally and personally. I am proud to be part of a company that believes in nurturing talent and growing together.

Success Stories

Internal

Mr. Dinakara
Specialist
INDO-MIM Ltd. - Doddaballapura

I am Dinakara. I completed my BE in Mechanical Engineering in 2022 at Srinivas Institute of Technology, Mangalore. I got an opportunity at INDO-MIM Ltd., Doddaballapur, Bengaluru, as a Graduate Apprentice Trainee for a one-year apprenticeship programme (NATS) that started from 1 June 2023.
Initially, I worked in the CMM (Standard Room), where I learnt machine operation and programming. This training enhanced my technical as well as practical knowledge which I gained during my engineering course.

I am now more confident working in the engineering industry. Moreover, this experience played a key role in helping me secure a permanent job at INDO-MIM Ltd. as a Quality Engineer. I joined INDO-MIM on 8 July 2024.

Here, I handle new projects that allow me to learn continuously and further develop my skills. I am continuing in the same team as a Specialist.

I am grateful for the opportunity to build my career at INDO-MIM. Thank you for providing me with this valuable opportunity.

Success Stories

Internal

Ms. Renuka
Engineer Trainee
INDO-MIM Ltd. - Doddaballapura

I am Renuka. I completed my graduation in Electrical and Electronics in 2024 and got an opportunity at INDO-MIM Ltd., Doddaballapur, Bengaluru, as a Graduate Apprentice Trainee for a one-year apprenticeship programme. As a PLC Programmer, I have learnt how to write a programme based on the requirement of the fixtures and how to identify faults in the fixture. After completing the GAT programme, I appeared for an interview and got selected in the role of an engineer at INDO-MIM. The skills I gained during the GAT programme helped me in securing this permanent job. Now I am confident in my career and believe that I can grow in the industrial sector.

Success Stories

Internal

Mr. Shabareesh R
Engineer
Aerospace Quality
INDO-MIM Ltd. - Doddaballapura

I am Shabareesh R. I completed BE Mechanical in 2024 at Brindavan College of Engineering Bengaluru. I got an opportunity at INDO-MIM Ltd. Doddaballapur as a Graduate Apprentice Trainee. I joined on 19 June 2024 and pursued the one-year apprenticeship programme at INDO-MIM. Initially, I worked in the Aerospace Quality, where I learnt engineering drawing, quality control documents, and inspection of parts. This training enhanced my technical as well as practical knowledge I gained during my engineering days. Now, I am more confident to work in the engineering industry. Moreover, the training played a key role in helping me secure a permanent job at INDO-MIM Ltd. I joined INDO-MIM as a Quality Engineer on 3 November 2025. Here, I have been handling line inspection and setting approvals. All of these have helped me learn new things every day and continuously improve my skills. I am happy that I got a chance to build my career at INDO-MIM. Thank you so much for providing me with this opportunity.

Disclaimer

Consultivo Business Solutions Pvt. Ltd. (Consultivo) is a management advisory and consulting firm helping global businesses in the areas of Sustainability, Business Excellence and Risk Management – both at the strategic and operational levels. Consultivo conducted an independent advisory service on behalf of INDO-MIM Limited to evaluate the impact of its CSR projects. We do not accept or assume any responsibility for any other purpose or to any other person or organisation. Any reliance that any third party may place on this report is entirely at their own risk. All conclusions are based on our on-site visit, interviews and study. The findings of this report are valid as of the date of the interviews. No member of the advisory team has any business relationship with the client beyond what is required for this assignment. We have conducted this advisory service independently, and there has been no conflict of interest.

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Notes

Notes

INDEPENDENT ASSURANCE STATEMENT

To,
The Management of INDO-MIM Limited

Introduction and objectives of work

Consultivo Business Solutions Pvt. Ltd. (Consultivo) has been engaged by INDO-MIM Limited to conduct an Independent Impact Assessment of its CSR Projects for the year 2023-25. This Impact Assessment Statement applies to the related information included within the scope of work described in this report.

The assessment process was conducted in line with the Consultivo internal protocol for Impact Assessment, which is developed based on requirements of The Companies (CSR Policy) Amendment Rules 2021, ISO 26000, IFC/World Bank, national, and international guidelines and relevant industry best practices. The relevant data and information have been verified by Consultivo through an online mode of data collection (online survey), focus group discussion, key informant interviews and observation.

Our findings

On the basis of our methodology and the activities described above, it is our opinion that the projects described in this report demonstrate impact benefitting stakeholders through the project's output, outcome and long term effects with a strategic intent for social change.

Statement of independence, impartiality and competence

Consultivo is an independent professional services company that specialises in ESG (Environmental, Social and Governance) and Sustainability in providing independent assurance services. Consultivo has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities. We are particularly vigilant in the prevention of conflicts of interest.
The impact assessment team has extensive experience in conducting baseline study, monitoring & evaluation (M&E) and impact programmes over different thematic areas, geographic regions with an excellent understanding of Consultivo's standard methodology for the Independent Impact Assessment of CSR projects.

Saikat Basu.

Saikat Basu
CEO, Consultivo
21 April 2026

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ESG and Sustainability solutions include the development of sustainability/ESG strategy, voluntary sustainability standard (VSS), sustainability reporting as per GRI standard, materiality assessment & study, stakeholder engagement, water sustainability management, carbon footprint, energy audit & conservation, ethical supply chain management, business and human rights, due diligence and related services.

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Hospital	Mall & Hypermarket	Technology & Telecom	FMCG	Supply Chain	Agribusiness

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- Approved ESG consultant of International Finance Corporation (World Bank Group)
- Approved Social Impact Assessment (SIA) Agency of Govt. of Jharkhand, India
- Global Approved Auditor of Pharmaceutical Supply Chain Initiative (PSCI), UK
- Approved Audit Body for CORE (Code of Responsible Extraction)
- Knowledge & Technical Partner of Confederation of Indian Industry (CII), Training & Knowledge Partner of Indian Chamber of Commerce (ICC)
- Approved Audit and Monitoring Partner of Ethical Tea Partnership (ETP), UK

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